

EGERTON MOUND SPRING AND ADJACENT BUSHLAND, ELLENBROOK

Boundary Definition: bushland (part taken to cadastre)/conservation wetland (Boundary adjusted after negotiations with land owner(s) in response to a submission to draft *Perth's Bushplan*.)

SECTION 1: LOCATION INFORMATION

Bush Forever Site no. 22 Area (ha): bushland 20.3
Map no. 31 Map sheet series ref. no. 2034-II NE
Other Names: Submission Area 115, part of Ellenbrook National Estate Area
Local Authorities (Suburb): Shire of Swan (Ellenbrook)

SECTION 2: REGIONAL INFORMATION

LANDFORMS AND SOILS

Pinjarra Plain

Guildford Formation (Qpa: Mgs1)

Bassendean Dunes

Bassendean Sands (Qpb: S8)

Bassendean Dunes/Pinjarra Plain

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

Wetlands (within the Bassendean Dunes)

Holocene Swamp Deposits (Qhw: Cps)

VEGETATION AND FLORA

Vegetation Complexes

Bassendean Dunes

Bassendean Complex — North

Combinations of Bassendean Dunes/Pinjarra Plain

Southern River Complex

Floristic Community Types: *not sampled, types inferred

Supergroup 2: Seasonal Wetlands

*S17 *Eucalyptus rudis* — *Agonis linearifolia* wetlands in Bassendean Dunes

REGIONAL WETLANDS

Wetland Types: sumpland, creek, palusplain

Natural Wetland Groups

Bassendean—Pinjarra transition OR Bassendean with fluvial features

Muchea (B/P.3)

Bassendean Dunes

Jandakot (B.3)

Wetland Management Objectives: Conservation (21.2ha, 12m), Resource Enhancement

Swan Coastal Plain Lakes EPP: none identified

THREATENED ECOLOGICAL COMMUNITIES

Not assessed, Not determined, Critically Endangered (Communities of Tumulus Springs)

SECTION 3: SPECIFIC SITE DETAIL

Landscape Features: vegetated wetland, creek, vegetated uplands

Vegetation and Flora: limited survey (DEP 1999, Jasinska and Knott 1994, GJ Keighery pers. comm.); detailed survey (Tingay, Alan & Associates 1994a)

Structural Units: mapping (Tingay, Alan & Associates 1994a)

Wetlands: *Eucalyptus rudis* Closed Forest to Open Forest, often with *Melaleuca preissiana* and *Banksia littoralis*; *Melaleuca preissiana* Low Woodland to Low Open Woodland, *Melaleuca raphiophylla* Low Closed Forest, often with *Eucalyptus rudis*; Closed Heaths to Open Low Heaths of *Agonis linearifolia*, *Astartea* aff. *fascicularis*,

Hypocalymma angustifolium or *Pericalymma ellipticum*; Sedgeland of *Baumea articulata* or *Cyathochaeta teretifolia*

Vegetation Condition: >90% Excellent to Very Good, <10% Good to Degraded, with small areas of severe localised disturbance

Total Flora: >80 native taxa (Tingay, Alan & Associates 1994a, with additions from Jasinska and Knott 1994 and GJ Keighery pers. comm.) (>75% expected native flora of Site)

Significant Flora: *Cyathochaeta teretifolia* (3), *Aotus cordifolia* (3); *Hibbertia perfoliata*, *Lycopodium serpentinum*; taxa uncommon on the Swan Coastal Plain found in association with permanent freshwater

seepages or springs — *Hibbertia perfoliata*, *Lycopodium serpentinum*, *Goebelobryum unguiculatum*, *Hyalolepidozia longiscypha*

Fauna: structured survey for birds (8 species), native mammals (3 species), reptiles (5 species) and amphibians (5 species) (Tingay, Alan & Associates 1994d). Significant bird species: category 3 (1) and category 4 (1). Significant mammal species: Honey Possum and Quenda (Friend 1996 D). Contains a rich and diverse aquatic invertebrate fauna (Jasinska and Knott 1994)

Linkage: no adjacent bushland; part of Greenway 36 (Tingay, Alan & Associates 1998a)

Other Special Attributes: the only Ellen Brook mound spring studied by Jasinska and Knott (1994) without degraded vegetation and with a new, monotypic genus of amphipod discovered in 1994; only known occurrence of the club moss *Lycopodium serpentinum* and the leafy liverworts *Goebelobryum unguiculatum* and *Hyalolepidozia longiscypha* in the PMR dependent on water regime in spring; National Trust of Australia (WA) Classification; contains part of the area recommended for conservation by Semeniuk, V&C Research Group (1992)

SECTION 4: INTERNATIONAL AND NATIONAL SIGNIFICANCE

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: Urban Negotiated Planning Solution (see Table 3, Volume 1).



















































