



## Unwooded freshwater wetlands of the southern Wheatbelt of Western Australia, dominated by *Duma horrida* subsp. *abdita* and *Tecticornia verrucosa* across the lake floor (Lake Bryde)

### Summary description

The community occurs in freshwater wetlands (Lake Bryde wetland system) of the southern Wheatbelt of Western Australia. The habitat of this community is characterised by intermittent inundation and it sometimes holds little water for several consecutive years. The major components of the community and other biota depend on relatively fresh water and regular drying out of the clay and silt wetland bed for survival. In addition to *Duma horrida* subsp. *abdita* (threatened) and *Tecticornia verrucosa* across the lake floor, the wetlands support fringing open woodlands of *Eucalyptus occidentalis* (flat-topped yate) over *Melaleuca strobophylla* dominated scrub.



### Distribution

The community occurs over a range of 22km in the Lake Bryde wetlands of the southern Wheatbelt, south-east of Lake Grace.

Department of Biodiversity, Conservation and Attractions (DBCA) Region: Wheatbelt


Local Government Authorities: Shire of Kent, Shire of Lake Grace

### Habitat requirements

This community type consists of clay-based playa (temporary) lakes that are typically surrounded by a portion of a rim of lunette dunes and woodlands. These lakes become inundated from a combination of rainfall and surface runoff from the catchment.

### Indigenous interests

Traditional Owner groups: Ballardong, Wagyl Kaip and Southern Noongar



The area is covered by the Ballardong People Indigenous Land Use Agreement (ILUA) and the Wagyl Kaip and Southern Noongar 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 Ballardong Aboriginal Corporation, Wagyl Kaip Southern Noongar 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*.

## Threatening processes

Increased inundation and salinisation are the most significant threats to the community. Due to the increased volume of runoff and high ground water levels, inundation events are occurring more frequently and for longer periods. These events are resulting in increased salt loads and are adversely impacting flora sensitive to salinity and to shallow groundwater tables.

## 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 continued vegetation and hydrological monitoring, managing water quality, revegetating the catchment, preserving genetic diversity, and investigating the potential for translocation of key flora.

## Key references

Chow, W. (2013). *University of Western Australia GEOS5502 Industry Placement Draft Report*. Department of Parks and Wildlife.

Department of Biodiversity, Conservation and Attractions. (2020). *Lake Bryde Landscape Recovery Program: 2020–2040*.

Hamilton-Brown, S. & Blyth, J. (2000). *Unwooded Fresh Water Lakes of the Southern Wheatbelt of Western Australia, dominated by Muehlenbeckia horrida subsp. abdita and Tecticornia verrucosa across the lake floor and, Muehlenbeckia horrida subsp. abdita: Interim Recovery Plan 2001–2006* (Interim Recovery Plan No. 92). Department of Conservation and Land Management.

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