



***Corymbia calophylla* – *Kingia australis* woodlands on heavy soils (floristic community type 3a as originally described in Gibson *et al.* 1994)**

Summary description

The community occurs on heavy soils of the eastern side of the southern Swan Coastal Plain largely between Capel and Chittering. Typical native taxa in the community are: the tree *Corymbia calophylla* (marri), the shrubs *Banksia dallaneyi* (couch honeypot), *Philotheca spicata* (pepper and salt), *Kingia australis* (kingia) and *Xanthorrhoea preissii* (balga), and the herbs, rushes and sedges *Cyathochaeta avenacea*, *Dampiera linearis* (common dampiera), *Haemodorum laxum*, *Desmocladus fasciculatus*, *Mesomelaena tetragona* (semaphore sedge) and *Morelotia octandra*. The community is also known as 'floristic community type 3a' as originally described in Gibson *et al.* (1994).



Distribution

The community occurs over a range of 224km, from Capel River in the south to Bullsbrook in the north.

Department of Biodiversity, Conservation and Attractions (DBCA) Regions: South West, Swan
DBCA Districts: Blackwood, Perth Hills, Swan Coastal

Local Government Authorities: City of Armadale, City of Gosnells, City of Kalamunda, City of Swan, Shire of Capel, Shire of Murray, Shire of Serpentine-Jarrahdale, Shire of Waroona

Habitat requirements

Marri dominated plant communities were historically probably some of the most common on heavy soils on the eastern side of the Swan Coastal Plain. Gibson *et al.* (1994) recognised three distinct communities in this group. The floristic composition of these communities varies with water regime, with the *Corymbia calophylla* – *Kingia australis* woodlands on heavy soils occurring on the wettest of the sites and being associated with the median species richness, and lowest level of weed invasion and disturbance. Groundwater is generally within 3m of the natural group surface in occurrences of this community, and this indicates that these wetlands likely have a high level of dependence on groundwater.

Indigenous interests

Traditional Owner groups: Pinjarup, Wardandi and Whadjuk Noongar

A register of Aboriginal cultural heritage sites kept by the Department of Planning, Lands and Heritage lists numerous sites of Aboriginal significance in the vicinity of this community's occurrences.

The area is covered by the Gnaala Karla Booja Indigenous Land Use Agreement (ILUA), South West Boojarah ILUA, and Whadjuk People ILUA as part of the South West Native Title Settlement, which formally recognises Noongar people as the Traditional Owners of the south-west region. The ILUA regions are supported by the Gnaala Karla Booja Aboriginal Corporation, Karri Karrak Aboriginal Corporation, Whadjuk Aboriginal Corporation and umbrella group, the South West Aboriginal Land and Sea Council.

Conservation status

State: Listed as a critically endangered ecological community under the *Biodiversity Conservation Act 2016*. Threatened ecological communities are declared environmentally sensitive areas under the *Environmental Protection Act 1986*.

National: Listed as endangered under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* as '*Corymbia calophylla - Kingia australis* woodlands on heavy soils of the Swan Coastal Plain'.

Threatening processes

Major threats to the community include weed invasion, land clearing, hydrological change, too frequent fire, dieback disease caused by *Phytophthora* species, and grazing by introduced herbivores.

Recovery plan

An interim recovery plan has been produced for this community, outlining the recovery actions that are required to reduce threats and maintain or improve its overall condition. Priority actions include monitoring flora and dieback disease, developing and implementing a fire management strategy, controlling weeds, fencing, determining hydrological requirements, and seeking conservation tenure as required.

Key references

Gibson, N., Keighery, B., Keighery, G., Burbidge, A., & Lyons, M. (1994). *A floristic survey of the Southern Swan Coastal Plain*. Unpublished report for the Australian Heritage Commission prepared by the Department of Conservation and Land Management and the Conservation Council of Western Australia (Inc.).

Department of Environment and Conservation (2011). *Corymbia calophylla – Kingia australis woodlands on heavy soil (Swan Coastal Plain Community type 3a – Gibson et al. 1994): Interim Recovery Plan 2011–2016* (Interim Recovery Plan No. 315).

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