Information Sheet on EAA Flyway Network Sites (SIS) – 2017 version

Available for download from http://www.eaaflyway.net/about/the-flyway/flyway-site-network/

Categories approved by Second Meeting of the Partners of the East Asian-Australasian Flyway Partnership in Beijing, China 13-14 November 2007 - Report (Minutes) Agenda Item 3.13

Notes for compilers:

1. The management body intending to nominate a site for inclusion in the East Asian - Australasian Flyway Site Network is requested to complete a Site Information Sheet. The Site Information Sheet will provide the basic information of the site and detail how the site meets the criteria for inclusion in the Flyway Site Network. When there is a new nomination or an SIS update, the following sections with an asterisk (*), from Questions 1-14 and Question 30, must be filled or updated at least so that it can justify the international importance of the habitat for migratory waterbirds.

2. The Site Information Sheet is based on the Ramsar Information Sheet. If the site proposed for the Flyway Site Network is an existing Ramsar site then the documentation process can be simplified.

3. Once completed, the Site Information Sheet (and accompanying map(s)) should be submitted to the Flyway Partnership Secretariat. Compilers should provide an electronic (MS Word) copy of the Information Sheet and, where possible, digital versions (e.g. shapefile) of all maps.

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1. Name and contact details of the compiler of this form*:

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EAAF SITE CODE FOR OFFICE USE ONLY:

E	A	A	F	0	9	3

2. Date this sheet was completed*:

DD/MM/YYYY

08/10/2004

3. Country*:

Australia

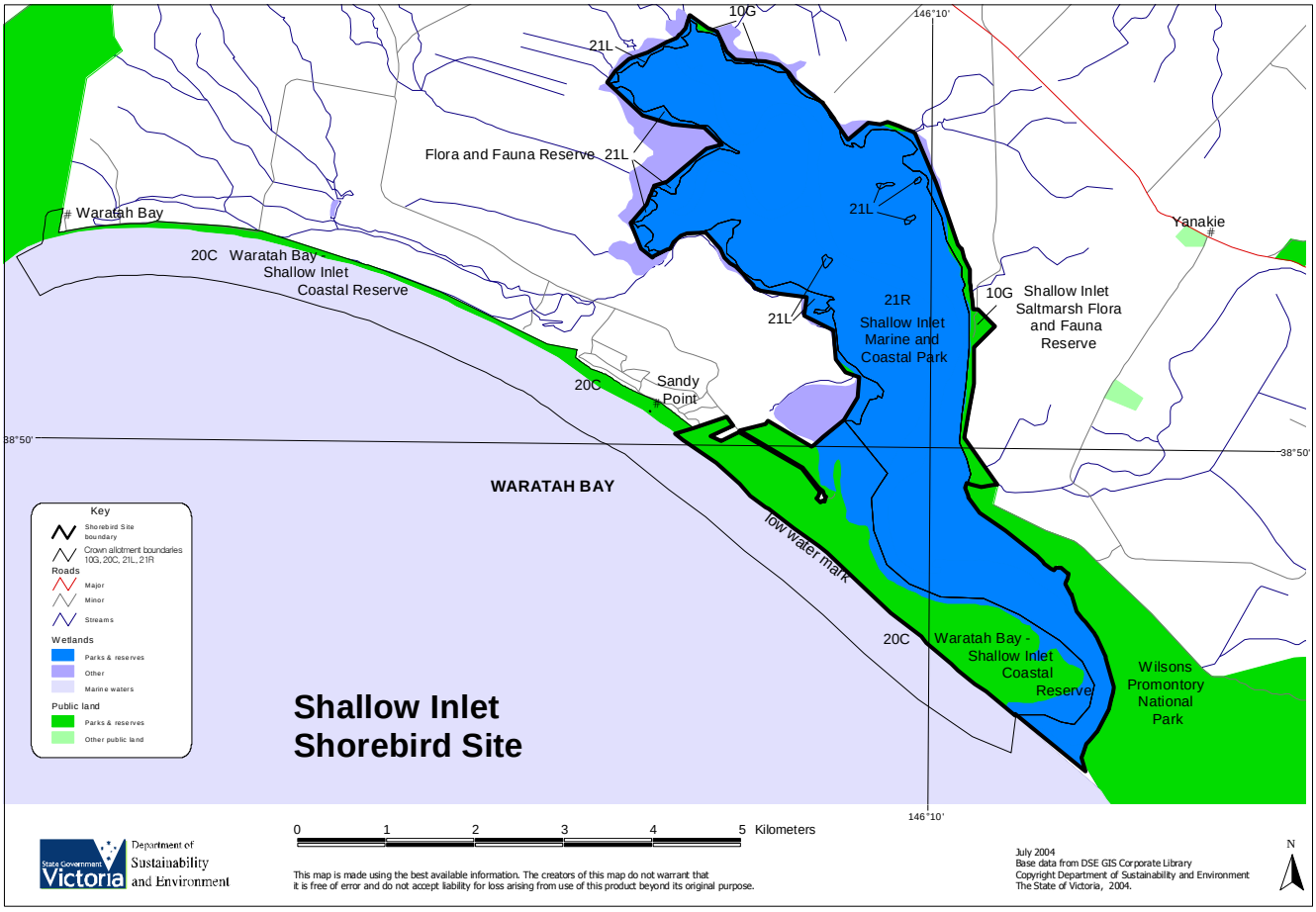
4. Name of the Flyway Network site*:

Accepted English transcription of the Site's name.

Shallow Inlet, Victoria

5. Map of site*:

The most up-to-date available and suitable map of the wetland should be appended to the SIS (only in digital format and shape file). The map must clearly show the boundary of the site. Please refer to the "Digitising Site Boundaries in Google Earth" file linked here.



6. Geographical coordinates (latitude/longitude, in decimal degrees)*:

Provide the coordinates of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas.

Latitude - 38º 50'S, Longitude - 146º 10'E

(Shallow Inlet is located on Victoria's south-east coastline at Waratah Bay, which lies north-west of Wilson's Promontory, near the small town of Sandy Point. The site is 180 kilometres south-east of Melbourne, and the population of Melbourne was 3.6 million in 2003.)

7. Elevation*: (in metres: average and/or maximum & minimum)

From less than 10 metres above sea level to the sea floor in Shallow Inlet.

8. Area*:

The total area of the site, in hectares. If the areas of discrete site units are known, please also list each of these together with the names (or labels) used to identify and differentiate these units.

2,300 hectares

9. General overview of the site*:

A brief (two sentences) summary of the site, mentioning principal physical and ecological functions, and its importance for migratory waterbirds.

Shallow Inlet is a large, wave-dominated estuary in mostly unmodified condition, on Victoria's south-eastern coastline near Wilson's Promontory (OzEstuaries database). The shorebird site includes Shallow Inlet Marine and Coastal Park, the Flora and Fauna Reserve along the western shoreline, on islands in the inlet, and the Shallow Inlet Satltmarsh Flora and Fauna Reserve along the eastern shoreline. Both Reserves are managed as part of the Park. The site also covers the part of the Waratah Bay – Shallow Inlet Coastal Reserve east of Sandy Point township.

The extensive mudflats and sandy intertidal areas provide excellent habitat for shorebirds. Over 16,000 wading birds are recorded in summer, representing 22 species (NRE unpublished draft). In particular, Shallow Inlet is an internationally important site for five species of migratory shorebird: Double-banded Plover (Charadrius bicinctus), Red-necked Stint (Calidris ruficollis), Sanderling (Calidris alba), Curlew Sandpiper (Calidris ferruginea) and Eastern Curlew (Numenius madagascariensis). Eastern Curlew, are classified as Near Threatened in the IUCN Red Databook. The site also supports significant numbers of Pacific Golden Plover and Hooded Plover

10. Justification of Flyway Site Network criteria*:

Please provide waterbird count information (with year of latest count) that demonstrates that the site meets the criteria of the Flyway Site Network (Annex 1). That is:

- it regularly supports > 20 000 migratory waterbirds; or,

- it regularly supports > 1 % of the individuals in a population of one species or subspecies of migratory waterbird; or,
- it supports appreciable numbers of an endangered or vulnerable population of migratory waterbird
- it is a "staging site" supporting > 5 000 waterbirds, or > 0.25% of a population stage at the site.

A listing of the populations of migratory waterbirds covered by the East Asian – Australasian Flyway Partnership and the 1% thresholds is attached (Annex 3).

The "staging site" criterion is particularly difficult to apply and application of this should be discussed with the Secretariat. Also note that some species have several populations that are very difficult to distinguish in the field.

Regularly supports >1% of the individuals in a population of one species or subspecies of migratory shorebirds

The remote location and large area of this site make regular counting difficult, but also contribute to continued habitat health. Therefore, whilst many published counts are over 10 years old and no repeat counts are available for some species, it is assumed that the site does regularly support similar numbers of these species listed below.

Shallow Inlet regularly[#] supports >1% of flyway population of five species of migratory shorebird. The counts exceeding the 1% population threshold were obtained for five species in surveys conducted between 1981and 1990. The counts conducted in 1999, 2001, 2003 and 2004 were only completed for Sanderling. Numbers of Double-banded Plover, Red-necked Stint and Eastern Curlew are likely to remain high at this site, although Curlew Sandpiper numbers have declined since the 1980's at several sites across south-eastern Australia (Jessop, AWSG *pers comm*).

Species common name	Species scientific name	Minimum population estimate for flyway*	SSN 1% Criterion	Shallow Inlet count	Count Dates#	Reference
Curlew Sandpiper	*Calidris ferruginea*	180,000	1,800	1829	02/12/1983	AWSG database
				2235	03/03/1984	AWSG database
				2500	21/1/1985	AWSG database
				2650	9/2/1985	AWSG database
				3500	1/2/1987	AWSG database
Double-banded Plover	*Charadrius Bicinctus*	50,000	500	538	20/4/1984	AWSG database
				597	17/6/1989	AWSG database
Eastern Curlew	*Numenius madagascariensis*	38,000	380	622	12/2/1983	AWSG database
Red-necked Stint	*Calidris ruficollis*	320,000	3,200	4500	06/02/1982	AWSG database
				5421	12/2/1983	AWSG database
				4000	21/02/1981	AWSG database
				3269	15/12/84	AWSG database
				3366	09/02/1985	AWSG database
				3500	01/02/1987	AWSG database
Sanderling	*Calidris alba*	22,000	220	361	21/1/1984	AWSG database
				252	4/2/1984	AWSG database
				230	3/3/1984	AWSG database
				769	1/8/1999	DSE Counts
				282	Jan 2001	DSE Counts
				431	Aug 2001	DSE Counts
				348	Apr 2002	DSE Counts
				300	Feb 2003	DSE Counts
				500	6/2/2004	AWSG database
				400	7/3/2004	AWSG database

* Population estimates from Wetlands International (2002).

\# The majority of sites in the East Asian – Australasian Flyway do not have sufficient count data to meet the Ramsar guidelines for defining the term "regularly supports". Allowance has been made for sites in remote areas where regular count information cannot be collected, and it is accepted that single counts can help establish the relative importance of the site for a species (Ramsar Convention Bureau 2000; Bamford *et al* 2006). Thus at this site, Eastern Curlew is considered to have met the 1% criterion on the basis of a single count.

Supports appreciable numbers of an endangered or vulnerable population of migratory shorebird]
Criteria not met.

Is a staging site supporting >5000 shorebirds or >0.25% of a population stage at this site
Criteria not met.

11. Wetland Types*:

List the wetland types present (see Annex 2). List the wetland types in order of their area in the Flyway Network site, starting with the wetland type with the largest area.

Marine and Coastal Wetlands – A, B, E, G, H, J

A - Permanent shallow marine waters less than six metres deep at low tide; includes sea bays and straits.

B - Marine subtidal aquatic beds; includes kelp beds, sea-grass beds, tropical marine meadows.

E - Sand, shingle or pebble shores; includes sand bars, spits and sandy islets; includes dune systems.

G - Intertidal mud, sand or salt flats.

H - Intertidal marshes: includes salt marshes.

J - Coastal brackish/saline lagoon.

12. Jurisdiction*:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Ministry of Agriculture/Dept. of Environment, etc.

Land management: Parks Victoria and Committees of Management

State: Victorian State Government

Conservation agency: Department of Sustainability and Environment (DSE).

13. Management authority*:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland and the title and/or name and email address/phone number of the person or persons in this office with direct responsibility for managing the wetland.

Area	**Management authority**
1. Shallow Inlet Marine and Coastal Park 2. Flora and Fauna Reserve on western shoreline and islands in the inlet.	Parks Victoria Main Street FOSTER VIC 3690
3. Shallow Inlet Saltmarsh Flora and Fauna Reserve	Shallow Inlet Committee of Management.
4. Waratah Bay – Shallow Inlet Coastal Reserve (east of Sandy Point)	Sandy Point Foreshore Committee of Management.

14. Bibliographical references*:

A list of key technical references relevant to the wetland, including management plans, major scientific reports, and bibliographies, if such exist. Please list Web site addresses dedicated to the site or which prominently feature the site, and include the date that the Web site was most recently updated. When a large body of published material is available about the site, only the most important references need be cited, with priority being given to recent literature containing extensive bibliographies.

Bamford, M., Watkins, D., Bancroft, W., Tischler, G. And Wahl, J. (2006). Shorebirds of the East Asian – Australasian Flyway: Population Estimates and Internationally Important Sites. Wetlands International – Oceania. Canberra, Australia.

Department of Conservation, Forests and Lands (1990). *Shallow Inlet Marine and Coastal Park: Proposed Management Plan*. Department of Conservation, Forests and Lands. Melbourne.

Department of Sustainability and Environment (2003a) Victorian *Flora Information System*.

Department of Natural Resources and Environment, Victoria. (unpublished). Department of Sustainability and Environment (2003b) *Atlas of Victorian Wildlife*. Department of Sustainability and Environment, Victoria.

OzEstuaries Database. http://www.ozestuaries.org. National Land and Water Resources Audit.

Ramsar Convention Bureau. (2000). Strategic Framework and guidelines for the future development of the List of Wetlands of International Importance of the Convention on Wetlands. Ramsar Convention Bureau, Gland. www.ramsar.org/key_guide_list_e.htm

Wetlands International (2002). Waterbird Population Estimates – Third Edition. Wetlands International Global Series No.12, Wageningen, The Netherlands. 226pp.

Wetlands International (unpublished). *Guidelines for preparation of site nomination documentation for the East Asian-Australasian Shorebird Site Network.* Wetlands International - Oceania, Canberra. http://www.deh.gov.au/water/wetlands/mwp/guidelines/index.html

15. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

Shallow Inlet is a large tidal embayment with a single marine connection partly enclosed by a sand barrier complex of spits, bars and mobile sand dunes (CFL 1990). It has a maximum length of 14 kilometres, maximum width of 260 metres, a water area of 503 hectares at low tide and 1168 hectares of saltmarsh and saltflat (OzEstuaries database). The entrance, although constricted and shifting, is permanently open to the sea with the absence of substantial human interference. The inlet is surrounded by dunes, low marshy shorelines and vegetated bluffs. The intertidal sediments include four sub-environments of deposition: salt marsh, coarse grained beaches, fine to medium grained intertidal mud and sand flats, and fine to medium grained sand dunes (CFL, 1990).

Thirteen sites of State, regional and local geological and geomorphological significance have been documented for Shallow Inlet Marine and Coastal Park (CFL, 1990).

16. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, and climate (including climate type).

17. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

Shallow Inlet has a high-tide surface area of 1660 hectares. The catchment of the inlet is 10,400 hectares. It is of low relief and drainage into the inlet is via numerous intermittent creeks and constructed drains. The streams are small, with the largest system being only 20 kilometres long and mostly dry in summer. Shallow Inlet is tidally dominated with negligible freshwater input. The average volume of runoff into the inlet has been estimated at 100 megalitres per tidal cycle or 0.5% of the high tide volume of the inlet. The spring tidal range in Waratah Bay, in which Shallow Inlet is found, is 2.5 metres (CFL, 1990).

18. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Flyway Network site, and the ecosystem services of the site and the benefits derived from them.

Marine and intertidal areas of the inlet are characterised by extensive seagrass meadows which are important nursery areas for fish and other marine life. Beds of *Heterozostera tasmanica* are restricted to deeper water adjacent to the main channels, while *Zostera muelleri*, the most abundant seagrass, is widespread on the tidal flats usually above the low tide mark but also extending below (CFL, 1990). Intertidal sand and mud flats are important feeding areas for resident and migratory shorebirds. The intertidal flats support large beds of bivavle molluscs and armies of the crab *Mictyris platycheles* are a regular sight (NRE, unpublished).

Fringing terrestrial vegetation is largely restricted to a narrow strip around the shoreline 10 to 300 metres wide (CFL, 1990). This vegetation includes:

- coastal woodlands dominated by *Eucalyptus obliqua* or *Banksia integrifolia*;
- coastal scrub communities (*Melaleuca ericifolia* closed scrub or closed dune scrub dominated by *Leptospermum laevigatum*, *Acacia sophorae* and *Leucopogon parviflorus*);
- foredune communities restricted to sandy shores which include introduced species used for dune stabilisation as well as native colonisers such as Coast Fescue *Austrofestuca littoralis* and *Acacia sophorae* and coastal shrub species;
- several different saltmarsh communities dominated by species such as *Samolus repens*, *Sarcocornia quinqueflora*, *Sclerostegia arbuscula*, *Juncus krausii*, *Stipa stipoides*, *Gahnia filum* and, in an area about one hectare in area, the introduced cord grass *Spartina townsendii.*

Seven species are considered to be serious environmental weeds in Shallow Inlet (CFL, 1990). These are *Dipogon lignosus*, *Coprosma repens*, *Rubus fruticosus*, *Thinopyrum junceum*, *Spartina townsendii*, *Euphorbia paralius* and *Pittosporum undulatum*.

Spartina (Cord grass) is major environmental weed which can impact negatively on shorebird habitat. It colonises estuarine areas, leads to the rapid accumulation of sediment, excludes invertebrate life from the soil strata and spreads across tidal flats resulting in the displacement of wading birds from their intertidal feeding grounds (NRE unpublished). Spartina occurred in a very small amount on the western side of the Inlet. It was sprayed with herbicide in April 1994 and successfully controlled. It is likely that *Spartina* can be eradicated from Shallow Inlet (NRE unpublished).

19. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the SIS.*

(Please add here the species which do not come under sec no 14)

Over 180 species, including 37 introduced flora species have been recorded in Shallow Inlet (NRE, unpublished). Significant species include:

- Prom She Oak *Allocasuarina media* (CFL, 1990) which is poorly known in Victoria and suspected of being rare or threatened;
- a *Banksia* species(CFL, 1990) which is yet to be identified which appears to be a distinct taxon;
- Coast Fescue *Austrofestuca littoralis* which is rare in Victoria (DSE 2003a); and
- 53 orchid species of which six are rare in Victoria (NRE unpublished draft).

20. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 10. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the SIS.*

(Please add here the species which do not come under sec no 14)

About 180 species of birds have been recorded in Shallow Inlet. Nineteen bird species are listed under the Japan-Australia Migratory Birds Agreement (JAMBA) and 16 species are listed under the China-Australia Migratory Birds Agreement (CAMBA).

Scientific name	Common Name	JAMBA	CAMBA
Limosa lapponica	Bar-tailed Godwit	✔	✔
Sterna caspia	Caspian Tern	✔	✔
Tringa nebularia	Common Greenshank	✔	✔
Actitis hypoleucos	Common Sandpiper	✔	✔
Calidris ferruginea	Curlew Sandpiper	✔	✔
Numenius madagascariensis	Eastern Curlew	✔	✔

Pluvialis squatarola	Grey Plover	✔	
Heteroscelus brevipes	Grey-tailed Tattler	✔	✔
Gallinago hardwickii	Japanese Snipe	✔	
Sterna albifrons	Little Tern	✔	✔
Tringa stagnatilis	Marsh Sandpiper	✔	✔
Pluvialis fulva	Pacific Golden Plover	✔	✔
Calidris canutus	Red Knot	✔	✔
Calidris ruficollis	Red-necked Stint	✔	✔
Arenaria interpres	Ruddy Turnstone	✔	✔
Calidris alba	Sanderling	✔	✔
Calidris acuminata	Sharp-tailed Sandpiper	✔	✔
Diomedea exulans	Wandering Albatross	✔	
Numenius phaeopus	Whimbrel	✔	✔

Shallow Inlet is of national significance for Pacific Golden Plover *Pluvialis fluva* and an important site for two species of endemic shorebird: Sooty Oystercatcher *Haematopus fuliginosus*, and Hooded Plover *Thinornis rubricollis* of which a maximum of 61 have been recorded at one time. This is more than the 1% population estimate of 50 (Watkins 1993). The inlet is an important breeding area for Red-capped Plover *Charadrius ruficapillus* and Pied Oystercatcher *Haematopus longirostris*. It regularly supports 100 Pied Oystercatcher out of a total population estimated at 11,000.

- Eight species of amphibians and 12 reptiles have been recorded in the Park, including the Swamp Skink which is vulnerable in Victoria (CFL, 1990). A range of mammals occur in the park, including the White-footed Dunnart which is vulnerable in Victoria and the Swamp Antechinus which is near-threatened in Victoria (CFL, 1990). There are also six introduced mammals.

- Threatened and 'at risk' fauna recorded for Shallow Inlet are listed below.

Common name	***Species name***	**Listed under the Victorian *Flora and Fauna Guarantee Act 1988***	**Status in Victoria***
Swamp Antechinus	*Antechinus minimus maritimus*	L	LR
Cape Barren Goose	*Cereopsis novaehollandiae*		LR
Eastern Curlew	*Numenius madagascariensis*		LR
Great Egret	*Ardea alba*	L	Vul
Hooded Plover	*Thinornis rubricollis*	L	Vul
Little Tern	*Sterna albifrons*	L	Vul
Musk Duck	*Biziura lobata*		Vul
Pacific Gull	*Larus pacificus*		LR
Sooty Oystercatcher	*Haematopus fuliginosus*		LR
White-bellied Sea-Eagle	*Haliaeetus leucogaster*	L	Vul
White-footed Dunnart	*Sminthopsis leucopus*		Vul
Yellow-nosed Albatross	*Thalassarche chlororhynchos*		Vul
Swamp Skink	*Egernia coventryi*	L	Vul

Source: Atlas of Victorian Wildlife DSE (2003b) and CFL 1990.

*Status in Victoria

Vul Vulnerable: A taxon that is not Critically Endangered or Endangered but is facing a high risk of extinction in the wild in the medium-term future.

LR Lower Risk – near threatened: A taxon that has been evaluated, does not satisfy the criteria for any of the threatened categories, but which is close to qualifying for Vulnerable.

21. Social, economic and cultural values:

a) *Describe if the site has any general social, economic and/or cultural values e.g., fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values:*

Many aboriginal middens are found along the coast to the west of Shallow Inlet (CFL, 1990).

Shallow Inlet is popular for recreational activities such as fishing, sailboarding, camping and picnicking. A few commercial fishers are licensed to fish within the inlet except between the period 15 December to 15 February. There is also a commercial bait licence for the inlet (NRE unpublished draft).

b) *Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning?* (Double-click the checkbox to check and choose "Checked" under "Default Value" from "Check Box Form Field Options" window)

If yes, tick the box ❑ and describe this importance under one or more of the following categories:

I. Sites which provide a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland: ☐
II. Sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland: ☐
III. Sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples: ☐
IV. Sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland: ☐

22. Land tenure/ownership:

a) Within the Flyway Network site:

Shallow Inlet Shorebird Site is made up of Crown land as shown below.

Area of shorebird site	Land status
Shallow Inlet Marine and Coastal Park	Crown land temporarily reserved under the *Crown Land (Reserves) Act 1978* for the conservation of areas of natural interest or beauty or scientific history or archaeological

	interest and areas for public recreation and managed under the *National Parks Act 1975*.
Flora and Fauna Reserve on western shoreline and islands in the inlet	Crown land temporarily reserved under the *Crown Land (Reserves) Act 1978* for the conservation of native saltmarsh, flora and fauna. Reserve number Rs9805.
Shallow Inlet Saltmarsh Flora and Fauna Reserve	Crown land permanently reserved under the *Crown Land (Reserves) Act 1978* for the protection of the coastline. Reserve number Rs11070
Waratah Bay – Shallow Inlet Coastal Reserve (east of Sandy Point)	Crown land permanently reserved under the *Crown Land (Reserves) Act 1978* for the protection of the coastline. Reserve number Rs10892

b) In the surrounding area:

23. Current land (including water) use:

a) Within the Flyway Network site:

- conservation and recreation.

b) In the surroundings/catchment:

- The northern half of Shallow Inlet Shorebird Site is completely surrounded by freehold agricultural land used predominantly for dairying, sheep grazing and beef cattle production.
- To the south east the site adjoins Wilsons Promontory National Park.
- The south-western boundary adjoins the Waratah Bay – Shallow Inlet Coastal Reserve and the Sandy Point township.

24. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

a) Within the Flyway Network site:

- Recreational activities require careful management to avoid adverse impacts on shorebird habitat and general disturbance to birds, particularly breeding birds. Human visitation is expected to increase if current trends continue (NRE unpublished draft).
- Pest animals, particularly cats and foxes, require careful management to reduce their impact on breeding shorebirds.
- Weeds require careful management to reduce their impact on the native vegetation communities. Although Spartina has been reduced in area it is not yet eradicated.

- Long term changes in the catchment, such as clearing of vegetation, nutrient runoff and erosion can impact negatively on water quality and hydrological regimes.

b) In the surrounding area:

- Development on adjacent freehold land has the potential to impact negatively on the landscape values of the inlet.

25. Conservation measures taken:

a) List national and/or international category and legal status of protected areas, including boundary relationships with the Flyway Network site:

In particular, if the site is partly or wholly a World Heritage Site and/or a UNESCO Biosphere Reserve, please give the names of the site under these designations.

Shallow Inlet Marine and Coastal Park was protected under the *Crown Lands (Reserves) Act* in March 1986. In April 1986 it was declared under the *National Parks Act*. Adjacent flora and fauna reserves are managed by Parks Victoria as part of the park. The park is managed by Parks Victoria and the Sandy Point Foreshore Committee of Management in accordance with the requirements of the Acts. A proposed management plan that was produced for the Park in 1990. The management plan was updated in 1996 but not finalised and published. A community consultative group for Shallow Inlet Marine and Coastal Park was establish in April 1989 to assist with the planning process for the management plan.

The Australasian Wader Studies Group conducts biannual counts of the waders and the Victorian Wader Study Group conducts population monitoring of Sanderling. There are also regular Hooded Plover counts conducted by Parks Victoria rangers.

b) If appropriate, list the IUCN (1994) protected areas category/ies which apply to the site (tick the box or boxes as appropriate, see Annex 3):

Ia ☐; Ib ☐; II ☐; III ☐; IV ☐; V ☐; VI ☐; N/A ☐

c) Does an officially approved management plan exist; and is it being implemented?:

If yes, is it being implemented?: If no, is one being planned?

d) Describe any other current management practices:

26. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc.

The proposed management plan for Shallow Inlet Marine and Coastal Park (CFL 1990) sets out objectives and actions in relation to: boundary amendments and management zones, protection of wildlife, marine communities, flora; physical resources, landscape and cultural resources; management of recreation and visitor activities, facilities and commercial activities; working with adjacent landholders to protect the Park, research and monitoring and park management resourcing. Significant activities proposed but not yet implemented include rationalisation and consolidation of reservations for the Shallow Inlet Marine and Coastal Park.

The proposed management plan will be reviewed in 2006/07.

27. Current scientific research and facilities:

e.g., details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

There are no research facilities at Shallow Inlet.

The Victorian Wader Study Group regularly nets and releases Sanderling, as part of its monitoring programme into the breeding success of this species. This is part of an Australia-wide survey of breeding success for a wide variety of species. Parks Victoria conducts counts of shorebirds between the inlet mouth and the Surf Life Saving Club at Sandy Point.

28. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:

e.g. visitors' centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

Shallow Inlet Marine and Coastal Park is occasionally used by local schools for environmental education and by tertiary institutions as a field site for post-graduate research (mainly geology and geomorphology).

29. Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

Shallow Inlet Marine and Coastal Park is popular for recreational activities such as fishing, sailboarding, camping and picnicking. Total annual day visits to Shallow Inlet are estimated at 45,000. Sandy Point township has a resident population of 170 which peaks to about 4,000 in the summer (NRE unpublished draft).

30. Threats*:

Which of the following threats is present historically – when the threat stopped but the effects are still there (H), currently (C) or potentially (P)?

	Historically	Currently	Potentially
Residential and commercial development			
housing and urban areas	☐	☐	☐
commercial and industrial areas	☐	☐	☐
tourism and recreation areas	☐	☐	☐
Agriculture and aquaculture			
annual and perennial non-timber crops	☐	☐	☐
wood and pulp plantations	☐	☐	☐
livestock farming and ranching	☐	☐	☐
marine and freshwater aquaculture	☐	☐	☐
Energy production and mining			
oil and gas drilling	☐	☐	☐
mining and quarrying	☐	☐	☐
renewable energy	☐	☐	☐
Transportation and service corridors			
roads and railroads	☐	☐	☐
utility and service lines	☐	☐	☐
shipping lanes	☐	☐	☐
flight paths	☐	☐	☐
Biological resource use			
hunting and collecting terrestrial animals	☐	☐	☐
gathering terrestrial plants	☐	☐	☐
logging and wood harvesting	☐	☐	☐
fishing and harvesting aquatic resources	☐	☐	☐
Human intrusions and disturbance			
recreational activities	☐	☐	☐
war, civil unrest and military exercises	☐	☐	☐
work and other activities	☐	☐	☐

Natural system modifications			
fire and fire suppression	☐	☐	☐
dams and water management/use	☐	☐	☐
other ecosystem modifications	☐	☐	☐
Invasive and other problematic species and genes			
invasive non-native/alien species	☐	☐	☐
problematic native species	☐	☐	☐
introduced genetic material	☐	☐	☐
Pollution			
household sewage and urban waste water	☐	☐	☐
industrial and military effluents	☐	☐	☐
agricultural and forestry effluents	☐	☐	☐
garbage and solid waste	☐	☐	☐
air-borne pollutants	☐	☐	☐
excess energy	☐	☐	☐
Geological events			
volcanoes	☐	☐	☐
earthquakes/tsunamis	☐	☐	☐
avalanches/landslides	☐	☐	☐
Climate change and severe weather			
habitat shifting and alteration	☐	☐	☐
droughts	☐	☐	☐
temperature extremes	☐	☐	☐
storms and flooding	☐	☐	☐

Please write here any additional threats and comments/queries you have on the threats.

Annex 1: Criteria for the inclusion of sites in the Flyway Site Network

(From the Partnership Text)

To be considered for inclusion in the Flyway Site Network, this Partnership adopts the following criteria:

a. Convention on Wetlands (Ramsar, Iran, 1971) criteria for internationally important sites for migratory waterbirds. That is:

   Criterion 2: A wetland should be considered internationally important if it supports vulnerable, endangered, or critically endangered species or threatened ecological communities.

   Criterion 5: A wetland should be considered internationally important if it regularly supports 20,000 or more waterbirds.

   Criterion 6: 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.

b. The staging criteria as applied under the Asia - Pacific Migratory Waterbird Conservation Strategy. That is:

   i. A staging site should be considered internationally important if it regularly supports 0.25% of individuals in a population of one species or subspecies of waterbirds on migration.

   ii. A staging site should be considered internationally important if it regularly supports 5,000 or more waterbirds at one time during migration.

c. Under exceptional circumstances a site can be nominated if it supports migratory waterbirds at a level or stage of their life cycle important to the maintenance of flyway populations. Justification of such nominations will be considered by the Partnership on a case by case basis.

Annex 2: Ramsar Classification System for Wetland Type

The codes are based upon the Ramsar Classification System for Wetland Type as approved by Recommendation 4.7 and amended by Resolutions VI.5 and VII.11 of the Conference of the Contracting Parties. The categories listed herein are intended to provide only a very broad framework to aid rapid identification of the main wetland habitats represented at each site.

To assist in identification of the correct Wetland Types to list in section 19 of the RIS, the Secretariat has provided below tabulations for Marine/Coastal Wetlands and Inland Wetlands of some of the characteristics of each Wetland Type.

Marine/Coastal Wetlands

A -- **Permanent shallow marine waters** in most cases less than six metres deep at low tide; includes sea bays and straits.

B -- **Marine subtidal aquatic beds**; includes kelp beds, sea-grass beds, tropical marine meadows.

C -- **Coral reefs**.

D -- **Rocky marine shores**; includes rocky offshore islands, sea cliffs.

E -- **Sand, shingle or pebble shores**; includes sand bars, spits and sandy islets; includes dune systems and humid dune slacks.

F -- **Estuarine waters**; permanent water of estuaries and estuarine systems of deltas.

G -- **Intertidal mud, sand or salt flats**.

H -- **Intertidal marshes**; includes salt marshes, salt meadows, saltings, raised salt marshes; includes tidal brackish and freshwater marshes.

I -- **Intertidal forested wetlands**; includes mangrove swamps, nipah swamps and tidal freshwater swamp forests.

J -- **Coastal brackish/saline lagoons**; brackish to saline lagoons with at least one relatively narrow connection to the sea.

K -- **Coastal freshwater lagoons**; includes freshwater delta lagoons.

Zk(a) – **Karst and other subterranean hydrological systems**, marine/coastal

Inland Wetlands

L -- **Permanent inland deltas**.

M -- **Permanent rivers/streams/creeks**; includes waterfalls.

N -- **Seasonal/intermittent/irregular rivers/streams/creeks**.

O -- **Permanent freshwater lakes** (over 8 ha); includes large oxbow lakes.

P -- **Seasonal/intermittent freshwater lakes** (over 8 ha); includes floodplain lakes.

Q -- **Permanent saline/brackish/alkaline lakes**.

R -- **Seasonal/intermittent saline/brackish/alkaline lakes and flats**.

Sp -- **Permanent saline/brackish/alkaline marshes/pools**.

Ss -- **Seasonal/intermittent saline/brackish/alkaline marshes/pools**.

Tp -- **Permanent freshwater marshes/pools**; ponds (below 8 ha), marshes and swamps on inorganic soils; with emergent vegetation water-logged for at least most of the growing season.

Ts -- **Seasonal/intermittent freshwater marshes/pools on inorganic soils**; includes sloughs, potholes, seasonally flooded meadows, sedge marshes.

U -- **Non-forested peatlands**; includes shrub or open bogs, swamps, fens.

Va -- **Alpine wetlands**; includes alpine meadows, temporary waters from snowmelt.

Vt -- **Tundra wetlands**; includes tundra pools, temporary waters from snowmelt.

W -- **Shrub-dominated wetlands**; shrub swamps, shrub-dominated freshwater marshes, shrub carr, alder thicket on inorganic soils.

Xf -- **Freshwater, tree-dominated wetlands**; includes freshwater swamp forests, seasonally flooded forests, wooded swamps on inorganic soils.

Xp -- **Forested peatlands**; peatswamp forests.

Y -- **Freshwater springs; oases**.

Zg -- **Geothermal wetlands**

Zk(b) – **Karst and other subterranean hydrological systems**, inland

Note: "**floodplain**" is a broad term used to refer to one or more wetland types, which may include examples from the R, Ss, Ts, W, Xf, Xp, or other wetland types. Some examples of floodplain wetlands are seasonally inundated grassland (including natural wet meadows), shrublands, woodlands and forests. Floodplain wetlands are not listed as a specific wetland type herein.

Human-made wetlands

1 -- **Aquaculture** (e.g., fish/shrimp) **ponds**

2 -- **Ponds**; includes farm ponds, stock ponds, small tanks; (generally below 8 ha).

3 -- **Irrigated land**; includes irrigation channels and rice fields.

4 -- **Seasonally flooded agricultural land** (including intensively managed or grazed wet meadow or pasture).

5 -- **Salt exploitation sites**; salt pans, salines, etc.

6 -- **Water storage areas**; reservoirs/barrages/dams/impoundments (generally over 8 ha).

7 -- **Excavations**; gravel/brick/clay pits; borrow pits, mining pools.

8 -- **Wastewater treatment areas**; sewage farms, settling ponds, oxidation basins, etc.

9 -- **Canals and drainage channels, ditches.**

Zk(c) -- **Karst and other subterranean hydrological systems**, human-made

Annex 3: IUCN Protected Areas Categories System

IUCN protected area management categories classify protected areas according to their management objectives. The categories are recognised by international bodies such as the United Nations and by many national governments as the global standard for defining and recording protected areas and as such are increasingly being incorporated into government legislation.

Ia Strict Nature Reserve

Category Ia are strictly protected areas set aside to protect biodiversity and also possibly geological/geomorphical features, where human visitation, use and impacts are strictly controlled and limited to ensure protection of the conservation values.

Ib Wilderness Area

Category Ib protected areas are usually large unmodified or slightly modified areas, retaining their natural character and influence without permanent or significant human habitation, which are protected and managed so as to preserve their natural condition.

II National Park

Category II protected areas are large natural or near natural areas set aside to protect large-scale ecological processes, along with the complement of species and ecosystems characteristic of the area, which also provide a foundation for environmentally and culturally compatible, spiritual, scientific, educational, recreational, and visitor opportunities.

III Natural Monument or Feature

Category III protected areas are set aside to protect a specific natural monument, which can be a landform, sea mount, submarine cavern, geological feature such as a cave or even a living feature such as an ancient grove. They are generally quite small protected areas and often have high visitor value.

IV Habitat/Species Management Area

Category IV protected areas aim to protect particular species or habitats and management reflects this priority. Many Category IV protected areas will need regular, active interventions to address the requirements of particular species or to maintain habitats, but this is not a requirement of the category.

V Protected Landscape/ Seascape

A protected area where the interaction of people and nature over time has produced an area of distinct charcter with significant, ecological, biological, cultural and scenic value: and where safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values.

VI Protected area with sustainable use of natural resources

Category VI protected areas conserve ecosystems and habitats together with associated cultural values and traditional natural resource management systems.