

Natural Environment Referral Response - Biodiversity

Application Number:	DA2020/1517
Date:	05/03/2021
Responsible Officer	Anne-Marie Young
Land to be developed (Address):	Lot 2 DP 349085 , 45 Warriewood Road WARRIEWOOD NSW 2102 Lot 1 DP 349085 , 49 Warriewood Road WARRIEWOOD NSW 2102

Reasons for referral

This application seeks consent development on land, or within 40m of land, containing:

- All Development Applications on
- Actual or potential threatened species, populations, ecological communities, or their habitats;
- Wildlife corridors;
- Vegetation query stipulating that a Flora and Fauna Assessment is required;
- Vegetation query - X type located in both A & C Wards;

And as such, Council's Natural Environment Unit officers are required to consider the likely potential environmental impacts.

Officer comments

Further information and revisions are required to satisfy biodiversity requirements.

Revisions required for the Biodiversity Development Assessment Report (BDAR)

1. The Subject Land has been identified within the BDAR as 1.23 ha, however the shapefile associated with the Subject Land has a total area of 1.36 ha. Please recalculate and update in the report.
2. There are three different area calculations for vegetation clearing identified within the BDAR:
 - p. 24 says 0.68 ha and 0.20 ha
 - p. 36 says 0.79 ha, that is comprised of 0.68 ha and 0.20 ha
 - p. 45 says 0.9 ha

The BDAR is to be revised to reflect the correct area calculation and reflected accordingly in the BAMC. Currently the BAMC states 0.88ha.

3. The Bushfire Hazard Assessment Report states "*All vegetation with the site (excluding Lot 13) will be managed to inner protection area (IPA) standards on completion of the subdivision. All unmanaged*

vegetation will be restricted to Lot 13 and the riparian corridor to the South". All native vegetation within proposed Lot 13 is to be retained.

4. The BDAR is to be revised to include a map of the location of all hollow bearing trees within the Subject Property, including the Subject Land and BMP area. The Ecologist has identified that large hollows exist within the BMP area. These hollows may be used by Barking Owl for breeding. As it has not been confirmed if Barking Owl utilises these hollows for breeding, offsets may be required for any land that falls within the Subject Site that is within a 100m buffer surrounding the hollow-bearing tree.

If the applicant does not wish to purchase offset credits, a suitably qualified Ecologist is required to undertake the recommended survey to identify if the trees are being used by Barking Owls. This includes 2 nights of survey within the recommended survey period (May to December). *"Where any known nest tree(s) occurs on site (e.g. known from existing data, studies or other documented evidence), a species polygon providing a circular buffer with a 100 m RADIUS should be drawn around the known nest tree(s). "Where potential nest trees are identified on site then, night monitoring at the identified potential nest locations for a minimum of 2 nights should be undertaken to detect the presence of any owl of this species using a potential nest tree or demonstrating behaviour focused on a potential nest tree (e.g. investigating the hollow or roosting within 10 m)".*

5. Councils Riparian referrals team have identified that Senegal Tea priority weed has been treated by Council on site for several years. This has not been identified or assessed within the BDAR or BMP. Please provide more detail within the BMP on ongoing management actions for Senegal Tea.

6. Table 9 Species Credits:

- Barking Owl has been identified in Table 9 as not occurring within the site. This is incorrect as the Ecologist has identified Barking Owl in sound recordings from the site. Justification as to why credits have not been assigned to the species is required. The buffer surrounding the hollows in the southern portion of the site may intersect the subject land and thus, credits may be required.
- Glossy-black cockatoo – requires a 200m radius around potential nesting trees. Hollows in the southern portion of the site may intersect with vegetation in the subject land. Please provide further clarification, including a species polygon or detailed justification as to why credits are not required.
- Powerful owl and Masked Owl require a 100m radius around potential nesting trees. Those in the southern portion of the site may intersect with vegetation in the subject land. Please provide further clarification, including a species polygon or detailed justification as to why credits are not required.
- White-bellied Sea-Eagle - survey was conducted outside of required survey period. Given proximal records, this species either requires further survey or offsets if assumed present.
- Little Eagle - survey was conducted outside of required survey period. Given proximal records, this species either requires further survey or offsets if assumed present.
- *Asterolasia elegans* – survey was conducted outside of required survey period. This species either requires additional information, further survey or assumed presence and offset credits.
- *Callistemon linearifolius* – this species has been identified within the BDAR as a potential candidate species in which targeted survey was undertaken. Survey was conducted outside of required survey period. This species either requires additional information, further survey or

assumed presence and offset credits. This species is not included in the BAM-C in BOAMS.

- *Epacris purpurascens var. purpurascens* - survey was conducted outside of required survey period. This species either requires additional information, further survey or assumed presence and offset credits.
- *Lasiopetalum joyceae* - survey was conducted outside of required survey period. This species either requires additional information, further survey or assumed presence and offset credits.
- *Tetratheca glandulosa* - survey was conducted outside of required survey period. This species either requires additional information, further survey or assumed presence and offset credits.
- *Syzygium paniculatum* - survey was conducted outside of required survey period. This species either requires additional information, further survey or assumed presence and offset credits

7. *Microtis angusii* is an SAll entity and due to the survey time not coinciding with the development application, has been assumed present. As such species credits are required for this species. As this species has been assumed present, Section 10.2.3 'Additional impact assessment provisions for threatened species or populations' of the BAM (2017) is required to be assessed in the revised BDAR. This is of importance given the proximity of the site to the known population of *Microtis angusii* in Ingleside (less than 2km from the site). Note: Justification within the BDAR for the omission of survey for *Microtis angusii* (Section 5.4) is not considered to be applicable to this species. The *Microtis angusii* Recovery Plan (Department of Environment, Climate Change and Water 2010) notes that "*It is also possible that M. angusii is a disturbance specialist as it has not been found in surrounding undisturbed habitat despite extensive searches*".

8. Table 11 Prescribed Impacts:

Hydrological process sustaining/interacting with rivers, streams or wetlands

It is noted that the Ecologist has identified that "*the subject land does not contain any mapped wetlands or watercourses*". A small portion of the southern area of the subject land is classified as coastal wetlands in accordance with the Coastal Management SEPP, and the entire site has been identified as Swamp Sclerophyll Forest EEC. Swamp Sclerophyll Forest EEC forms part of a complex of forested and treeless wetland communities found throughout the coastal floodplains of NSW. As such, this section "Hydrological process sustaining/interacting with rivers, streams or wetlands" requires more information.

9. The following maps are missing and required in accordance with the BAM (2017).

- Rivers, streams and wetlands including buffers
- -Connectivity of habitat
- Areas of geological significance and soil hazard features
- Species credit species polygons for species identified within the site.

Revisions required for the Biodiversity Management Plan (BMP)

1. Comments provided by Robert Blackall from Council on the 27/7/2020 have not been addressed, including:

- a) Identify management actions for the area labelled “cleared/built” including the area impacted by sewer construction works adjoining the creekline
 - b) apply to the identified Management Zones in perpetuity
 - c) detail ongoing management actions and performance standards following the initial five years
- These comments must be addressed in the revised BMP.

2. In accordance with the Warriewood Water Management Specification (2001), a 25m inner riparian corridor and 25m riparian buffer is required, for a 50m riparian corridor in total. The 25m riparian corridor is to be measured from the property boundary (not from the creek) and must be marked on the final plans. The applicant is to dedicate the 25m inner creekline corridor to Council. Prior to dedication of land, the applicant is to ensure that the land is fully rehabilitated by removal of weeds, removal of fill and subsequent native revegetation. The applicant may be required to pay monetary contributions to Council (via a bond) which will be used to manage the land for the initial 5-year period of the BMP. The area outside of the 25m dedication will also be subject to the BMP, however management (financial and on ground works) will be the responsibility of the developer/community association in perpetuity.

3. The infiltration basin area, rip rap overflow and landscape buffer should be included in the BMP area a separate zone from Management Zone 1 and Management Zone 2, to ensure that these areas are monitored and planted out with the correct native species and densities.

4. *Asparagus asparagoides* and *Gymnocoronis spilanthoides* have not been identified within Table 2 as a priority weed.

5. Senegal Tea (*Gymnocoronis spilanthoides*) has been identified within the property under previous Council programs. This has not been identified or assessed within the BMP. Senegal Tea is a priority weed listed under the Biosecurity Act 2016 and has a Regional Recommended Measure. Please provide further information including proposed management actions required to facilitate the eradication of Senegal Tea from within the site.

6. The report should include a map that identifies management actions and the locations of the actions, including the location of required fencing, permanent and temporary signage, sediment and erosion control.

7. Planting densities are to be amended to the following:

- a) Canopy Trees = 1 per 4m²
- b) Mid-storey trees and shrubs = 4 per 1m²
- c) Low / groundcover shrubs, sedges, herbs, scramblers, vines and grasses = 4 per 1m²

8. Identification of the methodology of how each performance criteria will be met is to be included in Table 6.

9. The BMP is to be amended to include estimate costing for implementation of the BMP for the first 5 years of implementation. The BMP is to be reviewed at 5 years by a qualified Ecologist and reviewed for proposed on-going maintenance.

10. The BMP should be amended to note that the BMP is to be implemented from the release of the Construction Certificate.

The proposal is therefore unsupported.

Note: Should you have any concerns with the referral comments above, please discuss these with the Responsible Officer.

Recommended Natural Environment Conditions:

Nil.