## **Commonwealth of Australia**

Inclusion of ecological communities in the list of threatened ecological communities under section 181 of the *Environment Protection and Biodiversity Conservation Act 1999* 

I, IAN CAMPBELL, Minister for the Environment and Heritage, pursuant to section 184(1) of the *Environment Protection and Biodiversity Conservation Act 1999*, hereby amend the list referred to in section 181 of that Act by:

including in the list in the endangered category:

• Upland Wetlands of the New England Tablelands (New England Tableland Bioregion) and the Monaro Plateau (South Eastern Highlands Bioregion), as described in the Schedule to this instrument.

Dated this 15<sup>th</sup> day of November 2005

Ian Campbell
Minister for the Environment and Heritage

## **SCHEDULE**

## Upland Wetlands of the New England Tablelands (New England Tableland Bioregion) and the Monaro Plateau (South Eastern Highlands Bioregion)

The Upland Wetlands of the New England Tablelands (New England Tableland Bioregion) and the Monaro Plateau (South Eastern Highlands Bioregion) ecological community occurs in upland areas of New South Wales (between 700-1400 m above sea level). These upland areas are primarily basalt plateaux, and have a temperate climate with an annual rainfall of less than 1000 mm. The upland wetlands are characterised by an absence, or only small representation, of peat underlying the vegetation.

The majority of wetlands in this ecological community are on basalt-derived soils. The remainder occur on soils derived primarily from granite or silcrete, with a few others on soils based on different rock types. The vegetation of the Upland Wetlands ecological community ranges from closed to mid-dense sedgeland and grasslands which occur on the shores of open water, or extend across shallow or dry wetlands. There are no shrub or tree species that occur naturally within this ecological community. See Table 1 for a list of native species occurring in the Upland Wetlands ecological community.

The wetlands themselves occur in depressions in the landscape. The persistence of the wetlands throughout the year is dependent on the depth of the depression, the depth of the water in the wetland, the catchment area supplying the wetland with water, rainfall patterns, and either past or current disturbances.

Upland Wetlands of the New England Tablelands (New England Tableland Bioregion) and the Monaro Plateau (South Eastern Highlands Bioregion) can occur in three general forms: near permanent (rarely dry); intermittent (often seasonally dry) and ephemeral (without free standing water for a majority of the year).

The near permanent wetlands on the New England Tableland tend to be shallow and have vegetation throughout most of the free-standing water. On the Monaro Plateau, the near permanent wetlands can be much deeper and only support vegetation in the shallower portions, which are mostly near the waterline. These near permanent wetlands support a moderate number of native plant species (around 15 species), and a low number of introduced plant species (around 2 species). The proportion of cover by native species is much greater than that by pasture or weed species.

Intermittent wetlands of this ecological community support a greater variety of native plant species (around 24 species) than the near permanent or ephemeral wetlands. The number of exotic plant species is low (approximately 2 species), and the proportion of ground cover by the exotic species is low. The generally shallow depth of these wetlands enables submerged water plants and emergent water plants to spread across the majority of the wetland. This abundance of vegetation creates a range of microhabitats which are exploited by a large number of native fauna, most noticeably waterbird species.

Ephemeral components of the Upland Wetlands ecological community are without free standing water for a majority of the year. This long period without water gives grazing herbivores access to plants in this ecological community for a longer time than in the intermittent or near permanent wetlands. The result of herbivores having longer access is a greater negative impact on these wetlands than those that have free-standing water for most of the year. This impact can be seen in the greatly reduced number of native plant species (approximately 11 species, including both wet and dry conditions) when compared to the other wetland types in this ecological community.

Due to the greater access by herbivores, ephemeral wetlands have been more heavily degraded than the intermittent or near permanent wetlands. As such, the condition of some ephemeral components of the Upland Wetlands ecological community may be degraded to the extent that they can no longer be considered a part of this ecological community.

The ephemeral wetlands to be excluded from the ecological community have a low native species richness (less than 7 species, including both wet and dry conditions) and/or have an average cover of introduced species of more than 50% of plant cover present.

This ecological community does not include created farm or domestic water storage dams.

**Table 1.** Native plant species that characterise components of the Upland Wetlands of the New England Tablelands (New England Bioregion) and the Monaro Plateau (South Eastern Highlands Bioregion) ecological community. The total flora species list for the ecological community is considerably larger than that given below, with many species present at only some sites, or in very low densities. Species may be present in the ecological community either in the seed bank, or as above-ground individuals. Not every species will be present at every site, and the species composition will be influenced by patch-size, recent environmental conditions, local disturbance history, and site-specific geographic and topographic locations.

New England Tableland Bioregion	South Eastern Highlands Bioregion
Agrostis avenacea	Agrostis avenacea
Brachyscome radicans	Amphibromus nervosus
Carex gaudichaudiana	Carex bichenoviana
Chara sp.	Carex gaudichaudiana
Crassula helmsii	Centipeda cunninghamii
Eleocharis acuta	Crassula helmsii
Eleocharis pusilla	Eleocharis acuta
Eleocharis sphacelata	Eleocharis pusilla
Epilobium billardierianum subsp. cinereum	Eleocharis sphacelata
Eragrostis brownii	Glossostigma elatinoides
Glyceria australis	Hydrocotyle peduncularis
Gnaphalium japonicum	Isolepis platycarpa
Hemarthria uncinata	Lepilaena bilocularis
Hydrocotyle peduncularis	Limosella australis
Hydrocotyle tripartita	Myriophyllum caput-medusae
Juncus fockei	Myriophyllum simulans
Limosella australis	Myriophyllum verrucosum
Myriophyllum propinquum	Neopaxia australasica
Myriophyllum varifolium	Nymphoides montana
Nymphoides geminata	Ottelia ovalifolia
Panicum laevifolium	Persicaria prostata
Poa spp.	Potamogeton tricarinatus
Potamogeton ochreatus	Pratia surrepens
Potamogeton tricarinatus	Ranunculus diminutus
Pratia surrepens	Schoenoplectus pungens
Ranunculus inundatus	Stellaria angustifolia
Stellaria angustifolia	
Utricularia biloba	
Utricularia dichotoma	