

## GREATER BRIXTON STREET WETLANDS, KENWICK

**Boundary Definition:** protected area/bushland (part taken to cadastre)/management boundary (Areas of bushland within the boundaries of the Site are not accurately mapped. The boundary has been drawn to include any unmapped bushland; Areas of bushland within the boundaries of the Site have been recently cleared. The boundary has been drawn to include cleared bushland.)

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

**Bush Forever Site no.** 387

**Area (ha):** bushland 126.7

**Map no.** 49, 55

**Map sheet series ref. no.** 2033-I NE

**Other Names:** Brixton Street Wetlands, Kenwick Swamp/Yule Brook Reserve, Submission Areas 16 and 227, Locations 62–65 (Keighery, BJ, and Trudgen 1992)

**Local Authorities (Suburb):** Shire of Kalamunda (Wattle Grove), City of Gosnells (Kenwick)

**System 6 (1983):** M69 area of bushland goes beyond System area boundaries, all bushland described

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

#### **LANDFORMS AND SOILS**

##### **Pinjarra Plain**

Guildford Formation (Qpa: Cs, Sc)

##### **Bassendean Dunes**

Bassendean Sands (Qpb: S8)

##### **Bassendean Dunes/Pinjarra Plain**

Bassendean Sands over Guildford Formation (Qpb/Qpa: S10)

#### **VEGETATION AND FLORA**

##### **Vegetation Complexes**

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

Guildford Complex

###### **Combinations of Bassendean Dunes/Pinjarra Plain**

Southern River Complex

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

###### **Supergroup 1: Foothills/Pinjarra Plain**

3a *Eucalyptus calophylla* — *Kingia australis* woodlands on heavy soils

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

7 Herb-rich saline shrublands in clay pans

8 Herb-rich shrublands in clay pans

10a Shrublands on dry clay flats (most northern representation, except for outlier at Lake Pinjar)

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

21c Low-lying *Banksia attenuata* woodlands or shrublands

23a Central *Banksia attenuata* — *B. menziesii* woodlands

#### **WETLANDS**

**Wetland Types:** sumpland, palusplain, creek

##### **Natural Wetland Groups**

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

Keysbrook (P.1)

###### **Bassendean—Pinjarra transition OR Bassendean with fluvial features**

Mungala (B/P.2)

**Wetland Management Objectives:** Conservation (144.7ha), Resource Enhancement

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

#### **THREATENED ECOLOGICAL COMMUNITIES**

Not assessed, Critically Endangered (floristic community type 3a), Endangered (floristic community type 10a), Vulnerable (floristic community types 7, 8)

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

**Landscape Features:** vegetated wetland (including claypans), creek (Yule Brook), vegetated uplands

**Vegetation and Flora:** limited survey (DEP 1996, DEP 1999, Gibson *et al.* 1994 (Brix 01–05, Yule 01–05), part Site — Hames Sharley Australia 1991a, Mattiske and Associates 1992); detailed survey (part Site — Goble-Garratt 1991, Keighery, GJ, and Keighery 1991, Keighery, GJ, 1993a, Keighery, BJ, and Keighery 1995, Keighery, BJ 1995b, Keighery, BJ 1995d, Speck and Baird 1984)

**Structural Units:** mapping (Goble-Garratt 1991, Hames Sharley Australia 1991a, Mattiske and Associates 1992, Speck and Baird 1984)

Uplands: *Eucalyptus calophylla* Open Forest to Woodland; *Banksia attenuata* and *B. menziesii* Low Woodland

Wetlands: *Eucalyptus calophylla* Woodland; *Viminaria juncea* Tall Shrubland; *Melaleuca* Tall Shrublands to Closed Tall Scrub dominated by *Melaleuca viminea*, *Melaleuca raphiophylla*, *M. uncinata*, *M. cuticularis* and combinations of these; *Actinostrobilus pyramidalis* Closed Tall Scrub to Shrubland; Closed Heaths to Shrublands dominated by *Regelia ciliata*, *Kunzea recurva*, *Melaleuca lateritia*, *Pericalymma ellipticum* and *Astartea* sp. Brixton; *Verticordia* species and *Calytrix breviseta* subsp. *breviseta* Low Open Heath; mixed Open Low Heaths to Shrublands; *Halosarcia indica* Low Shrubland; Herblands dominated by *Borya* species, *Tribonanthes* species, *Stylidium* species and others in combination; Sedgeland dominated by *Meeboldinia cana*, *C. aristatus*, *M. coangustata*, *Tremulina tremula*, *Cyathochaeta avenacea*, *Lepidosperma rostratum* and combinations of these; *Amphibromus neesii* Grassland

**Scattered Native Plants:** *Banksia attenuata* and *B. menziesii* Low Woodland; *Melaleuca viminea* and *Melaleuca raphiophylla* Closed Tall Scrub — regionally significant vegetation recognised as being included in the area of Site in need of protection

**Vegetation Condition:** >75% Excellent to Very Good, <25% Good to Degraded, with areas of severe localised disturbance

**Total Flora:** >555 native taxa (Keighery, GJ, and Keighery, BJ, 2000) (estimated >80% expected flora)

**Significant Flora:** *Eleocharis keigheryi* (R), *Andersonia gracilis* (R), *Calytrix breviseta* subsp. *breviseta* (R), *Diuris purdiei* (R), *Lepidosperma rostratum* (R), *Hydatella dioica* (R), *Acacia lasiocarpa* var. *bracteolata* (1), *Calandrinia* sp. Kenwick (GJK 10905) (1), *Schoenus pennisetis* (1), *Byblis lindleyi* (2), *Comesperma rhadinocarpum* (2), *Eryngium pinnatifidum* subsp. *palustre* ms (2), *Eryngium subdecumbens* ms (2), *Baeckea tenuifolia* (3), *Chamaescilla gibsonii* ms (3), *Stylidium mimeticum* (3), *Rhodanthe pyrethrum* (3), *Haemodorum loratum* (3), *Triglochin stowardii* (2), *Schoenus capillifolius* (2), *Schoenus benthamii* (3), *Schoenus* sp Waroona (GJK 12235) (3), *Synaphea acutiloba* (3), *Trichocline* sp. Treeton (BJK and NG 564) (3), *Anthotium junciforme* (4), *Aponogeton hexatepalus* (4), *Drosera occidentalis* subsp. *occidentalis*, *Grevillea thelemanniana* (4), *Hydrocotyle lemnoidea* (4), *Verticordia lindleyi* subsp. *lindleyi* (4), *Villarsia submersa* (4); *Melaleuca brevifolia*, *Pimelea imbricata* var. *major*, *Stylidium roseo-alatum*; at least 80 significant taxa are found on the Site of which 30 are restricted in their natural distribution, 16 are endemic to the eastern side of the Swan Coastal Plain, 45 are normally associated with the Darling Scarp or Plateau and 15 are at the southern or northern limit of their ranges.

**Fauna:** structured surveys for birds (41 species), native mammals (1 species), reptiles (19 species) and amphibians (5 species) (How and Dell 1994, Dell 1995). Significant bird species: category 3 (1) and category 4 (4). Significant mammal species: Quenda (Friend 1996 D). Significant reptile species: Rosenberg's Goanna (*Varanus rosenbergi*), Gould's Goanna (*V. gouldii*), legless lizard (*Pletholax gracilis*) and a dragon (*Tympanocryptis adelaidensis*)

**Linkage:** adjacent bushland/canopy to the east (across Welshpool Road to Hartfield Park) and west; part of Greenways 98, 102, 106 (Tingay, Alan & Associates 1998a); part of a regionally significant fragmented bushland/wetland linkage (Part A, Map 7)

**Other Special Attributes:** Outstanding flora diversity with at least 518 native taxa (a third of the taxa recorded for the Swan Coastal Plain); nominated for Register of the National Estate; recommended to be managed as a flora conservation area (Keighery, BJ, and Trudgen 1992); recommended to be designated as the Yule Brook Nature Reserve (Conservation Council of WA 1994); an area of long-term research studies and a reference area for identification of flora of the eastern side of the Swan Coastal Plain; Planning Control Area (WAPC/142 24–9–1996); Threatened or Poorly Reserved Plant Community (EPA 1994 GIS); majority Site Category One and Two Areas Middle Canning Catchment Study (Evangelisti & Associates *et al.* 1995); contains plant communities representative of the eastern side of the Swan Coastal Plain

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

Directory of Important Wetlands in Australia; Entered in the Interim List of the Register of the National Estate; 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 parts of the Site reserved for Parks and Recreation in the MRS should be purchased for National Park, Conservation Park, Nature Reserve or Regional Park. Part B: Other Government Land Mechanism (see Table 3, Volume 1).