

## BULLSBROOK NATURE RESERVE AND ADJACENT BUSHLAND, BULLSBROOK

**Boundary Definition:** protected area/conservation wetland/bushland (part taken to cadastre) boundary

### **SECTION 1: LOCATION INFORMATION**

**Bush Forever Site no.** 292      **Area (ha):** bushland 191.8

**Map no.** 24, 25      **Map sheet series ref. no.** 2134–IV NW, 2134–IV SW

**Other Names:** Location 109 (Keighery, BJ, and Trudgen 1992), part Site — Bullsbrook Nature Reserve

**Local Authorities (Suburb):** Shire of Swan (Bullsbrook)

**Includes CALM Managed Land:** Reserve C1654 (Conservation of Flora and Fauna)

**System 6 (1983):** M14 area of bushland goes beyond System area boundaries, all bushland described

### **SECTION 2: REGIONAL INFORMATION**

#### **LANDFORMS AND SOILS**

##### **Dandaragan Plateau/Gingin Scarp**

Laterite (Ql: G2)

##### **Foothills**

Colluvial Sand (Qc: S5)

Colluvial Sand (Qs: S6)

##### **Pinjarra Plain**

Guildford Formation (Qpa: Mgs1)

##### **Wetlands (within the Pinjarra Plain)**

Holocene Swamp Deposits (Qhw: Cps)

#### **VEGETATION AND FLORA**

##### **Vegetation Complexes**

###### **Scarps**

Reagan Complex

###### **Pinjarra Plain**

Beermullah Complex

##### **Floristic Community Types**

###### **Supergroup 2: Seasonal Wetlands**

5      Mixed shrub damplands

7      Herb-rich saline shrublands in clay pans

11     Wet forests and woodlands

###### **Supergroup 3: Uplands centred on Bassendean Dunes and Dandaragan Plateau**

23a    Central *Banksia attenuata* — *B. menziesii* woodlands (most northerly occurrence)

###### **Supergroup 4: Uplands centred on Spearwood and Quindalup Dunes**

28     Spearwood *Banksia attenuata* or *B. attenuata* — *Eucalyptus* woodlands (eastern representation of this community type)

#### **WETLANDS**

**Wetland Types:** palusplain

**Natural Wetland Groups** (undefined areas included in boundary)

##### **Swan Coastal Plain Rivers**

Ellen Brook (R.3)

**Wetland Management Objectives:** Conservation (56.3ha), Multiple Use

**Swan Coastal Plain Lakes EPP:** none identified

#### **THREATENED ECOLOGICAL COMMUNITIES**

Not assessed, Vulnerable (floristic community type 7)

### **SECTION 3: SPECIFIC SITE DETAIL**

**Landscape Features:** vegetated wetland, creek (seepage at base of eastern dunes), vegetated uplands

**Vegetation and Flora:** limited survey (part Site — Alford 1996a, DEP 1999, Chambers 1997 a&b, Gibson *et al.* 1994 (Bull 01–12), Gray 1994a, Keighery, BJ, and Trudgen 1992); detailed survey (part Site — Keighery, GJ, *et al.* 1997a (Bullsbrook Nature Reserve))

**Structural Units:** mapping (Keighery, BJ, and Trudgen 1992, Keighery, GJ, *et al.* 1997a)  
Uplands: *Eucalyptus marginata* Woodland to Forest; *Eucalyptus calophylla* Woodland; *Banksia attenuata* and *B. menziesii* Woodland with scattered *Eucalyptus todtiana*; *Banksia ilicifolia*, *B. attenuata* and *B. menziesii* Woodland; *Xanthorrhoea drummondii*, *Calothamnus sanguineus*, *Daviesia nudiflora* and *Hakea stenocarpa* Open Low Heath  
Wetlands: *Eucalyptus rudis* Woodland; *Melaleuca preissii* Low Closed Forest; Shrublands dominated by *Melaleuca raphiophylla*, *M. viminea*, *M. uncinata* and *Actinostrobos pyramidalis* and combinations of these; *Melaleuca scabra* and *Verticordia densiflora* Open Low Heath; Mixed Open Heath; Mixed Herbland; Sedgeland dominated by *Meeboldinia cana*, *L. aristatus*, *Anarthria laevis*, *Dielsia stenostachya* and *Lepidosperma longitudinale* and combinations of these; *Lepidosperma longitudinale* and *Baumea vaginalis* Sedgelands; *Cyclosorus interruptus* and *Pteris vittata* Fernland

**Vegetation Condition:** >90% Excellent to Very Good, <10% Good, with areas of severe localised disturbance

**Total Flora:** 440 native taxa, 63 weed taxa (Keighery, GJ, *et al.* 1997a) (estimated >90% of flora of entire Site)

**Significant Flora:** Keighery, GJ, *et al.* 1997a — *Grevillea althoferorum* (R) (southern limit of range, only secure population); *Tripterococcus paniculatus* ms (1), *Eryngium pinnatifidum* subsp. *palustre* ms (2) (northern limit of range), *Stylidium aceratum* (2) (only known population, Lowrie and Kennealy 1999), *Schoenus* sp. Bullsbrook (JJ Alford 915) (2) (only known location), *Haemodorum loratum* (3) (disjunct population), *Lambertia multiflora* var. *darlingensis* (3), *Platysace ramosissima* (3), *Conostephium minus* (4), *Anthotium junciforme* (4), *Myriocephalus appendiculatus* (3), *Stylidium longitubum* (3); *Persoonia angustiflora* and *Grevillea obtusifolia* (southern limit of ranges), *Hakea cristata*, *Cyathochaeta avenacea* and *Pultenaea ericifolia* (northern limit of ranges), *Pteris vittata* and *Cyclosorus interruptus* (disjunct populations), *Podolepis gracilis* (Swamp form), *Eucalyptus marginata* subsp. *thalassica* (only known population on the Swan Coastal Plain), co-occurrence of *Hovea trisperma* var. *grandiflora* and *Hovea trisperma* var. *trisperma*, *Hakea cristata* (only record on the Swan Coastal Plain), swamp and sand forms of *Stirlingia latifolia*, *Philotheca spicata* and *Stylidium brunonianum*, *Tetratheca nuda* (very uncommon on the Plain, confined to a few localities on the foothills of the Darling Range and Dandaragan Plateau), *Melaleuca ryeae*, *Melaleuca brevifolia*

**Fauna:** not known

**Linkage:** canopy linkage to bushland to the east (Site 291); part of Greenway 57 (Tingay, Alan & Associates 1998a); part of a regionally significant fragmented bushland/wetland linkage (Part A, Map 7)

**Other Special Attributes:** part of the Bullsbrook Bushland area recommended for inclusion in a regional park (Keighery, BJ, and Trudgen 1992); area of 'outstanding conservation value' (Keighery, GJ, *et al.* 1997a); part Site — Threatened or Poorly Reserved Plant Community (EPA 1994 GIS); contains plant communities representative of the eastern side of the Swan Coastal Plain

#### **SECTION 4: INTERNATIONAL AND NATIONAL SIGNIFICANCE**

Indicative place (AHC 2000 D) (Gray 1994a, Chambers, 1997 a&b); subject to protection under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*

#### **SECTION 5: SELECTION CRITERIA AND RECOMMENDATIONS**

**Criteria:** Representation of ecological communities, Diversity, Rarity, Scientific or evolutionary importance, General criteria for the protection of wetland, streamline and estuarine fringing vegetation and coastal vegetation

**Recommendation:** Part A: Site with Some Existing Protection; the existing care, control and management of Reserve C1654 is endorsed. Part B: Proposed Parks and Recreation Reservation. Part C: Rural Complementary Mechanism (see Table 3, Volume 1).