

18 August 2020

Our ref: 16114

NSW Department of Education

Attention: Max Shahin

Dear Max,

Monaro Cluster – Murrumbateman Site Biodiversity Constraints

Eco Logical Australia (ELA) was engaged by the NSW Department of Education to undertake a biodiversity constraints assessment at the proposed location of the new Murrumbateman Primary School on Fairley Street, Murrumbateman (**Figure 1**). This report provides information on the biodiversity values within the site and assesses these values in relation to the NSW *Biodiversity Conservation Act 2016* (BC Act) and Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

THE SUBJECT SITE

The study area (Lot 302, DP 1228766) is situated within the residential area of Murrumbateman, approximately 38 km north-west of Canberra. It is located within the local government area (LGA) of the Yass Valley Council and is zoned as RU5 Rural Village under the Yass Valley LEP 2013. It covers approximately 1.48 ha and is not covered by the Terrestrial Biodiversity layer under the Yass Valley LEP.

BACKGROUND

The NSW *Environmental Planning and Assessment Act 1979* (EP&A Act) is the principal planning legislation for NSW. It provides a framework for the overall environmental planning and assessment of development proposals. It is understood that this report may be used to support a State Significant Development (SSD) application under the EP&A Act, where Secretary Environmental Assessment Requirements (SEARs) would be issued.



Figure 1: Study area

METHOD

A desktop review was undertaken to identify threatened species, populations and threatened ecological communities (TECs) that have been recorded or are predicted to occur within the locality. The following data sources were used:

- BioNet Atlas of NSW Wildlife (DPIE 2020a)
- EPBC Protected Matters Search Tool (DAWE 2020a)
- NSW Threatened Species Profile Database (DPIE 2020b)
- BioNet Vegetation Classification (DPIE 2020c)
- Atlas of Living Australia online database (ALA 2020)
- aerial mapping and photography
- additional GIS datasets including soil, topography, geology and drainage.

A site inspection of the subject site was conducted on 11 August 2020 by ELA ecologist Clare Duck. This involved traversing the study area to assess:

- vegetation, including assessment of floristic structure and composition, and of vegetation communities against key listing criteria for TECs
- the presence of, or potential habitat for, threatened flora and fauna.

EXISTING ENVIRONMENT

The land surrounding the study area is predominantly used for residential and agricultural purposes. The study area itself is highly modified and the tree and shrub layer has been removed. The soil profile is compacted/disturbed. No vegetation communities (Plant Community Types – PCTs) were recorded.

The northern section of the study area is an existing car park, containing narrow rows of planted vegetation (**Photo 1**). The southern section is a mixture of unvegetated/dirt patches and exotic forbs/grasses (**Photo 2 and 3**). Exotic trees and shrubs were recorded to the south of the study area, outside of the proposed impact area.

One first order Strahler stream is mapped within the study area in the existing NSW hydro line spatial data (DPIE 2020d); however, it is mapped within the existing car park and was not observed during the field survey. The creek east of the study area is mapped as a third order Strahler stream. Impacts to the creek are not proposed.

FLORA

The most common flora species observed were exotic forbs such as *Arctotheca calendula* (Capeweed), *Plantago Lanceolata* (Plantago) and *Trifolium* sp. (Clover). Exotic grasses included *Bromus cartharticus* (Prairie Grass), *Eleusine tristachya* (Goose Grass), *Paspalum dilatatum* (Paspalum) and *Phalaris aquatica* (Phalaris). *Eragrostis curvula* (African Lovegrass), which is listed as a priority weed species within the South East Local Land Services Region, was also recorded.

The native grass species *Austrostipa bigeniculata* and *Rytidosperma setaceum* (Small-flower Wallaby Grass) were recorded within a very small area (approximately 14 m²) in the southern end of the study area (**Photo 4**). Exotic forbs that were common in the rest of the study area were also abundant in that patch.

A list of all flora species recorded in the study area is provided in **Attachment A**. Given the highly modified and disturbed nature of the study area, no threatened flora species listed under the NSW BC Act or Commonwealth EPBC Act are considered likely to occur.

FAUNA HABITAT

Several common bird species were recorded during the field survey (**Attachment B**). Considering the highly degraded nature of the site and lack of significant fauna habitat features such as native/intact vegetation, hollow-bearing trees, partially embedded rocks, fallen logs and litter, the study area does not represent potential habitat for threatened fauna species. The proposal is therefore considered unlikely to impact any threatened fauna species listed under the BC Act or EPBC Act.

CONCLUSION

This report has identified and assessed potential impacts on terrestrial biodiversity of the proposal to build a new school in Murrumbateman. The site is highly disturbed and contains very low biodiversity values. No Threatened Ecological Communities (TECs) and no threatened flora or fauna species listed under the NSW *Biodiversity Conservation Act 2016* (BC Act) or the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) were recorded within the study area or are considered likely to occur. Therefore, significant impacts on matters listed under the BC Act or EPBC Act are not likely to occur as a result of the proposal.

If you have any questions in relation to this brief letter, please do not hesitate to contact me at Clare.Duck@ecoaus.com.au.

Regards,



Clare Duck
Ecologist, Canberra Office



Photo 1: The car park.



Photo 2: Exotic vegetation and compacted dirt/gravel.



Photo 3: Exotic vegetation and compacted dirt/gravel.



Photo 4: The southern end of the study area, containing a mix of exotic forbs and native grasses, and adjacent exotic trees/shrubs.

ATTACHMENT A: FLORA SPECIES LIST

Family	Species	Common name	Exotic
Asteraceae	<i>Arctotheca calendula</i>	Capeweed	*
	<i>Conyza bonariensis</i>	Flaxleaf Fleabane	*
	<i>Hypochaeris radicata</i>	Catsear	*
Brassicaceae	<i>Hirschfeldia incana</i>	Hairy Brassica	*
Fabaceae (Faboideae)	<i>Trifolium</i> spp.	Clover	*
Fagaceae	<i>Quercus</i> sp.	Oak	*
Geraniaceae	<i>Erodium</i> sp.		*
Hypericaceae	<i>Hypericum perforatum</i>	St. Johns Wort	*
Juncaceae	<i>Juncus</i> sp.		*
Pinaceae	<i>Pinus</i> sp.	Pine	*
Plantaginaceae	<i>Plantago lanceolata</i>	Lamb's Tongue	*
Platanaceae	<i>Platanus Orientalis</i>		*
Poaceae	<i>Austrostipa bigeniculata</i>		
	<i>Bromus catharticus</i>	Prairie Grass	*
	<i>Cynodon dactylon</i>	Couch	
	<i>Eleusine tristachya</i>	Goose Grass	*
	<i>Eragrostis curvula</i>	African Lovegrass	*
	<i>Hordeum</i> sp.	Barley grass	*
	<i>Nassella neesiana</i>	Chilean Needle Grass	*
	<i>Paspalum dilatatum</i>	Paspalum	*
	<i>Phalaris aquatica</i>	Phalaris	*
	<i>Rytidosperma setaceum</i>	Smallflower Wallaby Grass	
Rosaceae	<i>Cotoneaster pannosus</i>	Silverleaf Cotoneaster	*

ATTACHMENT B: FAUNA SPECIES LIST

Common name	Species	Notes
BIRDS		
Australian Magpie	<i>Cracticus tibicen</i>	
Sulphur-crested Cockatoo	<i>Cacatua galerita</i>	
Yellow Thornbill	<i>Acanthiza nana</i>	
Yellow-rumped Thornbill	<i>Acanthiza chrysorrhoa</i>	
AMPHIBIANS		
Spotted Marsh Frog	<i>Limnodynastes tasmaniensis</i>	Heard near the riparian area to the east of the study area

REFERENCES

Atlas of Living Australia (ALA) online data base. Accessed July 2020. Available: <https://www.ala.org.au/>.

Department of Agriculture, Water and the Environment (DAWE) 2020a. *EPBC Act Protected Matters Search Tool*. Available: <http://www.environment.gov.au/epbc/protected-matters-search-tool>.

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NSW Department of Planning, Industry and Environment (DPIE) 2020a. *BioNet Atlas of NSW Wildlife*. Available: https://www.environment.nsw.gov.au/atlaspublicapp/UI_Modules/ATLAS_/AtlasSearch.aspx.

NSW Department of Planning, Industry and Environment (DPIE) 2020b. *Threatened Biodiversity Profile Search*. Available online: <https://www.environment.nsw.gov.au/threatenedspeciesapp/>.

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