

## Vegetation and Flora of the Muir-Unicup Recovery Catchment

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### Introduction

During the past two years we have been mapping the vegetation, establishing 47 wetland monitoring sites in 27 wetlands and preparing species lists of the flora of 12 of the 13 nature reserves contained in the recovery catchment.

### Vegetation

Vegetation maps have been prepared for all reserves with the exception of Quindinup Nature Reserve (high in the catchment and not under threat from salinity), Cowerup Nature Reserve (very poor access, and will be completed later) and those reserves (Yarnup, Unicup and Kululinup) which had been previously mapped by Ted Griffin.

Vegetation consists of:

A small amount of Tall forest (Yate on the eastern side of Lake Muir) and low forest of fresh water paperbark fringing the larger lakes and creeks and of Salt Water Paperbark on the east of Lake Muir and seepage areas of Little Unicup.

Tall woodlands of Swamp Yate (especially around Lake Unicup) and Jarrah/Marri on laterite (Lake Muir Nature Reserve).

A large variety of woodlands either dominated by jarrah, banksia or various paperbarks (Fresh, Salt and Stout), over a variety of understories depending on site and soil type.

Shrublands or heaths on wet clay flats.

Sedgelands of *Baumea juncea* or *B. articulata* in the large lakes.

The last three vegetation types contain nearly all the rare or restricted flora recorded in the area and are also the areas most at risk from salinity and hydrological change.

The vegetation is very diverse with over 30 vegetation types being mapped in the Lake Muir reserve alone.

### Monitoring Sites

27 monitoring transects have established on a wide variety of wetlands throughout the area.

As well, Lake Noobijup has become a major monitoring wetland for the Salinity Action Plan.

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## Flora

Currently 971 species of vascular plants (flowering plants, conifers and ferns) have been recorded in the area.

These include 2 species of declared rare flora, (the orchids, *Caladinia christinae* and *Diuris drummondii*), and 30 priority species. These priority taxa included the herb *Eryngium* sp (Lake Muir) which is only known from Lake Muir Nature Reserve and *Samolus caespitosus* previously only known from the Stirling Range and near Jerramungup.

Of particular interest were:

The discovery of very large populations of the previously declared rare aquatic sedge (*Schoenus natans*).

The only Western Australian occurrences of the proposed nationally threatened Species, Yellow Eyebright (*Euphrasia scabra*) were located in Lake Muir Nature Reserve.

The only WA occurrences of the unusual carrot relative, *Lilaeopsis polyantha* are also found in seeps around Lake Muir.

## Summary

The vegetation and flora of the recovery catchment is diverse and of high conservation value. Threats to maintaining this biodiversity are disease (dieback and armillaria) in upland areas and hydrological changes (salinity and flooding) to the areas low in the landscape.