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04/04/2023

Karen McCann
Environmental Advisor
Haslin Constructions Pty Ltd
Suite 2, 2-4 Merton Street
Sutherland, NSW, 2232

Dear Karen,

**Re: ECOLOGICAL SURVEY FOR ADDITIONAL VEGETATION REMOVAL FOR THE
EUROBODALLA WATER SUPPLY PROJECT**

Please find below an ecological assessment of areas requested for additional clearing for the Eurobodalla Water Supply Project. This report relates to an area identified as **Zone 3**.

If you have any questions or would like to discuss any matter in relation to the advice and subsequent recommendations provided, please contact me on the number below. I would be pleased to discuss this project with you further.

Yours sincerely,



Sam Patmore
Director
PATH Co Pty Ltd
0439 655 120
sam.p@path-co.com.au

Path-Co Pty Ltd was requested by Haslin Pty Ltd to assess an additional area outside of the clearing boundaries of the Eurobodalla Water Supply Project that have been identified as requiring additional clearing for earthwork activities related to the main embankment wall of the dam. The area is identified as Zone 3 (Figure 1).

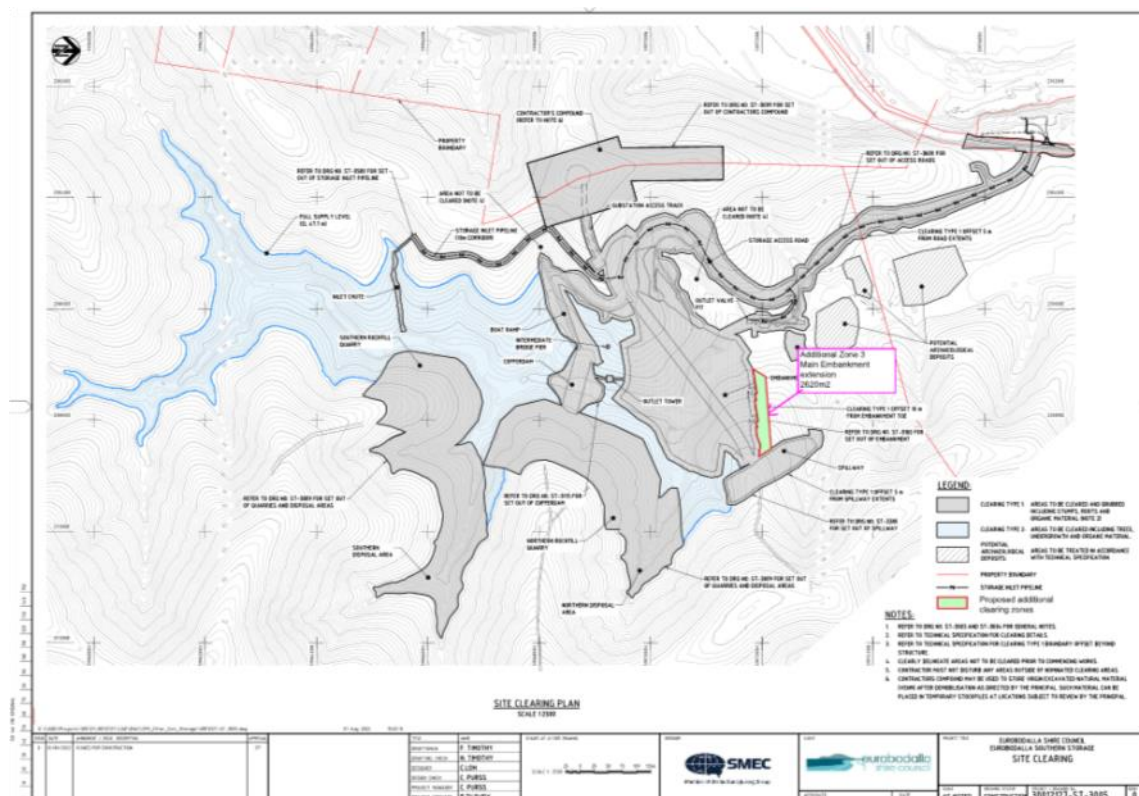


Figure 1. Additional Zone 3 clearing area- Southern Water Storage footprint

Zone 3 was assessed by a senior ecologist (Vanessa Place) on 20th December 2022 and 28th March 2023. Assessment involved a walk through with Haslins Environmental Advisor to identify habitat features such as hollow-bearing trees (HBTs) and assess suitability for threatened species. The area was assessed against the EEC River-Flat Eucalypt Forest on Coastal Floodplains of the NSW North Coast, Sydney Basin and South East Corner bioregions which occurs in the area but was found to be PCT 1220- Spotted Gum - White Stringybark - Burrawang shrubby open forest on hinterland foothills, northern South East Corner Bioregion in poorer condition, probably due to historical logging and the impact of fire. Whilst heavy *Allocasuarina littoralis* regrowth was found on the upper slope, none of the larger Black She-oaks showed signs of Glossy Black Cockatoo use.

The noted habitat features and assessment of Zone 3 are:

Site	Required clearing	HBTs	Other habitat features & area assessment
Additional Zone 3- Main Embankment area	2620m ²	2	No threatened flora/EEC seen. Nesting birds assessed, with none seen. Two HBTs- details at Table 1. Mixed vegetation- thick patches of Black She-oak seedlings, <i>Goodenia ovata</i> and open areas. Photo 1. No wombat burrows noted- some wombat/wallaby tracks/scats.

Two HBTs have been identified as potentially requiring clearing within zone 2, though both may be avoided during works. Table 1 identifies species, hollows and the location of HBTs.

Table 1. Hollow-bearing trees located within zone 3 requested for clearing

					
HBT	Species	DBH	Comments		
			Easting	Northing	
1	<i>Eucalyptus muelleriana</i>	70cms	230820.61	5997194.90	1 large open top (Chimney)- poor quality 

2	<i>Corymbia maculata</i>	90cms	230777.68	5997199.24	Fissures suitable for microbats/small gliders. Scratches on trunk	
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Recommended Actions

The clearing request is for the clearing of HBT1 in a timeframe outside of that stipulated in the conditionals of consent for the Southern Water Storage project. To minimize the threat to fauna species the following recommended management actions are suggested:

1. Clearly demarcate the area of clearing to avoid any further vegetation clearing. Walk through of each area to be cleared maximum of 24 hours prior to any clearing activity to search for any new evidence of nesting birds, wombat burrows or other fauna activity. Nesting birds are considered a low risk if after April and before September.
2. Two-stage clearing with disturbance via knocking is suggested. A minimum of 48 hrs prior to clearing of HBTs, underscrubbing of all ground vegetation within the required area should occur. HBTs should be knocked with an excavator (approx.) five times over a period of 2-3 minutes to disturb any resident fauna in the hope they will vacate the hollow of their own accord. This knocking should occur immediately after underscrubbing and then again on the evening prior to removal.
3. On day of clearing, HBTs should be climbed by an arborist to check for fauna with an inspection camera. If none present, tree can be chainsawed or taken down by excavator. If fauna present, the tree should be knocked with an excavator (approx.) five times over a period of 2-3 minutes again and left overnight. Hollows should be checked again the next morning and, if fauna still present the process repeated until the fauna has vacated the tree. An ecologist will be on site for all felling and checking of hollows immediately post felling.
4. In the unlikely event any fauna is found in hollows post felling, they will be extracted if possible or left within the hollow to vacate overnight. Hollows will be inspected the morning after felling and trees removed from the site only if clear of any fauna.
5. Any extracted fauna is to be checked for injuries/shock and relocated to the identified relocation zones in the FFMP. Relocation will occur in the evening. Fauna is to be directly released onto the trunk of a large and preferably potential HBT.
6. Any injured fauna is to be treated as per the requirements of the FFMP (i.e. taken to local vet or WIRES, or euthanised humanely if catastrophic injuries occur by blunt force trauma to the head).
7. All observed fauna, including species, actions taken and outcomes (i.e. injuries/death) will be recorded and described in a post-clearing report. Observations of any threatened fauna will be reported to OEH/BCD within 24 hours.
8. If HBT2 is required to be removed, it will be done between first week of February and second week of March.

Photos



Photo 1. Upper area (eastside) of Zone 3- indicative vegetation in zone small saplings/regrowth with few scattered larger canopy trees.