Information Sheet on Ramsar Wetlands

Categories approved by Recommendation 4.7 of the Conference of the Contracting Parties.

NOTE: It is important that you read the accompanying *Explanatory Note and Guidelines* document before completing this form.

FOR OFFICE USE ONLY.
DD MM YY

Designation date | Site Reference Number

1. Date this sheet was completed/updated:

August 2000

2. Country:

Australia

3. Name of wetland:

Becher Point Wetlands

4. Geographical coordinates:

32^0 23' S, 115^0 44' E.

5. Elevation: (average and/or max. & min.) a few m above sea level (Australian Height Datum).

6. Area: (in hectares) 677 ha (of which less than 10 % is wetland).

7. Overview: (general summary, in two or three sentences, of the wetland's principal characteristics)

The Site comprises a substantial portion of the system of inter-dunal wetlands associated with Becher Point, on the coast of South-Western Australia. The series of wetlands within the Site exhibits a continuum of development in geomorphology, hydrology and vegetation and is considered by researchers to be a unique wetland system in Western Australia and one of the youngest wetland systems on the Swan Coastal Plain. The sedgelands of the Site are included in the national list of threatened ecological communities.

8. Wetland Type (the applicable codes for wetland types as listed in Annex I of the *Explanatory Note and Guidelines* document.)

Where the type includes options, the relevant options are shown in bold:

Ts (**seasonal**/intermittent freshwater **marshes**/pools).
W (shrub-dominated wetlands).

Please now rank these wetland types by listing them from the most to the least dominant:

W, Ts.

9. Ramsar Criteria: (the applicable criteria; see point 12.)

1 (it contains a representative, rare, or unique example of a natural or near-natural wetland type found within the appropriate biogeographic region).
2 (it supports vulnerable, endangered, or critically endangered species or threatened ecological communities).

Please specify the most significant criterion applicable to the site: 1

10. Map of site included? Please tick *yes* ☒ -or- *no* ☐

(Please refer to the *Explanatory Note and Guidelines* document for information regarding desirable map traits).

11. Name and address of the compiler of this form:

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12. Justification of the criteria selected under point 9. (Please refer to Annex II in the *Explanatory Note and Guidelines* document).

1 The Becher Point Wetlands are an example of shrub swamps and seasonal marshes that have formed in an extensive sequence of inter-dunal depressions that have arisen from seaward advancement of the coastline over recent millennia. This type of wetland system is rare in South-Western Australia. Examples of this type of geomorphological sequence in equally good condition and within a protected area, are rare world-wide.

2 The sedgelands that occur within linear wetland depressions of the Site are included in the national list of threatened ecological communities.

13. General location: (include the nearest large town and its administrative region)

The Becher Point Wetlands are in the City of Rockingham (local authority) in the State of Western Australia (population ca. 1.9 million). The Becher Point Wetlands are 9 km south of the city of Rockingham (population ca. 70,000 in the local government area).

The Becher Point Wetlands Ramsar Site comprises the entire areas of Nature Reserves 44077 and 45041. It includes a substantial part of the suite of approximately 200 discrete, very small wetlands located between Becher Point (Indian Ocean coast) and the Perth-Mandurah Road.

14. Physical features: (e.g. geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; catchment area; downstream area; climate)

The Site is situated in the Perth Basin, in the Quindalup Dunes formation, on the beach ridge plains that form the cuspate foreland at Becher Point. The Site's wetlands are within 0.2-1.5 km of the Indian Ocean. The wetlands comprise chains of microscale linear, ovoid or irregular swamps arranged in about ten groups roughly parallel to the coast, separated by sand ridges.

The Site's wetlands are seasonal: there is usually no surface water in summer-autumn. The fresh surface water of winter is derived primarily from groundwater flow and direct precipitation and generally is less than 0.3 m deep.

Median and mean annual rainfall at Rockingham are 818 mm and 826 mm respectively, mostly falling in May-August. Annual evaporation is about 1900 mm (Semeniuk 1991).

15. Hydrological values: (groundwater recharge, flood control, sediment trapping, shoreline stabilisation etc)

The Site's wetlands possibly contribute to maintenance of groundwater in surrounding areas.

16. Ecological features: (main habitats and vegetation types)

The swamps support sedgeland, tall open-shrubland and/or low open-forest in various spatial arrangements. The sedgeland is dominated by *Baumea articulata*, *B. juncea*, *Typha* spp. and *Lepidosperma* spp. *Bolboschoenus caldwellii* and *Juncus kraussii* also occur; the forest/woodland is dominated by *Melaleuca rhaphiophylla* and *M. hamulosa*, *M. cuticularis*, *M. teretifolia* also occur (Semeniuk 1991). Surrounding areas support mainly open-heathland.

17. Noteworthy flora: (indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc)

The sedgelands of the Site are included in the national list of "Ecological Communities that are Endangered" (Threatened Ecological Communities) under the Commonwealth of Australia's Environment Protection and Biodiversity Conservation Act 1999.

18. Noteworthy fauna: (indicating, e.g., which species are unique, rare, endangered, abundant or biogeographically important; include count data, etc.)

Noteworthy native fauna of the Site includes the quenda (*Isoodon obesulus fusciventer*), carpet python (*Morelia spilota imbricata*), Perth lined lerista (*Lerista lineata*) and black-striped snake (*Neelaps calanotus*). At least four species of amphibians and 21 species of reptiles have been recorded.

19. Social and cultural values: (e.g. fisheries production, forestry, religious importance, archaeological site etc.)

There is strong community support for protection of the natural history values of the Becher Point wetlands.

20. Land tenure/ownership of: (a) site (b) surrounding area

(a). The entire Ramsar Site is within Nature Reserves 44077 and 45041 vested in the National Parks and Nature Conservation Authority (appointed by the Government of Western Australia) for the purposes of "Conservation of Flora and Fauna".

(b). Surrounding areas include freehold (privately owned) land, Government Reserves (e.g. for recreation), Marine Park, other marine waters and Unallocated Crown Land.

21. Current land use: (a) site (b) surroundings/catchment

(a). There is no land use other than nature conservation within the Ramsar Site. There are no facilities at present for nature-based recreation and this type of recreation is currently negligible within the Ramsar Site. Small numbers of anglers traverse the Site in order to undertake beach fishing.

(b). The dominant land use in the surrounding areas is urban (residential), which is increasing; other uses include recreation and rural smallholdings. Human population in the Site's immediate surrounds is in the order of several hundreds of people and is increasing.

22. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land use and development projects: (a) at the site (b) around the site

(a). Some disturbance of the Site by off-road use of motor vehicles has occurred. Potentially important factors include too frequent burning, and invasion by exotic plants.

(b). Groundwater is extracted in the vicinity, to maintain a nearby golf course. Ongoing monitoring to detect impacts, if any, is required under WA Ministerial conditions of development approval.

23. Conservation measures taken: (national category and legal status of protected areas - including any boundary changes which have been made: management practices; whether an officially approved management plan exists and whether it has been implemented)

The Nature Reserves were established in 1996-7. The Site is part of the Rockingham Lakes Regional Park system, which is the subject of a management framework (Tingay and Associates 1997). Preparation of a management plan for the system has begun: consultants have been engaged and a community advisory committee established. Actions undertaken or underway on-site include vermin proof fencing and weed control, fire protection measures and control of public access.

The Water & Rivers Commission has contracted a consultant to develop a groundwater allocation plan that will include the Port Kennedy area (Rockingham Groundwater Area Allocation Plan). As part of this plan, the environmental water requirements of significant wetlands in the area will be assessed.

The Site is listed on the Register of the National Estate.

The sedgelands of the Site are included in the national list of “Ecological Communities that are Endangered” (Threatened Ecological Communities) under the Commonwealth of Australia’s Environment Protection and Biodiversity Conservation Act 1999.

24. Conservation measures proposed but not yet implemented: (e.g. management plan in preparation; officially proposed as a protected area etc.)

There is potential to extend the Ramsar Site in the future, following proposed changes in land tenure and consultation with land managers, to include adjoining parts of the Rockingham Lakes Regional Park (immediately east, also in the Cooloongup Lake area). This would add later stages (up to 7000 years before present) in the Holocene dune/wetland development to the Ramsar site. The Site as currently defined includes wetlands aged up to 4500 years before present.

25. Current scientific research and facilities: (e.g. details of current projects; existence of field station etc.)

The Site is of international significance in terms of research interest in the evolution of wetlands; it presents a rare opportunity for investigation of coastal history, biological succession and palaeoclimate during the past 4500 years. (See Semeniuk 1991 & 1995; Semeniuk *et al.* 1988.)

26. Current conservation education: (e.g. visitors centre, hides, information booklet, facilities for school visits etc.)

No facilities are available at present, however there is considerable potential given the close proximity of urban areas. There are plans to provide information shelters with interpretive signage and also walking paths. An informative brochure has been prepared.

27. Current recreation and tourism: (state if wetland is used for recreation/tourism; indicate type and frequency/intensity)

Low level recreational use of the Site occurs (see items 21 and 26).

28. Jurisdiction: (territorial e.g. state/region and functional e.g. Dept of Agriculture/Dept. of Environment etc.)

Territorial: The State Government of Western Australia.
Functional: The National Parks and Nature Conservation Authority (vesting) and the Western Australian Department of Conservation & Land Management (management).

29. Management authority: (name and address of local body directly responsible for managing the wetland)

The Swan Region, Western Australian Department of Conservation & Land Management.

30. Bibliographical references: (scientific/technical only)

Jaensch, R.P. and Watkins, D. 1999. Nomination of additional Ramsar wetlands in Western Australia. Unpublished technical report by Wetlands International – Oceania for the Department of Conservation & Land Management, Perth.

Lane, J., Jaensch, R. and Lynch, R. 1996. Western Australia. In, ANCA. A Directory of Important Wetlands in Australia. Second edition. Australian Nature Conservation Agency, Canberra.

Semeniuk, V. 1995. The Holocene record of climatic, eustatic and tectonic events along the coastal zone of Western Australia - a review. pp 247-59 in Journal of Coastal Research Special Issue No. 17: Holocene Cycles: climate, sea levels and sedimentation.

Semeniuk, V. and C. Research Group 1991. Wetlands of the City of Rockingham - their classification, significance and management. Report to the City of Rockingham and Western Australian Heritage Committee.

Semeniuk, V., Searle, D.J. and Woods, P.J. 1998. The sedimentology and stratigraphy of a cuspate foreland, southwestern Australia. Journal of Coastal Research 4 (4), 551-564.

Tingay, A. and Associates 1997. Proposed Port Kennedy and Rockingham Parks Management Framework. Western Australian Planning Commission, Perth.

List of Attachments:

- Map of boundary of new Ramsar Site.

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