RAMSAR WETLANDS
INFORMATION SHEET

1. Country: New Zealand **2. Date:** October 1992 **3. Ref:** 5NZ002

4. Name and address of compiler: Neil Deans, Department of Conservation, Nelson/Marlborough Conservancy, Private Bag 5, Nelson, NEW ZEALAND.

5. Name of wetland: FAREWELL SPIT

6. Date of Ramsar designation: 13 August 1976

7. Geographical co-ordinates: 172°50'E 40°32'S

8. General location: (e.g. administrative region glen and nearest large town)

Located 38 km from the town of Taka in the Tasman District at the northern extremity of Golden Bay, and the north-west extremity of the South Island of New Zealand. Nearest city - Nelson.

9. Area; (in hectares) included in listed site

Landmass approximately 1961 hectares, intertidal zone approximately 9427 hectares

10. Wetland type: (see attached classification, also approved by Montreux Rec. C.4.7)

AEFGHJKQRT

11. Altitude: (average and/or maximum & minimum)

Sea level to 3 metres

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

Farewell Spit is a classic recurved spit, approximately 30km long, composed predominately of uniform quartz sand derived from rivers draining westwards and transported northward by the westland current. The north is exposed to the Tasman sea but south has extensive tidal mudflats. These provide feeding areas for large numbers of wetland birds. 95 species were recorded on the spit in March 1974, and more than 83 wetland birds are regularly recorded at the spit. The sand dunes provide habitat for a diverse and unusual plant community.

Farewell Spit is listed as a wetland of international importance under the Ramsar Convention.

13. 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 spit is a classic recurved spit. The material forming the spit is derived from erosion of the Southern Alps and West Coast sea cliffs, transported northwards by a longshore current. Since the estimated origin of the spit 6,500 years ago an estimated 2.2m^3 of sand has been deposited per annum. Wind transports more surface sand towards Golden Bay, although the majority of sand lies below ML water mark. The subaerial part of the spit averages about 1km in width, and extends for about 22km eastwards into Golden Bay. It is reported to be extending by 15m annually. At low tide, the sandflats and salt marsh extend for about 6km to the south of the spit. Along the northern coast there is a succession of fairly stable barchans up to 27m height (a dune formation rare in New Zealand). The interdune areas contain a series of damp hollows and small lakes, some of which have fresh water and may be semi-permanent.

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

The vast expanse of intertidal sand and mudflats provides habitat for large numbers of wetland birds. 95 species were recorded on the spit in March 1974, and more than 83 wetland birds are regularly recorded at the spit, notably international and internal migratory wading birds. The variety of dunes and their lack of disturbance from human activity provide habitat for colonies of Caspian and White-fronted terns, gannets and roosts for large flocks of waders (e.g. 27,000 lesser knots, 19,000 eastern bar-tailed godwits, 1,700 turnstones, 8,600 South Island Pied Oystercatchers, 1,300 banded dotterels) and for approximately 14,000 black swans (1992).

Southern fur seals occasionally haul-out and Golden Bay is well known for its not infrequent mass whale strandings, which sometimes occur on the inner Spit.

The dryland areas are almost totally transformed from original light coastal bush, scrub and native grasses, to a predominantly exotic cover dominated by marram grass *(Ammophila arenaria)* and lupin *(Lupinus arboreus),* but with some native manuka *(Leptospermum scoparium),* kanuka *(Kunzea ericoides),* flax *(Phormium tenax),* bracken *(Pteridium aquilinum var esculentum),* sedges *(Carex* spp.) and herbs. Regenerating native forest species include kaitomako *(Pennantia corynbosa),* rimu *(Dacrydium cupressinum)* and some akeake *(Dodonaea viscosa).* The dune hollows and small lakes contain milfoil *(Myriophyllum* spp.), *Glossostigma elatinoides, Limosolla tenuifolia Lilaeopsis orbiculatus,* sand gunnera *(Gunnera arenaria),* sedges *(Carex* spp.), and rushes *(Juncus* spp.). Three threatened, endemic plant species are found in the sand dune communities *Euphorbia galuca,* sand daphne *(Pimelea arenaria),* pingao *(Desmoschoenus spiralis).* The saltmarsh follows a classical development, with eelgrass *(Zostera* spp.) at the lower limit, then distinct zones of glasswort *(Salicornia* spp.), sea rush *(Juncus maritimus var australiensis)* and jointed rush *(Leptocarpus simplex)* and finally a zone of flax near the dunes.

In 1975 all cattle and sheep were removed from the spit, and since then, despite the presence of some deer, the natural vegetation has begun to regenerate. With the character of the vegetated inter-dune areas changing as native hardwood scrub species are colonising the mixed exotic/indigenous grass/herb swards. The emergence of this vegetation is a significant ecological development, as early explorers noted that the spit had 'woody vegetation'. Pingao is also showing signs of regeneration since the removal of cattle and sheep. There is evidence to suggest that this species is now competing successfully with introduced marram grass.

15. Land tenure/ownership of:

(a) site: Crown land.

(b) surrounding areas: Crown land. The surrounding seas have no specially protected status.

16. 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)

(a) protected areas: Farewell Spit (i.e. the entire sandspit) is Crown land, status Nature Reserve, with public entry by permit only. Tourist traffic to the lighthouse is tightly controlled. The Nature Reserve status recognised Farewell Spit's outstanding values. It has been a protected area since 1938 when almost all the land (1,961ha) above high-tide level was set apart as a Flora and Fauna Reserve, and the area uncovered at low tide (then 9,360ha) was set aside as a Sanctuary for the Preservation of Wildlife. Adjoining land is Crown land - Puponga Farm Park which is a gazetted Recreation Reserve, and is the only adjacent land area.

(b) other measures: It is also listed under the Ramsar Convention (a convention of wetlands of international importance especially as waterfowl habitat) on 13 August 1976. The management plan for the nature reserve was revised in 1990, this plan covers both the nature reserve and the adjoining farm park (Farewell Spit Nature Reserve and Puponga Farm Park Management Plan January 1990).

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

(a) existing proposals: A National Park investigation for the entire North West South Island area including the spit and the farm park is presently receiving submissions from interested parties in response to a discussion document put out by the Department of Conservation.

(b) new proposals: Will only occur in the event of changes to protected area legislation or in shown to be necessary to the surrounding seas.

18. Current land use: principal human activities in:

(a) site: Conservation of flora and fauna, and protection of wildlife are the main land uses at the spit. The area continues to be given a high level of protection against human interference. Some tourism occurs, there is currently one tour operator conducting daily tours to visit the lighthouse during the summer months and less frequently for the rest of the year. The lighthouse is unstaffed now, it lies about 20km west of Puponga, with a house and trees adjacent.

(b) surrounding/catchments: Puponga is run as a farm park with access to the public. The primary objective of farm park management is to protect the Spit.

19. Disturbances/threats, including changes in land use and major development projects: (factors which may have a negative impact on the ecological character of the wetland)

(a) at the site: There are no major developments proposed for the area. Introduced Red deer and hares present a threat to the plant communities and especially the threatened plant species. There are still some problems with invasion of other introduced species such as gorse *(Ulex europeus),* blackberry *(Rubus fructicosus),* climbing dock (trials were carried out to find an effective herbicide, these were successful. Although ongoing monitoring is being carried out to ensure this is so.

(b) in the surroundings/catchment: A control programme is underway). A major potential threat would be from an oil spill and plastics dumping from the considerable amount of shipping in the area. Fire is also a major potential threat, especially with the strong winds known from the area in summer. Cockle harvesting nearby in Golden Bay, may have some effect on marine food chains of the area if harvesting exceeds sustainable levels.

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

The wetland plays a major role in food chains, particularly those ending in wading birds.

The sandspit is unique in New Zealand due to its extent and the biota it supports. The processes forming the sandspit have not and probably could not be altered by the hand of man.

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

(a) social values: Nothing significant.

(b) cultural values: The sandspit has high aesthetic value. Maori cultural value is not known. Pingao is highly valued for weaving by Maori.

(c) historic value: The nearby Puponga area had a number of village, midden and pa sites, notably Abel Head and middens on Triangle Flat. Prehistoric Maori use of the Spit is unknown. The coasts were subject to sealing and whaling. Since 1840 there have been 11 shipwrecks on or near the spit. The Spit was leased for grazing from 1874 until 1976.

22. **Noteworthy fauna: (e.g. unique, rare endangered, abundant or biogeographically important species; include count dats etc.)**

95 species were recorded on the spit in March 1974, and more than 83 wetland birds are regularly recorded at the spit, notably international and internal migratory wading birds.

The spit provides habitat for colonies of Caspian and White- fronted terns, gannets (the gannet colony at the end of the spit continues to grow, with over 2,000 adult birds). It also provides roosts for large flocks of migratory waders, including 27,000 lesser knots *(Calidris canutus canutus),*

19,000 eastern bar-tailed godwits *(Limosa lapponica baueri),* 1,700 turnstones *(Arenaria interpres),* 8,600 South Island pied oystercatchers *(Haematopus ostralegus finschi),* 1,300 banded dotterels *(Charadrius bicinctus bicinctus),* black billed gulls *(Larus bulleri).* The spit is a moulting and recovery area for an estimated 14,000 black swans *(Cygnus atratus),* this is approximately 20% of the New Zealand population.

Rare international migratory waders reported include:

grey plover *(Pluvialis squatarola)*
lesser yellowlegs *(Tringa flavipes)*
wandering tattler *(Tringa incana)*
American whimbrel *(Numenius phaeopus hudsonicus)*
terek sandpiper *(Tringa terek)*
western sandpiper *(Calidris mauri)*

Other threatened/unusual species include:

crested tern *(Sterna bergii)*
white-capped noddy *(Anous tenuirostris minutus)*
marsh crake *(Porzana pusilla;* endemic subspecies)
New Zealand dotterel *(Charadrius obscurus;* endemic, status: vulnerable; possibly breeding)
banded dotterel *(C. bicinctus bicinctus;* endemic, status: vulnerable)

23. Noteworthy flora: (e.g. unique, rare, endangered, or biogeographically important species/communities etc.)

Threatened plants include:
Euphorbia galuca (endemic)
sand daphne *(Pimelea arenaria;* endemic)
pingao *(Desmoschoenus spiralis;* endemic)

Unusual plants include:
Spinifex hirsutus - southern most record for the species
sand spike rush *(Eleocharis neozelandcia)* - recently rediscovered here (in its type locality), the species had not been collected in the South Island for many years.

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

The Ornithological Society of New Zealand (OSNZ) and the former Wildlife Service have undertaken bird surveys. OSNZ continue to regularly monitor wader flocks with logistical assistance from the Department of Conservation. The Nelson/Marlborough Fish and Game Council monitor game bird numbers by aerial counts. Various studies have been undertaken to determine the origin and formation of the sandspit. Accommodation is available to scientists through the Department at Puponga and the Lighthouse residence.

25. **Current conservation education: (e.g. visitor centres, hides, information booklet, facilities for school visits etc.)**

None undertaken on site as it is remote, vulnerable and access is prevented to most of it,

although educational materials have been produced which refer to the Reserve.

26. Recreation and tourism: (state if wetland used for recreation/tourism; indicate type & frequency/intensity)

A safari tour operates daily to visit the lighthouse from Collingwood during the summer months and less frequently for the rest of the year. An application has been received for a second tour operator.

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

Management of flora and fauna. and the nature reserve: Department of Conservation, Nelson/Marlborough Conservancy Office (Private Bag 5, Nelson, NEW ZEALAND); with Takka Field Centre of Department of Conservation (PO Box 53, Takaka, NEW ZEALAND) responsible for day to day management.

Resource Consents: The Tasman District Council (Private Bag, Richmond, NEW ZEALAND) has statutory responsibilities under the Resource Management Act 1991 for water resources and the preparation of coastal plans.

Management of sports fish (trout/salmon) and game bird hunting season and licences: The Nelson/Marlborough Fish and Game Council, 66-74 Champion Road, Richmond, NEW ZEALAND. The Fish and Game Council sets quota (bag limits/catch limits) for the game/fishing season; sets the time of the game/fishing season; sets the methods of hunting/fishing; issues game hunting/fishing licences; and carries out enforcement in relation to these functions.

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

Territorial: Tasman District Council

Functional: Department of Conservation, Nelson/Marlborough Conservancy
Nelson/Marlborough Fish and Game Council

29. Bibliographical references: (scientific/technical only)

Davidson, R J et al (1990). Coastal Resource Inventory, First Order, Nelson/Marlborough, Department of Conservation, Nelson.

Jane, G 1991. Farewell Spit Nature Reserve and Puponga Farm Park: A Resource Summary. Department of Conservation, Nelson.

Jane, G 1991. Farewell Spit Nature Reserve and Puponga Farm Park: Management Plan.

Walker, K 1987. Wildlife in the Nelson Region.

30. Reasons for inclusion: (state which Ramsar criteria - as adopted by Rec.C.4.15 of the

Montreux Conference -are applicable)

1(a) Farewell Spit is an example of a classic recurved spit and contains barchans -a dune formation rare in New Zealand.

2(a) Farewell Spit supports an appreciable assemblage of rare, vulnerable or endangered species or subspecies of plants or animals, including:

- New Zealand dotterel (endemic, status: vulnerable)
- banded dotterel (endemic, status: vulnerable)

threatened, endemic plants:

- *Euphorbia galuca*
- sand daphne (*Pimelea arenaria*)
- pingao (*Desmoschoenus spiralis*)

2(b) Farewell Spit is of special value for maintaining the genetic and ecological diversity of the region because of the quality and peculiarities of its flora and fauna, including:

- supporting a large number of bird species - 95 were recorded in 1974, and 83 species are regularly recorded at the spit
- presence of regenerating sand dune communities, containing threatened, endemic plant species *(Euphorbia galuca,* sand daphne *(Pimelea arenaria),* pingao *(Desmoschoenus spiralis).*

2(c) Farewell Spit is of value as the habitat of plants or animals at a critical stage of their biological cycles, including:

- over wintering area for internal and international migratory waders
- habitat for threatened, endemic plant species *(Euphorbia galuca,* sand daphne *(Pimelea arenaria)* pingao *(Desmoschoenus spiralis).*

2(d) Farewell Spit is of special value for its endemic plant or animal species or communities, including:

- New Zealand dotterel
- banded dotterel
- *Euphorbia galuca*
- sand daphne *(Pimelea arenaria)*
- pingao *(Desmoschoenus spiralis)*

3(a) Farewell Spit regularly supports 20,000 waterfowl:

- November/December counts have recorded in the order of 33,000 waders (OSNZ Wader Counts)
- June/July counts have recorded in the order of 12,000 waders (OSNZ Wader Counts)

3(b) Farewell Spit regularly supports substantial numbers of individuals from particular groups of waterfowl, including:

- 27,000 lesser knots

- 19,000 bar-tailed godwits
- 1,700 turnstones
- 8,600 South Island pied oystercatchers
- 1,300 banded dotterels
- 14,000 black swans

3(c) Farewell Spit regularly supports 1% of the individuals in a population of one species or subspecies of waterfowl, including:

- c. 30% of the New Zealand population of lesser knot
- c. 21% of the New Zealand population of bar-tailed godwit
- c. 35% of the New Zealand population of turnstone
- 14% of New Zealand population of South Island pied oystercatcher
- c. 13% of New Zealand population of banded dotterel
- c. 20% of New Zealand population of black swan

31. Map of site: (please enclose the most detailed and up-to-date map available - preferably at least 1:25,000 or 1:50,000)