

Biodiversity Management Plan

Tomago Battery Energy Storage System

AGL Macquarie Pty Limited

Tomago NSW

September 2025



Prepared for:

AGL Macquarie Pty Limited
Level 24, 200 George Street
SYDNEY
NSW 2000

Prepared by:

Cool Burn Pty Ltd
coolburn.com.au
ABN: 61 645 633 236
Warners Bay NSW 2282

Ref: J361 – AGL Tomago BESS Biodiversity Management Plan

Document Control:

Version	Description	Date	Author	Reviewed
1.0	Draft	01 June 2025	D Milburn	D Pedersen
1.1	AGL review	17 June 2025		
1.2	AGL review	21 July 2025		
2.0	CPHR review	19 August 2025		
2.1	Final	02 September 2025		
2.2	DPHI review	09 September 2025		

**Disclaimer**

Cool Burn Pty Ltd has prepared this document based on the information provided by the Client/recipient and has endeavoured to ensure that all information presented in this document is correct and current. Cool Burn advises that there are factors outside Cool Burn current knowledge or control which can affect the Client/recipient's project planning. Cool Burn does not warrant that the document is free from error or omissions arising from these factors and does not accept liability for any such errors or omissions. The scope of services has been defined in consultation with the Client/recipient by time and budgetary constraints imposed by the Client/recipient, and the availability of other data on the project. Changes to available information, legislation and schedules are made on an ongoing basis and readers should obtain up to date information. To the fullest extent possible Cool Burn expressly excludes any express or implied warranty as to condition, fitness, merchantability or suitability of this document and limits its liability for direct or consequential loss at Cool Burn's option to re-supplying the document or the cost of correcting the document. In no event shall Cool Burn's responses to questions or any other information in this document be deemed to be incorporated into any legally binding agreement without the express written consent of Cool Burn. The information in this document is proprietary. The Client/recipient, its designated representatives or relevant statutory authorities may use this document for the specific project for which this report was prepared. It should not be otherwise referenced without permission.

Contents

1.	OVERVIEW	1
1.1	Project Details	1
1.2	Conditions of Consent	2
1.3	Biodiversity Management Plan	5
1.4	Referral under the EPBC Act	5
2.	BIODIVERSITY VALUES	7
2.1	Vegetation communities	7
2.2	Flora and fauna	8
2.3	Habitat	9
3.	KEY THREATS AND MITIGATION	11
3.1	Vegetation clearing and habitat disturbance	11
3.1.1	Delineation	11
3.1.2	Pre-clearance survey	11
3.1.3	Project Ecologist / Fauna Spotter Catcher	12
3.1.4	Habitat clearance	13
3.1.5	Re-use of features and materials	14
3.1.6	Timing	14
3.2	Weed incursion	15
3.2.1	Weeds of the Project Area	15
3.2.2	Weed control and ongoing management	16
3.2.3	Topsoil	16
3.3	Hygiene measures	17
3.3.1	Weed hygiene	17
3.3.2	Pathogens and disease	17
3.3.3	Pest animals	18
3.3.4	Rubbish	18
3.4	Sedimentation, runoff and dust	18
3.5	Bushfire	19
4.	MANAGEMENT MEASURES	20
4.1	Action Plan	20
4.1.1	Management zones	20
4.1.2	Stages	20
4.1.3	Performance criteria	20
4.1.4	Responsibility	21

4.1.5	Construction and Environment Management Plan	21
4.2	Monitoring and reporting	21
4.3	Rehabilitation	23
4.4	Adaptive management and incidental finds.....	23
5.	REFERENCES	29

Tables and Figures

Table 1: Tomago BESS site details.....	2
Table 2: Condition of consent – B13	3
Table 3: Threatened species identified onsite.....	9
Table 4: Veterinarian and wildlife carer services	12
Table 5: Significant weed species	15
Table 6: Tomago BESS Action Plan	25
Figure 1: Location and site layout	6

1. OVERVIEW

AGL Macquarie Pty Ltd (AGLM), a subsidiary wholly owned by AGL Energy Limited (AGL) has engaged Cool Burn Fire and Ecology (Cool Burn) to prepare a Biodiversity Management Plan (BMP) for the Tomago Battery Energy Storage System (BESS) (the Project). The BMP will provide a framework for the implementation and monitoring of management measures to protect and enhance biodiversity during the construction of the BESS.

1.1 Project Details

AGL is preparing to construct and operate a 500 megawatt (MW) BESS with storage capacity for 2000 MW hours (MWh). The Project, a State Significant Development (SSD 57107216), was approved on 8 November 2024 by the Department of Planning, Housing and Infrastructure (DPHI).

The BESS will be located off Old Punt Road in Tomago NSW. A transmission easement will be established to connect the BESS to the Transgrid Tomago 132 kilovolt (kV) substation that lies approximately 400m east of the BESS location.

The development will include:

- Battery enclosure including inverters and transformers
- Office and maintenance buildings
- Laydown areas
- Detention ponds and bioretention filters
- Transmission line easement to the Transgrid Tomago substation
- Access roads including a perimeter road around the battery enclosure
- Primary and secondary access points.

Construction of the Project will require disturbance to the biodiversity values within the natural environment including the removal of native vegetation. Biodiversity impacts were assessed through a Biodiversity Development Assessment Report (BDAR) submitted for the Project to support the Development Application and reviewed by the NSW Department of Biodiversity, Conservation and Science (BCS) of the NSW Department of Climate Change, Energy, the Environment and Water (NSW DCCEEW).

The BDAR identified:

- Direct impacts to threatened species. Direct impacts were avoided, as much as practicable with development design but cannot be completely avoided. A threatened ecological community, and habitat for certain listed threatened species will be directly impacted by the Project.

- Indirect environmental impacts to biodiversity values will need to be managed. An exclusion zone will be established and maintained within the Project boundary. This zone primarily contains remnant open forest vegetation that will be maintained and enhanced.

The Project location details, site terminology, and footprint areas are provided below in *Table 1*, and illustrated in *Figure 1¹*. There has been a change in the Project layout from the original design proposed in the Environmental Impact Statement (EIS), however there is no change to the disturbance footprint.

Table 1: Tomago BESS site details

Tomago Battery Energy Storage System	
Development Consent	SSD 57107216
Development	2000MWh Battery Energy Storage System
Primary project address	6 Old Punt Road TOMAGO NSW 2322
Project Area	Lot 5 (part) & Lot 6 DP1286735 – Battery Energy Storage System Lot 8 (part) DP1286735 – transmission easement
Local Government Area (LGA)	Port Stephens Council
Zoning	E4 General Industrial
Renewable Energy Zone (REZ)	Hunter and Central Coast
Local Environmental Plan (LEP)	Port Stephens Local Environmental Plan 2013
Vegetation	<ul style="list-style-type: none"> • Spotted Gum – Broad-leaved Mahogany – Red Ironbark shrubby open forest (including derived native shrubland and derive native grassland) • Exotic vegetation
Sensitive environments	Tomago Sandbeds (drinking water catchment)
Footprints	Project Area – 23.53ha Development Footprint – 15.76ha Exclusion Area – 3.89ha

1.2 Conditions of Consent

In accordance with Condition B13 of the Development Consent, prior to any activity related to the development that could impact biodiversity directly or indirectly, a BMP must be developed in consultation with the BCS (now the Conservation Programs, Heritage and Regulation Group (CPHR)) and to the satisfaction of the Planning Secretary.

Condition B13 is detailed below in *Table 2* along with comments, or the section where each requirement has been addressed within the BMP.

¹ Source: AECOM 2024

Table 2: Condition of consent – B13

Condition	Comment / Section
<p>This plan must:</p> <p>(a) be prepared in accordance with the Biodiversity Development Assessment Report (dated 30 August 2024);</p>	<p>The BMP was prepared in accordance with Tomago BESS Biodiversity Development Assessment Report written by Biosis – Final Report dated 30/08/2024</p>
<p>(b) include a description of the measures that would be implemented for:</p> <p>(i) <i>protecting vegetation and fauna habitat outside the approved disturbance areas;</i></p> <p>(ii) <i>managing and enhancing the remnant vegetation and fauna habitat on site;</i></p> <p>(iii) <i>minimising clearing and avoiding unnecessary disturbance of vegetation that is associated with the construction and operation of the development;</i></p> <p>(iv) <i>minimising the impacts of the development on threatened flora and fauna species within the disturbance footprint and its surrounds;</i></p> <p>(v) <i>minimising the impacts to fauna on site and implementing fauna management protocols;</i></p> <p>(vi) <i>rehabilitating and revegetating temporary disturbance areas with native species that are appropriate to the site's ecology and conditions;</i></p> <p>(vii) <i>maximising the salvage of vegetative and soil resources within the approved disturbance area for beneficial reuse in the enhancement or the rehabilitation of the site; and</i></p> <p>(viii) <i>controlling weeds, feral pests and pathogens;</i></p>	<p>Section 3.1</p> <p>Section 4.3</p> <p>Section 3.1.1 – 3.1.2</p> <p>Section 3.1 & 4.4</p> <p>Section 3.1.1 – 3.1.4</p> <p>Section 4.3</p> <p>Section 3.1.5</p> <p>Section 3.2 & 3.3</p>
<p>(d) include an incidental threatened species finds protocol to identify the avoid and/or minimise and/or offset options to be implemented if additional threatened species are discovered on site;</p>	<p>Section 4.4</p>
<p>(e) include details of who would be responsible for monitoring, reviewing and implementing the plan.</p>	<p>Section 4.1.4</p>
<p>Developed in consultation with BCS/CPHR.</p>	<p>A draft of the BMP (V1) was provided to CPHR via email on 11 June 2025. CPHR attended a site visit (15 June 2025) to discuss the BMP and review appropriate biodiversity mitigation measures.</p>

The BMP also considers the following Development Consent Conditions and Updated Mitigation Measures (Submissions Report Appendix B):

- B9 which states: The Applicant must not clear any native vegetation or fauna habitat located outside the approved disturbance areas described in the EIS. Section 3.1 addresses this requirement.
- B10 which state: Prior to carrying out any development that could directly or indirectly impact the biodiversity values requiring offset, the Applicant must retire biodiversity credits of a number and class specified in Table 1 and Table 2 (of the Development Consent), unless the Planning Secretary agrees otherwise. The retirement of these credits must be carried out in accordance with the NSW Biodiversity Offsets Scheme. Section 2.2 addresses this requirement.
- B30 which states: The Applicant must minimise the fire risks of the development, including managing vegetation fuel loads on-site and ensure that the development complies with the relevant

asset protection requirements in the RFS's *Planning for Bushfire Protection 2019* (or equivalent) and *Standards for Asset Protection Zones (2005)*. Section 3.5 addresses this requirement.

- BD-2 which states: A Biosecurity Management Plan prepared as part of the Project's CEMP/OEMP will prevent the spread of weeds and pathogens, and other biosecurity items into or out of the impact area upon implementation. Section 3.2 and Section 3.3 addresses this requirement.
- BD-3 which states: All material stockpiles, vehicle parking and machinery storage, and other ancillary works will be located within areas considered impacted within the current assessment and not be located within retained vegetation outside the impact area unless an updated impact assessment is undertaken. Section 3.1, Section 3.4, and Table 6 addresses this requirement.
- BD-4 which states: Construction fencing will be established to minimise the risk of fauna entering the construction zones. Table 6 addresses this requirement.
- BD-5 which states: All construction traffic and machinery will be restricted to 30 km/h and erection of signage informing personnel of this restriction. Table 6 addresses this requirement.
- BD-6 which states: Offsetting requirements of this Project will be met as determined by the BAM Calculator following detailed design. Section 2.2 addresses this requirement.

This BMP should be read in conjunction with the Environmental Management Strategy, prepared for the Tomago Battery Project, dated 18 August 2025.

Access to information

Pursuant to Condition C14, AGL will make the following information publicly available on the Project's website as relevant to the stage of the development:

- The EIS
- The final layout plans for the development
- Current statutory approvals for the development
- Approved strategies, plans and programs required under the conditions of consent (other than the Fire Safety Study and Emergency Plan)
- The proposed staging plans for the development in construction, operation or decommissioning of the development is to be staged
- How complaints about the development are made
- Complaints register
- Compliance reports
- Any independent audit prepared in accordance with Condition C13 and the Applicants response to the recommendations in any audit
- Any other matter required by the Planning Secretary.

1.3 Biodiversity Management Plan

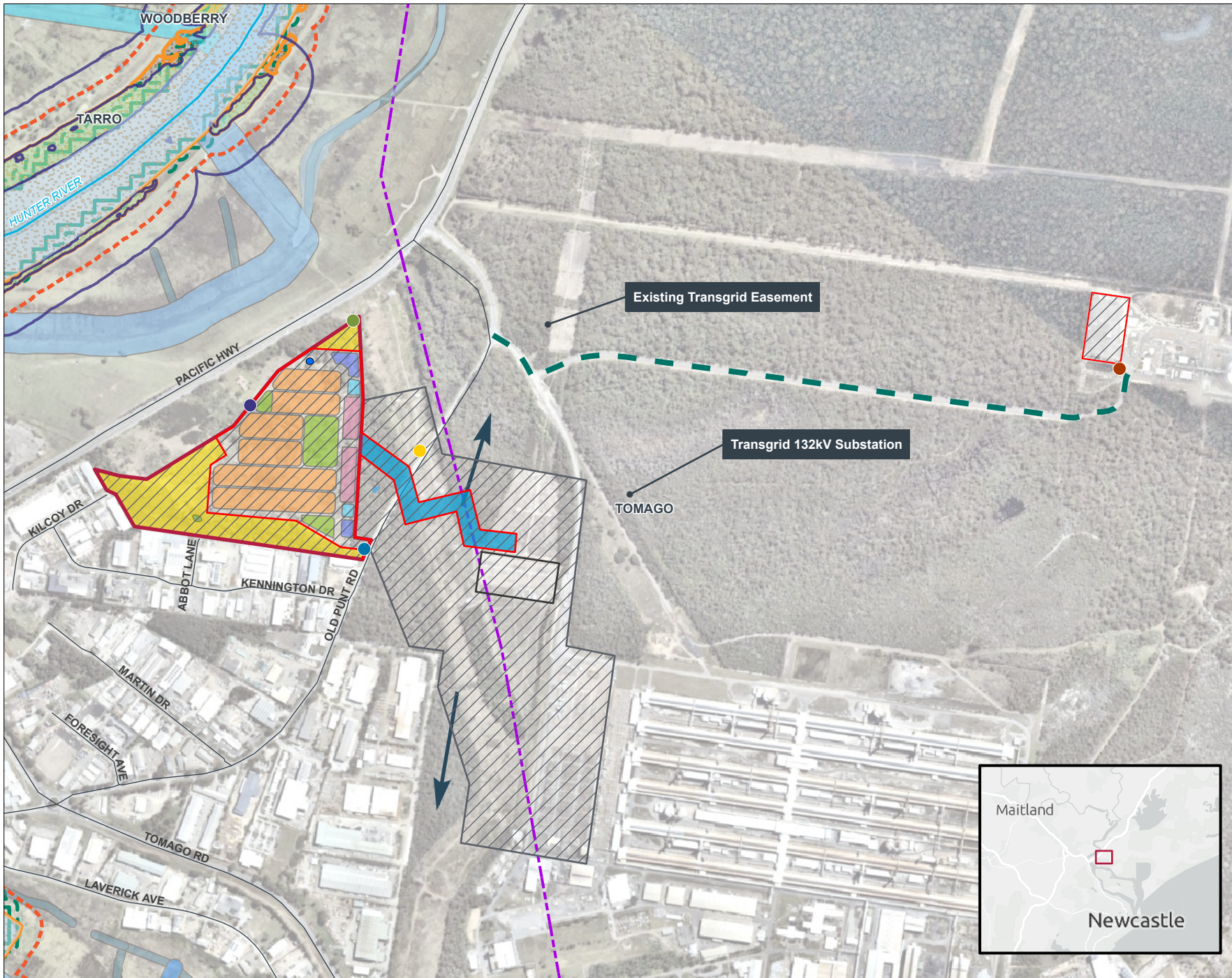
This BMP identifies the biodiversity values within the Project Area and key threats that could impact those values during the construction and development of the Project. Mitigation measures that are discussed are then itemised in an Action Plan at Section 4 and Table 6, with performance criteria, timing, applicable zones, and accountability detailed. The BMP has been developed in with consideration to the following legislation, reports, and guidelines:

- NSW *Environmental and Planning Assessment Act 1979* (EP&A Act)
- NSW *Biodiversity Conservation Act 2016* (BC Act)
- NSW *Biosecurity Act 2015* (Biosecurity Act)
- Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).
- Biodiversity Development Assessment Report (Biosis 2024)
- Bushfire Assessment Report (Blackash 2023)
- Environmental Impact Statement (AECOM 2023)
- Planning for Bushfire Protection (NSW RFS 2019)
- Standards for Asset Protection Zones (NSW RFS 2015).

1.4 Referral under the EPBC Act

The Project was referred to the Environment Minister of the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW Cth) under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), due to potential impacts to Matters of National Environmental Significance.

DCCEEW Cth determined that the proposed action (the Project) was not a controlled action.



AECOM

N

200400

m

Legend

The BESS Site

Project Area

Development Footprint

Ancillary Facility

Battery Enclosure Location

Bioretention Filter Pond

Detention Pond

Laydown And Parking Area

Exclusion Zone

Substation Location

Proposed Transmission Corridor Connection

Water Body

Watercourse

Road

NGSF Private Access Road

Primary Access Point

Emergency Access Point

Indicative Gate Location

Electricity Transmission Line Access Point

Laydown and Parking Area Access Point

IBRA Region/Sub-region

Dam (Biosis, 2023)

Water Body (Biosis, 2023)

Habitat Connectivity

HydroLine Stream Order Buffers

1

2

3

9

Resilience and Hazards SEPP

Coastal Wetlands

Wetlands/ Estuaries

Riparian Buffers - Important Wetlands

Estuaries

Riparian Buffer - Estuaries

Riparian Buffers - Local Wetlands

Local Wetlands

Copyright: Copyright in material relating to the base layers (contextual information) on this page is licensed under a Creative Commons, Attribution 4.0 licence
© Department of Spatial Services 2022. (Digital Cadastral Database and/or Digital Topographic Database).

The terms of Creative Commons Attribution 4.0 License are available from <https://creativecommons.org/licenses/by/4.0/> legalcode (Copyright Licence)

Neither AECOM Australia Pty Ltd (AECOM) nor the © Department of Spatial Services make any representations or warranties of any kind, about the accuracy, reliability, completeness or suitability or fitness for purpose in relation to the content (in accordance with clause 5 of the Copyright Licence).

AECOM has prepared this document for the sole use of its Client based on the Client's description of its requirements having regard to the assumptions and other limitations set out in this report, including page 2.

Source: *Nearmap*, 2022.

L:\Secure\Groups\GIS\Small_Jobs\INTERSTATE_PROJECTS\NTL_60696986\60696986_AGL_tomago_BESS\60696986_AGL_tomago_BESS_2.aprx\G074_01_ProjectComp_250617 Date Saved: 19/06/2025

2. BIODIVERSITY VALUES

2.1 Vegetation communities

The Project Area contains native and non-native vegetation. Native vegetation is characterised by an open forest dominated by Spotted Gum (*Corymbia maculata*) and Red Ironbark (*Eucalyptus fibrosa*), which are co-dominant in places. A shrub layer is present and can be dense, and some areas are dominated by Paperbarks (*Melaleuca* spp.) owing to the low lying nature of the site and standing water can occur during wetter months.

One vegetation community was described onsite:

- Plant Community Type (PCT) 1590 - *Spotted Gum – Broad-leaved Mahogany – Red Ironbark shrubby open forest*

The extent of PCT 1590 is 16.71 ha², which occurs as three structural types: open forest, derived native shrubland and derived native grassland. PCT 1590 is associated with the BC Act listed Endangered Ecological Community (EEC) *Lower Hunter Spotted Gum Ironbark Forest in the Sydney Basin and NSW North Coast Bioregions* (Lower Hunter Spotted Gum Ironbark Forest). The Project will result in the removal of 12.82ha of native vegetation (PCT 1590), 11.02ha of which represent the *Lower Hunter Spotted Gum Ironbark Forest* EEC.

A total area of 3.89ha of native vegetation (PCT 1590 – moderate to high condition) will be protected within the exclusion zone. The exclusion zone to the north is characterised by an open grassy understorey, whilst the exclusion zone to the south contains low lying areas that are inundated during the wet season and a midstorey with *Melaleuca* species that are co-dominant.

There is 2.7ha of non-native vegetation that is characterised by exotic grasslands and areas dominated by Radiata Pine (*Pinus radiata*) and Lantana (*Lantana camara*).

Two dams and one waterbody occur onsite and have associated wetland fringing vegetation.



Plate 1: Exclusion zone – North



Plate 2: Exclusion zone - South

² The vegetation areas in this BMP differ from the areas provided in the BDAR due to confirmation of the 132kV transmission easement option which reduced the overall footprint and area of impact.

2.2 Flora and fauna

A candidate threatened species assessment undertaken for the BDAR by Biosis, identified 58 species of listed flora and fauna known or likely to occur in the Project Area (based on habitat and records) that could be impacted by the Project.

Fourteen threatened species were identified in the BDAR survey area or assumed to be present (*Table 3*). Direct impacts to these species can be avoided through the design of the Project and appropriate mitigation measures including delineation, pre-clearance surveys, and vegetation clearing techniques.

Ecological surveys for the BDAR identified 70 flora species and 29 fauna species within the Project Area (Biosis 2024).

Direct impacts to the Lower Hunter Spotted Gum Ironbark Forest in the Sydney Basin and NSW North Coast Bioregions, habitat of Common Planigale, Eastern Cave Bat, Large-eared Pied Bat, Brush-tailed Phascogale, Squirrel Glider and Southern Myotis will arise from the project and will be permanent and will occur from the outset of the development. These impacts have been offset via the Biodiversity Offsets Scheme.

The BDAR (Biosis 2024) that accompanied the development application for the project included the assumption of presence of five species credit species, which have since been subject to additional appropriate targeted survey:

- *Pterostylis chaetophora*
- Netted Bottlebrush *Callistemon linearifolius*
- Leaf-less Tongue Orchid *Cryptostylis hunteriana*
- Singleton Mint Bush *Prostanthera cineolifera*
- Pale-headed Snake *Hoplocephalus bitorquatus*.

In their review of the BDAR (Biosis, 2024), the Biodiversity Conservation and Science (BCS), part of the NSW DCCEE did not accept the justification for not completing targeted surveys for entities within the western area of the project site on the basis of habitat degradation. In response, additional survey for flora species was undertaken across October and November 2024 in previously unsurveyed areas within the approved BESS site (Lot 5 and Lot 6 in DP 1286735). A credit adjustment report was submitted to DPHI on 7 March 2025 (AECOM, 2025) and the credit adjustment was approved by the Planning Secretary in their letter dated 23 June 2025. Condition B11 of the Conditions of Consent has therefore been satisfied.

Prior to carrying out any development that could directly or indirectly impact the biodiversity values requiring offset, the biodiversity offset credits will be retired as required by Condition B10 of the Conditions of Consent.

Table 3: Threatened species identified onsite

Tomago Battery Energy Storage System	
<ul style="list-style-type: none"> • Netted Bottle Brush (<i>Callistemon linearifolius</i>) - was observed at four locations within the existing Transgrid easement. However, these individuals are outside the development footprint. For areas within the BESS site that the species has not been surveyed for, the species was assumed present in the BDAR, but removed on the basis of the credit adjustment report and subsequent surveys. No impacts to this species will occur from the Project <i>Flowering: Spring - Summer</i> • Small-flowered Grevillea (<i>Grevillea parviflora</i> subsp. <i>parviflora</i>) - is only found in the 330 kV transmission line option, which is no longer being considered. No impacts to this species will occur from the Project <i>Flowering: July – December, April – May</i> • Brush-tailed Phascogale (<i>Phascogale tapoatafa</i>) <i>Breeding: May - July</i> • Common Planigale (<i>Planigale maculata</i>) <i>Breeding: October - January</i> • Eastern Cave Bat (<i>Vespadelus troughtoni</i>) - assumed present in all vegetation zones based on commentary from BCS. There is no known breeding habitat occurring within two kilometres of the Project <i>Breeding: Unspecified (likely November – December)</i> • Eastern Coastal Free-tailed Bat (<i>Micronomus norfolkensis</i>) <i>Breeding: Unspecified (likely November – December)</i> 	<ul style="list-style-type: none"> • Eastern False Pipistrelle (<i>Falsistrellus tasmaniensis</i>) <i>Breeding: Late spring to early summer</i> • Greater Broad-nosed Bat (<i>Scoteanax rueppellii</i>) <i>Breeding: Uncertain (likely December – January)</i> • Grey-headed Flying Fox (<i>Pteropus poliocephalus</i>) <i>Breeding: October - November</i> • Little Bent-winged Bat (<i>Miniopterus australis</i>) <i>Breeding: Spring - Summer</i> • Large Bent-winged Bat (<i>Miniopterus orianae oceanensis</i>) <i>Breeding: Spring - Summer</i> • Large-eared Pied Bat (<i>Chalinolobus dwyeri</i>) - assumed present in all vegetation zones based on commentary from BCS, despite no known breeding habitat occurring within two kilometres <i>Breeding: Uncertain (early winter or spring)</i> • Southern Myotis (<i>Myotis macropus</i>) <i>Breeding: November - December</i> • Squirrel Glider (<i>Petaurus norfolcensis</i>) - assumed present in all wooded portions of PCT 1590 based on commentary from BCS, despite the small patches of fragmented vegetation. <i>Breeding: Autumn - Spring</i>

Flowering and breeding information source: NSW Government threatened species profiles (bionet)

2.3 Habitat

Hollow bearing habitat trees (HBTs) were identified within the Project Area, these range from small (<50mm) to large (>400mm) (Plate 3). These features provide breeding or roosting / denning habitat for various birds, reptiles, and mammals including microbats. Several HBTs occur within the development footprint that will be removed. Nest boxes were also identified within the disturbance footprint (Plate 4). The nest boxes were installed as part of the Newcastle Gas Storage Facility development in 2005. Nest boxes will be inspected to ensure they are empty prior to permanently removing from site. The nest boxes are dilapidated and do not need to be relocated.

Habitat for avian stick nests is prevalent in shrubs and trees, and vine thickets (Monkey Rope – *Parsonsia straminea*) are present. Species such as the Ringtail Possum (*Pseudocheirus peregrinus*) will use vine thickets for dreys. Other habitat observed included woody debris and litter that would support various reptiles, amphibians and small mammals.

Koala (*Phascolarctos cinereus*) 'use' trees occur within the Project Area and the locality contains known Koala records. The BDAR concluded that the subject land and assessment area have historical records

of Koala; however, targeted survey for this species did not detect evidence of current or recent habitation.

One artificial wetland (dam) occurs within the disturbance footprint (Plate 5), whilst another dam occurs within the exclusion zone. Both dams could provide habitat for various amphibians, water birds, and potentially aquatic vertebrates. The dam within the disturbance footprint can be drained and backfilled, as per Section 3.1.4.

Mitigation measures will consider all fauna that could occur onsite, and habitat that will be subject to disturbance, or could be indirectly, during construction of the Project.

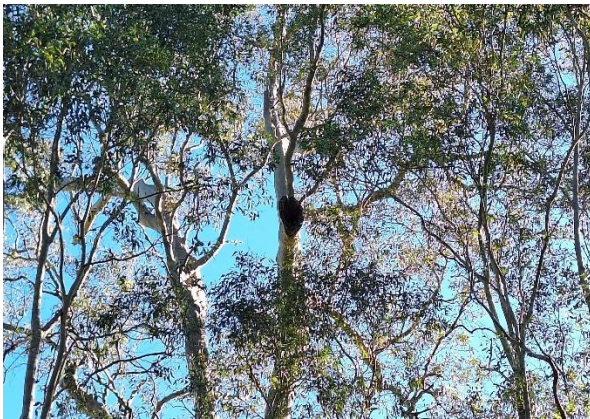


Plate 3: Large hollow in the development footprint



Plate 4: Old nest boxes in the transmission easement



Plate 5: The dam within the disturbance footprint

3. KEY THREATS AND MITIGATION

3.1 Vegetation clearing and habitat disturbance

The Project will result in the removal of exotic and native vegetation, including 12.82ha ha of PCT 1590 open forest, derived shrubland and derived native grassland. Vegetation clearing will impact hollow-bearing trees and there is the potential for nests and dreys to be present. The dam will be filled in and will require dewatering if water is present at the time of works. Exotic vegetation, although degraded in nature, still provides habitat for animals and measures will be required for all vegetation clearing works.

A Project Ecologist or suitably qualified person should be appointed for this Project to conduct or oversee the implementation and delivery of biodiversity mitigation measures to a sufficient standard during construction and operation of the BESS. A Project Ecologist will be required on-site for nominated pre-clearance surveys and as required during clearing (as outlined in this BMP) or for unexpected finds of flora or fauna.

The following activities will be implemented to ensure only permitted vegetation is cleared and impacts to all fauna and habitat values onsite are minimised.

3.1.1 Delineation

The development footprint must be delineated in its entirety prior to any clearing works. A conspicuous and robust product must be used (e.g. bunting flags) and must remain in place until all clearing works are complete (at a minimum). The clearing works will be undertaken in the presence of the Project Ecologist to mitigate the risk of accidental clearing. An exclusion fence will be erected immediately after clearing along the footprint boundary (star pickets and high vis barrier mesh or equivalent).

Once available, tree stems (trunks) could be placed around the development footprint where it interfaces retained vegetation for additional protection during construction (refer Section 3.1.5).

Tree Protection Zones (TPZs) will be established around any retained individual native trees in accordance with the Standards Australia Committee (2009).

All personnel are to be inducted to be aware that disturbance to native vegetation outside the development footprint or otherwise unauthorised disturbance may have legislative consequences if done without approval.

3.1.2 Pre-clearance survey

A pre-clearance survey must be undertaken to identify and mark all potential fauna habitat features within the disturbance footprint and will include a 5m buffer into retained vegetation to account for indirect impacts and edge effects during clearing. The survey should ideally be undertaken within fourteen days of the work proceeding.

All habitat features are to be marked up by means that are clearly visible to the construction contractor (i.e. flagging tape and / or non-toxic spray paint). Habitat features include but aren't limited to hollows, nests, roosts, dens, termitaria, rocky areas (bush rock), wood piles and hollow logs on the ground, decorticating bark, bowers, or any other signs that may indicate the presence of resident or migratory fauna. Additionally, the potential presence of fauna through indicative signs including fresh scat, scratching, urinal staining (Koala) should also be recorded for informative purposes.

The pre-clearance survey must be conducted by the Project Ecologist or another person suitably qualified and experienced in habitat identification (e.g. Fauna Spotter Catcher (FSC)). This person will be familiar with all threatened species known or that have the potential to occur onsite (flora and fauna) in case of an unexpected find (see *Section 4.4*).

Comparative habitat assessments are to be included in the pre-clearance surveys to identify appropriate like for like habitat and release locations for fauna to be relocated during clearing works.

3.1.3 Project Ecologist / Fauna Spotter Catcher

All habitat features must be felled or otherwise disturbed in the presence of the Project Ecologist (or an accredited FSC). The Project Ecologist must have a suite of traps and other equipment appropriate for the temporary and safe holding of a variety of animals. This includes but isn't limited to cage traps, soft release bat boxes, cotton (calico) bags (large, medium and small) and appropriate snake handling equipment including leather strapped tongs³. Containers clean gloves should be carried that area appropriate for amphibians (vinyl and nitrile gloves are preferred, latex should be avoided as it has been shown to have toxicity towards frog embryos and tadpoles).

The Project Ecologist or FSC should ideally be vaccinated against potential zoonoses (transmissible viruses and diseases) including lyssavirus due to potential microbat roosting habitat. Details of local veterinarians and animal carers (*Table 4*) should be included in a Construction and Environment Management Plan (CEMP) for the Project works.

Table 4: Veterinarian and wildlife carer services

Company	Contact	Address
WIRES Wildlife Rescue	1300 094 737	-
Raymond Terrace Veterinary Clinic	02 4987 1111	63 Port Stephens Street Raymond Terrace 2324
My Vets Irrawang and Thornton	02 4987 1898	3/17 Port Stephens Street Raymond Terrace 2324
Newcastle Animal Emergency Centre (24hrs)	02 4957 7106	4 Lang Street Broadmeadow 2292

³ Note: the handling of snakes is not recommended unless the snake is trapped, injured, or likely to relocate to an unfavourable place. The ecologist / FSC must have demonstrated experience to handle snakes.

3.1.4 Habitat clearance

The area to be cleared each day must be first inspected by the Project Ecologist to avoid impacts to mobile species by assessing potential habitat, and to ensure all habitat features have been identified (e.g. newly constructed bird nests) and are clearly marked and evident to the clearing contractor.

The Project Ecologist must be present for all vegetation clearing activities including shrubland and grassland to mitigate impacts for small mammals and reptiles that will likely be present. The Project Ecologist should work ahead of the clearing plant and machinery with appropriate health and safety protocols in place, to identify potential fauna in the path of clearing works. Echidnas, for example, will freeze and attempt to burrow into the ground/litter. The Project Ecologist should also periodically work behind the clearing machinery to check for displaced or injured fauna.

A two-staged process for the clearing of habitat trees is required. Under-grubbing of all non-habitat vegetation should occur 24 – 48 hours prior to the clearing of habitat trees (where they are present). All habitat features must be felled or otherwise disturbed in the presence of the Project Ecologist. Hollow-bearing trees are to be nudged first in an attempt to flush any animals, including microbats that may be roosting in the tree. Soft felling techniques are to be used and engaging an experienced clearing company is recommended.

Sequential clearing must be employed to avoid the creation of vegetation islands and to allow all animals the opportunity to disperse naturally.

Each habitat tree must be immediately inspected by the Project Ecologist when it is safe to do so. Hollow-bearing trees should be verified by torch that they are free from animals before the tree is moved or sheared. Where this cannot be verified the tree should be left in-situ overnight to allow any fauna to disperse, unless the operator is capable of 'cracking' the hollow in a suitable location to make a determination. This process must be guided by the Project Ecologist. Any animal observed in a hollow should be extracted with care and inspected for injury. Injured fauna are to be taken to a veterinarian as soon as possible or placed in safe holding in an appropriate location until such time they can or a veterinarian arrives. Displaced fauna that may not be able to care for themselves (i.e., chicks or other young) should be made safe and taken to a carer as soon as possible. Animals that are injured and are unlikely to survive, based on the decision of the Project Ecologist, should be euthanised humanely with blunt force trauma to the head in an appropriate place (out of sight of other personnel).

Should it be observed that fauna fatalities are occurring, then AGL should be notified and adaptive management or an AGL incident management process is to be implemented to reduce the risk of further fatalities.

All uninjured fauna must be relocated to a safe and suitable predetermined location in like for like habitat (identified in the comparative habitat assessment). Bats should be placed into a soft release box to disperse after dark. All fauna interactions must be recorded (date, species name (or take photos to identify later), capture location, release location, outcome if not relocated (taken to vet / carer or euthanised), and name of Project Ecologist).

Stockpiling of felled vegetation (including sheared) should be conducted away from clearing works wherever possible to avoid providing shelter that displaced animals may be drawn to during vegetation clearing.

The dam within the disturbance footprint can be drained, if it is holding water. Dewatering must be done in the presence of the Project Ecologist to capture any aquatic fauna. Dams within the exclusion zone will not be impacted by Construction activities and will be left in-situ. The contractor can implement stormwater diversion to appropriately manage water flows from dams within the exclusion zone in order to limit impact to project. The Project Ecologist should attempt to capture/remove any animals within the waterbody at an appropriate time. The water outlet should be monitored for tadpoles or other small animals. Aquatic animals must be identified, held in a suitable container with water (and potentially an aerator) and relocated as soon as possible to an appropriate location and waterbody. Any pest species (e.g. *Gambusia* fish) should be humanely euthanised at the discretion of the Project Ecologist.

If the dam is refilled by wet weather or ground water seepage, it should be dewatered as soon as reasonably practicable to ensure it does not create suitable fauna habitat.

3.1.5 Re-use of features and materials

Where feasible, trees should be felled in a manner to preserve the hollowing feature. Any hollows that are suitable for re-use must be appropriately marked by the Project Ecologist and the feature sheared appropriately and stored in a designated area. The hollow can be installed within the exclusion area (elevated in trees or as ground habitat), utilised for other projects, or given to Landcare (or similar organisation) for their use in habitat enhancement in the region.

Mulch should be reused onsite wherever possible. However, mulch can spread fire and should not be used in close proximity to the BESS components or transmission lines, or next to buildings.

Felled trees with straight stems (trunks) would be suitable for placement along the exclusion zone boundary. The stems could be placed along the retained vegetation interface to minimise the risk of impacts to retained vegetation during construction and operation (i.e. slashing), to reduce the risk of vegetation creep (bushfire risk), and to provide habitat for reptiles, small mammals, and birds.

Alternative uses for timber should also be investigated.

3.1.6 Timing

The Project Ecologist must be aware of threatened species that occur onsite and their breeding seasons and implement additional measures as necessary during those times when assessing habitat or clearing vegetation. The breeding season(s) of each species has been provided in *Table 3* of *Section 2.2* (threatened species identified onsite).

3.2 Weed incursion

3.2.1 Weeds of the Project Area

Weeds are a key threatening process to biodiversity values recognised by the NSW and Commonwealth Governments. They are commonly introduced, exacerbated, and / or spread by construction activities where management practices are insufficient. Surveys for the BDAR and a site inspection for the BMP identified 34 introduced species in the Project Area. Eleven of these species are significant weed species as they are classified as one or more of the following:

- High Threat Weed (HTW) classified under the NSW BAM
- Regional Priority Weed (RPW) as nominated in the Hunter Regional Strategic Weed Management Plan 2023 – 2027 and prioritised for Eradication (E), Asset Protection (AP), or Containment (C)
- Weeds of National Significance (WoNS) as determined by the Federal Government.

Significant weed species, their classification(s) and details have been provided in *Table 5*.

Table 5: Significant weed species

Species	Classification	Comment
<i>Baccharis halimifolia</i> Groundsel Bush	HTW, RPW-E	The BESS is located within a marginal area within the Hunter Regional Groundsel Bush Management Strategy 2020 – 2030. Control for this weed has been instigated (Feb / March 2025) with slashing and herbicide control. Will require ongoing treatment in the exclusion zone until eradicated.
<i>Bryophyllum delagoense</i> Mother of Millions	HTW, RPW-AP	Low infestations primarily around the existing track. Succulent plant that spreads vegetatively. Will require treatment or removal prior to disturbance to ensure the plant is not spread around the site or contaminated reusable materials such as wood mulch.
<i>Cenchrus clandestinus</i> Kikuyu	HTW	Limited threat.
<i>Cortaderia selloana</i> Pampas Grass	HTW, RPW-C	Isolated plants around the site. Can be removed mechanically during clearing works. Small plants in the exclusion zone can be removed manually.
<i>Eragrostis curvula</i> African Lovegrass	HTW, RPW-AP	Widespread.
<i>Hyparrhenia hirta</i> Coolatai Grass	HTW, RPW-AP	Can be treated with herbicide.
<i>Lantana camara</i> Lantana	HTW, RPW-AP, WoNS	Treat plants with herbicide (foliar application), hand pull, or cut and paint, with large plants broken down.
<i>Paspalum dilatatum</i> Paspalum	HTW	Limited threat.
<i>Rubus fruticosus</i> sp. agg.	HTW, RPW-AP, WoNS	Can be removed mechanically during clearing works. Plants within the exclusion zone will need to be treated with herbicide, small plants can be removed manually.
<i>Senecio madagascariensis</i> Fireweed	HTW, WoNS	Widespread. Can be removed mechanically during clearing works. Plants within the exclusion zone will need to be treated with herbicide.



Plate 6: Mother of Millions on the access track



Plate 7: Lantana in the exclusion zone

3.2.2 Weed control and ongoing management

Significant weeds will require either chemical or manual / mechanical control. Weeds that have the capability to regenerate vegetatively (e.g. Mother of Millions) must be controlled by herbicide prior to any disturbance to ensure they do not contaminate soil or mulch stockpiles.

All significant weeds within the exclusion zone are to be treated and managed on an ongoing basis (refer Section 4.3).

Treatment of Groundsel Bush must occur biannually until the plant has not been observed for a period of two consecutive years (Hunter Regional Groundsel Bush Management Strategy 2020 – 2030).

Weed control should be conducted in accordance with the Department of Primary Industries weed profiles (NSW WeedWise). Residual / persistent herbicides should be avoided due to the Projects location within the Tomago Sandbeds drinking water catchment. Hunter Water (water resource stakeholder) should be consulted if there is any uncertainty. No glyphosate based herbicide is permitted for use on AGL land.

After initial weed control works, weed inspection and control as required should be conducted during construction every three months, and post-construction every six months for one year. Weed inspections and control within the exclusion zone will be on an 'as required' and ongoing basis to ensure AGL meets its biosecurity obligation under the Biosecurity Act.

3.2.3 Topsoil

Topsoil stripping must consider existing seedbanks, particularly due to the presence of Groundsel Bush which remains viable in the soil medium for two years. Where exotic vegetation is prevalent (as per Biosis vegetation mapping), weed contaminated topsoil should be stripped and stockpiled separately to the predominantly native vegetation topsoil stockpile. This 'contaminated' topsoil must remain onsite (within the BESS). It can remain stockpiled (no less than two years) or can be used in construction or landscaping. If it is reused onsite the location must be recorded so target weed management can be

employed. It should not be used for any requirements within the transmission easement. Appropriate delineation and management of topsoil should be included in the CEMP.

3.3 Hygiene measures

Hygiene measures are important to mitigate the potential introduction of biodiversity threats to, or from, the Project Area. All matters of hygiene considered below are to be incorporated into the CEMP.

3.3.1 Weed hygiene

Weed hygiene measures are required to avoid introducing weeds (seeds or other propagules) to the Project Area or transferring them offsite. All plant and equipment coming on to site should be declared free of organic matter including mud etc., and free of seed or other propagules, either through certification or independent inspection by AGL (or a third party).

All contractors are responsible for ensuring that they do not spread weeds to or from the Project Area offsite. The principal contractor will be responsible for establishing a washdown area for use throughout construction of the Project. The washdown area must be used for vehicles in contact with vegetated or topsoiled areas.

Similarly, imported construction material should be observed, and verified free from biosecurity matters including weed seeds.

3.3.2 Pathogens and disease

Pathogens are present in the Tomago region and the Project needs to ensure that appropriate measures are implemented to minimise the risk of the introduction and / or spread of such pathogens and disease. Notable pathogens include Phytophthora (*Phytophthora cinnamomi*) and Myrtle Rust (*Austropuccinia psidii*). Chytridiomycosis or amphibian chytrid is a potentially fatal disease to all native amphibians that is caused by the aquatic fungus *Batrachochytrium dendrobatidis* which has been recorded in the Hunter region.

Appropriate hygiene for all plant and equipment coming into site, particularly plant to be used for vegetation clearing, will minimise this risk. The handling of native frogs that are displaced during clearing or dewatering activities should be done so using appropriate gloves and containment devices.

Further information is available in the NSW Government document *Hygiene guidelines - Protocols to protect priority biodiversity areas in NSW from Phytophthora cinnamomi, myrtle rust, amphibian chytrid fungus and invasive plants* (DPIE 2020) (refer References in Section 5 for link).

3.3.3 Pest animals

One pest animal, the European Rabbit (*Oryctolagus cuniculus*) was identified in the Project Area during surveys. Other pest animals are likely or have potential to be present in the locality including the Black Rat (*Rattus rattus*), the Feral Cat (*Felis catus*), the European Fox (*Vulpes vulpes*) and the Wild Dog (*Canis familiaris*).

Pest animals are opportunistically attracted to construction areas that have poor hygiene practices. Waste products should be appropriately collected and treated or removed offsite with regularity. This will also minimise the likelihood of snakes entering the site in search of prey.

Feral Cats, European Foxes and Wild Dogs will also predate on displaced fauna or fauna not relocated appropriately. The Project Ecologist must determine and document appropriate actions when relocating displaced fauna.

3.3.4 Rubbish

Small items of rubbish and historical waste occur in the disturbance footprint. This includes a small pile of old tyres in the transmission easement. All piles of waste should be identified in the pre-clearance survey. All rubbish must be collected and disposed of at an appropriate waste or recycling facility.

Waste in the exclusion zone is discussed in Section 4.3 (Rehabilitation).

3.4 Sedimentation, runoff and dust

Erosion from construction earthworks such as the operation of machinery during the construction phase is unlikely but could facilitate the movement of water-borne sediments that have the potential to adversely impact biodiversity values on and off site, particularly during heavy rainfall. This may include impacts to the condition of native vegetation, threatened ecological communities and threatened species habitat.

A Soil and Water Management Plan (AECOM 2025) has been prepared for the Project and appropriate soil and water management measures are to be established during construction and included in the CEMP. Any discharge to remnant vegetation must be avoided or if it occurs then must avoid impacts to habitat and ensure sediment and erosion control.

To minimise the risk of tannin generation impacting surrounding waterways, mulch stockpiles should be established in elevated areas and not be placed within 20m of a watercourse or 10m of a flow path as mapped in Figure 5-1 of the Soil and Water Management Plan. Stockpiles should be bunded with a material that captures and contains stormwater runoff. This water can be allowed to subside naturally or be collected and repurposed (e.g. dust suppression). Mulch should be repurposed as soon as feasible (or removed if that is the intent) to limit the volume of materials stockpiled long term.

Construction phase monitoring will occur at the discharge points from the Project Area as detailed in the Soil and Water Management Plan, endorsed by NSW DCCEE Water Group under the Conditions of

Consent. The purpose of the monitoring is to help identify if water quality issues are occurring as the result of construction works, including vegetation clearance.

Dust suppression measures must be in place to minimise accumulation of dust onto remnant vegetation (including the EEC) which can impact the ability of plants to photosynthesize. Forbs, terrestrial orchids, and young seedlings in the ground layer can be particularly vulnerable.

3.5 Bushfire

Habitat loss and ecological consequences resulting from bushfire emanating onsite during construction works could result in significant impacts to biodiversity in and outside of the Project Area. Ignition management, including appropriate risk assessment and mitigation, should be addressed in the CEMP with high-risk activities permitted subject to stringent risk mitigation measures and/or not permitted on days of increased Fire Danger Ratings.

Landscaping or rehabilitation of areas back to native vegetation must consider bushfire risk and ensure that such works do not increase this risk or create a fire path toward the assets. The BESS (development footprint) must be managed to the standards of an Inner Protection Area (IPA) described in Appendix 4 of the NSW RFS *Planning for Bushfire Protection 2019* (PBP 2019) in accordance with the bushfire report.

Any vegetation screening required for the Project should be established as a low-threat vegetation (Appendix A1.10 PBP 2019) and consider the standards of an IPA (i.e., removal of fine materials and raising of the canopy base).

4. MANAGEMENT MEASURES

4.1 Action Plan

The mitigation and management measures identified in this BMP have been summarised and incorporated into an Action Plan (*Table 6*). The plan itemises the actions, when they are required, includes performance criteria to ensure they are delivered to sufficient standard, and allocates accountability through a responsible party.

4.1.1 Management zones

Management zones have been identified to assist in delivering the actions. Three management zones have been identified:

1. BESS – the disturbance footprint for the BESS
2. Transmission easement – the disturbance footprint for the transmission easement
3. Exclusion zone – areas of vegetation retained around the BESS.

4.1.2 Stages

The timing of actions have been separated into three stages:

1. Pre-construction – actions must be addressed or implemented prior to construction
2. Construction – actions must be addressed or implemented during the construction phase
3. Post-construction – actions must be addressed or implemented at the completion of construction and during operations.

4.1.3 Performance criteria

Performance criteria ensure the actions are delivered to a sufficient and measurable standard. Failure to meet the performance criteria will trigger adaptive management.

Overarching performance criteria for the successful delivery of the BMP include:

- No accidental clearing of native vegetation
- No loss by mortality of any threatened fauna or removal of any threatened plant
- Successful relocation of threatened fauna
- Removal / control of all significant weeds
- The introduction or spread on or offsite of any significant weed, pathogen or disease is appropriately mitigated throughout Project construction
- The salvage and reuse of topsoil, habitat features, and timber where possible.

4.1.4 Responsibility

It is the responsibility of the Principal Contractor to ensure the actions of the BMP are understood and implemented in a timely fashion and that the relevant contracting parties and consultants meet the performance criteria for each action.

The Principal Contractor will be responsible for delivery and reporting of relevant actions in a timely and effective manner and to ensure appropriate biodiversity mitigation measures have been implemented in accordance with best practice guidelines.

AGL will provide assurance by implementing an auditing protocol and submitting an annual report to CPHR (*Section 4.2*).

4.1.5 Construction and Environment Management Plan

A CEMP will be written prior to the commencement of construction activities. The CEMP should include all relevant actions and recommendations described in this BMP.

4.2 Monitoring and reporting

4.2.1 General reporting

AGL or the Principal Contractor should conduct quarterly internal monitoring to ensure compliance with the actions of the plan, and to address any changes as a result of adaptive management or other. Reporting is required at the completion of the pre-construction activities during construction as required, and post-construction.

- A pre-construction survey report will detail the results of the pre-clearance habitat survey. All habitat features will be illustrated in GIS mapping. Specific recommendations or necessary actions will be provided on weed control or fauna management that are not included in this BMP
- All weed management and fauna management actions undertaken are to be summarised in a post-clearance report complete with recommendations for future learnings, increasing the literature for better biodiversity outcomes for projects of this scale, that can be used by AGL.

This BMP will be audited, as part of the Independent Environmental Audits to be conducted under Consent Condition C13. The BMP should be updated as appropriate to capture any relevant findings of the Independent Environmental Audits.

AGL will submit an annual report to CPHR to demonstrate compliance with the BMP. Monitoring and reporting details are provided in *Table 6*.

Condition C2 of Development Consent outlines the requirements for revisions to strategies, plans and programs. Prior to carrying out any upgrading or decommissioning activities on site, AGL must update

the strategies, plans or programs required under Development Consent to the satisfaction of the Planning Secretary.

This BMP and all other associated plans will be reviewed, and where necessary, revised to the satisfaction of the Planning Secretary within 1 month of the:

- Submission of an incident report under Condition C10 of the Development Consent
- Submission of an audit report under Condition C13 of the Development Consent
- Any modification to the conditions of this consent.

4.2.2 Incident reporting

Incident notification protocols are outlined in Consent Condition C10, C11 and C12. AGL must notify DPHI within 24 hours of becoming aware of an incident. The notification must be made via the NSW planning portal (Major Projects) and address details of the incident including:

- Date, time and location
- A brief description of what occurred and why it has been classified as an incident
- A description of what immediate steps were taken in relation to the incident
- Identifying a contact person for further communication regarding the incident.

AGL must provide the Department with a subsequent incident report within seven days (or as otherwise agreed by the Planning Secretary) of the immediate incident notification being made. AGL is required to submit an incident report, in accordance with Appendix 7 of the Development Consent, that:

- Identifies how the incident was detected
- Identifies when the Applicant became aware of the incident
- Identifies any actual or potential non-compliance with conditions of consent
- Identifies further action(s) that will be taken in relation to the incident
- A summary of the incident
- Outcomes of an incident investigation, including identification of the cause of the incident
- Details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence, including the period for implementing any corrective and/or preventative actions
- Details of any communication with other stakeholders regarding the incident.

AGL must submit any further reports as directed by the Planning Secretary.

4.2.3 Non-compliance reporting

Within seven days of becoming aware of a non-compliance, AGL must notify DPHI of the non-compliance. The notification must be in writing and must be submitted via the NSW planning portal (Major Projects). The notification must identify the development (including the development application

number and name), set out the condition of this consent that the development is non-compliant with, why it does not comply, the reasons for the non-compliance (if known), and what actions have been undertaken, or will be undertaken, and when, to address the non-compliance.

In the event that a non-compliance has been notified as an incident, there is no need to also submit a non-compliance notification.

4.3 Rehabilitation

AGL have an obligation under Development Consent Condition B13 to manage and enhance the remnant vegetation and fauna habitat that will be retained. The exclusion zone contains moderate to high condition PCT 1590 *Lower Hunter Spotted Gum Ironbark Forest* EEC.

Rehabilitation and revegetation of temporary disturbance areas must utilise locally occurring native species where practicable.

Significant weeds within the exclusion zone must be controlled in accordance with Section 3.2.2, prior to the completion of construction.

Any rehabilitation undertaken within the Project Area needs to ensure that the risk of bushfire is not exacerbated by, for example, the creation of a fire path. This is applicable to bushfire entering or emanating from the site.

Any shrubs incorporated into rehabilitation must be managed to 10% cover or less and should not be established near the components of the BESS or buildings. Trees should be avoided for rehabilitation with the exception of vegetation screening, where they will be established as low-threat vegetation and consider the standards of an IPA (refer Section 3.5 for more detail).

All waste within the exclusion zone should be collected and disposed of at an appropriate waste or recycling facility. This includes all wire from dilapidated fencing.

4.4 Adaptive management and incidental finds

Adaptive management will be sought where performance criteria for a particular action or the broad criteria described in Section 4.1.3 are not being met. When adaptive management is triggered, works will cease until a review of management measures has been undertaken and changes are implemented. Adaptive management will review the current procedures and standards and will identify higher performing measures to increase the likelihood that the performance criteria are achieved. Adaptive management outcomes should be documented and reported on for future learnings and better biodiversity outcomes.

Incidental (unexpected) finds or outcomes of relevance must be reported in a timely manner. These may occur at any time and all construction personnel including contractors and consultants should be briefed through inductions and toolbox talks. Incidental finds may include identification of a threatened species or heritage/artefact within the disturbance footprint pre or post-clearing. AGL is to be notified

immediately, and works are to cease until it can be ensured that the species can be safely relocated or avoided.

A Project Ecologist should be appointed for this Project who can be consulted on all matters involving biodiversity during construction including threatened species.

Table 6: Tomago BESS Action Plan

Action	Location	Timing	Responsibility	Performance Criteria
Pre-clearance activities (Section 3.1)				
Delineate the development footprint	All zones	Pre-construction	Construction manager / surveyor	Continuous, visible physical barriers (e.g., flagging, fencing) are installed along the entire development boundary with appropriate 'no-go' signage prior to works. Construction site perimeter fencing is to be of a design that excludes terrestrial fauna, so as to minimise the risk of Koala and other fauna ingress to the construction site.
Internal fencing / barricades	All zones	Pre-construction	Construction Manager	Install exclusion to the boundary of the retained vegetation and any construction area where there is potential for accidental encroachment. Ensure appropriate signs such as 'No Go Zone' or 'Environmental Protection Area' are placed on the fencing.
Site inductions	All zones	Any stage	Construction Manager	All 'No Go Zones' or similar to be identified in site inductions and communicated to all personnel.
Undertake a pre-clearance habitat survey of the disturbance footprint and an external 5m buffer	All zones	Pre-construction	Project Ecologist	Survey completed in the appropriate timeframe prior to clearing. All significant features marked and mapped in GIS. Comparative habitat assessments are completed.
Undertake control of Mother of Millions with an appropriate herbicide or manual removal techniques	BESS	Pre-construction (at least 2 weeks prior)	Project Ecologist / weed contractor	100% of visible infestations treated and no regrowth at time of clearing
Vegetation clearing and habitat disturbance (Section 3.1)				
Daily pre-clearing inspections	All zones	Daily during clearing activities	Project Ecologist	Daily reporting confirms inspections and that all habitat features were identified and marked, and no threatened species were present prior to works
Fauna management during under-grubbing works	All zones	Construction	Project Ecologist / clearing contractor	No threatened species are impacted during clearing No fauna fatalities, all fauna interactions recorded, and animals safely relocated Vegetation cleared in sequential and staged pattern

Action	Location	Timing	Responsibility	Performance Criteria
Fauna management during clearing of habitat trees	All zones	Construction	Project Ecologist / clearing contractor	No threatened species are impacted during clearing Habitat trees procedures are followed No fauna fatalities, all fauna interactions recorded, and animals safely relocated Vegetation cleared in sequential and staged pattern
Fauna management during de-watering	BESS	Construction	Project Ecologist / construction manager	No threatened species are impacted during dewatering No fauna fatalities, all fauna interactions recorded, and animals safely relocated Disease protocols followed for amphibians
Recover habitat features if practicable	All zones	Construction	Project Ecologist / clearing contractor	Hollowing features suitable for reuse are recovered, separated, and collected
Stockpile cleared vegetation to be processed away from clearing front	All zones	Construction	Clearing contractor / construction manager	All stockpiles ≥ 30 m from active clearing front. No fauna sightings in stockpiled material No stockpiling in areas that native vegetation is to be retained
Re-use of materials – vegetation	All zones	Construction	AGL / construction manager	Where practicable, logs and mulch will be repurposed on or off site
Vehicle parking and machinery storage	All zones	Any stages	AGL / Construction Manager	Vehicle parking and machinery storage should be located only with areas proposed for clearing and not in areas of native vegetation that are to be maintained
Traffic management	BESS and transmission easement	Any stages	AGL / Construction Manager	A speed limit compatible with Port Stephens Comprehensive Koala Plan of Management is to be enforced and temporary wildlife signage to be installed along Old Punt Road. All construction traffic and machinery within the BESS and transmission easement will be restricted to 30km/h and erection of signage informing personnel of this restriction.

Action	Location	Timing	Responsibility	Performance Criteria
Weed control (Section 3.2)				
Manage significant weeds in the exclusion zone	Exclusion zone	Any stage	Project Ecologist / AGL	No significant weeds in the exclusion zone AGL is compliant with its biosecurity obligation
Stockpile topsoil from areas of exotic vegetation that is likely to be contaminated by Groundsel Bush seed and contain or reuse in BESS area only	BESS	Construction	Construction manager	No new Groundsel Bush infestations recorded outside BESS. Soil use records maintained
Hygiene (Section 3.3)				
Risk assess vehicles, machinery and equipment to determine the necessary level of inspection using a Plant / Equipment Weed & Seed Checklist and wash down as necessary. Protocol will be provided in CEMP	All zones	Construction	Construction manager	All vehicles, plant and machinery are free of mud and soil upon arrival to site No seeds, propagules, or pathogens enter the Project Area Inspection records are maintained
Inspect / verify any materials coming on to site	All zones	Construction	Construction manager	No seeds, propagules, or pathogens enter the Project Area Records are maintained
Contain, store, and regularly remove waste	Site compound	Construction	Construction manager	No evidence of pest animals Waste treated or removed weekly
Establish a wash down facility	BESS	Construction	Construction manager	All vehicles are free of mud and soil prior to departure site No seeds, propagules, or pathogens leave the Project Area
Collect and dispose of all rubbish	All zones	Construction	Construction manager	All rubbish is removed and disposed of at an appropriate waste facility
Sediment, runoff and dust (Section 3.4)				
Establish sediment control	All zones	Construction	Construction manager	Sediment controls in place before soil disturbance No offsite sedimentation events recorded
Manage dust	All zones	Construction	Construction manager	Dust suppression measures visibly effective No visible dust accumulation on retained vegetation

Action	Location	Timing	Responsibility	Performance Criteria
Bushfire (Section 3.5)				
Rehabilitate areas in accordance with an IPA	BESS		AGL / landscaper	Rehabilitation within the BESS meets the standards of an IPA
Establish vegetation screening, if required	BESS	Post-construction	AGL / landscaper	Vegetation screens are installed and will meet the definition of low-threat vegetation in PBP 2019
Monitoring and reporting (Section 4.2)				
Daily works report	-	Daily (during clearing activities or weed control)	Project Ecologist / weed contractor	Daily activities including fauna interactions and herbicide use recorded for regulatory purposes
Develop pre-clearance report	-	Pre-clearing	Project Ecologist	Report delivered within 2 weeks post-survey and before clearing begins Includes GIS mapping and recommendations
Develop post-clearance report	-	Post-clearing	Project Ecologist	Report delivered within 2 weeks post-clearing All fauna interactions recorded, learnings and compliance documented
Monitoring and reporting to ensure the efficacy of and compliance with the BMP. Adaptive management is enacted when required and documented	-	Quarterly	Construction Manager	Biodiversity values are protected, and impacts are appropriately mitigated throughout construction of the Project
Develop annual report detailing compliance with the BMP, outcomes, achievements, and changes.	-	Annually	AGL	An annual report is delivered to CPHR that provides assurance of the delivery of the BMP to the appropriate standards and performance criteria.

5. REFERENCES

AECOM, 2024. *Environmental Impact Assessment*.

AECOM, 2025. *Soil and water Management Plan*.

Biosis, 2024. *Biodiversity Development Assessment Report*.

Biosis, 2025. *Credit adjustment report for Tomago Battery Energy Storage System (BESS)*.

Blackash, 2023. *Bushfire Assessment Report*.

Keith, David., 2004. *Ocean Shores to Desert Dunes – The Native Vegetation of New South Wales and the ACT*. The Department of Environment and Climate Change.

Local Land Services, 2022. *Hunter Regional Strategic Weed Management Plan 2023-2027*. State of New South Wales through Local Land Services, 2022.

NSW Rural Fire Service, 2019. *Planning for Bushfire Protection*. NSW Government.

NSW Rural Fire Service. 2015. *Standards for Asset Protection Zones*. Retrieved from https://www.rfs.nsw.gov.au/data/assets/pdf_file/0010/13321/Standards-for-Asset-Protection-Zones.pdf

Specht, R.L., 1970. *Vegetation*. Pages 44–67 in Leeper, G.W. (ed.), "Australian Environment", 4th edn. Melbourne University Press, Melbourne.

State of NSW and Department of Planning, Industry and Environment, 2020. *Hygiene guidelines - Protocols to protect priority biodiversity areas in NSW from Phytophthora cinnamomi, myrtle rust, amphibian chytrid fungus and invasive plants*, viewed 19 May 2025. NSW Government, Parramatta. <https://www.environment.nsw.gov.au/sites/default/files/saving-our-species-hygiene-guidelines-200164.pdf>