

## PORT KENNEDY

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

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

**Bush Forever Site no.** 377

**Area (ha):** bushland 674.9

**Map no.** 74, 79

**Map sheet series ref. no.** 2033–II SW, 2033–III NE, 2033–III SE

**Other Names:** Becher Point Wetlands, part of Port Kennedy and Rockingham Lakes Regional Parks

**Local Authorities (Suburb):** City of Rockingham (Port Kennedy, Secret Harbour)

**Includes CALM Managed Land:** Nature Reserve 44077 (Conservation of Flora and Fauna), 45041 (Conservation of Flora and Fauna)

**System 6 (1983):** Part M106 area of bushland goes beyond System area boundaries, only bushland described

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

#### **LANDFORMS AND SOILS**

**Quindalup Dunes** (Holocene dunes)

Safety Bay Sands (Qhs: S2, S13)

**Wetlands (within the Quindalup Dunes)**

Holocene Swamp Deposits (Qhw: Cps)

#### **VEGETATION AND FLORA**

##### **Vegetation Complexes**

**Quindalup Dunes**

Quindalup Complex

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

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

19a Sedgelands in Holocene dune swales (DEP 1996, equivalent to 19 in Gibson *et al.* 1994, English and Blyth 1997)

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

29b *Acacia* shrublands on taller dunes

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

\*S14 *Spinifex longifolius* grassland and low shrubland

#### **WETLANDS**

**Wetland Types:** dampland, sumpland

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

###### **Quindalup**

Cooloongup (Qu.1)

Becher (Qu.2)

Peelhurst (Qu.3)

**Wetland Management Objectives:** Conservation (19.5ha)

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

#### **THREATENED ECOLOGICAL COMMUNITIES**

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

Not determined

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

**Landscape Features:** coastal dunes

**Vegetation and Flora:** detailed survey (Keighery, GJ, and Keighery 1993c; part Site — Trudgen 1989); limited survey (Gibson *et al.* 1994 (PB 01–06))

**Structural Units:** mapping (part Site — Trudgen 1989)

Quindalup Dunes

Uplands — Beach ridge plain: *Olearia axillaris* Open Shrubland to Closed Heath to Closed Tall Scrub; *Scaevola crassifolia* and *Olearia axillaris* Low Open heath to Closed Heath to Open Scrub; Open Heath to Open Low Heaths dominated by *Acacia rostelifera*, *A. lasiocarpa* var. *lasiocarpa*, *Melaleuca systena*, *Olearia axillaris*, *Jacksonia furcellata* and combinations of these over *Austrostipa flavescens* Grassland

Wetlands — Beach ridge plain: *Juncus kraussii* Closed Sedgeland, at times over *Sarcocornia quinqueflora* Closed Herbland; *Isolepis nodosa* and *Baumea juncea* Closed to Open Sedgeland, generally with an overstorey of *Xanthorrhoea preissii*

Strand: *Spinifex longifolius* Grassland

**Scattered Native Plants:** not assessed

**Vegetation Condition:** >60% Very Good to Pristine, <40% Good to Degraded, with areas of severe localised disturbance

**Total Flora:** 172 native taxa, 68 weed taxa (Keighery, GJ, and Keighery 1993) (estimated >90% expected flora)

**Significant Flora:** Keighery, GJ, and Keighery 1993 — *Cryptandra mutila* and *Zygophyllum fruticosum* (southern range end), *Hibbertia cuneiformis* (most northern known population); *Jacksonia furcellata* (floriferous shrub form)

**Fauna:** limited surveys for birds (22 species), native mammals (5 species), reptiles (7 species) and amphibians (3 species) (Binnie & Partners 1988, Tingay, Alan & Associates 1997). Significant mammal species: Western Brush Wallaby and Quenda

**Linkage:** adjacent bushland to the north and east (Site 356, across road); part of Greenways 1, 83 (Tingay, Alan & Associates 1998a); part of a regionally significant fragmented bushland/wetland linkage (Part A, Map 7)

**Other Special Attributes**

Meets all six of the specific criteria for coastal reserves —

- (i) Quindalup Dune types: beach ridge plain
- (ii) Continuing natural processes: 764.2ha (657.9ha bushland) of Quindalup Dunes extending to 4km inland
- (iii) Shoreline: soft (sandy)
- (iv) Linkage: through adjacent Site 356 to Spearwood Dunes
- (v) Vegetation: two regional floristic groups, one of which is a threatened community, areas of vegetation in apparently Pristine condition
- (vi) Habitats: see Fauna section above;

Part Site recommended to be declared an A-class Nature Reserve for the protection of flora and fauna in Gibson *et al.* (1994); wetlands of 'national and international significance' (Semeniuk, V&C Research Group 1991b); majority of Site included in Port Kennedy and Rockingham Parks proposal (Tingay, Alan & Associates 1997)

**SECTION 4: INTERNATIONAL AND NATIONAL SIGNIFICANCE**

Directory of Important Wetlands in Australia; Entered in 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, 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:** Site with Some Existing Protection; the care, control and management of this Site (Reserves 44077, 45041) for conservation purposes within Port Kennedy and Rockingham Lakes Regional Park is endorsed (see Table 3, Volume 1).