

C2 Statement Addressing SEPP Site Compatibility Criteria

The natural environment (including known significant environmental values, resources or hazards), and the existing uses and approved uses of land in the vicinity of the proposed development.

1.1 Subject Site

The proposed development involves the construction of a residential estate at 25 Laitoki Road, Terrey Hills (Lot 261, DP 775299) 'the subject site'. The subject site covers an area of approximately 2.00 ha.

The subject site is situated within the suburb of Terrey Hills, which is situated in the Warringah Ward of the Northern Beaches Local Government Area (LGA). It is currently zoned 'RU4 – Primary Production Small Lots' according to the Warringah Local Environmental Plan (LEP) 2011. A portion of the property is currently utilised for low density residential purposes. Parts of the property have been historically cleared of vegetation and the remaining area of the subject site contains native trees and shrubs.

The remaining vegetation on the subject site is separated into seven main zones, covering the northern, eastern and southern borders and a large zone that covers the mid-western section of the subject site. This vegetation is dominated by *Eucalyptus piperita*, *Angophora costata*, *Acacia elata* and *Eucalyptus sieberi* over a dense shrub layer of *Callicoma serratifolia*, *Pittosporum undulatum*, *Acacia parramattensis*.

This vegetation is dominated by woody weeds listed as noxious in the Northern Beaches Council area under the *Biosecurity Act 2015*. Weed species includes, *Ligustrum sinense*, *Ligustrum lucidum*, *Salix spp.*, *Cestrum parqui* and *Lantana camara*.

1.2 Commonwealth Biodiversity Legislation

1.2.1 The Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)

A search utilising the online database *Commonwealth Protected Matters Search Tool* was conducted on 28th November 2018 to identify all Matters of National Environmental Significance (NES) including any EPBC Act listed threatened and migratory fauna, threatened flora or threatened ecological communities within a 10 km² search area centred on the subject site. This data was used to assist in establishing the presence or likelihood of any such NES as occurring on or adjacent to the subject site.

Results from the Protected Matters Search revealed 61 threatened fauna species and 33 threatened flora species modelled as having potential to utilise the area for foraging or habitat purposes.

A thorough assessment was conducted on the subject site by Narla Environmental ecologists on the 16th November 2018. Thorough searches revealed no NES including threatened fauna and/or flora on the subject site.

The site survey revealed low potential for threatened fauna listed under the EPBC Act to utilise the subject site. Ten EPBC Act listed threatened fauna were considered as having potential to occur on the subject site. They were:

- Grey-headed Flying-fox (*Pteropus poliocephalus*) – This species is listed as vulnerable. Ecologists consider that the subject site provides a small area of low quality, intermittently suitable foraging habitat for this species. No suitable roosting habitat occurs on the property or immediate surrounds.
- Southern Brown Bandicoot (*Isodon obesulus*) – this species is listed as Endangered. Ecologists consider that the subject site provides a small area of low-quality shelter and foraging habitat for this species. Potential habitat was restricted to the southern end of the property where shrubby, vegetation exists as part of a corridor.
- Spot-tailed Quoll (*Dasyurus maculatus maculatus*) (SE mainland population) – this species is listed as endangered. Ecologists consider that the subject site provides sub-optimal conditions for foraging and for shelter for the Spot-tailed Quoll. Additionally, historical records only reveal patchy distribution in the surrounding national park, and not in the highly disturbed, subject site and immediate surrounds.
- Regent Honeyeater (*Anthochaera phrygia*) – this species is listed as critically endangered. There is potential foraging habitat for this species in the subject site, however this is unlikely given the distribution of this species is very patchy and not historically reported within the vicinity of the subject site.
- Swift Parrot (*Lathamus discolor*) – this species is listed as critically endangered. Ecologists consider the site may have potential foraging habitat, however, this species is unlikely to be found on the subject site or the near surrounds, due to the highly disturbed nature of the site.
- Giant Burrowing frog (*Heleioporus australiacus*) – this species is listed as vulnerable. It is unlikely this species would be found in the area of the subject site. Although the habitat has potential suitability for this species, it is highly disturbed, making it sub-optimal. Additionally, there is a lack of proximal records in the area.
- Green and golden bell frog (*Litoria aurea*) – this species is listed as vulnerable. This species would unlikely inhabit the subject site and surrounds because there are no water bodies present, required for this species to breed. Additionally, there is a lack of proximal records of the presence of the Green and golden bell frog in the area of the subject site.
- Large-eared Pied Bat (*Chalinolobus dwyeri*) – this species is listed as vulnerable. Ecologist consider it unlikely for this species to be found on the subject site. Although there is potential foraging habitat, it is highly disturbed and considered sub-optimal. The Large-eared Pied Bat would not breed or roost in this area, as the species requires sandstone caves.

- Koala (*Phascolarctos cinereus*) – this species is listed as vulnerable. This species is considered extinct in the Northern region of Sydney, with the last record in proximity to the subject site, recorded in 1949.
- New Holland Mouse (*Pseudomys novaehollandiae*) – this species is listed as vulnerable. Although this species has been reported as occurring on the urban fringes of Sydney, its distribution is patchy and not historically reported in the proximity of the subject site. It is therefore considered as unlikely to occur on the highly disturbed habitat that remains within the subject site.

Owing to the weed-infested and degraded condition of the Subject Site, it is not expected that any threatened flora species would occur.

The site does not provide important habitat for any Migratory Species that occur or have potential to occur within the Subject Site.

The Subject Site does not contain or occur adjacent any important Heritage Place/Items or National Park/Nature Reserve estate.

An assessment of each known/potentially occurring NES will be undertaken under the Matters of National Environmental Significance Significant impact guidelines 1.1. This is required to assess any potential for impacts upon NES. In the unlikely event that a significant impact is confirmed a Referral to the Commonwealth may be required.

1.4.1 Groundwater Dependent Ecosystems

The Subject Site contains no known Groundwater Dependent Ecosystems (GDE).

1.3 New South Wales Biodiversity Legislation

1.3.1 Biodiversity Conservation Act 2016 (BC Act)

A search utilising the online database NSW Wildlife Atlas (BioNet) was conducted on 29th November 2018 to identify all threatened flora and fauna historically recorded within a 10 km² search area centred on the subject site. This data was used to assist in establishing the presence or likelihood of any such ecological values as occurring on or adjacent the subject site, and helped inform the ecologist on what to look for during the site assessment.

Results from the BioNet search tool revealed 35 threatened fauna species and 18 threatened flora species as having historically occurred within 10km² of the subject site.

A thorough assessment of the subject site was conducted by Narla Environmental Ecologists on the 16th November 2018. The searches were targeted at identifying the presence and potential presence of habitat of any threatened flora or fauna listed under the BC Act.

The ecologists believe there is low potential for fourteen species of threatened fauna listed under the BC Act to utilise the subject site, including:

- Powerful Owl (*Ninox strenua*) – this species is listed as Vulnerable. Ecologists consider that the subject site only provides low quality, intermittently suitable roost and hunting

habitat for this species. No suitable nesting habitat occurs on the property or immediate surrounds.

- Grey-headed Flying-fox (*Pteropus poliocephalus*) - this species is listed as vulnerable. Ecologists consider that the subject site provides a small area of low quality, intermittently suitable foraging habitat for this species. No suitable roosting habitat occurs on the property or immediate surrounds.
- Southern Brown Bandicoot (*Isoodon obesulus*) - this species is listed as Endangered. Ecologists consider that the subject site provides a small area of low-quality shelter and foraging habitat for this species. Potential habitat was restricted to the southern end of the property where shrubby, vegetation exists as part of a corridor.
- Rosenberg's Goanna (*Varanus rosenbergi*) – this species is listed as vulnerable. Ecologists consider that the subject site could provide potential habitat for this species, which has been recently reported in close proximity to the subject site in health and woodland-type habitats.
- White-bellied Sea-Eagle (*Haliaeetus leucogaster*) – this species is listed as vulnerable. This species is likely to forage on the subject site, however breeding is unlikely owing to suitable habitat structure (lack of tall undisturbed trees).
- Little Eagle (*Hieraaetus morphnoides*) – this species is listed as vulnerable. This species is likely to forage on the subject site, however breeding is unlikely owing to suitable habitat structure (lack of tall undisturbed trees)
- Square-tailed Kite (*Lophoictinia isura*) - this species is listed as vulnerable. This species is likely to forage on the subject site, however breeding is unlikely owing to suitable habitat structure (lack of tall undisturbed trees)
- Eastern Osprey (*Pandion cristatus*) - this species is listed as vulnerable. This species is likely to forage on the subject site, however breeding is unlikely owing to suitable habitat structure (lack of tall undisturbed trees)
- Glossy Black-Cockatoo (*Calyptorhynchus lathami*) – this species is listed as vulnerable. The subject site could provide potential foraging habitat for the species, with the strong presence of the Glossy Black-Cockatoo's primary food source, Allocasuarina species, found on site, and in the close proximity to the subject site.
- Little Lorikeet (*Glossopsitta pusilla*) – this species is listed as vulnerable. Ecologists consider that the subject site would likely provide foraging and breeding habitat for this species.
- Swift Parrot (*Lathamus discolor*) – this species is listed as endangered. The subject site may provide potential foraging habitat for this species, however this area is relatively small, disturbed and of low quality.
- Yellow-bellied Sheath-tail-bat (*Saccolaimus flaviventris*) – this species is listed as vulnerable. This species may be found on the subject site. Although there is potential

foraging habitat, it is highly disturbed and considered sub-optimal. This species may roost in the area in tree hollows.

- Little Bentwing-bat (*Miniopterus australis*) – this species is listed as vulnerable. It is possible this species may be found on the subject site as they are known to forage and roost in the area and surrounds.
- Eastern Bentwing-bat (*Miniopterus schreibersii oceanensis*) – This species is listed as vulnerable. – This species is listed as vulnerable. It is possible this species may be found on the subject site as they are known to forage and roost in the area and surrounds.

Owing to the weed-infested and degraded condition of the Subject Site, it is not expected that any threatened flora species would occur.

No Areas of Outstanding Biodiversity Values, Wilderness or Wild Rivers occur within the Subject Site.

The potential occurrence of the threatened fauna listed under the BC Act triggers the need for an Assessment of Significance under the *Environmental Planning and Assessment Act 1979* (EP&A Act) to assess impacts upon species listed under the BC Act (5-part test). The 5-part test is to form a component of a Flora and Fauna Assessment report which is required under the Warringah LEP and DCP.

1.3.2 Fisheries Management Act 1994 (FM Act)

The main objective of the *Fisheries Management Act 1994* is to preserve 'Key Fish Habitat'. The FM Act does not apply to the proposed development as there is no mapped 'Key Fish Habitat' on site (**Figure 1**).

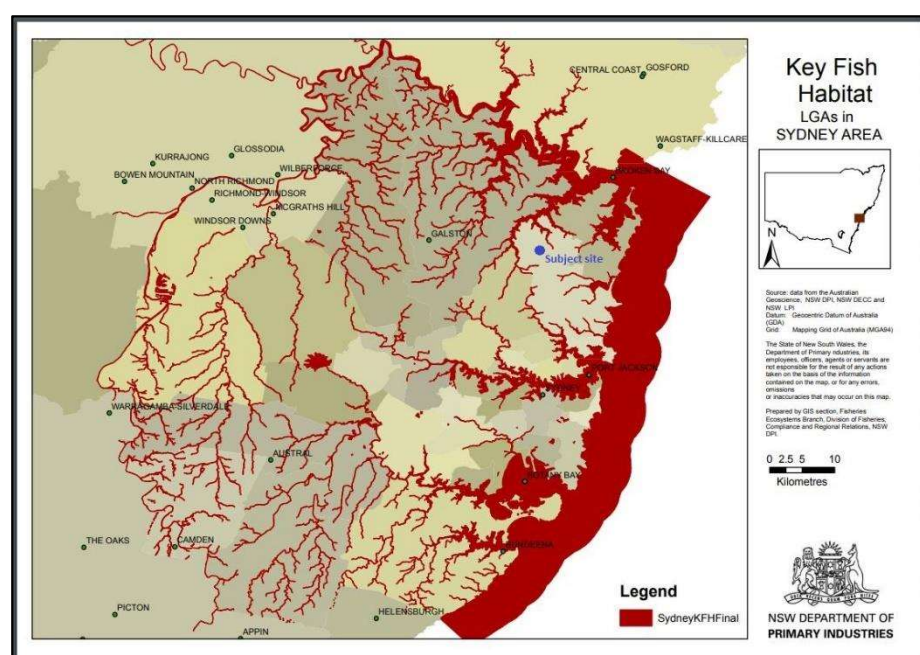


Figure 1. Key fish habitats mapped. Approximate area of subject site is represented in blue

1.3.3 Water Management Act 2000 (WM Act)

The subject site does not contain any mapped water land (dams or water courses) and therefore is not classified as 'Waterfront Land' (**Figure 2**). The proposed development therefore does not trigger the *Water Management Act 2000*.



Figure 2. The subject site and mapped water land (blue line, purple and red circles)

1.4 State Environmental Planning Policies

The following State Environmental Planning Policies (SEPPs) were considered in relation to the proposed development, including:

- *SEPP 19 Bushland in Urban Areas – There is remnant vegetation present on the subject site in an urban setting but does not adjoin a designated urban bushland reserve; therefore, this SEPP does not apply.*
- *SEPP 44 Koala Habitat Protection – There are no schedule 2 feed trees on the subject site, therefore this SEPP does not apply.*
- *Coastal Protection SEPP – There are no mapped wetlands or areas of Littoral Rainforest in the subject site, neither is the subject site in a coastal zone. This SEPP does not apply.*

1.5 Environmentally Sensitive Land

Land identified in another environmental planning instrument by any of the following descriptions or by like descriptions or by descriptions that incorporate any of the following words or expressions:

- (a) coastal protection,
- (b) conservation (but not land identified as a heritage conservation area in another environmental planning instrument),
- (c) critical habitat,
- (d) environment protection,
- (e) open space,
- (f) escarpment,
- (g) floodway,
- (h) high flooding hazard,
- (i) natural hazard,
- (j) (Repealed)
- (k) scenic (but not land that is so identified if:
 - (i) the land is within a residential zone in which development of two storeys or more in height is permitted, or
 - (ii) an adjacent residential zone, also identified as scenic, permits development of two storeys or more in height),
- (l) water catchment,
- (m) natural wetland.

The Subject Site contains no Environmentally Sensitive Land as defined by the above list..

1.5.1 Coastal Management Act 2016

- No Environmentally Sensitive areas, including Littoral Rainforest or Coastal Wetlands are located within the Subject Site or immediate surrounds.
- The Subject Site is not located in a coastal zone.

1.6 Warringah Council Development Control Plan (DCP) and Local Environmental Plan 2011 (LEP)

1.6.1 E3 Threatened species, populations, ecological communities listed under State or Commonwealth legislation, or High Conservation Habitat

The potential occurrence of the threatened fauna listed in Section 1.3 triggers the requirement for a 'Flora and Fauna Assessment Report' under the Warringah LEP and DCP.

Warringah guidelines for Flora and Fauna Assessment Report state that this report is required for any development works on a property which:

- Contains native vegetation; or
- Contains remnant native trees, or
- Is adjacent to native vegetation (e.g. National Parks, bushland reserves, wildlife corridors, or native vegetation on private property). Although a site may be cleared, survey work must still be undertaken to assess the sites capacity to act as a corridor or linkage for threatened species, or
- Contains sensitive environmental areas likely to contain important habitat resources for fauna (although these may not be vegetated) such as riparian areas, wetlands or swamps, rocky outcrops, woody debris, hollow bearing trees, caves, cliffs, and
- The proposal will directly or indirectly impact on these areas, vegetation or natural features of the site (eg rock outcrop, slopes), for example by clearing, soil disturbance, runoff, waste water disposal, artificial lighting and implementation of Bushfire Asset Protection Zones.

1.6.2 E4 Wildlife Corridors

The control 'E4 Wildlife Corridor' under the Warringah Council Development Control Plan applies to land identified as mapped Wildlife Corridors. As the subject site is not mapped under this layer the requirements of 'E4 Wildlife Corridors' are not triggered (**Figure 3**).

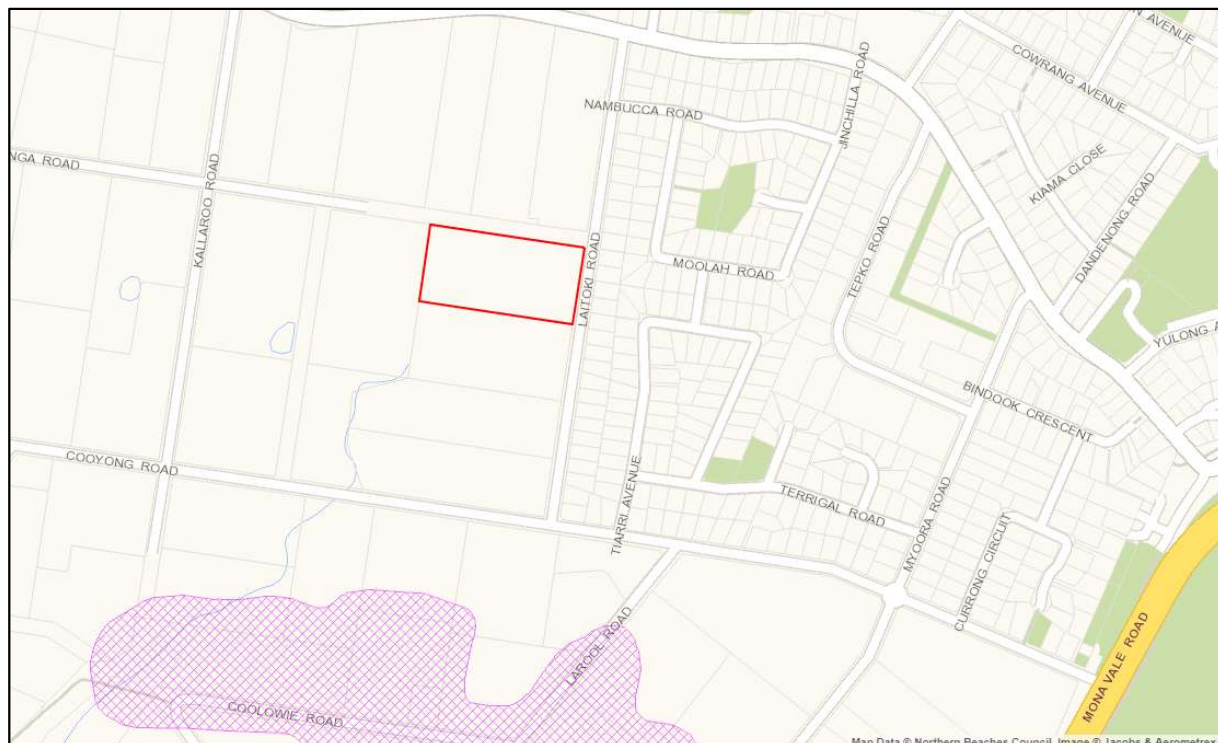


Figure 3. Mapped Wildlife Corridors (purple; Warringah Council DCP). Subject site is indicated in red

1.6.3 E5 Native Vegetation

The control 'E5 Native Vegetation' under the Warringah Council Development Control Plan applies to land identified as mapped Native Vegetation. As the subject site is not mapped under this layer the requirements of 'E5 Native Vegetation' are not triggered (**Figure 4**).

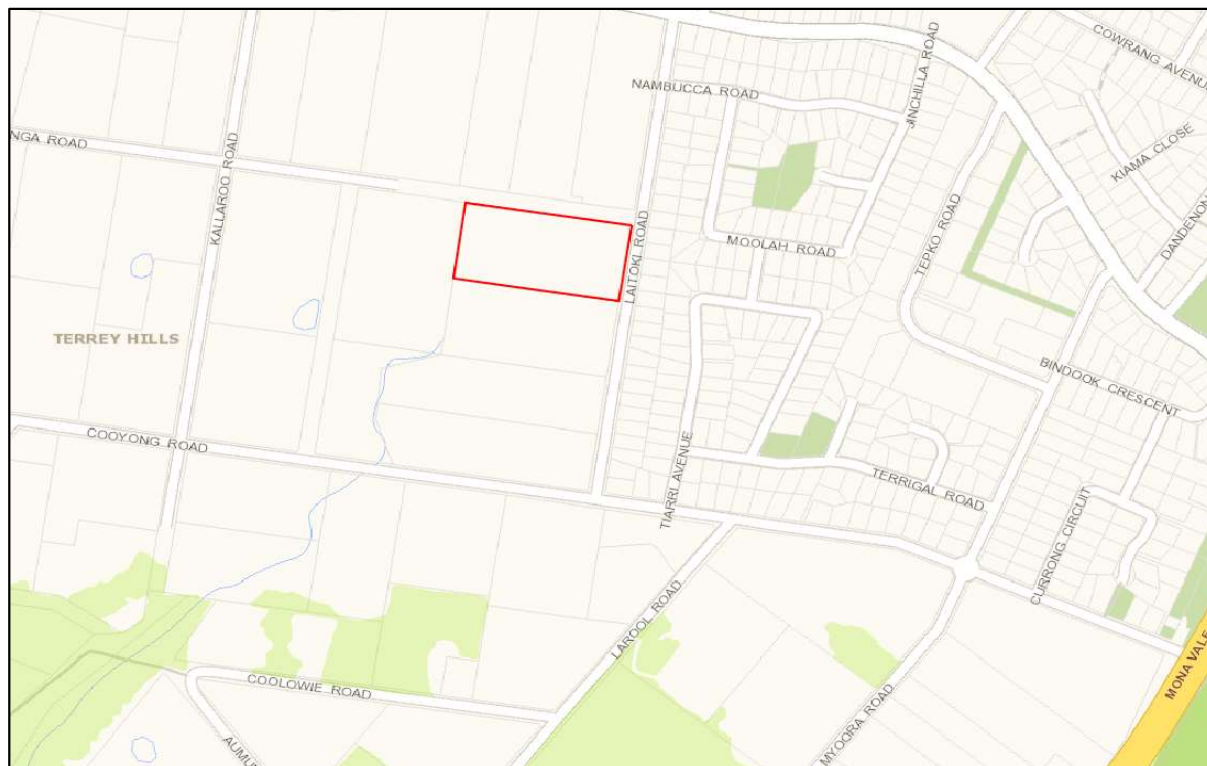


Figure 4. Mapped Native Vegetation (Warringah Council DCP). Subject site is indicated in red

1.6.4 E8 Waterways and Riparian Lands

The control 'E8 Waterways and Riparian Lands' under the Warringah Council Development Control Plan applies to land identified as waterway or riparian land as shown on the DCP Map 'Waterways and Riparian Lands' (**Figure 5**).

The objectives of the control include:

- Protect, maintain and enhance the ecology and biodiversity of waterways and riparian land.
- Encourage development to be located outside waterways and riparian land.
- Avoid impacts that will result in an adverse change in watercourse or riparian land condition.
- Minimise risk to life and property from stream bank erosion and flooding by incorporating appropriate controls and mitigation measures.
- Maintain and improve access, amenity and scenic quality of waterways and riparian lands.
- Development on waterways and riparian lands shall aim to return Group B and Group C creeks to a Group A standard (as described in Warringah Creek Management Study, 2004) through appropriate siting and development of development.

As a requirement of the control, a Waterway Impact Statement must be produced as the proposed development is situated on land that is mapped as Waterways and Riparian Lands (**Figure 5**).

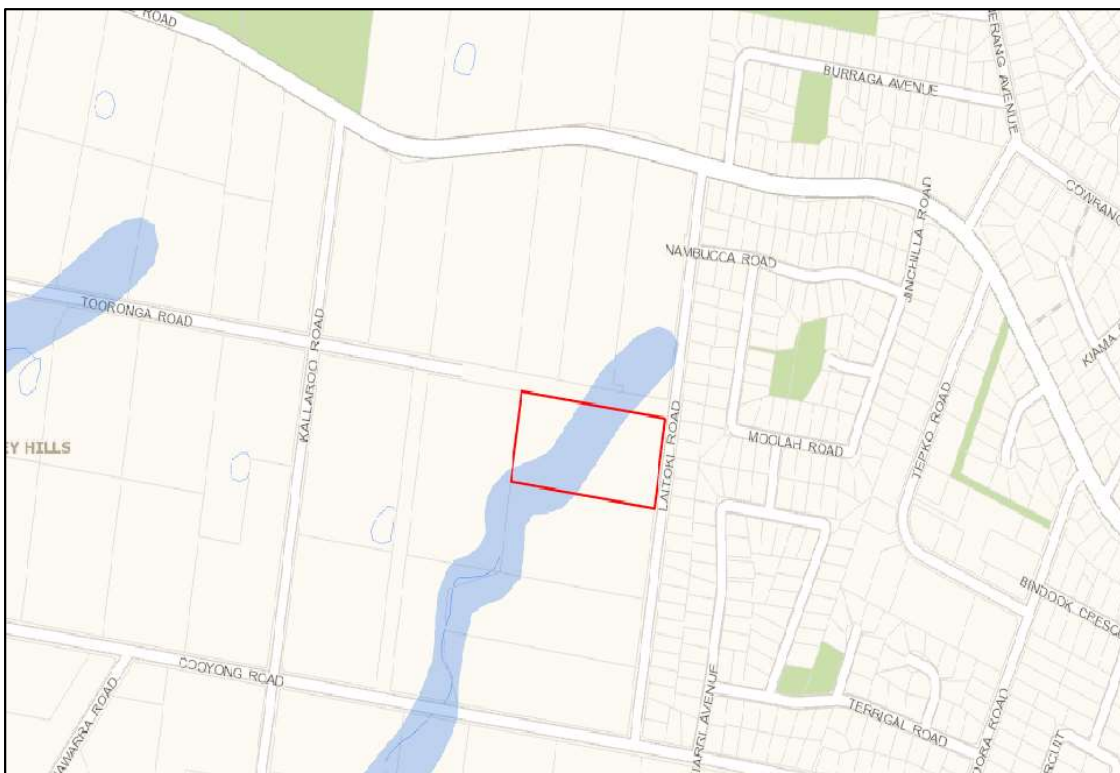


Figure 5. Mapped Waterways and Riparian Lands (Warringah Council DCP). Subject site is indicated in red

2. Site Ecological Assessment - 25 Laitoki Road, Terrey Hills.

Our ecologists conducted a preliminary Ecological (Biodiversity) Site Assessment for the subject site at 25 Laitoki Road, Terrey Hills on the 16th September 2018.

A summary of the findings is presented below. The Subject Site contains:

- No threatened flora species listed under the BC Act or EPBC Act.
- Degraded and weed-infested habitat for a small number of locally common threatened fauna species, listed under the BC Act and/or EPBC Act (see section 1.2 and 1.3)
- A weed-infested patch of one Endangered Ecological Community (EEC) - *Duffy's Forest in the Sydney Basin Bioregion*.

3. The Impact that the proposed development is likely to have on the uses that are likely to be the future uses of the land in the vicinity of the development.

Future uses of the land in the vicinity of the proposed development on 25 Laitoki Road are likely to reflect what is currently zoned in the Terrey Hills area, including Low Density Residential and Primary Production Small Lots. The main impact of the proposed development to the local vicinity is the reduction in availability of land suitable for 'rural purposes'.

The proposed development will increase the density of housing in the immediate vicinity, resulting in the area reflecting a moderate to high density residential area. This is likely to increase traffic demands in the area as well as increasing demands on essential infrastructure such as access to water and sewerage disposal.

The benefit of the proposal will outweigh the impacts since the proposal will significantly contribute to the housing demands from Sydney's ageing population.

4. If the required development may involve the clearing of native vegetation that is subject to the requirements of the Local Land Services Act 2013 and its regulations as amended – the impact that the proposed development is likely to have on the conservation and management of native vegetation (NB: This criterion does not apply to land in urban local government areas or urban zones).

The proposed development is situated in an urban Local Government Area (LGA), and is listed under Schedule 1 of the Local Land Services Act 2013 or its regulations as amended, therefore this act does not apply.

Appendix 1

Ecological Site Assessment

An initial site assessment was performed by Narla Environmental Ecologists on 16th September 2018. During the site assessment, the following activities were undertaken:

- Identifying and recording the vegetation communities present on the subject site, with focus on identifying any threatened ecological communities (TEC);
- Recording a detailed list of flora species encountered on the subject site, with a focus on threatened species, species diagnostic of threatened ecological communities and priority weeds;
- Recording opportunistic sightings of any fauna species seen or heard on or within the immediate surrounds of the subject site;
- Identifying and recording the locations of notable fauna habitat such as important nesting, roosting or foraging microhabitats;
- Targeting the habitat of any threatened and regionally significant fauna including:
- Tree hollows (habitat for threatened large forest owls, parrots, cockatoos and arboreal mammals);
- Caves and crevices (habitat for threatened reptiles, small mammals and microbats);
- Termite mounds (habitat for threatened reptiles and the echidna);
- Soaks (habitat for threatened frogs and dragonflies);
- Wetlands (habitat for threatened fish, frogs and water birds);
- Drainage lines (habitat for threatened fish and frogs);
- Fruiting trees (food for threatened frugivorous birds and mammals);
- Flowering trees (food for threatened nectarivorous mammals and birds);
- Trees and shrubs supporting nest structures (habitat for threatened birds and arboreal mammals); and
- Any other habitat features that may support fauna (particularly threatened) species.
- Assessing the connectivity and quality of the vegetation within the subject site and surrounding area.

Weather Conditions

A summary of the weather conditions in the locality of the Subject Property leading up to and including the day of the site assessment are included in **Table 1**Error! Reference source not found. below and are typical of the conditions during that time of the year. This information is provided by the Bureau of Meteorology (2018).

Table 1. Weather conditions taken from the nearest weather station (Moss Vale) in the lead up and during the field survey (BOM 2018) (Survey date in bold)

Survey date	Minimum Temp. °C	Maximum Temp. °C	Rainfall (mm)
12/11/2018	13.6	22.5	0
13/11/2018	15.9	23.9	0
14/11/2018	16.3	21.6	0
15/11/2018	16.1	22.7	0.4
16/11/2018	14.3	19.2	7.2

Study Limitations

This study was not intended to provide a complete inventory of all flora and fauna species with potential to occur on the subject site. Rather this study was undertaken in order to:

- *Provide a preliminary assessment into the likelihood of occurrence of any significant ecological features particularly threatened vertebrate fauna and vascular plants or ecological communities listed under state and/or commonwealth legislation (e.g. migratory species, threatened species, threatened ecological communities and endangered populations); and*
- *Assess the potential for impacts from the proposed works on any of those ecological features;*

The species inventory provided for the site was restricted to what was observed on the day of the field survey on the 16th of November 2018. The timing of the survey may not have coincided with emergence times of some species of flora and fauna, such as seasonally flowering herbs, seasonal migratory fauna or nocturnal fauna. To account for those species that could not be identified during the field survey, detailed habitat assessments were combined with desktop research and local ecological knowledge to establish an accurate prediction of the potential for such species to occur on or adjacent the subject site.



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