
Appendix 3.13. Supplement Bangalay Forest EEC 7 part test RPS 2015



Sydney Office

Level 9, 17 York Street, GPO Box 4401, Sydney NSW Australia 2001

T +61 2 9248 9800 F +61 2 9248 9810 E sydney@rpsgroup.com.au W rpsgroup.com.au

Our Ref: 124192
Date: 14 April 2015

Attn: Ron van Ardenna
RVA Australia
6/1 Pitt Street
Loftus
NSW 2232

Dear Ron,

RE: ASSESSMENT OF SIGNIFICANCE (7-PART TEST): BANGALAY SAND FOREST EEC

RPS was engaged to prepare an Ecological Assessment for the proposed development of land located at 60-70 Bournemouth Street, Bundeena (the study area), within the Sutherland Local Government Area (LGA).

This assessment verified the presence of four vegetation communities mapped by OEH (2013); Coastal Sand Apple-Bloodwood Forest, Coastal Sand Bangalay Forest, Coastal Sandstone Heath-Mallee and Coastal Freshwater Wetland.

Coastal Freshwater Wetland, located in the north-western corner of the study area, is a component of Freshwater Wetlands on Coastal Floodplains of the NSW North Coast, Sydney Basin and South East Corner Bioregions, listed as an Endangered Ecological Community (EEC) under the TSC Act. Potential impacts of the proposed development on this EEC were assessed by an Assessment of Significance (7-part test) in Appendix 7 of the Ecological Assessment. It was concluded that the proposed development is unlikely to have "a significant effect" on Sydney Freshwater Wetland EEC.

Coastal Sand Bangalay Forest, occurring in a narrow band along the margins of the Coastal Freshwater Wetland (where it intergrades with adjoining Coastal Sand Apple Bloodwood Forest), is commensurate with Bangalay Sand Forest of the Sydney Basin and South East Corner bioregions, listed as an Endangered Ecological Community (EEC) under the TSC Act.

Potential impacts of the proposed development on this EEC have not been adequately assessed to date. Accordingly, an Assessment of Significance for Bangalay Sand Forest EEC is required, and this is provided below.

Assessment of Significance: Coastal Sand Bangalay Forest Endangered Ecological Community

A narrow band of Coastal Sand Bangalay Forest occurs along the margins of the Coastal Freshwater Wetland, where it intergrades with adjoining Coastal Sand Apple Bloodwood Forest. The canopy to 15 metres supports *Angophora costata* (Smooth-barked Apple) and *Eucalyptus botryoides* (Bangalay). Smaller trees of the midstorey include *Banksia serrata* (Old Man Banksia),

Banksia integrifolia (Coast Banksia) and *Livistona australis* (Cabbage-tree palm). The groundlayer is dominated by *Lomandra longifolia* (Spiny-head Mat-rush), *Gahnia spp.*, and *Pteridium esculentum* (Bracken), in addition to climbers and scramblers such as *Hibbertia dentata* (Twining Guinea Flower), *Smilax glycyphylla* (Sarsaparilla) and *Cissus hypoglauca* (Water Vine). The margins of Coastal Sand Bangalay Forest adjoining Coastal Freshwater Wetland support incursions of weeds such as *Ageratina adenophora* (Crofton Weed) and *Zantedeschia aethiopica* (White Arum lily). The overall condition of Coastal Sand Bangalay Forest in the study area is moderate to high.

(a) In the case of a threatened species, whether the action proposed is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction.

Not applicable. Coastal Sand Bangalay Forest is not a threatened species.

(b) In the case of an endangered population, whether the action proposed is likely to have an adverse effect on the life cycle of the species that constitutes the endangered population such that a viable local population of the species is likely to be placed at risk of extinction.

Not applicable. Coastal Sand Bangalay Forest is not a threatened population.

(c) In the case of an endangered ecological community or critically endangered ecological community, whether the action proposed:

(i) is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or

(ii) is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction.

The proposed action is located approximately 80 metres upslope from Coastal Sand Bangalay Forest. No area of Coastal Sand Bangalay Forest EEC will be removed for the proposed action. The 80 metres of Coastal Sand Apple-Bloodwood Forest occurring between the boundary of Coastal Sand Bangalay Forest EEC and the proposed action will be retained within the study area; indirect impacts of the proposed action on Coastal Sand Bangalay Forest EEC are unlikely. The small-scale construction activities within the development footprint are and selective clearing for the establishment of the APZ is unlikely to significantly increase the volumes of sediments carried downslope to Coastal Sand Bangalay Forest, provided that the mitigation measures listed in Section 5 of the Ecological Assessment (RPS 2014) are implemented.

The proposed action is unlikely to have an adverse effect on the extent of Coastal Sand Bangalay Forest such that its local occurrence is likely to be placed at risk of extinction. The proposed action will not substantially or adversely modify the composition of Coastal Sand Bangalay Forest such that its local occurrence is likely to be placed at risk of extinction.

(d) In relation to a habitat of a threatened species, population or ecological community:

(i) the extent to which habitat is likely to be removed or modified as a result of the action proposed, and

(ii) whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed action, and

(iii) the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species, population or ecological community in the locality.

The proposed action will not result in the removal of Coastal Sand Bangalay Forest EEC that occurs in the study area. The retention of Coastal Sand Bangalay Forest and adjoining vegetation communities within the study area will not result in the fragmentation or isolation of this EEC from other areas of habitat. The long-term survival of Coastal Sand Bangalay Forest EEC occurring in and adjoining the study area (and in the locality) is unlikely to be impacted by the proposed action.

(e) Whether the action proposed is likely to have an adverse effect on critical habitat (either directly or indirectly).

No area has been designated as 'critical habitat' under the TSC Act for Coastal Sand Bangalay Forest.

(f) Whether the action proposed is consistent with the objectives or actions of a recovery plan or threat abatement plan.

There is currently no Recovery Plan in place for Coastal Sand Bangalay Forest EEC. There are no Threat Abatement Plans currently in operation for any Key Threatening Processes threatening Coastal Sand Bangalay Forest EEC.

(g) Whether the action proposed constitutes or is part of a key threatening process or is likely to result in the operation of, or increase the impact of, a key threatening process.

The TSC Act defines a 'key threatening process' as 'a process that threatens, or may have the capability to threaten, the survival or evolutionary development of species, populations or ecological communities'. Schedule 3 of the TSC Act provides a list of the 'key threatening processes' (KTPs). The following KTPs are already in action:

- Loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants.
-

The proposed action is unlikely to exacerbate this KTP. Potential impacts of the proposed action will be reduced and mitigated through the implementation of appropriate controls and mitigation measures during and following construction, as outlined in Section 5 of the Ecological Assessment (RPS 2014).

Conclusion

In light of the consideration of the above seven factors (1-7), the proposed activity is unlikely to have "a significant effect" on Coastal Sand Bangalay Forest EEC as a result of the proposed action, as:

- The proposed action will not have an adverse effect on the extent, or substantially and adversely modify the composition of this EEC;
- The proposed action will not remove, modify or further fragment or isolate a significant area of habitat for this EEC; and
- The proposal does not significantly contribute to any KTP threatening the EEC.

Consequently, a Species Impact Statement is not required to be prepared.

We trust this information is sufficient for your purposes; however should you require any further details or clarification, please do not hesitate to contact the writer by telephone.

Yours sincerely
RPS



Laura Worthington
Senior Ecologist