

TERRESTRIAL ECOSYSTEMS BRANCH
POLICY AND COORDINATION DIVISION

Memorandum

ATTENTION: Gary Williams
FROM: Andrew Webb
DATE: 21 August 2006
SUBJECT: Vegetation Inspection, Capel
FILE NO.: Lot 35 Capel townsite

As requested a preliminary inspection has been undertaken of remnant vegetation within Capel townsite adjacent to the Capel industrial area, three distinct vegetation units as indicated on the attached aerial photograph were noted,

1. A seasonally inundated sumpland *Melaleuca preissiana* low woodland, over *Pericalymma elliptica*, *Hypocalymma angustifolia*, *Hypocalymma ericifolium* closed low heath. This vegetation community is of excellent to pristine vegetation health and noted to include plants of the following significant species

- *Verticordia attenuata* (priority 3 listed species)
- *Bacteria australis* (populations within Capel are at the northern most extent of species distribution)
- *Evandra pauciflora* (habitat specific species the extent of which has declining due to clearing and habitat degradation)

The core of this wetland dependent vegetation has been mapped as resource enhancement category by the Hill et.al. 1996 mapping of wetlands of the Swan Coastal Plain. Except for a regenerating firebreak and a possible reduction in the original extent of this wetland to the north this vegetation community shows no sign of modification and would support high levels of ecological attributes and functions. The management objectives for resource enhancement wetlands, which should be applied to this particular wetland, are for the ultimate management, restoration and protection of their conservation values.

This vegetation community is similar to the Swan Coastal Plain floristic community type 4 (*Melaleuca preissiana* damplands)

2. A low dune community of *Eucalyptus marginata*, *Banksia attenuata*, *Nutysia floribunda* woodland, over *Kunzea glabrescens* tall open scrub, over *Melaleuca thymoides*, *Calytrix fraseri* open heath, over *Phlebocarya ciliata*, *Dasyopogon bromelifolius* herbland, over *Lyginea barbata*, *Hypolaena exsulca* sedgeland. This vegetation community is predominantly of very good vegetation health although edge effect degradation is occurring towards the northern and eastern extents of the community.

A sterile plant of the Franklandia genus was observed within this community, the priority 4 listed species *Franklandia triaristata* is known from the nearby Capel nature reserve. This vegetation community could also support populations of the Declared Rare annual *Drakaea elastica*.

This vegetation community is likely to be the Swan Coastal Plain floristic community type 21b (Southern *Banksia attenuata* woodlands)

3. A seasonally inundated dampland *Eucalyptus calophylla* woodland, over *Melaleuca raphiophylla*, *Melaleuca preissiana*, *Agonis flexuosa* low open forest, over *Melaleuca incana*, *Astartea fascicularis* tall open scrub, over mixed spp. sedgeland. Apart from introduced grass and *Acacia longifolia* weed invasion on the eastern extent this community is of Very Good to Excellent vegetation health.

The brief inspection undertaken indicates the possible presence of two different species of wetland *Cyathochaeta*, further floristic survey work is required to determine the species of these plants and their conservation status.

This wetland dependent vegetation is part of a larger wetland body that has been mapped as multiple use by the Hill et.al. 1996 mapping of wetlands of the Swan Coastal Plain. With the exception of the remnant vegetation upon this and an adjoining location this larger wetland body is cleared of vegetation. Given the healthy intact condition of this remnant of wetland vegetation

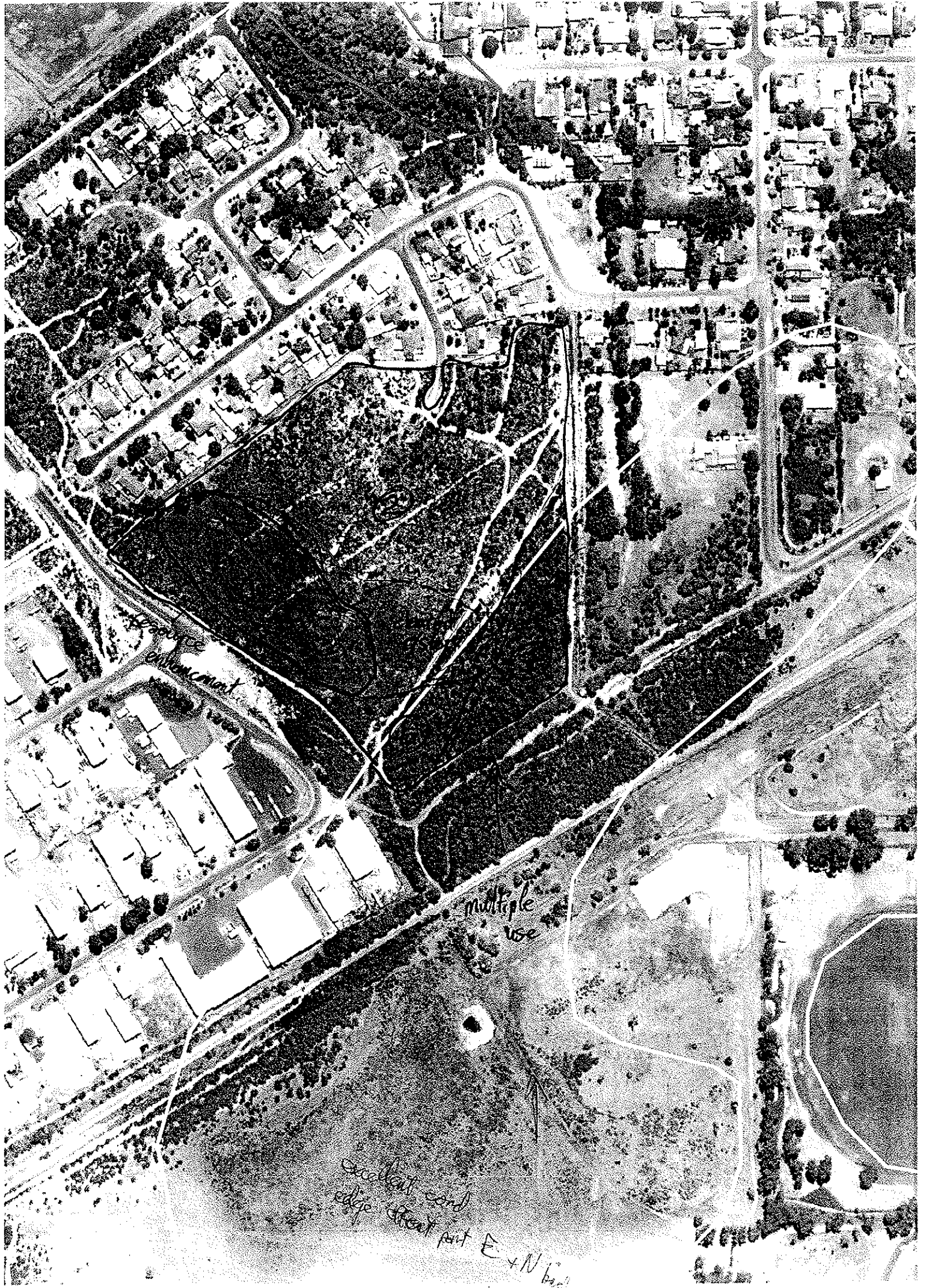
within an overall cleared system it should be protected from further clearing. This vegetation community with the presence of *Agonis flexuosa* and a dense overstorey may potentially support the vulnerably listed Western Ringtail Possum.

While in need of further survey work this vegetation community appears to have some similarity with the Swan Coastal Plain floristic community type 13 (southern wet shrublands).

This location falls within the Southern River vegetation complex as mapped by Heddle et.al (1980), which is a complex that only has 19.8% of its original pre-european extent remaining uncleared. The recommended retention level of the pre-european extent of a vegetation complex is 30%, although in this particular situation this location may be within an area designated as urban under the Greater Bunbury Region scheme and the level of retention may only be for 10% of the pre-european extent.

If any development application was to be submitted for this location, the wetland dependent vegetation units as recognised from the preliminary site visit should be protected from any vegetation clearing under principle (f) of the Environmental Protection (Clearing of Native Vegetation) Regulations 2004, 'Native vegetation should not be cleared if it is growing in, or in association with an environment associated with a watercourse or wetland'. This protection should also include for the provision of a buffer between any development and the wetland vegetation units.

Prior to the assessment of any development application a detailed level 2 floristic survey over the entire area of proposed impact as per the standards outlined within the EPA Guidance Statement no.51 would be required. This survey would need to establish vegetation quadrats within the different vegetation communities to allow for further analysis of the communities against currently recognised Threatened Ecological Communities and/or for the recognition of any new communities that may be present. Any development application would also require the provision of a fauna survey as to the standards of EPA Guidance Statement no.56.



multiple use

excellent sand edge effect part E + N