

Peel-Yalgorup System: assessment against Ramsar criteria		
Group A. Sites containing representative, rare or unique wetland types		
Criterion 1		A wetland should be considered internationally important if it contains a representative, rare, or unique example of a natural or near-natural wetland type found within the appropriate biogeographic region.
Assessment of PYS against this criteria		The site includes the largest and most diverse estuarine complex in south-western Australia and also particularly good examples of coastal saline lakes and freshwater marshes. This criterion was met at designation in 1990 and continues to be met at present.
Group B. Sites of international importance for conserving biological diversity		
Criterion 2	Species and ecological communities	A wetland should be considered internationally important if it supports vulnerable, endangered, or critically endangered species or threatened ecological communities.
Assessment of PYS against this criteria		the Australian context, it is recommended that this criterion should only be applied with respect only to nationally threatened species/communities, listed under the EPBC Act 1999. Only one waterbird species, Australian Painted Snipe, is usually applicable and while there is suitable habitat for the Australian Painted Snipe at this Ramsar site there are no records from the Peel-Yalgorup. Species included in the IUCN Red List as vulnerable or endangered could also be considered in this criterion: a relevant species in this context is the Australasian Bittern (globally Endangered), which formerly occurred and possibly bred at Lake McLarty (and also Mealup) but which seems to have become locally extinct with the demise of extensive sedgeland in that wetland. There may be future occasional occurrences of Australasian Bittern from sedgely habitats within the Ramsar site but regular and/or substantial occurrence would be a pre-requisite for Criterion 2 to be met. (It is interesting to note that the stromatolite community at Lake Richmond is listed as a threatened ecological community whereas the stromatolite community at the Yalgorup Lakes is not so listed.) Therefore, this criterion probably was met (with respect to Australasian Bittern) at the date of listing but is not met at present.
Criterion 3	Species and ecological communities	A wetland should be considered internationally important if it supports populations of plant and/or animal species important for maintaining the biological diversity of a particular biogeographic region.
Assessment of PYS against this criteria		Criterion 3: The site is one of only two locations in south-western Australia and one of very few in the world where living thrombolites occur in inland waters. This criterion was met at designation in 1990 and continues to be met at present.

Criterion 4	Species and ecological communities	A wetland should be considered internationally important if it supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.
Assessment of PYS against this criteria		<p>The basic description of this criterion implies a number of common functions/roles that wetlands provide and the following apply at Peel-Yalgorup Ramsar site, in most if not all cases both at the date of listing and at present:</p> <ul style="list-style-type: none"> • the critical life stage of migration: annual use by large numbers of many species of migratory animals; • the critical life stage of drought refuge: seasonal influx of large numbers of waterbirds from dried out wetlands in surrounding areas, and periodic massive influx from wider regions during drought; • the critical life stage of breeding: regionally and nationally significant colonies of cormorants occurred in the 1980s in paperbark swamp in “Carraburmup Swamp Nature Reserve” (Jaensch et al. 1988) on the south-east side of Peel Inlet (and part of the Ramsar site) and small breeding colonies of pelicans breed now and then on islets in Peel Inlet; in addition, the Yalgorup Lakes are a significant site bioregionally for breeding of Hooded Plover (Birds Australia 2006); • breeding also applies to fishes, crabs and prawns; and • the critical life stage of moulting: shelducks and Musk Ducks that congregate on the open waters of the Ramsar site outside the breeding season are engaging in moult (hence, the birds are flightless for a short period). <p>Therefore this criterion was met at the date of listing and continues to be met.</p>
Criterion 5	Waterbirds	A wetland should be considered internationally important if it regularly supports 20,000 or more waterbirds.
Assessment of PYS against this criteria		The site comprises the most important area for waterbirds in south-western Australia, supporting in excess of 20,000 waterbirds annually, with greater than 150,000 individuals recorded at one time (February 1977). Numbers exceeding 20,000 birds have been recorded in all comprehensive surveys conducted in the 1990s in the Peel-Harvey Estuary. Therefore, this criterion was met at designation in 1990 and continues to be met at present.
Criterion 6	Waterbirds	A wetland should be considered internationally important if it regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.
Assessment of PYS against this criteria		<p>Applying the method detailed in Appendix 3, this criterion is clearly met for a number of waterbirds (both international and Australian). For the majority of these species it is likely that the site met this criterion both at the time of listing and currently. According to the 4th edition of Waterbird Population Estimates, the site regularly supports 1% of the population of:</p> <ul style="list-style-type: none"> Red necked Avocet, Red necked Stint, Red-capped Plover, Hooded Plover Black-winged Stilt, Banded Stilt Curlew Sandpiper

		<p>Sharp-tailed Sandpiper Fairy Tern Musk Duck Grey Teal Australasian Shoveler Australian Shelduck and Eurasian Coot.</p> <p>The 4th edition of Waterbird Population Estimates (WPE; Wetlands International 2006) applies the range 10,000 to 100,000 to the Australian population of the Caspian Tern and, by the WPE methodology (using the upper limit), this equates to a 1% threshold of 1000. With maximum numbers < 500, the site does not support 1% of the population of this species.</p>
Criterion 7	Fish	A wetland should be considered internationally important if it supports a significant proportion of indigenous fish subspecies, species or families, life-history stages, species interactions and/or populations that are representative of wetland benefits and/or values and thereby contributes to global biological diversity.
Assessment of PYS against this criteria		This criteria is very difficult to apply and given the paucity of data from the site it is unable to be determined if this criterion would be met.
Criterion 8	Fish	A wetland should be considered internationally important if it is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend.
Assessment of PYS against this criteria		The Peel-Yalgorup Ramsar Site is important as a nursery and/or breeding and/or feeding ground for at least 50 species of fish and the Peel - Harvey Estuary is a migratory route for the Pouched Lamprey (<i>Geotria australis</i>). Therefore, this criterion was met at designation in 1990 and continues to be met at present.
Criterion 9	Other taxa	A wetland should be considered internationally important if it regularly supports 1% of the individuals in a population of one species or subspecies of wetland-dependent non-avian animal species.
Assessment of PYS against this criteria		The application of this criterion relies on estimates of the total population of non-bird species. In the case of the Peel-Yalgorup this would require population estimates of fish and crustacean species. This criterion cannot be assessed based on current information.