

Natural Environment Referral Response - Biodiversity

Application Number:	DA2021/0420
Date:	20/12/2021
Responsible Officer	Thomas Prosser
Land to be developed (Address):	Lot 2 DP 1237357 , 12 A John Street AVALON BEACH NSW 2107

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

The proposal seeks to subdivide the existing battle-axe shaped allotment into two allotments, including indicative plans for the building footprint and driveways (THW Architects 2021).

Council's Natural Environment Unit - Biodiversity referral team have reviewed the application for consistency against the relevant environmental legislation and controls, including:

Biodiversity Conservation Act 2016 (BC Act)

Biodiversity Conservation Regulation 2017

State Environmental Planning Policy (Coastal Management)

- Coastal Wetlands & Proximity Area
- Coastal Environment Area

Pittwater Local Environmental Plan (PLEP)

- 7.6 Biodiversity Protection

Natural Environment Unit - Biodiversity - Updated Recommendation 15/12/2021 (DA2021/0420)

The following information was requested, and is now noted to have been provided by the applicant:

1. Updated Arborist Report, taking into account the impacts of the trenching/swale in the east of the site
2. Updated BDAR, amending impact area to encompass all areas of the development, of which it is currently missing the eastern portion of the proposed dwellings and the swales.

3. Updated Riparian Plan and Coastal Impacts Assessment, to account for bio-swales, and provide a clear, to-scale map demonstrating that the averaging rule for waterfront land has been met, as well as that proposed planting requirements and densities can be achieved.

It is noted that amended Architectural Plans (THW Architects, Issue K, dated 13/12/2021) have been submitted which have deleted the proposed balconies extending into Waterfront Land. No objection is raised by Council's Biodiversity Unit to this amendment, given it will result in reduced impact, and increased capacity for proposed revegetation detailed within the amended Riparian Plan and Coastal Impacts Assessment (Kingfisher 2021b). Additionally, the deletion of the proposed balconies supported in lieu of the requested map that details how the 'averaging rule' meets the 1:1 replacement in accordance with NRAR Guidelines. This concern is withdrawn in light of the amended design.

The amended proposal will require the removal of two (2) additional trees (T.3, 38 ; Naturally Trees 2021) in addition to the 30 listed for removal under the previous edition of the Arboricultural Impact Assessment (February 2021):

- 3 - Archontophoenix alexandrae
- 38 - Grevillea robusta

Neither tree is locally-native (both exempt species), therefore no objection is raised by Council's Natural Environment Unit - Biodiversity.

No changes to the number (9) of locally-indigenous trees (T.4, 8, 13, 14, 17, 18, 19, 20 & 29) proposed for removal have been made. Subject to the retention of high-value trees (T.42, 45) and subject to the complete re-vegetation of all waterfront land as detailed within the amended Riparian Plan and Coastal Impacts Assessment (Kingfisher 2021b), no objection is raised to the removal of these trees.

Subject to conditions the Bushland and Biodiversity referral team find the application to be consistent against relevant environmental controls.

Natural Environment Unit - Biodiversity - Updated Recommendation 18/05/2021 (DA2021/0420)

The following information is required before Natural Environment Unit - Biodiversity can provide a recommendation on the DA:

1. Updated Arborist Report, taking into account the impacts of the trenching/swale in the east of the site
2. Updated BDAR, amending impact area to encompass all areas of the development, of which it is currently missing the eastern portion of the proposed dwellings and the swales.
3. Updated Riparian Plan and Coastal Impacts Assessment, to account for bio-swales, and provide a clear, to-scale map demonstrating that the averaging rule for waterfront land has been met, as well as that proposed planting requirements and densities can be achieved.

The proposal will require the removal of thirty (30) trees (Naturally Trees 2021), including fourteen (14) trees native to NSW:

- 4 - Melaleuca quinquenervia
- 8 - Eucalyptus robusta
- 13 - Casuarina glauca
- 14 - Casuarina glauca

- 17 - Casuarina glauca
- 18 - Casuarina glauca
- 19 - Casuarina glauca
- 20 - Casuarina glauca
- 22 - Syzygium paniculatum
- 29 - Glochidion ferdinandi
- 32 - Hymenoporum flavum
- 33 - Banksia integrifolia
- 35 - Macadamia indica (integrifolia*)
- 39 - Brachychiton acerifolius

Natural Environment Unit - Biodiversity notes submission of the Arboricultural Report (Naturally Trees 2021), the Biodiversity Development Assessment Report (Kingfisher 2021a) and a Riparian Plan and Coastal Impacts Assessment (Kingfisher 2021b).

Comments raised by the Biodiversity Officer for DA2019/1332 have still not been addressed in the DA. Specifically, *"The Arborist did not assess impacts to trees resulting from the proposed Stormwater Management Plan, including trenching and dispersal trench / bio swale which is proposed close to other high quality trees to be retained."* This assessment is required as it will impact the outcome of the Biodiversity Development Assessment Report and the Riparian Plan and Coastal Impacts Assessment.

Concerns with Arboricultural Report (Naturally Trees 2021)

The Stormwater Assets and Management Plan (Barrenjoey Consulting Engineers 2021) depicts three separate 'dispersion trenches / bio-swales' within the east of the site. The plan notes that these are to be 'located in accordance with arborist and riparian zone reports'. Natural Environment Unit - Biodiversity notes that this plan has not been acknowledged within the Arboricultural Report, nor reference made to the possible excavation into the TPZ of Trees 38, 42, 45 & 46. Assessment of impacts, and feasibility of retention of these trees must be assessed to inform the submitted Biodiversity Development Assessment Report (Kingfisher 2021).

Concerns with Biodiversity Development Assessment Report (Kingfisher 2021a)

The Stormwater Assets and Management Plan (Barrenjoey Consulting Engineers 2021) depicts three separate 'dispersion trenches / bio-swales' within the east of the site. The plan notes that these are to be 'located in accordance with arborist and riparian zone reports'. Natural Environment Unit - Biodiversity notes that although this plan has been included within the BDAR (Figure 1.4), it has not been included within the impact area that is requiring offset credits (Figure 6). The proposed trenching/bioswales must be considered within the report and offset accordingly. Additionally, the proposed development footprint (TWH Architects 2021) appears to be different from that of the area proposed to be offset, with both the proposed dwelling and associated decking extending east beyond the mapping included in Figure 6 of the BDAR.

Concerns with Riparian Plan and Coastal Impacts Assessment (Kingfisher 2021b)

The proposal will encroach into waterfront land.

The report (Kingfisher 2021b), including Figure 3.2 must be updated to:

- account for the aforementioned dispersion trenches / bio-swales' proposed within the east of the site (Barrenjoey Consulting Engineers 2021).
- recognise the porous steps (mapped in purple ; Figure 3.2) as encroachments into waterfront land, as they will require vegetation removal, and prevent any future vegetation growth.
- demonstrate how the 'averaging rule' meets the 1:1 replacement required for the abovementioned encroachments in accordance with NRAR Guidelines.

Natural Environment Unit - Biodiversity does not support the use of the averaging rule where re-vegetation of the proposed 'offset areas' can not be demonstrated. NRAR Guidelines specify that the riparian corridor is to be vegetated, not simply permeable ground. On review of the existing proposed offset areas they are located within areas immediately adjoining the houses, and likely to be used as access passageways.

The following trees proposed for removal are native to Pittwater, and are characteristic of the threatened ecological community, Swamp Oak Floodplain Forest or Swamp Sclerophyll Forest:

- 4 - *Melaleuca quinquenervia*
- 8 - *Eucalyptus robusta*
- 13 - *Casuarina glauca*
- 14 - *Casuarina glauca*
- 17 - *Casuarina glauca*
- 18 - *Casuarina glauca*
- 19 - *Casuarina glauca*
- 20 - *Casuarina glauca*
- 29 - *Glochidion ferdinandi*

It has not been demonstrated how the proposal can accommodate 9 suitable replacement trees within the site. Although NEU - Biodiversity supports the proposed species selection and densities, it must be demonstrated through a to-scale plan or map that depicts the exact locations of the proposed replacement plantings, at the recommended densities. Replanting off site will not be considered as there is no legal mechanism for Council to condition offset plantings on land that is not within the property.

In summary, the following information is required before NEU- Biodiversity can provide a recommendation on the DA:

1. Updated Arborist Report, taking into account the impacts of the trenching/swale in the east of the site
2. Updated BDAR, amending impact area to encompass all areas of the development, of which it is currently missing the eastern portion of the proposed dwellings and the swales.
3. Updated Riparian Plan and Coastal Impacts Assessment, to account for bio-swales, and provide a clear, to-scale map demonstrating that the averaging rule for waterfront land has been met, as well as that proposed planting requirements and densities can be achieved.

Concerns raised by Council's Development Engineering Referral Team, specifically relating to easements for drainage and services must be taken into account during the preparation of the previously mentioned updates.

Natural Environment Unit - Biodiversity - Original Recommendation 18/12/2019 (DA2019/1332)

Council's Natural Environment - Biodiversity section cannot support the application due to noncompliances with relevant Pittwater LEP / DCP controls and the provisions of the NSW Biodiversity Conservation Act 2016 (BC Act 2016).

This application was assessed against Pittwater LEP Clause 7.6 Biodiversity and Pittwater DCP B4.19 Estuarine Habitat as well as the NSW BC Act 2016 and Coastal Management SEPP 2018 Coastal

Wetlands and Proximity Area. The property is also identified as a wildlife corridor.

The proposal is for the subdivision of the land into 2 lots which includes the construction of a driveway and an additional two Development Applications (DA2019/1333 and DA2019/1334) have been submitted for the construction a new dwelling, garage and secondary dwelling on each of the proposed lots. Proposed Lot 12A with a 4-bedroom dwelling and 2-bedroom secondary dwelling and proposed Lot 12B with a 5-bedroom dwelling and 2-bedroom secondary dwelling.

The land is currently vacant and contains large native canopy trees, some planted exotic / non-local native trees and mown lawn / exotic garden. The property directly adjoins Careel Creek to the east which contains sensitive estuarine habitat and protected mangroves. The native canopy trees clustered within the north-eastern portion of the site are mapped as PCT 1234 Swamp Oak Swamp Forest Fringing Estuaries which is a component of Swamp Oak Floodplain Forest an EEC listed within the NSW BC Act 2016 and Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act 1999).

The submitted Arborist Report 'Arboricultural Impact Appraisal and Method Statement' (Naturally Trees, 20/09/2019) assesses 54 trees, 23 of which are prescribed under PDCP. Of the 23 prescribed trees 5 are located on adjoining land and 18 within the property. The proposed subdivision and resulting residential development will remove 12 of the 18 prescribed trees, 11 of these being high category trees.

The Arborist did not assess impacts to trees resulting from the proposed Stormwater Management Plan, including trenching and dispersal trench / bio swale which is proposed close to other high quality trees to be retained.

Local controls

Relevant provisions under local controls include;

- The development is designed, sited and will be managed to avoid any significant adverse environmental impact. If impact cannot be reasonably avoided by adopting feasible alternatives, the development is to be designed, sited and managed to minimise that impact.
- Development shall provide adequate buffering to estuarine habitat.
- Existing wildlife corridors are to be maintained and functional habitat links provided wherever possible.

It is considered that the proposal has not been designed to avoid or minimise impacts to biodiversity given that 12 of the 18 prescribed trees will be removed, and additional impacts are expected from the proposed stormwater management plan impacts which have not been assessed.

The submitted Landscape Plan is not consistent with the Flora and Fauna Report recommendations for revegetation to be conducted using species from the Swamp Oak Floodplain Forest species and references a "living retaining wall". The Landscape Plan proposes lawn and landscaped plantings up to the creek.

There is no legal mechanism for Council to condition offset plantings on land that is not within the property.

The proposal is inconsistent with local provisions.

NSW Biodiversity Conservation Act 2016

The vegetation within the north-eastern portion of the site is mapped as "Biodiversity Value" within the

Biodiversity Values Map published by DPIE within the Biodiversity Offsets Scheme (BOS). Clause 7.1 (3) of the Biodiversity Conservation Regulation 2017 requires consideration of the likely vegetation clearing resulting from the subdivision, which are presented in the two dwelling DAs. The proposal is removing native trees within the mapped extent which triggers automatic entry into the BOS. As a result impacts to biodiversity must be assessed within a Biodiversity Development Assessment Report (BDAR) prepared by an Accredited Assessor. Alternatively, the proposal could be amended to avoid removing native vegetation within the mapped "Biodiversity Value" extent, which will demonstrate some avoidance of biodiversity impacts.

The Arborist Report identified *Syzygium paniculatum* (T22) which is a threatened species listed in Schedule 1 of the NSW Biodiversity Conservation Act 2016. This species was not identified or assessed with a 5-part test within the Flora and Fauna Report (Ecological Consultants Australia, October 2019).

The proposal is inconsistent with the NSW BC Act 2016. Coastal Management SEPP 2018 The Flora and Fauna Report (Ecological Consultants Australia, October 2019) addresses the objectives of the relevant clauses within this SEPP. There are inconsistencies between plans and impacts not yet assessed described above. As such, Council is not currently satisfied that sufficient measures have been, or will be, taken to protect, and where possible enhance, the biophysical, hydrological and ecological integrity of the coastal wetland.

Recommendation

Council's Natural Environment - Biodiversity section cannot support the application due to noncompliances with relevant Pittwater LEP / DCP controls and the provisions of the NSW BC Act 2016 and Coastal Management SEPP 2018. The applicant is encouraged to consider a design which avoids and minimises impacts to the biodiversity values on the site, i.e. retention of prescribed high quality trees and a wider set-back from Careel Creek.

The proposal is therefore supported.

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

Recommended Natural Environment Conditions:

CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF THE CONSTRUCTION CERTIFICATE

Notification of determination to which the Biodiversity Offset Scheme applies

The applicant or Project Ecologist, on behalf of the applicant, must download and complete the "Biodiversity Offsets Scheme – Notification of Determination" form.

The completed form and attachments, including a copy of the determination and any conditions of approval, must be emailed to the LMBC Service Centre bam.support@environment.nsw.gov.au. The LMBC Service Centre arranges for determination outcomes to be recorded in the Biodiversity Offset and Agreement Management System (BOAMS).

Council's Manager Bushland and Biodiversity and the Certifying Authority must be copied into the notification email to confirm compliance.

Reason: To ensure the NSW Department of Planning, Industry and Environment are notified of determinations where the Biodiversity Offsets Scheme applies and Council are notified for compliance.

Like for like credit retirement conditions - Ecosystem credit retirement conditions

Prior to issue of the relevant Construction Certificate the class and number of ecosystem credits in Table 1 must be retired to offset the impacts of the development.

The requirement to retire credits outlined in Table 1 may be satisfied by payment to the Biodiversity Conservation Fund of an amount equivalent to the class and number of ecosystem credits, as calculated by the Biodiversity Offsets Payment Calculator.

Evidence of the retirement of credits or payment to the Biodiversity Conservation Fund in satisfaction of Table 1 requirements must be provided to the Manager Bushland and Biodiversity of Northern Beaches Council and to the Certifying Authority prior to release of construction certification.

Table 1 Ecosystem credits required to be retired – like for like

Impacted Plant Community Type	TEC	Number of ecosystem credits	Containing HBT	IBRA sub-region	Plant community type(s) that can be used to offset the impacts from development
1234-Estuarine Swamp Oak forest	Swamp Oak Floodplain Forest of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions	1	No	Pittwater, Cumberland, Sydney Cataract, Wyong and Yengo. or Any IBRA subregion that is within 100 kilometers of the outer edge of the impacted site.	Swamp Oak Floodplain Forest of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions This includes PCT's: 915, 916, 917, 918,

					919, 1125, 1230, 1232, 1234, 1235, 1236, 1726, 1727, 1728, 1729, 1731, 1800, 1808
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Reason: To offset the residual biodiversity impacts of the development in accordance with the NSW Biodiversity Offset Scheme.

Variation rule credit retirement conditions - Ecosystem credit retirement conditions

Prior to issue of the relevant Construction Certificate the class and number of species credits in Table 2 must be retired to offset the impacts of development.

Evidence of the retirement of credits in satisfaction of Table 2 requirements is to be provided to the Manager Bushland and Biodiversity of Northern Beaches Council and the Certifying Authority prior to release of construction certification.

Table 2 Ecosystem credits required to be retired – variation rules

Impacted plant community type	Number of ecosystem credits	Containing HB1
1234-Estuarine Swamp Oak forest	1	No

Reason: To offset the residual biodiversity impacts of the development in accordance with the NSW Biodiversity Offset Scheme.

Like for like credit retirement conditions - Species credit retirement conditions

Prior to issue of the relevant Construction Certificate the class and number of species credits in Table 3 must be retired to offset the impacts of development.

The requirement to retire credits outlined in Table 3 may be satisfied by payment to the Biodiversity

Conservation Fund of an amount equivalent to the class and number of ecosystem credits, as calculated by the Biodiversity Offsets Payment Calculator.

Evidence of the retirement of credits or payment to the Biodiversity Conservation Fund in satisfaction of Table 3 requirements must be provided to the Manager Bushland and Biodiversity of Northern Beaches Council and the Certifying Authority prior to release of construction certification.

Table 3 Species credits required to be retired – like for like

Any in NSW

Impacted species credit species	Number of species credits	IBRA sub-region
Chalinolobus dwyeri / Large-eared Pied Bat	1	Any in NSW

Reason: To offset the residual biodiversity impacts of the development in accordance with the NSW Biodiversity Offset Scheme.

Variation rule credit retirement conditions - Species credit retirement conditions

Prior to issue of the relevant Construction Certificate the class and number of species credits in Table 4 must be retired to offset the impacts of development.

Evidence of the retirement of credits in satisfaction of Table 4 requirements is to be provided to the Manager Bushland and Biodiversity of Northern Beaches Council and the Certifying Authority prior to release of construction certification.

Table 4 Species credits required to be retired – variation rules

Impacted species credit species	Number of species credits	IBRA sub-region	Approved variation species credit species that can be used to offset the impacts from development
Chalinolobus dwyeri / Large-eared Pied Bat	1	Any in NSW	Vulnerable (or higher) Fauna, within the following IBRA Region: Pittwater, Cumberland, Sydney Cataract, Wyong and Yengo. or Any IBRA subregion that is within 100 kilometers of the outer edge of the impacted site.

Reason: To offset the residual biodiversity impacts of the development in accordance with the NSW Biodiversity Offset Scheme.

Compliance with approved BDAR impact mitigation table to minimise impacts – Prior to Construction

Chapter 10 of the approved BDAR (Kingfisher 2021a) includes mitigation measures, which must to be implemented before, during and after construction to avoid and minimise the impacts of the proposal, including action, outcome, timing and responsibility.

All biodiversity-related measures are to be implemented prior to construction, as specified in the approved BDAR and these conditions of consent.

The Project Ecologist is required to provide details of compliance, including written and photographic evidence, and provide to the Certifying Authority and Council prior to issue of Construction Certificate.

Reason: To - compliance with the approved BDAR.

CONDITIONS THAT MUST BE ADDRESSED PRIOR TO ANY COMMENCEMENT

Compliance with Ecologist's Recommendations – During Construction

All biodiversity-related measures are to be implemented during construction in accordance with Chapter 10 of the approved Biodiversity Development Assessment Report (Kingfisher 2021a), and the Riparian Plan and Coastal Impacts Assessment (Kingfisher 2021b).

Compliance with these measures is to be certified by the Project Ecologist in writing to the Principal Certifying Authority.

Reason: To confirm compliance with wildlife and habitat protection/replacement measures.

Dead or Injured Wildlife

If construction activity associated with this development results in injury or death of a native mammal, bird, reptile or amphibian, a registered wildlife rescue and rehabilitation organisation must be contacted for advice.

Reason: To protect native wildlife.

CONDITIONS WHICH MUST BE COMPLIED WITH PRIOR TO THE ISSUE OF THE OCCUPATION CERTIFICATE

Implementation of Riparian Plan and Coastal Impacts Assessment

All works and measures detailed within the approved Riparian Plan and Coastal Impacts Assessment (Kingfisher 2021b) are to be undertaken.

Written details demonstrating compliance are to be certified by the Project Ecologist and provided to the Principal Certifying Authority prior to issue of any Occupation Certificate.

Reason: To protect native vegetation, wildlife and habitats.

Planting Areas of Native Vegetation

The Vegetated Riparian Zone proposed for revegetation mapped within the approved Riparian Plan and Coastal Impacts Assessment (Kingfisher 2021b) is to be planted with locally native species at the densities provided within 3.1.3 of the report:

- 1 tree per 4m²
- 2 shrubs per 4m²
- 4 groundcovers per m²
- 1 vine per 20m²

The Project Ecologist is to provide written certification of compliance to the Principal Certifying Authority prior to issue of any Occupation Certificate.

Reason: To protect and maintain native vegetation and wildlife habitat.

No Weeds Imported On To The Site

No Priority or environmental weeds (as specified in the Northern Beaches Local Weed Management Plan 2019 – 2023) are to be imported on to the site prior to or during construction works.

Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to issue of any Occupation Certificate.

Reason: To reduce the risk of site works contributing to spread of Priority and environmental weeds.

Priority Weed Removal and Management

All Priority weeds as specified in the Northern Beaches Local Weed Management Plan 2019 – 2023) within the development footprint are to be removed.

Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to issue of any Occupation Certificate.

Reason: To reduce the risk of site works contributing to spread of Priority weeds.

ON-GOING CONDITIONS THAT MUST BE COMPLIED WITH AT ALL TIMES

Protection of Habitat Features

All natural landscape features, including any rock outcrops, native vegetation, soil and/or watercourses, are to remain undisturbed except where affected by necessary works detailed on approved plans.

Reason: To protect wildlife habitat.

Replacement of Canopy Trees

Tree replacement plantings required under this consent are to be retained for the life of the development and/or for their safe natural life.

Trees that die or are removed must be replaced with another locally native canopy tree.

Reason: To replace locally native trees.