ABOUT TREES

URBAN TREE AND BUSHLAND MANAGEMENT

1

Hi Jonathan

Appendum to Flora and Fauna Assessment No. 1878 Dated 30/01/17

In response to the flora and fauna report stating that the Alluvial Woodland is a component of the Sydney Coastal River Flat Forest Ecological Community, Penrith City Council advised the applicant that it could not find either Alluvial Woodland or Sydney Coastal River Flat Forest Ecological Community listed under the Biodiversity Conservation Act 2016, or the Threatened Species Conservation Act 1995. It did suspect that they may fall under the definition of River-Flat Eucalypt Forest on Coastal Floodplains.

Council has requested the author of the flora and fauna report to clarify this matter by way of a letter. This letter should confirm listing under the legislation.

Response: The NPWS Vegetation Mapping of the Cumberland Plain (2002) is still online and appears to be the only mapping that comes up under an internet search. This mapping project identifies remnants of Alluvial Woodland occurring within the grounds of the Golf Course

Sydney Coastal River Flat Forest occurs along the extensive riverbanks and floodplains of the Cumberland Plain

In the NPWS vegetation mapping of the Cumberland Plain, two main forms of Sydney Coastal River Flat Forest have been identified — Riparian Forest and Alluvial Woodland.

Riparian Forest is a tall open forest community on alluvial soils adjacent to main river channels, with emergent trees, such as broad leaf apple (Angophora subvelutina), cabbage gum (Eucalyptus amplifolia), bangalay (E. botryoides) and river peppermint (E. elata). The small tree layer often includes wattles, such as white Sally (Acacia floribunda) and coast myall (A. binervia). Originally, the understorey would have had occasional dense pockets of low rainforest vegetation, such as grey myrtle (Backhousia myrtifolia) and a grassy shrub layer with blackthorn (Bursaria spinosa).

Alluvial Woodland occurs along minor watercourses and on terraces adjacent to riparian forest and commonly includes trees such as cabbage gum (E. amplifolia) forest red gum (E. tereticornis) and dense stands of Swamp Oak (Casuarina glauca).

The scientific name of this community has recently been changed to '*River-Flat Eucalypt Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions*

The profile of the *River-Flat Eucalypt Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions (6 July 2019)* make the following comments on its distribution and description;

This EEC is found on the river flats of the coastal floodplains. It has a tall open tree layer of eucalypts, which may exceed 40 m in height, but can be considerably shorter in regrowth stands or under conditions of lower site quality. While the composition of the tree stratum varies considerably, the most widespread and abundant dominant trees include Eucalyptus tereticornis (Forest Red Gum), E. amplifolia (Cabbage Gum), Angophora floribunda (Rough-barked Apple) and A. subvelutina (Broad-leave Apple), Eucalyptus baueriana (Blue Box), E. botryoides (Bangalay) and E. elata (River Peppermint) may be common south from Sydney, E. ovata (Swamp Gum) occurs on the far south coast, E. saligna (Sydney Blue Gum) and E. grandis (Flooded Gum) may occur north of Sydney, while E. benthamii is restricted to the Hawkesbury floodplain.

A layer of small trees may be present, including <u>Melaleuca decora</u>, <u>M. styphelioides</u> (Prickly-leaved Teatree), <u>Backhousia myrtifolia</u> (Grey Myrtle), <u>Melia azaderach</u> (White Cedar), <u>Casuarina</u> <u>cunninghamiana</u> (River Oak) and <u>C. glauca</u> (Swamp Oak).

OEH no longer have a "map" of Threatened Ecological Communities but they do make spatial data layers available via the SEED site.

https://datasets.seed.nsw.gov.au/dataset/map-of-critically-endangered-ecological-communities-nsw-version-3e89bb

I've tried a number of times to access this data, and spent an hour or so on the phone today with someone from OEH. They couldn't get the relevant vegetation layers to become visible either.

So, failing to provide any current mapping, I can confirm that both the Alluvial Woodland and Riparian Forest are components of the Sydney Coastal River Flat Forest Ecological Community, and this was listed as a Threatened Ecological Community under the NSW TSC Act 1995

In 2016, OEH revised the names of the Threatened Ecological Communities, and the 'Sydney Coastal River Flat Forest' is now referred to as the 'River-Flat Eucalypt Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions' under the Biodiversity Conservation Act 2016.

It should be noted that only remnants of this community exist on the site, and the proposed development is unlikely to have a significant impact on this remnant

If you require any further information, please feel free to contact me on 0439 758 658, or by return email

Kind Regards

Lawrie Smith