

LEDA AND ADJACENT BUSHLAND, LEDA

Boundary Definition: protected area/bushland (part taken to cadastre and zoning) boundary (Areas of bushland within the boundaries of the Site are not accurately mapped; Boundary adjusted after vegetation survey and negotiations with the land owner(s) in response to submissions to draft *Perth's Bushplan*.)

SECTION 1: LOCATION INFORMATION

Bush Forever Site no. 349
open water.)

Area (ha): bushland 959.8 (Site also includes

Map no. 64, 70, 71
NW

Map sheet series ref. no. 2033–I SW, 2033–II

Other Names: Submission Area 224

Local Authorities (Suburb): Town of Kwinana (Baldivis, Kwinana Beach, Postans, Medina, Calista, Leda, Wellard, East Rockingham), City of Rockingham (Baldivis, East Rockingham)

Includes CALM Managed Land: Nature Reserve 33581 (Conservation of Flora and Fauna)

System 6 (1983): M104 area of bushland goes beyond System area boundaries, all bushland described

SECTION 2: REGIONAL INFORMATION

LANDFORMS AND SOILS

Bassendean Dunes

Bassendean Sands (Qpb: S8)

Spearwood Dunes

Sands derived from Tamala Limestone (Qts: S7)

Tamala Limestone (Qtl: LS1)

Quindalup Dunes (Holocene dunes)

Safety Bay Sands (Qhs: S13)

Wetlands (within the Spearwood and Bassendean Dunes)

Holocene Swamp Deposits (Qhw: Cps)

VEGETATION AND FLORA

Vegetation Complexes

Pinjarra Plain

Serpentine River Complex

Bassendean Dunes

Bassendean Complex — Central and South

Spearwood Dunes

Karrakatta Complex — Central and South

Cottesloe Complex — Central and South

Quindalup Dunes

Quindalup Complex

Floristic Community Types: *not sampled, type inferred

Supergroup 2: Seasonal Wetlands

*19b Woodlands over sedgeland in Holocene dune swales (DEP 1996, equivalent to 19 in Gibson *et al.* 1994)

17 *Melaleuca raphiophylla* — *Gahnia trifida* seasonal wetlands

Supergroup 3: Uplands centred on Bassendean Dunes and Dandaragan Plateau

21a Central *Banksia attenuata* — *Eucalyptus marginata* woodlands

Supergroup 4: Uplands centred on Spearwood and Quindalup Dunes

25 Southern *Eucalyptus gomphocephala* — *Agonis flexuosa* woodlands

28 Spearwood *Banksia attenuata* or *B. attenuata* — *Eucalyptus* woodlands (most southern occurrence sampled)

WETLANDS

Wetland Types: sumpland, artificial channel

Natural Wetland Groups

Pinjarra Plain

Keysbrook (P.1)

Bassendean—Pinjarra transition OR Bassendean with fluvial features

Muchea (B/P.3)

Bassendean Dunes

Jandakot (B.3)

Spearwood—Bassendean interface

Bibra (S/B.1)

Spearwood Dunes

Stakehill (S.4)

Quindalup

Becher (Qu.2)

Wetland Management Objectives: Conservation (109.9ha), Multiple Use

Swan Coastal Plain Lakes EPP: 11.7ha + 4.4ha + 6.4ha + 0.5ha + 3.3ha + 3.6ha = 29.9ha (total)

THREATENED ECOLOGICAL COMMUNITIES

Not assessed, Critically Endangered (floristic community type 19 as defined by Gibson *et al.* 1994)

SECTION 3: SPECIFIC SITE DETAIL

Landscape Features: open water, vegetated wetland, vegetated uplands, dune crest

Vegetation and Flora: limited survey (DEP 1996 (Leda 01–04), DEP 1999, DEP 2000, EPA and WAWA 1990, Gibson *et al.* 1994 (Well 01–02), Weston 1993)

Structural Units: mapping (EPA and WAWA 1990)

Uplands: *Eucalyptus marginata*, *E. gomphocephala* and *Allocasuarina fraseriana* Woodland; *Banksia menziesii*, *Eucalyptus marginata* and *Allocasuarina fraseriana* Low Woodland; *Banksia attenuata* and *B. grandis* Low Woodland; *Banksia attenuata* and *B. menziesii* Low Woodland with scattered emergent *Eucalyptus gomphocephala*; *Eucalyptus gomphocephala* Open Forest; *Acacia saligna* Low Open Forest; *Eucalyptus calophylla* Open Forest

Wetlands: *Eucalyptus rudis* Low Open Forest to Low Forest; *Melaleuca raphiophylla* Low Open Forest to Low Closed Forest; Mixed Closed Sedgeland

Scattered Native Plants: *Eucalyptus gomphocephala* Open Woodland

Vegetation Condition: >70% Excellent to Very Good, <20% Good, 10% Degraded, with areas of severe localised disturbance (Weston 1993)

Total Flora: 129 native species and 31 weed taxa (estimated >60% expected flora) (plot-generated list compiled from DEP 1996 (Leda 01–04), Gibson *et al.* 1994 (Well 01–02))

Significant Flora: *Glischrocaryon aureum* (uncommon in the PMR)

Fauna: limited survey for birds (60 species) (AHC 2000 D). Significant mammal species: Western Brush Wallaby (Halpern Glick Maunsell Pty Ltd and Tingay, Alan & Associates 1991), Quenda (Friend 1996 D)

Linkage: adjacent bushland to the north, south (Site 356, across road), east and west; part of Greenways 85, 86, 87 (Tingay, Alan & Associates 1998a); part of a regionally significant contiguous bushland/wetland linkage (Part A, Map 7)

SECTION 4: INTERNATIONAL AND NATIONAL SIGNIFICANCE

Not listed, Indicative place (AHC 2000 D), subject to protection under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*

SECTION 5: SELECTION CRITERIA AND RECOMMENDATIONS

Criteria: Representation of ecological communities, Rarity, Scientific or evolutionary importance, General criteria for the protection of wetland, streamline and estuarine fringing and coastal vegetation, Criteria not relevant to determination of regional significance, but which may be applied when evaluating areas having similar values

Recommendation: Part A: Site with Some Existing Protection; the existing purpose, care, control and management of Reserve 33581 is endorsed. Part B: Other Government Land Mechanism. Part C: Urban Negotiated Planning Solution (see Table 3, Volume 1).