From: Andre Vernez

Sent:Tuesday, 6 December 2022 5:47 PMTo:iwan.davies@planning.nsw.gov.auCc:rachel.carss@planning.nsw.gov.au

**Subject:** Shoalhaven Hydro Expansion Project - Main Works - COMMENTS

FROM SHOALHAVEN CITY COUNCIL ON REQUEST FOR ADVICE

Importance: High

Dear Iwan,

Please find below technical comments from Shoalhaven City Council on the Request for Advice in relation to the Shoalhaven Hydro Expansion Project – Main Works.

### SHOALHAVEN HYDRO EXPANSION PROJECT - MAIN WORKS

#### **Environmental Health Comments/Requirements:**

- 1. Advice has previously been provided by Shoalhaven Water in regard to algal and toxin counts as a result of water movements / transfers.
- 2. No further comments are to be provided for this development.

# **Environmental Assessment Comments/Requirements:**

3. Spoil placement

The Spoil Management Strategy by Jacobs (dated November 2022) states that the area to the east of the Bendeela Pondage was selected for the permanent spoil stockpile. One of the reasons being that it is an 'area of low biodiversity and cultural values (i.e. previously disturbed site) and where visual, noise and dust impacts can be reasonably engineered and managed'.

The Biodiversity Development Assessment Report (BDAR) however has identified this same area as containing habitat for the following species:

- Hibbertia puberula
- Bauer's Midge Orchid *Genoplesium baueri*, (assumed present)
- Eastern Pygmy Possum Cercartetus nanus
- Giant Burrowing Frog *Heleioporus australiacus* (assumed present)
- Large-eared Pied Bat *Chalinolobus dwyeri* and a very small area of Southern Myotis (Myotis macropus) habitat
- And several medium sized hollow-bearing trees.

Based on Figure 5-1 and Table 5-10, vegetation zone ETT-3, which is to be impacted by the spoil stockpile, has the highest vegetation integrity score when compared to other vegetation zones mapped across the development site.

To avoid/minimise impacts to the six (6) biodiversity values occurring with the currently proposed spoil stockpile site, Council recommends that the applicant investigate

alternative locations such as already cleared land (which may be at a greater distance) in accordance with section 7 of the Biodiversity Assessment Method (BAM) 2020.

The above must be considered when seeking a permit from the NSW Environment Protection Authority.

# 4. Assumed presence for species credit species

The BDAR has assumed presence for:

- Bauer's Midge Orchid *Genoplesium baueri* (at risk of Serious and Irreversible Impacts (SAII))
- Littlejohn's Tree Frog Litoria littlejohni
- Giant Burrowing Frog Heleioporus australiacus

Council generally does not support assuming presence, especially for entities at risk of SAII. Sufficient information about the population to be impacted must be obtained to demonstrate how impacts to the threatened entity have been avoided and for entities at risk of SAII, to adequately document the impacts of the proposed development required by section 9.1 of the BAM 2020.

# 5. Additional targeted survey recommended

Council notes that the BDAR states that further surveys for Bauer's Midge Orchid are proposed in 2023. It is therefore recommended that targeted surveys for Bauer's Midge Orchid be undertaken between February-March when the species is confirmed flowering at a nearby reference site and using the methods detailed in the NSW BioNet TBDC, Surveying threatened plants and their habitats: NSW survey guide for the Biodiversity Assessment Method (Department of Planning, Industry and Environment, 2020) and Commonwealth survey guidelines.

Similarly, rather than assuming presence, it is also recommended that targeted survey be completed for Littlejohn's Tree Frog and Giant Burrowing Frog in accordance with NSW BioNet TBDC, NSW Survey Guide for Threatened Frogs: A guide for the survey of threatened frogs and their habitats for the Biodiversity Assessment Method and Commonwealth survey guidelines.

Breeding Gang-gang Cockatoo and Glossy Black-Cockatoo were detected adjacent to the Promised Lands Track however the BDAR concludes that no 'actual' nest trees were present in development site or 200m buffer.

It can be difficult to determine a nest site for hollow-nesting species without sufficient observation time. For example, individuals could be within the hollow at the time and not observed. The BDAR states that a 10-20min hollow observation time was allowed to identify possible usage along with additional visits associated with other surveys. Council's biodiversity staff have recently been monitoring a Gang-gang Cockatoo nest in the Shoalhaven. During nesting, the male or female have been observed to stay within the hollow without any evidence of presence for an hour+ in good conditions and several hours (potentially a whole day) in rain or wind. Nesting sites for the Gang-gang Cockatoo are considered to be significant as pairs typically return to the same hollow to nest each year. Powerful Owls and Glossy Black-Cockatoo are known for similar behaviour.

It is therefore recommended that additional survey be undertaken during the breeding season of hollow-nesting fauna, in particular Gang-gang Cockatoo and Glossy Black-Cockatoo given both species were detected during the previous breeding season, to determine presence of a nest site and the requirement to redesign the development to avoid impacts to significant breeding sites.

Following targeted survey for the above, it may be necessary to revise the development footprint to avoid important habitat and/or update the BDAR and credit obligation.

# 6. Manually input species credit species included in same PCTs of adjoining subregions

The proposed development spans three (3) subregions. In the case where a plant community type (PCT) occurs across different subregions within the subject land and the BAM-Calculator has excluded species credit species based on subregion association, Council recommends that the Accredited Assessor manually input any excluded species into the remaining child cases within the BAM-Calculator. Given species are predicted to occur in one subregion and the bushland is connected it would be reasonable to assume occurrence across the whole study area.

#### 7. Recommended conditions

Provided that the above items are addressed, the following conditions of consent are recommended, relating to mitigating impacts to biodiversity. Conditions relating to the credit obligation have not been included as this will be confirmed by the DPE.

## **Native Vegetation and Habitat**

The removal and/or disturbance of native vegetation and habitat on the property, including canopy trees, understorey and groundcover vegetation, is restricted to that required to construct and maintain the development in accordance with the plans approved and required by this consent.

#### Earthworks and vegetation clearing

No earthworks or vegetation clearing works are permitted prior to the issue of the Construction Certificate.

### **Ecological consultant - Engagement**

Prior to the commencement of clearing work, a suitably qualified and licensed ecological consultant with wildlife handling experience and equipment must be engaged to guide and supervise the clearing work and protection of environmental features on the site. Evidence of engagement and contact details must be submitted to Council prior to the commencement of clearing work.

#### Identification of Vegetation to be Retained – Survey Required

Prior to the commencement of clearing work, a registered surveyor must identify and mark the extent of clearing work as shown on the plans approved and required by this consent. A temporary protective barrier or similar visible material must be installed along the boundary surveyed and retained until all work is complete.

# **Tree and Vegetation Protection**

Prior to the commencement of any clearing works, the dripline of trees to be retained within the development area must be clearly identified and protected with temporary barrier fencing in accordance with AS 4970: Protection of trees on development sites.

#### **Erosion and sediment control measures**

Erosion and sediment control measures must be established in accordance with the approved plans and prior to the commencement of any clearing or earthworks.

# Rehabilitation Plan - Preparation

A Rehabilitation Plan must be submitted to the consent authority for review and approval prior to the issue of the Construction Certificate. A private certifier cannot assume the role of the consent authority in confirming compliance with the Rehabilitation Plan.

The Rehabilitation Plan must, at a minimum, contain further details and guidance in plain English, on the following matters:

- a. A map identifying the areas to be rehabilitated following the construction of the development (such as laydown and stockpile areas) using species from the plant community type that occurred prior to removal.
- b. Methods proposed for rehabilitation.
- c. Density and location of proposed plantings.
- d. Ongoing maintenance and monitoring of any rehabilitated areas.

### **Biodiversity Management Plan**

A Biodiversity Management Plan (BMP) must be prepared as part of the Construction Environmental Management Plan and submitted to the consent authority for review and approval prior to the issue of the Construction Certificate. A private certifier cannot assume the role of the consent authority in confirming compliance with the BMP.

The BMP must, at a minimum, contain further details and guidance in plain English, for all items listed in Table 10-1 of the BDAR by prepared by Jacobs, dated 7 November 2022.

### **Erosion and sediment control plans**

Erosion and sediment control plans must be submitted to the consent authority for review and approval prior to the issue of the Construction Certificate. The plans must be prepared in accordance with *Volume 2D of Managing Urban Stormwater: Soils and Construction* (DECC 2008c).

#### **Pre-clearance fauna surveys**

Prior to the commencement of any clearing work, pre-clearance fauna surveys must undertaken in accordance with the approved Biodiversity Management Plan. The ecologist must submit the post-clearing report to consent authority and directly to Council's Biodiversity Team within 10 days of the clearing event.

# Maintenance of water quality in aquatic habitats

The following actions must be undertaken to maintain the water quality in aquatic habitats:

- a. Erosion and sediment control measures must be updated and managed throughout as relevant to the activities during the construction phase.
- b. Erosion and sediment controls must be regularly inspected, particularly following rainfall events, to ensure their ongoing functionality.
- c. Excavated surfaces must be stabilised and reinstated as quickly as practicable after
- d. Appropriate speeds for all construction and contractor vehicles are to be enforced to limit dust generation and minimise chances of fauna mortality through vehicle strike during the construction phase of the project.
- e. All stockpiled material should be stored in bunded areas within the development footprint and kept away from waterways to avoid sediment or contaminants entering the waterway.
- f. Spill kits would be made available to construction vehicles. A management protocol for accidental spills would be put in place.

# Rehabilitation Plan - During Works

During works, the appropriate measures specified in the approved Rehabilitation Plan must be implemented.

## **Biodiversity Management Plan – During Works**

During works, all protocols and procedures outlined in the approved Biodiversity Management Plan, must be adhered to.

### **Unexpected fauna finds**

The construction contractor is to cease all work immediately and contact the project ecologist for advice if any unexpected fauna is found during the construction period (i.e. following clearing of native vegetation when the Project ecologist is no longer on site). If the fauna is a threatened species, the project ecologist must notify and liaise with Council's Biodiversity Team.

## Felling of trees

Trees to be cleared must be felled into the development area carefully so as not to damage trees to be retained in or beyond the development footprint.

## Pruning or trimming of retained trees

Pruning or trimming of any trees to be retained must be undertaken in accordance with AS 4373 Pruning of amenity trees.

### Timing of works

To protect adjoining bushland and riparian habitats, works involving soil disturbance must not take place during heavy rainfall periods, other than work necessary to stabilise the site.

#### Road Assets Comments/Requirements:

8. There is concern that a section of Jacks Corner Road is to be incorporated into the project area and the entirety of spoil will be transported across this section. The EIS indicates a dilapidation report will be prepared as a mitigation measure with a restoration at the conclusion of the project (6.7.6, Table 6-27, TT15). However, given the volume of material being transported across this section of road, it is imperative that the road remains open and serviceable throughout the duration of the project.

Should you have any questions in relation to the above please give me a call.

Regards,



**Andre Vernez** 

Senior Development Planner

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