

SWANBOURNE BUSHLAND, SWANBOURNE/CITY BEACH

Boundary Definition: protected area/bushland boundary

SECTION 1: LOCATION INFORMATION

Bush Forever Site no. 315

Area (ha): bushland 174.9

Map no. 45

Map sheet series ref. no. 2034–II SW

Other Names: not known

Local Authorities (Suburb): City of Nedlands (Swanbourne, Mt Claremont), Town of Cambridge (City Beach, Mt Claremont)

System 6 (1983): M46 area of bushland goes beyond System area boundaries, all bushland described

SECTION 2: REGIONAL INFORMATION

LANDFORMS AND SOILS

Spearwood Dunes

Tamala Limestone (Qtl: LS1)

Quindalup Dunes (Holocene dunes)

Safety Bay Sands (Qhs: S1, S2)

VEGETATION AND FLORA

Vegetation Complexes

Spearwood Dunes

Karrakatta Complex — Central and South

Cottesloe Complex — Central and South

Quindalup Dunes

Quindalup Complex

Floristic Community Types

Supergroup 4: Uplands centred on Spearwood and Quindalup Dunes

29b *Acacia* shrublands on taller dunes

S11 Northern *Acacia rostelifera* — *Melaleuca systema* shrublands

S13 Northern *Olearia axillaris* — *Scaevola crassifolia* shrublands

S14 *Spinifex longifolius* grassland and low shrubland

WETLANDS

No wetlands mapped

THREATENED ECOLOGICAL COMMUNITIES

Not assessed, Not determined

SECTION 3: SPECIFIC SITE DETAIL

Landscape Features: coastal dunes

Vegetation and Flora: detailed survey (part Site — Keighery, GJ, and Keighery 1993; Mitchell McCotter and Ecoscape 1993); limited survey (DEP 1999, Dames and Moore 1986, Griffin and Trudgen 1994 (SW 01–11), Keighery, GJ, 1996 D (M46 01–02))

Structural Units: mapping (part Site — Mitchell McCotter and Ecoscape 1993)

Spearwood Dunes

Uplands — Sands derived from Tamala Limestone and Tamala Limestone: limited in area and vegetation; reflects Quindalup Dunes floristic influence

Quindalup Dunes

Uplands — Oldest dunes and plains (limited area): *Eucalyptus gomphocephala* Woodland; *Callitris preissii* Low Closed Forest to Low Woodland; *Agonis flexuosa* Low Woodland; Open Low Heaths dominated by *Melaleuca systema*, *Acacia rostelifera*, *A. lasiocarpa*, *Calothamnus quadrifidus* over Herblands dominated by *Lomandra maritima*; *Allocasuarina lehmanniana* subsp. *lehmanniana* Closed Tall Scrub; *Acacia rostelifera* Closed Tall Scrub

Uplands — Youngest dunes: Open Low Heaths to Closed Tall Scrub dominated by *Myoporum insulare*, *Scaevola crassifolia*, *Acacia rostelifera*, *Olearia axillaris*

Uplands — Strand: *Spinifex hirsutus* Grassland

Vegetation Condition: >75% Very Good to Good, <25% Good to Degraded

Total Flora: 117 native taxa, 58 weed taxa (Keighery, GJ, and Keighery, 1993c) (estimated >75% expected flora)

Significant Flora: *Lechenaultia linarioides*, *Allocasuarina lehmanniana* (most southern significant population), *Chamelaucium uncinatum* (with Bold Park most southern population), *Callitris preissii*, *Agonis flexuosa* (with Bold Park most northern population)

Fauna: structured survey for birds (57 species), native mammals (1 species) and reptiles (19 species) (How *et al.* 1996). Significant populations of insectivorous passerine birds including Splendid, Variegated and White-winged Fairy-wrens and White-browed Scrubwren. Significant bird species: category 1 (1), category 3 (8) and category 4 (5). Significant reptile species: Bardick (*Echiopsis curtus*)

Linkage: adjacent bushland to the north (Site 312, across road); part of Greenways 1, 18, 20 (Tingay, Alan & Associates 1998a); part of a regionally significant fragmented bushland/wetland linkage (Part A, Map 7)

Other Special Attributes

Meets all six specific coastal reserve criteria —

- (i) Quindalup Dune types: ‘moderate to tall, moderate aged dunes perched on gently undulating Spearwood (Tamala) Limestone surface, with little plain between them; moderate sized coastal Q4 (youngest) dunes’ (Griffin and Trudgen 1994)
- (ii) Continuing natural processes: 220.3ha (174.8ha bushland) of Quindalup Dunes extending to 1.6km inland
- (iii) Shoreline: soft (sandy)
- (iv) Linkage: adjacent to area containing Quindalup/Spearwood Dunes interface; part of semi-contiguous North—South vegetated coastal strip
- (v) Vegetation: four regional floristic groups, diversity of structural groups
- (vi) Habitats: see Fauna section above

SECTION 4: INTERNATIONAL AND NATIONAL SIGNIFICANCE

Not listed

SECTION 5: SELECTION CRITERIA AND RECOMMENDATIONS

Criteria: Representation of ecological communities, Rarity, Maintaining ecological processes or natural systems, 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 intent of the reserve is endorsed. The purpose of the reserve should be amended to include conservation and appropriate mechanisms applied in consultation with the management body. Part B: Local Reserve Mechanism. Part C: Other Government Land Mechanism (see Table 3, Volume 1).