

## THOMSONS LAKE NATURE RESERVE AND ADJACENT BUSHLAND, BEELIAR

**Boundary Definition:** protected area boundary

### SECTION 1: LOCATION INFORMATION

**Bush Forever Site no.** 391

**Area (ha):** bushland 366.7 (Site also includes open water.)

**Map no.** 58, 59

**Map sheet series ref. no.** 2033-1 SW

**Other Names:** part of Beeliar Regional Park, Part Submission Area 18

**Local Authorities (Suburb):** City of Cockburn (Success)

**Includes CALM Managed Land:** Reserve 15556 (Fauna Conservation and Research and Drainage)

**System 6 (1983):** Part M93 Part System area bushland, only bushland described

### SECTION 2: REGIONAL INFORMATION

#### LANDFORMS AND SOILS

##### Bassendean Dunes

Bassendean Sands (Qpb: S8)

##### Bassendean Dunes/Pinjarra Plain

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

##### Spearwood Dunes

Sands derived from Tamala Limestone (Qts: S7)

##### Wetlands (within the Spearwood/Bassendean Dune interface)

Holocene Swamp Deposits (Qhw: Cps, Ms5)

#### VEGETATION AND FLORA

##### Vegetation Complexes

###### Bassendean Dunes

Bassendean Complex — Central and South (at or near interface of Bassendean Complex — Central and South and Karrakatta Complex — Central and South)

###### Spearwood Dunes

Karrakatta Complex — Central and South

Cottesloe Complex — Central and South

###### Wetlands

Herdsmen Complex

**Floristic Community Types:** \*not sampled, types inferred

##### Supergroup 2: Seasonal Wetlands

\*11 Wet forests and woodlands

\*12 *Melaleuca teretifolia* and/or *Astartea* aff. *fascicularis* shrublands

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

24 Northern Spearwood shrublands and woodlands

\*28 Spearwood *Banksia attenuata* or *B. attenuata* — *Eucalyptus* woodlands

#### WETLANDS

**Wetland Types:** lake, dampland, sumpland, creek, artificial channel

##### Natural Wetland Groups

###### Bassendean Dunes

Jandakot (B.3)

###### Spearwood—Bassendean interface

Bibra (S/B.1)

**Wetland Management Objectives:** Conservation (367.4ha), Resource Enhancement, Multiple Use

**Swan Coastal Plain Lakes EPP:** 33.0ha + 13.9ha + 237.3ha = 284.2ha (total)

#### THREATENED ECOLOGICAL COMMUNITIES

Not assessed



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

**Landscape Features:** open water, vegetated wetland, vegetated uplands

**Vegetation and Flora:** limited survey (Crook and Evans 1981, EPA and WAWA 1990, Gibson *et al.* 1994 (Thom 01–02), Newman 1976, Weston 1993)

**Structural Units:** mapping (Crook and Evans 1981, EPA and WAWA 1990, Newman 1976)

Uplands: *Eucalyptus marginata* Low Open Forest; *Banksia attenuata* and *B. menziesii* Low Open Forest and Low Woodland with *Eucalyptus marginata* and *E. tottiana*; mixed Low Heath

Wetlands: *Eucalyptus rudis*, *Melaleuca preissiana* and *M. raphiophylla* Open Forests to Low Woodland; *Eucalyptus tottiana* and *Melaleuca preissiana* Low Open Forest to Low Woodland; *Acacia* sp. Closed to Open Tall Scrub; *Melaleuca teretifolia* Low Open Forest; *Baumea articulata* and *Typha* sp. Closed Sedgeland

**Scattered Native Plants:** not assessed

**Vegetation Condition:** >30% Excellent, >50% Very Good to Good, <20% Degraded, with areas of severe localised disturbance

**Total Flora:** 199 native taxa (Crook and Evans 1981) (estimated >80% expected taxa)

**Significant Flora:** *Dodonaea hackettiana* (4); *Lysinema elegans*

**Fauna:** multiple survey for birds (105 species) (RAOU 1996 D, 23 visits). Important feeding area for large assemblage and population levels of trans-equatorial wading birds protected under the JAMBA/CAMBA treaties. Significant populations of Australasian Shoveler, Hardhead, Blue-billed, Musk and Pink-eared Ducks. Significant bird species: category 1 (2), category 2 (10), category 3 (17) and category 4 (7). Significant mammal species: Quenda (Friend 1996 D)

**Linkage:** adjacent bushland to the north (Site 256, across road), south (Site 392, across road), east and west; part of Greenways 76, 78, 120 (Tingay, Alan & Associates 1998a); part of a regionally significant contiguous bushland/wetland linkage (Part A, Map 7)

**Other Special Attributes:** included in Beeliar Regional Park Proposal (DPUD 1992a)

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

Wetlands of International Importance (Ramsar); Directory of Important Wetlands in Australia; Entered in the Interim List of the Register of the National Estate; location for JAMBA/CAMBA species; 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, Scientific or evolutionary importance, General criteria for the protection of wetland, streamline and estuarine fringing vegetation and coastal vegetation, Criteria not relevant to determination of regional significance, but which may be applied when evaluating areas having similar values

**Recommendation:** Site with Some Existing Protection; the care, control and management of this Site (Reserve 15556) for conservation purposes within Beeliar Regional Park is endorsed (see Table 3, Volume 1).