

MU 50 NEWNES PLATEAU SHRUB SWAMP

□ CORRESPONDING CLASSIFICATIONS

Regional: FRW130 Blue Mountains-Shoalhaven Hanging Swamps

State: Coastal Heath Swamps / Montane Bogs and Fens

Number of Sites: 7

Average number of identified native species per plot: 19.1

□ DESCRIPTION

This recently listed NSW Endangered Ecological Community (*Newnes Plateau Shrub Swamp in the Sydney Basin Bioregion*) occurs on long gentle open drainage lines on the Newnes Plateau. It forms a dense, wet heath with an unevenly-textured, tussock sedge understorey. Trees are typically absent, although occasional eucalypts do occur where there is greater influence from incoming sediments. The main shrub species are *Baeckea linifolia*, *Boronia deanei*, *Grevillea acanthifolia*, *Epacris* species and *Leptospermum* species. The consistent feature of the ground cover are the



Cyperoid species *Lepidosperma limicola*, and button grass (*Gymnoschoenus sphaerocephalus*) and *Empodisma minus* a members of the Restionaceae. *Xyris*, the yellow flag, is also very common in the community.

While the unit is typically within the Triassic age Narrabeen Sandstone, the community itself occurs within recent alluvial deposits that form in the low-lying, broad valleys of the plateau. They range in elevation from 900 to 1130 metres above sea level, although most are above 1000 metres above sea level. There is usually between 880 millimetres and 1080 millimetres of precipitation *per annum*. This particular swamp community is restricted to the high elevations of the Blue Mountains. While some examples are likely to fall within the Blue Mountains reserve system, the largest patches fall within the Newnes State Forest.

Data analysis suggested a stand alone assemblage associated with the higher elevations of the Newnes Plateau although there is strong overlap with species composition found in the Blue Mountains – Shoalhaven Hanging Swamps of Tindall *et al.* (2004). It may be included within the Coastal Heath Swamps of Keith (2004), although Montane Bogs and Fens class may also be appropriate. The community is included within the Temperate *Highland Peat Swamps on Sandstone* Endangered Ecological Community listed under the Commonwealth EPBC Act 1999.

□ STRUCTURAL SUMMARY

Stratum	Count	AvLowHt	AvHt	maxHt	AvCover	SDcover	minCover	maxCover
T	5	0.64	1.80	2.5	55	7.07	45	60
L1	5	0.01	0.42	0.8	31	18.84	10	60

□ FLORISTIC SUMMARY

Low Trees and Shrubs

Baeckea linifolia, *Banksia marginata*, *Callistemon sieberi*, *Epacris paludosa*, *Grevillea acanthifolia*, *Leptospermum continentale*, *L. grandifolium*, *Pultenaea divaricata*

Ground Covers

Baloskion australe, *Celmisia longifolia*, *Drosera* spp., *Empodisma minus*, *Gleichenia dicarpa*, *Gymnoschoenus sphaerocephalus*, *Lepidosperma limicola*, *Lepyrodia scariosa*, *Olearia quercifolia*, *Patersonia fragilis*, *Viola hederacea*, *Xyris ustulata*

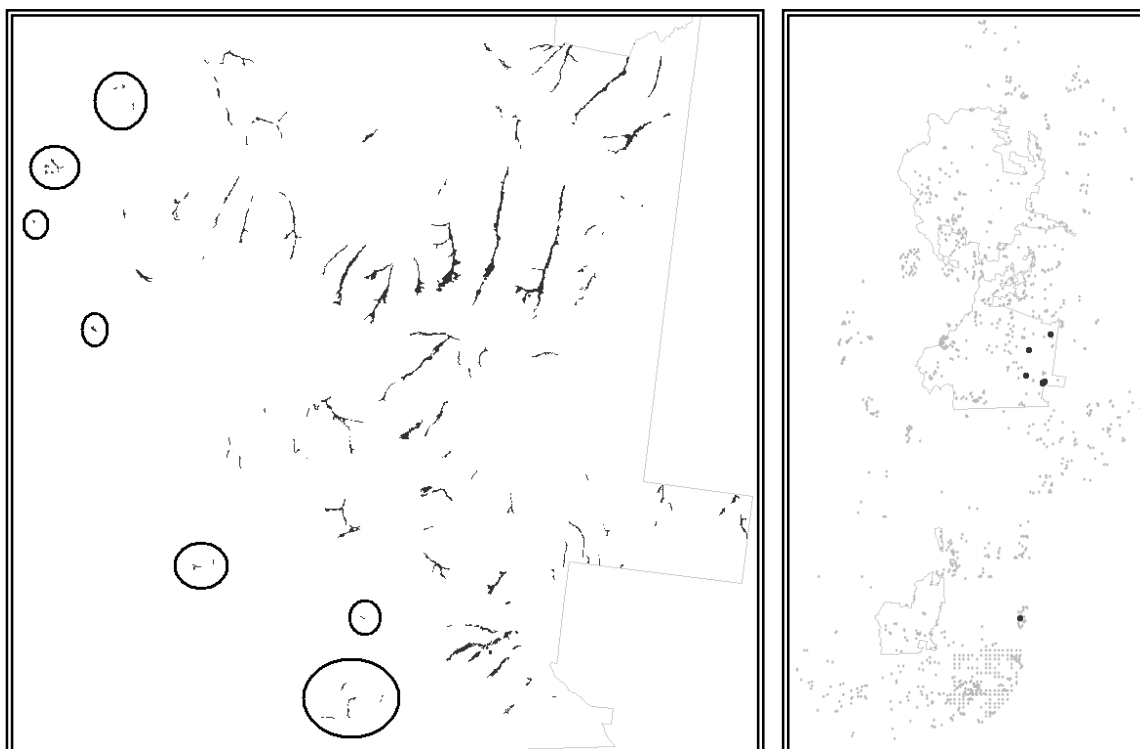
□ KEY IDENTIFYING FEATURES

Easily recognisable features to assist in identifying this map unit are:

- Moderately dense shrub layer (sometimes opened by fire), and very dense understorey of sedges.
- Semi-permanently saturated soils, high in organic matter.
- Found at the lower parts of the landform (lowest footslopes, broad valley floors and alluvial flats).

□ EXAMPLE LOCATIONS

Throughout the Newnes Plateau, in broad valleys of Narrabeen Sandstone.



□ CONDITION ASSESSMENT

Disturbance Class	Area (ha)	Proportion Extant (%)
A Low	229.28	58.18
B Medium	113.13	28.71
C High	51.66	13.11
Total	394.07	100

□ THREATENED PLANT SPECIES

Definite: *Boronia deanei*, *Derwentia blakelyi*

Possible: *Baloskion longipes*, *Carex klaphakei*, *Euphrasia bowdeniae*, *Persoonia hindii*

Community: This community matches the *Newnes Plateau Shrub Swamp in the Sydney Basin Bioregion* Endangered Ecological Community listed under the NSW TSC Act 1995. It is included within the *Temperate Highland Peat Swamps on Sandstone* Endangered Ecological Community listed under the Commonwealth EPBC Act 1999.

□ **DIAGNOSTIC SPECIES**

Species Name	Group Score	Group Freq (%)	Non Group Score	Non Group Freq (%)	Fidelity Class
<i>Baeckea linifolia</i>	2	62.50	2	0.72	positive
<i>Baloskion australe</i>	2	37.50	3	0.40	positive
<i>Banksia paludosa</i>	1	12.50	0	0.00	positive
<i>Boronia deanei</i>	4	12.50	0	0.00	positive
<i>Celmisia longifolia</i>	2	37.50	0	0.00	positive
<i>Empodisma minus</i>	3	100.00	3	0.88	positive
<i>Epacris microphylla</i>	2	37.50	2	4.16	positive
<i>Epacris paludosa</i>	2	75.00	2	0.48	positive
<i>Gleichenia dicarpa</i>	2	37.50	3	1.20	positive
<i>Gonocarpus micranthus</i>	2	37.50	2	0.72	positive
<i>Grevillea acanthifolia</i>	3	87.50	2	0.32	positive
<i>Lepidosperma limicola</i>	3	100.00	3	0.96	positive
<i>Leptospermum continentale</i>	5	37.50	2	1.36	positive
<i>Leptospermum grandifolium</i>	3	87.50	1	0.96	positive
<i>Mitrasacme serpyllifolia</i>	2	37.50	2	0.24	positive
<i>Notochloe microdon</i>	2	25.00	0	0.00	positive
<i>Olearia quercifolia</i>	2	37.50	2	0.16	positive
<i>Pimelea linifolia</i>	2	37.50	1	8.08	positive
<i>Pultenaea divaricata</i>	3	50.00	0	0.00	positive
<i>Utricularia dichotoma</i>	2	12.50	0	0.00	positive
<i>Utricularia uniflora</i>	1	12.50	0	0.00	positive
<i>Viola fuscoviolacea</i>	2	12.50	0	0.00	positive
<i>Viola hederacea</i>	2	37.50	2	16.81	positive
<i>Xanthorrhoea concava</i>	5	12.50	0	0.00	positive
<i>Xanthorrhoea minor</i> subsp. <i>minor</i>	3	12.50	0	0.00	positive
<i>Xyris ustulata</i>	3	87.50	2	0.32	positive
<i>Lomandra filiformis</i>	0	0.00	2	36.43	negative
<i>Lomandra longifolia</i>	1	12.50	2	39.71	negative
<i>Poa sieberiana</i>	3	25.00	2	40.03	negative