



Review of Environmental Factors (REF)

**Project Name: Lake Wyangan Residential Housing
Infrastructure Project (Initial Works) for Griffith City
Council
August 2025**



**LOCAL
GOVERNMENT
PROCUREMENT**
APPROVED CONTRACTOR

Access Environmental Planning Copyright and Legal Disclaimers

Disclaimer

Whilst every effort has been made to ensure the accuracy of material which appears in this document, Access EP makes no representation in any form as to the completeness or correctness of the information contained herein and cannot accept any legal responsibility for errors, omissions or consequences of any action taken by users of this information. This document is intended to be used as a guide only. Access EP accepts no responsibility or liability whatsoever for any decision, action, loss, damage or otherwise arising from the supply of this information or for the use of or reliance on this information.

Access EP may at any time amend, modify, or retract any, or all, of this document including any opinions, conclusions or recommendations. All information contained herein including costings should not be relied upon for construction or any other purpose other than intended. The Significant Factors Table is for guidance purposes only. It is intended to assist the Proponent in addressing risk to the most sensitive environmental and cultural locations at the site but is not guaranteed to be exhaustive or to remove the need for all provisions of the REF to be followed across the subject area.

Copyright

All content is **copyright © Access EP 2025**. All rights reserved. No content may be reproduced by any means in part or in whole without express written consent.

Proponent	Griffith City Council		
Client	Griffith City Council		
Purchase Order No			
Document Description	Review of Environmental Factors: Lake Wyangan Residential Housing Infrastructure – Initial Works		
	Name	Signed	Date
Clients Reviewing Officer	Phil King		07/10/2025
Clients' representative managing this document		Person(s) managing this document	
Name: Phil King Position: Director Infrastructure & Operations Griffith City Council Ph.: 0459 651 887		Author Tony Moody Reviewed by Renae Hill Approved by Christopher Botfield	
Location		Lake Wyangan, New South Wales 2650	
Document Status Draft		24/06/2025	
Draft V1.0 Author to Editor Access EP 1 st Internal edit by Lucinda Hook		31/07/2025	
Draft V1.0 Access EP 2 nd Internal edit by Renae Hill		31/07/2025	
Draft V2.0 Report Draft for release for comment to client (Client edit and return)		25/08/2025	
FINAL once latest version of draft approved by client			
Prepared for: Name: Phil King Position: Director Infrastructure & Operations Griffith City Council Ph.: 0459 651 887		Prepared by: Tony Moody Christopher Botfield Access EP Ph: 0429 944 430 Email: chris@accessep.com.au	

	Business Address	Qualifications
Tony Moody	PO Box 686 Mudgee NSW 2850	B App Sci, CSU, 1996
Renae Hill	PO Box 686 Mudgee NSW 2850	BAgr UNE Armidale 2006 BSc (Hons) UoN Newcastle 1994 Grad Dip Env Mgt CSU 2023
Christopher Botfield	PO Box 686 Mudgee NSW 2850	B Env Management CSU 1999

Access EP acknowledges the Traditional Owners and Custodians of the Country on which we live, work and travel. We show our respect for places, traditions, beliefs, customs, values and objects that represent the oldest living culture in the world by advocating for the protection of Aboriginal Cultural Heritage in every aspect of our work



Assessment of the proposal for Lake Wyangan Residential Infrastructure under Part 5 of the Environmental Planning and Assessment Act 1979 (EP&A Act) and Regulation 2021 (EP&A Regulation)

Clause 2.109 of State Environmental Planning Policy (Transport and Infrastructure) 2021 (TISEPP) permits development for the purpose of road or road infrastructure facilities to be carried out by or on behalf of a public authority without consent on any land and clause 2.137 of TISEPP permits development on any land for the purpose or the purposes of stormwater management systems to be carried out by or on behalf of a public authority without consent.

As this proposal is for a stormwater system upgrade and is to be carried out by Griffith City Council (Council), it falls under the provisions of TISEPP and can be assessed under Part 5 of the EP&A Act.

Part 5.1 of the EP&A Act requires the determining authority to examine and consider to the fullest extent possible all matters affecting or likely to affect the environment by reason of the proposed activity. Clause 171 of the EP&A Regulation sets out the environmental factors that must be considered in relation to the assessment of the proposal's impacts.

I am satisfied that this Review of Environmental Factors (REF) addresses the relevant environmental issues as set out in the legislation and meets Council's requirements for assessment of the proposal under Part 5. This REF should be read in conjunction with the Lake Wyangan Residential Housing Infrastructure (Additional Works) REF.

The assessment indicates no environmental or legislative impediments to the proposal proceeding, subject to implementation of the recommended safeguards.

This REF is hereby accepted by Council in fulfilment of the requirements of Part 5 of the EP&A Act and will be valid for two years from the date of acknowledgement of acceptance of the final document by Council.

Director Infrastructure & Operations

Signature: Phil 16j

Date: 10/10/2025

Director Utilities

Signature: [Signature]

Date: 10/10/2025

Executive Summary

The proposal

Griffith City Council proposes to upgrade existing infrastructure at Lake Wyangan near Griffith NSW to enable further residential development. Proposed works will include stormwater channel construction and enhancement, road realignment and construction of a detention basin.

The proposed activity is permitted without consent under *State Environmental Planning Policy (Transport and Infrastructure) 2021* (TISEPP) (Clauses 2.109 and 2.137) and does not require development consent. As such the impacts have been assessed under Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) with the factors listed in Clause 171 of the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation) taken into consideration.

This report details a Review of Environmental Factors (REF) undertaken to assess the impacts of the proposal under Part 5 of the EP&A Act. Measures outlined in this document will ensure that the implementation of the proposed activity will have minimal or no impact on the condition of this land. The proposal is considered justified on the basis of minimal environmental impact and significant benefit for the community through enabling further residential development. Any potential for environmental harm will be minimised by adherence to safeguards and compliance with the prescribed operating conditions. Table 1 provides a summary of the main environmental factors considered in this report and key safeguards to ensure adverse effects to the environment are limited.

Table 1: Significant factors and safeguards

SIGNIFICANT FACTORS TABLE		
PROPOSED ACTIVITY: Lake Wyangan Residential Infrastructure Initial Works	LOCATION: Lake Wyangan, 2680	
FACTOR	ITEM	SAFEGUARDS
Aboriginal Cultural Heritage	<p>Specific: Known Aboriginal Cultural Heritage in the area.</p> <p>General: Items suspected of being of Cultural significance uncovered during planned activities.</p>	<p>Given the location of the proposed activity, an Aboriginal cultural heritage assessment report (ACHAR) must be prepared in relation to proposed activities around Lake Wyangan foreshore and an Aboriginal Heritage Impact Permit (AHIP) must be obtained before start of works in this vicinity (two outlet/drainage points on the Lake Foreshore).</p> <p>All staff briefed on the possibility of culturally significant items being present on site.</p> <p>Should any items suspected of being of Cultural significance be uncovered all work must cease immediately, and guidance sought from senior management or Environment and Heritage NSW for appropriate management of the item(s).</p>
European Cultural Heritage	General: Items suspected of being of Cultural significance	Should items suspected of being of Cultural significance be uncovered all work must cease immediately, and guidance sought from senior management or Environment and Heritage

	uncovered during planned activities.	NSW for appropriate management of the item(s).
Biodiversity	Specific: Lake Wyangan mapped as a Key Fish Habitat.	Council must contact NSW Department of Primary Industries to obtain a Fisheries Permit which is required for the proposed activity.
	Specific: Existing mature native trees.	All efforts must be made to protect existing mature native trees.
	Specific: Existing aquatic and semi-aquatic vegetation.	All efforts must be made to protect existing aquatic and semi-aquatic vegetation.
	General: Potential presence of threatened species.	Should any threatened species be detected during the proposed activity, all work must cease immediately, and guidance sought from senior management or DCCEW NSW for appropriate management. Work in potential habitat should be carried out between February and July to avoid bird breeding season.
	Specific: Removal of existing drainage infrastructure.	Council must inspect any existing pipes, drainage pits and utilities pipelines to determine whether they contain asbestos. If asbestos is detected, removal and disposal of material must comply with relevant state and federal legislation and Council policy and procedure.

Glossary of terms and abbreviations

Term	Meaning
AEP	Access Environmental Planning
AHIMS	Aboriginal Heritage Information Management System
AHIP	Aboriginal Heritage Impact Permit
BC Act	Biodiversity Conservation Act 2016
CEMP	Construction Environmental Management Plan
CMP	Conservation Management Plan
DCCEEW	Department Climate Change, Energy, the Environment and Water (Commonwealth)
DCCEEW NSW	Department Climate Change, Energy, the Environment and Water NSW
DPHI	Department of Planning, Planning and Infrastructure
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
EP&A Act	Environmental Planning and Assessment Act 1979
EP&A Reg	Environmental Planning and Assessment Regulation 2021
EPA	Environment Protection Authority
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
EPI	Environmental Planning Instrument
EPL	Environmental Protection Licence
FM Act	Fisheries Management Act 1994
KMA	Koala Management Area
KTP	Key Threatening Processes
LEP	Local Environmental Plan
LGA	Local Government Area
LLS	Local Land Services
NES	National Environmental Significance
NP&W Reg	National Parks and Wildlife Regulation 2009
NP&W Act	National Parks and Wildlife Act 1974
NPWS	National Parks and Wildlife Service NSW
NT Act	Commonwealth Native Title Act 1993
POEO Act	Protection of the Environment Operations Act 1997
REF	Review of Environmental Factors
REP	Regional Environmental Plan
RF Act	Rural Fires Act 1997
ROL	Road Occupancy Licence
ROTAP	Rare or Threatened Australian Plant
SCA	State Conservation Area
SEPP	State Environmental Planning Policy
TEC	Threatened Ecological Community
TfNSW	Transport for NSW
TISEPP	State Environmental Planning Policy Transport and Infrastructure 2021
TSR	Travelling Stock Reserve
WHS	Work Health and Safety Act 2011
WHS MaPS Act	Work Health and Safety (Mines & Petroleum Sites) Act 2013

Note: NSW and Federal departments responsible for planning, heritage and the environment undergo frequent name changes. AEP aims to use current names in all documents, but obsolete names sometimes appear for various reasons. AEP accepts no responsibility for names used in this report that are obsolete or have changed since acceptance of the final document

Contents

1. INTRODUCTION.....	1
2. SIGN-OFF	1
3. PROJECT DETAILS.....	1
4. REF PATHWAY ANALYSIS AND GENERAL LEGISLATIVE ANALYSIS.....	2
5. PROJECT DESCRIPTION.....	5
6. PROJECT JUSTIFICATION.....	15
7. EXISTING ENVIRONMENT.....	15
8. IMPACT ASSESSMENT.....	24
9. ENVIRONMENTAL SAFEGUARDS	45
10. ENVIRONMENTAL RISK ASSESSMENT	48
10.1. Individual Impact Risk Assessment	48
10.2. Overall Risk and Environmental Auditing Requirements.....	49
11. CUMULATIVE IMPACTS.....	49
12. COMMONWEALTH ENVIRONMENTAL FACTORS	50
13. STAKEHOLDER AND COMMUNITY CONSULTATION REQUIREMENTS.....	50
14. SUMMARY OF IMPACTS AND CONCLUSIONS	51
15. References.....	54
Appendix A: Clause 171 Checklist	56
Appendix B: Bionet Atlas Results	58
Appendix C: Priority weeds for the Riverina	65
Appendix D: Protected Matters Summary	85
Appendix E: Potential Threatened Species, EEC and KTP	89
Appendix F: Significance test for threatened species with potential to occur in the vicinity ..	97
Appendix G: Fisheries Management Act Test of Significance.	110
Appendix H: Environmental Management Plan example	112
Appendix I: AHIMS records and Due Diligence Code of Practice Compliance.....	115

List of Figures

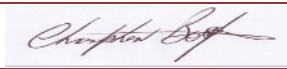
Figure 1: Context plan.....	7
Figure 2: Site overview plan.....	8
Figure 3A – 3F: Site plans.....	9
Figure 4: Historic Weather Data for Griffith Airport.....	19
Figure 5: Existing shed	20
Figure 6: Riparian vegetation.....	20
Figure 7: Existing channel near west end of Druitt St.....	21
Figure 8: Opuntia infestation on site	21
Figure 9: Channel bank material of various origins	22
Figure 10: High potential for Aboriginal artefacts	22
Figure 11: Native vegetation to be retained where possible	23

1. INTRODUCTION

This report documents the outcomes of an environmental assessment regarding impacts potentially resulting from infrastructure construction and upgrading at Lake Wyangan, NSW.

Griffith City Council (Council) is planning to expand residential development in the area and this will require improved infrastructure for stormwater. The proposed activity is permitted without consent under the *State Environmental Planning Policy (Transport and Infrastructure) 2021* (TISEPP) and does not require development consent. As such the impacts have been assessed under Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) with the factors listed in Clause 171 of the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation) taken into consideration (Appendix A: Clause 171 Checklist). Proposed works will include stormwater channel construction and enhancement, road realignment and construction of a detention basin.

2. SIGN-OFF

Name	Christopher Botfield
Position	Business Principal
Business area	Access Environmental Planning
Declaration	I hereby declare that the information contained in this report adequately addresses the scope of proposed works, has safeguards and directions to which Council will adhere and to the best of my knowledge is neither false nor misleading.
Signature	
Date	31/07/2025

3. PROJECT DETAILS

Provide the activity(s) name		Lake Wyangan Residential Infrastructure Upgrade – Initial Works
State the project aims and objectives		Upgrading infrastructure to allow further residential development.
Identify the project manager	Name	Graham Gordon & Phil King
	Position	Director Utilities and Director Infrastructure & Operations
	Business area	Griffith City Council
Identify the persons that prepared this report	Name	Tony Moody
	Position/s	Project Officer
	Business area/ company	Access Environmental Planning (AccessEP)
	Qualifications	Tony Moody - BAppSci Parks, Rec and Heritage, CSU, 1996
Describe the project location including specific address		Lake Wyangan, approximately 5.3km NW of Griffith Town Centre.
Provide a project location map		See Figure 1 and Figure 2.

4. REF PATHWAY ANALYSIS AND GENERAL LEGISLATIVE ANALYSIS

What is the land tenure where proposed activity will occur?		The proposed activity will occur mostly on Council managed land, including road reserve. Some privately owned land will require acquisition. A small amount of work may take place on private land with the owner's permission.
What is the land zoning under the <i>Council Local Environment Plan (LEP)</i>?		The proposed work will take place on or adjacent to land zoned: RE1 – Public Recreation R5 – Large Lot Residential RU4 – Primary Production, Small Lots RU5 – Village
Is the proposed activity located in:	freehold or crown land, if crown lands what type?	Part of the proposed activity will be undertaken on freehold land currently used for residential and agricultural purposes. Part of the activity may also be undertaken on and adjacent to Crown Reserve (Lake Wyangan and parts of its surrounds are shown as Crown Reserve on the NSW Planning Portal).
	land reserved or dedicated within the <i>Crown Land Management (CLM) Act 2016</i> for preservation or environmental protection?	Existing drainage infrastructure, including Murrumbidgee Irrigation (MI) drains (to be widened) are not on Crown Land. South Lake Wyangan (also known as the Jack Carson Wildlife Reserve - Crown Reserve 159017), is reserved for the purposes of 'Environmental Protection' and is categorised as 'Natural Area – Bushland'.
	a world heritage property, national heritage place or RAMSAR wetland as listed under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act)?	No. It is not located on world heritage property, a national heritage place or RAMSAR wetland as listed under the EPBC Act. The Commonwealth EPBC Act contains provisions for the protection of nationally significant flora, fauna and natural heritage. It lists threatened species, populations and communities, additionally identifying matters of national environmental significance (MNES) that must be considered in assessments of the environmental impacts of a proposal.
	an Environmental Protection Zone or designated as Environmentally Significant Lands under the Council LEP?	The proposed activity is on land partly zoned R5 (Large Lot Residential), RU5 (Village) with the lake itself being zoned W2 (Recreational Waterway). Parts of the site are shown on the Griffith LEP (2014) maps: <ul style="list-style-type: none"> • Riparian Lands and Watercourses Map - Sheet RLW_003 • Wetlands Map Sheet WET_003 • Terrestrial Biodiversity Map – Sheet BIO_003
	lands protected under State Environmental Planning Policy (Resilience and Hazards) 2021?	No, there are no lands protected under State Environmental Planning Policy (Resilience and Hazards) for preservation of sensitive coastal land, located in the Griffith Local Government Area (LGA).

lands identified as wilderness under the <i>Wilderness Act 1987</i> or declared as wilderness under the <i>National Parks and Wildlife Act 1974</i> (NP&W Act)?	There are no lands around the area of the proposal that are identified as wilderness under the <i>Wilderness Act 1987</i> or declared as wilderness under the NP&W Act.
an aquatic reserve dedicated under the <i>Fisheries Management Act 1994</i> (FM Act)?	There are no lands in the vicinity of the proposal that are aquatic reserves dedicated under the FM Act. However, on the Fisheries NSW Spatial Data Portal (DPI 2025), Lake Wyangan is listed as Key Fish Habitat. No Freshwater Fish Threatened Species are shown on the Portal in the vicinity of the proposed activity.
land subject to a conservation agreement under the NP&W Act?	The NP&W Act aims to conserve nature, objects, features and places; protect and preserve Cultural Heritage; and manage land reserved under this Act. The proposed activity is to take place in urban areas, modifying existing drains and road corridors and none of the land affected is not subject to a conservation agreement under the NP&W Act.
land identified as State Forest under the <i>Forestry Act 2012</i> ?	There are no nearby lands identified as State Forests.
land subject to a Western Lands Lease?	No - the Griffith LGA is not in the NSW Western division.
lands where any other relevant SEPPs or REPs apply	<p>The objectives of the EP&A Act (1979) are to guide proper management of development to achieve environmentally sustainable development. To supplement this, a range of state environmental planning policies (SEPPs) have been made. The proposed activity is permitted without consent under <i>State Environmental Planning Policy (Transport and Infrastructure) 2021</i> (TISEPP) (Clauses 2.109 and 2.137) and does not require development consent. As such the impacts have been assessed under Part 5 of the <i>Environmental Planning and Assessment Act 1979</i> (EP&A Act) with the factors listed in Clause 171 of the <i>Environmental Planning and Assessment Regulation 2021</i> (EP&A Regulation) taken into consideration.</p> <p>As this proposal involves construction of infrastructure to enable residential development, and is to be carried out by Council, it falls under the provisions of TISEPP and can be assessed under Part 5 of the EP&A Act.</p> <p>SEPP (Biodiversity and Conservation) 2021, includes provisions relating to the Koala Habitat Protection SEPP 2020 and 2021. Under those provisions the Griffith LGA is not listed as an area to which the policy applies. There are no other relevant SEPPs or REPS that apply to the lands.</p>

Are there any easements or encumbrances over the land where the activity is proposed? (Section 10.7 Certificate)	The status of easements relating to power, drainage and water management should be confirmed by Council prior to work commencement.
Will the proposed activity impact on any utilities like gas, water, electricity, telecommunications etc?	<p>There is infrastructure in the area including underground telecommunications lines, gas supply, water supply, irrigation supply, sewer drainage and overhead powerlines. A 'Dial before you Dig' check will be conducted before any groundworks commence.</p> <p>As existing services will have known locations and therefore can be avoided if possible, it is not anticipated the proposed activity will impact any such utilities.</p>
Is the project a scheduled activity under the <i>Protection of the Environment Operations (POEO) Act 1997</i> ?	<p>No. The proposed activity does not constitute a scheduled activity under the <i>Protection of the Environment Operations (POEO) Act 1997</i>.</p> <p>Primarily concerned with prevention of pollution, minimisation of wastes, resource recovery and the associated positive impacts of these on human and environmental health, the POEO Act lists "scheduled activities" for which Environmental Protection Licences (EPLs) are required. Works associated with road construction are listed as a scheduled activity, however, the proposed work does not meet the minimum thresholds in the Schedule and the works do not require an EPL. Drainage construction and improvement is not listed in the Schedule. Offences relating to water, air and land pollution and waste disposal are still applicable and the safeguards highlighted in this report will minimise risk of possible breaches.</p>
Has the Health and Safety of personnel involved in the activity been considered?	<p>The <i>Work Health and Safety (WHS) Act 2011</i> and its associated regulation are primarily concerned with ensuring safe workplaces through provision of appropriate training and safety equipment, and accountability through monitoring and incident reporting.</p> <p>In relation to this proposal, the provisions of the WHS Act and Regulation means Council's General and Senior Managers have statutory responsibilities in relation to the health and safety of workers, contractors and any other visitors to the site.</p>
Will the proposal have negative impacts on the biosecurity at the site?	The <i>Biosecurity Act 2015</i> is primarily concerned with the protection of environmental assets, agricultural production, public health and community infrastructure. In relation to the proposed works, the requirements for managing threats from "priority weeds" are of relevance (Appendix C). At least two species listed as priority weeds were recorded during the site visit (<i>Opuntia spp</i> and <i>Solanum elaeagnifolium</i>). These species will need to be managed prior to commencement of works. Good equipment hygiene practices will ensure negligible biosecurity impacts.
Have the potential impacts on the heritage values of local places, built or	<p>The <i>Heritage Act 1997</i> defines 'environmental heritage' as those places, building, works, relics, moveable objects and precincts of State or local significance.</p> <p>A property is a heritage item if it is listed:</p>

environmental items been considered?	<ul style="list-style-type: none"> • In the heritage schedule of the LEP, • On the State Heritage Register, a register of places and items of importance to the people of NSW; or • On the National Heritage Database. <p>Heritage values are investigated within this REF.</p>
What approvals are required?	<p>In line with the requirements of the legislation and planning instruments outlined, necessary approvals are:</p> <ul style="list-style-type: none"> • Assessment by Griffith City Council under Part 5 of the EP&A Act, • A Fisheries permit for works to Lake foreshore areas, and • Consent of the relevant land holder (only if access to private land is required).

5. PROJECT DESCRIPTION

Describe the main proposed activities	<p>Griffith City Council (Council) is planning to upgrade stormwater and drainage capacity for future residential development at Lake Wyangan, a suburb of Griffith NSW. The intent of the work is to improve stormwater flows so that the risk of local flooding is reduced.</p> <p>The following activities are proposed:</p> <ul style="list-style-type: none"> • Lake Wyangan pumping station: Inlet works: Extend existing pressure pipe/ Install pipe from existing temporary pump to the existing steel shed/ building. Relocation of pump to existing shed. Existing power poles to be relocated. Flood pump no. 10 is on private property. (Farm 1818, Druitt Rd, Lake Wyangan). Permission will need to be gained from the landholder before accessing this property. • Western end of Todd Road: Widening of existing channel outlet. • Druitt and Todd Roads MC07: Widening of existing channel within the road reserve, drainage embellishment and pipes and culvert. • McCarthy Road to Smeeth Road then Lake Drain. Todd Road to Lake Drain MC06. Major stormwater works. Existing intersection and road reserve will be affected from boundary to boundary. Channel widening from Boorga and Todd Roads to the lake. • Corner of Boorga and Smeeth Roads MC08. Land acquisition and construction of detention basin. • South of Dylbal Drive. Widening of existing channel outlet. Large concrete outlet/ headwall structure to be constructed. • Boorga Road (east side) from Scott Road to Druitt Road and then to Todd Road MC01. Road drainage. • Boorga Road (west side) from Scott Road to Druitt Road MC01. Road drainage. • Maillinson and Abattoir Roads intersection. Realignment. • Druitt Road eastern end MC05. Roadworks and drainage. • Mason Street. Widening of channels. Extensive outlet works into south lake – concrete pad etc.
---------------------------------------	---

<p>Describe the types of work equipment and machinery proposed for use</p>	<p>Construction will entail significant earthworks. Types of earthworks include:</p> <ul style="list-style-type: none"> • Stripping and stockpiling topsoil. • Construction of haul road. • Excavating material at multiple sites including existing and new drains and the detention basin. • Placement and compaction of fill. • Urban roadworks. • Placing and trimming topsoil for rehabilitation and revegetation of sites <p>Types of work equipment and machinery that will be used for the proposal include:</p> <ul style="list-style-type: none"> • Trucks • Concrete trucks • Excavators • Scrapers • Graders • Water carts • Compactor • Road sealing plant • Trenching machine or small excavator <p>It is anticipated that all vehicles will be able to turn in the work area and road corridor.</p>
<p>State generally, commencement and completion dates, number of persons that will be present on site and proposed hours of operations</p>	<p>The proposed activity is programmed to begin late 2025. It is estimated that the work will take approximately 9 months to complete and during peak construction periods there will be significant numbers of staff on various sites. Works would be confined to normal construction hours (Monday to Friday, 7.00am to 6.00pm; Saturday 8.00am to 1.00pm; with no construction work on Sundays or public holidays).</p>
<p>State the site access and vehicle movements</p>	<p>All construction work and operation of plant (except for vehicle movements to and from the site) will be within the boundaries of the subject sites and adjacent road corridor. During peak construction periods, it is estimated that a significant number of trucks will be moving continuously across the site each day. Turning of road plant and trucks will be executed within the work area existing road corridor. Parking of standard work vehicles will be in the work area or surrounding street parking.</p>
<p>Describe the likely future maintenance requirements, extensions or additions</p>	<p>Post-construction, maintenance requirements may include repair and maintenance of sediment control measures, maintenance and cleaning of drainage structures, litter removal and weed control. Any plantings of native vegetation will require weed control, watering, and checking of tree guards until plants are well established.</p>

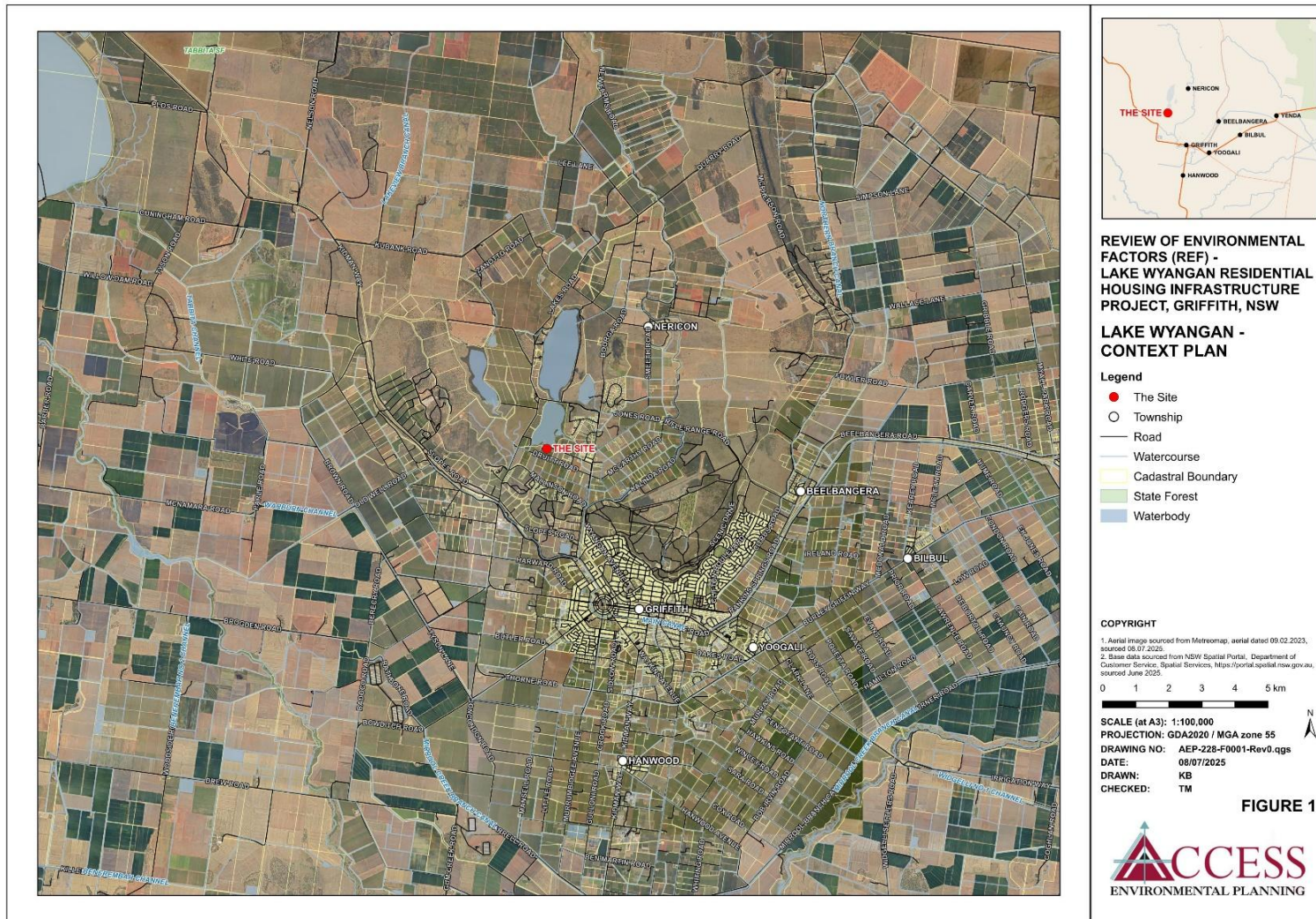


Figure 1: Context plan

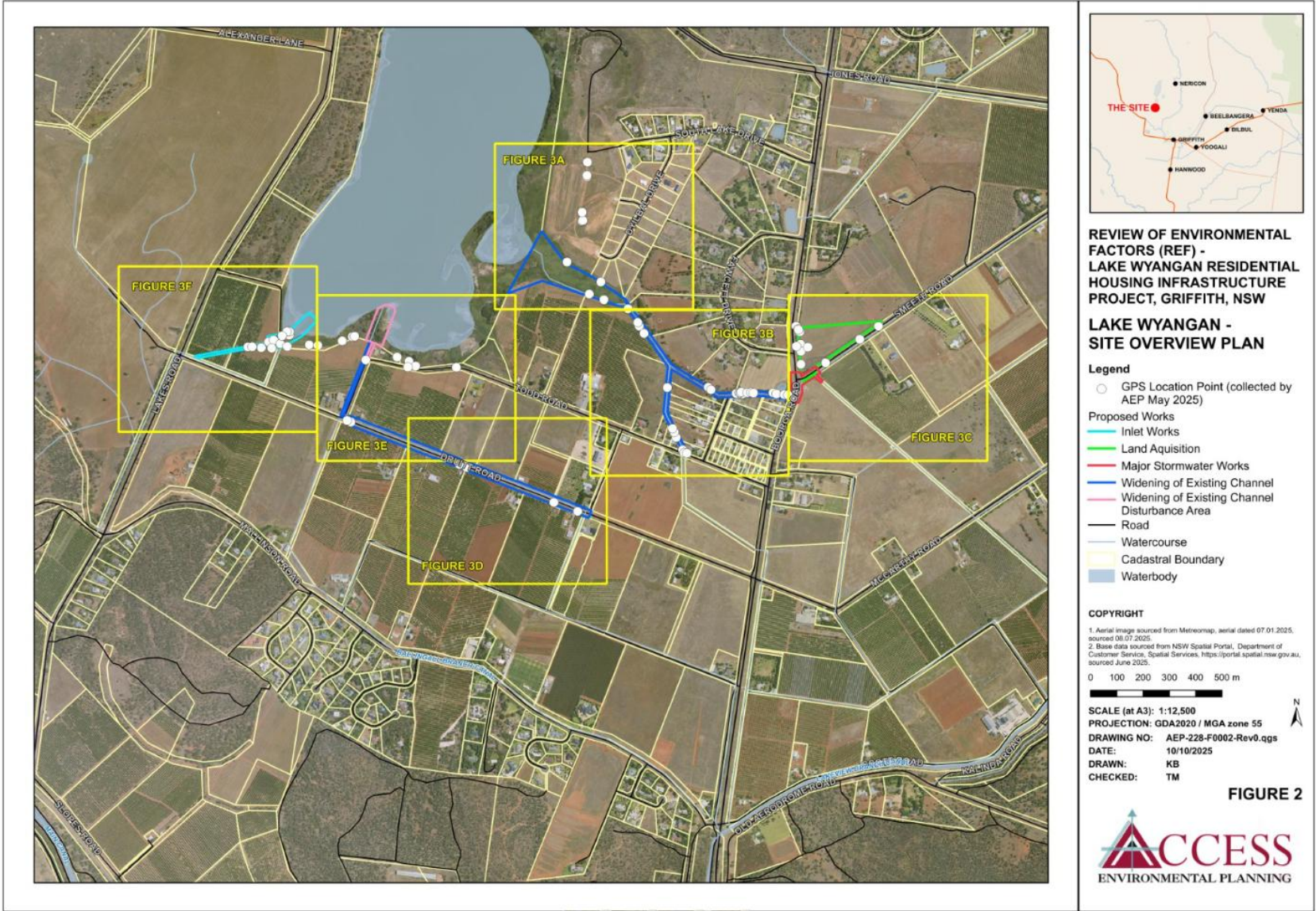


Figure 2: Site overview plan

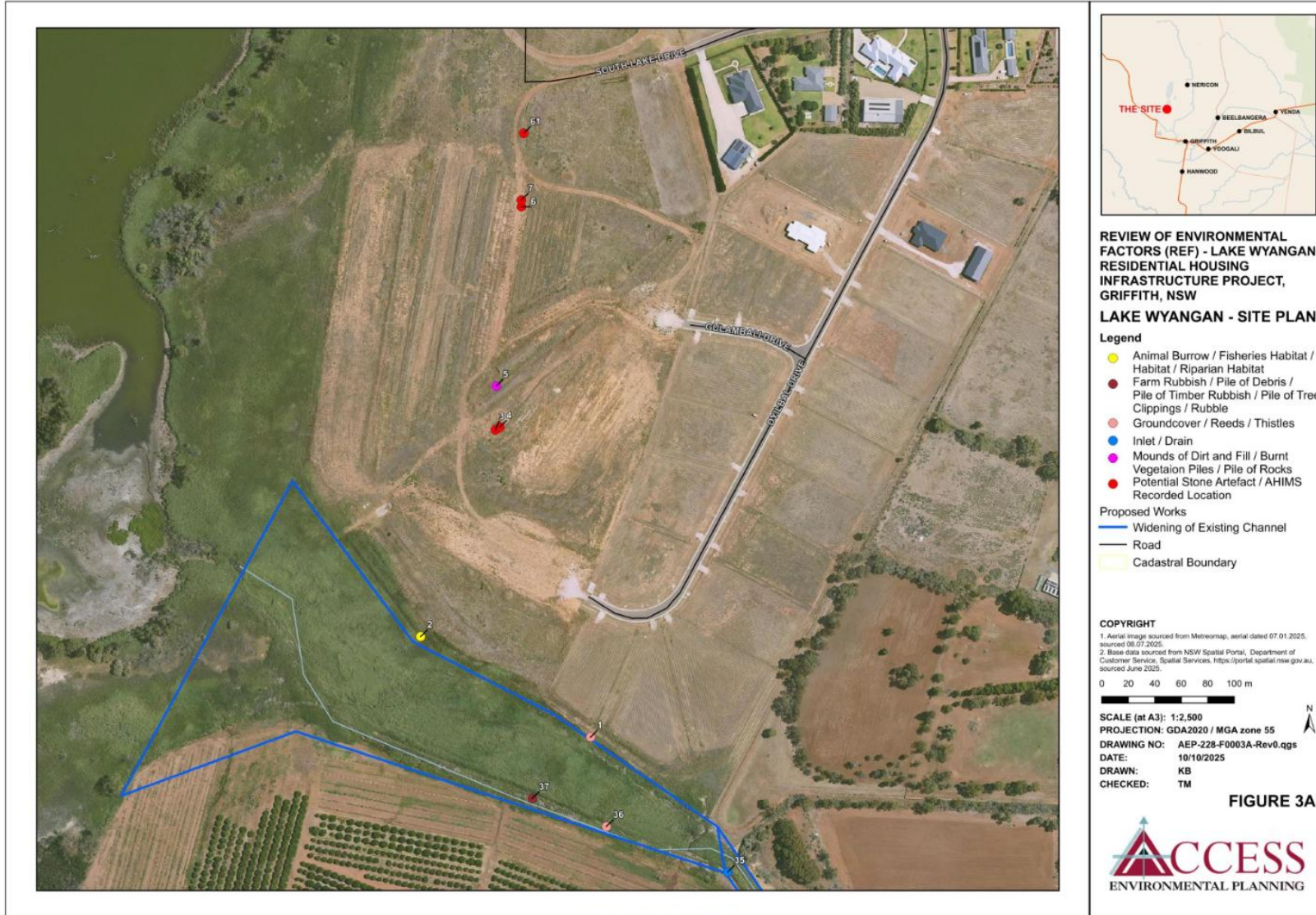
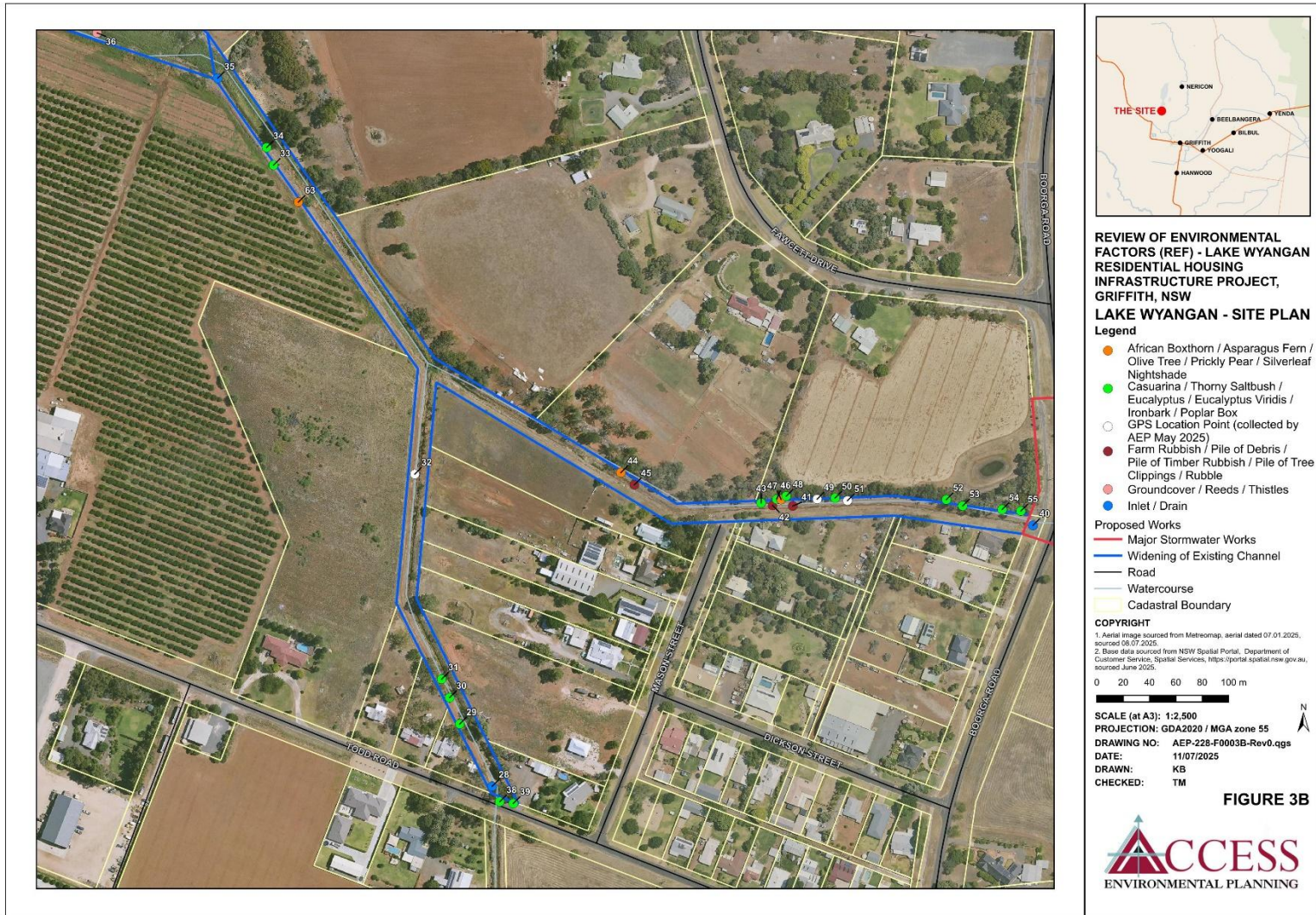


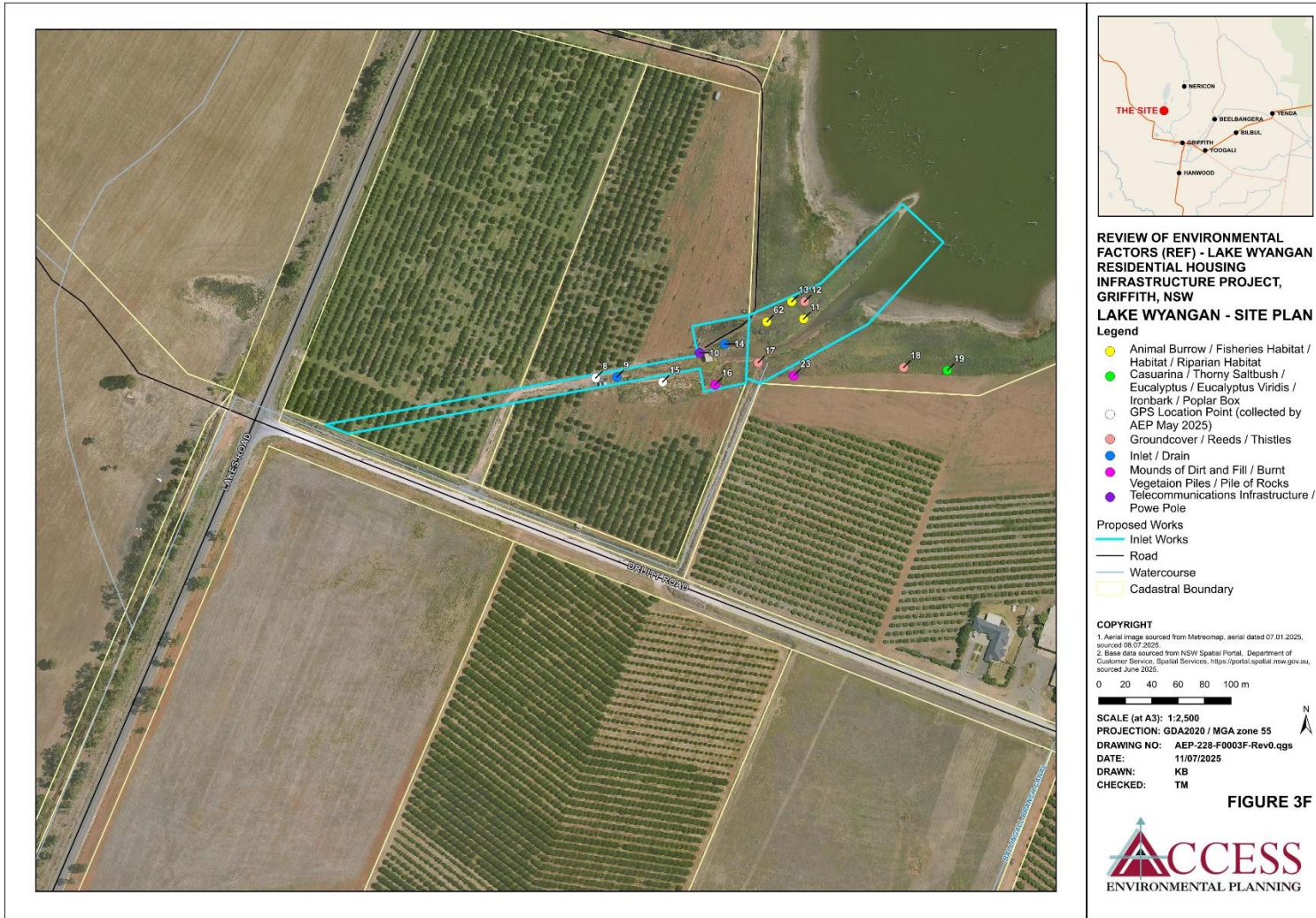
Figure 3A – 3F: Site plans











6. PROJECT JUSTIFICATION

Objectives of work

Council has determined that the proposed works are required to allow new residential development in the Lake Wyangan area. Environmental impacts would be minimised by the implementation of safeguards and mitigation measures as detailed in this REF.

Options

Two options were considered regarding the proposed work:

Option 1: ‘Do nothing’ – This option does not address the need to provide adequate drainage arrangements for the proposed residential area development, while protecting the Lake Wyangan environment.

Option 2: Carry out the work as proposed by Council – This option achieves the stated objective of providing enhanced stormwater drainage for the proposed residential area.

Option 2 is the preferred option as it meets the objectives of improving stormwater drainage for the subject area whilst limiting environmental impacts by complying with the safeguards stipulated in this REF.

7. EXISTING ENVIRONMENT

A site visit was undertaken on the 29 May 2025 to examine the identified project area. Survey noted biodiversity (flora, fauna and observed habitat, weed species, aquatic habitat, heritage items and infrastructure features which were recorded with waypoints (WPs).

Provide a general description of landforms in vicinity of the proposed works e.g. slope, gradients, ridges, hills, gorges, rivers, alluvial plains etc

The proposed work is in the Cobar Peneplain Interim Biogeographic Regionalisation for Australia (IBRA) region and the Lachlan Plains IBRA subregion.

The site is in the Cocoparra Ranges and Footslopes Mitchell Landscape (characterised by steep crested ranges, ridges, hills and associated footslopes of Quaternary colluvium with outcrops of upper Devonian sandstone, conglomerate and siltstones). Cliff faces extend to 30 m and bouldery hill slopes with overall relief to 260 m. Extensive rock outcrop, shallow sandy lithosols, acid, neutral and calcareous red earths on slopes and deep sandy alluvium in creek lines, Hillston Sandplains Mitchell Landscape (characterised by level to undulating sandplain of Quaternary aeolian sands and limited alluvium, relief 2 to 4 m. Calcareous red earth and solonized brown soils with deep siliceous sands on hummocks are present) and Lachlan Lakes Swamps and Lunettes Mitchell Landscape (which is characterised by Quaternary alluvium in lakebeds, swamps, salinas, shorelines, lunettes, feeder channels and terraces of the river wetlands). There are associated extensive sandplains and dunes and grey cracking clays with gilgai on active lake beds and channels. Calcareous red earths on

	<p>shorelines and shallow sandy calcareous soils, or deep brownish sands and solonized brown soils on lunettes exist with red brown or grey, often saline clays on relic lakebeds. Sandplains of loamy to clay loam calcareous earths with limestone nodules frequently exposed, dunes of deep red, yellow or white sands. Prior streams and relic lunettes of loamy red texture-contrast soils and calcareous earths. The site is located on relatively flat land with a very slight slope towards Lake Wyangan.</p>
<p>Will the proposed activity disturb the soil surface or involve excavation works? If yes, provide a description of the soil type and properties e.g. erodibility, engineering and structural properties, dispersibility, permeability, presence of saline soils and a general description of the geological setting or the proposed works providing reference to any geological or geotechnical surveys</p>	<p>Yes, the proposed work will involve significant earthworks to upgrade stormwater infrastructure. Soil types on site are Rudosols and Calcarosols. The local area has previously been disturbed for agriculture and infrastructure development including channels, houses, sheds, roads and utilities. A soil profile report from the area (NSW Soil and Land Information System 1995), states: "Erosion/Land Degradation: wind erosion at site is susceptible, stable; sheet erosion at site is susceptible, stable; scald erosion at site is stable; salting evident. Soil Hydrology: profile is slowly permeable and imperfectly drained, free water at 3.00 m below soil surface, run on is moderate and runoff is moderate. Soil Type: Red brown earth."</p>
<p>Provide a general description of the climatic conditions of the regional and adverse climatic features such as fog, winds, seasonally intensive rainfall etc</p>	<p>For Griffith, the annual average¹ rainfall is approximately 400 mm, with 75 days per year of rain spread evenly throughout the year (between 4.0 and 10.0 days per month) (BOM). Average minimum temperatures² range from 3.5° to 17.5°, with average maximum temperatures ranging from 14.6° to 33.2° (Figure 4). July is the coolest month and January the hottest.</p>
<p>Provide a general description of the ecological attributes of the site.</p>	<p>A full list of plants and animals observed on site is provided in the table below. No threatened species were observed on site, however a BioNet Atlas Search (DCCEEW NSW 2025) returned the following result:</p> <p><i>Data from the BioNet Atlas website, which holds records from a number of custodians. The data are only indicative and cannot be considered a comprehensive inventory and may contain errors and omissions. Species listed under the Sensitive Species Data Policy may have their locations denatured (rounded to 0.1°C; rounded to 0.01°C. Copyright the State of NSW through the Department of Planning, Industry and Environment. Search criteria: Public Report of all Valid Records of Threatened (listed on BC Act 2016), Commonwealth listed, CAMBA listed, JAMBA listed or ROKAMBA listed Entities in selected area [North: -34.19 West: 145.98 East: 146.08 South: -34.29] returned a total of 627 records of 45 species.</i></p> <p><i>Report generated on 1/07/2025 9:59 AM</i></p> <p>Groundcover, midstorey and canopy vegetation at the site is predominantly exotic, with some incursion of high threat exotic weed species. Only a small number of native plant and animal species were recorded during the site visit.</p>

¹ Rainfall data for this site (075041) is available for the period 1958 to present.

² Temperature data for this site is available for the period 1970 to present.

Species recorded during site visit:

Flora

Common name

Scientific name

Browns love grass*	<i>Eragrostis brownii</i>
Couch*	<i>Cynodon dactylon</i>
Bathurst burr	<i>Xanthium spinosum</i>
Bidens	<i>Bidens pilosa</i>
Black roly poly*	<i>Sclerolaena muricata</i>
Blackberry nightshade	<i>Solanum nigrum</i>
Blue bells*	<i>Wahlenbergia sp.</i>
Bluebush*	<i>Maireana microphylla</i>
Canary island date palm	<i>Phoenix canariensis</i>
Cape marguerite	<i>Dimorphotheca ecklonis</i>
Cathead	<i>Tribulus terrestris</i>
Climbing or creeping saltbush*	<i>Einadia nutans</i>
Common reed *	<i>Phragmites australis</i>
Coobah*	<i>Acacia salicina</i>
Cumbungi*	<i>Typha orientalis</i>
Curled dock	<i>Rumex crispus</i>
Feathertop Rhodes grass	<i>Chloris virgata</i>
Fennel	<i>Foeniculum vulgare)</i>
Fumitory	<i>Fumaria sp</i>
Gazania	<i>Gazania rigens</i>
Giant dock	<i>Rumex obtusifolius</i>
Green mallee*	<i>Eucalyptus viridys</i>
Horehound	<i>Marrubium vulgare</i>
Mallow	<i>Malva sp</i>
Oxalis	<i>Oxalis sp</i>
Paddy melon	<i>Cucumis myriocarpus</i>
Paspalum	<i>Paspalum dilatatum</i>
Pigeon grass	<i>Setaria sphacelata</i>
Pink amaranthus	<i>Amaranthus retroflexus</i>
Poplar box*	<i>Eucalyptus populnea</i>
Prickly lettuce	<i>Lactuca serriola</i>
Prickly pear	<i>Opuntia sp</i>
Purple top	<i>Verbena bonariensis</i>
River oak*	<i>Casuarina cunninghamiana</i>
Saffron thistle	<i>Carthamus lanatus</i>
Senna*	<i>Senna sp</i>
Silverleaf nightshade	<i>Solanum elaeagnifolium,</i>
Sonchus	<i>Sonchus oleraceus</i>
Spear thistle	<i>Cirsium vulgare</i>
Swamp oak*	<i>Casuarina glauca</i>
Thorny saltbush*	<i>Chenopodium spinescens</i>
Variegated thistle	<i>Silybum marianum</i>
Water cress	<i>Nasturtium officinale</i>
Water speedwell	<i>Veronica anagallis-aquatica</i>
White sweet clover	<i>Melilotus albus</i>

	Wild mustard	<i>Sisymbrium sp</i>
	Wild turnip	<i>Rapistrum rugosum</i>
	Wireweed	<i>Polygonum erectum,</i>
Does the site contain National, State or local heritage items or heritage conservation areas? Comment on the existence or likely existence of Indigenous cultural heritage.	Fauna	
	Common name	Scientific name
	Australian raven*	<i>Corvus coronoides</i>
	Crested pigeon*	<i>Ocyphaps lophotes</i>
	Double bar finch*	<i>Taeniopygia bichenovii</i>
	Goat	<i>Capra hircus</i>
	Magpie*	<i>Gymnorhina tibicen</i>
	* native species	
	The proposed activity is not located in an area where any national or state heritage items are located.	
	<p>Potential items of Aboriginal Cultural Heritage significance were detected during the site visit on 29 May 2025 and an AHIMS search conducted on 27 May 2025 returned 23 records for Aboriginal sites in the area.</p> <p>The National Parks and Wildlife Act is the primary legislation for the protection of some aspects of Aboriginal cultural heritage in NSW. One of the objectives of the NPW Act is: ‘... the conservation of objects, places or features (including biological diversity) of cultural value within the landscape, including but not limited to: (i) places, objects and features of significance to Aboriginal people...’ (s.2A(1)(b)).</p> <p>Part 6 of the NPW Act provides specific protection for Aboriginal objects and declared Aboriginal places by establishing offences of harm. Harm is defined to mean destroying, defacing, damaging an Aboriginal object or declared Aboriginal place, or moving an object from the land. There are a number of defences and exemptions to the offence of harming an Aboriginal object or declared Aboriginal place. For works disturbing ground surfaces around the Lake foreshore, given the location of the proposed activity, an Aboriginal cultural heritage assessment report (ACHAR) must be prepared in relation to the proposed activity and an Aboriginal Heritage Impact Permit (AHIP) must be obtained before start of the proposed activity.</p>	

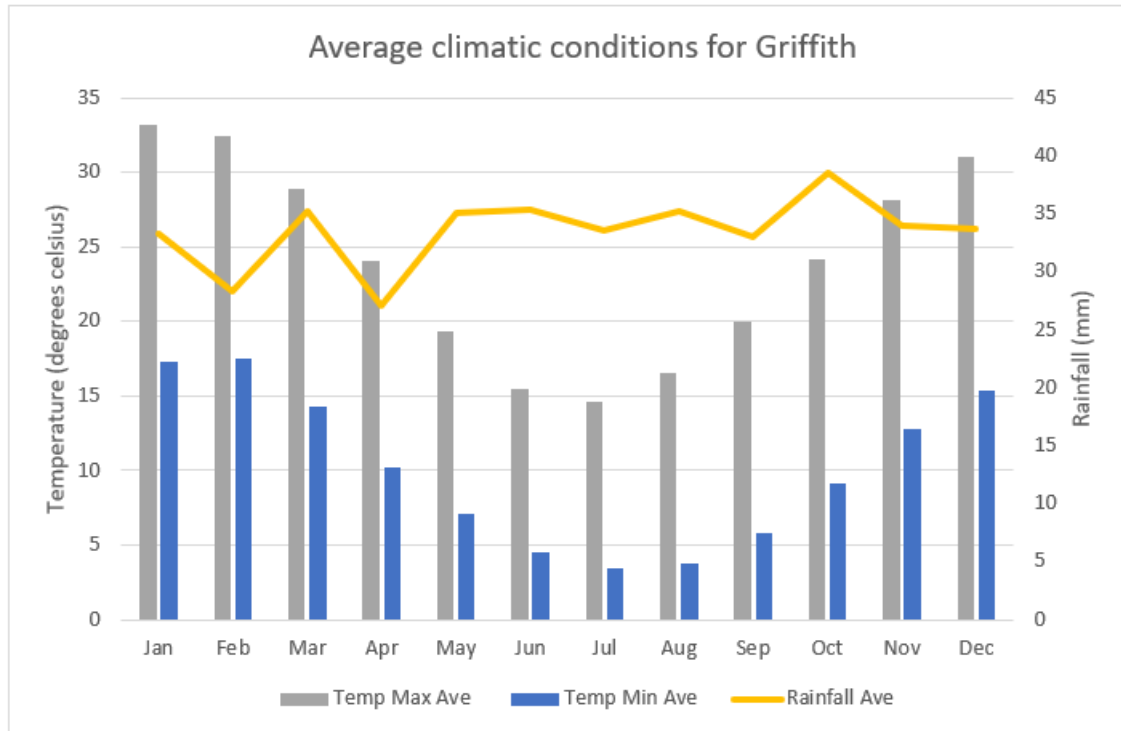


Figure 4: Historic Weather Data for Griffith Airport



Figure 5: Existing shed



Figure 6: Riparian vegetation



Figure 7: Existing channel near west end of Druitt St



Figure 8: Opuntia infestation on site



Figure 9: Channel bank material of various origins



Figure 10: High potential for Aboriginal artefacts



Figure 11: Native vegetation to be retained where possible

8. IMPACT ASSESSMENT

This section provides a detailed description of the potential environmental impacts associated with the construction and operation of the proposal. All aspects of the environment potentially impacted by the proposal are considered, including the factors specified in the guideline *Is an EIS required?* (DUAP 1999). The factors specified in Clause 171 of the EP&A Regulation and the matters of national environmental significance under the Federal EPBC Act are also considered. Where appropriate, site-specific safeguards are provided to ameliorate the identified potential impacts.

Environmental Factors	Risk check	Yes/ No	Details	Data sources checked
A Topography and geology	Is the proposed activity located in a landslip area?	No	Any slopes on the site are less than 5% (excluding drain batters), so landslips are extremely unlikely. Safeguards in accordance with the most recent edition of the Landcom/Department of Housing Managing Urban Stormwater, Soils and Construction Guidelines (the Blue Book) should mitigate risk of landslip. A list of detailed environmental safeguards is provided in Section 9.	Site inspection 29/05/2025
	Is the proposed activity likely to cause erosion, impact on soil quality or land stability?	Yes	<p>The works will require significant earthworks on a site that is susceptible to wind and sheet erosion and there will be a moderate risk of erosion when undertaking the proposed works. As such, there is potential that sedimentation of waterways could occur. The GCC Residential Development Control Plan 2020 (DCP) states: “As Lake Wyangan is a terminal lake (meaning it does not flow to the ocean through a network of rivers or wetlands), nutrient and pollutant removal is an important objective in the catchment.”</p> <p>Safeguards to reduce impacts:</p> <ul style="list-style-type: none"> • Works must be kept within the identified boundaries. • Erosion and sediment control measures are to be implemented and maintained to: <ul style="list-style-type: none"> ○ Prevent sediment moving off-site and sediment laden water entering any water course, drainage lines, or drain inlets; ○ Reduce water velocity and capture sediment on site; and ○ Divert clean water around the site, 	Site inspection 29/05/2025

Environmental Factors	Risk check	Yes/ No	Details	Data sources checked
			<p>In accordance with the most recent edition of the Landcom/Department of Housing Managing Urban Stormwater, Soils and Construction Guidelines (the Blue Book). The proposed activity where applicable will also comply with Council's Erosion and Sediment Control Policy.</p> <ul style="list-style-type: none"> An erosion and sediment control plan is to be prepared for the works. Erosion and sedimentation controls are to be checked and maintained on a regular basis (including clearing of sediment from behind barriers). <p>Erosion and sediment control measures are not to be removed until the works have been completed and areas are stabilised.</p>	
	Does the proposed activity require excavation?	Yes	The proposed activity requires significant earthworks which have the potential to movement of sediment into waterways and disturb stream beds with subsequent impacts on biodiversity through loss or damage of habitat and smothering by sediments. Implementing safeguards as above should mitigate risks associated with excavation works.	Scope of works
	Is the proposed activity occurring in an area affected by salinity?	No	The works are occurring where soils have firm surface condition, good drainage and no observed salinity. The proposed activity will involve disturbance to the soil surface and some clearing of deep-rooted trees but no significant effects on soil salinity are expected.	Site inspection- 29/05/2025 SEED search – 02/07/2025
	Is the proposed activity likely to result in the generation of groundwater discharges (e.g. from drilling, boring or deep excavation)?	No	There is little potential for the works to result in the generation of groundwater discharges as the excavation is not deep enough to interfere with the water table.	Scope of works Griffith LEP 03/07/2025
	Is the proposed activity likely to result in the generation of saline groundwater discharge?	No	The proposed activity is unlikely to result in the generation of saline groundwater discharges.	Site inspection 08/02/2025

Environmental Factors	Risk check	Yes/ No	Details	Data sources checked
B Hydrology and drainage	Is the proposed activity likely to affect a waterbody, watercourse, wetland or natural drainage system (is it located within the bed or bank of a watercourse or within 40 m of a watercourse which includes dry drainage channels)?	Yes	The site is adjacent to Lake Wyangan. If erosion or chemical spills were to occur during construction, there is a high likelihood of contamination reaching the lake resulting in negative impacts to aquatic biodiversity. The lake is listed as Key Fish Habitat (DPI 2025). In addition, the proposed activity may result in larger volumes of stormwater entering the lake. Safeguards listed in Section 9 should mitigate potential risks to waterways.	Site inspection – 29/05/2025 DPI – 02/07/2025
	Are there any natural watercourses located immediately downslope or in close proximity downslope of the areas where the proposed activity will occur?	Yes	<p>Lake Wyangan is immediately downslope the proposed work area and would be directly impacted by any erosion or contamination from the worksite.</p> <p>Safeguards for implementation:</p> <ul style="list-style-type: none"> Fuels, chemicals and other liquids would not be stored on site overnight. Refuelling and any other urgent maintenance on machinery and equipment would be done in a bunded area within the site footprint. An emergency spill kit would be kept on site at all times. The location and proper use of the kit would be part of staff induction. Sediment and erosion control measures would be developed and implemented as per the requirements of the most recent edition of the NSW Government’s Blue Book on erosion and sediment control to ensure no or minimal offsite impacts. The proposed activity where applicable will also comply with Council’s Erosion and Sediment Control Policy. Erosion and sediment control measures would not be removed until the work is complete and disturbed areas have been stabilised. 	Site inspection- 29/05/2025 Google/Six Maps- 02/07/2025
	Does the proposed activity involve temporary diversion of a creek or watercourse	Possible	The proposed activity may require diversion of waterways (man-made drains) to allow work to proceed.	Scope of works

Environmental Factors	Risk check	Yes/ No	Details	Data sources checked
C Potential pollutants	during the construction phase?			
	Will the proposed activity result in permanent changes to existing surface drainage patterns?	Yes	The proposed activity involves the widening a number of existing drainage channels, construction of a detention basin, roadworks and ancillary works. Given the purpose of the drainage channels, the proposal will result in permanent change of existing surface drainage patterns. However, this will be a positive change. Additional to the channel widening, disturbance to the soil surface, compaction and installation of new drainage infrastructure will also contribute to changes in drainage patterns.	Scope of works
	Is the proposed activity located within a floodplain (i.e. 1 in 100 year flood prone area)?	Yes	The proposed activity is in a floodplain, however flood events are very rare. (Lake Wyangan Flood Study, BMT WBM Pty Ltd, 2011).	Scope of works, Council LEP
	Is the proposed activity likely to alter flooding regimes or be affected by flooding?	Yes	The proposal seeks to improve stormwater drainage and provide greater flood protection to residences and infrastructure in Lake Wyangan.	Scope of works
	Will the proposed activity involve the use, storage or transport of hazardous substances or the use or generation of chemicals which may build up residues in the environment?	No	The proposed activity will not involve the use, storage or transport of hazardous substances or the use or generation of chemicals which may build up residues in the environment. Construction materials like gravel, concrete, binding compounds and bitumen emulsion will require transport but these are inert materials not commonly known to accumulate toxic levels in the environment. All relevant safe work method statements and appropriate training will be provided, where applicable, to personnel working on site. Additionally, the development will comply with the relevant legislative requirements.	Scope of works
	Will the proposed activity involve the generation or disposal of gaseous liquid or solid wastes or emissions?	Yes	The proposed activity will involve the generation of carbon dioxide through vehicular emissions driving to and from the site and generated by machinery on site, but during construction this is finite in nature. The proposed activity will also generate waste from the removal of existing vegetation and excavated soils, producing green waste from vegetation	Scope of works

Environmental Factors	Risk check	Yes/ No	Details	Data sources checked
			<p>removal. Soil excavated to widen channels and for roadworks may be classified as virgin excavated natural material (VENM) if not contaminated with manufactured chemicals or process residues that may result from industrial, commercial, mining or agricultural activities; and not containing sulfidic ores or soils, or any other waste. Such general waste will be transported to the Tharbogang landfill site.</p> <p>General waste produced by site workers will include packaging waste, paper, food scraps and bottles. All waste or redundant material generated by the works would be managed in accordance with the <i>Waste Avoidance and Resource Recovery 2001</i> (WARR Act) by following the waste hierarchy of avoidance, reuse, recycle, energy recovery and disposal. Where recycling and reuse is not possible, waste would be collected and transported in a manner that fulfils Council's statutory requirements and disposed of at an appropriately waste facility that is licenced to accept such wastes. Wastes would be securely stored on site to ensure no loss of containment of wastes and any potential pollutants.</p>	
	Will the proposed activity involve the emission of dust, odours or radiation?	Yes	<p>Proposed works will likely generate temporary air quality impacts with dust generated by excavation, handling of soil and/or exposed soils, removal of vegetation and exhaust emissions from construction vehicles and machinery. Additionally, dust creation may be significant during the construction period but will be managed with appropriate watering. Air quality impacts would be effectively managed with the following mitigation measures:</p> <ul style="list-style-type: none"> • The extent of excavations would be minimised where possible; • The time between ground disturbance and restoration would be minimised as far as practicable; • Dust generating activities would be avoided during dry windy conditions; 	Scope of works / Site inspection – 29/05/2025

Environmental Factors	Risk check	Yes/ No	Details	Data sources checked
			<ul style="list-style-type: none"> All work areas would be closely monitored for dust generation and stabilised / suppressed where required; Any loads of fill material would be kept covered at all times during transportation; All work vehicles/machinery would be maintained to a standard such that particulates in exhaust emissions are not visible for a continuous period of more than 10 seconds; and Work vehicles, plant or machinery would not be left running or idling when not in use. <p>Provided that the mitigation measures listed above are followed, air quality impacts are expected to be short-term, localised and minimal.</p>	
	Will the proposed activity involve the emission of dust, odours or radiation in the proximity of workplaces/ residential/ urban areas or other sensitive locations?	Yes	<p>As above, the proposed works will likely generate temporary air, dust and odour emissions for the duration of the works. Sensitive receptors include private properties, Lake Wyangan Public School (directly opposite the eastern end of Todd Road) and Griffith Regional Airport (approaching and departing aircraft may pass over the site at low altitude). The proposed activity will have short-term impacts for these receptors and any adverse effects would be localised and limited to construction periods, with use of the proposed safeguards. The Principal of the public school should be contacted before the start of the proposed activity to discuss mitigation of impacts on the school. To avoid dust adversely effecting offsite receivers, construction activities should be moderated at times when gusty winds blow in the direction of nearby buildings. Impacts will be further minimised provided that the safeguards listed below are implemented.</p> <ul style="list-style-type: none"> Dust suppression measures (including watering exposed areas) would be used to minimise or prevent dust. Works would not to be carried out during strong winds or in weather conditions where high levels of dust or air borne particulates are likely. 	Scope of works / Site inspection – 29/05/2025

Environmental Factors	Risk check	Yes/ No	Details	Data sources checked
			<ul style="list-style-type: none"> Vehicles transporting materials that may produce dust would be covered during transportation. Vehicles would be maintained so as to minimise emissions (exhaust emissions are not visible for a continuous period of more than 10 seconds). Work vehicles, plant or machinery would not be left running or idling when not in use, unless waiting inside the cab for a turn. In the event of any complaint being made, Council's Complaints Handling Procedure would be followed. <p>With the implementation of the appropriate mitigation measures during site operations, air quality impacts are expected to be minimal.</p>	
	Will the proposed activity result in permanent changes to background noise?	No	Heavy machinery used in work activities could add significantly to the ambient noise and vibration levels at the site however would be localised and limited to construction periods. Changes to background noise will be temporary and outside of work hours and after completion of work, the existing environment will continue to function as it currently does.	Scope of works / Site inspection – 29/05/2025
	Will the proposed activity generate noise or vibration during the work period?	Yes	<p>The proposed activity is likely to generate noise, and vibration impacts during the work period. Construction works have the potential to generate localised noise and vibration impacts through the following sources:</p> <ul style="list-style-type: none"> Transit of work vehicles and trucks, Construction staff movement and activity around the work site, and Heavy vehicle equipment and machinery associated with scope of works onsite. <p>The noise and vibration generated during works will be higher than existing levels, as currently the noise and vibrations are limited to those produced by traffic and agriculture. There are many sensitive receptors in the area but works would be confined to normal construction hours (Monday to Friday, 7.00am to 6.00pm; Saturday 8.00am to 1.00pm, if required; with no work on Sundays or</p>	Scope of works

Environmental Factors	Risk check	Yes/ No	Details	Data sources checked
			<p>public holidays). Residents and workers will be notified prior to the commencement of work and regular communication from the Council should ameliorate any additional risks posed by excess noise and vibration. The Principal of the public school should be contacted before the start of the proposed activity to discuss mitigation of impacts on the school. The following mitigation measures would be implemented during site operations:</p> <ul style="list-style-type: none"> • Direct liaison with the landholder and residents of nearest properties to ensure notice is given before commencement of site activities; • Plant and vehicles would be switched off when idle; • Plant and equipment would be maintained to minimise noise emissions; • All plant and equipment on site to be maintained in accordance with manufacturer's requirements and, where applicable, fitted with suitable noise suppressing equipment to limit engine noise emissions; • Any noise complaints would be addressed, investigated and responded to as per Council's Complaints procedures; and • Daily operational times would be established and followed. <p>Provided that the mitigation measures are followed during construction, temporary noise and vibration impacts from activities will be adequately managed.</p>	
	Will the proposed activity generate noise at night during the work period?	No	Works would be confined to normal construction hours (Monday to Friday, 7.00am to 6.00pm; Saturday 8.00am to 1.00pm, if required; with no construction work on Sundays or public holidays) and no night works.	Scope of works
	Will the proposed activity involve the use or storage of fuels or other chemicals (other than fuels contained within work vehicles)?	No	The proposed activity will only involve minimal use or storage of fuels and other chemicals (other than fuels contained within work vehicles). All relevant safe work method statements and appropriate training will be provided where applicable to personnel working on site. Additionally, the proposed activity will comply with the relevant legislative requirements.	Scope of works

Environmental Factors	Risk check	Yes/ No	Details	Data sources checked
	Will the proposed activity involve the use of fuel-driven machinery or equipment (other than vehicles used to transport work staff to the work site)?	Yes	<p>The proposed activity will involve the use of fuel driven machinery or equipment including:</p> <ul style="list-style-type: none"> • Trucks, • Concrete trucks, • Excavators, • Scrapers, • Graders, • Water cart, • Compactor, • Small crane, • Trenching machine and, • Small excavator 	Scope of works
	Will the proposed activity result in an increase in Council's energy use?	Yes	<p>Site works will increase Council's energy usage through the following sources:</p> <ul style="list-style-type: none"> • Use of work vehicles and trucks, • Work activities on site and • Heavy vehicles and machinery use. <p>The following mitigation measures would be implemented for construction:</p> <ul style="list-style-type: none"> • Plant, equipment and vehicles would be switched off when idle; • Plant and equipment would be maintained to increase energy efficiency; • Vehicle transit would be via major roads and the shortest possible routes; • All plant and equipment on site would be maintained in accordance with manufacturer's requirements; and • Daily work times would be established and followed. <p>Provided that the mitigation measures are followed during site works, energy impacts will be minimised. Overall, the existing environment will continue to function as it currently does when the site is not active. The proposed activity is therefore unlikely to have a long-term significant effect on energy use.</p>	Scope of works

Environmental Factors	Risk check	Yes/ No	Details	Data sources checked
D Visual	Have alternative energy sources or ways to reduce energy usage for the proposed activity been considered?	Yes	Alternative energy options include electric or hybrid electric vehicles and trucks, advanced biofuels and hydrogen fuel cell and as these technologies become more available and affordable, Council will consider incorporation into its fleet of plant and vehicles. Energy usage will be minimised using properly maintained equipment and always seeking operational effectiveness through the method of work, such as batching activities to gain efficiencies. Any increase in energy usage levels will be limited to times of construction and is unlikely to have a significant long-term effect on energy use.	Scope of works
	Are the areas where the proposed activity will occur visible from residential properties or other land uses that may be sensitive to visual impacts?	Yes	The proposed site adjoins residential properties, rural agricultural properties, public recreation and the public school. The proposed activity will be visible from several homes, businesses and the school. However, the work is mostly excavation, so the long-term impacts of the proposal on visual landscape and amenity is negligible.	Site inspection 29/05/2025 LEP – 04/02/2025
	Do the areas where the proposed activity will occur have a high scenic value?	No	Lake Wyangan has high scenic values but the effect of the proposed work on the lake scenery will be minimal, as work areas are not easily accessible by the public. The other areas where the proposed activity will occur do not have a high scenic value, nor will any views be permanently interrupted.	Site inspection 29/05/2025
	Is the proposed activity located in an area where native fauna may be affected by light or other visual impacts?	No	The native fauna in the area of the proposed activity is unlikely to be affected by light or other visual impacts. The proposal does not include the installation of lighting, and no night works are proposed. Works would be confined to normal construction hours (Monday to Friday, 7.00am to 6.00pm; Saturday 8.00am to 1.00pm, if required; with no work on Sundays or public holidays).	Scope of works, Site inspection 29/05/2025
	Will the proposed activity result in permanent changes to the visual character of the environment?	Yes	The proposed activity will result in alterations to the visual character of the environment but, as it consists mostly of excavation, this is not considered to be significant.	Scope of works, Site inspection 29/05/2025
E Biological impacts	Will the proposed activity result in the	Yes	Most of the vegetation to be removed consists of exotic weeds, groundcovers and planted trees. A small amount of native vegetation will be removed (for	Scope of works, Site inspection 29/05/2025

Environmental Factors	Risk check	Yes/ No	Details	Data sources checked
	clearing or modification of vegetation?		example, less than 5 % of the cumbungi rushland, which is present at the south Lake site areas and is shown on SEED mapping as having high probability of being a groundwater dependent ecosystem) but no significant remnant trees. The cumbungi rushland is highly likely to regenerate in any cleared areas after completion of work and any controlled burning to allow site access is unlikely to have a permanent effect.	
	Will the proposed activity result in the removal of standing dead trees or woody debris from the ground?	No	No standing dead trees will be removed. Any large wood debris in the work area will be pushed outside the work area in remaining habitat to continue to be utilised by fauna.	Scope of works, Site inspection 08/10/2025
	Will the proposed activity involve the removal of bush rock?	No	No bush rock was identified on-site.	Site inspection 29/05/2025
	Will the proposed activity occur in an area infested by any noxious or environmental weeds?	Yes	The site is infested to varying degrees by a variety of weed species. To avoid further spreading of these weeds, they should be treated before works starts. Ongoing monitoring and treatment of weeds will be needed. Priority weeds for the Riverina, which includes Griffith LGA are listed in Appendix C: Priority weeds for the Riverina. Some of the priority species are also among the 32 Weeds of National Significance (WoNS, 2021) for consideration in vegetation management.	Site inspection 29/05/2025
	Is the proposed activity likely to introduce noxious weeds, vermin, feral species or genetically modified organisms into an area?	No	The proposed activity is not likely to introduce noxious weeds, vermin, feral species or genetically modified organisms into the area, provided safeguards are observed. Vehicles used on-site will be routinely washed at the Council depot, examined and cleaned before entering the site to avoid transfer of organisms. Vehicles entering the site can be cleaned by blowing dust and plant seeds off the vehicle with an air hose or brushing surface matter off the vehicle. Weeds or feral animals will be controlled as per biosecurity obligations and Council policy.	Scope of works

Environmental Factors	Risk check	Yes/ No	Details	Data sources checked
	Does the proposed activity have the potential to endanger, displace or disturb fauna or create a barrier to their movement?	No	The proposed activity is unlikely to endanger, displace or disturb fauna or create a barrier to movement as the work involves enhancing existing infrastructure. Additionally, large mature, or hollow bearing trees won't be removed.	Scope of works, Site inspection 29/05/2025
	Are there any threatened species, populations, threatened ecological communities (TEC) and/or their habitat protected under the EPBC Act located within or adjacent to where the proposed activity will occur?	No	<p>No threatened species were identified during the site visit. The EPBC Act lists matters of national environmental significance (MNES) to determine whether the proposal should be referred to the Australian Government Department of Climate Change, Environment, Energy and Water (DCCEEW). Of the MNES, migratory species, threatened species and communities are relevant to this proposal.</p> <p>To identify those protected and threatened species and communities that may potentially inhabit the surrounding area, searches were conducted of the following databases:</p> <ul style="list-style-type: none"> • BioNet NSW Atlas of Wildlife (DCCEEW NSW 2025a), • Protected Matters Search Tool (DCCEEW 2025) and, • Threatened species search by region (DCCEEW NSW 2025b). <p>A summary of these search results appears in Appendix B, D and E and a likelihood of occurrence assessment is provided in Appendix F. In total, 29 threatened fauna species, two flora species and 5 TEC listed under the EPBC Act were listed in the Protected Matters Report. The Bionet report of all valid records of threatened (listed on BC Act 2016), Commonwealth listed, CAMBA listed, JAMBA listed or ROKAMBA listed a total of 627 records of 45 species. The threatened species search for the Lachlan Plains IBRA subregion returned a list of 75 species.</p>	Site Inspection – 29/05/2025, Bionet Atlas, Protected Matters, Threatened Species 02/02/2025
	Will the proposed activity affect any threatened species, populations, threatened ecological communities	Yes	The proposed activity has the potential to affect known threatened species and populations that are protected under the EPBC Act. It is highly unlikely that any TEC will be affected. As targeted threatened species surveys weren't undertaken areas of high biodiversity value have been considered as potential	Site inspection – 29/05/2025, Scope of Works

Environmental Factors	Risk check	Yes/ No	Details	Data sources checked
	and/or their habitat protected under the EPBC Act?		<p>threatened species and/or their habitat. Currently there is vegetation with habitat value in the area of the proposed work activity. Significant trees will be protected which will mitigate risks to any threatened species that could reside in the area. If threatened species are discovered, work must cease immediately and DCCEEWS NSW be contacted for direction. An EPBC Act test of significance has been undertaken for any species considered with potential to utilise the work area (Appendix F). The implementation of safeguards as listed below would ensure no significant impact on biodiversity.</p> <ul style="list-style-type: none"> • The extent of works must be clearly identified and tool boxed to crews and sub-contractors so that all persons, machinery and equipment are confined to the assessed areas. • If threatened fauna or flora species are discovered, work must cease immediately and DPIE must be contacted for direction. • All machinery associated with the works to be housed within the site. • Machinery to be cleaned thoroughly prior to entering the site and again prior to leaving to avoid spreading weeds and/or pathogens. <p>Priority weeds, if present, are to be managed according to the duties under the <i>Biosecurity Act 2015</i>. Following biodiversity safeguards, the test of significance supported the conclusion that the disturbance to habitat in the area would not be substantial.</p>	
	Will the proposed activity occur in an area or affect any migratory species protected under the EPBC Act?	No	<p>A Protected Matters Report under the EPBC Act has been generated for the area of interest using the Protected Matters Search Tool (PMST) (DCCEEWS 2025). Migratory species that will potentially use the site are populated in this search. The majority of the records for migratory species in the area (Bionet) are historical, the most recent being more than 20 years ago. It is highly unlikely that EPBC Act migratory species will be affected by the proposal.</p>	<p>Site inspection – 29/05/2025, Protected Matters Report – 03/07/2025</p>

Environmental Factors	Risk check	Yes/ No	Details	Data sources checked
	Are there any threatened species, populations, TEC and/or their habitat protected under the BC Act located within or adjacent to where the proposed activity will occur?	Yes	A search of the BioNet Atlas (DCCEEWSW 2025a) returned 627 records of 45 species and 15 TECs recorded within 10 km x 10 km search frame centred around the proposed work area. The site inspection did not identify any threatened species or TECs on-site. Most notably individuals of the, magpie goose (2023), blue-billed duck (2011), Australasian bittern (2023), white bellied sea eagle (2004), sharp-tailed sandpiper (2006), marsh sandpiper (2007), painted honeyeater (2019), grey-crowned babbler (2023), little pied bat (2019), turquoise parrot (2022), swift parrot (2019), pink cockatoo (2023), freckled duck (2019) and black falcon (2022) have been recorded on or adjacent to the site. Most of these species are listed as vulnerable and some as endangered.	Site inspection - 29/05/2025, BioNet Atlas 04/02/2025
	Will the proposed activity affect any threatened species, populations, TEC and/or their habitat protected under the BC Act?	No	<p>The work area would contain foraging habitat for the species noted above and may also contain breeding, nesting and roosting sites. Significant surrounding foraging habitat will not be affected by the works. As noted above, targeted threatened species were not undertaken and therefore, areas of high biodiversity value have been considered with potential to affect threatened fauna and/or their habitat. Currently there is vegetation with habitat value including rushes and sedges, a small number of mature native trees and woody debris in the zone of work activity, and the rushes and sedges, at least, will be affected by the proposal. Significant trees will be protected which will benefit any threatened species that could reside in the area.</p> <p>If threatened species are discovered, work must cease immediately and DCCEEWSW contacted for direction. Following biodiversity safeguards, as listed in this table above, will help ensure minimal impacts. There will be short-term impacts of construction machinery such as vibration, noise, dust, odours, traffic but species would be expected to return to the area when works are complete. A test of significance has been applied to those threatened species</p>	Site inspection – 29/05/2025, BioNet Atlas 04/02/2025

Environmental Factors	Risk check	Yes/ No	Details	Data sources checked
F Traffic and access (community)			listed under the BC Act that are considered to potentially occur in the vicinity (Appendix F).	
	Is there any other important vegetation or habitat (e.g. urban bushland) located within or immediately adjacent to the area where the proposed activity will occur?	No	The proposed activity is not located within or adjacent to any other important vegetation or habitat.	Site inspection 29/05/2025
	Will the proposed activity affect any important aquatic flora or fauna?	No	Lake Wyangan is adjacent, downstream from the work area. The lake is listed as Key Fish Habitat (DPI 2025) and a test of significance (under the FM Act) has been conducted, showing significant impacts are not likely (Appendix G). The cumbungi rushland, which is present on site is shown on SEED mapping as having high probability of being a groundwater dependent ecosystem. It is likely that less than 5 % of this rushland will be significantly impacted by the proposed work. Potential waterway contamination is limited by erosion and sediment control safeguards. A Fisheries Permit is required for the proposed activity. The outlined safeguards will be employed to protect waterways from sediment transfer, minimising impacts to any important aquatic flora or habitat.	Site inspection 29/05/2025, DPI – 03/07/2025. SEED map, 03/07/2025.
	Is the area where the proposed activity will occur easily accessible by vehicle?	Yes	The area where the proposed activity will occur is easily accessible by vehicle from various roads.	Site inspection 29/05/2025
	Are there likely to be any difficulties associated with site access in the area where the proposed activity will occur?	No	There are unlikely to be any difficulties associated with site access as the location is easily accessible by vehicle.	Site inspection - 29/05/2025
	Is the proposed activity occurring in an area that	No	The proposed activity is near a school. Council will contact the school principal to discuss appropriate mitigation measures.	Site inspection 29/05/2025

Environmental Factors	Risk check	Yes/ No	Details	Data sources checked
	may be highly sensitive to movement of work vehicles to and from the work sites (e.g. close to a school)?			
	Will the proposed activity involve partial or complete road closures?	Yes	The proposed activity will likely involve partial road closures, which would be coordinated by guidelines established in a traffic management plan.	Scope of works
	Will the proposed activity result in a significant increase in the volume of traffic on local roadways during the work period?	Yes	<p>The proposed activity will result in an increase in the volume of traffic on local roadways during the work period. Significant earthworks will entail the movement of trucks to and from the site, removing and depositing material. General work vehicles (e.g. utility vehicles) should be mostly limited to the start and end of the work day. An established traffic management plan should ensure disruptions to locals should be reasonable and limited to work hours. Safeguards to be implemented to minimise impacts:</p> <ul style="list-style-type: none"> • The erosion and sediment control measures previously indicated would be sufficient to ensure stabilisation of roads and disturbed areas, to guard against erosion. • Vehicles and machinery associated with construction activities would be parked/stored in a designated area within the site footprint. • Access to be confined to a formal route. • Traffic management and vehicle movement plans would be developed and implemented prior to work in accordance with Council's standard operating procedures. <p>Any degradation of the local roads will be remediated as part of major project works.</p>	Scope of works
	Will the proposed activity require the construction of a new permanent vehicle access road?	No	The proposed activity may require construction of temporary haulage roads but no permanent new access roads are proposed.	Scope of works

Environmental Factors	Risk check	Yes/ No	Details	Data sources checked
G Land use and services (community)				
	Is the proposed activity occurring in an area where street parking space is scarce?	No	The proposed activity is not occurring in an area where street parking is scarce, and parking is expected to be accommodated in previously disturbed areas.	Site inspection 29/05/2025
	Will the availability of street parking spaces for residents, businesses or popular recreational areas be reduced during the period in which the proposed activity will occur?	Yes	There will be a reduction in the availability of street parking spaces during the work period. This would be limited to work hours during construction only. However, street parking is abundant in the area, with negligible street parking used for businesses and it is not expected to significantly impact residents and businesses.	Site inspection 29/05/2025
	Will the proposed activity require access to or disturbance of private property?	Yes	The proposed activity will require access to and disturbance of private property. Some parcels of private land are required for the infrastructure implementation and will be acquired by Council after negotiation. Council will need to maintain regular communication with landholders to ensure they are given adequate notice prior to accessing land. The proposal will provide greater protection to these residents and as such, the short-term inconvenience will have a long-term positive outcome.	Site inspection 29/05/2025
	Is the proposed activity likely to affect existing community services or infrastructure?	No	The proposed activity is unlikely to have negative impacts on existing community services or infrastructure. There are overhead and underground utilities that will be clearly marked to avoid contact while working in proximity to those areas. A "Dial before you Dig" check would be conducted before excavation commences, to check for additional utilities not marked aboveground.	Scope of works, Site inspection - 29/05/2025
	Is the proposed activity located in an area with a high recreational value?	Yes	Lake Wyangan has high recreational value for the local community, however, the proposed work will have minimal effects on this value.	Site inspection 29/05/2025

Environmental Factors	Risk check	Yes/ No	Details	Data sources checked
	Is the proposed activity likely to cause a bushfire risk?	No	The proposal does not include activities that will increase the risk of bushfire.	Site inspection – 29/05/2025, Scope of works
	Is the proposed activity occurring in a busy commercial area?	No	The proposed activity is not occurring in a busy commercial area.	Site inspection 29/05/2025
	Is the proposed activity likely to have an impact on the safety of the community?	No	The proposed activity is not likely to have an impact on safety of the community as appropriate traffic control measures will be implemented for the duration of the work.	Scope of works, Site inspection 29/05/2025
	Will the proposed activity result in temporary or permanent loss or disruption of an existing land use?	No	The proposed activity will not result in the permanent disruption of the existing land.	Scope of works
	Will the proposed activity involve the installation of structures or facilities that may be perceived as harmful or noxious?	No	The proposed activity will not involve the installation of structures or facilities that may be perceived as harmful or noxious.	Scope of works
	Will the proposal involve the disturbance or decommissioning of an asbestos structure?	No	The proposed activity will not involve the disturbance or decommissioning of an asbestos structure. Council must inspect any existing pipes and fill material that are to be removed for the presence of asbestos. If asbestos is detected, removal must comply with all relevant state and Commonwealth legislation.	Site inspection – 29/05/2025 Scope of works
	Will the proposed activity involve the removal or disturbance of lead paint?	No	The proposed activity will not involve the removal or disturbance of lead paint.	Site inspection – 29/05/2025 Scope of works
	Will the proposed activity occur on lands that are known to be or are potentially contaminated?	No	The proposed activity will not occur on lands that are known to be or are potentially contaminated.	NSW EPA Contaminated Land Register 04/02/2025

Environmental Factors	Risk check	Yes/ No	Details	Data sources checked
H Waste generation	Will the proposed activity disturb contaminated land or contaminated material?	No	The proposed activity will not disturb contaminated land or contaminated material.	Site inspection – 29/05/2025 Scope of works
	Will the proposed activity impact on lands or infrastructure owned or managed by a State Government agency, corporation or utility e.g. RailCorp, Transgrid, NSW DPE or TfNSW?	No	The proposed activity will not impact on lands or infrastructure owned or managed by a State Government agency, corporation or utility. The proposed activity involves excavation works and a ‘Dial before you Dig’ search will be conducted before any ground disturbance occurs. All overhead powerlines must be clearly marked before work starts. The locations of all utilities must be communicated to crews prior to commencing work.	Scope of works, Dial before you Dig search Title Deed Section 10.7 Certificate
	Will the proposal create hazardous waste (e.g. lead or asbestos) as per Safe Work Australia guidelines?	No	The proposed activity will not generate waste that includes hazardous substances (such as lead or asbestos (stormwater pipes and fill to be removed must be checked for asbestos)). The proposed activity will only produce those wastes as described earlier in this table under potential pollutants.	Scope of works
	Will the proposal generate non-hazardous waste requiring disposal at a landfill or waste disposal facility?	Yes	The proposed activity will generate non-hazardous waste requiring disposal at a landfill or waste disposal facility (Tharbogang landfill). Council will manage those wastes as described earlier in this table under potential pollutants.	Scope of works
	Will the proposed activity generate wastewater that will require removal from site (e.g. sediment-laden groundwater)?	No	The proposed activity will not generate wastewater that will require removal from the site.	Scope of works
I Heritage	Are there any registered Cultural Heritage items or places located within or immediately adjacent to the area where the proposed activity will occur?	Yes	The proposal is located on land subject to previous disturbance for agriculture and road construction and maintenance. Potential items of Aboriginal Cultural Heritage significance were detected during the site visit on 29 May 2025 and an AHIMS search conducted on 27 May 2025 returned 23 records for Aboriginal sites in the area (Appendix I). The Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales (the Code) (DCCEEW 2010) (Appendix I) provides guidance	AHIMS register – 03/02/2025, Site inspection – 29/05/2025

Environmental Factors	Risk check	Yes/ No	Details	Data sources checked
C			<p>on determining what type of assessment is required, and whether an Aboriginal Heritage Impact Permit (AHIP) should be sought prior to commencement of works that are likely to have a significant impact on items or places of cultural significance. Given the location of the proposed activity in Lake foreshore areas, an Aboriginal cultural heritage assessment report (ACHAR) must be prepared in relation to the proposed activities, for land around the south Lake foreshores (two proposed drain inlet/outlet works) and an Aboriginal Heritage Impact Permit (AHIP) must be obtained before the start of such activity.</p> <p>Specified low impact activities have a defence against the strict liability s86(2) offence in the NP&W regulation if it concerns land management work (including the construction of water storage works, irrigation infrastructure, flood mitigation works, erosion control or soil conservation works) on land that has been disturbed (where human activity has changed the land surface and remains clearly observable). Work activity to widen the existing drains that do not have close proximity to the Lake foreshore can proceed (with caution) before the AHIP has been finalised. If Aboriginal cultural items are uncovered an 'unexpected finds' protocol should be followed and work ceased until protection of the heritage item is in place.</p> <p>Consultation will be undertaken with the Griffith Local Aboriginal Land Council (LALC) regarding work activity protocols.</p>	
	Will the proposed activity affect any Cultural heritage items or places?	Possible	<p>The proposal may have an impact on Cultural heritage. Application of the generic process set out in the Code indicates that an Aboriginal cultural heritage assessment report (ACHAR) must be prepared in relation to the proposed activity and an Aboriginal Heritage Impact Permit (AHIP) must be obtained before start of the proposed activity, in the natural areas and Lake foreshore zones.</p>	Site inspection 29/05/2025

Environmental Factors	Risk check	Yes/ No	Details	Data sources checked
	Will the proposed activity affect any wild resources or access to these resources which are used or valued by the Indigenous community?	No	The proposed work area does not contain wild resources that are used or valued by the Indigenous community except large mature trees. Council has indicated that significant trees will be protected, therefore proposed activity is unlikely to affect any wild resources or access to these resources which are used or valued by the Indigenous community. Council has also indicated that the Local Aboriginal Lands Council will be consulted prior to the commencement of work.	Site inspection - 29/05/2025, Scope of works
	Are there any National or NSW State Heritage places located within or immediately adjacent to the area where the proposed activity will occur?	No	There are no national or NSW state heritage places located within or immediately adjacent to the proposed work.	Site inspection – 29/05/2025, 04/07/2025, Heritage databases 04/07/2025
	Will the proposed activity affect a National or NSW State Heritage place or item?	No	The proposed work area itself does not contain any items of national or state heritage and therefore will not have an impact on any such items.	Site inspection – 29/05/2025, Council LEP – 04/07/2025, Heritage databases 04/07/2025
	Are there any other heritage items or areas listed under a regional planning instrument or Council LEP located within or immediately adjacent to the where the proposed activity will occur?	No	The proposed activity is not located within or immediately adjacent to any other heritage items or areas listed under a regional planning instrument or Council LEP and therefore will not affect any such items or places.	Site inspection – 29/05/2025, Council LEP – 04/07/2025,

9. ENVIRONMENTAL SAFEGUARDS

The following detailed safeguards must be incorporated as conditions in any contract or work specification for the proposed works. Consider the preparation of an Environmental Management Plan (EMP), an example is provided in Appendix H: Environmental Management Plan.

General

- All licence, approval and notification requirements identified in this REF are to be documented in the site plans.
- All project staff and contractors will be inducted on the environmental sensitivities of the work site(s) and relevant safeguards prior to commencement.
- The Project Manager will be notified immediately of any complaints relating to management of environmental issues.
- To ensure compliance with Section 148(3) of the *Protection of the Environment Operations Act 1997*, any employees and contractors will inform the Project Manager and if relevant Council's environmental officer as soon as they become aware of any pollution incidents that have caused or threaten material harm to the environment.
- Safety Data Sheets (SDS) are to be available on site for all fuels, chemicals etc stored on site.
- Council's Complaints Handling Procedure would be followed in the event of any complaint being made.

Topography and geology

- All surface runoff is to be diverted away from areas of soil disturbance and any stockpiles of erodible material.
- Erosion and sediment control measures will be consistent with those specified in the NSW Government's 'Blue Book' (4th Edition, 2004 or latest) on erosion and sediment control.
- Erosion and sediment control measures will be established before work begins and be maintained in effective working order throughout the duration of the works and until the site has been stabilised, to prevent on-site erosion and off-site transport of eroded sediments.
- Sediment and erosion control devices will be inspected weekly and immediately after rainfall to ensure effectiveness over the entire duration of the project. Any damage to erosion and sediment controls will be rectified immediately.
- Sediment fences and traps will be cleaned out before 30 % capacity is reached. Material removed from sediment traps will be re-distributed on site as appropriate or managed in accordance with the safeguards for 'waste'.
- Sediment control devices will be installed parallel with the contours, immediately downslope of any areas where the natural ground surface will be disturbed.
- Sandbags will be placed at the entry points to any culverts and stormwater channels to prevent sediment entering the stormwater system.
- Where possible, stockpiles will be placed on level ground, away from kerbs and drainage lines and 20m from creek banks or water bodies.
- Any stockpiles of soils or fill are to be managed in an appropriate manner to prevent dust, erosion and sediment runoff.
- Wherever possible excavated soil and sediment accumulated in erosion and sediment control structures will be reused in site restoration unless contaminated or otherwise inappropriate for reuse.
- Any fill material or soil imported to the site must be weed free and sourced locally, wherever possible.
- Measures will be taken to prevent tracking of soils/sediments from work sites to roadways and footpaths as a result of work vehicle/machinery movement.
- Any sediment/soil transferred from work sites to adjacent roadways/footpaths will be swept up at least daily or prior to the onset of rainfall and reused on site where appropriate.
- Equipment, plant and materials will be situated in designated lay-down areas with bunding where they are least likely to cause erosion or damage vegetation.
- Vehicle and machinery movement will be confined to designated tracks, pathways and work areas.

- Earthworks will not take place during or after heavy rain when doing so is likely to cause soil erosion or soil structural damage. Under such circumstances, earthworks will stop and only recommence after the ground surfaces have sufficiently dried out.
- In the event of rain developing during works execution, work site/s will be made secure against soil erosion.
- Site plans will include a contingency plan and emergency procedures for dealing with the unexpected onset of rainfall during the work period.
- If possible, disturbed areas will be stabilised progressively, as soon as possible, as works are completed.
- The natural landform of the site(s) will be restored in a manner that eliminates ponding of runoff and erosion.
- Site stabilisation/restoration measures will be monitored for effectiveness and modified as required.

Hydrology and drainage

- A functioning 'spill kit' will always be kept on site for clean-up of accidental chemical/fuel spills.
- Any chemicals and fuels on site will be stored within designated bunded areas, identified with appropriate signage.
- Bunded areas for chemical storage will have impervious floors and have the capacity to retain 150 % percent of the total volume of all liquids stored therein.
- Any necessary refuelling, fuel decanting and vehicle maintenance work will take place within a designated bunded area.
- Equipment will not be used if there are any signs of fuel, oil or hydraulic leaks. Leaks will be repaired immediately, or the equipment will be removed from site and replaced with a leak-free item.
- Any chemicals stored on site will be recorded on a register with Safety Data Sheets (SDS) available.
- Site plans will include contingency plans/emergency procedures in case of chemical/fuel spillage.
- No equipment, machinery or work vehicles will be washed on-site.
- Bitumen and concrete residues shall be captured, cleaned up and disposed of appropriately (see waste disposal safeguards).
- All storage and handling of chemicals and fuels onsite will be in accordance with the relevant NSW legislation and occupational health and safety guidelines.

Potential pollutants

- Time between ground disturbance and site restoration will be minimised as far as practical.
- All work areas and stockpiles will be closely monitored for dust generation.
- In the event of excessive dust generation, appropriate dust suppression measures (e.g. watering, covering exposed areas/stockpiles with tarpaulins or geotextile fabric, appropriate seeding and/or avoidance of dust generating activities during dry or windy conditions).
- Where watering is used to suppress dust, appropriate non-potable water sources will be used where at all possible (e.g. water pumped from excavation pits).
- All loads of excavated material, soil, fill and other erodible matter that is transported to or from the work site will always be kept covered during transportation.
- All work vehicles/machinery will be maintained to a standard such that visible particulates in exhaust emissions are not visible for a continuous period of more than 10 seconds.
- Work vehicles/machinery will not be left running or idling when not in use.
- No matter of any kind is to be burnt.
- Equipment used will have efficient muffler design and be well maintained.
- All stationary and mobile equipment will be fitted with residential type silencers.
- Noisy activities should occur in as short a timeframe as possible with minimal delays.
- Noisy plant and equipment will be positioned and oriented to minimise noise impacts.
- Any noise complaints will be addressed immediately in accordance with Council's policies.
- Surrounding residences and businesses will be given reasonable notice of the proposed works (including proposed start date, work methods and works duration) in accordance with Council's policies.

Visual

- All work equipment and materials will be contained within the designated boundaries of the work site.
- The spread of stockpiles, waste, and vehicle parking will be minimised.

- On completion of the works, all vehicles, construction equipment, materials, and refuse relating to the works will be removed from the work site(s) and any adjacent affected areas.
- All waste generated during the works will be reused or removed from the work areas as soon as practicable and disposed of in accordance with the waste disposal safeguards.

Biological

- If any threatened species (flora or fauna) is discovered during the works, all work will stop immediately, and relevant Council officers will be notified. Work will only recommence once the impact on the species has been assessed, and appropriate control measures provided.
- Site plans will clearly identify the boundaries of the work area and disturbance corridor.
- Site plans will clearly identify the locations of lay-down and storage areas for materials, equipment, plant and stockpiles.
- Site plans will clearly identify the location of work vehicle parking areas.
- Site plans will clearly document the location and full extent of any lopping, trimming, clearing or other vegetation disturbance required for the works.
- Site plans will clearly identify the locations of any 'no-go' areas within/adjacent to work site boundaries that are not to be in any way disturbed or damaged by the works (e.g. areas containing threatened species or other sensitive sites).
- Vegetation clearance and disturbance will be kept to an absolute minimum.
- Where possible hollow bearing trees will be left undisturbed.
- Large trees to be retained are to have a 10m diameter 'No Dig' buffer zone to prevent root disturbance.
- Materials, plant, equipment and stockpiles will not be placed in a manner that results in damage to surrounding native vegetation.
- Work vehicle access will be restricted to designated work areas and existing formed access tracks/roadways.
- A 'no disturbance' buffer will be established by erecting and maintaining exclusion fencing between work areas and any adjoining bushland, riparian zones, wetland environments or other sensitive areas.
- Areas of vegetation and specific trees/plants that are not to be disturbed will be fenced off prior to commencement of works. Workers will be instructed to keep out of such areas.
- If any damage occurs to vegetation outside of the nominated work area (as shown in the site plan) the Council employee responsible for environmental matters will be notified so that appropriate remediation strategies can be developed and implemented.
- If it is perceived that significant impacts are occurring to native animals in the vicinity of the work area, works will cease and Council's staff will seek further advice.
- Excavated topsoil material that is likely to be infested with weed propagules is to be removed from the site and disposed of at an appropriately licensed and approved waste disposal facility.
- Native animals found on site will be allowed to leave the site without undue duress or harassment.

Traffic and access (community)

- Work vehicles will not obstruct vehicular or pedestrian traffic on roadways, or access to private driveways, public facilities or businesses, unless absolutely necessary and only if appropriate notification has been provided to potentially affected property owners, local residents and businesses.
- Construction vehicles and equipment will be positioned within the boundaries of the work site where possible or (where no on-site parking is available) in the nearest available roadway parking space in a manner which minimises disruption to other road users, businesses and the public.
- Contractors will comply with any Council or TfNSW requirements regarding traffic control, access and road/footway restoration issues.
- Appropriate signs will be erected to inform public road users of the proposed works and any temporary road closures.
- If necessary, a Traffic Management Plan will be prepared in consultation with Council.
- The Traffic Management Plan will designate parking areas for vehicles and plant associated with the works.
- Any degradation of the local roads will be remediated.

Land use and services (community)

- The site and/or work plans will provide details of community consultation requirements.

- The Project Manager will be notified immediately of any complaints received and will respond as soon as possible.
- All services in the vicinity of the works will be located in the field ('Dial before you Dig') and 'pegged out' and noted in the site and/or work plans prior to excavation works.

Waste Generation

- Waste streams will be sorted to maximise the reuse/recycling potential and minimise disposal costs.
- A sufficient number of suitable receptacles for general waste, hazardous waste and recyclable materials will be provided for waste disposal on site, including sufficient bins to allow separation of wastes for recycling.
- All wastes will be securely stored to ensure that any pollutants are prevented from escaping.
- Contractors will be instructed to remove all their general garbage from the work sites.
- Bins will be emptied when 80% full either by a licensed waste contractor or via delivery to an appropriately licenced and approved waste disposal depot.

Cultural and Other Heritage

- The extent of works must be clearly identified and tool boxed to crews and subcontractors so that all persons, machinery and equipment are confined to the assessed areas.
- In the event of an unexpected find of Cultural objects or sites, or other historical relics or sites, work will be stopped and an archaeologist contacted for assessment. If necessary, DPE, will be notified and any necessary approvals to continue work will be obtained.

10. ENVIRONMENTAL RISK ASSESSMENT

10.1. Individual Impact Risk Assessment

Key potential environmental impact	Before application of environmental safeguards			After application of environmental safeguards		
	Likelihood	Consequence	Risk	Likelihood	Consequence	Risk
Excavation causing erosion	1	C	High	5	B	Low
Erosion affecting water quality	2	C	High	5	B	Low
Waste generation and handling	3	B	Med	5	B	Low
Dust affecting local sensitive receptors	1	B	High	4	A	Low
Noise and vibration affecting local sensitive receptors	1	B	High	4	A	Low
Loss of habitat at the site	3	C	High	5	B	Low
Impacts on Threatened species or EEC	3	C	High	5	B	Low
Damage or interruption to community services or infrastructure	2	B	High	4	B	Low
Impacts on Indigenous heritage items	3	C	High	5	C	Med
Impacts on other heritage items	5	A	Low	5	A	Low

To determine the risk of individual impacts:

- Determine the likelihood of an impact occurring:

Likelihood	Definition
1 Almost certain	Impact will occur
2 Very likely	Impact has a high chance of occurring
3 Likely	Impact may occur
4 Unlikely	Impact has a minimal chance of occurring
5 Very unlikely	Impact will not occur or has very little chance of occurring

- Determine the consequence of the impact occurring:

Consequence		Definition
A	Minor	Impacts would result in minimal or negligible adverse change to the environment or may only persist for a short timeframe
B	Moderate	Impacts would result in moderate adverse change to the environment or may persist for longer with the environment eventually recovering
C	Extreme	Impacts would result in a permanent and adverse change to the environment.

- Determine the risk:

Risk	Likelihood				
Consequence	1 <i>Almost certain</i>	2 <i>Very likely</i>	3 <i>Likely</i>	4 <i>Unlikely</i>	5 <i>Very unlikely</i>
A Minor	Medium	Low	Low	Low	Low
B Moderate	High	High	Medium	Low	Low
C Extreme	High	High	High	Medium	Medium

Note that the risk of irreversible change may be high due to the environment's natural sensitivity and/or induced sensitivity because of the cumulative impacts of the proposed activity. Also, if it is known that the environment is already stressed then the acceptability of that activity that may further degrade the environment may be significantly reduced.

10.2. Overall Risk and Environmental Auditing Requirements

The ranking of the potential significance of the individual impacts of any activity must be considered as well as the aggregation of all the impacts of the activity. The cumulative effect could result in the activity as a whole having a significant effect. Note the overall risk is determined based on the average risk rating of the individual impacts.

Overall environmental risk before application of safeguards	Medium to high risk of moderate environmental impacts.
Overall environmental risk after application of safeguards	Low risk or occurrence of minimal environmental impacts.
Can risks be adequately mitigated?	Yes. The environmental risks can be adequately mitigated using the safeguards specified in Section 9 'Environmental Safeguards.'
Is environmental auditing during the works phase required or recommended?	Environmental auditing is not required during works as there are no activities that have a high potential environmental risk provided safeguards are utilised effectively.

11. CUMULATIVE IMPACTS

Clause 171 of the EP&A Regulation 2021 requires that an environmental assessment of an activity under Part 5 of the EP&A Act 1979 considers the potential for cumulative environmental impacts with other existing or likely future activities. In accordance with this clause, cumulative environmental effects of the proposal are considered minimal, the

proposed work is an improvement to existing infrastructure and the cumulative impacts are considered negligible.

The highest risk construction activities involve potential impacts causing erosion and reduced water quality of important waterbodies. Implementing the recommended mitigation measures will help minimise potential impacts and reduce the extent of disruption caused by proposed activities. In the long-term the proposal is unlikely to result in any significant accumulated impacts on the environment provided the material on levee is left in a stable condition.

12. COMMONWEALTH ENVIRONMENTAL FACTORS

The EPBC Act lists MNES for the purposes of determining whether the proposal should be referred to the DCCEEW. Table 1 provides a checklist of the MNES set out in the EPBC Act, and whether this proposal is likely to have any significant impact.

Table 2: MNES checklist

Factor	Impact
a. Any impact on a World Heritage Property?	Nil
b. Any impact on a National Heritage place?	Nil
c. Any impact on a wetland of international importance?	Nil
d. Any impact on a listed threatened species or community?	Minimal
e. Any impact on a listed migratory species?	Minimal
f. Any impact on a Commonwealth marine area?	Nil
g. Does the proposal involve a nuclear action?	Nil
Additionally, any impact (direct or indirect) on Commonwealth land?	Nil

13. STAKEHOLDER AND COMMUNITY CONSULTATION REQUIREMENTS

Consultation requirements within Part 2 of TISEPP relate to consultation with Councils in whose area the proposed development is located (cl 2.10). As Council is the proponent in this case, these clauses are not relevant. Clause 2.15 relates to consultation with public authorities other than councils, in relation to specified developments. This proposal is not a specified development as defined by TISEPP and therefore this clause also does not apply. The proposal is located almost entirely on Council managed land and is not expected to result in significant environmental impacts. Further consultation with DCCEEW NSW is therefore not considered necessary. Council will consult with Indigenous stakeholders regarding potential cultural heritage impacts of the proposal.

While the consultation provisions of TISEPP do not apply to this proposal, Council will consult all affected landholders directly and consultation will be undertaken only if required with:

- the Environmental Protection Agency (EPA) as the regulatory authority for the provisions of the POEO Act, and

- DCCEEW NSW in relation to environmental assessment requirements.

Council must consult with DPI – Fisheries regarding a Fisheries Permit for the proposed activity.

Council regularly undertakes community consultation as part of its activities with the key objective of ensuring that the community and key stakeholders are accurately informed about the scope and timing of the proposed activity and have the opportunity, where applicable, to provide input as part of the process. However, in this case, consultation with other agencies and the wider community is not required given the location, land tenure of the proposal and the limited impacts expected.

Consultation with the owners and occupiers of adjacent lots and the principal of Lake Wyangan Public School will be undertaken to inform of possible noise, dust, access and traffic impacts that may occur during the construction phase of the proposed activity. Consultation will be undertaken with Murrumbidgee Irrigation as much of the project area includes drainage assets that will be transferred to Council as works are proceeding.

Following completion of the activity, Council's standard policies and procedures for customer and community relations apply.

14. SUMMARY OF IMPACTS AND CONCLUSIONS

In preparing this REF, the potential impacts of the proposed activities have been investigated and a range of mitigation measures to minimise environmental impacts have been developed. This REF considers to the fullest extent possible, all matters affecting or likely to affect the environment by reason of the proposed activity in accordance with Part 5 of the EP&A Act.

The proposal involves the improving stormwater disposal for future residential developments. The works will not induce large impacts or hazards to the local environment and on completion habitat values will be similar to that before the works took place.

The results of the environmental risk assessment (Section 10) indicate that the main potential impacts are erosion leading to degradation of water quality and short-term dust, noise and vibration impacts. There is also potential for threatened species habitat to be impacted. Potential impacts on Aboriginal Cultural Heritage will be dealt with in the AHIP. Provided the mitigation measures outlined in Section 9 are implemented, the proposed activity is unlikely to have a significant impact on the environment and therefore the preparation of an Environmental Impact Statement (EIS) is not required.

Council understands that its operations must be conducted in accordance with the principles under the *NSW Local Government Act 1993* (DPHI). Under Section 8 of this Act, part of Council's charter is to properly manage, protect, restore, enhance, conserve the environment of the area for which is responsible, in a manner that is consistent with and promotes the principles of ecologically sustainable development.

The principles of ecologically sustainable development have been a key consideration in the proposed activities and apply to this proposal as follows:

- (a) **The precautionary principle** – the proposal does not involve significant threat of irreversible damage to the environment. Different options for achieving the proposal's objectives were considered with reference to risk of environmental degradation, cost and convenience. The risks associated with the preferred option for the proposal have been identified and assessed, and where necessary, specific safeguards have been recommended to minimise risk or mitigate unavoidable harm.
- (b) **Inter-generational equity** – the proposal would provide improved arrangements for dealing with stormwater in the area. Consideration of potential risks to the environment and identification of appropriate safeguards would ensure that there is no significant reduction in the health, diversity and productivity of the environment, for the benefit of future generations.
- (c) **Conservation of biological diversity and ecological integrity** – potential impacts of the proposal on biological diversity and ecological integrity have been examined in this REF. Negligible fauna habitat will be removed as part of the proposal and as such, there would be no significant adverse impact on either biological diversity or ecological integrity.
- (d) **Improved valuation, pricing and incentive mechanisms** – this proposal meets the criteria for improved pricing through the approval process. The proposal has been assessed with a view to minimising environmental harm and associated costs to the community.

Where there are threats of serious or irreversible environment damage, lack of scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. The assessment of impacts outlined in this REF has not been limited by a lack of information. Conservation of biological diversity and ecology integrity has also been a fundamental consideration for this proposal. The works are unlikely to significantly impact on the ecological integrity of the area as the quantity and quality of existing intrinsic habitat features will not be markedly degraded.

After consideration of the environmental factors previously described, it is considered that the proposal is justified on the basis of minimal environmental impact and significant benefit to the safety of the community.

Declaration

I declare that this REF has been prepared in accordance with the requirements of the relevant legislation. It contains all available information that is relevant to the environmental assessment of the development to which the statement relates. The site of the proposal has been inspected by Access EP staff to gather the site-specific physical data presented in this report.

To the best of my knowledge, the information contained in this REF is neither false nor misleading.



Christopher Botfield

15. References

- DCCEEW (1999), Environmental Protection and Biodiversity Act (EPBC Act), Department of Climate Change, Energy, the Environment and Water
<https://www.dcceew.gov.au/environment/epbc> Accessed July 2025
- DCCEEW NSW (2010), Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales, Department of Climate Change, Energy, the Environment and Water NSW. <https://www.environment.nsw.gov.au/publications/due-diligence-code-practice-protection-aboriginal-objects-new-south-wales> Accessed July 2025
- DCCEEW NSW (2025a), BioNet: The Website for the Atlas of NSW Wildlife: A whole-of-government system for flora and fauna sightings information, Department of Climate Change, Energy, the Environment and Water NSW,
https://atlas.bionet.nsw.gov.au/UI_Modules/ATLAS_/AtlasSearch.aspx. Accessed July 2025.
- DCCEEW NSW (2025b), Threatened Species search by region, Department of Climate Change, Energy, the Environment and Water NSW,
<https://threatenedspecies.bionet.nsw.gov.au/GeoHabitatSearch>, Accessed July 2025
- DPHI (1993), Local Government Act, Department of Planning, Housing and Infrastructure,
<https://legislation.nsw.gov.au/view/html/inforce/current/act-1993-030>, Accessed July, 2025
- DPI (2025), Fisheries NSW Spatial Data Portal, Department of Primary Industries,
https://webmap.industry.nsw.gov.au/Html5Viewer/index.html?viewer=Fisheries_Data_Porta l. Accessed July 2025
- EP&A Act (1979), Environmental Planning and Assessment Act,
<https://legislation.nsw.gov.au/view/html/inforce/current/act-1979-203>, Accessed July, 2025.
- Landcom (2004), the Blue Book, Managing Urban Stormwater: Soils and Construction Vol.1, [managing-urban-stormwater-soils-construction-volume-1-fourth-edition-compressed.pdf](#), Accessed July, 2025.
- SEED (2025), The Central Resource for Sharing and Enabling Environmental Data in NSW,
<https://www.seed.nsw.gov.au/>. Accessed July 2025
- SEPP (Biodiversity and Conservation) (2021), *State Environmental Planning Policy (Biodiversity and Conservation)*.
<https://legislation.nsw.gov.au/view/html/inforce/current/epi-2021-0722>, Accessed July, 2025.
- TISEPP (2021), *State Environmental Planning Policy (Transport and Infrastructure)*,
<https://legislation.nsw.gov.au/view/html/inforce/current/epi-2021-0732>, Accessed July, 2025.

Griffith City Council (2010), Griffith Local Environment Plan,
<https://www.planningportal.nsw.gov.au/publications/environmental-planning-instruments/wagga-wagga-local-environmental-plan-2010>. Accessed July 2025

WARR Act (2001), *Waste Avoidance and Resource Recovery Act*,
<https://legislation.nsw.gov.au/view/html/inforce/current/act-2001-058>, Accessed July, 2025.

WoNS (2021), Weeds of National Significance, Weeds Australia,
<https://weeds.org.au/weeds-profiles/>, Accessed July 2025

Appendix A: Clause 171 Checklist

The following factors, listed in clause 171 (s 5.10(a)) of the EP&A Regulation 2021 have been considered to assess the likely impacts of the proposal on the natural and built environment.

Factor	Impact
Any environmental impact on a community? <i>The stormwater upgrades will improve safety for a large portion of the community. Work designs have been formulated to avoid or minimise environmental impacts. The community will benefit long-term, and works will be completed in accordance with conditions of approval and best practice guidelines ensuring minimal environmental impact on the local community.</i>	<i>Positive long-term impact</i>
Any transformation of a locality? <i>There will be no major transformation of the locality as there are existing stormwater channels on the site.</i>	<i>No significant impact</i>
Any environmental impact on the ecosystems of the locality? <i>There is unlikely to be any significant impact on the ecosystems in the locality. The extent of changes to the environment are small and will not significantly change the composition, structure or function of local ecosystems. Resources for any potentially threatened species that may utilise the area will not be impacted to any significant extent. Sediment and erosion control measures, machinery hygiene and fuels management and standard operating procedures would further reduce any potential for adverse environmental impacts.</i>	<i>No significant impact</i>
Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality? <i>The aesthetic, recreational and scientific values will be similar post-construction as they were prior to the commencement of works.</i>	<i>No significant impact</i>
Any effect on a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations? <i>There are no places, facilities or buildings having these types of values that will be impacted by the works.</i>	<i>No significant impact</i>
Any impact on the habitat of protected fauna (within the meaning of the Biodiversity Conservation Act 2016)? <i>All habitat suitable for protected fauna on the site will be protected by the provisions of this REF.</i>	<i>No significant impact</i>
Any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air? <i>The provisions of this REF will ensure no animal is endangered by the project. Groundcover, mid-storey plants and planted trees may be removed as part of the project. The amount of clearing required is not considered significant in the wider landscape and Council will regenerate vegetation where possible..</i>	<i>Short-term impact</i> <i>Not significant</i>
Any long-term effects on the environment? <i>There will be marginal long-term effects on the environment as changes to the site will be relatively small. Implementation of sediment and erosion control measures will help ensure minimal disturbance to surrounding landscapes.</i>	<i>Long-term impact</i> <i>Not significant</i>
Any degradation of the quality of the environment?	<i>Short-term impact</i>

Stormwater infrastructure upgrading may affect ecosystem function in the short-term, but implementation of safeguards will protect the area from long-term environmental degradation. *Not significant*

Any risk to the safety of the environment?

The proposal would not pose a significant risk to the safety of the environment as the proposed activities are relatively minor in the context of the wider landscape. Sediment and erosion controls and fuel handling procedures will protect soils and waterways.

Impact not significant

Any reduction in the range of beneficial uses of the environment?

There may be a small reduction in beneficial use of the environment as during construction, but remediation to similar environmental values post-construction will keep these affects short-term.

*Short-term impact
Not significant*

Any pollution of the environment?

The proposal would not result in any pollution of the environment. Implementation of appropriate sediment and erosion controls would be sufficient to manage pollution associated with soil disturbance and any fuel spills that may occur. Wastes will be avoided, reused or removed from site, as necessary.

Impact not significant

Any environmental problems associated with the disposal of waste?

The proposal would not generate hazardous waste. Domestic waste associated with personnel would be removed for appropriate disposal. Green waste materials would be utilised on site, where possible.

*Short-term impact
Not significant*

Any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply?

The proposal would not significantly increase demands on any resources that are, or are likely to become, in short supply.

No impact

Any cumulative environmental effect with other existing or likely future activities?

The proposal is unlikely to result in significant cumulative impacts, and environmental assessments will be completed for future work.

*Long-term impact
Not significant*

Any impact on coastal processes and coastal hazards, including those under projected climate change conditions?

The proposal is not located near the coast.

Not relevant

Any applicable local strategic planning statements, regional strategic plans or district strategic plans made under the Act Division 3.1?

The Community Strategic Plan 2022-2032 is the endorsed strategic plan for the Griffith LGA, and the proposal aligns with the strategic directions of the plan

Positive impact

Any other relevant environmental factors?

No

No impact

Appendix B: Bionet Atlas Results

Data from the BioNet Atlas website, which holds records from a number of custodians. The data are only indicative and cannot be considered a comprehensive inventory, and may contain errors and omissions. Species listed under the Sensitive Species Data Policy may have their locations denatured (^ rounded to 0.1°C; ^^ rounded to 0.01°C. Copyright the State of NSW through the Department of Planning, Industry and Environment. Search criteria : Public Report of all Valid Records of Threatened (listed on BC Act 2016) ,Commonwealth listed, CAMBA listed, JAMBA listed or ROKAMBA listed Entities in selected area [North: -34.19 West: 145.98 East: 146.08 South: -34.29] returned a total of 627 records of 45 species.
Report generated on 1/07/2025 9:59 AM

Kingdom	Species Code	Scientific Name	Common Name	NSW status	Comm. status	Records
Animalia	0199	<i>Anseranas semipalmata</i>	Magpie Goose	V,P		29
Animalia	0216	<i>Oxyura australis</i>	Blue-billed Duck	V,P		75
Animalia	0214	<i>Stictonetta naevosa</i>	Freckled Duck	V,P		49
Animalia	0335	<i>Apus pacificus</i>	Fork-tailed Swift	P	C,J,K	1
Animalia	0183	<i>Ephippiorhynchus asiaticus</i>	Black-necked Stork	E1,P		1
Animalia	0197	<i>Botaurus poiciloptilus</i>	Australasian Bittern	E1,P	E	13
Animalia	0218	<i>Circus assimilis</i>	Spotted Harrier	V,P		1
Animalia	0226	<i>Haliaeetus leucogaster</i>	White-bellied Sea-Eagle	V,P		8
Animalia	0225	<i>Hieraaetus morphnoides</i>	Little Eagle	V,P		24
Animalia	0236	<i>^Falco hypoleucos</i>	Grey Falcon	V,P,2	V	1
Animalia	0238	<i>Falco subniger</i>	Black Falcon	V,P		5
Animalia	0174	<i>Burhinus grallarius</i>	Bush Stone-curlew	E1,P		3
Animalia	0136	<i>Pluvialis squatarola</i>	Grey Plover	P	C,J,K	1
Animalia	0170	<i>Rostratula australis</i>	Australian Painted Snipe	E1,P	E	2
Animalia	0157	<i>Actitis hypoleucos</i>	Common Sandpiper	P	C,J,K	1
Animalia	0163	<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	P	C,J,K	55
Animalia	0161	<i>Calidris ferruginea</i>	Curlew Sandpiper	E4A,P	CE,C,J,K	16
Animalia	0978	<i>Calidris melanotos</i>	Pectoral Sandpiper	P	J,K	2
Animalia	0162	<i>Calidris ruficollis</i>	Red-necked Stint	P	C,J,K	10
Animalia	0168	<i>Gallinago hardwickii</i>	Latham's Snipe	V,P	V,J,K	7

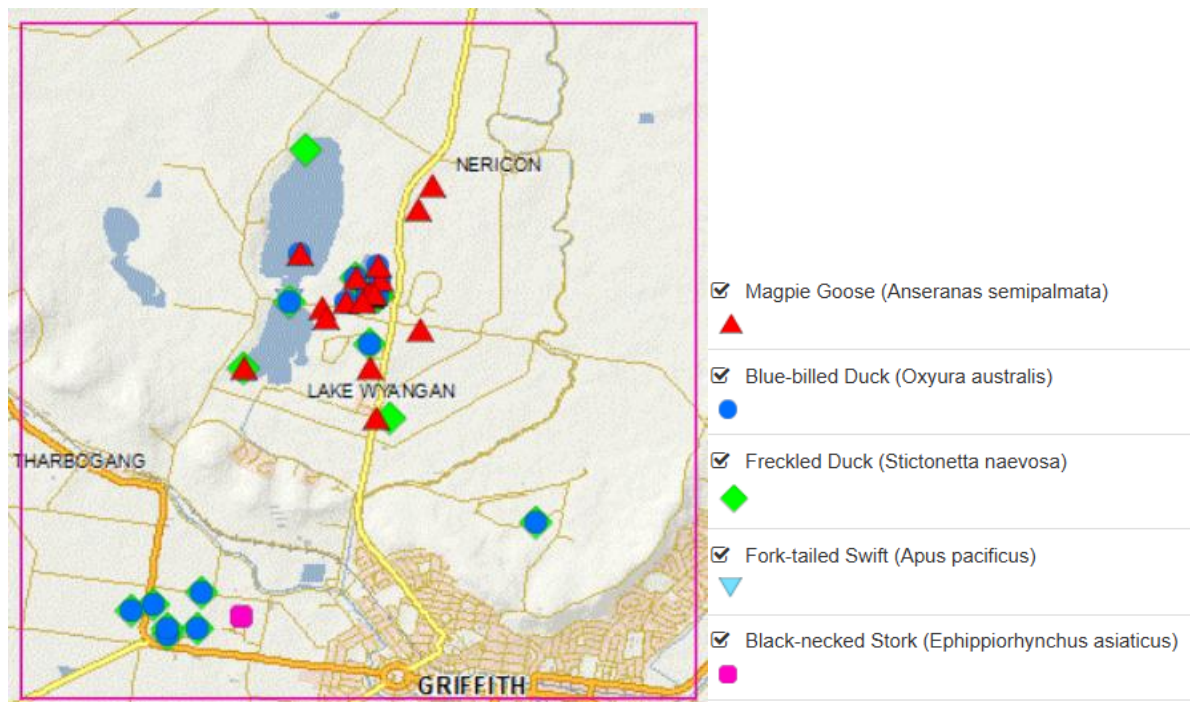
Animalia	0153	<i>Limosa lapponica</i>	Bar-tailed Godwit	P	C,J,K	1
Animalia	0152	<i>Limosa limosa</i>	Black-tailed Godwit	V,P	E,C,J,K	14
Animalia	0154	<i>Tringa glareola</i>	Wood Sandpiper	P	C,J,K	11
Animalia	0158	<i>Tringa nebularia</i>	Common Greenshank	E1,P	E,C,J,K	16
Animalia	0159	<i>Tringa stagnatilis</i>	Marsh Sandpiper	P	C,J,K	55
Animalia	0111	<i>Gelochelidon nilotica</i>	Gull-billed Tern	P	C	1
Animalia	0112	<i>Hydroprogne caspia</i>	Caspian Tern	P	J	5
Animalia	0270	<i>^Lophochroa leadbeateri</i>	Pink Cockatoo	V,P,2	E	56
Animalia	0309	<i>Lathamus discolor</i>	Swift Parrot	E1,P	CE	1
Animalia	0306	<i>Neophema chrysostoma</i>	Blue-winged Parrot	V,P	V	1
Animalia	0302	<i>^^Neophema pulchella</i>	Turquoise Parrot	V,P,3		1
Animalia	0277	<i>^^Polytelis swainsonii</i>	Superb Parrot	V,P,3	V	2
Animalia	0246	<i>^^Ninox connivens</i>	Barking Owl	V,P,3		2
Animalia	8127	<i>Climacteris picumnus victoriae</i>	Brown Treecreeper (eastern subspecies)	V,P	V	19
Animalia	0466	<i>Aphelocephala leucopsis</i>	Southern Whiteface	V,P	V	25
Animalia	0504	<i>Pyrrholaemus sagittatus</i>	Speckled Warbler	V,P		1
Animalia	0602	<i>Certhionyx variegatus</i>	Pied Honeyeater	V,P		4
Animalia	0448	<i>Epthianura albifrons</i>	White-fronted Chat	V,P		25
Animalia	0598	<i>Grantiella picta</i>	Painted Honeyeater	V,P	V	29
Animalia	8388	<i>Pomatostomus temporalis temporalis</i>	Grey-crowned Babbler (eastern subspecies)	V,P		36
Animalia	8519	<i>Artamus cyanopterus cyanopterus</i>	Dusky Woodswallow	V,P		2
Animalia	8367	<i>Melanodryas cucullata cucullata</i>	South-eastern Hooded Robin	E1,P	E	11
Animalia	0652	<i>Stagonopleura guttata</i>	Diamond Firetail	V,P	V	1
Animalia	1352	<i>Chalinolobus picatus</i>	Little Pied Bat	V,P		1
Plantae	13501	<i>Grevillea ilicifolia subsp. ilicifolia</i>	Holly-leaf Grevillea	E4A		3

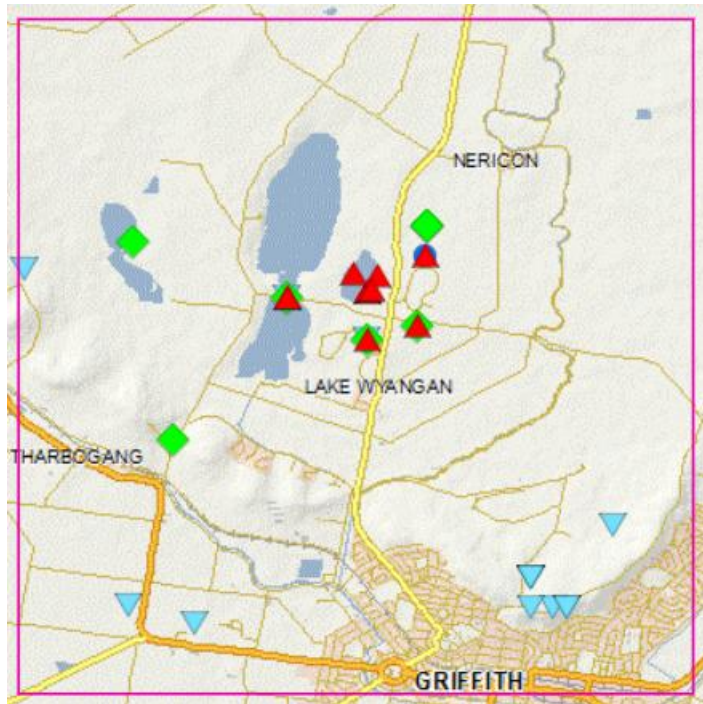
► NSW status

1	Sensitivity Class 1 (Sensitive Species Data Policy)
2	Sensitivity Class 2 (Sensitive Species Data Policy)
3	Sensitivity Class 3 (Sensitive Species Data Policy)
CC	Collapsed Ecological Community (Biodiversity Conservation Act 2016)
CH	Critical Habitat (Biodiversity Conservation Act 2016)
E1	Endangered (Biodiversity Conservation Act 2016)
E2	Endangered Population (Biodiversity Conservation Act 2016)
E3	Endangered Ecological Community (Biodiversity Conservation Act 2016)
E4	Extinct (Biodiversity Conservation Act 2016)
E4A	Critically Endangered (Biodiversity Conservation Act 2016)
E4B	Critically Endangered Ecological Community (Biodiversity Conservation Act 2016)
EW	Extinct in the Wild (Biodiversity Conservation Act 2016)
KTP	Key Threatening Process (Biodiversity Conservation Act 2016)
P	Protected (National Parks & Wildlife Act 1974)
V	Vulnerable (Biodiversity Conservation Act 2016)
V2	Vulnerable Ecological Community (Biodiversity Conservation Act 2016)

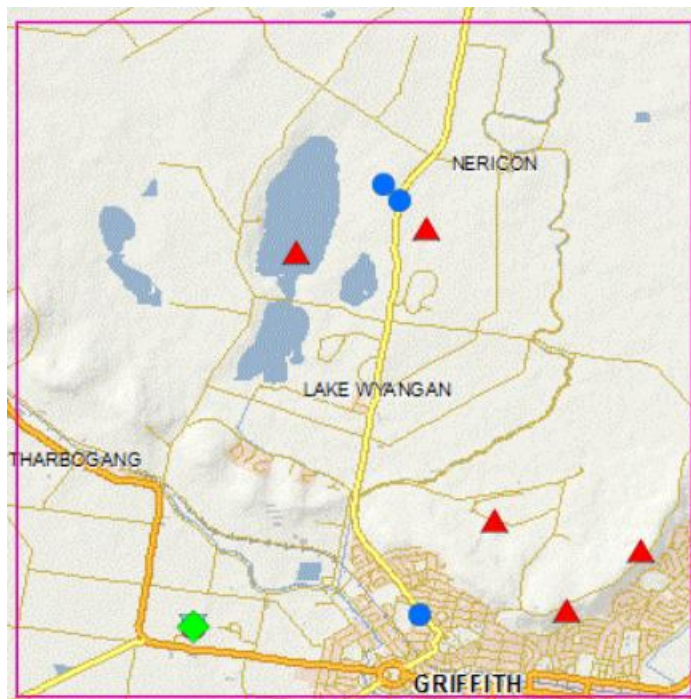
► Commonwealth status

C	Listed on China Australia Migratory Bird Agreement
CD	Conservation Dependent (Commonwealth EPBC Act 1999)
CE	Critically Endangered (Commonwealth EPBC Act 1999)
E	Endangered (Commonwealth EPBC Act 1999)
J	Listed on Japan Australia Migratory Bird Agreement
K	Listed on Republic of Korea Australia Migratory Bird Agreement
KTP	Key Threatening Process (Commonwealth EPBC Act 1999)
V	Vulnerable (Commonwealth EPBC Act 1999)
X	Extinct (Commonwealth EPBC Act 1999)
XW	Extinct in the Wild (Commonwealth EPBC Act 1999)

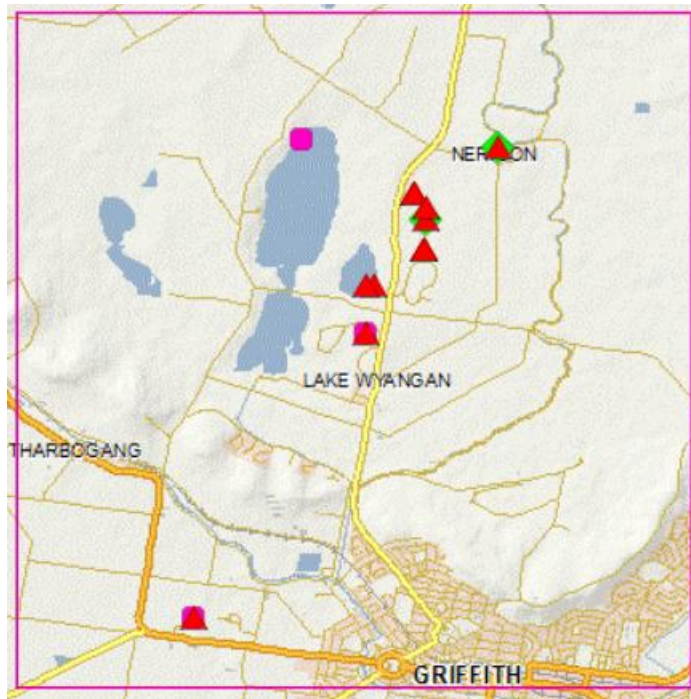




- ☒ Australasian Bittern (*Botaurus poiciloptilus*)
▲
- ☒ Spotted Harrier (*Circus assimilis*)
●
- ☒ White-bellied Sea-Eagle (*Haliaeetus leucogaster*)
◆
- ☒ Little Eagle (*Hieraaetus morphnoides*)
▼
- ☒ ^Grey Falcon (*Falco hypoleucos*)
■



- ☒ Black Falcon (*Falco subniger*)
▲
- ☒ Bush Stone-curlew (*Burhinus grallarius*)
●
- ☒ Grey Plover (*Pluvialis squatarola*)
◆
- ☒ Australian Painted Snipe (*Rostratula australis*)
▼
- ☒ Common Sandpiper (*Actitis hypoleucos*)
■



☒ Sharp-tailed Sandpiper (*Calidris acuminata*)



☒ Curlew Sandpiper (*Calidris ferruginea*)



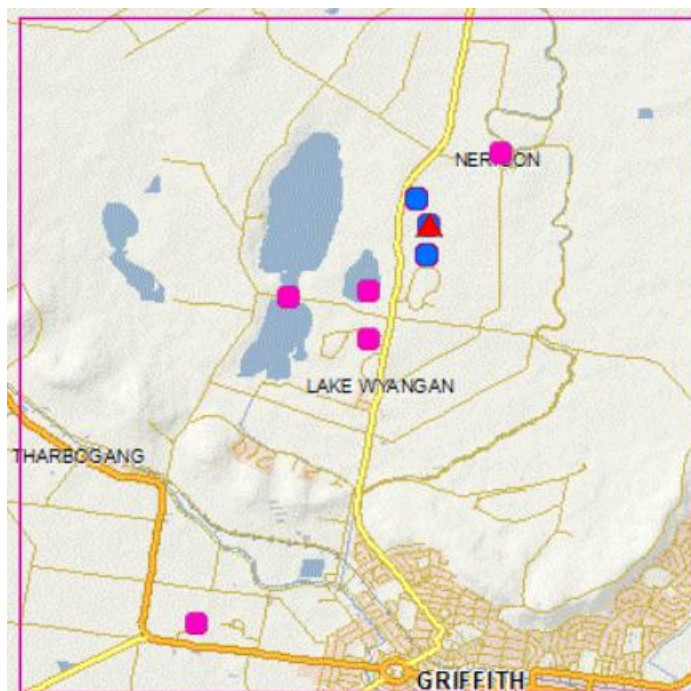
☒ Pectoral Sandpiper (*Calidris melanotos*)



☒ Red-necked Stint (*Calidris ruficollis*)



☒ Latham's Snipe (*Gallinago hardwickii*)



☒ Bar-tailed Godwit (*Limosa lapponica*)



☒ Black-tailed Godwit (*Limosa limosa*)



☒ Wood Sandpiper (*Tringa glareola*)

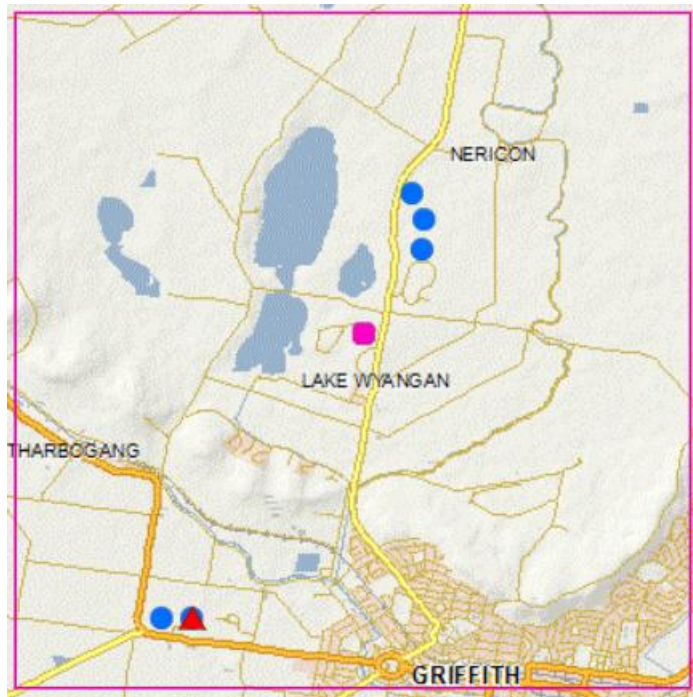


☒ Common Greenshank (*Tringa nebularia*)

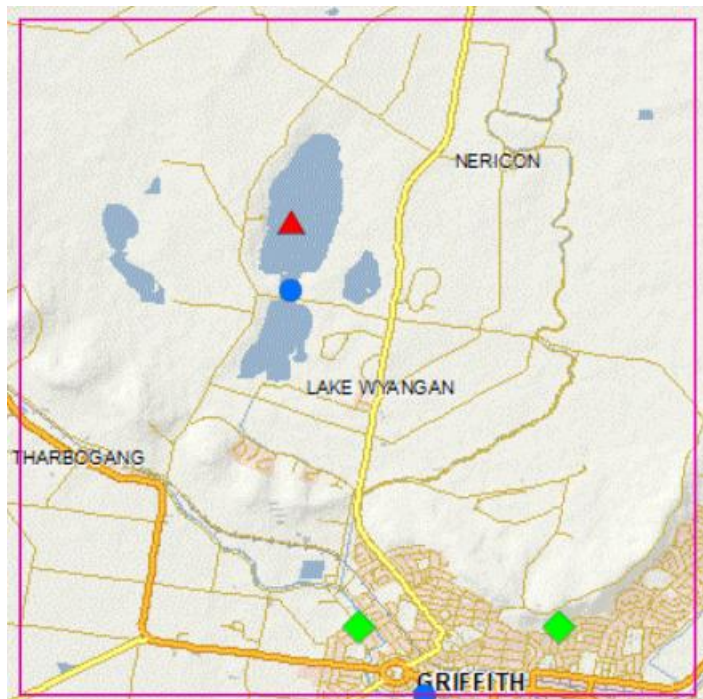


☒ Marsh Sandpiper (*Tringa stagnatilis*)

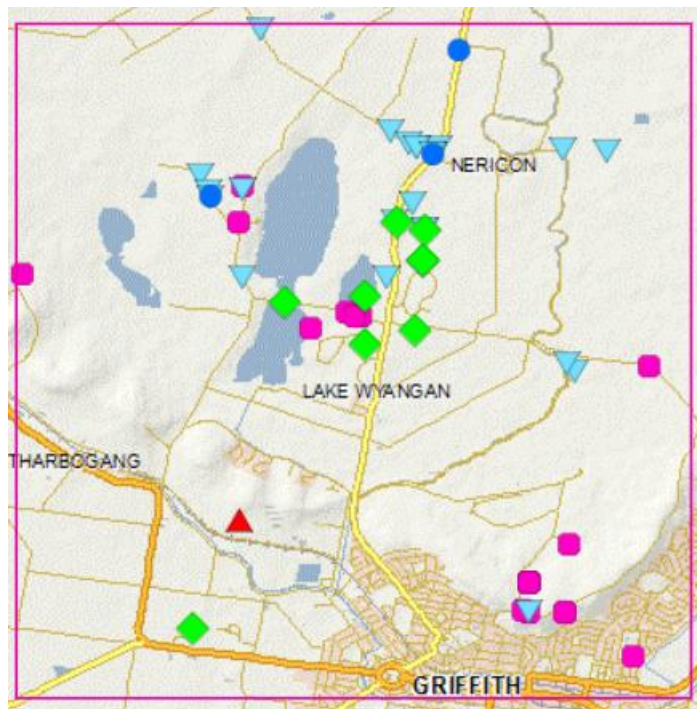




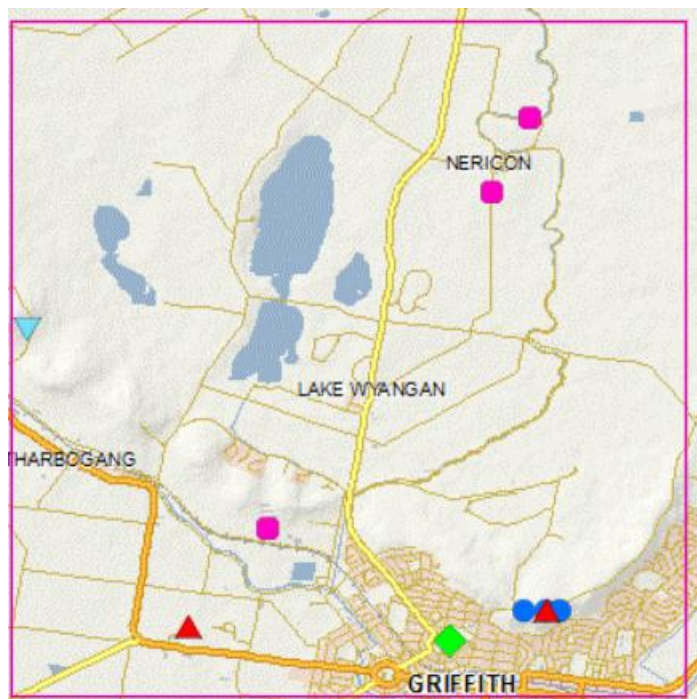
- ☒ Gull-billed Tern (*Gelochelidon nilotica*)
▲
- ☒ Caspian Tern (*Hydroprogne caspia*)
●
- ☒ ^Pink Cockatoo (*Lophochroa leadbeateri*)
◆
- ☒ Swift Parrot (*Lathamus discolor*)
▼
- ☒ Blue-winged Parrot (*Neophema chrysostoma*)
■



- ☒ ^^Turquoise Parrot (*Neophema pulchella*)
▲
- ☒ ^^Superb Parrot (*Polytelis swainsonii*)
●
- ☒ ^^Barking Owl (*Ninox connivens*)
◆
- ☒ Brown Treecreeper (eastern subspecies) (*Climacteris picumnus victoriae*)
▼
- ☒ Southern Whiteface (*Aphelocephala leucopsis*)
■



- ☒ Speckled Warbler (*Pyrrholaemus sagittatus*)
- ☒ Pied Honeyeater (*Certhionyx variegatus*)
- ☒ White-fronted Chat (*Epthianura albifrons*)
- ☒ Painted Honeyeater (*Grantiella picta*)
- ☒ Grey-crowned Babbler (eastern subspecies) (*Pomatostomus temporalis temporalis*)



- ☒ Dusky Woodswallow (*Artamus cyanopterus cyanopterus*)
- ☒ South-eastern Hooded Robin (*Melanodryas cucullata cucullata*)
- ☒ Diamond Firetail (*Stagonopleura guttata*)
- ☒ Little Pied Bat (*Chalinolobus picatus*)
- ☒ Holly-leaf Grevillea (*Grevillea ilicifolia* subsp. *ilicifolia*)

Appendix C: Priority weeds for the Riverina

Weed	Duty
All plants	<p>General Biosecurity Duty</p> <p><i>All pest plants are regulated with a general biosecurity duty to prevent, eliminate, or minimise any biosecurity risk they may pose. Any person who deals with any plant, who knows (or ought to know) of any biosecurity risk, has a duty to ensure the risk is prevented, eliminated, or minimised, as far as is reasonably practicable.</i></p>
<p>Aaron's beard prickly pear <i>Opuntia leucotricha</i></p>	<p>Prohibition on certain dealings</p> <p><i>Must not be imported into the state, sold, bartered, exchanged, or offered for sale.</i></p>
<p>African boxthorn <i>Lycium ferocissimum</i></p>	<p>Prohibition on certain dealings</p> <p><i>Must not be imported into the state, sold, bartered, exchanged, or offered for sale.</i></p>
<p>Alligator weed <i>Alternanthera philoxeroides</i></p>	<p>Prohibition on certain dealings</p> <p><i>Must not be imported into the state, sold, bartered, exchanged, or offered for sale.</i></p>
<p>Alligator weed <i>Alternanthera philoxeroides</i></p>	<p>Biosecurity Zone</p> <p>The Alligator Weed Biosecurity Zone is established for all land within the state except land in the following regions: Greater Sydney; Hunter (but only in the local government areas of City of Lake Macquarie, City of Maitland, City of Newcastle or Port Stephens).</p> <p><i>Within the Biosecurity Zone this weed must be eradicated where practicable, or as much of the weed destroyed as practicable, and any remaining weed suppressed. The local control authority must be notified of any new infestations of this weed within the Biosecurity Zone</i></p>
<p>Alligator weed <i>Alternanthera philoxeroides</i></p>	<p>Regional Recommended Measure</p> <p><i>Notify local control authority if found. Your local biosecurity weeds officer can help to identify, advise on control, and how to remove this weed.</i></p> <p>Griffith City Council has issued a General Biosecurity Direction to the entirety of Barren Box Storage and Wetland and its riparian areas. A link to the direction above is under More Information.</p>

[Anchored water hyacinth](#)

Eichhornia azurea

Prohibited Matter

A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries

[Athel pine](#)

Tamarix aphylla

Prohibition on certain dealings

Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

[Bitou bush](#)

Chrysanthemoides monilifera subsp. *rotundata*

Prohibition on certain dealings

Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

[Bitou bush](#)

Chrysanthemoides monilifera subsp. *rotundata*

Biosecurity Zone

The Bitou Bush Biosecurity Zone is established for all land within the State except land within 10 kilometres of the mean high water mark of the Pacific Ocean between Cape Byron in the north and Point Perpendicular in the south. *Within the Biosecurity Zone this weed must be eradicated where practicable, or as much of the weed destroyed as practicable, and any remaining weed suppressed. The local control authority must be notified of any new infestations of this weed within the Biosecurity Zone*

[Black knapweed](#)

Centaurea x moncktonii

Prohibited Matter

A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries

[Black willow](#)

Salix nigra

Prohibition on certain dealings

Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

[Black willow](#)

Salix nigra

Regional Recommended Measure

Core infestation areas: Snowy Valleys Council, Cootamundra - Gundagai Regional Council, Griffith City Council. Exclusion zone: All of Riverina except identified core infestation areas. *Within exclusion zone: Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant where dealings include but are not limited*

to buying, selling, growing, moving, carrying, or releasing the plant. Notify local control authority if found. Within core infestation area: Land managers should mitigate the risk of the plant being introduced to their land. Land managers should mitigate spread of the plant from their land. A person should not buy, sell, move, carry, or release the plant into the environment. Land managers should reduce the impact of the plant on assets of high economic, environmental, and/or social value.

Blackberry

Rubus fruticosus species aggregate

Prohibition on certain dealings

Must not be imported into the state, sold, bartered, exchanged or offered for sale.

All species in the *Rubus fruticosus* species aggregate have this requirement, except for the varieties Black Satin, Chehalem, Chester Thornless, Dirksen Thornless, Loch Ness, Murrindindi, Silvan, Smooth Stem, and Thornfree

Blind cactus

Opuntia rufida

Prohibition on certain dealings

Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

Boneseed

Chrysanthemoides monilifera subsp. *monilifera*

Prohibition on certain dealings

Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

Boneseed

Chrysanthemoides monilifera subsp. *monilifera*

Control Order

Boneseed Control Zone: Whole of NSW

Boneseed Control Zone (Whole of NSW): Owners and occupiers of land on which there is boneseed must notify the local control authority of new infestations; immediately destroy the plants; ensure subsequent generations are destroyed; and ensure the land is kept free of the plant. A person who deals with a carrier of boneseed must ensure the plant (and any seed and propagules) is not moved from the land; and immediately notify the local control authority of the presence of the plant.

Boxing glove cactus

Cylindropuntia fulgida var. *mamillata*

Prohibition on certain dealings

Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

Bridal creeper

Asparagus asparagoides

Prohibition on certain dealings

Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

***this requirement also applies to the Western Cape form of bridal creeper**

Bridal veil creeper
Asparagus declinatus

Prohibited Matter
A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries

Broomrapes
Orobanche species

Prohibited Matter
A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries
All species of Orobanche are Prohibited Matter in NSW, except Clover broomrape, Orobanche minor and Australian broomrape, Orobanche cernua var. australiana.

Bunny ears cactus
Opuntia microdasys

Prohibition on certain dealings
Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

Cabomba
Cabomba caroliniana

Prohibition on certain dealings
Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

Cane cactus
Austrocylindropuntia cylindrica

Prohibition on certain dealings
Must not be imported into the state, sold, bartered, exchanged, or offered for sale.
All species in the Austrocylindropuntia genus have this requirement

Cane needle grass
Nassella hyalina

Regional Recommended Measure
Eradication zone: whole region except for the containment zone of Griffith City Council
Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Notify local control authority if found. Your local biosecurity weeds officer can

help to identify, advise on control, and how to remove this weed.

[Cape broom](#)

Genista monspessulana

Prohibition on certain dealings

Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

[Cape broom](#)

Genista monspessulana

Regional Recommended Measure

Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Notify local control authority if found. Your local biosecurity weeds officer can help to identify, advise on control, and how to remove this weed.

[Cat's claw creeper](#)

Dolichandra unguis-cati

Prohibition on certain dealings

Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

[Chicken dance cactus](#)

Opuntia schickendantzii

Prohibition on certain dealings

Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

[Chilean needle grass](#)

Nassella neesiana

Prohibition on certain dealings

Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

[Chilean needle grass](#)

Nassella neesiana

Regional Recommended Measure

Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Notify local control authority if found. Your local biosecurity weeds officer can help to identify, advise on control, and how to remove this weed.

[Chinese violet](#)

Asystasia gangetica

Control Order

Owners and occupiers of land on which there is Chinese violet must notify the local control authority for the area if the Chinese violet is part of a new infestation on the land, destroy all Chinese violet on the land ensuring that

subsequent generations of Chinese violet are destroyed; and keep the land free of Chinese violet. A person who deals with a carrier of Chinese violet must ensure the plant (and any seed and propagules) is not moved from the land; and immediately notify the local control authority of the presence of the plant on the land, or on or in a carrier.

[Climbing asparagus](#)
Asparagus africanus

Prohibition on certain dealings
Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

[Climbing asparagus fern](#)
Asparagus plumosus

Prohibition on certain dealings
Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

[Common pear](#)
Opuntia stricta

Prohibition on certain dealings
Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

[Coolatai grass](#)
Hyparrhenia hirta

Regional Recommended Measure
Core infestation areas: Cootamundra - Gundagai Regional Council, Exclusion zone: All of Riverina except identified core infestation areas.
Within exclusion zone: Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Notify local control authority if found. Within core infestation area: Land managers should mitigate the risk of the plant being introduced to their land. Land managers should mitigate spread of the plant from their land. A person should not buy, sell, move, carry, or release the plant into the environment. Land managers should reduce the impact of the plant on assets of high economic, environmental, and/or social value.

[Creeping pear](#)
Opuntia humifusa

Prohibition on certain dealings
Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

[Eurasian water milfoil](#)
Myriophyllum spicatum

Prohibited Matter
A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited

	<p><i>matter must immediately notify the Department of Primary Industries</i></p>
<p>Eve's needle cactus <i>Austrocylindropuntia subulata</i></p>	<p>Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged, or offered for sale.</i> All species in the Austrocylindropuntia genus have this requirement</p>
<p>Fireweed <i>Senecio madagascariensis</i></p>	<p>Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged, or offered for sale.</i></p>
<p>Fireweed <i>Senecio madagascariensis</i></p>	<p>Regional Recommended Measure <i>Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Notify local control authority if found. Your local biosecurity weeds officer can help to identify, advise on control, and how to remove this weed.</i></p>
<p>Flax-leaf broom <i>Genista linifolia</i></p>	<p>Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged, or offered for sale.</i></p>
<p>Foxtail fern <i>Asparagus densiflorus</i></p>	<p>Prohibition on certain dealings <i>Must not be imported into the state, sold, bartered, exchanged, or offered for sale.</i></p>
<p>Frogbit <i>Limnobium laevigatum</i></p>	<p>Prohibited Matter <i>A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries</i> All species of Limnobium are Prohibited Matter</p>
<p>Gamba grass <i>Andropogon gayanus</i></p>	<p>Prohibited Matter <i>A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited</i></p>

matter must immediately notify the Department of Primary Industries

[Gorse](#)
Ulex europaeus

Prohibition on certain dealings
Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

[Gorse](#)
Ulex europaeus

Regional Recommended Measure
Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Notify local control authority if found. Your local biosecurity weeds officer can help to identify, advise on control, and how to remove this weed.

[Green cestrum](#)
Cestrum parqui

Regional Recommended Measure
Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Notify local control authority if found.

[Grey willow](#)
Salix cinerea

Prohibition on certain dealings
Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

[Grey willow](#)
Salix cinerea

Regional Recommended Measure
Core infestation areas: Snowy Valleys Council, Cootamundra - Gundagai Regional Council, Griffith City Council. Exclusion zone: All of Riverina except identified core infestation areas.
Within exclusion zone: Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Notify local control authority if found. Within core infestation area: Land managers should mitigate the risk of the plant being introduced to their land. Land managers should mitigate spread of the plant from their land. A person should not buy, sell, move, carry, or release the plant into the environment. Land managers should

reduce the impact of the plant on assets of high economic, environmental, and/or social value.

[Ground asparagus](#)
Asparagus aethiopicus

Prohibition on certain dealings
Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

[Hawkweeds - Hieraciums](#)
Hieracium species

Prohibited Matter
A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries
All species in the genus *Hieracium* are Prohibited Matter except for *Hieracium murorum* (wall hawkweed).

[Hawkweeds - Pilosellas](#)
Pilosella species

Prohibited Matter
A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries
All species in the genus *Pilosella* are Prohibited Matter

[Horsetails](#)
Equisetum species

Regional Recommended Measure
Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Notify local control authority if found. Your local biosecurity weeds officer can help to identify, advise on control, and how to remove this weed.

[Hudson pear](#)
Cylindropuntia pallida

Prohibition on certain dealings
Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

[Hydrocotyl](#)
Hydrocotyle ranunculoides

Prohibited Matter
A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries

Hymenachne

Hymenachne amplexicaulis and hybrids

Prohibition on certain dealings

Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

Karoo acacia

Vachellia karroo

Prohibited Matter

A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries

Kidney-leaf mud plantain

Heteranthera reniformis

Regional Recommended Measure

Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying, or releasing the plant. Notify local control authority if found. Your local biosecurity weeds officer can help to identify, advise on control, and how to remove this weed.

King devil hawkweed

Pilosella piloselloides

Prohibited Matter

A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries

All species in the genus *Pilosella* are Prohibited Matter

Kochia

Bassia scoparia

Prohibited Matter

A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries

Excluding the subspecies *trichophylla*

Koster's curse

Clidemia hirta

Prohibited Matter

A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries

[Lagarosiphon](#)

Lagarosiphon major

Prohibited Matter

A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries

[Lantana](#)

Lantana camara

Prohibition on certain dealings

Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

[Madeira vine](#)

Anredera cordifolia

Prohibition on certain dealings

Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

[Mesquite](#)

Prosopis species

Prohibition on certain dealings

Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

All species in the genus *Prosopis* have this requirement

[Mesquite](#)

Prosopis species

Regional Recommended Measure

Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying, or releasing the plant. Notify local control authority if found. Your local biosecurity weeds officer can help to identify, advise on control, and how to remove this weed.

[Mexican feather grass](#)

Nassella tenuissima

Prohibited Matter

A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries

[Miconia](#)

Miconia species

Prohibited Matter

A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries

All species of *Miconia* are Prohibited Matter in NSW

Mikania vine

Mikania micrantha

Prohibited Matter

A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries

***all species in the genus *Mikania* are Prohibited Matter in NSW**

Mimosa

Mimosa pigra

Prohibited Matter

A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries

Mother-of-millions

Bryophyllum species

Regional Recommended Measure

Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying, or releasing the plant. Notify local control authority if found. Your local biosecurity weeds officer can help to identify, advise on control, and how to remove this weed.

Mouse-ear hawkweed

Pilosella officinarum

Prohibited Matter

A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries

All species in the genus *Pilosella* are Prohibited Matter

Orange hawkweed

Pilosella aurantiaca

Prohibited Matter

A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries

All species in the genus *Pilosella* are Prohibited Matter

Parkinsonia

Parkinsonia aculeata

Prohibition on certain dealings

Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

Parkinsonia

Parkinsonia aculeata

Control Order

Parkinsonia Control Zone: Whole of NSW

Parkinsonia Control Zone (Whole of NSW): Owners and occupiers of land on which there is parkinsonia must notify the local control authority of new infestations; immediately destroy the plants; ensure subsequent generations are destroyed; and ensure the land is kept free of the plant. A person who deals with a carrier of parkinsonia must ensure the plant (and any seed and propagules) is not moved from the land; and immediately notify the local control authority of the presence of the plant.

Parthenium weed

Parthenium hysterophorus

Prohibited Matter

A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries

Parthenium weed

Parthenium hysterophorus

Prohibition on certain dealings

The following equipment must not be imported into NSW from Queensland: grain harvesters (including the comb or front), comb trailers (including the comb or front), bins used for holding grain during harvest operations, augers or similar for moving grain, vehicles used to transport grain harvesters, support vehicles driven in paddocks during harvest operations, mineral exploration drilling rigs and vehicles used to transport those rigs, unless set out as an exception in Division 5, Part 2 of the Biosecurity Order (Permitted Activities) 2017

Perennial ground cherry

Physalis longifolia

Regional Recommended Measure

Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying, or releasing the plant. Notify local control authority if found. Your local biosecurity weeds officer can help to identify, advise on control, and how to remove this weed.

Pond apple

Annona glabra

Prohibited Matter

A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries

Prairie ground cherry

Physalis hederifolia

Regional Recommended Measure

Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying, or releasing the plant. Notify local control authority if found. Your local biosecurity weeds officer can help to identify, advise on control, and how to remove this weed.

Prickly acacia

Vachellia nilotica

Prohibited Matter

A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries

Prickly pears - Austrocyllindropuntias

Austrocyllindropuntia species

Prohibition on certain dealings

Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

All species in the Austrocyllindropuntia genus have this requirement

Prickly pears - Cyllindropuntias

Cyllindropuntia species

Prohibition on certain dealings

Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

All species in the Cyllindropuntia genus have this requirement

Prickly pears - Opuntias

Opuntia species

Prohibition on certain dealings

Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

For all Opuntia species except for *Opuntia ficus-indica* (Indian fig).

Ragwort

Senecio jacobaea

Regional Recommended Measure

Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying, or releasing the plant. Notify local control authority if found. Your local biosecurity weeds officer can help to identify, advise on control, and how to remove this weed.

[Riverina pear](#)
Opuntia elata

Prohibition on certain dealings

Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

[Rope pear](#)
Cylindropuntia imbricata

Prohibition on certain dealings

Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

All species in the *Cylindropuntia* genus have this requirement

[Rubber vine](#)
Cryptostegia grandiflora

Prohibited Matter

A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries

[Sagittaria](#)
Sagittaria platyphylla

Prohibition on certain dealings

Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

[Sagittaria](#)
Sagittaria platyphylla

Regionally Recommended Measure

*Eradication whole region except for Griffith.
Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying, or releasing the plant. Notify local control authority if found. Your local biosecurity weeds officer can help to identify, advise on control, and how to remove this weed.*

[Salvinia](#)
Salvinia molesta

Prohibition on certain dealings

Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

[Salvinia](#)
Salvinia molesta

Regional Recommended Measure

Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying, or releasing the plant. Notify local control authority if found. Your local biosecurity weeds

officer can help to identify, advise on control, and how to remove this weed.

Scotch broom

Cytisus scoparius subsp. scoparius

Prohibition on certain dealings

Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

Scotch broom

Cytisus scoparius subsp. scoparius

Regional Recommended Measure

Core infestation areas: Snowy Valleys Council. Exclusion zone: All of Riverina except identified core infestation areas.

Within exclusion zone: Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying, or releasing the plant. Notify local control authority if found. Within core infestation area: Land managers should mitigate the risk of the plant being introduced to their land. Land managers should mitigate spread of the plant from their land. A person should not buy, sell, move, carry, or release the plant into the environment. Land managers should reduce the impact of the plant on assets of high economic, environmental, and/or social value.

Senegal tea plant

Gymnocoronis spilanthoides

Regional Recommended Measure

Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying, or releasing the plant. Notify local control authority if found. Your local biosecurity weeds officer can help to identify, advise on control, and how to remove this weed.

Serrated tussock

Nassella trichotoma

Prohibition on certain dealings

Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

Serrated tussock

Nassella trichotoma

Regional Recommended Measure

Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying, or releasing the plant. Notify local control authority if found. Your local biosecurity weeds

officer can help to identify, advise on control, and how to remove this weed.

Siam weed

Chromolaena odorata

Prohibited Matter

A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries

Silverleaf nightshade

Solanum elaeagnifolium

Prohibition on certain dealings

Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

Smooth tree pear

Opuntia monacantha

Prohibition on certain dealings

Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

Snakefeather

Asparagus scandens

Prohibition on certain dealings

Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

Spongeplant

Limnobia spongia

Prohibited Matter

A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries

All species of *Limnobia* are Prohibited Matter

Spotted knapweed

Centaurea stoebe subsp. *micranthos*

Prohibited Matter

A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries

Tiger pear

Opuntia aurantiaca

Prohibition on certain dealings

Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

Tropical soda apple

Solanum viarum

Control Order

*Tropical Soda Apple Control Zone: Whole of NSW
Tropical Soda Apple Control Zone (Whole of NSW): Owners and occupiers of land on which there is tropical soda apple*

must notify the local control authority of new infestations; destroy the plants including the fruit; ensure subsequent generations are destroyed; and ensure the land is kept free of the plant. A person who deals with a carrier of tropical soda apple must ensure the plant (and any seed and propagules) is not moved from the land; and immediately notify the local control authority of the presence of the plant on the land, or on or in a carrier.

[Velvety tree pear](#)
Opuntia tomentosa

Prohibition on certain dealings
Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

[Water caltrop](#)
Trapa species

Prohibited Matter
A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries
All species in the *Trapa* genus are Prohibited Matter in NSW

[Water hyacinth](#)
Eichhornia crassipes

Prohibition on certain dealings
Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

[Water hyacinth](#)
Eichhornia crassipes

Biosecurity Zone
The Water Hyacinth Biosecurity Zone applies to all land within the State, except for the following regions: Greater Sydney or North Coast, North West (but only the local government area of Moree Plains), Hunter (but only in the local government areas of City of Cessnock, City of Lake Macquarie, Mid Coast, City of Maitland, City of Newcastle or Port Stephens), South East (but only in the local government areas of Eurobodalla, Kiama, City of Shellharbour, City of Shoalhaven or City of Wollongong). *Within the Biosecurity Zone this weed must be eradicated where practicable, or as much of the weed destroyed as practicable, and any remaining weed suppressed. The local control authority must be notified of any new infestations of this weed within the Biosecurity Zone*

[Water lettuce](#)
Pistia stratiotes

Regional Recommended Measure
Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying, or releasing the plant. Notify local

control authority if found. Your local biosecurity weeds officer can help to identify, advise on control, and how to remove this weed.

Water poppy

Hydrocleys nymphoides

Regional Recommended Measure

Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant. Notify local control authority if found. Your local biosecurity weeds officer can help to identify, advise on control, and how to remove this weed.

Water soldier

Stratiotes aloides

Prohibited Matter

A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries

Wheel cactus

Opuntia robusta

Prohibition on certain dealings

Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

Willows

Salix species

Prohibition on certain dealings

Must not be imported into the state, sold, bartered, exchanged, or offered for sale.

All species in the *Salix* genus have this requirement, except *Salix babylonica* (weeping willows), *Salix x calodendron* (pussy willow) and *Salix x reichardtii* (sterile pussy willow)

Witchweeds

Striga species

Prohibited Matter

A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries

All species in the *Striga* genus are Prohibited Matter in NSW, except the native *Striga parviflora*

Yellow burrhead

Limncharis flava

Prohibited Matter

A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited

*matter must immediately notify the Department of
Primary Industries*

Yellow waterlily
Nymphaea mexicana

Regional Recommended Measure

Land managers should mitigate the risk of the plant being introduced to their land. Land managers should eradicate the plant from the land and keep the land free of the plant. A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying, or releasing the plant. Notify local control authority if found. Your local biosecurity weeds officer can help to identify, advise on control, and how to remove this weed.

Appendix D: Protected Matters Summary

Department of Climate Change, Energy, the Environment and Water

Protected Matters Search Tool

Report Generated - 11:23AM - 03 July 2025

Matters of National Environment Significance

Count

World Heritage Properties	0
National Heritage Places	0
Wetlands of International Importance (Ramsar Wetlands)	4
Great Barrier Reef Marine Park	0
Commonwealth Marine Area	0
Listed Threatened Ecological Communities	5
Listed Threatened Species	32
Listed Migratory Species	14

Other Matters Protected by the EPBC Act

Count

Commonwealth Lands	4
Commonwealth Heritage Places	0
Listed Marine Species	25
Whales and Other Cetaceans	0
Critical Habitats	0
Commonwealth Reserves	0
Terrestrial Australian Marine Parks	0
Habitat Critical to the Survival of Marine Turtles	0

Extra Information

Count

State and Territory Reserves	0
Regional Forest Agreements	0
Nationally Important Wetlands	0
EPBC Act Referrals	6
Key Ecological Features	0
Biologically Important Areas	0
Bioregional Assessments	0
Geological and Bioregional Assessments	0

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 and is accurate at the time of generation.

Please see the caveat for interpretation of information provided here. Consider carefully the age of information for decision making.

[Report Metadata](#)

[Caveat](#)

Wetlands of International Importance (Ramsar Wetlands)

Ramsar Site No.	Ramsar Site Name	Proximity	Website
63	BANROCK STATION WETLAND COMPLEX	500 - 600km upstream from Ramsar site	Australian Wetlands Database
25	THE COORONG, AND LAKES ALEXANDRINA AND ALBERT WETLAND	600 - 700km upstream from Ramsar site	Australian Wetlands Database
16	HATTAH-KULKYNE LAKES	300 - 400km upstream from Ramsar site	Australian Wetlands Database
29	RIVERLAND	400 - 500km upstream from Ramsar site	Australian Wetlands Database

Listed Threatened Ecological Communities

Community ID	Community Name	Threatened Category	Text
141	Poplar Box Grassy Woodland on Alluvial Plains	Endangered	Community may occur within area
43	White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	Critically Endangered	Community may occur within area
98	Weeping Myall Woodlands	Endangered	Community may occur within area
3	Buloke Woodlands of the Riverina and Murray-Darling Depression Bioregions	Endangered	Community may occur within area
86	Grey Box (<i>Eucalyptus microcarpa</i>) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia	Endangered	Community likely to occur within area

Listed Threatened Species

Species ID	Scientific Name	Common Name	Simple Presence	Threatened Category
84745	<i>Galaxias rostratus</i>	Flathead Galaxias, Beaked Minnow, Flat-headed Galaxias, Flat-headed Jollytail, Flat-headed Minnow	May	Critically Endangered
906	<i>Pedionomus torquatus</i>	Plains-wanderer	Likely	Critically Endangered

744	<i>Lathamus discolor</i>	Swift Parrot	Known	Critically Endangered
856	<i>Calidris ferruginea</i>	Curlew Sandpiper	Known	Critically Endangered
59151	<i>Crinia sloanei</i>	Sloane's Froglet	May	Endangered
1179	<i>Hemiaspis damelii</i>	Grey Snake	May	Endangered
9190	<i>Lepidium monoplacoides</i>	Winged Pepper-cress	May	Endangered
82926	<i>Lophochroa leadbeateri</i>	Major Mitchell's Cockatoo (eastern), Eastern Major Mitchell's Cockatoo, Pink Cockatoo (eastern)	Known	Endangered
66632	<i>Macquaria australasica</i>	Macquarie Perch	May	Endangered
845	<i>Limosa limosa</i>	Black-tailed Godwit	Known	Endangered
67093	<i>Melanodryas cucullata</i>	South-eastern Hooded Robin, Hooded Robin (south-eastern)	Likely	Endangered
832	<i>Tringa nebularia</i>	Common Greenshank, Greenshank	Known	Endangered
77037	<i>Rostratula australis</i>	Australian Painted Snipe	Likely	Endangered
85104	<i>Phascolarctos cinereus</i> (combined populations of Qld, NSW and the ACT)	Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory)	Likely	Endangered
1001	<i>Botaurus poeciloptilus</i>	Australasian Bittern	Known	Endangered
1828	<i>Litoria raniformis</i>	Southern Bell Frog, Growling Grass Frog, Green and Golden Frog, Warty Swamp Frog, Golden Bell Frog	May	Vulnerable
726	<i>Neophema chrysostoma</i>	Blue-winged Parrot	Known	Vulnerable
863	<i>Gallinago hardwickii</i>	Latham's Snipe, Japanese Snipe	May	Vulnerable
470	<i>Grantiella picta</i>	Painted Honeyeater	Known	Vulnerable
929	<i>Falco hypoleucos</i>	Grey Falcon	Known	Vulnerable
872	<i>Arenaria interpres</i>	Ruddy Turnstone	Known	Vulnerable
66704	<i>Austrostipa metatoris</i>	null	May	Vulnerable
59398	<i>Stagonopleura guttata</i>	Diamond Firetail	Likely	Vulnerable

83395	<i>Nyctophilus corbeni</i>	Corben's Long-eared Bat, South-eastern Long-eared Bat	May	Vulnerable
67036	<i>Calyptorhynchus lathami lathami</i>	South-eastern Glossy Black-Cockatoo	May	Vulnerable
738	<i>Polytelis swainsonii</i>	Superb Parrot	Known	Vulnerable
874	<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	Known	Vulnerable
67062	<i>Climacteris picumnus victoriae</i>	Brown Treecreeper (south-eastern)	May	Vulnerable
934	<i>Leipoa ocellata</i>	Malleefowl	May	Vulnerable
529	<i>Aphelocephala leucopsis</i>	Southern Whiteface	Known	Vulnerable
1665	<i>Aprasia parapulchella</i>	Pink-tailed Worm-lizard, Pink-tailed Legless Lizard	May	Vulnerable
6765	<i>Swainsona murrayana</i>	Slender Darling-pea, Slender Swainson, Murray Swainson-pea	May	Vulnerable

Listed Migratory Species

Species ID	Scientific Name	Common Name	Presence	
			Rank	Threatened Category
860	<i>Calidris ruficollis</i>	Red-necked Stint	Known	
863	<i>Gallinago hardwickii</i>	Latham's Snipe, Japanese Snipe	May	Vulnerable
644	<i>Motacilla flava</i>	Yellow Wagtail	May	
829	<i>Tringa glareola</i>	Wood Sandpiper	Known	
678	<i>Apus pacificus</i>	Fork-tailed Swift	Likely	
895	<i>Charadrius bicinctus</i>	Double-banded Plover	Known	
872	<i>Arenaria interpres</i>	Ruddy Turnstone	Known	Vulnerable
845	<i>Limosa limosa</i>	Black-tailed Godwit	Known	Endangered
833	<i>Tringa stagnatilis</i>	Marsh Sandpiper, Little Greenshank	Known	
832	<i>Tringa nebularia</i>	Common Greenshank, Greenshank	Known	Endangered
858	<i>Calidris melanotos</i>	Pectoral Sandpiper	Known	
874	<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	Known	Vulnerable
59309	<i>Actitis hypoleucos</i>	Common Sandpiper	May	
856	<i>Calidris ferruginea</i>	Curlew Sandpiper	Known	Critically Endangered

Appendix E: Potential Threatened Species, EEC and KTP

Cobar Penepine Interim Biogeographic Regionalisation for Australia (IBRA) region and the Lachlan Plains IBRA subregion.

Scientific Name	Common Name	Type Of Species	NSW Status	Occurrence
<i>Litoria raniformis</i>	Southern Bell Frog	Animal>Amphibians	Endangered	Known
<i>Crinia sloanei</i>	Sloane's Froglet	Animal>Amphibians	Endangered	Known
<i>Chalinolobus picatus</i>	Little Pied Bat	Animal>Bats	Vulnerable	Known
<i>Myotis macropus</i>	Southern Myotis	Animal>Bats	Vulnerable	Known
<i>Nyctophilus corbeni</i>	Corben's Long-eared Bat	Animal>Bats	Vulnerable	Known
<i>Saccolaimus flaviventris</i>	Yellow-bellied Sheath-tail-bat	Animal>Bats	Vulnerable	Predicted
<i>Vespadelus baverstocki</i>	Inland Forest Bat	Animal>Bats	Vulnerable	Known
<i>Anseranas semipalmata</i>	Magpie Goose	Animal>Birds	Vulnerable	Known
<i>Ardeotis australis</i>	Australian Bustard	Animal>Birds	Endangered	Known
<i>Botaurus poiciloptilus</i>	Australasian Bittern	Animal>Birds	Endangered	Known
<i>Burhinus grallarius</i>	Bush Stone-curlew	Animal>Birds	Endangered	Known
<i>Lophochroa leadbeateri</i>	Pink Cockatoo	Animal>Birds	Vulnerable	Known
<i>Hylacola cauta</i>	Shy Heathwren	Animal>Birds	Vulnerable	Known
<i>Calyptorhynchus lathami lathami</i>	South-eastern Glossy Black-Cockatoo	Animal>Birds	Vulnerable	Known
<i>Certhionyx variegatus</i>	Pied Honeyeater	Animal>Birds	Vulnerable	Known
<i>Cinclosoma castanotum</i>	Chestnut Quail-thrush	Animal>Birds	Vulnerable	Known
<i>Climacteris affinis</i> - endangered population	White-browed Treecreeper population in Carrathool local government area south of the Lachlan River and Griffith local government area	Animal>Birds	Endangered Population	Known

<i>Climacteris picumnus victoriae</i>	Brown Treecreeper (eastern subspecies)	Animal>Birds	Vulnerable	Known
<i>Drymodes brunneopygia</i>	Southern Scrub-robin	Animal>Birds	Vulnerable	Known
<i>Falco hypoleucos</i>	Grey Falcon	Animal>Birds	Vulnerable	Known
<i>Grantiella picta</i>	Painted Honeyeater	Animal>Birds	Vulnerable	Known
<i>Antigone rubicunda</i>	Brolga	Animal>Birds	Vulnerable	Known
<i>Hamirostra melanosternon</i>	Black-breasted Buzzard	Animal>Birds	Vulnerable	Known
<i>Leipoa ocellata</i>	Malleefowl	Animal>Birds	Endangered	Known
<i>Limosa limosa</i>	Black-tailed Godwit	Animal>Birds	Vulnerable	Known
<i>Lophoictinia isura</i>	Square-tailed Kite	Animal>Birds	Vulnerable	Known
<i>Melanodryas cucullata cucullata</i>	South-eastern Hooded Robin	Animal>Birds	Endangered	Known
<i>Melithreptus gularis gularis</i>	Black-chinned Honeyeater (eastern subspecies)	Animal>Birds	Vulnerable	Known
<i>Neophema pulchella</i>	Turquoise Parrot	Animal>Birds	Vulnerable	Known
<i>Ninox connivens</i>	Barking Owl	Animal>Birds	Vulnerable	Known
<i>Oxyura australis</i>	Blue-billed Duck	Animal>Birds	Vulnerable	Known
<i>Pachycephala inornata</i>	Gilbert's Whistler	Animal>Birds	Vulnerable	Known
<i>Pachycephala rufogularis</i>	Red-lored Whistler	Animal>Birds	Critically Endangered	Known
<i>Polytelis swainsonii</i>	Superb Parrot	Animal>Birds	Vulnerable	Known
<i>Pomatostomus temporalis temporalis</i>	Grey-crowned Babbler (eastern subspecies)	Animal>Birds	Vulnerable	Known
<i>Pyrholaemus sagittatus</i>	Speckled Warbler	Animal>Birds	Vulnerable	Known
<i>Rostratula australis</i>	Australian Painted Snipe	Animal>Birds	Endangered	Known
<i>Stagonopleura guttata</i>	Diamond Firetail	Animal>Birds	Vulnerable	Known
<i>Stictonetta naevosa</i>	Freckled Duck	Animal>Birds	Vulnerable	Known
<i>Tyto novaehollandiae</i>	Masked Owl	Animal>Birds	Vulnerable	Known
<i>Petroica phoenicea</i>	Flame Robin	Animal>Birds	Vulnerable	Known
<i>Hieraaetus morphnoides</i>	Little Eagle	Animal>Birds	Vulnerable	Known

Circus assimilis	Spotted Harrier	Animal>Birds	Vulnerable	Known
Daphoenositta chrysoptera	Varied Sittella	Animal>Birds	Vulnerable	Known
Epthianura albifrons	White-fronted Chat	Animal>Birds	Vulnerable	Known
Calidris ferruginea	Curlew Sandpiper	Animal>Birds	Critically Endangered	Known
Falco subniger	Black Falcon	Animal>Birds	Vulnerable	Known
Artamus cyanopterus	Dusky Woodswallow	Animal>Birds	Vulnerable	Known
Haliaeetus leucogaster	White-bellied Sea-Eagle	Animal>Birds	Vulnerable	Known
Hirundapus caudacutus	White-throated Needletail	Animal>Birds	Vulnerable	Known
Neophema chrysostoma	Blue-winged Parrot	Animal>Birds	Vulnerable	Known
Aphelocephala leucopsis	Southern Whiteface	Animal>Birds	Vulnerable	Known
Gallinago hardwickii	Latham's Snipe	Animal>Birds	Vulnerable	Known
Tringa nebularia	Common Greenshank	Animal>Birds	Endangered	Known
Antechinomys laniger	Kultarr	Animal>Marsupials	Endangered	Known
Ningauai yvonneae	Southern Ningauai	Animal>Marsupials	Vulnerable	Known
Phascolarctos cinereus	Koala	Animal>Marsupials	Endangered	Known
Sminthopsis macroura	Stripe-faced Dunnart	Animal>Marsupials	Vulnerable	Known
Aprasia inaurita	Mallee Worm-lizard	Animal>Reptiles	Endangered	Known
Tiliqua occipitalis	Western Blue-tongued Lizard	Animal>Reptiles	Vulnerable	Known
Austrostipa metatoris	A spear-grass	Plant>Herbs and Forbs	Vulnerable	Known
Austrostipa wakoolica	A spear-grass	Plant>Herbs and Forbs	Endangered	Known
Brachyscome papillosa	Mossgiel Daisy	Plant>Herbs and Forbs	Vulnerable	Known
Distichlis distichophylla	Australian Saltgrass	Plant>Herbs and Forbs	Endangered	Known
Eleocharis obicis	Spike-Rush	Plant>Herbs and Forbs	Vulnerable	Known
Lepidium monoplocoides	Winged Peppercreess	Plant>Herbs and Forbs	Endangered	Known

Swainsona murrayana	Slender Darling Pea	Plant>Herbs and Forbs	Vulnerable	Predicted
Swainsona sericea	Silky Swainson-pea	Plant>Herbs and Forbs	Vulnerable	Known
Caladenia arenaria	Sand-hill Spider Orchid	Plant>Orchids	Endangered	Known
Diuris tricolor	Pine Donkey Orchid	Plant>Orchids	Vulnerable	Known
Pterostylis cobarensis	Greenhood Orchid	Plant>Orchids	Vulnerable	Predicted
Acacia curranii	Curly-bark Wattle	Plant>Shrubs	Vulnerable	Known
Kippistia suaedifolia	Fleshy Minuria	Plant>Shrubs	Endangered	Known
Threlkeldia inchoata	Tall Bonefruit	Plant>Shrubs	Endangered	Known
Grevillea ilicifolia subsp. ilicifolia	Holly-leaf Grevillea	Plant>Shrubs	Critically Endangered	Known
Pomaderris cocoparrana	Cocoparra Pomaderris	Plant>Shrubs	Endangered	Known
Infection by Psittacine Circoviral (beak and feather) Disease affecting endangered psittacine species and populations	Threat>Disease	KTP	Predicted	
Infection of frogs by amphibian chytrid causing the disease chytridiomycosis	Threat>Disease	KTP	Predicted	
Infection of native plants by Phytophthora cinnamomi	Threat>Disease	KTP	Predicted	
Alteration to the natural flow regimes of rivers and streams and their floodplains and wetlands	Threat>Habitat Loss/Change	KTP	Predicted	
Bushrock removal	Threat>Habitat Loss/Change	KTP	Predicted	
Loss or degradation (or both) of sites used for hill-topping by butterflies	Threat>Habitat Loss/Change	KTP	Predicted	

Removal of dead wood and dead trees	Threat>Habitat Loss/Change	KTP	Predicted
High frequency fire resulting in the disruption of life cycle processes in plants and animals and loss of vegetation structure and composition	Threat>Habitat Loss/Change	KTP	Predicted
Clearing of native vegetation	Threat>Habitat Loss/Change	KTP	Predicted
Anthropogenic Climate Change	Threat>Habitat Loss/Change	KTP	Predicted
Loss of Hollow-bearing Trees	Threat>Habitat Loss/Change	KTP	Predicted
Forest eucalypt dieback associated with over-abundant psyllids and Bell Miners	Threat>Other Threat	KTP	Predicted
Competition from feral honey bees, <i>Apis mellifera</i> L.	Threat>Pest Animal	KTP	Predicted
Introduction of the Large Earth Bumblebee <i>Bombus terrestris</i> (L.)	Threat>Pest Animal	KTP	Predicted
Predation by the Feral Cat <i>Felis catus</i> (Linnaeus, 1758)	Threat>Pest Animal	KTP	Predicted
Invasion of the Yellow Crazy Ant, <i>Anoplolepis gracilipes</i> (Fr. Smith) into NSW	Threat>Pest Animal	KTP	Predicted
Herbivory and environmental degradation caused by feral deer	Threat>Pest Animal	KTP	Predicted
Predation by the European Red Fox <i>Vulpes Vulpes</i> (Linnaeus, 1758)	Threat>Pest Animal	KTP	Predicted

Predation by <i>Gambusia holbrooki</i> Girard, 1859 (Plague Minnow or Mosquito Fish)	Threat>Pest Animal	KTP	Predicted
Competition and habitat degradation by Feral Goats, <i>Capra hircus</i> Linnaeus 1758	Threat>Pest Animal	KTP	Predicted
Predation, habitat degradation, competition and disease transmission by Feral Pigs, <i>Sus scrofa</i> Linnaeus 1758	Threat>Pest Animal	KTP	Predicted
Importation of Red Imported Fire Ants <i>Solenopsis invicta</i> Buren 1972	Threat>Pest Animal	KTP	Predicted
Competition and grazing by the feral European Rabbit, <i>Oryctolagus cuniculus</i> (L.)	Threat>Pest Animal	KTP	Predicted
Invasion and establishment of the Cane Toad (<i>Bufo marinus</i>)	Threat>Pest Animal	KTP	Predicted
Predation and hybridisation by Feral Dogs, <i>Canis lupus familiaris</i>	Threat>Pest Animal	KTP	Predicted
Habitat degradation and loss by Feral Horses (brumbies, wild horses), <i>Equus caballus</i> Linnaeus 1758	Threat>Pest Animal	KTP	Predicted
Invasion of native plant communities by exotic perennial grasses	Threat>Weed	KTP	Predicted

Invasion of native plant communities by <i>Chrysanthemoides monilifera</i>	Threat>Weed	KTP	Predicted
Invasion, establishment and spread of Lantana (<i>Lantana camara</i> L. sens. Lat)	Threat>Weed	KTP	Predicted
Invasion and establishment of exotic vines and scramblers	Threat>Weed	KTP	Predicted
Invasion and establishment of Scotch Broom (<i>Cytisus scoparius</i>)	Threat>Weed	KTP	Predicted
Invasion of native plant communities by African Olive <i>Olea europaea</i> subsp. <i>cuspidata</i> (Wall. ex G. Don) Cif.	Threat>Weed	KTP	Predicted
Loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants	Threat>Weed	KTP	Predicted
Myall Woodland in the Darling Riverine Plains, Brigalow Belt South, Cobar Peneplain, Murray-Darling Depression, Riverina and NSW South Western Slopes bioregions	EEC	Known	

Inland Grey Box Woodland in the Riverina, NSW South Western Slopes, Cobar Peneplain, Nandewar and Brigalow Belt South Bioregions	EEC	Known
--	-----	-------

Appendix F: Significance test for threatened species with potential to occur in the vicinity

(a) In the case of a threatened species, whether the proposed development or activity is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction.

None were observed on the site inspection, however, the following tables show the likelihood of species recorded as threatened on Bionet occurring on site, or listed as threatened in the Protected Matters Report:

Bionet search:

Likelihood: Highly likely
Possible
Highly unlikely

L
P
U

Listed in both Bionet
and Protected
Matters

Scientific name	Common name	Habitat (latest record)	Breeds
<i>Anseranas semipalmata</i> L	Magpie Goose	Mainly found in shallow wetlands (less than 1 m deep) with dense growth of rushes or sedges. (2023)	Summer and winter
<i>Oxyura australis</i> P	Blue-billed Duck	Prefers deep water in large permanent wetlands and swamps with dense aquatic vegetation. Usually nest solitarily in Cumbungi over deep water (2011).	Sept-Feb
<i>Stictonetta naevosa</i> L	Freckled Duck	Prefer permanent freshwater swamps and creeks with heavy growth of Cumbungi, Lignum or Tea-tree. (2019)	Oct-Dec
<i>Apus pacificus</i> U	Fork-tailed Swift	Mostly occur over dry or open habitats, including riparian woodland and tea-tree swamps, low scrub, heathland or saltmarsh. Does not breed in Australia (1987)	N/A
<i>Ephippiorhynchus asiaticus</i> U	Black-necked Stork	Floodplain wetlands (swamps, billabongs,	May-Jan

		watercourses and dams) of the major coastal rivers are the key habitat. Build large nests high in tall trees close to water. (1978)	
<i>Botaurus poiciloptilus</i> L	Australasian Bittern NSW and Comm	Favours permanent freshwater wetlands with tall, dense vegetation, particularly bullrushes (<i>Typha</i> spp.) and spikerushes (<i>Eleocharis</i> spp.). Nests are built in secluded places in densely-vegetated wetlands on a platform of reeds. (2023)	Oct-Jan
<i>Circus assimilis</i> U	Spotted Harrier	Occurs in grassy open woodland including <i>Acacia</i> and mallee remnants, inland riparian woodland, grassland and shrub steppe. Builds a stick nest in a tree. (2006)	Mostly spring, sometimes autumn
<i>Haliaeetus leucogaster</i> U	White-bellied Sea-Eagle	Habitats are characterised by the presence of large areas of open water including larger rivers, swamps, lakes, and the sea. Nest trees are typically large emergent eucalypts. (2004)	Jun-Sept
<i>Hieraaetus morphnoides</i> U	Little Eagle	Occupies open eucalypt forest, woodland or open woodland. Sheoak or <i>Acacia</i> woodlands and riparian woodlands of interior NSW are also used. Nests in tall living trees within a remnant patch, where pairs build a large stick nest in winter. (2008)	Winter
<i>Falco hypoleucos</i> U	Grey Falcon NSW and Comm	Usually restricted to shrubland, grassland and wooded watercourses of arid and semi-arid regions,	Late winter-early spring

		Also occurs near wetlands. Utilises old nests of other birds of prey and ravens. (2002)	
<i>Falco subniger</i> L	Black Falcon	Prefers fringes of swamps, dams and nearby marshy areas where there is a cover of grasses, lignum, low scrub or open timber. Nests on the ground amongst tall vegetation, such as grasses, tussocks or reeds. (2022)	Sept-Dec
<i>Burhinus grallarius</i> P	Bush Stone-curlew	Inhabits open forests and woodlands with a sparse grassy groundlayer and fallen timber. Nest on the ground in a scrape or small bare patch. (2009)	Spring-early summer
<i>Pluvialis squatarola</i> U	Grey Plover	Found mainly on marine shores, inlets, estuaries and lagoons with large tidal mudflats or sandflats for feeding, sandy beaches for roosting, and also on rocky coasts. (1977)	Does not breed in Australia
<i>Rostratula australis</i> U	Australian Painted Snipe NSW and Comm	Prefers fringes of swamps, dams and nearby marshy areas where there is a cover of grasses, lignum, low scrub or open timber. Nests on the ground amongst tall vegetation, such as grasses, tussocks or reeds. (1976)	Sept-Dec
<i>Actitis hypoleucos</i> U	Common Sandpiper	Found in coastal or inland wetlands, both saline or fresh. (1981)	Does not breed in Australia
<i>Calidris acuminata</i> P	Sharp-tailed Sandpiper NSW and Comm	Largely found around wetlands, preferring freshwater inland wetlands with grassy edges. (2006)	Does not breed in Australia

<i>Calidris ferruginea</i> U	Curlew Sandpiper NSW and Comm	Can occur in non-tidal swamps, lakes and lagoons on the coast and sometimes inland. (1996)	Does not breed in Australia
<i>Calidris melanotos</i> U	Pectoral Sandpiper	Typically found in freshwater habitats usually coastal or near-coastal, but occasionally farther inland. (1997)	Does not breed in Australia
<i>Calidris ruficollis</i> P	Red-necked Stint	May be seen in shallow wetlands including lakes, swamps, riverbanks, waterholes, bore drains, dams, soaks and pools in saltflats, flooded paddocks or damp grasslands. (2006)	Does not breed in Australia
<i>Gallinago hardwickii</i> U	Latham's Snipe	Found in any vegetation around wetlands, in sedges, grasses, lignum, reeds and rushes and also in saltmarsh and creek edges on migration. They also use crops and pasture. (1985)	Does not breed in Australia
<i>Limosa lapponica</i> U	Bar-tailed Godwit	Mainly in coastal habitats - a rare visitor to wetlands away from the coast. (1986)	Does not breed in Australia
<i>Limosa limosa</i> U	Black-tailed Godwit NSW and Comm	Primarily a coastal species. Further inland, it can also be found on mudflats and in water less than 10 cm deep, around muddy lakes and swamps. (2001)	Does not breed in Australia
<i>Tringa glareola</i> U	Wood Sandpiper	Seen in small flocks or singly on inland shallow freshwater wetlands, often with other waders. They prefer ponds and pools with emergent reeds and grass, surrounded by tall plants or dead trees and fallen timber. (1987)	Does not breed in Australia

<i>Tringa nebularia</i> P	Common Greenshank NSW and Comm	Found both on the coast and inland, in estuaries and mudflats, mangrove swamps and lagoons, and in billabongs, swamps, sewage farms and flooded crops. (2006)	Does not breed in Australia
<i>Tringa stagnatilis</i> P	Marsh Sandpiper	Commonly seen singly, or in small to large flocks in fresh or brackish (slightly salty) wetlands such as rivers, water meadows, sewage farms, drains, lagoons and swamps. (2007)	Does not breed in Australia
<i>Gelochelidon nilotica</i> U	Gull-billed Tern	Found in freshwater swamps, brackish and salt lakes, beaches and estuarine mudflats, floodwaters, sewage farms, irrigated croplands and grasslands. Generally the terns choose to nest in colonies on high, dry ground on small permanent or temporary islands in a lake or marsh. (1976)	Flexible depending on location
<i>Hydroprogne caspia</i> U	Caspian Tern	Usually found near the coast, in extensive wetlands, on coastal and interior beaches and sheltered estuaries. The nest is on the ground among gravel and sand, or sometimes on vegetation. (2006)	Spring-summer
<i>Lophochroa leadbeateri</i> L	Pink Cockatoo NSW and Comm	Inhabits a wide range of treed and treeless inland habitats, always within easy reach of water. Nesting, in tree hollows, occurs throughout the second half of the year; nests are at least 1 km apart, with no more than one	Jul-Dec

<i>Lathamus discolor</i> L	Swift Parrot NSW and Comm	pair every 30 square kilometres. (2023) Migrates to the Australian south-east mainland between February and October. On the mainland they occur in areas where eucalypts are flowering profusely or where there are abundant lerp (from sap-sucking bugs) infestations. (2019)	Breeds in Tasmania
<i>Neophema chrysostoma</i> P	Blue-winged Parrot NSW and Comm	Lives in savannah woodland, grasslands, orchards, farmlands, marshes, heath, dunes, and other open habitats up to 1,200 m above sea level. Nests in tree hollows. (2006)	Sep-Jan
<i>Neophema pulchella</i> L	Turquoise Parrot	Lives on the edges of eucalypt woodland adjoining clearings, timbered ridges and creeks in farmland. Nests in tree hollows, logs or posts. (2022)	Aug-Dec
<i>Polytelis swainsonii</i> P	Superb Parrot NSW and Comm	Inhabit Box-Gum, Box-Cypress-pine and Boree woodlands and River Red Gum forest. In the Riverina superb parrots nest in the hollows of large trees (dead or alive) mainly in tall riparian River Red Gum forest or woodland (2017)	Sep-Jan
<i>Ninox connivens</i> U	Barking Owl	Inhabits woodland and open forest, including fragmented remnants and partly cleared farmland. Nests in hollows of large, old trees. (1998)	Mid winter-spring
<i>Climacteris picumnus victoriae</i> U	Brown Treecreeper (eastern subspecies)	Found in eucalypt woodlands (including Box-Gum Woodland) and dry open forest of the inland slopes and	Jul-Feb

		plains inland of the Great Dividing Range. Hollows in standing dead or live trees and tree stumps are essential for nesting. Also found in mallee and River Red Gum (<i>Eucalyptus camaldulensis</i>) Forest bordering wetlands with an open understorey of acacias, saltbush, lignum, cumbungi and grasses. (1999)	
<i>Aphelocephala leucopsis</i> U	Southern Whiteface NSW and Comm	Typically inhabits arid open woodlands with a shrubby or grassy understory. Nests are often placed in shrubs or tree hollows and can range in height from less than 1m from the ground, to greater than 10 m. (1999).	Jul-Oct
<i>Pyrrholaemus sagittatus</i> U	Speckled Warbler	Typical habitat would include scattered native tussock grasses, a sparse shrub layer, some eucalypt regrowth and an open canopy. The rounded, domed, roughly built nest of dry grass and strips of bark is located in a slight hollow in the ground or the base of a low dense plant, often among fallen branches and other litter. (2002)	Aug-Jan
<i>Certhionyx variegatus</i> L	Pied Honeyeater	Inhabits wattle shrub, primarily Mulga (<i>Acacia aneura</i>), mallee, spinifex and eucalypt woodlands. Constructs a relatively large cup-shaped nest in the fork of a shrub or tree up to 5 m above the ground. (2019)	Aug-Sep

<i>Epthianura albifrons</i> P	White-fronted Chat	Usually found foraging on bare or grassy ground in wetland areas, singly or in pairs. 'Open-cup' nests built in low vegetation. (2017)	Jul-Mar
<i>Grantiella picta</i> P	Painted Honeyeater NSW and Comm	Inhabits Boree/ Weeping Myall (<i>Acacia pendula</i>), Brigalow (<i>A. harpophylla</i>) and Box-Gum Woodlands and Box-Ironbark Forests. A small, delicate nest hanging within the outer canopy of drooping eucalypts, she-oak, paperbark or mistletoe branches. (2019)	Sep-May
<i>Pomatostomus temporalis temporalis</i> L	Grey-crowned Babbler (eastern subspecies)	Inhabits open Box-Gum Woodlands on the slopes, and Box-Cypress-pine and open Box Woodlands on alluvial plains. Nests are usually located in shrubs or sapling eucalypts, although they may be built in the outermost leaves of low branches of large eucalypts. (2023)	Jul-Feb
<i>Artamus cyanopterus cyanopterus</i> U	Dusky Woodswallow	Primarily inhabit dry, open eucalypt forests and woodlands, including mallee associations, with an open or sparse understorey of eucalypt saplings, acacias and other shrubs, and ground-cover of grasses or sedges and fallen woody debris. It has also been recorded in shrublands, heathlands and very occasionally in moist forest or rainforest. Nest sites vary greatly, but generally occur in shrubs or low trees,	Aug-Jan

<i>Melanodryas cucullata</i> <i>cucullata</i> U	South-eastern Hooded Robin NSW and Comm	living or dead, horizontal or upright forks in branches, spouts, hollow stumps or logs, behind loose bark or in a hollow in the top of a wooden fence post. (1977) Prefers lightly wooded country, usually open eucalypt woodland, acacia scrub and mallee, often in or near clearings or open areas. The nest is a small, neat cup of bark and grasses bound with webs, in a tree fork or crevice, from less than 1 m to 5 m above the ground. (1998)	Jul-Nov
<i>Stagonopleura guttata</i> U	Diamond Firetail NSW and Comm	Found in grassy eucalypt woodlands, including Box-Gum Woodlands and Snow Gum <i>Eucalyptus</i> <i>pauciflora</i> Woodlands. Nests are globular structures built either in the shrubby understorey, or higher up, especially under hawk's or raven's nests. (1976)	Aug-Jan
<i>Chalinolobus picatus</i> L	Little Pied Bat	Occurs in dry open forest, open woodland, mulga woodlands, chenopod shrublands, cypress pine forest and mallee and Bimil box woodlands. Roosts in caves, rock outcrops, mine shafts, tunnels, tree hollows and buildings. (2019)	Oct Nov

Protected Matters Report

Known or likely species for the search area.

<i>Pedionomus torquatus</i>	Plains-wanderer	Likely	Critically Endangered
<i>Lathamus discolor</i>	Swift Parrot	Known	Critically Endangered
<i>Calidris ferruginea</i>	Curlew Sandpiper (M)	Known	Critically Endangered
<i>Lophochroa leadbeateri leadbeateri</i>	Major Mitchell's Cockatoo (eastern), Eastern Major Mitchell's Cockatoo, Pink Cockatoo (eastern)	Known	Endangered
<i>Limosa limosa</i>	Black-tailed Godwit (M)	Known	Endangered
<i>Melanodryas cucullata cucullata</i>	South-eastern Hooded Robin, Hooded Robin (south-eastern)	Likely	Endangered
<i>Tringa nebularia</i>	Common Greenshank, Greenshank	Known	Endangered
<i>Rostratula australis</i>	Australian Painted Snipe	Likely	Endangered
<i>Phascolarctos cinereus (combined populations of Qld, NSW and the ACT)</i>	Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory)	Likely	Endangered
<i>Botaurus poiciloptilus</i>	Australasian Bittern	Known	Endangered
<i>Neophema chrysostoma</i>	Blue-winged Parrot	Known	Vulnerable
<i>Grantiella picta</i>	Painted Honeyeater	Known	Vulnerable
<i>Falco hypoleucos</i>	Grey Falcon	Known	Vulnerable
<i>Arenaria interpres</i>	Ruddy Turnstone (M)	Known	Vulnerable
<i>Stagonopleura guttata</i>	Diamond Firetail	Likely	Vulnerable
<i>Polytelis swainsonii</i>	Superb Parrot	Known	Vulnerable
<i>Calidris acuminata</i>	Sharp-tailed Sandpiper (M)	Known	Vulnerable
<i>Aphelocephala leucopsis</i>	Southern Whiteface	Known	Vulnerable
M = migratory			

Information from Bionet and the Protected Matters Report indicates that the species of most concern are: *Anseranas semipalmata*, magpie goose, *Stictonetta naevosa*, freckled duck, *Botaurus poiciloptilus*, Australasian bittern and *Falco subniger*, black falcon. This is because:

- There are recent records of these species in the area.
- A significant part of the proposed activity is in habitats that these species use to forage, breed and nest.

Other species such as *Oxyura australis*, blue-billed duck, *Calidris acuminata*, sharp-tailed sandpiper, *Calidris ruficollis*, red-necked stint, *Tringa nebularia*, common greenshank and *Tringa stagnatilis*, marsh sandpiper are of less concern. This is because there have been no recent sightings and most of them don't breed in Australia. Other bird species and the bat are also of much less concern because the bulk of the proposed work will not be taking place in their preferred habitat.

It is unlikely that the proposed activity will have an adverse effect on the life cycle of these species such that a viable local population of the species is likely to be placed at risk of extinction. However, a number of measures will be taken to reduce impacts:

- Work will be staged so that individual animals have a chance to relocate as the project progresses
- Regrowth of native aquatic plant species will be encouraged.
- Invasive plant and animal species will be controlled (foxes and cats should be targeted).
- If burning of aquatic plant species is undertaken to improve access for the proposed activity, this will be staged and completed by the Rural Fire Service.

(b) In the case of an endangered ecological community (EEC) or critically endangered ecological community, whether the proposed development or activity:

- a. **is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or**
- b. **is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction,**

Communities listed under the EPBC Act are:

Poplar Box Grassy Woodland on Alluvial Plains,
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland,
Weeping Myall Woodlands,
Buloke Woodlands of the Riverina and Murray-Darling Depression Bioregions and
Grey Box (*Eucalyptus microcarpa*) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia.

Due to the long-term disturbance in the area and lack of the key species, none of these EEC exist on site, even in derived grassland forms.

Communities listed under the BC Act are:

Myall Woodland in the Darling Riverine Plains, Brigalow Belt South, Cobar Peneplain, Murray-Darling Depression, Riverina and NSW South Western Slopes bioregions and Inland Grey Box Woodland in the Riverina, NSW South Western Slopes, Cobar Peneplain, Nandewar and Brigalow Belt South Bioregions.

Due to the long-term disturbance in the area and lack of the key species, none of these EEC exist on site, even in derived grassland forms.

(c) in relation to the habitat of a threatened species or ecological community:

- i. **the extent to which habitat is likely to be removed or modified as a result of the proposed development or activity, and**
- ii. **whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed development or activity, and**

iii. the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species or ecological community in the locality,

The subject area has a history of disturbance associated with agriculture, road construction and maintenance and utility installation and maintenance. A small number of remnant native trees provide limited habitat, however, there will be minimal modification, fragmentation or isolation from other areas of habitat provided measures outlined in this REF are followed. Replacement tree planting would assist in providing fauna habitat.

Aquatic and semi-aquatic vegetation, such as cumbungi and common reed, is likely to be affected to a greater extent by the proposal and this habitat can be considered to be important to the long-term survival of threatened species in the area.

The fauna species that may be able to utilise the area are mobile but may roost, breed or nest in aquatic and semi-aquatic vegetation. In other locations, limited groundcover vegetation will be removed to enable work to proceed. The vegetation that will be disturbed is of medium to low quality.

To reduce effects on threatened species:

- Work will be staged so that individual animals have a chance to relocate as the project progresses
- Regrowth of native aquatic plant species will be encouraged.
- Invasive plant and animal species will be controlled (foxes should be targeted).
- If burning of aquatic plant species is undertaken to improve access for the proposed activity, this will be staged and completed by the Rural Fire Service.

(d) Whether the proposed development or activity is likely to have an adverse effect on any declared area of outstanding biodiversity value (either directly or indirectly).

“Areas of outstanding biodiversity value” refers to specific locations as declared under Part 3 of the BC Act, mapped and gazetted by the Environment Agency Head. The proposed development is not located in or near a listed area of outstanding biodiversity value. The proposal would have no direct or indirect impact on any such area.

(e) Whether the proposed development or activity is or is part of a key threatening process or is likely to increase the impact of a key threatening process.

Of the key threatening processes (KTPs) predicted to occur in the subregion, those potentially relevant to this proposal are:

- Anthropogenic Climate Change
- Infection of native plants by *Phytophthora cinnamomi*
- Loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants.
- Predation by feral cats
- Predation by the European Red Fox

The proposal would involve the use of diesel-powered machinery, generating emissions that contribute to greenhouse gases. The relatively small scale of the proposed works will mean that these emissions are negligible in the context of the wider environment and safeguards listed in this REF will minimise emissions where possible.

The introduction of plant diseases and weed species generally, whether or not escaped garden plants, is a small risk but has been addressed through safeguards requiring cleaning of plant and equipment prior to reaching site and weed management at the site. The safeguards are considered adequate to prevent introduction of diseases and further weed invasion. Spreading of weeds that already exist

on the site is a considerable risk and should be addressed as outlined in this REF. The site should be inspected in the 12 months following work completion to check for any new weed incursions.

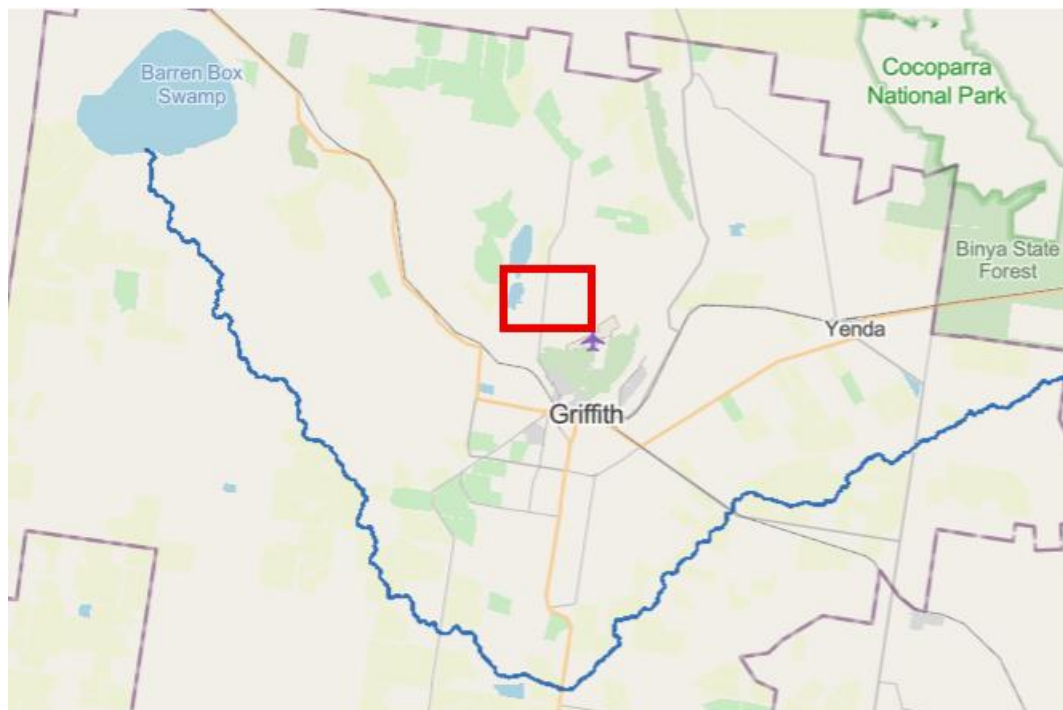
Predation by foxes and feral cats is a risk in the area. Council will continue control measures following accepted policies and procedures.

The proposal includes activities that are listed KTPs. However, because of the small scale of the proposal relative to the surrounding area (and modification of existing infrastructure), its history of disturbance and the identification of safeguards it is unlikely to introduce or exacerbate any of these key threatening processes to any significant extent.

Appendix G: Fisheries Management Act Test of Significance.

1. In the case of a threatened species, whether the action proposed is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction

The Fisheries NSW Spatial Data Portal lists only one threatened freshwater fish species in the Griffith area (flathead galaxias, *Galaxias rostratus*) which is critically endangered. Despite extensive scientific sampling over the past 15 years there have been very few recorded sightings of flathead galaxias. The species is now only known from the upper Murray River near Tintaldra and wetland areas near Howlong. (NSW DPI). It is highly unlikely that the proposed works will have any impact on the flathead galaxias due to the distance from the site of the proposed activity to Mirrool Creek and the unlikely possibility that the species is present.



Flathead Galaxias

2. In the case of an endangered population, whether the action proposed is likely to have an adverse effect on the life cycle of the species that constitutes the endangered population such that a viable local population of the species is likely to be placed at risk of extinction

Provided that the safeguards specified in this REF and the provisions of the Fisheries Permit are followed at all times it is highly unlikely that there will be an adverse effect on the life cycle of the species that constitutes the endangered population such that a viable local population of the species is likely to be placed at risk of extinction.

3. In the case of an endangered ecological community or critically endangered ecological community, whether the action proposed:

- i) is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or
- ii) is likely to substantially and adversely modify the composition of the ecological community such that its occurrence is likely to be placed at risk of extinction

There are no fish communities in the area listed as endangered or critically endangered.

4. In relation to the habitat of a threatened species, population or ecological community:

- i) the extent to which habitat is likely to be removed or modified as a result of the action proposed, and
- ii) whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed action, and
- iii) the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species, population or ecological community in the locality

The distance between the site of the proposed activity and Mirrool Creek means that the habitat of the threatened species is extremely unlikely to be affected.

5. Whether the action proposed is likely to have an adverse effect on critical habitat (either directly or indirectly)

Critical Habitat is defined under the Threatened Species Conservation Act 1995. They are areas of land that are crucial to the survival of particular threatened species, populations and ecological communities. Areas of declared critical habitat under the *Threatened Species Conservation Act 1995* have become the first Areas of Outstanding Biodiversity Value (AOBV) in New South Wales with the commencement of the *Biodiversity Conservation Act 2016*. There are no AOBV ins the area.

6. Whether the action proposed is consistent with the objectives or actions of a recovery plan or threat abatement plan

Recovery and Threat Abatement plans are made under the provisions of Part 7A Division 5 of the *Fisheries Management Act 1994*. There are currently 8 recovery plans for fresh and saltwater species, none of which apply to this project.

7. Whether the action proposed constitutes or is of a Key Threatening Process or is likely to result in the operation of, or increase the impact of, a Key Threatening Process

The following Key Threatening Processes (KTPs) are relevant to the proposal:

- Alteration to the natural flow regimes of rivers and streams and their floodplains and wetlands (BC Act).
- Infection of frogs by amphibian chytrid causing the disease chytridiomycosis (BC Act).
- Predation by *Gambusia holbrooki* (BC Act).

Any alteration to the natural flow regimes of rivers and streams and their floodplains and wetlands will be temporary and mitigated by the provisions of the Fisheries Permit and this REF.

Infection of frogs by amphibian chytrid causing the disease chytridiomycosis KTP will be mitigated by the plant hygiene provisions of this REF.

There are no records of *gambusia* in the Bionet Atlas for the Griffith area.

Appendix H: Environmental Management Plan example

An Environmental Management Plan (EMP or CEMP specialised to Construction) is a site or project specific plan to ensure appropriate environmental management practices are followed, encompassing:

- Project description and objectives,
- Responsibilities, reporting, training and emergency response,
- Risk assessments and environmental controls; and
- Monitoring audits and corrective actions.

For the following rudimentary examples (from DIPNR EMP guidelines) insert the appropriate title and relevant specific environmental controls for the project at hand:

(i) Small Project Checklist

Environmental Management Activities and Controls:

Weed Removal Activities

Project Name:			
Project Location:			
Environmental Controls:	Yes	No	Comments
Air Quality			
Are vehicles being restricted to sealed or dedicated areas?			
Is machinery complying with emission standards (i.e. emissions not visible for more than 10 seconds)?			
Are truck and vehicle speeds below 20km/hr on unsealed access tracks?			
Soils and Hydrogeology			
Are geotextile fences installed in appropriate locations and secure?			
Are geotextile fences clean and well-maintained?			
Is overburden being placed upslope as a protective bund?			
Noise Control			
Is all site work being conducted inside prescribed hours (i.e. between 7am-6pm Mon to Fri, 8am-1pm Sat, no work Sunday or Public Holidays)?			
Hazardous Goods			
Are MSDS available?			
Are spill kits on-site and complete?			
Are all chemicals, fuel and wastes being kept in sealed containers and not in drainage lines?			
Waste Management			
Is all cut vegetation being retained on-site in piles?			
Are plant containers and other waste being removed from site daily?			
Is the site left in a tidy and safe condition every day?			
Subcontractors			
Have all subcontractors completed a site induction?			
Are all subcontractors complying with the EMP?			

Complete a Non-compliance Report/Corrective Action Report for any "NO" answers.

Name of person inspecting site:	
Signature:	
Date and time of site inspection:	

(ii) Small Project Site-based Table

Environmental Management Activities and Controls: Quarry Operations

Environmental Management Control	Person Responsible	Timing / Frequency	Completed (Initials/Date)
General Site Issues			
Conduct site induction training for all personnel to alert them to sensitive work areas, explain the requirements of the EMP, outline an individual's responsibilities and inform all workers of emergency response procedures. Documented evidence of such training is to be available before commencing work on-site.	Environmental Manager	Before commencing work then ongoing for new employees / contractors	
Ensure all operations are undertaken in accordance with the Environment Protection Licence (EPL) obtained under the provisions of the <i>Protection of the Environment Operations Act 1997</i> .	All site personnel	Ongoing during operations	
Ensure emergency procedures are displayed in a prominent position within the site working area.	Safety Manager	Before commencing work	
Allocate a person for the dissemination of general information on the site operations. Identify a contact person(s) and contact numbers for receiving comments or complaints from the community.	Environmental Manager	Before commencing work	
Establish a register of complaints before work commences and maintain for the full duration of the work. The register shall record details of complaints, complainant contact information and action taken to address complaints.	Environmental Manager	Before commencing work	
Conduct audits of the EMP at least once a month. These will involve reviewing all documents, records and monitoring results to ensure compliance with the EMP.	Environmental Manager	Monthly	
Indigenous Heritage			
If any Aboriginal archaeological sites or artefacts are discovered during the works, ensure work ceases immediately in the vicinity and that the DEC is contacted for further advice and action.	Site Supervisor	Ongoing during operations	

Air Quality			
To prevent dust emissions from vehicles ensure that all vehicles entering or leaving the site and carrying a load that may generate dust are covered to prevent dust emissions at all times, except during loading and unloading.	Site Supervisor	Ongoing during operations	
Install, operate, and maintain dust control measures and/or equipment on the following: <ul style="list-style-type: none"> - all processing equipment - internal haul roads and disturbed areas - truck loading areas, and - all stockpiles including raw material, product, topsoil, and overburden. 	Site Supervisor	Ongoing during operations	
Ensure a mobile water tanker equipped with a pump and sprays is used to suppress dust from unsealed roads when in use.	Site Supervisor	Ongoing during operations	
Flora and Fauna			
Fence the boundary of the construction zone to prevent construction plant and equipment entering adjacent vegetated areas.	Site Supervisor	Before commencing work	
Restrict the removal of trees and other vegetation to the minimum required for quarry activities, the processing plant, and areas necessary for fire control.	Site Supervisor	Ongoing during operations	
Rehabilitate and revegetate works of extracted strips progressively.	Site Supervisor	Ongoing during operations	
Establish a riparian zone, revegetated with local native species, along the length of the reconstructed ephemeral waterway in the quarry.	Environmental Manager	Post-quarrying activities	

Environmental Management Control	Person Responsible	Timing / Frequency	Completed (Initials/Date)
Water Quality			
<p>Prepare a Soil and Water Management Plan (SWMP) before commencing work. The SWMP shall provide for:</p> <ul style="list-style-type: none"> - the prompt completion of works relating to drainage and sediment control to minimise exposure time of disturbed areas - the provision of sediment and filter traps, in advance of and in conjunction with earthworks operations, to prevent contaminated run-off leaving the site, and - scour protection / energy dissipation measures in drainage lines below drainage outlets. <p>All controls are to be designed and installed in accordance with <i>Managing Urban Stormwater: Soil and Construction, Department of Housing 1998</i>. This plan is implemented and maintained for the period of quarrying and subsequent rehabilitation.</p>	Environmental Manager	Before commencing work	
Ensure erosion and sedimentation control measures are installed before commencing land disturbance, and remain in place until the erosion hazard reverts to its pre-existing level.	Site Supervisor	Before commencing work then ongoing	
Ensure drainage through and from areas of disturbance is designed to minimise surface flow velocities. Where appropriate, surface water flows from disturbed areas (including stockpile sites) are to be directed to sediment control facilities. Run-off from outside the work area is to be diverted around the disturbed catchment or through the area without mixing with site run-off, to prevent overloading erosion control structures.	Site Supervisor	Ongoing during operations	
Ensure discharge of stormwater from the site is clear of sediment and pollution in accordance with the provisions of the <i>Protection of the Environment Operations Act 1997</i> and the EPL for the quarry.	Environmental Manager	Ongoing during operations	
Noise			
<p>Ensure activities are restricted to the following hours:</p> <ul style="list-style-type: none"> - 7:00 am to 6:00 pm Monday to Friday - 8:00 am to 1:00 pm Saturday - No work on Sundays or public holidays. 	Site Supervisor	Ongoing during operations	
<p>Ensure noise from the site does not exceed the following at any residence not owned by the quarry:</p> <ul style="list-style-type: none"> - an $L_{Aeq}(15 \text{ minute})$ of 44 dB(A) between 7am and 6pm Monday to Saturday, and - an $L_{Aeq}(15 \text{ minute})$ of 37 dB(A) between 6am and 7am Monday to Saturday; 	Environmental Manager	Ongoing during operations	
Waste Management			
Ensure waste is disposed in compliance with the requirements of <i>Waste Avoidance and Resource Recovery Act, 2001</i> at a waste facility licensed to accept the type of waste presented.	Site Supervisor	Ongoing during operations	

(iii) Small Project Issues-based Table

Environmental Management Activities and Controls: Demolition Works – Noise

Noise			
Environmental Management Control	Person Responsible	Timing / Frequency	Completed (Initials/Date)
<p>Ensure construction or demolition activities are restricted to the following hours:</p> <ul style="list-style-type: none"> - 7:00 am to 6:00 pm Monday to Friday - 8:00 am to 1:00 pm Saturday - No work on Sundays or public holidays 	Site Supervisor	During demolition	
<p>If the hours of demolition and construction activities need to be varied, ensure prior written approval is obtained from the local council. Any request to alter construction hours should include:</p> <ul style="list-style-type: none"> - a clear justification of the need for the work - details of the type of activity and the extended hours, and - an analysis of the resultant noise levels at residences in the vicinity of the site. 	Site Supervisor	During demolition	
<p>Before commencing work, send a letter to all residents and industrial/commercial users whose premises may be affected by demolition noise. Ensure the letter includes:</p> <ul style="list-style-type: none"> - hours of operation and duration of the demolition work, and - contact details for more information and/or to register complaints. 	Environmental Manager	Before demolition	
<p>Ensure that all noise complaints are recorded in a logbook. Ensure all complaints are investigated and concerns addressed.</p>	Environmental Manager	During demolition	
<p>Ensure high efficiency mufflers are used on all construction equipment and manufacturer's noise control equipment is intact. All equipment used on site shall have evidence of compliance with recommended noise levels outlined in AS2436, 1981.</p>	Site Supervisor	Before and during demolition	
Ensure all construction equipment is well maintained.	Site Supervisor	During demolition	

Appendix I: AHIMS records and Due Diligence Code of Practice Compliance



AHIMS Web Services (AWS) Search Result

Your Ref/PO Number : Lake Wyangan Res

Client Service ID : 1008146

Access Environmental Planning Pty Ltd

Date: 27 May 2025

PO Box 686

Mudgee New South Wales 2850

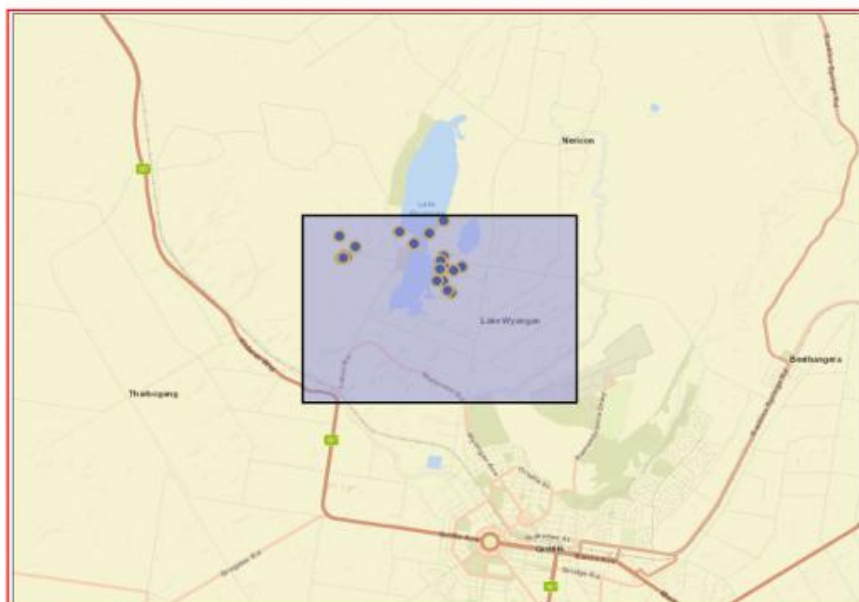
Attention: Renae Hill

Email: renae@accessep.com.au

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lat. Long From : -34.26, 145.9931 - Lat. Long To : -34.2245, 146.0549, conducted by Renae Hill on 27 May 2025.

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



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

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

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the [NSW Government Gazette](https://www.legislation.nsw.gov.au/gazette) (<https://www.legislation.nsw.gov.au/gazette>) website. Gazettal notices published prior to 2001 can be obtained from Heritage NSW upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not to be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Heritage NSW and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : Lake Wyangan Res
Client Service ID : 1008149



SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	Site Features	Site Types	Reports
49-2-0165	LW8	GDA	55	410585	6211438	Open site	Valid	Artefact :-		
Contact	Tharbogang Swamp - Flake - 1001	Recorders	Mr. Matthew Barber, Mr. Matthew Barber, NGH Heritage - Fyshwick, NGH Heritage - F							
49-2-0138	Contact	GDA	55	408139	6211650	Open site	Valid	Artefact :-		Permits
49-2-0187	Lake Wyangan OS-1	Recorders	Miss Catherine Luck							
49-2-0168	Contact	GDA	55	410203	6211667	Open site	Valid	Artefact :-		Permits
LW5	Recorders	OzArk Environmental and Heritage Management - Dubbo, Mr. Brendan Fisher								
49-2-0133	Contact	GDA	55	410198	6211138	Open site	Destroyed	Artefact :-		Permits
Tharbogan 1	Recorders	OzArk Environmental and Heritage Management - Dubbo, Mr. Matthew Barber, NGH								
49-2-0133	Contact	GDA	55	408093	6211605	Open site	Valid	Artefact :-		Permits
49-2-0135	Tharbogang Swamp	Recorders	Mr. Mark Saddler							
Contact	Tharbogang Swamp	Recorders	GDA	55	408067	6211590	Open site	Valid	Artefact :-	Permits
49-2-0107	Lake Wyangan Artefact Scatter	Recorders	Mr. Colin Luck							
Contact	Searle	Recorders	GDA	55	409595	6211927	Open site	Valid	Artefact : 200	Permits
49-1-0042	LW3	Recorders	Mr. Chris Burton							
49-1-0043	Contact	GDA	55	410064	6211134	Open site	Destroyed	Artefact :-	Open Camp Site	Permits
49-2-0136	Tharbogang Swamp kos 1	Recorders	OzArk Environmental and Heritage Management - Dubbo, Mr. Matthew Barber, Mr. B							
LW Artefact Reburial 1	Recorders	AGD	55	410110	6211240	Open site	Valid	Artefact :-	Open Camp Site	Permits
49-2-0186	Contact	GDA	55	408141	6211662	Open site	Valid	Artefact :-		Permits
Tharbogang Swamp kos 1	Recorders	Ms. Kerrie Osullivan								
49-2-0136	Contact	GDA	55	410139	6211571	Open site	Valid	Artefact :-		Permits
LW Artefact Reburial 1	Recorders	OzArk Environmental and Heritage Management - Dubbo, Mr. Brendan Fisher								
49-2-0166	Contact	GDA	55	410372	6210899	Open site	Destroyed	Artefact :-		Permits
LW-11	Recorders	OzArk Environmental and Heritage Management - Dubbo, Mr. Matthew Barber, NGH								
49-2-0182	Contact	GDA	55	410195	6212425	Open site	Valid	Artefact :-		Permits
LW6	Recorders	Mr. Douglas Williams, Access Archaeology & Heritage								
49-2-0167	Contact	GDA	55	410299	6210943	Open site	Destroyed	Artefact :-	4786	Permits
tharbogang swamp 17	Recorders	OzArk Environmental and Heritage Management - Dubbo, Mr. Matthew Barber, Mr. W								
49-2-0137	Contact	GDA	55	408179	6211623	Open site	Valid	Artefact :-		Permits
Tharbogan 3	Recorders	Mr. Graham Traynor								
49-2-0137	Contact	GDA	55	408092	6211605	Open site	Valid	Artefact :-		Permits
Wardry Swamp, Wardry, Narrandera,	Recorders	Mr. Mark Saddler								
LW-12	Recorders	AGD	55	407920	6211880	Open site	Valid	Artefact :-	Open Camp Site	Permits
49-2-0181	Contact	GDA	55	409910	6212140	Open site	Valid	Artefact :-, Hearth :-		Permits
LW-12	Recorders	Mr. Douglas Williams, Mr. Douglas Williams, Access Archaeology & Heritage, Access A								
Contact		Recorders	GDA	55	409910	6212140	Open site	Valid	Artefact :-, Hearth :-	4786

Report generated by AHIMS Web Service on 27/05/2025 for Renae Hill for the following area at Lat, Long From : -34.26, 145.9931 - Lat, Long To : -34.2245, 146.0549, Number of Aboriginal sites and Aboriginal objects found is 23

This information is not guaranteed to be free from error omission. Heritage NSW and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.

AHIMS Web Services (AWS) Extensive search - Site list report

Your Ref/PO Number : Lake Wyangan Res
Client Service ID : 1008149

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
49-2-0027	LW1	AGD	55	410300	6211180	Open site	Valid	Artefact :-	Isolated Find	
	Contact	Recorders	Mr.Matthew Barber							
49-2-0126	Ballingall MT 1	AGD	55	408264	6211665	Open site	Valid	Modified Tree (Carved or Scarred) :-	Permits	
	Contact	Recorders	Mr.Steve Meredith							
49-2-0134	Tharbogan 4	GDA	55	408125	6211607	Open site	Valid	Artefact :-	Permits	
	Contact	Recorders	Mr.Mark Saddler							
49-2-0016	Lake Wyangan Site 1,Lake Wyangan;	AGD	55	409179	6211981	Open site	Valid	Artefact :-	Open Camp Site	
	Contact	Recorders	Mr.Gary Currey							
49-1-0044	LW2	GDA	55	410137	6211388	Open site	Valid	Artefact :-	Open Camp Site	
	Contact	Recorders	Mr.Matthew Barber,Mr.Matthew Barber,NGH Heritage - Fyshwick							

** Site Status

Valid - The site has been recorded and accepted onto the system as valid

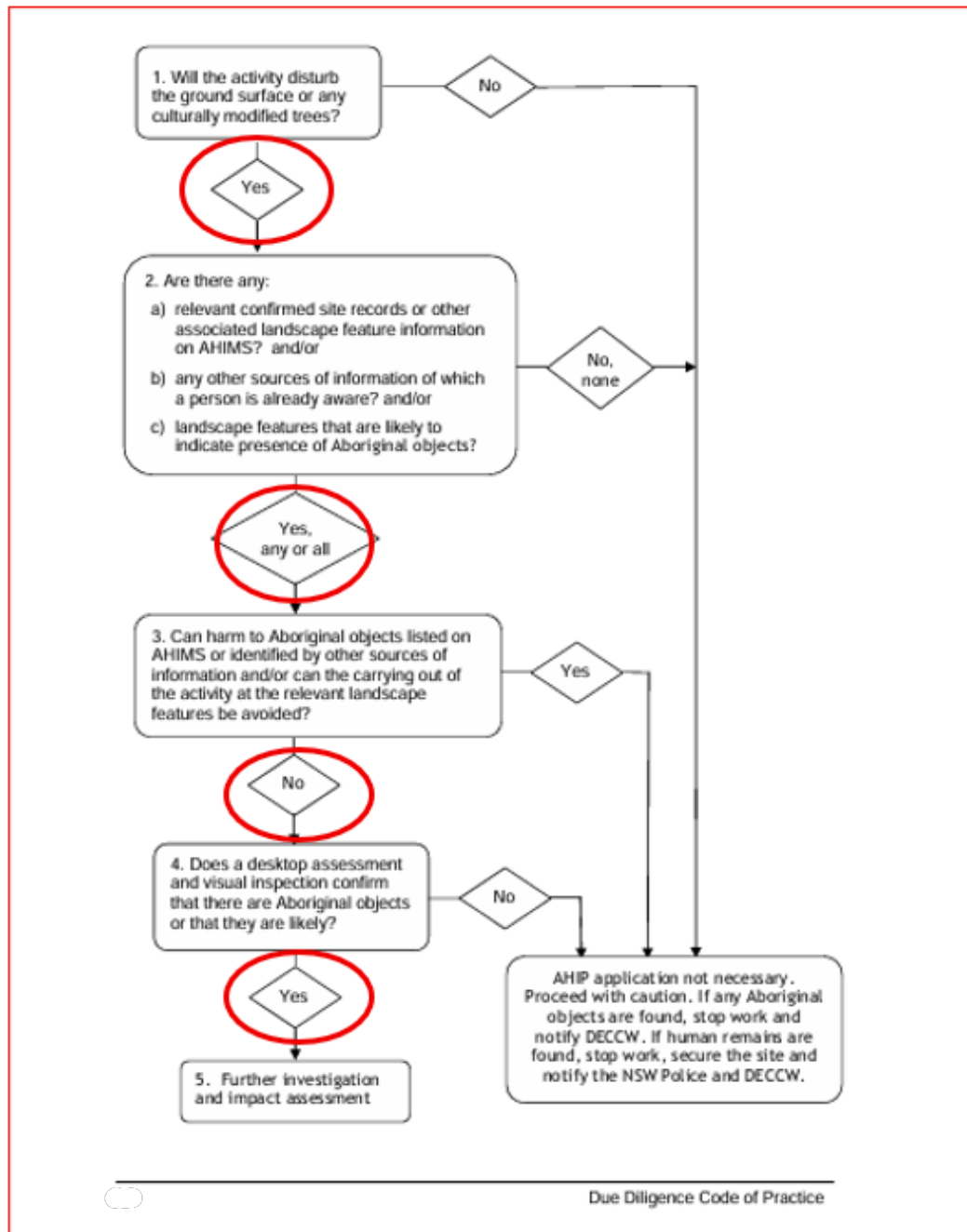
Destroyed - The site has been completely impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There is nothing left of the site on the ground but proponents should proceed with caution.

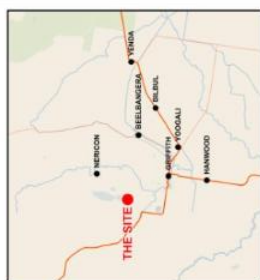
Partially Destroyed - The site has been only partially impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There might be parts or sections of the original site still present on the ground

Not a site - The site has been originally entered and accepted onto AHIMS as a valid site but after further investigations it was decided it is NOT an aboriginal site. Impact of this type of site does not require permit but Heritage NSW should be notified

Report generated by AHIMS Web Service on 27/05/2025 for Renae Hill for the following area at Lat, Long From : -34.26, 145.9931 - Lat, Long To : -34.2245, 146.0549, Number of Aboriginal sites and Aboriginal objects found is 23

This information is not guaranteed to be free from error omission. Heritage NSW and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.





REVIEW OF ENVIRONMENTAL FACTORS (REF) - LAKE WYANGAN RESIDENTIAL HOUSING INFRASTRUCTURE PROJECT, GRIFFITH, NSW AHIMS EXTENSIVE SEARCH RESULTS

Legend

- Artefact
- Artefact / Hearth
- Modified Tree (Carved or Scarred)
- Proposed Works
- Inlet Works
- Land Acquisition
- Major Stormwater Works
- Widening of Existing Channel
- Widening of Existing Channel
- Disturbance Area
- Road
- Watercourse
- Cadastral Boundary
- Waterbody

COPYRIGHT

1. Aerial image sourced from Metronom, aerial dated 07/01/2025.
2. Base data sourced from NSW Spatial Portal, Department of
Customer Service, Spatial Services. <https://spatial.nsw.gov.au>,
sourced June 2025.

0 100 200 300 400 500 m

SCALE (at A3): 1:12,500

PROJECTION: GDA2020 / MGA zone 55

DRAWING NO: AEP-228-F004-Rev0.qgs

DATE: 10/10/2025

DRAWN: KB

CHECKED: TM

