

15 February 2023

Robyn Flynn  
C/o-  
Friends of Coila

|                              |
|------------------------------|
| Document tendered by         |
| Ms Gillian McNamara          |
| Received by                  |
| Eareth Perkins               |
| Date: 2 / 5 / 24             |
| Resolved to publish Yes / No |

Dear Robyn,

**Re: Desktop ecological constraints assessment for MDA0124/20 - 41 Anderson Ave, Tuross Head NSW**

It is my understanding that Eurobodalla Shire Council (Council) approved the Modification to a Development Application (DA) for a 71 residential lot subdivision on 1 March 2022.

The original DA (dated 3 December 1984) was approved under Section 4.55(1)(A) of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act) for the development of 60 residential lots, a lot proposed for commercial use (Lot 61) and a proposed public reserve (Lot 62).

Section 4.55(1)(A) of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act 1997), states: "A consent authority may, on application being made by the applicant or any other person entitled to act on a consent granted by the consent authority and subject to and in accordance with the regulations, modify the consent if—

- (a) it is satisfied that the proposed modification is of minimal environmental impact, and
  - (b) it is satisfied that the development to which the consent as modified relates is substantially the same development as the development for which the consent was originally granted and before that consent as originally granted was modified (if at all), and
  - (c) it has notified the application in accordance with—
    - (i) the regulations, if the regulations so require, or
    - (ii) a development control plan, if the consent authority is a council that has made a development control plan that requires the notification or advertising of applications for modification of a development consent, and
  - (d) it has considered any submissions made concerning the proposed modification within any period prescribed by the regulations or provided by the development control plan, as the case may be.
- Subsections (1), (2) and (5) do not apply to such a modification."

The original approval was without a comprehensive biodiversity assessment. Therefore, it would be difficult to determine whether the development would result in minimal environmental impact. Further, between the original DA approval (1984) and the modification of the DA (2020), the approved development hadn't commenced within the Subject Site.

Under Division 4.9, Section 4.53(1) of the EP&A Act, a development consent lapses:

- "(a) 5 years after the date from which it operates if the development consent commences operation after the prescribed period, or
- (b) 5 years after the date from which it operates if the development consent commences operation during the prescribed period, or
- (c) 2 years after the date on which the development consent would otherwise have lapsed if the development consent commenced operation before, and has not lapsed at, the commencement of the prescribed period."

- PCT 3272 - *South Coast Lowland Creekflat Forest* is consistent with *Swamp Sclerophyll Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions* (Endangered Ecological Community, under the BC Act).
- Seven threatened flora species were considered to have a moderate or higher likelihood of occurrence and are discussed further below in Section 1.7.4.
- Eighteen threatened fauna species were considered to have a moderate or higher likelihood of occurrence and are discussed further below in Section 1.7.5.
- *Coastal Saltmarsh in the New South Wales North Coast, Sydney Basin and Southeast Corner Bioregions* (Endangered Ecological Community, under the BC Act) occurs on the foreshore of Coila Lake (immediately downgradient of the Subject Site). The Coastal Saltmarsh and Swamp Oak Floodplain Forest TECs, along Coila Lake are mapped within the NSW Biodiversity Values Map (BV Map).
- There are no known Areas of Outstanding Biodiversity Value (AOBV) within the Subject Site, or broader study area.
- According to the important habitat mapping for the Migratory Shorebirds, as identified in the Important Area Mapping (IAM) under the BAM (DPE, 2022) the Subject Site is immediately next to Migratory Shorebird important habitat (Coila Lake). The Important habitat maps identify areas that are considered essential to support critical life stages of these migratory species including foraging/over-wintering habitat.
- Under the Resilience and Hazards SEPP 2021, the Subject Site traverses' areas mapped as 'Proximity Area for Coastal Wetlands' (Section 1.10).
- The Project would result in unavoidable and direct impacts, namely the removal of approximately 5.46 ha of native vegetation. Section 1.13 details the total hectares of each PCT that will be subject to direct and/or indirect disturbance using a conservative estimate of a 100-metre buffer Of the Subject Site. Approximately 16.49 ha of native vegetation will be indirectly impacted by the Project without appropriate mitigation.
- The 39 Key Threatening Processes (KTPs) that are listed on the BC Act and/or EPBC Act as of October 2021 and are applicable to terrestrial environments, are shown in Section 1.14. The Project has the potential to contribute to 10 of the listed KTPs, without appropriate consideration.

I trust that the information presented in this letter report provides the information you require for your scope.

Yours sincerely,



**Kayla McGregor**  
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## Methods

### 1.5 Background Review

Relevant databases, mapping, legislation, and planning policies were reviewed to identify potential desktop constraints. Database searches within the locality (a 10 km radius around the Subject Site) were conducted in January 2023 to identify threatened biodiversity and migratory species with known or predicted occurrences in the locality. The following databases and literature were used for this purpose:

- NSW Department of Planning and Environment (DPE) BioNet, Atlas of NSW Wildlife (DPE 2023)
- NSW Threatened Species Profiles for threatened species, endangered populations and threatened ecological communities (TECs) listed under the BC Act (DPIE 2023a)
- Australian DAWE EPBC Act Protected Matters Report for Matters of National Environmental Significance (MNES) (DAWE 2023b)
- Australian DAWE Species Profile and Threats Database (DAWE 2023c)
- Existing vegetation mapping for the site (including TECs), *NSW State Vegetation Type Map* (DPE 2022)
- NSW Biodiversity Values Map (BV Map)
- Important Area Mapping (IAM)
- Areas of Outstanding Biodiversity Values (AOBV)
- NSW Department of Primary Industries, Fisheries NSW Portal for Key Fish Habitat (DPI 2021)
- Areas of coastal wetlands and littoral rainforest mapped under the State Environmental Planning Policy (Resilience and Hazards SEPP 2021).

### 1.6 Limitations

The Following limitations apply to this desktop constraints assessment:

- The ecological constraints assessment has not addressed all potential impacts of development within the Subject Site, and no formal impact assessments have been completed under the BC Act or EPBC Act. The purpose of the assessment is to identify the potential ecological constraints within the Subject Site.
- The assessment was based on a desktop analysis whereby no site inspection was undertaken; therefore, vegetation or potential habitat has not been verified.
- The likelihood of threatened species to occur within the Subject Site is based on existing vegetation mapping for the Subject Site and adjacent areas, BioNet species records (DPE 2023), and local knowledge of potential habitats present.

## Desktop Assessment

### 1.7 Database Searches

#### 1.7.1 Existing vegetation mapping

Based on the regional vegetation mapping (DPE 2022), approximately 5.46 ha of the Subject Site supports native vegetation in varying conditions. This includes scattered and isolated trees floodplain and riparian vegetation found along Coila Lake. According to the regional vegetation mapping (DPE 2022), the Plant Community Types (PCTs) of the Subject Site consist of:

- PCT 4028 - *Estuarine Swamp Oak Twig-rush Forest*
- PCT 3275 - *South Coast Spotted Gum Cycad Dry Forest*
- PCT 3272 - *South Coast Lowland Creekflat Forest*
- Non-native vegetation.

As shown in Table 1, there were additional PCTs found within the broader Study Area. These PCTs within the Study Area may be subject to indirect impacts as a result of the Project.

**Table 1: PCTs within the Subject Site and broader Study Area**

| PCT  | PCT Name  | Subject Site (ha) | Study Area (ha) |
|------|---|-------------------|-----------------|
| 3045 | <i>South Coast Spotted Gum Cycad Dry Forest</i> | 0.07              | 0.27            |
| 3272 | <i>South Coast Lowland Creekflat Forest</i>     | 4.22              | 15.64           |
| 3410 | <i>Spinifex Strandline Grassland</i>            | -                 | 0.30            |
| 3788 | <i>Coastal Foredune Wattle Scrub</i>            | -                 | 0.29            |
| 3792 | <i>Far Southeast Headland Scrub</i>             | -                 | 0.68            |
| 4028 | <i>Estuarine Swamp Oak Twig-rush Forest</i>     | 1.16              | 4.55            |
| 4094 | <i>Estuarine Club Rush-Arrowgrass Wetland</i>   | -                 | 5.59            |
| 4097 | <i>Samphire Saltmarsh</i>                       | -                 | 0.70            |
|      |   | <b>5.46</b>       | <b>28.02</b>    |

### 1.7.2 Threatened Ecological Communities

Seven EPBC Act listed TECs are known or predicted to occur in the locality, including (DAWE 2023b):

- *Subtropical and Temperate Coastal Saltmarsh*
- *Lowland Grassy Woodland in the South East Corner Bioregion*
- *Littoral Rainforest and Coastal Vine Thickets of Eastern Australia*
- *River-flat eucalypt forest on coastal floodplains of southern New South Wales and eastern Victoria*
- *Brogo Vine Forest of the South East Corner Bioregion*
- *Illawarra and south coast lowland forest and woodland ecological community*
- *Coastal Swamp Oak (Casuarina glauca) Forest of New South Wales and South East Queensland ecological community.*

The Subject Site contains Plant Community Types (PCTs) that are consistent with Threatened Ecological Communities (TECs) listed under the BC Act:

- PCT 4028 - *Estuarine Swamp Oak Twig-rush Forest* is consistent with *Swamp Oak Floodplain Forest of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions* (Endangered Ecological Community, under the BC Act).
- PCT 3272 - *South Coast Lowland Creekflat Forest* is consistent with *Swamp Sclerophyll Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions* (Endangered Ecological Community, under the BC Act).

As shown in Table 2, there were additional TECs found within the broader Study Area (e.g., *Coastal Saltmarsh*). These TECs within the Study Area may be subject to indirect impacts as a result of the Project.

**Table 2: TECs within the Subject Site and broader Study Area**

| Scientific Name under the BC Act   | Subject Site (ha) | Study Area (ha) |
|--|-------------------|-----------------|
| <i>Swamp Oak Floodplain Forest of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions</i>                     | 1.16              | 4.55            |
| <i>Coastal Saltmarsh in the New South Wales North Coast, Sydney Basin and Southeast Corner Bioregions</i>                                | -                 | 6.29            |
| <i>Swamp Sclerophyll Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions</i> | 4.22              | 15.64           |
|  | 5.39              | 26.47           |

### 1.7.3 Threatened flora and fauna likelihood of occurrence

A list of subject threatened flora and fauna within the locality was determined from the database searches detailed in Section 1.7.

The list of potential threatened species was determined from consideration of this list. In order to adequately determine the potential constraint associated with threatened species, further analysis of the likelihood of those species occurring within the Subject Site was completed. Five categories for 'likelihood of occurrence' were attributed to threatened biodiversity after considering the number and proximity of known records, presence or absence of preferred habitat types (e.g. native vegetation types), the mobility of the species, field survey results and professional judgement. The categories are outlined in Table 3.

Species considered further in formal assessments of significance (BC Act, EPBC Act) were those in the 'Known', 'High' or 'Moderate' categories. Species listed as having a 'Low' or 'None' likelihood of occurrence are those for which there is limited, or no habitat present within the Subject Site.

**Table 3: Likelihood of occurrence criteria**

| Likelihood rating | Threatened flora criteria   | Threatened and migratory fauna criteria   |
|-------------------|---|---|
| <b>Known</b>      | The species was observed within the Subject Site  | The species was observed within the Subject Site  |
| <b>High</b>       | It is likely that a species inhabits or utilises habitat within the Subject Site.   | It is likely that a species inhabits or utilises habitat within the Subject Site.   |
| <b>Moderate</b>   | Potential habitat for a species occurs within the Subject Site. Adequate field survey would determine if there is a 'high' or 'low' likelihood of occurrence for the species within the Subject Site. | Potential habitat for a species occurs within the Subject Site and the species may occasionally utilise that habitat. Species unlikely to be wholly dependent on the habitat present within the Subject Site.   |
| <b>Low</b>        | It is unlikely that the species inhabits the Subject Site.  | It is unlikely that the species inhabits the Subject Site. If present at the site, the species would likely be a transient visitor. The Subject Site contains only very common habitat for this species which the species would not rely on for its on-going local existence. |
| <b>None</b>       | The habitat within the Subject Site is unsuitable for the species.  | The habitat within the Subject Site is unsuitable for the species.  |

### 1.7.5 Threatened fauna

A total of 111 threatened fauna species listed under the BC Act or the EPBC Act were considered as subject species. Sixty-seven species listed under the BC Act have been recorded within 10 km of the Subject Site, with 10 recorded within 500 m of the Subject Site (Table 5). Of the 111 fauna subject species, 18 species were considered to have a moderate or higher likelihood of occurrence (Table 6), five of which are listed under the EPBC Act. While a number of the threatened fauna may use adjacent habitat, species considered as candidate species are those that have the potential to be adversely impacted by the Project. The presence of Hollow-bearing trees, grassy understorey, fallen woody ground refugia, and ephemeral soaks have assumed for the purpose of the desktop assessment.

**Table 5: Threatened fauna recorded within 500 m of the Subject Site**

| Class   | Common Name                    | Scientific Name                        | Proximity to the Subject Site             |
|---------|--------------------------------|--|---|
| Aves    | Bar-tailed Godwit              | <i>Limosa lapponica</i>                | 300 m (in Coila Lake)                     |
| Aves    | Gang-gang Cockatoo             | <i>Callocephalon fimbriatum</i>        | Within the Subject Site                   |
| Aves    | Crested Tern                   | <i>Thalasseus bergii</i>               | 300 m (in Coila Lake)                     |
| Aves    | Dusky Woodswallow              | <i>Artamus cyanopterus cyanopterus</i> | 100 m                                     |
| Aves    | Eastern Hooded Dotterel        | <i>Thinornis cucullatus cucullatus</i> | 300 m (in Coila Lake)                     |
| Aves    | Short-tailed Shearwater        | <i>Ardenna tenuirostris</i>            | 300 m (in Coila Lake)                     |
| Aves    | Whimbrel                       | <i>Numenius phaeopus</i>               | 300 m (in Coila Lake)                     |
| Aves    | White-bellied Sea-Eagle        | <i>Haliaeetus leucogaster</i>          | Within the Subject Site (aerial foraging) |
| Mammals | Grey-headed Flying-fox         | <i>Pteropus poliocephalus</i>          | 100 m                                     |
| Mammals | Yellow-bellied Sheath-tail-bat | <i>Saccolaimus flaviventris</i>        | 100 m                                     |



Figure 5: Threatened fauna records



## 1.8 Biodiversity values

### Areas of Outstanding Biodiversity Value

Areas of Outstanding Biodiversity Value are special areas that contain irreplaceable biodiversity values that are important to the whole of NSW, Australia or globally. Areas of declared critical habitat under the repealed *Threatened Species Conservation Act 1995* have become the first AOBV in NSW. AOBV declarations in NSW include:

- Gould's Petrel – critical habitat declaration
- Little penguin population in Sydney's North Harbour – critical habitat declaration
- Mitchell's Rainforest Snail in Stotts Island Nature Reserve – critical habitat declaration
- Wollemi Pine – critical habitat declaration.

There are no known AOBV within the Subject Site, or broader study area.

### Biodiversity Values Map

The NSW Biodiversity Values Map (BV Map) identifies land with high biodiversity value that is particularly sensitive to impacts from development and clearing. The BV Map is relevant for:

- Development under Part 4 of the EP&A Act that is not state significant development or complying development.
- Clearing regulated by the State Environmental Planning Policy (Vegetation) 2017 (Vegetation SEPP).

The BOS applies to development under Part 4 of the EP&A Act if a relevant clearing or development proposal has one of the following impacts in an area on the Biodiversity Values Map:

- Clearing native vegetation.
- An impact prescribed under clause 6.1 of the Biodiversity Conservation Regulation.

*Coastal Saltmarsh in the New South Wales North Coast, Sydney Basin and Southeast Corner Bioregions* (Endangered Ecological Community, under the BC Act) occurs on the foreshore of Coila Lake (immediately downgradient of the Subject Site). The Coastal Saltmarsh and Swamp Oak Floodplain Forest TECs, mapped along Coila Lake are within the NSW Biodiversity Values Map (BV Map).

### Important Area Mapping (IAM)

IAM identifies area of habitat that are considered to be important for the survival of a threatened species. According to the important habitat mapping for the Migratory Shorebirds, as identified in the Important Area Mapping (DPE, 2022) the Subject Sites is immediately next to Migratory Shorebird important habitat (Coila Lake). The Important habitat maps identify areas that are considered essential to support critical life stages of these species including foraging/over-wintering for nomadic species. Therefore, the development may have indirect impacts to Migratory Shorebird habitat, considered essential to support critical life stages of these migratory bird species (non-breeding habitat).

## 1.10 Resilience and Hazards SEPP 2021

The State Environmental Planning Policy (Coastal Management) 2018 (Coastal Management SEPP) was made and commenced on 3 April 2018. On 1 March 2022, 45 planning policies were consolidated into 11 theme-based policies, to make the planning system simpler. The Coastal Management SEPP 2018 is now Chapter 2 (Coastal Management) of the Resilience and Hazards SEPP 2021 (Resilience and Hazards SEPP).

The aim of Chapter 2 of SEPP is to promote an integrated and co-ordinated approach to land use planning in the coastal zone in a manner consistent with the objects of the *Coastal Management Act 2016*, including the management objectives for each coastal management area, by:

- “(a) managing development in the coastal zone and protecting the environmental assets of the coast, and*
- (b) establishing a framework for land use planning to guide decision-making in the coastal zone, and*
- (c) mapping the 4 coastal management areas that comprise the NSW coastal zone for the purpose of the definitions in the Coastal Management Act 2016.”*

Chapter 2 of the Resilience and Hazards SEPP defines and maps the coastal zones as coastal management areas including Coastal Wetlands and Littoral Rainforest, Proximity Areas, Coastal Vulnerability Areas, Coastal Environment Areas and Coastal Use Areas. The Subject Site traverses areas mapped as 'Proximity Area for Coastal Wetlands'.

Under Division 1, Section 2.8 of the Resilience and Hazards SEPP, development consent must not be granted to development on land identified as “proximity area for coastal wetlands” or “proximity area for littoral rainforest” on the Coastal Wetlands and Littoral Rainforests Area Map unless the consent authority is satisfied that the proposed development will not significantly impact on:

- “(a) the biophysical, hydrological, or ecological integrity of the adjacent coastal wetland or littoral rainforest, or*
- (b) the quantity and quality of surface and ground water flows to and from the adjacent coastal wetland or littoral rainforest.”*

As such, development consent should not be granted under subclause (a) or (b), if hydrological or ecological impact are likely, or there is inadequate data to determine the risk.

### **1.11 NSW Biodiversity Conservation Act 2016**

The Project would be a Part 4 development (under the NSW *Environment Planning and Assessment Act 1979* (EP&A Act) and would therefore be assessed under the BC Act. Under the BC Act, the biodiversity values of an area may be assessed by two main means:

- An ecological assessment that applies the threatened species test of significance (5-part test) to determine a significant impact.
- Entry into the BOS and production of a Biodiversity Development Assessment Report (BDAR).

The BOS Threshold is a test used to determine when it is necessary to apply the Biodiversity Assessment Method (the BAM) to assess the impacts of a proposal. The *Biodiversity Conservation Regulation 2017* sets out threshold levels for when the BOS will be triggered. The threshold has three elements:

- Whether the amount of native vegetation being cleared exceeds a threshold: Threshold clearing limits (based on lot size and clearing area) outlined in the BAM specify the level of assessment that must be carried out.
- Whether a proposal is likely to have a significant impact on threatened biodiversity, through application of the five-part test: Section 7.3 of the BC Act, the test of significance, sets the criteria for determining whether a proposal is likely to have a significant impact on threatened biodiversity.
- Whether the impacts occur on an area mapped on the Biodiversity Values Map.

Where the BOS is triggered and impacts to native vegetation will occur, the Project may be liable for offsetting costs. The BOS Threshold tool is outlined below.

#### **BOS threshold tool**

The area threshold varies depending on the minimum lot size for the zoned land. The Subject Site is zoned as R2 - Low Density Residential and has a minimum lot size of 0.55 ha (LEP 2012). Therefore, a clearing threshold of 0.25 ha or more would apply to the Subject Site. That is, where 0.25 ha or more of native vegetation is likely to be impacted, the BOS would be triggered and the preparation of a BDAR would be required.

### **1.12 Commonwealth Environment Protection and Biodiversity Conservation Act 1999**

The purpose of the EPBC Act is to ensure that actions likely to cause a significant impact on MNES undergo an assessment and approval process. Under the EPBC Act, an action includes a project, undertaking, development or activity. An action that 'has, will have or is likely to have a significant impact on MNES' is deemed to be a controlled action and may not be undertaken without prior approval from the Commonwealth Minister for the Department of Agriculture, Water and the Environment (DAWE).

Where impacts to native vegetation can be avoided and/or mitigated, a significant impact is unlikely.

### **1.13 Potential impact summary**

The Project would result in unavoidable and direct impacts, namely the removal of approximately 5.46 ha of native vegetation. Table 7 details the total area of each PCT that will be subject to direct and/or indirect disturbance using a conservative estimate of a 100-metre buffer Of the Subject Site. Approximately 16.49 ha of native vegetation will be indirectly impacted by the Project without appropriate mitigation.

## 1.14 Key threatening processes

The 39 Key Threatening Processes (KTPs) that are listed on the BC Act and/or EPBC Act as of October 2021 and are applicable to terrestrial environments, are shown in Table 8. The Project will result in the permanent clearing of native and non-native vegetation. Of the listed 39 KTPs, 10 relate to altered ecological processes, or direct removal of habitat.

**Table 8: Key threatening processes**

| Key Threatening Process   | BC Act | EPBC Act<br>equivalent | Exacerbated due to Project   |
|---|--------|------------------------|--|
| 1. Aggressive exclusion of birds by noisy miners ( <i>Manorina melanocephala</i> )  | √      | √                      | No   |
| 2. Alteration of habitat following subsidence due to longwall mining  | √      | x                      | N/A  |
| 3. Alteration to the natural flow regimes of rivers, streams, floodplains & wetlands.   | √      | x                      | Yes - The proposed works will alter the natural flow of surface flow within the floodplain, without mitigation.                          |
| 4. Bushrock removal   | √      | x                      | No   |
| 5. Clearing of native vegetation  | √      | √                      | Yes - clearing of at least 5.46 ha (permanent) within the Subject Site, and potential indirect impacts to 16.49 ha of native vegetation. |
| 6. Competition and grazing by the feral European rabbit   | √      | √                      | No – the Project will not increase the presence of European rabbit throughout the Subject Site.  |
| 7. Competition and habitat degradation by feral goats   | √      | √                      | No   |
| 8. Competition from feral honeybees   | √      | X                      | No   |
| 9. Death or injury to marine species following capture in shark control programs on ocean beaches                             | √      | x                      | No   |
| 10. Entanglement in, or ingestion of anthropogenic debris in marine and estuarine environments                                | √      | √                      | No   |
| 11. Forest Eucalypt dieback associated with over-abundant psyllids and bell miners  | √      | x                      | No   |
| 12. Habitat degradation and loss by Feral Horses (brumbies, wild horses), <i>Equus caballus</i>                               | √      | x                      | No   |
| 13. Herbivory and environmental degradation caused by feral deer  | √      | x                      | No   |
| 14. High frequency fire   | √      | x                      | No   |
| 15. Human-caused climate change   | √      | √                      | Negligible   |
| 16. Importation of red imported fire ants into NSW  | √      | √                      | No   |
| 17. Infection by <i>Psittacine circoviral</i> (beak & feather) disease affecting endangered psittacine species                | √      | √                      | No   |
| 18. Infection of frogs by amphibian chytrid fungus causing the disease chytridiomycosis                                       | √      | √                      | Unknown  |
| 19. Infection of native plants by <i>Phytophthora cinnamomi</i>   | √      | √                      | Unknown  |
| 20. Introduction and Establishment of Exotic Rust Fungi of the order Pucciniales pathogenic on plants of the family Myrtaceae | √      | x                      | Unknown  |

## Constraints summary and recommendations

The desktop assessment has identified the following ecological constraints within the Subject Site, and immediate surrounds:

- At least 5.46 ha of the Subject Site supports native vegetation in varying conditions. This includes scattered and isolated remnants, floodplain and riparian vegetation found along Coila Lake. According to the regional vegetation mapping (DPE 2022), the Plant Community Types (PCTs) of the Subject Site consist of (Section 1.7.1):
  - PCT 4028 - *Estuarine Swamp Oak Twig-rush Forest*
  - PCT 3275 - *South Coast Spotted Gum Cycad Dry Forest*
  - PCT 3272 - *South Coast Lowland Creekflat Forest*
  - Non-native vegetation.
  
- The Subject Site contains PCTs that are consistent with Threatened Ecological Communities (TECs) listed under the BC Act (Section 1.7.2):
  - PCT 4028 - *Estuarine Swamp Oak Twig-rush Forest* is consistent with *Swamp Oak Floodplain Forest of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions* (Endangered Ecological Community, under the BC Act).
  - PCT 3272 - *South Coast Lowland Creekflat Forest* is consistent with *Swamp Sclerophyll Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions* (Endangered Ecological Community, under the BC Act).
  
- Seven threatened flora species were considered to have a moderate or higher likelihood of occurrence and are discussed further below in Section 1.7.4.
- Eighteen threatened fauna species were considered to have a moderate or higher likelihood of occurrence and are discussed further below in Section 1.7.5.
- *Coastal Saltmarsh in the New South Wales North Coast, Sydney Basin and Southeast Corner Bioregions* (Endangered Ecological Community, under the BC Act) occurs on the foreshore of Coila Lake (immediately downgradient of the Subject Site). The Coastal Saltmarsh and Swamp Oak Floodplain Forest TECs, along Coila Lake are mapped within the NSW Biodiversity Values Map (BV Map).
- There are no known Areas of Outstanding Biodiversity Value (AOBV) within the Subject Site, or broader study area.
- According to the important habitat mapping for the Migratory Shorebirds, as identified in the Important Area Mapping (IAM) under the BAM (DPE, 2022) the Subject Site is immediately next to Migratory Shorebird important habitat (Coila Lake). The Important habitat maps identify areas that are considered essential to support critical life stages of these migratory species including foraging/over-wintering habitat.
- Under the Resilience and Hazards SEPP 2021, the Subject Site traverses' areas mapped as 'Proximity Area for Coastal Wetlands' (Section 1.10).
- The Project would result in unavoidable and direct impacts, namely the removal of approximately 5.46 ha of native vegetation. Section 1.13 details the total hectares of each PCT that will be subject to direct and/or indirect disturbance using a conservative estimate of a 100-metre buffer Of the Subject Site. Approximately 16.49 ha of native vegetation will be indirectly impacted by the Project without appropriate mitigation.

**Conservation advice (incorporating listing advice) for the Coastal Swamp Oak (*Casuarina glauca*) Forest of New South Wales and South East Queensland ecological community**

1. The Threatened Species Scientific Committee (the Committee) was established under the EPBC Act and has obligations to present advice to the Minister for the Environment (the Minister) in relation to the listing and conservation of threatened ecological communities, including under sections 189, 194N, 266B and 269AA of the EPBC Act.
2. The Committee provided its advice on the 'Coastal Swamp Oak (*Casuarina glauca*) Forest of New South Wales and South East Queensland' ecological community to the Minister as a draft conservation advice in 2017. The Committee recommended that:
  - the ecological community merits listing as **endangered** under the EPBC Act; and
  - a recovery plan is not required for the ecological community at this time.
3. In 2018, the Minister accepted the Committee's advice, and adopted this document as the approved conservation advice. The Minister amended the list of threatened ecological communities under section 184 of the EPBC Act to include the 'Coastal Swamp Oak (*Casuarina glauca*) Forest of New South Wales and South East Queensland' ecological community in the endangered category.
4. A draft conservation advice for this ecological community was made available for expert and public comment for a minimum of 30 business days. The Committee and Minister had regard to all public and expert comment that was relevant to the consideration of the ecological community.
5. New South Wales and Queensland also list (or protect) components of this ecological community under State legislation and local government planning schemes.
6. This approved conservation advice was based on the best available information at the time it was prepared; this includes scientific literature, advice from consultations, and existing plans, records or management prescriptions for this ecological community.

