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Ninety Mile Beach Marine National Park



Management Plan July 2006

**NINETY MILE BEACH MARINE NATIONAL PARK
MANAGEMENT PLAN**



July 2006

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Acknowledgement of *Country*: In their rich culture, Indigenous Australians are intrinsically connected to the continent — including the area now known as Victoria. Parks Victoria recognises that the park is part of *Country* of the Traditional Owners.

Parks Victoria is grateful to all those organisations, agencies and individuals who have contributed to this Management Plan. Special thanks go to members of the Ninety Mile Beach Marine National Park Management Plan Advisory Group: Melissa Ainsworth, Bruce Atkin, David Boulton, Ann Coulson, Jason King, Duncan Malcolm, Gary Poore, Steven Shinnars and Kevin Young.

Note

Technical terms used in this plan are explained in the **Glossary** at the end of the plan.

Disclaimers

This plan is prepared without prejudice to any negotiated or litigated outcome of any native title determination application covering land or waters within the plan's area. It is acknowledged that any future outcomes of native title determination applications may necessitate amendment of this plan; and the implementation of this plan may require further notifications under the procedures in Division 3 of Part 2 of the *Native Title Act 1993* (Cwlth).

The plan is also prepared without prejudice to any future negotiated outcomes between the Government/s and Victorian Indigenous communities. It is acknowledged that such negotiated outcomes may necessitate amendment of this plan.

Every effort has been made to ensure that the information in this report is accurate. Parks Victoria does not guarantee that the publication is without flaw of any kind and therefore disclaims all liability for any error, loss or other consequence that may arise from you relying on any information in the publication.

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FOREWORD

Ninety Mile Beach Marine National Park protects part of a unique sandy environment recognised for its internationally significant diversity of marine invertebrates. These tiny invertebrates are a key component of a complex food web which ultimately supports large predators such as the White Shark.

The long, unbroken beach offers visitors the opportunity to enjoy a coastal wilderness experience while only a short distance from the town of Seaspray.

The park is within *Country* of the Gunai/Kurnai. Parks Victoria respects the cultural lore of the Traditional Owners, and those of other groups with historical associations with the park.

Implementation of this Management Plan will help protect and conserve the park's natural and cultural values and will help make the park more widely known and appreciated, and ensure visitors both respect and enjoy its importance for current and future generations.

The care of Ninety Mile Beach Marine National Park is not a task for the government alone, nor only for those who live on the coast. It is a task for the whole Victorian community. This Management Plan sets out the ways in which we can work together to learn about, protect and sustain an important part of our marine environment.

I welcome collaborative initiatives in the management of the park, particularly with Indigenous communities, local community groups and individuals and key government agencies.

I thank the Ninety Mile Beach Marine National Park Advisory Group for their valuable contribution to the plan, and also wish to thank those individuals and organisations who made submissions on the draft plan. I look forward to the community's ongoing support for the management of Ninety Mile Beach Marine National Park.



JOHN THWAITES MP
Minister for Environment

APPROVED MANAGEMENT PLAN

This Management Plan has been prepared under section 17D of the *National Parks Act 1975* (Vic.) and is approved for implementation.

The plan provides the basis for the future management of Ninety Mile Beach Marine National Park. It was finalised following consideration of the 11 submissions received on the Draft Management Plan.

PROF. LYNDSEY NEILSON
Secretary to the
Department of Sustainability and Environment

MARK STONE
Chief Executive
Parks Victoria

INTRODUCTION TO THE MARINE ENVIRONMENT

Victorians are custodians of some of the most remarkable, diverse, and culturally important marine environments on Earth. These include deep open water, shallow embayments, rocky reefs, canyons, seagrass meadows, tidal sandflats and mudflats, and estuaries, and they support more than 12 000 known species. Around 90% of these marine species are found only in the waters of southern Australia.

Broadly speaking, Victoria has responsibility for the waters which extend offshore to three nautical miles and cover around 70 000 square kilometres. Marine National Parks and Marine Sanctuaries make up about 5% of this area, but protect a range of significant species and important habitats.

The vast three-dimensional marine environment has characteristics that are very different from those of the land and atmosphere. The fundamental physical properties — pressure, temperature, salinity, density and availability of nutrients and gases — are all very different. There are also great differences in the types of substrates, and the physical and biological processes that occur, such as tides, currents, light penetration, erosion, sedimentation, oxygen uptake, life cycles and even the food chains.

The organisms that occupy the marine environment are different as well. On land vascular plants dominate, but in marine habitats they are very rare, occurring only in very shallow water on sheltered coastlines. In most marine environments their ecological roles in photosynthesis and oxygen production are undertaken by algae, which range in size from giant kelps to minute single-celled species. Other single-celled organisms such as diatoms, cyanobacteria, dinoflagellates and forams, together with invertebrate larvae and marine fungi, make up most of the abundant marine plankton that is the basis of all marine food chains.

As on land, invertebrates, including molluscs (e.g. octopuses, abalones, snails), crustaceans (e.g. crabs, lobsters, tiny amphipods) and echinoderms (e.g. sea cucumbers, sea stars and sea urchins), dominate the marine fauna. But insects — the most abundant invertebrates on land — are almost absent. The dominant

vertebrates are fish, although mammals and reptiles also inhabit the marine environment and many birds inhabit both realms.

Although they are very different physically and biologically, the land, atmosphere and marine environments are interconnected. Water and gases are transferred between oceans and the atmosphere. There are animals with both marine and freshwater life stages, and some species breed in estuaries where fresh water from the land mixes with oceanic salt water. Fresh water and sediments from catchments far inland are dispersed into coastal waters, bringing with them nutrients needed to maintain inshore marine ecosystems but also pollution from human activities.

The sea interconnects marine habitats over great distances. Tides and currents move sediments, plankton and organic matter into and through habitats, along with flotsam, jetsam, ballast water and oils from catchments or inshore waters, released from ships on the open seas, or washed from the shores of other countries. Many marine animals migrate long distances, passing freely into and out of Victorian waters and spending much of their lives in the open ocean.

A vision for Victoria's system of Marine National Parks and Marine Sanctuaries

‘A world-class system of Marine National Parks and Marine Sanctuaries that conserves the diversity of Victoria's marine environments, protected and enjoyed by Victorians and visitors, forever.’

This vision for Victoria's system of Marine National Parks and Marine Sanctuaries is detailed in the *Marine National Parks and Marine Sanctuaries Management Strategy 2003–2010* (Parks Victoria 2003a) and described in the following extract:

‘The vision for Victoria's system of Marine National Parks and Marine Sanctuaries is to maintain marine ecosystems in their natural state, enjoyed by visitors and protected from the effects of inappropriate activities. The system will safeguard representative examples of undisturbed natural marine habitats, respect cultural heritage values, and be a place of inspiration, enjoyment and renewal for all

people. The system will complement our world-class national parks system on land.

This vision aims to preserve the diversity of our marine environment, its flora and fauna, its natural beauty, and the diversity of activities that may be enjoyed there. It is a vision that invites all Victorians to become involved, to take pride in our Marine National Parks and Marine Sanctuaries, and to share in their stewardship' (Parks Victoria 2003a).

Contribution of Ninety Mile Beach Marine National Park in the statewide system

Ninety Mile Beach Marine National Park (2750 ha) protects an example of an internationally significant sandy environment, recognised for its exceptionally high diversity of marine invertebrates. Low calcarenite reefs offshore support a unique invertebrate biota, including colourful sponge gardens. The long sandy beach provides extensive habitat for shore birds, including international migratory waders and the threatened Hooded Plover.

Implications for management

The differences and connections in the marine environment mean that Victoria's Marine National Parks and Marine Sanctuaries must be managed somewhat differently from land environments. Natural, recreational and cultural values may be affected by the use of both land and marine areas some distance away, over which Ninety Mile Beach Marine National Park managers have no direct control.

Impacts on one marine habitat can quickly affect another, and human activities and natural events on land and in the atmosphere can have widespread consequences for the marine environment. Boundaries in the ocean can be difficult to define, and the effects of human activities can be hidden from view. Like the atmosphere, but in contrast to land, the marine environment is a common resource which is rarely in private ownership and there are few natural or artificial barriers to movement. Many of the strategies used to concentrate the impacts of recreational activities in terrestrial parks (e.g. the creation of walking tracks and picnic areas) are not feasible in the marine context.

Conserving cultural places and objects is also a challenge because it is difficult to identify an underwater site or monitor activities that take place on the open sea or under water. Sea *Country*, and cultural association to, or past use of, underwater sites which were exposed before the sea level rose, must also be considered.

The long-term protection of the Marine National Parks and Marine Sanctuaries relies on the support and goodwill of the community, together with the help of coastal managers and government agencies. The plan seeks to foster a strong sense of custodianship of the park and to strengthen its protection while respecting cultural and community associations with the area.

SUMMARY

Ninety Mile Beach Marine National Park (2750 ha) protects an internationally significant sandy environment, recognised for its exceptionally high diversity of marine invertebrates.

Low calcarenite reefs, scattered throughout the park, support a unique invertebrate biota, including colourful sponge gardens. The long sandy beach provides extensive habitat for shorebirds, including international migratory waders and the threatened Hooded Plover.

Indigenous tradition indicates that the park is part of the *Country* of the Gunai/Kurnai¹ Indigenous people. It is a place integral to the *Dreaming* of the Gunai/Kurnai people, and is highly significant to Traditional Owners.

Ninety Mile Beach Marine National Park will be managed as a world-class marine national park for conservation and appropriate recreation. It will contribute to the overall maintenance of marine biodiversity by protecting significant habitats and associated communities.

Enabling natural processes such as disturbance, recruitment, predation and competition to continue unimpeded in all marine ecological communities will be an important management goal, as will increasing the participation of Friends, volunteers and community groups in ongoing management, and improving partnerships with Indigenous communities and other government agencies.

Significant management directions for the park are summarised as follows.

- Natural processes, including competition, predation, recruitment and disturbance, will be protected to ensure an overall benefit to the biodiversity and variety of marine ecological communities in Ninety Mile Beach Marine National Park.
- Intertidal feeding and roosting habitat for migratory and threatened shorebirds will be protected.
- Identified threats to the park will be minimised through addressing the outcomes of ongoing monitoring, risk assessment and, where feasible,

complementary adjacent, coastal and catchment management.

- Research and monitoring to improve the scientific basis for management, including baseline data collection and marine habitat mapping, will be undertaken as outlined in the Statewide Management Strategy (Parks Victoria, 2003a) and through collaborative research links.
- The Traditional Owners' cultural lore, interests and rights in the park and aspirations relating to *Country*, will be reflected in the park's planning and management, in accordance with legislation and policies, and through strong cooperative working relationships with the relevant Indigenous communities.
- Visitors' safety and their understanding and appreciation of the park's natural and cultural heritage values will be enhanced by information, interpretation and education programs.
- Visitors will be encouraged to adopt minimal-impact techniques and to adhere to industry-developed standards appropriate to their activity.
- Opportunities for the community and other stakeholders to work together and with Parks Victoria to achieve common goals for the park will be encouraged.
- Impacts of illegal harvesting will be minimised through information, interpretation, education and improved surveillance and enforcement.

¹ This management plan adopts the spelling used by the Native Title Unit, Department of Justice. There are a number of alternative spellings and pronunciations including 'Ganai' 'Gun-na', 'Kanny', 'Kani', 'Knai', 'Kannnai'.

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1 INTRODUCTION

1.1 Location and planning area

Ninety Mile Beach Marine National Park (2750 ha) is located approximately 220 km south-east of Melbourne, 40 km south of Sale and 60 km north-east of Yarram on Ninety Mile Beach (figure 1). The township of Seaspray is approximately 550 metres north-east of the park's northern boundary.

The park extends along approximately five kilometres of coastline and offshore for approximately five kilometres (three nautical miles), forming a square (figure 2). The park extends to 200 m below the seabed. Onshore boundary markers at the high water mark of the eastern and western boundary help to identify the park's boundary.

1.2 Creation of Ninety Mile Beach Marine National Park

Ninety Mile Beach Marine National Park forms part of the system of 13 Marine National Parks and 11 Marine Sanctuaries in Victorian waters. The selection of these areas was based on more than 10 years of research, investigation and community consultation by the former Land Conservation Council (LCC) and Environment Conservation Council (ECC), summarised in the *Marine, Coastal and Estuarine Investigation Final Report* (ECC 2000). The recommendations of the ECC accepted by government (Government of Victoria 2002) included reservation of the new Marine National Parks and Marine Sanctuaries under the *National Park Act 1975* (Vic.). Ninety Mile Beach Marine National Park was included on Schedule 7 of the National Parks Act on 16 November 2002 (appendix 1).

When created, much stronger penalties were applied for all forms of fishing, including shellfish collection, in Marine National Parks or Marine Sanctuaries, than those that apply for the taking or damaging of fauna, plants or objects from these areas.

Ninety Mile Beach Marine National Park includes areas between the high and low water mark that were formerly part of McLoughlins Beach – Seaspray Coastal Reserve, reserved under the *Crown Lands (Reserves) Act 1978* (Vic.).

1.3 Plan development

This first Management Plan for the park was prepared by Parks Victoria, with significant input from the Ninety Mile Beach Marine National Park Management Plan Advisory Group and other stakeholders. It takes into account existing information, reports and research findings that relate to the park and is informed and supported by a range of best practice management systems.

The strategies outlined in this plan have been guided by the statewide *Marine National Parks and Marine Sanctuaries Management Strategy 2003–2010* (Parks Victoria 2003a).

The plan is a strategic guide for future management of the park. As a public document, the plan establishes how Parks Victoria will protect the natural and cultural values of the park, and describes the services and facilities that will be provided to help visitors to enjoy, appreciate and understand the park in ways that are consistent with this. The plan also serves to inform and encourage cooperative land management and participation in community-based programs between Parks Victoria and the managers of areas adjacent to the park.

As a working document for the park, the plan informs Parks Victoria's development of Corporate Plans, serves as a framework for subsequent detailed planning and governs management activities.

The Draft Management Plan was published for public comment in 2005, and 11 submissions were received (appendix 2).

Where necessary, further consultation with the community and stakeholders was undertaken.

Key changes made to the Draft Management Plan in preparing this Final Management Plan included:

- enhanced and better defined management strategies
- additional information about the park's natural values and monitoring of values

- greater detail about plan implementation, reporting, performance measuring and evaluation at the end of the plan
- clarification of the role of Parks Victoria and other government agencies.

The final management plan will direct future management of the Ninety Mile Beach Marine National Park until reviewed.

2.1 Regional context

Ninety Mile Beach Marine National Park forms part of a representative system of 12 other Marine National Parks and 11 Marine Sanctuaries in Victoria, established within the broader context of a National Representative System of Marine Protected Areas (NRSMPA). The NRSMPA contributes to the establishment of a global representative system of marine protected areas (TFMPA 1998).

Ninety Mile Beach Marine National Park forms part of the Twofold Shelf marine bioregion. It is one of four Victorian Marine National Parks and Marine Sanctuaries and one Marine Protected Area in Tasmania in the Twofold Shelf marine bioregion, as identified by the Interim Marine and Coastal Regionalisation for Australia (IMCRA). This regionalisation identified 60 marine bioregions, five of which apply to Victorian waters (TFMPA 1998).

The IMCRA Twofold Shelf region extends from southern New South Wales to Bass Strait (ANZECC 1998). The coastline in this region is dominated by dunes and associated sandy shorelines. These features are a characteristic of the Ninety Mile Beach Marine National Park foreshore. Offshore are large sandy plains which gently slope down to the edge of the continental shelf. The area of Bass Strait off Ninety Mile Beach is important for oil and gas extraction and there are a number of oil and gas platforms in the area. The marine environment along this coastline benefits from the mixing of the warmer water influence of East Gippsland and the cooler waters of Bass Strait. Consequently the area has some of the flora and fauna of both areas (ECC 2000).

Indigenous tradition indicates that the park is part of *Country* of the Gunai/Kurnai Indigenous people. At the time of publication there were several Indigenous groups asserting traditional ownership of the park.

As part of the Merriman Creek sub-catchment (South Gippsland basin), the park is influenced by activities within the catchment, which is within the West Gippsland Catchment Management Authority's area of responsibility (WGCMA). The catchment is dominated by

agriculture, particularly livestock production, although there is some timber production in the higher reaches. Land adjacent to the coast is predominantly cleared pasture used for cattle and sheep production.

The foreshore adjacent to the park is part of McLoughlins Beach – Seaspray Coastal Reserve, managed by Parks Victoria. The park is within Wellington Shire.

The township of Seaspray is about 550 metres from the Ninety Mile Beach Marine National Park and has an estimated population of 200 residents. This small coastal community has a high level of holiday home ownership and offers a range of tourist accommodation to visitors. The town does not have a fishing industry, although recreational fishing is a popular attraction for residents and visitors. Charter boats provide opportunities for boat-based recreational fishing along Ninety Mile Beach.

Ninety Mile Beach Marine National Park protects approximately 4% of the Ninety Mile Beach coastline, and is complemented by a number of nearby parks, including Gippsland Lakes Coastal Park, The Lakes National Park and Holey Plains State Park. These parks provide for a range of visitor activities including fishing, boating and camping.

Ninety Mile Beach Marine National Park is in Tourism Victoria's Gippsland marketing and promotion region. Camping and accommodation areas close to the park include Seaspray, Woodside and Golden Beach. The Gippsland region receives 7% of all tourist visits to Victoria (Tourism Victoria 2002).

2.2 Park significance and values

Ninety Mile Beach Marine National Park makes a valuable contribution to Victoria's park system, which aims to protect viable representative samples of the State's natural marine and terrestrial environments. Parks also provide opportunities for all people to enjoy and appreciate natural and cultural values, and many make important contributions to tourism.

The park is assigned the International Union for the Conservation of Nature and Natural Resources (IUCN) Category II of the United

Nations' List of National Parks and Protected Areas. Category II areas are managed primarily for ecosystem protection and recreation.

The area included in the park is significant to many people in the community, especially the Traditional Owners who are associated with the area by cultural lore, and other people with traditional attachments to the area.

It is of note that the world's highest recorded levels of marine biodiversity for a sand environment were sampled in this area. More than 800 different species were found within 10 square metres of Ninety Mile Beach sand, making it one of the most biologically diverse marine environments in the world (Coleman et al. 1997).

Important values for the park are listed below.

Natural values

- Very high diversity of invertebrates in soft sediments.
- Scattered low calcarenite reefs providing habitat for a distinctive marine invertebrate fauna, especially sponges.
- Important habitat for threatened shorebird species, including species listed under international migratory bird agreements.

Cultural values

- Seascape and places of high cultural significance to the Traditional Owners.

Recreation and tourism values

- Opportunities for beach walking and other permitted activities on a remote area of open coast beach throughout the park.

2.3 Evidence of past use

As recently as 10 000 years ago sea levels were approximately 50 metres lower than today, and Victoria was connected to Tasmania by a 'land bridge' (Wallis 1998). During this time Ninety Mile Beach Marine National Park was a terrestrial habitat and inhabited by Indigenous people (Coutts 1968).

Existing offshore reefs are most likely the remnants of an old sand dune system that existed along the coast when sea levels were lower during the last Ice Age, around 10 000 –

25 000 years ago. As sea levels have risen the beach and its associated sand dunes have migrated inland over shallow coastal lagoons.

Although there are no known physical cultural objects within the park, cultural places within the park and places and objects in nearby areas indicate Indigenous occupation and sustained collection and harvesting of resources over many thousands of years. These places and objects represent a sustained use of the area and its resources by Indigenous people.

Indigenous people of the area hunted and gathered seasonally abundant food, including terrestrial and aquatic animals, fruits, yams and eggs. They fished the streams and coastal waters with net or line, and by spear from the shore and from bark canoes (Collett 1994).

The park and adjoining terrestrial areas have a long history of resource use and commerce dating back to the early 19th century, including commercial fishing, timber extraction and farming (section 5.2).

In more recent years the area now within the park has made only minor economic contributions to the area, mainly through commercial and recreational fishing.

The area within the park is now highly protected, and all forms of extraction, including commercial and recreational fishing, are prohibited.

2.4 The park visitor

The entire Ninety Mile Beach attracts thousands of visitors to the area, although key visitation sites are outside the park. Many visitors come from Melbourne, Latrobe Valley and the surrounding region, including Seaspray.

Seaspray has a range of local services and facilities available to visitors.

Visitors stay in a range of accommodation, from holiday homes or camping in Seaspray to more remote camping at McGaurans Beach.

The park has a range of visitor types, including:

- day boat visitors
- recreational walkers
- horse riders

- local people seeking to enjoy the beach area.

Visitation to the park may have decreased since the proclamation of the park, as most previous visitors used the area for fishing, either from a boat or from the beach.

Visitors generally access the park using small craft from Seaspray. Larger vessels tend to access the park from Port Albert or McLoughlins Beach, or pass through the park from areas further afield.

2.5 Legislation and ECC recommendations

Legislation

Ninety Mile Beach Marine National Park is reserved and managed under the provisions of the National Parks Act. The Act requires the Secretary to the Department of Sustainability and Environment to preserve and protect the natural condition of the park and its natural and other features and, subject to this, to provide for the use of the park by the public for enjoyment, recreation and education. Appropriate research activities are also provided for under the Act. The National Parks (Park) Regulations 2003 apply to Ninety Mile Beach Marine National Park.

All forms of extraction, including recreational and commercial fishing and shellfish collection, are prohibited under the National Parks Act and regulations. A Statewide Compliance Strategy (Parks Victoria 2002a) and a Regional Compliance Plan (Parks Victoria 2005a) have been developed in partnership with Fisheries Victoria – Department of Primary Industries to manage compliance with the no-fishing provisions within the park (section 8.3).

The objects and provisions of the National Parks Act set the framework for the management of Ninety Mile Beach Marine National Park (appendix 1). Specific legislation and ECC recommendations accepted by government also govern particular aspects of management of the park, as described below and in subsequent sections of the plan.

The *Coastal Management Act 1995* (Vic.) applies to the use and development of the whole of the park.

The *Archaeological and Aboriginal Relics Preservation Act 1972* (Vic.) and the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (Cwlth) apply to the park and protect all Aboriginal cultural heritage values, including places and objects (section 5.1).

The *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth) applies to the whole of the park with respect to actions that have, will have or are likely to have, a significant impact on matters of national environmental significance, including listed threatened species and communities and listed migratory species in the park.

The *Native Title Act 1993* (Cwlth) applies to the management of the park.

An application for a native title determination, covering the park among other areas, was lodged with the Native Title Tribunal on 1 April 1997 (VC 97/4) by the Gunai/Kurnai people. The implementation of this Management Plan will take into account the existence of this and any subsequent native title applications, and any native title found to exist under the Native Title Act.

The *Parks Victoria Act 1998* (Vic.) enables management services for Ninety Mile Beach Marine National Park to be provided by Parks Victoria on behalf of the Secretary.

Other legislation, and policies and guidelines (section 2.6) at both the Commonwealth and State levels apply to management of the park and specific activities and uses.

ECC recommendations

The former Environment Conservation Council (ECC) in its *Marine, Coastal and Estuarine Investigation Final Report*, recommended the creation of the Ninety Mile Beach Marine National Park for its contribution to the representative system of marine protected areas along the Victorian coast (ECC 2000). It protects an area of the Ninety Mile Beach, including significant low profile offshore reefs.

The ECC also made a number of recommendations that relate to the park. The recommendations included:

- Recommendation A Use of Ninety Mile Beach Marine National Park (A11) in accordance with the general recommendations for Marine National Parks.
- R3 Planning and management relating to traditional interests and uses in coastal marine areas to be based on recognition and respect for the traditional relationship of Aboriginal people with the land and sea.
- R13 Further research to be undertaken on biological community composition and structure, both within and external to marine protected areas, with an emphasis on assessing the impacts of harvesting marine fauna.
- R14 Assessments to be made and strategies developed for protection of vulnerable or threatened marine species and communities, using the provisions of the *Flora and Fauna Guarantee Act 1988* (Vic.) as appropriate.
- R18 Measures to be implemented by responsible agencies to reduce the risk of marine pest species arriving in Victoria, and to ensure a rapid and effective response in the event of an introduction.
- R26 Public land and waters continue to be available for a wide range of tourism and recreational uses. Development should not preclude public access to foreshore and offshore areas other than to meet safety and security requirements that cannot be achieved in other ways.
- R34 Priority be given to establishing monitoring programs for Marine National Parks to determine the extent to which these areas are meeting their objectives.

All of these recommendations were accepted by the State Government in 2002 (Government of Victoria 2002).

2.6 Policies and guidelines

The park is managed in accordance with Parks Victoria's operational policies and, as appropriate, consistent with other relevant policies and guidelines, including:

- *Indigenous Partnership Strategy and Action Plan* (Parks Victoria 2005b)
- *National Strategy for Ecologically Sustainable Development* (COAG 1992)
- *Guidelines for Working with Aboriginal Communities and Protection of Cultural Sites* (Parks Victoria 2002b)
- *National Strategy for the Conservation of Australia's Biological Diversity* (ANZECC 2001)
- *Heritage Management Strategy* (Parks Victoria 2003b)
- *Victoria's Biodiversity Strategy* (NRE 1997a)
- *Victoria's System of Marine National Parks and Marine Sanctuaries Management Strategy 2003–2010* (Parks Victoria 2003a).

Ninety Mile Beach Marine National Park is also managed within a broader context of a number of other plans and strategies, including:

- *Gippsland Boating Coastal Action Plan* (GCB 2002a)
- *Integrated Coastal Planning for Gippsland — Coastal Action Plan* (GCB 2002b)
- *Nature Based Tourism — Directions and Opportunities for Victoria 2000–2003* (Tourism Victoria 2000)
- *Policy for Sustainable Recreation and Tourism on Victoria's Public Land* (NRE 2002)
- *Victorian Coastal Strategy* (VCC 2002)
- *Victorian Heritage Strategy, Shipwrecks 2005* (Heritage Victoria 2000)
- *West Gippsland Regional Catchment Strategy* (WGCMA 2004).

3 STRATEGIC DIRECTIONS

3.1 Park vision

A future visitor to Ninety Mile Beach Marine National Park finds a dynamic, open coastal environment, renowned for its uninterrupted beach and ocean views and biologically diverse sand ecosystem.

The park preserves an internationally significant sandy environment, recognised for its exceptionally high diversity of marine invertebrates. Low calcarenite reefs support a unique invertebrate biota, including colourful sponge gardens. Appropriate management of the beach ensures safe refuge and breeding areas for a variety of shorebirds, including the threatened Hooded Plover.

Research and monitoring programs enable management to be based on a sound and increasing understanding of the park's natural values and ecological processes, and the specific requirements of its significant marine flora and fauna.

Indigenous cultural heritage of the park is protected, conserved and managed through a strong working partnership with the relevant Indigenous communities. The partnership is based on mutual respect and a sound understanding of the cultural and spiritual significance of the park to Indigenous people. This significance includes Indigenous tradition and the interests and rights of Indigenous people in land and waters within the park.

Local support and awareness of the park is strong; community groups and volunteers working together with Parks Victoria to achieve common goals in accordance with their aspirations for the park.

Visitors are drawn to the wild, windswept beach which engenders a strong sense of remoteness, making it one of the best accessible beach walks in Victoria. The unspoilt view of pounding surf and a sweeping sandy beach vanishing into the distant sea haze continues to create a calming and enjoyable atmosphere for visitors seeking an alternative to more crowded beaches.

Well-designed and distributed information, interpretation and education continue to promote understanding and appreciation of the

park's significance among the local community and park visitors, and the park contributes to regional tourism.

Well-practised integrated coastal management protects the park from the pressures of human activities on adjacent or nearby land and water. Parks Victoria works closely with other agencies on coastal and catchment management issues, ensuring the protection of the park, Victoria's 'splendour in the sands'.

3.2 Zoning

A park management zoning scheme is normally used to define the different parts of parks, or different parks, where various types and levels of use are appropriate. However, management zones do not need to be defined in Marine National Parks and Marine Sanctuaries because the management aims for these areas are clearly outlined in the National Parks Act and are consistent across all Marine National Parks and Marine Sanctuaries (section 2.5 and appendix 1).

3.3 Management directions

Major management directions for the park are outlined below.

Natural values conservation

- Natural processes, including competition, predation, recruitment and disturbance, will be protected to ensure an overall benefit to the biodiversity and variety of marine ecological communities in Ninety Mile Beach Marine National Park.
- The high diversity of marine life, especially the invertebrate populations found on and in the subtidal sand banks, will be maintained, subject to natural ecological processes.
- Intertidal feeding and roosting habitat for migratory and threatened shorebirds will be preserved and protected.
- Identified threats to the park will be minimised through addressing the outcomes of ongoing monitoring, risk assessment and, where feasible, complementary adjacent, coastal and catchment management.

- Impacts of changes to water quality will be minimised through cooperation with catchment managers and other relevant agencies. In the long term, water quality will be maintained at a level that is consistent with the West Gippsland Catchment Management Authority Regional Catchment Strategy.
- Compliance with legislated provisions that prohibit extractive activities, including fishing and shellfish collection, will be ensured through education, information, community support, and improved surveillance and enforcement.
- Research and monitoring to improve the scientific basis for management, including baseline data collection, marine habitat mapping and threat assessment, will be undertaken as outlined in the statewide Management Strategy (Parks Victoria 2003a) and through collaborative research links.

Cultural values conservation

- The Traditional Owners' cultural lore, interests and rights in the park and aspirations for *Country*, will be reflected in the park's planning and management, in accordance with legislation and policies.
- Indigenous cultural lore relating to *Country* will be respected, promoted and interpreted in accordance with the views of the Traditional Owners.
- Research into Indigenous and historic cultural heritage of the park will be encouraged and supported as appropriate, in consultation with Indigenous and wider communities.
- The history of past use and activity in the park and adjoining coastal area will be investigated, and any historic places and objects that may be discovered will be protected from damaging or inappropriate activities.

The park visit

- Visitors and the community will have opportunities to learn about the park and its special values.

- Visitor understanding and appreciation of the park's natural and cultural values will be enhanced by a range of information services and interpretation and education programs.
- Visitor enjoyment, especially that of a perceived wilderness experience, will be enhanced by appropriate management of recreation activities.
- Recreational activities will be permitted in accordance with table 1.
- Visitors will be encouraged to have minimal impact while undertaking activities, and to follow industry-developed standards appropriate to their activity.

Community awareness and involvement

- Friends, volunteers, Indigenous and community groups will be supported if they wish to participate in areas of park management that relate to their interests.
- An awareness and understanding of the Marine National Parks system, Ninety Mile Beach Marine National Park and its management, and a sense of custodianship, will be encouraged among local communities and visitors.
- Relationships will be developed and maintained with people, groups and communities with strong connections with, or interests in, the park as a basis for encouraging their appropriate participation in aspects of the park's management.
- Strong collaborative partnerships will be developed with the Traditional Owners to facilitate the reflection of their cultural lore, rights, and interests and aspirations in the park's planning and management.
- Collaborative partnerships will be established with relevant agencies to ensure ongoing compliance and future protection of the park.
- There will be ongoing opportunities for individuals, groups, communities and government agencies to discuss aspirations and issues of mutual concern relating to the park.

TABLE 1 SUMMARY OF RECREATIONAL OPPORTUNITIES

ACTIVITY	PARK
Anchoring (section 6.3)	Y
Beachcombing (no collecting)	Y
Bait collection	N
Birdwatching	Y
Boat launching using a vehicle or trailer (section 6.2)	N
Camping	N
Chainsaws / generators	N
Cycling	Y
Diving and snorkelling (section 6.4)	Y
Dogs on leads (section 6.6)	Y
Driving on beaches (all vehicles except bicycles)	N
Education/guided activities (sections 6.1 and 6.7)	Y
Feeding wildlife	N
Fires on beaches	N
Fishing (all forms)	N
Horse riding (section 6.6)	Y
Kite surfing / wind surfing (section 6.3)	Y
Licensed tours (section 6.7)	Y
Motorised boating (general) (section 6.3)	Y
Nature photography / painting / filming	Y
Non-motorised boating (section 6.3)	Y
Nude bathing	N
Personal watercraft / jetskiing (section 6.3)	Y
Picnicking	Y
Prospecting and metal detecting	N
Shell collecting	N
Sightseeing / scenic viewing	Y
Surfing (section 6.3)	Y
Swimming (section 6.5)	Y
Wake-boarding / water-skiing (section 6.3)	Y
Walking (sandy intertidal zone)	Y
Whale / dolphin / seal watching	Y

Note: Recreation activities should only be undertaken by those experienced in the activity.

Key: Y Yes, subject to conditions prescribed by legislation, permits or elsewhere in the plan as indicated
 N Not permitted

4 STRATEGIES FOR NATURAL VALUES CONSERVATION

4.1 Geological and geomorphological features

Ninety Mile Beach Marine National Park consists of recent Holocene (<10 000 years ago) sand deposits and isolated Tertiary (1–65 million years ago) offshore calcarenite reef outcrops.

There are no recognised subtidal sites of geological or geomorphological significance within the park. Nevertheless, the intertidal beach forming part of the park is of geomorphological interest as part of an example of an unbroken beach and barrier dune system, stretching from McLoughlins Point in the west to Point Ricardo in the east (Buckley 1993).

The barrier dune system fronting the park is a single high sand ridge which is slowly migrating inwards over earlier lagoonal sediments. Behind the dune the remains of the lagoonal system is represented by a wide, flat, low-lying coastal plain (LCC 1993).

Offshore, Holocene sand and shell deposits dominate, with isolated Tertiary calcarenite reefs outcropping between 10 m and 20 m depth in the east of the park. The reefs are remnants of old dune systems, formed during earlier periods of lower sea levels. More extensive reef areas occur outside the park to the north-east and south-west.

The reef outcrops are low, often rising less than one metre from the seabed. Mobile sand beds frequently scour and cover these reefs.

Many geomorphological features are significant elements of *Country* for the Traditional Owners in accordance with their tradition.

Erosion of the adjacent barrier dune system by wave action is occurring. Land subsidence due to oil, gas and groundwater extraction has been considered as a factor contributing to the erosion (GCB 2002b). However, erosion was active prior to extraction commencing in the 1960s (Bird 2000) and may be due to a natural depletion of sand from offshore reservoirs through long-term geomorphological processes. The Gippsland Coastal Board is

coordinating studies to further investigate the issue of subsidence in the area.

Native vegetation has been largely removed from the dunes and replaced with Marram Grass. Marram Grass was planted throughout Victoria to stabilise dunes and has contributed to the formation of a high, single-ridge dune along Ninety Mile Beach which is more susceptible to wind and wave erosion. This dune formation dominates the coastal landscape along the length of the park and is actively migrating inland due to wind erosion (J. Stevenson pers. obs.). The changing dune structure has resulted in a beach face that is frequently inundated by wave action right up to the dune base, reducing the beach's suitability for shore-nesting birds (section 4.4).

Illegal vehicle access on and through the dunes has contributed to blowouts in areas adjacent to the park (section 6.2). These blowouts have been further enlarged by wave action.

Aims

- Protect geological and geomorphological features of the park from potentially damaging human activities.
- Allow natural geological and geomorphological processes to continue without human interference.

Management strategies

- *Support investigations by relevant agencies, including the Gippsland Coastal Board and Department of Primary Industries, into the occurrence and impact of subsidence on coastal geomorphology in the park and adjacent areas.*
- *Investigate, using trials, re-establishing native vegetation communities on the barrier dune system in order to minimise further erosion of the barrier dune system.*
- *Protect the park and adjoining dunes from erosion caused by illegal vehicle access (section 6.2) using appropriate management actions, including barriers, track closures, signage and interpretive information (section 6.1).*

- *Work collaboratively with the relevant Indigenous communities to identify landforms of special significance to the Traditional Owners, and protect the landforms from damaging or inappropriate activities (sections 5.1 and 8.2).*
- *Consider the significance of landforms to the Traditional Owners in interpreting the park and implementing management programs (sections 4.5, 5.1, 6.1 and 8.2).*

4.2 Catchment and water quality

Water quality within the park is predominantly influenced by the exposed open ocean environment of eastern Bass Strait and the Tasman Sea. Strong tidal currents and high-energy easterly and south easterly swells result in well-mixed coastal waters (LCC 1980; ECC 2000).

Potential sources that may influence water quality are catchment effects, waste water discharges, litter, seabed disturbances and oil or other chemical spills.

The West Gippsland Regional Catchment Strategy (WGCMA 2004) sets out a strategic management framework for the protection of natural values within the West Gippsland catchment management area, including coastal and marine environments. The Regional Catchment Strategy addresses the impacts of land use and management on the marine and estuarine environment.

Ninety Mile Beach Marine National Park lies adjacent to the Merriman Creek sub-catchment (South Gippsland basin) of the West Gippsland Catchment Management Authority region (WGCMA 2004). There are no direct discharges of surface waters into the park. Two waterways and two waste water outfalls discharge into the sea in the vicinity of the park.

Merriman Creek discharges into the sea approximately 500 m north-east of the park, and the overflow from Lake Dennison, locally known as ‘The Fisheries’, occasionally discharges approximately three kilometres to the south-west of the park boundary. ‘The Fisheries’ has discharged only twice since 1995 (A. Coulson pers. comm. 2005).

Gippsland Water manages a Saline Water Outfall Pipeline (SWOP) at McGaurans Beach, and the Latrobe Valley Ocean Outfall (for treated waste water) at Delray Beach. The SWOP discharges saline water associated with electricity production in the Latrobe Valley, and the Delray Beach outfall discharges secondary treated waste water from central Gippsland. Both outfalls are some distance from the park (McGaurans Beach – 4 km; Delray Beach – 23 km). Both are licensed by the Environment Protection Authority (EPA) and consistently meet water quality monitoring standards (S. Shinnars pers. comm. 2004).

Because of its proximity to the park, Merriman Creek is the only source with the potential to influence water quality in the park. The other sources are considered too far from the park, or discharge too infrequently to influence water quality in the park.

Merriman Creek rises at Callignee and flows through intensive grazing and dairy farms in the Gormandale and Willung region, as well as pine plantations (WGCMA 2005a). The lower reach from Willung to Seaspray has been identified as a high-priority area, with high social, flora, fauna and landscape values (WGCMA 2005a). Risks to these identified values include water quality issues, stock access, exotic flora, degraded riparian vegetation, channel modification and wetland connectivity.

The Regional River Health Strategy West Gippsland Catchment (WGCMA 2005a) specifies management actions for the Merriman Creek sub-catchment. These aim to protect and improve the aquatic environment and biodiversity of the catchment.

Gippsland Water has identified the need to sewer the township of Seaspray. Existing septic systems within the town are contributing to water quality issues through leaching into Merriman Creek and potential contamination of groundwater. The proposed option is for a land-based treatment system producing secondary-treated water for irrigation of pastures. No marine discharges are proposed.

Water quality and quantity data in Merriman Creek is currently being collected by Waterwatch, a community water quality monitoring program and the Gippsland Regional Water Monitoring Partnership

(GRWMP). Water quality monitoring has been identified as a high-priority for Merriman Creek in Gippsland's Water Quality Action Plan (WGCMA & EGCMA 2005). Water quality data has historically been collected by Gippsland Water in the vicinity of their off-take for drinking water supply to Seaspray. Assessment of the 2003 year water quality data for site 227240 Merrimans Creek at Prospect Road, Seaspray against SEPP (State Environment Protection Policy) Waters of Victoria Schedule F5 objectives indicates that all objectives were met with the exception of electrical conductivity. Data collected by GRWMP is available on the Victorian Water Resources Data Warehouse (www.vicwaterdata.net).

Merriman Creek does not flow permanently into the sea. During years of normal rainfall the creek discharges periodically in response to episodes of heavy rainfall. During drought years it may break out only once or twice per year. During major flood events, it discharges to the sea and excess water is diverted around Seaspray by flood mitigation works and channelled to Lake Reeve to the north-east.

It is not known what, if any, effect water quality from Merriman Creek may have on the park. Under normal conditions it is considered that any discharge will be rapidly diluted and dispersed and have no effect. Impacts associated with flood events are unlikely to be detectable because of the highly dynamic population structure of the marine invertebrate communities present (J. Carey pers. comm. 2005).

Litter is both aesthetically displeasing and a threat to wildlife. Birds and marine mammals can mistake litter for food or become entangled, causing death. Litter that occurs in the park originates from various sources which are predominantly outside the park. Sources include litter discarded by recreational and commercial boating and shipping, and litter from beach users and stormwater runoff from nearby rural and urban areas.

Water quality and litter issues in the park and adjacent local environments may be improved through the implementation of a Neighbourhood Environment Improvement Plan (NEIP). NEIPs are action plans developed in partnership by all parts of the community and administered by EPA Victoria under the

Environment Protection Act 1970 (Vic.). They are designed to address environmental issues of importance to the community at a local scale and build on and support other efforts to protect Victoria's environment.

Seabed disturbance can cause increased turbidity and changes in sedimentation patterns. It can also release previously inactive nutrients and pollutants and have a major effect on marine ecosystems. Dredging is not permitted in Ninety Mile Beach Marine National Park, but may occur in adjacent waters. The Basslink development has recently excavated a channel in the seabed to lay a power cable approximately 6 km to the south-west of the park. No further seabed disturbances are likely to occur in the area.

Oil and other chemical spills can have devastating effects on park values, particularly on seabirds and intertidal areas. The spilt substance and cleanup techniques used have the potential to cause damage or death to aquatic organisms, wildlife and essential habitat. Oil and gas production occurs offshore in the vicinity of the park. Pipelines and shipping associated with oil and gas production may be a potential source of oil and chemical spills that could affect the park area.

Marine Safety Victoria has responsibility, under the Marine Act and the *National Plan to Combat Pollution of the Sea by Oil and other Noxious and Hazardous Substances* (AMSA 1998), to ensure there is an effective response to marine pollution incidents in Victorian waters. In addition, the oil and gas industry operating off Ninety Mile Beach, has in place extensive environmental plans, risk assessment and management systems and oil spill response plans which minimise the risk of spills associated with their operations.

As the manager of around 70% of Victoria's coastal areas, Parks Victoria plays a significant support role in the response to marine incidents (section 8.3). Responses to marine incidents often require a diverse range of skills and resources, involving coordination between multiple agencies including Parks Victoria and members of the community.

The *Victorian Marine Pollution Contingency Plan* (VICPLAN) (MSV 2002) has been prepared by Marine Safety Victoria to meet this responsibility. Under VICPLAN, the park

lies in the Gippsland Region and Gippsland Ports Committee of Management Inc. is the Regional Oil Pollution Coordinator. The *Gippsland Region Marine Pollution Contingency Plan* (Gippsland Ports 2005) describes the arrangements made for the Gippsland Region to provide effective emergency response during a marine pollution incident, under VICPLAN.

The Department of Sustainability and Environment (DSE) has developed the Wildlife Response Plan for Oil Spills (NRE 1997b). All wildlife is protected under the *Wildlife Act 1975* (Vic.) and DSE has responsibility for the collection, assessment, cleaning and rehabilitation of wildlife affected by marine pollution.

The Victorian Environment Protection Authority (EPA Victoria) also has powers and enforcement provisions to restrict the pollution of State waters, and works closely with Marine Safety Victoria.

The *Integrated Coastal Planning for Gippsland — Coastal Action Plan* (GCB 2002b) emphasises the importance of an integrated approach to planning and management of the marine and coastal environment. It seeks to achieve integration between municipal planning schemes, public land policy and public land management plans in Gippsland, including the park.

Aim

- Maintain water quality within the park and surrounding waters to ensure that natural biological and physical processes can occur.

Management strategies

- *Work collaboratively with community and government organisations, including Gippsland Coastal Board, West Gippsland CMA and Wellington Shire, to ensure the integration of future catchment and coastal planning and management of the park (sections 7.2 and 8.3).*
- *Support actions in the Regional River Health Strategy that aim to improve water quality in the Merriman Creek sub-catchment.*
- *Work collaboratively with EPA Victoria to minimise impacts associated with*

discharge of wastes into the environment particularly those from litter, stormwater, boating and shipping, and assist local communities to develop a NEIP if deemed appropriate for the park (section 8.3).

- *Work collaboratively with Marine Safety Victoria, DSE and EPA Victoria to ensure that appropriate response arrangements for marine pollution incidents consider the environmental significance of the marine communities within the park, with particular reference to the potential detrimental effect of dispersants on subtidal, demersal and infauna invertebrate communities (section 4.4).*
- *Provide support to Marine Safety Victoria in the event of an oil or chemical spill that could affect the park, in accordance with the Victorian Marine Pollution Contingency Plan, and the Gippsland Region Marine Pollution Contingency Plan.*
- *Integrate themes relating to oil spills, marine plastics pollution, catchment management issues and litter reduction into the park's information, interpretation and education programs (section 6.1).*

4.3 Hydrodynamics

Because human-induced changes to local hydrodynamic processes could affect park values, any proposals for new infrastructure such as tidal generators, offshore wind farms or artificial reefs will not be permitted. Natural hydrodynamic events such as storm surges and regular sand erosion or deposition are considered to be natural processes, and their effects should be allowed to persist.

There are no artificial structures in the park or adjacent area and hydrodynamic processes are driven by natural events.

Very strong tidal currents (up to 2.5 knots) are characteristic of the park area and surrounding coast (ECC 2000). Tidal currents run parallel to the coast and follow a semi-diurnal pattern. Current patterns are also influenced by ocean swells and other wave-induced components (Basslink 2001).

The area is protected from south-westerly swells by Tasmania but is strongly influenced by south-easterly and easterly swells

originating in the Tasman Sea. Mean wave heights are 1.0–1.5 m, with maximum heights varying between 1.9 and 2.7 m (LCC 1993). Wave action is the main source of beach erosion in the park (section 4.1).

Wind patterns also influence hydrodynamics, with south-westerly winds dominating, resulting in an overall easterly movement of water and sand along the coast.

Aim

- Minimise impacts on park values from human-induced changes to local hydrodynamic processes, while allowing natural hydrodynamic processes to continue.

Management strategies

- *Provide advice to Wellington Shire on planning applications for developments that could affect park hydrodynamic processes, where appropriate (section 7.2).*
- *Support research into processes that may threaten the integrity of park values, including sea level change and altered hydrodynamic regimes.*

4.4 Habitats and communities

Ninety Mile Beach Marine National Park supports four distinct marine ecological communities (Plummer et al. 2003): intertidal sandy beach, subtidal sandy sediment, subtidal reef and open waters (appendix 3). The distribution of the subtidal habitats is poorly known as the park area has not been adequately mapped.

High-energy sandy beaches extend uninterrupted along the entire intertidal edge of the park. Intertidal sand communities along the Ninety Mile Beach are species-poor (LCC 1993), which is typical of coarse-grained, steep-faced, high-energy beaches. At McGaurans Beach, adjacent to the park, only nine species were found during a survey of the beach fauna. The most dominant species of the sandy beach are crustaceans in the swash area, while bivalves (such as pipis) and worms are known to occur in the sand in the lower intertidal area (LCC 1993).

Wrack, primarily drift algae, is a microhabitat and food resource for mobile beach organisms

such as beetles, sand hoppers and kelp flies, as well as small crustaceans (LCC 1993).

The Ninety Mile Beach is a potentially important area for the endangered Hooded Plover, a listed species under the *Flora and Fauna Guarantee Act 1988* (Vic.). However, the number of Hooded Plovers observed between McLoughlins Point and Seaspray on biannual counts between 2000 and 2006 has declined markedly from 40 to 3 (Weston 2003, J. Stevenson pers. obs.). No Hooded Plovers were observed within the park during the 2004 and 2006 survey. Many factors may explain the decline in numbers, although the loss of roosting and nesting areas due to beach erosion (section 4.1) may be a major factor (J. Stevenson pers. obs.)

Hooded Plovers nest on the beach just above the high tide mark. Nests are at risk of trampling by dogs, horses or people, predation of eggs by various native and introduced predators, and inundation by waves. After hatching, chicks rapidly leave the nest and forage across the upper part of the beach. When threatened, chicks freeze and rely on camouflage to avoid detection. This behaviour makes them highly susceptible to disturbance by horses and dogs (section 6.6). Nesting pairs will be outside the park as they will be above the mean high water mark, which defines the park's landward boundary. Within the park, Hooded Plovers are likely to be foraging, and adults and chicks will be susceptible to disturbance from uncontrolled dogs and horses roaming along the beach (section 6.6).

Protection of Hooded Plover breeding areas is best achieved by integrating dog and horse control regulations with actions specifically aimed at protecting breeding pairs (Weston 2003) (section 6.6). These include appropriate educational and interpretive signage, awareness campaigns by Rangers and volunteers, complementary regulations in adjacent reserves (section 7.2), temporary beach closures around nesting birds, and nest site protection cages.

The area is also used by other threatened shorebirds, including Crested Terns, Caspian Terns, Pied Oystercatchers and Sanderlings.

The subtidal sand community along Ninety Mile Beach has been found to be the most species-rich of its type in the world. A survey

of a section of Ninety Mile Beach found approximately 800 marine invertebrate species per 10 m², compared to 300 to 400 per 10 m² in comparable habitats (Coleman et al. 1997). This high species richness was a major factor in the creation of a Marine National Park on the Ninety Mile Beach.

The subtidal sand invertebrate fauna are dominated by small animals, mostly crustaceans, molluscs, echinoderms and polychaetes (Plummer et al. 2003). These organisms live in or on the sand and their ecological relationships are poorly known, except that they are a key component of the local food web and that their population dynamics are extremely variable (J. Carey pers. comm. 2005).

The subtidal reefs of the park are composed of Tertiary calcarenite (section 4.1) and support a community dominated by invertebrates, particularly sponges and sea squirts. Seaweeds are largely absent, possibly because of frequent scouring by shifting sand. The reefs themselves are likely to be periodically covered and uncovered by sand. A variety of fish use these reefs and surrounding sandy areas, including many species important for commercial and recreational fishing.

The pelagic areas of the Marine National Park are relatively shallow, with depths of up to 30 metres, and very strong currents. The area is thought to be a White Shark nursery ground, and is also important for snapper. Dolphins, whales and a range of invertebrate and fish species pass through the park. The area around Seaspray (less than 2 km east of Ninety Mile Beach Marine National Park) is known by fishers for populations of salmon, flathead, snapper and tailor.

Cetacean strandings have occurred along Ninety Mile Beach. Most involved a single dead animal that washed ashore. Occasional live strandings do occur and mass strandings are possible. The Victorian Cetacean Contingency Plan (NRE 1999c) details arrangements for responses to incidents such as strandings or entanglements.

All species recorded within the park listed as threatened or protected by international agreements (e.g. JAMBA, CAMBA) are either birds or marine mammals (e.g. Southern Right Whale). This reflects the current vertebrate

focus of threatened species management. Environmental management within the park takes a habitat-based, rather than a species-based approach. Management of marine ecological communities, rather than threatened species, is more likely to lead to a higher level of success in protecting and enhancing threatened species populations. Whole-of-habitat management may also result in the protection of species not yet identified, due to their rarity, cryptic nature or lack of search effort. Nevertheless, approved action statements and recovery plans will be implemented as appropriate.

Research and monitoring are important management strategies for the collection of baseline biological information that can be used to understand long-term changes in populations, abundances, community structures and ecological processes occurring in the park. Surveys of marine flora and fauna in the park are limited, with most information from surveys located outside the park (Plummer et al. 2003). Nevertheless, it is anticipated that species diversity within the park is similar to that in nearby surveyed areas.

Monitoring changes in biodiversity values in the park will be difficult because of the remote nature of the park and the high variability of biodiversity values in the area. The dynamic nature of the Ninety Mile Beach environment results in a large variation in species richness and abundance over time. Biodiversity monitoring in the park will be prioritised in accordance with Parks Victoria's Marine National Park research and monitoring program and available resources. Currently, data from the park and sites nearby is being assessed to design a future monitoring program to establish baseline biodiversity information and habitat mapping specific for the park.

Identified threats to marine ecological communities within the park include litter (section 4.2) and disturbance to wildlife by recreational activities (e.g. dog walking and horse riding) (section 6.6). A variety of potential threats exist such as oil and chemical spills and catchment effects on water quality (section 4.2) and marine pest incursions (section 4.6). Such potential threats may currently be occurring and have not been detected (e.g. marine pests, changes to water

quality), or may occur infrequently (e.g. oil or chemical spills).

Responses to certain threats, particularly oil spills, need to consider the potential impact of the threat on different communities. Dispersing oil with chemical dispersants that then settle onto the seabed may have a greater impact on the highly diverse subtidal soft sediment communities than oil washing ashore onto depauperate intertidal soft sediment communities. For this reason the use of dispersants will be discouraged in the park in favour of beach clean-up (section 4.2).

All forms of extraction, including recreational and commercial fishing, collection of shells and beach-washed material and removal of sand, are prohibited within the park. The feeding of animals, including fish and birds, is not permitted in the park.

Little is commonly known about Indigenous cultural lore relating to the marine plants and animals of the park. This heritage is greatly valued by the Traditional Owners, and has considerable potential to interest visitors and enrich park management.

Aims

- Protect marine ecological communities and indigenous flora and fauna.
- Increase knowledge of marine ecological communities, flora and fauna, and key threatening processes to aid management, protection and appreciation.

Management strategies

- *Construct a habitat map for the park at a scale suitable for management purposes in accordance with statewide habitat mapping programs.*
- *Collaborate with research institutions to develop research into major knowledge gaps, particularly with respect to species diversity within the park.*
- *Implement priority actions from approved action statements or recovery plans to address threats to threatened species listed under the Flora and Fauna Guarantee (FFG) and the Environment Protection and Biodiversity Conservation Acts.*
- *Manage Hooded Plover populations according to approved FFG action*

statements, Nos 9 and 44, to enhance fledgling survival (section 4.6).

- *Manage visitor activities to minimise impacts on flora, fauna and communities particularly in relation to compliance with no-fishing provisions (section 8.3).*
- *Ensure that all significant sightings of marine flora and fauna are recorded on Parks Victoria's Environmental Information System and other relevant databases.*
- *Respond to cetacean strandings in the park in accordance with the Victorian Cetacean Contingency Plan.*
- *Undertake risk assessments every two years to assess the major threats to the park, and review management programs as appropriate.*
- *Promote a greater understanding of the park's marine communities and species diversity through appropriate interpretation, information and education programs (section 6.1).*
- *Encourage research to identify Indigenous cultural lore relating to communities and species of significance to the Traditional Owners (section 5.1), and reflect Indigenous knowledge in management practices as appropriate.*

4.5 Landscape and seascape

Ninety Mile Beach Marine National Park has extensive ocean, beach and dune scenic values. The underwater scenery consists of expansive beds of gently sloping sand, with isolated reefs providing the only vertical relief on the seabed. The dunes adjacent to the park's intertidal zone are sensitive to human-induced change.

Ninety Mile Beach is recognised as a significant element of *Country* of the Traditional Owners in accordance with tradition.

The *Victorian Coastal Strategy* (VCC 2002) establishes the framework for long-term ecological sustainable management of the Victorian coast. The strategy uses Integrated Coastal Zone Management principles which attempt to integrate planning and management across the land-sea and public and private land interface. This involves the coordination of

coastal and marine management activities of the various Commonwealth, State and local government agencies and a commitment to community consultation at all levels of planning.

The *Siting and Design Guidelines for Structures on the Victorian Coast* (VCC 1998a) and *Landscape Settings Types for the Victorian Coast* (VCC 1998b) are designed to ensure sympathetic development that complements the surrounding landscape and results in sensitive design and development along the Victorian coast. The *Siting and Design Guidelines* (VCC 1998a) define issues that should be considered in the siting, design and construction of, or improvement to, structures in coastal areas.

Landscape setting types are used to broadly characterise different landscape types (VCC 2002). The park is within the Victorian Coastal Council's Landscape Setting Types 31 (Ninety Mile Beach) (VCC 1998a). The VCC's recommended special considerations for these Landscape Setting Types include the following:

- All development should be kept out of the direct path of the wind and special controls on use in the setting type are essential to avoid erosion problems.
- Clearing of vegetation should be restricted or avoided.
- Access to the beach should be controlled.
- Building height needs to be carefully managed because of the nature of this low and horizontal landscape.

Potentially significant impacts to the landscape and seascape values of the park could arise from developments on adjacent freehold land or offshore areas. No specific developments are currently proposed, but potential developments that could affect park values include windfarms, the establishment of offshore oil/gas platforms near the park, and residential subdivisions on freehold property adjacent to the Coastal Reserve. There are currently few developments that interrupt views from the water or the beach, and the park is noted for the sense of remoteness that its uninterrupted views generate (section 7.2).

Apart from onshore boundary markers to aid boundary identification (section 7.2), there are no facilities within the park.

Aims

- Preserve and protect the landscape and seascape values of the park, including the natural character and aesthetic qualities.
- Minimise the visual impact of developments and management activities within and adjacent to the park.

Management strategies

- *Liaise with Wellington Shire to ensure that the planning scheme and planning applications give due consideration to the landscape and seascape values of the park.*
- *Encourage and support the identification of landscape elements of special importance to the Traditional Owners and their perspectives on those elements as a basis for their protection and appropriate interpretation (sections 5.1 and 6.1).*

4.6 Marine and other pests

Over 100 exotic species are known to have become established in Victorian waters (Hewitt et al. 1999). Some have become marine pests. No marine pests have been recorded to date in Ninety Mile Beach Marine National Park. Because of the park's inaccessibility and associated difficulty in conducting regular, detailed surveys, incursions of marine pests are unlikely to be detected until they are fully established and beyond potential control. Marine pest incursions are most likely to be from natural dispersal of larvae or adults from established populations. The open coast environment and infrequent boating traffic makes the introduction of marine pests due to translocation by boats unlikely.

An exotic marine species with the potential to establish in the park is the New Zealand Screw Shell, a large gastropod with a broad conical spire. This species is established in Bass Strait and live individuals have been found in Corner Inlet (MRG 2004). The marine environment along Ninety Mile Beach, including the park, is suitable for this species and it may already be present. The impacts of the species have yet to be fully understood however it could reduce

the numbers of native suspension feeders if it occurs in high densities via direct competition for food and by changing sediment characteristics. There are no established control measures for this species (NIMPIS 2002).

Marine pests can have a devastating impact on Marine National Parks and Marine Sanctuaries. The introduction of marine pests into Victorian waters is listed as a potentially threatening process on Schedule 3 of the Flora and Fauna Guarantee Act (FFG). Victoria's management priorities in relation to marine pests are set out in the relevant FFG Action Statement (NRE 1999a).

Prevention of marine pest invasions is the most effective management option. Prevention involves reducing the risk that a pest will be introduced to the park. In a very limited number of cases, with specific criteria, control measures may be attempted for established pest populations generally as part of a coordinated regional or national response. However, experience elsewhere has shown that proposals to control established marine pests need to consider fully the likely effectiveness. The interconnectedness of the marine environment and the ability of many marine pests to migrate over long distances mean that control measures may be feasible only in limited circumstances. For example, using techniques that are successful on land, such as physical removal by hand, might make the situation worse as some marine pests regenerate fully from fragments dislodged during removal. Where implemented, control measures will meet strict national guidelines for managing marine pests. Because of the possibility of misidentifications or exacerbating the pest problem, control measures will need to be part of authorised programs. In some cases, further nationally coordinated research is required into control measures.

Victorian marine pest emergency management arrangements (*Interim Victorian Protocol for Managing Exotic Marine Organism Incursions*) (NRE 1999b) will form the basis for responding to new introductions and existing incursions of marine pests. The adoption of the *Waste Management Policy (Ships' Ballast Water)* (EPA 2004) for Victorian waters will help reduce the risk of

marine pest incursions from ships' ballast water. Emergency responses to marine pest outbreaks in Victoria are managed as part of agreed national arrangements for marine pest emergencies. The Consultative Committee for Introduced Marine Pest Emergencies provides national oversight. Parks Victoria actively supports the protocol, by adopting best practice within the organisation and educating and informing the community about prevention measures.

Vessel cleaning and maintenance guidelines to help prevent the spread of marine pests (DSE 2004) aim to reduce the risk of spreading marine introduced pests by providing practical solutions for vessel operators for cleaning gear and hulls. Supporting initiatives include *EPA Victoria's Cleaner Marinas Guidelines* (EPA 1998).

Parks Victoria Rangers, Fisheries Victoria Fisheries Officers, community-based organisations (e.g. dive clubs), and visitors play an important role in the monitoring and early detection of marine introduced pests in the park.

The intertidal area of the park is frequented by the Red Fox. Foxes scavenge along the beach and prey on eggs and chicks of shore-nesting birds. Fox predation is listed as a potentially threatening process in Schedule 3 of the Flora and Fauna Guarantee Act, and an action statement (No. 44) has been prepared. Foxes enter the park from the adjacent coastal reserve and farmland.

Aims

- Minimise the risk of introduction by human activities and subsequent establishment of marine pests in the park.
- Establish arrangements for the detection of new incursions within the park in support of Victorian marine pest management arrangements.
- Implement national or Victoria-wide control arrangements as they relate to the park.

Management strategies

- *Support DSE in educating Parks Victoria staff, Fisheries Victoria Officers and the community to identify marine pests.*

- *Provide community groups, researchers, licensed tour operators and contractors with information about marine pests so they can integrate the identification of marine pests into their activities and report any sightings.*
- *Avoid translocation or new introductions by promoting boat-cleaning protocols for all recreational boats and contractors (section 6.3) in accordance with the DSE brochure 'Aquatic Pests: Treat 'em mean — keep your boat clean'.*
- *Ensure that management vessels operating in the park are maintained according to Victorian Government boat-cleaning protocols (DSE 2004).*
- *Include boat-cleaning protocols in contracts, licences or permits of contracted vessels, research vessels and licensed tour operator vessels operating in the park.*
- *Manage all pest incursions in accordance with the Interim Victorian Protocol for Managing Exotic Marine Organism Incursions (NRE 1999b) (section 8.3).*
- *Undertake authorised pest programs only where research indicates that control or eradication is feasible and likely to be effective or as part of a coordinated regional or national response.*
- *Ensure that the detection of marine pests is reported in accordance with Victorian pest management arrangements and recorded on Parks Victoria's Environmental Information System and other relevant databases.*
- *Develop and implement appropriate fox control programs aimed at protecting breeding shorebirds, for the park and adjacent coastal reserve.*

5 STRATEGIES FOR CULTURAL VALUES CONSERVATION

5.1 Indigenous cultural heritage

The land and seascapes of Ninety Mile Beach Marine National Park and surrounding land and waters are culturally and spiritually significant to the relevant Indigenous communities.¹ Indigenous tradition indicates that the park is part of the *Country* of the Gunai/Kurnai Indigenous people. At the time of publication there were several Indigenous groups asserting traditional ownership of the park.

Throughout periods of changing sea levels, Traditional Owners have maintained a strong and continual association to the park for thousands of years. They possess an intimate relationship with features of the land and seascape, and of particular plant and animal species. Many features of the park remain culturally and spiritually significant to the relevant Indigenous communities today.

Ninety Mile Beach Marine National Park provided important areas for shelter, food collection, tool making, story telling, teaching and learning. Children were taught important techniques for the hunting, collection and preparation of seasonally abundant food and other resources. Such resources were found in both marine and terrestrial environments. Stories were shared, and children developed an ongoing spiritual association, understanding, and respect for the area now park.

Seasonally abundant food, including fruit, yams, eggs, shellfish and other animals were all important components of the diet of Indigenous people of the area. The streams and coastal waters were fished with net or line, or by spear from the shore or bark canoes (Coutts 1984).

Areas adjacent to Ninety Mile Beach Marine National Park contain evidence of a range of places and objects of particular significance to Indigenous people.

As significant Indigenous places and objects within the park become known, some may require active management to ensure their protection, while many others will be relatively secure because of their location. Degradation by erosion and pillaging of material are potential threats to the integrity of such cultural places and objects.

All Indigenous cultural places and objects are protected under the Aboriginal and Torres Strait Islander Heritage Protection Act and the Archaeological and Aboriginal Relics Preservation Act. It is an offence to damage, interfere with or endanger an Aboriginal site, place, or object without obtaining prior written consent from the scheduled Aboriginal Community. Issues relating to the protection of such cultural heritage and the involvement of the scheduled Aboriginal Community are approached in accordance with these Acts.

As the Central Gippsland Aboriginal Health and Housing Co-operative Ltd (the scheduled Aboriginal Community) is currently not in operation, the Minister for Aboriginal Affairs currently has cultural heritage responsibilities for Ninety Mile Beach Marine National Park in accordance with Part IIA of the Aboriginal and Torres Strait Islander Heritage Protection Act. Aboriginal Affairs Victoria is to be contacted regarding cultural heritage matters within the community area (section 8.3).

Issues relating to native title are dealt with according to the Native Title Act (section 2.5).

Parks Victoria respects the Traditional Owners' cultural lore, interests and rights in the land, and aspirations for *Country* and seeks to reflect these in planning and management (Parks Victoria 2005b). Parks Victoria welcomes opportunities to cooperate with the relevant Indigenous communities in managing the park (section 8.2).

Aims

- Protect Indigenous places and objects from interference or damaging activities.
- Nurture Indigenous cultural lore relating to the park.

¹ Unless cited otherwise, information is based on oral history provided by relevant Indigenous communities.

Management strategies

- *Protect Indigenous places and objects from disturbance and damage in partnership with the Traditional Owners and in cooperation with the scheduled Aboriginal Community and AAV (section 8.3), and in accordance with:*
 - *the provisions of relevant legislation including the Archaeological and Aboriginal Relics Preservation Act and Aboriginal and Torres Strait Islander Heritage Protection Act*
 - *Parks Victoria's Guidelines for Working with Aboriginal Communities and Protection of Cultural Sites (Parks Victoria 2002b).*
- *Assess annual park programs to integrate relevant Indigenous practices and minimise the potential for impacts of park management activities on Indigenous cultural heritage, in consultation with the Traditional Owners and the scheduled Aboriginal Community.*
- *Ensure that all management actions are in accordance with the Native Title Act.*
- *Maintain confidentiality in respect of Indigenous cultural lore, places, objects and aspirations, in accordance with tradition and the wishes of the Traditional Owners (sections 6.1 and 8.2).*
- *Respect Indigenous cultural lore and the Traditional Owners' aspirations for Country and in collaboration with them and scheduled Aboriginal Community and in accordance with Parks Victoria's operational policies, reflect the Traditional Owners' cultural lore, interest and rights in all planning and management of the park (sections 4.1, 4.4, 4.5, 6.1 and 8.2).*
- *Encourage the identification, recording and risk assessment of Indigenous places and objects and cultural lore relating to the park, in collaboration with relevant Indigenous communities and in liaison with AAV.*
- *Assess and identify Indigenous cultural heritage suitable for promotion and interpretation in collaboration with the*

Traditional Owners and in liaison with AAV (sections 6.1 and 8.3).

5.2 Maritime and other cultural heritage

European association with the Ninety Mile Beach began in 1797 with the wreck of a longboat from the *Sydney Cove* (Love 2003). This was the first recorded shipwreck on the Gippsland coast. The longboat, with 17 sailors, was attempting to reach Port Jackson after the *Sydney Cove* was wrecked on Preservation Island in Bass Strait. Three survivors eventually reached Port Jackson, after walking the coastline from Ninety Mile Beach (Love 2003). The wreck resulted in the first contact between Europeans and Indigenous people along the Ninety Mile Beach.

The first recorded European maritime exploration of Ninety Mile Beach was by George Bass in 1798 when he sailed from Sydney to see whether Van Diemen's Land was separated from the mainland (Le Cheminant 1986). This voyage was followed shortly after by those of Lieutenant James Grant in 1801 and French Captain Nicolas Baudin in 1802 (Collett 1994; Townrow 1997).

The first official surveys of the coastline (from Cape Howe to Western Port) were undertaken between 1841 and 1856.

Between this period of first exploration by George Bass and subsequent full survey in the mid 19th century the marine environment in this area was extensively exploited by sealers and whalers, who lived in temporary camps along the coast (Collett 1994).

Port Albert developed in the 1840s as a gateway for the early settlement of Gippsland (LCC 1980). The town initially serviced the local area only but soon developed into a staging post for further exploration and development of the coastal fringe of Gippsland. Grazing areas were opened up and the area's rich timber reserves were harvested to meet the growing needs of Melbourne.

There are no known shipwrecks or other European cultural registered sites within the park.

Aims

- Conserve places of historic significance.
- Encourage learning and understanding about the historic heritage of the park.

Management strategies

- *Where appropriate, interpret any cultural heritage values discovered within the park, in collaboration with Heritage Victoria.*

- *Protect any historic places and objects that may be discovered from damaging or inappropriate activities.*
- *Cooperate with and support Heritage Victoria's maritime heritage research programs.*

6 STRATEGIES FOR VISITORS

6.1 Information, education and interpretation

Providing information, interpretation and education can help orientate and inform visitors, increase visitor enjoyment and satisfaction, foster an understanding and appreciation of the park's special natural and cultural values, build understanding of management activities, and help visitors to experience the park in a safe and appropriate manner. Parks Victoria delivers information, interpretation and education to visitors by various means, including its website, Ranger patrols, Marine Note brochures, signage, tourism brochures and other publications, displays, and licensed tour operators. These services may be developed and provided in collaboration with other agencies.

Having a representative system of Marine National Parks and Marine Sanctuaries in Victoria presents a unique opportunity to educate visitors and the broader community about the features and benefits of a statewide system of protected areas. While delivering initiatives to raise awareness and understanding of the system in a statewide context, a range of information, interpretation and education products specific to the key features of the park will also be provided.

Ninety Mile Beach Marine National Park offers opportunities to develop themes related to the park's significant subtidal soft sediment habitat and diversity of marine ecological communities (section 4.4) and the use of the area by the Traditional Owners (section 5.1).

Promotion of the high biodiversity values of the park represents an important opportunity to publicise the reason for the inclusion of the Marine National Park in the system.

Currently the park is little known and promoted. Wellington Shire Council is investigating ways to promote the Ninety Mile Beach area and considers the park a potential feature of future promotions. Information on the underwater environment has been obtained mostly by remote sampling surveys. Only a few underwater photographic and video images exist to help promote the park.

The dune environment, although outside the park, is integral to the appreciation and understanding of the natural and cultural values of the park. Information, interpretation and education programs in particular must seek to communicate information and regulations across the entire marine and terrestrial protected areas of Gippsland, without allowing varying land and water tenures to confuse messages.

Information about the park can be found on the Parks Victoria website, in Parks Victoria's Marine Note about the park and on a Parks Victoria information sign at Seaspray. The Marine Note has been distributed to local shops, schools and information centres in the Wellington Shire.

Future signage should improve the on-site identification of the park and describe permitted activities. Appropriate signage describing the park's value to the Hooded Plover, and the impact that unrestrained dogs can have on this species, will be required for visitors to fully appreciate alterations to dog regulations in the park (section 6.6).

Off-site information using a variety of media will be the best way of promoting the park, its significant marine communities and Indigenous cultural significance. Information will be distributed via the Parks Victoria website, visitor information centres and local shops, caravan parks and other venues.

The park's proximity to Seaspray means that on-site Ranger-guided activities are possible. Activities such as beach walks and public talks run in collaboration with the Department of Sustainability and Environment's Coast Action/Coastcare summer activities program will be used to promote the park and its significance, particularly during peak visitor season.

There are no existing educational programs in the park. Opportunities for school education relating to themes associated with the marine environment, human impacts, recreation, conservation and Indigenous cultural heritage could be developed in conjunction with local schools in the future. These programs would further promote the park and Parks Victoria's marine education program.

The park is within Tourism Victoria's Gippsland marketing and promotion region. Ninety Mile Beach Tourism and Development Group is the Local Tourism Association.

The *Gippsland Regional Tourism Development Plan 2004–2007* (Tourism Victoria 2004) sets the tourism framework for Gippsland. Parks Victoria supports the provision of marketing information that highlights the natural and cultural values of the park, fosters awareness of Indigenous culture and heritage, and promotes appropriate behaviours in visitors that are compatible with the conservation of natural and cultural values.

Aims

- Promote and encourage visitors' discovery, enjoyment and appreciation of the park's natural and cultural values in a safe and appropriate manner through information, interpretation and education.
- Encourage public support for parks and park management practices.
- Promote an awareness of Indigenous culture.

Management strategies

- *Provide pre-visit information about the park via Marine Notes, Education Notes, Parks Victoria's website, the Parks Victoria Information Centre, accredited visitor centres and appropriate local outlets.*
- *Provide and support high-quality, stimulating and innovative opportunities for visitors to discover, experience and understand the park's natural and cultural value (section 8.1), in particular:*
 - *collaborate with Coast Action to provide a coordinated 'Summer by the Sea' holiday program for the South Gippsland area which has a strong focus on park values*
 - *provide high-quality marine national park displays and talks to a range of clubs, schools and community groups*
 - *provide on-site visitor signage and interpretive and education material appropriate for the park in liaison with the Wellington Shire and*

Seaspray Foreshore Reserves Committee of Management.

- *Deliver messages to visitors about various values and themes including:*
 - *the high diversity of marine life in the park, especially the invertebrate diversity (section 4.4)*
 - *Indigenous cultural heritage (section 5.1)*
 - *appropriate behaviours including minimal impact techniques and adherence to appropriate codes of conduct to protect park values and maximise visitor safety (section 6.8)*
 - *protection of the Hooded Plover, and associated management strategies (section 4.4).*
- *Deliver clear interpretation, information and education messages supporting integrated management between the park and the adjacent coastal reserve.*
- *Promote greater public understanding, appreciation and respect for Indigenous culture by incorporating information about Indigenous cultural lore, places and objects in information, interpretation and education programs, in collaboration and accordance with the wishes of the Traditional Owners (sections 5.1 and 8.2).*
- *Annually evaluate information and interpretive programs related to the park.*
- *Work in partnership with State, regional and local tourism outlets to provide information on the park's values and recreational opportunities within neighbouring townships.*
- *Continue to allow sustainable educational use by school and community groups.*
- *Promote the need for schools to notify Parks Victoria (on 13 1963) of any intended school group visits.*

6.2 Access

Ninety Mile Beach Marine National Park is about 220 kilometres south-east of Melbourne and 40 kilometres south of Sale. Access to the park is by walking, horse riding, cycling or boat. Currently the majority of walkers, horse riders and cyclists access the park along the

beach from the township of Seaspray. Beach access from Seaspray is via established walking tracks or around the mouth of Merriman Creek. Boating access is mainly by small boats (3 to 4 metres) launched at the Seaspray boat ramp into Merriman Creek and then floated down the creek to the sea or dragged over the beach to the sea, if the mouth is closed. Larger boats can only access the area by launching at McLoughlins Beach, Port Albert or further afield. No boat launching facilities exist within the park and beach launching of boats using vehicles or trailers is not permitted.

Access by walkers, horse riders or cyclists is unlikely to cause significant impacts to natural or cultural values within the park. Trampling, particularly by horses (section 6.6) is a threat to shore-nesting birds using the upper beach areas adjacent to the park. Potential impacts are avoided if walkers, horse riders and cyclists remain below the high tide mark.

No formal access points exist in the adjoining coastal reserve, and uncontrolled access, particularly by horses, may contribute to disturbance to dunes and Indigenous cultural heritage sites.

There is no direct vehicle access to the park. Vehicle access is available to Seaspray and McGaurans Beach. Illegal vehicle access occurs within the park via a network of informal tracks crossing the dunes in the adjacent coastal reserve. Beach driving is classed as off-road driving and is prohibited throughout Victoria under the *Land Conservation (Vehicle Control) Act 1972* (Vic.). Off-road driving, including beach driving, is prohibited within Ninety Mile Beach Marine National Park.

Sufficient access currently exists to the park. The park is seen as having high seascape and landscape values because of the limited opportunities for access, particularly by vehicles. Visitors experience a sense of remoteness when entering the park from Seaspray because of the uninterrupted ocean and coast views seen from the beach. This experience may be disturbed by the sight and sound of vehicles in the vicinity of the park.

Aim

- Provide for the use and enjoyment of the park by visitors while protecting the park's natural and cultural values.

Management strategies

- *Provide for appropriate access to the park by boat, foot, horseback or bicycle (section 6.6).*
- *Monitor access to the park, particularly horse riding along the beach (section 6.6), and implement appropriate management actions to minimise access impacts, particular those affecting shore-nesting birds, if necessary.*
- *Prevent illegal vehicle access to the park by controlling vehicle access in the adjacent coastal reserve.*
- *Prohibit vehicle or trailer-based boat launching from the beach within the park.*

6.3 Recreational boating and surface water sports

Recreational boating within the park is predominantly transitory; most boats that pass through the park are engaged in recreational fishing outside the park. Fishing is prohibited within the park. Surfers, sail boarders and sea kayakers may occasionally use the park, although most water sports occur at the patrolled beach at Seaspray. Because of the inherent dangers of undertaking recreational activities in the park (section 6.8), visitors are generally encouraged to use the patrolled beach at Seaspray.

As in all Victorian coastal waters, a speed limit of 5 knots applies in specified circumstances in the park (MSV 2003).

Boating within the park is unlikely to increase significantly over time. The park is unsuitable for recreational scuba diving and snorkelling (section 6.4) and there are no boat-only accessible visitor sites in the park. Use of personal water craft (PWC) and water skiing are not known to occur in the park. Threats to the visitor experience of other users relating to excessive speed of recreational vessels are generally considered insignificant, as existing speed restrictions in coastal waters as determined by the *Marine Act 1988* (Vic.) are sufficient to minimise risks. Furthermore,

surface water sports close to the shore are minimal.

Boating activity in the park is likely to remain transitory, although if visitor numbers to the area increase, boating activities associated with fishing in adjacent areas may also increase. Compliance with the no-fishing provisions in the park will be an important management consideration should boating activity in the area increase. Anchoring in the park is likely to be infrequent and therefore unlikely to impact on existing natural values.

Parks Victoria, Victoria Police and Fisheries Officers undertake regular water-based patrols and have contact with recreational boat users. Patrols offer an opportunity for boat users to learn about the park.

Aim

- Allow for a range of recreational boating activities and surface water sports that are consistent with the conservation and recreation values of the park.

Management strategies

- *Permit a range of boating activities and surface water sports in the park in accordance with the 5 knot speed restriction within 200 m of the shore, 100 m of a vessel or buoy with a diver below signal and 50 m of a swimmer, and table 1.*
- *Encourage visitors to seek information on weather, tides and other conditions that may affect their safety in the park (section 6.8).*
- *Encourage safe and appropriate boating practices in the park through information, interpretation and education programs, in collaboration with relevant organisations (sections 6.1 and 6.8).*
- *Monitor boating activities and take appropriate action, if required, to minimise damaging activities.*

6.4 Diving and snorkelling

Although the park offers a different underwater experience compared to parks dominated by rocky reefs, it is not frequented by scuba divers or snorkellers because of its

inaccessibility, exposed conditions, strong currents and limited underwater scenery.

Diving in the park is difficult and dangerous (section 6.8), and has generally been limited to research and monitoring studies associated with various projects occurring along the Ninety Mile Beach coast.

Information relating to diving in the park should describe the dangers and recommend diving only by experienced divers. Diving, while remaining a permitted activity, should therefore not be actively promoted.

Educating divers about minimal impact practices, particularly visitors new to the activity, will help minimise impacts and assist with park management. Divers should refer to the Dive Industry Victoria Association (DIVA) *Code of Practice for Commercial Providers of Recreational Snorkelling & Scuba Diving Services in Victoria* (DIVA 2004) or the Scuba Divers Federation of Victoria (SDFV) *Codes of Practice: General Operating Guidelines for Recreational Scuba Diving and Related Activities* (SDFV 2005). Snorkellers should refer to the *Snorkelling, SCUBA diving, and wildlife swims - Adventure Activity Standards* (ORC 2004 at www.orc.org.au).

Divers need to be aware of the no-take provisions in the park and can assist in the early detection of marine pests in the park (sections 4.6 and 8.2), and the detection of unrecorded cultural places and objects.

Aim

- Allow, but do not promote, diving and snorkelling in the park.

Management strategies

- *Allow diving and snorkelling in the park in accordance with table 1.*
- *Provide information describing the limited diving opportunities, difficult conditions and level of experience required.*
- *Promote compliance of recreational scuba divers and snorkellers with relevant codes of practice and Adventure Activity Standards.*

6.5 Swimming and shore-based activities

The shoreline of Ninety Mile Beach Marine National Park is an exposed ocean beach. Current shore-based activities include walking, running, beachcombing, horse riding, sunbathing and swimming. All forms of fishing are prohibited within the park.

Nature study in the park is infrequent and generally carried out by experienced visitors who understand and practise minimal impact observation techniques. Future increases in these types of nature-based visits are expected, but are unlikely to be a significant management concern.

Limited swimming opportunities exist in the park because of its remoteness and frequently unsafe swimming conditions (section 6.8). Swimming is therefore not encouraged. A patrolled beach is located nearby at Seaspray.

Nude bathing has occasionally occurred in the park. Nude bathing may cause conflict with other beach users. No areas in the park have been prescribed as areas to which the provisions of the *Nudity (Prescribed Areas) Act 1983* (Vic.) apply and therefore nude bathing is not permitted in the park. An area of beach elsewhere in the local area has been proposed as an optional dress beach.

Shore-based activities are unlikely to increase significantly within the park because of its remoteness. Areas outside the park and elsewhere in the region suitable for a wider range of shore-based activities include Seaspray, Golden Beach and Delray Beach.

The lighting of fires on Marine National Park and Marine Sanctuary beaches is not permitted.

Aim

- Provide for appropriate shore-based activities, consistent with the protection of conservation values of the park.

Management strategies

- *Permit shore-based activities in accordance with table 1.*
- *Encourage swimming at the patrolled beach at Seaspray.*

6.6 Dog walking and horse riding

Dog walking and horse riding are activities that regularly occur along the beach within Ninety Mile Beach Marine National Park. Most visitors with dogs or horses access the park area from Seaspray. Historically this section of beach has been a preferred dog walking and horse riding area, as it is away from the more populated beach immediately in front of the Seaspray township and forms part of an extended beach horse ride from Seaspray to Woodside Beach.

Prior to the establishment of the Marine National Park the beach was part of the Ninety Mile Beach Coastal Reserve, in which unrestricted dog and horse access was permitted throughout the year.

Dogs and horses are not compatible with the management objectives of, and are generally not permitted in, areas managed under the National Parks Act, including Marine National Parks.

Dogs can chase, prey on or otherwise disturb native fauna. The sight or sound of dogs can disturb wildlife, and lead to the interruption of feeding and breeding which may threaten the survival of certain species. Endangered ground-dwelling species such as Hooded Plover are at particular risk (section 4.4). These birds are susceptible to disturbance by unrestrained dogs, including trampling or predation of eggs or chicks (Weston 2003).

Dogs and dog excrement can also cause annoyance and distress to other park visitors. Some visitors object to seeing dogs in parks because they are not part of the natural environment and make wildlife more difficult to observe (Weston 2003).

Trampling of vegetation and disturbance to ground nesting birds are the main impacts associated with horses in beach areas. Damage to vegetation can lead to erosion. Eggs and chicks of ground-nesting birds, particularly Hooded Plovers (section 4.4), are also easily crushed. Disturbance to ground nesting birds by horses can be negated if horses are kept below the high tide mark. Horses and horse dung can also cause annoyance and distress to other park visitors.

In accordance with the National Parks (Park) Regulations 2003, dogs and horses may be

permitted in certain areas of a park, provided they are kept under control and on a lead or rein, and prevented from causing annoyance to people, disturbance to wildlife or damage to property. In a number of parks, dogs are currently permitted on leads and horses are permitted, subject to appropriate conditions.

Dogs are permitted in McLoughlins Beach – Seaspray Coastal Reserve and dogs on leads are permitted on the Seaspray Beach in front of the township.

In order to achieve a balance between the protection of conservation values, consistency with adjacent dog regulations and providing for the continuation of an existing popular recreational activity, a dogs-on-lead area and a no-dogs area has been established within the park. The dogs-on-lead area commences at the north-eastern boundary closest to Seaspray and extends two kilometres into the park along the beach. In the remaining three kilometres of beach dogs are prohibited (figure 2).

Horse access is permitted in the Ninety Mile Beach Coastal Reserve adjacent to the park. Limited access is permitted to the north-east of Seaspray as far as the start of the Gippsland Lakes Coastal Park, where horses are prohibited.

Horse riding along beach areas below the high water mark within the park is permitted. This allows for the continuation of an established, extended beach riding experience, with minimal impact on sensitive natural values.

Aim

- Provide for dog walking and horse riding in the park, while minimising impacts on natural and cultural values.

Management strategies

- *Allow dogs on leads at all times within the designated dog permitted area, being the section of beach below the high water mark extending two kilometres south-west along the beach from the north-east boundary nearest Seaspray (figure 2). Prohibit dogs from the all other areas of the park unless confined on board a vessel.*
- *Allow horse riding along intertidal beach areas of the park (figure 2).*

- *Introduce a permit system for organised horse riding events (e.g. club rides, specific events) to:*
 - *promote contact between riding groups and Parks Victoria*
 - *provide riders with park information, including a map, park horse riding regulations and any restrictions on horse riding locations*
 - *provide Parks Victoria with data on the use of the park by horse riders.*
- *Monitor the impact of horse riding and dog walking on environmental values (including the Hooded Plover) and other park users and take appropriate management actions as necessary.*
- *Require dog and horse owners to dispose of their animal's excrement outside the park.*
- *Raise the awareness of dog owners and horse riders about the importance of the park to Hooded Plover protection through information, interpretation and education.*

6.7 Tourism services

Licensed tour operators play a key role in nature-based tourism in Victoria by offering guided park tours and supported recreation activities, and information that promotes park values and appropriate use.

Tour operator licences include conditions that detail access, permitted activities and site-specific restrictions. Licensed tour operators must also adhere to industry standards for safety and the *Policy for Sustainable Recreation and Tourism on Public Land* (NRE 2002).

Tourism Alliance Victoria is a membership-based industry association with a representative and professional development role for tourism businesses. Parks Victoria works collaboratively with Tourism Alliance Victoria in administering the Tour Operator Licensing system across Victoria's public land estate, including the park.

There are currently no licensed tour operators providing tours or activities in Ninety Mile Beach Marine National Park. Ninety Mile Beach Marine National Park is predominately an open-water park with limited commercial

tourism opportunities. Other beach areas along the Ninety Mile Beach offer greater opportunities for commercial tourism because of better access and availability of recreational opportunities.

Aim

- Support the provision by external providers of tourism services that accord with the objects of the National Parks Act.

Management strategies

- *Support and assist licensed tour operators to provide a range of appropriate activities compatible with the protection of park values.*
- *Monitor activities and use of licensed tour operations to ensure that the values of the park are protected, and amend permit conditions if necessary.*
- *Support Indigenous communities in providing licensed tour operator services.*

6.8 Public safety

Visitors are exposed to a number of natural hazards when visiting the park, although most of these are not unique to the park. Public information and education is an effective way to promote safety (section 6.1).

Interactions between weather and tidal cycles can result in major changes in sea conditions, even over the course of a day. Understanding and checking weather forecasts and tidal predictions is important for park visitors, especially those engaged in water activities.

Large waves, even on calm days, are common along the beach in the park. Combined with strong currents, these make the park an unsafe area for swimming. The beach within the park is not patrolled by surf lifesavers, but there is a patrolled beach nearby at Seaspray.

A survey of Victorian beaches in 1996 rated their safety according to four hazard categories: safest, moderately safe, low safety and least safe (Short 1996). The beach within the park was described but not assigned a risk rating. The adjacent Seaspray beach was given a 'moderate' rating because of the shallow attached inner bar, although the numerous rips were identified as a significant hazard (Short 1996).

Boats are frequently launched from the beach adjacent to the park. Launching of boats from the beach is a dangerous activity and boats can easily be swamped or capsized by waves.

The responsibilities for responding to emergency incidents in Victoria and Victorian waters are outlined in the *Emergency Management Act 1986* (Vic.). Parks Victoria is not the lead agency for emergency response situations. Instead it supports other agencies, including the Department of Sustainability and Environment, the Country Fire Authority, the State Emergency Service and Victoria Police, in emergency incidents where required.

The *Wellington Shire Municipal Emergency Management Plan* (Wellington Shire Council 2005) defines emergency response arrangements for all potential incidents within the Wellington Shire.

Parks Victoria has an Emergency Management Plan for all parks in the South Gippsland Marine and Coastal Park management area (Parks Victoria 2005c), including Ninety Mile Beach Marine National Park. The plan describes how Parks Victoria will respond to emergencies that occur in parks.

Adventure Activity Standards are being developed by the outdoor recreation industry for a range of adventure activities to assist in achieving safe practice, including diving and snorkelling. The Outdoor Recreation Centre will facilitate the development and continual update of these standards.

Aims

- Promote visitor safety and awareness of safety issues and risks within the park associated with access and use.
- Promote and observe safe practices, and co-operate with emergency services

Management strategies

- *Encourage visitors to seek information on weather, tides and other conditions that may affect their safety in the park.*
- *Ensure that staff and licensed tour operators are aware of the South Gippsland Marine and Coastal Park Management Unit's Emergency Management Plan particularly with*

respect to Ninety Mile Beach Marine National Park

- *Increase visitors' awareness of safety issues and potential hazards in the park, particularly strong currents, waves, weather and tidal hazards, through the use of Marine Notes, Parks Victoria's website and information signs.*
- *Provide and maintain safety and information signs at key locations in the park and adjacent area (section 6.1), including Seaspray.*
- *Integrate risk signage in the park with adjacent signage on Parks Victoria managed land.*
- *Liaise with the Seaspray Foreshore Committee to coordinate risk signage along the foreshore adjacent to the park.*
- *Promote safe boating and water safety within the parks.*
- *Support emergency services in search and rescue activities and ensure that Parks Victoria staff have adequate levels of training.*

7 STRATEGIES FOR AUTHORISED AND ADJACENT USES

7.1 Authorised uses

A number of uses and activities may be permitted in the park, subject to specified conditions to minimise impacts.

Vessels of all types are permitted to travel through the park. There are no Inshore Traffic Zones, navigational beacons, safe anchorages, public utilities or occupancies in the park.

Petroleum extraction, exploratory drilling, mineral exploration and mining, and invasive searching for or extraction of stone and other materials, are prohibited in the park under the National Parks Act. Petroleum exploration, such as seismic survey from an aircraft or from a vessel, that is carried out in a manner which does not detrimentally affect the seabed or any flora or fauna of the park may be allowed with the consent of the Minister. However the government has announced that it will not release any further areas in Victoria that contain Marine National Parks or Marine Sanctuaries for petroleum exploration. There is no petroleum exploration permit over this park. Construction of pipelines or seafloor cables may be permitted with the consent of the Minister in some circumstances.

Protected areas are generally avoided as locations for Defence Force training exercises, although they are sometimes used for search and rescue, field navigation and incident response activities. Activities are subject to a permit with conditions to ensure that values of the park are protected.

All research and monitoring for a Marine National Park or Marine Sanctuary by external organisations or individuals requires a research permit under the National Parks Act, issued by DSE.

Parks Victoria recognises the significant role that the filming and photography industry plays in the social and economic well-being of the community, and in providing for these activities, seeks to ensure protection of the natural and cultural values of the park. This is achieved through a permit system for all filming or photography conducted as part of a trade or a business. Amateur photographers or people taking film or video for personal or

hobby interest do not require a permit (section 6.10).

Aim

- Manage authorised uses and permitted activities consistent with legislation and minimise their impact on park values.

Management strategies

- *Manage authorised uses in accordance with the requirements of legislation and Parks Victoria's operational policies.*
- *Monitor authorised activities to ensure that conditions of authorisations are met. Assess the effectiveness of conditions of authorisations in protecting the park, and seek review of authorisations, if necessary, to arrest impacts.*
- *Permit Defence Force training activities or field navigation exercises in accordance with Parks Victoria's operational guidelines.*

7.2 Boundaries and adjacent uses

State waters adjoining the park and the underlying sea bed greater than 200 m below the sea floor are unreserved Crown land. The Government accepted the ECC's recommendation that a Coastal Waters Reserve be established under the Crown Land (Reserves) Act for the major portion of Victoria's marine area not otherwise designated for a particular purpose, to provide for a diverse range of activities that are compatible with long-term sustainable use (ECC 2000).

The adjacent coastal reserve and the nearby foreshore reserve are managed, in accordance with the Crown Land (Reserves) Act, by Parks Victoria and the Seaspray Foreshore Reserve Committee of Management respectively. Cooperation with all adjacent managers is desirable to facilitate a coordinated approach to management, especially operational matters.

Information, interpretation and education programs in particular must seek to communicate information and regulations across the entire marine and terrestrial protected areas of Gippsland, without allowing

varying land and water tenures to confuse messages (section 6.1).

As fishing is prohibited in the park but permitted in adjacent waters, clear boundary identification is essential.

Onshore boundary markers are used to communicate park boundaries to visitors. Existing boundary markers are yellow triangles mounted on three-metre-high poles, located on the north-eastern and south-western boundaries above the high water mark in the dunes. The markers are visible up to 2.5 km away depending on weather conditions. In addition to the boundary markers, boundaries are communicated to visitors through Marine Note brochures and signs at boat launching and other sites, and through information, interpretation and education programs (section 6.1). These programs will continue to identify coordinates of the park boundaries and landmark features to look for, and encourage boat-based visitors to use global positioning systems.

The ECC recommended that the adjacent coastal area be zoned as Coastal Protection Zone (ECC 2000) as indicated in the Victorian Coastal Strategy (VCC 2002). A nearby area, adjacent to the Seaspray township, is zoned Coastal Recreation Zone.

Many potential threats to the park, such as pollution originate from outside the park. Partnerships with the local community (section 8.2) and other agencies (section 8.3) are essential to ensure an integrated approach to marine conservation in the Twofold Shelf marine bioregion.

The Wellington Planning Scheme (DSE 2000) sets out the statutory framework for managing proposals and developments adjoining the park. Under the scheme the beach and dunes in and adjacent to the park are zoned, consistent with the State Planning Policy Framework (DSE 2003), as Public Conservation and Resource Zones (PCRZ). The area of the park

covered by the planning scheme is currently not zoned. This area, consistent with the State Planning Policy Framework (DSE 2003), should be zoned Public Conservation and Resource Zone (PCRZ).

The park extends to the three nautical mile limit of Victorian waters. The South East Regional Marine Plan does not identify any proposed marine protected areas in the adjoining Commonwealth waters (NOO 2004).

Aims

- Effectively communicate the location of the park boundaries.
- Minimise impacts on park values from adjacent developments and activities.

Management strategies

- *Regularly assess the existing system of boundary markers, signs and information about boundaries, and upgrade if necessary. In particular, assess the visibility of the onshore boundary markers from small boats and improve if necessary.*
- *Investigate and install, if feasible, onshore lead markers to improve boundary identification for vessels at sea.*
- *Work with Wellington Shire Council and the Seaspray Foreshore Reserve Committee of Management to encourage management of nearby coastal reserves in a manner that complements the landscape, seascape and conservation values of the park.*
- *Recommend to the Wellington Shire Council an amendment of the planning scheme, to recognise the creation of the park, and zone the area of park covered by the scheme as Public Conservation and Resource Zone.*

8 STRATEGIES FOR COMMUNITY AWARENESS AND INVOLVEMENT

8.1 Community awareness

Raising the community's awareness of the park's values is an essential step in developing their sense of custodianship for the park and engagement in the area's management (section 6.1). Community members are more likely to develop a sense of custodianship for the park if their views and values are respected, and park-related social networks are encouraged and supported. A strong connection with the park among visitors and the local and wider community assists in broader public education, raising awareness, and reaching others in the community.

The Seaspray community is well located for developing strong links with the park. Raising the awareness of the park within the Seaspray community will help ensure support for the park and can be used by the community to promote the tourism values of Seaspray.

Parks Victoria aims to communicate the benefits of a healthy parks system and its contribution to the health of individuals and society through the 'Healthy Parks Healthy People' program. Increasing awareness in the community of threatening processes, particularly those associated with recreational activities, can help to minimise the potential for further impacts (sections 4.2, 4.4 and 4.6). Information, interpretation and education programs play an integral role in raising community awareness about these issues (section 6.1).

Opportunities exist through information, interpretation and education programs (section 6.1) to build broader community awareness of the significance of the park to Indigenous communities. This will aid in the development of greater respect and recognition of Indigenous culture amongst the broader community.

The Coast Action / Coastcare program works with a variety of volunteer groups and community organisations to build broader community awareness and understanding of marine and coastal issues.

Aims

- Increase the community's awareness and understanding of the park, its values and management activities.
- Build a sense of shared ownership and custodianship for the park among community groups and individuals.

Management strategies

- *Promote opportunities for community members to improve park management through taking shared responsibility and becoming directly involved in reporting fauna sightings and compliance issues to Parks Victoria staff (sections 6.1 and 8.2).*
- *Ensure that information, interpretation and education programs for the park include raising local awareness as an objective.*
- *Publicise the work of volunteers and community groups in the park.*
- *Support volunteers and community groups to further develop an understanding of the park's values (section 8.2).*

8.2 Community participation

The participation of community groups and individuals in the park's management is pivotal in effective long-term planning, use and care of its values.

Volunteers and community groups make valuable contributions to park management projects. They bring diverse and valuable information, knowledge, skills and experience to the park that may otherwise not be available to park managers. Volunteers also bring great enthusiasm and add valuable resources to assist with the care of the park.

The interests of different community groups in the park often overlap and may not be complementary. There can be considerable benefits where such groups combine effort to collaborate with Parks Victoria to achieve common goals.

Traditional Owners have considerable interest in and aspirations for the park. Traditional Owners are also an important potential source of traditional knowledge about the area which has yet to be documented. A strong working relationship with Indigenous communities will be essential to reflect the Traditional Owners' cultural lore in the area's planning and management and reconciliation of their interests and aspirations with those of other members of the community.

Within Seaspray there are a number of groups, such as the Seaspray Reserves Committee of Management, Seaspray Ratepayers and Progress Association and the Seaspray Surf Life Saving Club, that have a strong interest in the local area.

Other volunteer organisations, including the Field Naturalists Club of Victoria, Birds Australia, Conservation Volunteers of Australia, horse riding clubs, dive clubs and tertiary and work experience students may also have an interest in the park.

Parks Victoria will support community groups who wish to become involved in aspects of the park's management. Currently there are few projects that community groups can become involved in, because of the remote nature of the park. Potential projects include promoting the park through information, interpretation and education projects or limited beach-based fauna surveys, particularly of shorebirds.

Coast Action / Coastcare coordinates marine and coastal interpretation activities along the Gippsland coast, including activities based at Seaspray. Parks Victoria will work with Coast Action / Coastcare to ensure coordinated delivery of information, interpretation and education appropriate to the park (section 6.1).

Aims

- Support community groups and volunteers to assist actively in the park's management by participating and contributing their knowledge and skills.
- Inform, enrich and strengthen the park's management with the community's tradition and customs, especially Traditional Owners' cultural lore.

Management strategies

- *Support volunteers and community groups seeking to become involved in the park, and support them in seeking funding for appropriate projects.*
- *Encourage, support and collaborate with Coast Action / Coastcare to provide programs within the park, particularly focusing on community interpretation and education (section 6.1).*
- *Continue to build, and strengthen and maintain relationships with relevant Indigenous communities. In particular, seek to further develop a close inclusive working partnership with the Traditional Owners and cooperation with the scheduled Aboriginal Community.*
- *Encourage visitors to assist with compliance management by:*
 - *reporting illegal fishing to the Fisheries Victoria offence reporting hotline*
 - *reporting other offences against the National Parks Act to the Parks Victoria Foster office.*

8.3 Agency partnerships

Although Parks Victoria is responsible for overall management of the park, other agencies are responsible for planning, managing or regulating certain activities in the park.

All activities relating to the park that are carried out by Parks Victoria or other agencies need to accord with all legislation and government policy and, as far as practical, be consistent with agencies policies and guidelines. To ensure this occurs, park staff must work closely with staff of relevant agencies and collaborate in implementing activities where appropriate.

DSE establishes parks, and provides strategic direction and policy advice for the management of the park, including marine flora and fauna values and threatening processes. Parks Victoria is a support agency for responses to oiled wildlife (section 4.2) and cetacean stranding or entanglement (section 4.4), operating at the direction of DSE.

The Gippsland Coastal Board provides for the long-term strategic planning of the eastern coast of Victoria, including the preparation of Coastal Action Plans (section 2.6). The Board provides direction and policy advice to facilitate sustainable development of the east coast of Victoria through the implementation of the *Victorian Coastal Strategy* (VCC 2002) and the *Integrated Coastal Planning for Gippsland — Coastal Action Plan* (GCB 2002a) (section 4.2).

The *Integrated Coastal Planning for Gippsland — Coastal Action Plan* (GCB 2002b) emphasises the importance of an integrated approach to the planning and management of the marine and coastal environment. It seeks to achieve integration between municipal planning schemes, public land policy and public land management plans in Gippsland, including the park.

West Gippsland Catchment Management Authority (CMA) manages the protection and sustainable development of land, vegetation and water resources within the region, including the preparation of a regional catchment strategy to specifically address impacts of land use and management on the marine and estuarine environment (section 4.2).

As part of agreed service delivery arrangements, Fisheries Victoria–Department of Primary Industries has primary responsibility for enforcement to ensure compliance with the fishing prohibitions under the National Parks Act. Parks Victoria will continue to collaborate with Fisheries Victoria and Victoria Police in activities such as cooperative Ranger and Fisheries Officer patrols and support arrangements in accordance with the *Statewide Compliance Strategy* (Parks Victoria 2002a) and *East Region Compliance Plan* (Parks Victoria 2005a).

Wellington Shire Council administers the planning scheme for land adjacent to the park, including assessment of developments with the potential to impact on park values. Parks Victoria provides input into planning applications to ensure the protection of park values.

The Victorian Environment Protection Authority (EPA Victoria) has primary

responsibility for environmental protection of all waters in Victoria and is responsible for administering and enforcing the Environment Protection Act, including all activities relating to the discharge of litter and waste to the environment (section 4.2). EPA Victoria also develops State Environment Protection Policies (SEPPs) for state waters.

EPA Victoria facilitates the development of Neighbourhood Environment Improvement Plans (NEIPs) which enable communities to work towards achieving local environmental improvements (section 4.2).

Responsibilities for responding to emergency incidents in Victoria and Victorian waters are outlined in the Emergency Management Act. As the manager of around 70% of Victoria's coastal areas, Parks Victoria plays a significant support role in the response to marine pollution incidents. In Victorian waters the *Victorian Marine Pollution Contingency Plan* (VICPLAN) (MSV 2002) outlines broad response arrangements to a potential oil spill or chemical spill (section 8.3). The *Gippsland Region Marine Pollution Contingency Plan* (Gippsland Ports 2005) describes the arrangements made for the Gippsland Region to provide effective emergency response during a marine pollution incident, under VICPLAN.

Through Aboriginal Affairs Victoria (AAV), the Department of Victorian Communities has responsibility for administering legislation protecting cultural heritage (sections 2.5 and 5.1). AAV and the Gippsland Cultural Heritage Unit advise Parks Victoria on Indigenous matters (section 5.1).

Heritage Victoria (Department of Sustainability and Environment) has primary responsibility for ensuring compliance with the *Heritage Act 1995* (Vic), including the provision of heritage advice to Parks Victoria (section 5.2). A Memorandum of Understanding between Parks Victoria and Heritage Victoria provides for cooperation between both parties to achieve mutual objectives for heritage conservation.

Parks Victoria is a support agency for Marine Safety Victoria at a statewide and regional level for marine pollution incidents, providing technical advice and on-site management (section 4.2).

The Minerals and Petroleum Division (Department of Primary Industries) is responsible for the sustainable development of the extractive, oil and gas, pipelines, geothermal energy, minerals exploration and mining industries in Victoria, through the provision of policy advice, regulation and promotion.

Tourism Victoria is the state government authority responsible for developing and marketing Victoria to Australian and international travellers. The park is within Tourism Victoria's Gippsland marketing and promotion region (section 6.1).

Victorian agencies work cooperatively with the Commonwealth Department of the Environment and Heritage on the management of regional ecosystem conservation issues.

Aim

- Enhance park management by collaborating with other agencies to ensure that they give appropriate consideration to park values in planning and implementing activities that relate to the park.

Management strategies

- *Work collaboratively with all agencies to implement the plan vision and directions, in particular with:*
 - *DSE regarding future planning and management, including protection of marine flora and fauna from potentially threatening processes*
 - *Gippsland Coastal Board on existing and future plans and strategies that relate to the park, including Coastal Action Plans and investigations into seabed subsidence*
 - *West Gippsland CMA to ensure the Regional Catchment Strategy specifically addresses impacts of land use and management on water quality issues that may affect the park*
 - *Fisheries Victoria to implement the fishing prohibition and the East Region Marine Compliance Plan*
 - *Wellington Shire Council regarding the administration of the planning scheme, including input into*

development proposals that may impact on the park

- *EPA Victoria and Gippsland Water to minimise impacts associated with discharge of waste into the environment particularly those from the Saline Water Outfall Pipeline (SWOP) and the Latrobe Valley Ocean Outfall at Delray Beach, and development of a NEIP if appropriate (section 4.2)*
- *AAV and Gippsland Cultural Heritage Unit on issues regarding Indigenous affairs, including the protection of Indigenous places and objects*
- *Heritage Victoria on heritage management and compliance with the Heritage Act*
- *Marine Safety Victoria to help maximise visitor safety and compliance with boating regulations*
- *Commonwealth Department of the Environment and Heritage on the management of regional ecosystem conservation issues.*
- *Maintain communication with Minerals and Petroleum Division (DPI), the petroleum industry and other agencies with respect to petroleum activities near the park.*
- *Liaise with State and regional tourism authorities to promote the park appropriately in regional visitor information centres and in regional strategies.*
- *Encourage other agencies to provide information to Parks Victoria on issues that are relevant to the management of the park and the protection of its values.*
- *Provide updated information for contingency plans for marine pollution incidents such as oil and chemical spills, cetacean / wildlife incidents (sections 4.2 and 4.3) and the Emergency Management Plan (section 6.8) as required, and communicate arrangements to staff, relevant agencies and interested parties.*

9 PLAN IMPLEMENTATION

9.1 Delivery and reporting

A range of approaches will be used to implement strategies in this plan. Some will be undertaken as part of routine management activities such as Ranger visits; others will be addressed as part of regional programs undertaken across the state each year.

A priority list of all the strategies in the plan will be used to guide routine management and identify detailed actions for inclusion in annual regional programs. Priorities for regional programs vary from year to year, depending on available resources and government priorities.

At the end of each year, progress towards implementing strategies in the plan will be reviewed and the priority list updated. Staff report internally against 'on time and within budget' delivery of regional programs and whether the completed strategy has achieved the objective. Parks Victoria reports annually to Government on the overall delivery of regional and divisional programs. This broader reporting on management performance is available in annual reports prepared on the National Parks Act and Parks Victoria.

During implementation of the plan Parks Victoria will work in partnership with Traditional Owners and the scheduled Aboriginal Community. On-going collaborative activities with the relevant Indigenous communities, interested members of the community, scientists and agencies in realising the vision and management directions for the park will be especially important as outlined in previous sections of the plan.

Implementation of the plan will be consistent with Parks Victoria's commitment to sustainable practices, which involves the delivery of operations, services and facilities in an ecologically and socially responsible manner with minimal use of expendable resources and minimal generation of waste.

In implementing the plan, management will respond to monitoring and research information as it emerges. Parks Victoria's environmental management framework makes this possible. Based on the International Standard for Environmental Management Systems (ISO 14001), the framework ensures

that the future condition of values is considered in identifying threats and developing actions to ameliorate them. Over time the success of actions is reviewed against set objectives to ensure ongoing learning and refinement of management. The selection of actions and treatments of threats are guided by the precautionary principle. Management options are evaluated on the basis of least impact on the environment. Treatment of threats with a potential for serious damage that are not addressed in the plan will not be postponed for lack of information.

Parks Victoria will use a variety of means to report to the community about the progress of implementation of the plan. The primary means will be through routine liaison between Parks Victoria, interested groups and individuals from the local community and relevant government agencies. In addition to giving regular updates, there will be opportunities for input by interested members of the community into annual priority setting and feedback on management performance. Events such as park open days and community and volunteer forums will offer similar opportunities for reporting and discussions about annual programs.

The results of monitoring and research work will continue to be available to the community as technical reports available on Parks Victoria's website www.parkweb.vic.gov.au.

Parks Victoria will also report on evaluation of the plan (section 9.3) at the start of the new or revised plan, through routine liaison and community forums and in the subsequent draft plan.

Future reporting on the Statewide Strategy (Parks Victoria 2003) and State of the Parks reports, which will be available on the Parks Victoria's website, will also include information on management performance in the park.

9.2 Plan amendment

During the 10-year life of the plan, amendments to the plan may only be made by the Secretary to DSE, following an authorised process which includes community consultation.

Circumstances that might lead to amendment of the plan include:

- the results of monitoring or research, management experience or new information (such as greater understanding of new threatening processes) which indicate the need for a change in management direction
- significant changes in visitation or use
- a change in policy that calls into question plan objectives
- new legislation (such as significant boundary changes).

The plan may also be amended if an activity, development or use which conflicts with the provisions of the plan is approved by government (such as native title outcomes).

9.3 Evaluation and review

Periodically through the life of the plan, Parks Victoria will assess overall progress towards implementing the strategies in the plan and also assess progress towards achieving the plan vision and directions. These evaluations will inform a decision about whether a new or revised plan is required. The achievements of the plan will be assessed by considering performance areas such as:

Protecting natural values

- Overall improvement in biodiversity.
- Compliance with no-fishing provisions and park regulations.

- Timely management intervention to minimise threats.

Protecting cultural values

- Progress towards working with Traditional Owners in managing the park and in protecting and interpreting Indigenous cultural heritage.
- Timely management intervention to avoid damaging activities and threats.

Managing recreation and visitor use

- Managing impact from visitors, including individuals and school and tour groups.
- Meeting community expectations in relation to Parks Victoria's management of the park.
- Improving community and visitor awareness.

Providing for research and promoting understanding

- Improving understanding of the composition and distribution of habitats and ecological processes.
- Ongoing Traditional Owners and other community participation.
- Clear identification of major knowledge gaps.

Methods for evaluating the benefits of the plan are likely to be refined over time. Parks Victoria partners with external research agencies to establish benchmarks and indicators for major communities and habitats. Through sound monitoring and assessment methods this monitoring and research work will strengthen the basis for comparing management performance over time.

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GLOSSARY

Algae (seaweed) – plant-like organisms that use light energy to create food. Unlike plants, algae are not differentiated into roots, stems and leaves.

Ascidian (sea squirt) – common type of solitary or colonial marine animal.

Ballast water – water carried in a ship's tanks for stability. Normally discharged to the sea when the ship is loaded, and can be contaminated with pollution or exotic organisms.

Biodiversity – the natural diversity of all life: the sum of all native species of flora and fauna, the genetic variation within them, their habitats and the ecosystems of which they are an integral part.

Bioregion – an area with unique underlying environmental and ecological features.

Bivalve – a type of mollusc with a pair of hinged shells (e.g. scallop, mussel).

Blow cart – any type of wind-powered, wheeled vehicle. Commonly has 3 or 4 wheels and a small yachting sail and is driven along beaches.

Calcarenite – type of limestone consisting of sand grains cemented together with lime.

CAMBA – China and Australia Migratory Bird Agreement. Agreement sets out management obligations for each country with respect to listed bird species.

Catchment – the area of land that drains to a watercourse or estuary.

Coast – in broad terms, the sea and the seabed to the State limit (3 nautical miles or 5.5 kilometres offshore) and the land and inland waters within the coastal catchment.

Coastal Action Plan (CAP) – plan that identifies strategic directions and objectives for use and development in the region or part of the region to facilitate recreational use and tourism, and to provide for protection and enhancement of significant features of the coast, including the marine environment.

Coastline – generally, the line along which the land meets the sea.

Committee of Management – a committee appointed under the Crown Land (Reserves) Act to manage reserved Crown land on behalf of the Minister. For coastal land, committees are either an agency (e.g. the local municipality, Parks Victoria or the Department of Sustainability and Environment) or a committee appointed through an expression of interest process.

Country – in Indigenous usage, all of nature, cultural and spirituality relating to an area.

Crown land – land belonging to the State.

Cultural lore – tradition about stories, songs, rituals, ceremonies, dances, art, customs and spiritual beliefs.

Customs – observances and practices of people (includes land management and resource use) in accordance with tradition.

Dreaming, the – the primordial creative world of the spirit ancestors and the continuing reality for their totem ancestors.

Ecologically sustainable development (ESD) – development that improves the total quality of life both now and in the future, in a way that maintains the ecological processes on which life depends.

Ecologically sustainable use – the use of a species or ecosystem at a level that enables it to recover naturally.

Ecosystem – a dynamic complex of interacting organisms and their associated non-living environment.

Estuary – an inlet or river mouth that is influenced by tides and freshwater inputs from the catchment.

Exotic marine organism / species – a non-endemic / non-native species existing outside its natural distribution.

Flotsam – In maritime law, applies to wreckage or cargo left floating on the sea after a shipwreck. The common phrase *flotsam and jetsam* is now used loosely to describe any objects found floating or washed (respectively) ashore. See also *Jetsam*.

Foreshore – generally, the land between a coastal road and the low water mark.

Freehold land – land in private ownership.

Habitat – the preferred location or 'home' of an organism.

Heritage – a place, activity, cultural way of life, structure or group of structures that has aesthetic, historic, scientific or social value for past, present or future generations.

High water mark – the landward boundary of high water mark is the average of the highest tides (spring and neap).

Holocene – the most recent geological period covering from 12 000 ago to the present.

JAMBA – Japan and Australia Migratory Bird Agreement. Agreement sets out management

obligations for each country with respect to listed bird species.

Jetsam – In maritime law, applies to cargo or equipment thrown overboard from a ship in distress and either sunk or washed ashore. The common phrase *flotsam and jetsam* is now used loosely to describe any objects found floating or washed (respectively) ashore. See also *Flotsam*

Indigenous cultural heritage – the cultural lore, places and objects of significance to Indigenous people in accordance with tradition.

Indigenous people – people who are descendants of Aboriginal Australians.

Infrastructure – physical structures that facilitate the human use of an area (e.g. roads, paths, toilet blocks).

Integrated coastal zone management (ICZM) – a framework that attempts to integrate planning and management in a region (e.g. Victoria) across the land and sea interface and the private and public land interface, to treat the coastal zone as one biophysical entity.

Intertidal – the area between low and high tide levels, which is subject to daily changes in physical and biological conditions from tide movements.

Invertebrate – an animal without a backbone at any stage of development (e.g. worms, sponges).

Marine National Park – in Victoria, highly protected areas reserved and managed under Schedule 7 of the National Parks Act that represent the range of marine environments in Victoria, and in which no fishing, extractive or damaging activities are allowed.

Marine protected area – a marine area that has some form of protection and is managed for conservation objectives.

Marine Sanctuary – in Victoria, a small, highly protected area reserved and managed under Schedule 8 of the National Parks Act to protect special values, and in which no fishing, extractive or damaging activities are allowed. These areas complement Marine National Parks.

Matters of National Environmental Significance – defined by the Environment Protection and Biodiversity Conservation Act to include: World Heritage Properties; Ramsar wetlands; nationally threatened species and communities; migratory species protected under international agreements; the Commonwealth marine environment; and nuclear actions.

Midden – a mound or deposit containing the remains of shellfish eaten by Indigenous people. Coastal shell middens can consist of the shells and other remains from a single meal or many different

meals eaten in the same location over many years. Middens can also contain other cultural items such as stone and bone artefacts..

Mollusc – broad group of animals including snails, sea slugs, squids, octopuses, cuttlefish and mussels.

Neap tides – tide occurring twice every month between spring tides, and slightly lower than them.

Outfall – the place where sewage is discharged to the ocean.

Pelagic – relating to the surface waters of the marine environment.

Pest – exotic organisms (plants, animals or pathogens) that, if introduced outside their natural or previous distribution, they cause significant changes to habitats, food chains, ecosystems or human health by feeding on or competing with native species. Can refer to either terrestrial or marine species.

Photosynthesis – the process by which organic molecules are made from carbon dioxide and water, using light energy. This process is essential for the growth and survival of plants and algae.

Ramsar Convention on Wetlands – An international agreement created in Ramsar, Iran in 1971 to recognise wetlands of international importance.

Relevant Indigenous communities – includes the traditional owners, and any scheduled Aboriginal Community/s for areas included in the park area, and other Indigenous communities and individuals with an interest in the park.

Scheduled Aboriginal Community – body or bodies scheduled as the Local Aboriginal Community under the Aboriginal and Torres Strait Islander heritage Protection Act relating to the park.

Sediment – insoluble material carried in water, consisting mainly of particles derived from rock, soil and organic material; such material that has settled out of the water, onto the seabed.

Sedimentation – the deposition of sediment on a surface.

Sponge – multicellular, filter-feeding animals with a variety of forms. Sponges are the simplest form of invertebrate life.

Spring tides – occur twice every month at new and full moon, and are the highest tides.

Stakeholder – an individual or group with a vested interest in, or may be affected by, a project or process.

Stormwater – runoff from land during and following rain. Stormwater carries accumulated

material, which may include litter, soil, nutrients, pathogens, chemicals, pesticides, oils and grease.

Tertiary – geological period occurring from 63 to 1.5 million years ago.

Threatening process – a source of potential harm or a situation with a potential to cause loss.

Tradition – the body of knowledge, belief and customs that is passed from generation to generation.

Traditional owners – communities of people that reasonably assert an association with the area that is based on direct descent from the original Indigenous custodians and is in accordance with Indigenous tradition.

Translocation – the transfer of pests from one area to a new area.

Values – natural and cultural assets (e.g. historic artefacts, features, species, communities) that have been given worth or are considered to be desirable.

Water column – water habitat extending between the surface and the seabed.

Wetland – land where saturation by water is the dominant factor for soil type and plant and animal communities (e.g. tidal areas, saltmarshes and mangrove).

Wrack – organic matter washed up on beaches.

Abbreviations

AAV – Aboriginal Affairs Victoria.

ANZECC – former Australian and New Zealand Environment and Conservation Council. ANZECC was represented by government Ministers and guided national policy and programs relating to the management of the environment and its conservation.

CRIMP – Centre for Research on Introduced Marine Pests.

DPI – Department of Primary Industries.

DSE – Department of Sustainability and Environment.

ECC – former Environment Conservation Council (now VEAC).

EPA – Environment Protection Authority (Victoria).

GRWMP – Gippsland Regional Water Quality Monitoring Partnership.

IUCN – International Union for the Conservation of Nature and Natural Resources.

NRE – former Department of Natural Resources and Environment.

NRSMPA – National Representative System of Marine Protected Areas.

TFMPA – Taskforce for Marine Protected Areas.

VEAC – Victorian Environmental Assessment Council.

APPENDIX 1 MANAGEMENT OBJECTIVES FOR MARINE NATIONAL PARKS

Management objectives for marine national parks and marine sanctuaries included on Schedule 7 or 8 of the National Parks Act are in Sections 4 and 17D as listed below. For an up-to-date copy of the *National Parks Act 1975* (Vic.), refer to Victorian Acts Legislation and Parliamentary Documents website (www.dms.dpc.vic.gov.au).

4. Objects of the Act

The objects of this Act are —

- (a) to make provision, in respect of national parks, State parks, marine national parks and marine sanctuaries –
 - (i) for the preservation and protection of the natural environment including wilderness areas and remote and natural areas in those parks;
 - (ii) for the protection and preservation of indigenous flora and fauna and of features of scenic or archaeological, ecological, geological, historic or other scientific interest in those parks; and
 - (iii) for the study of ecology, geology, botany, zoology and other sciences relating to the conservation of the natural environment in those parks; and
 - (iv) for the responsible management of the land in those parks;
- (c) to make provision in accordance with the foregoing for the use of parks by the public for the purposes of enjoyment, recreation or education, and for the encouragement and control of that use.

Section 17D Marine national parks and marine sanctuaries

The Secretary, subject to this Act will ensure that each marine national park and marine sanctuary is controlled and managed in accordance with the objects of this Act in a manner that will —

- (i) preserve and protect the natural environment and indigenous flora and fauna of the park and any features of the park which are of geological, geomorphological, ecological, scenic, archaeological, historic or other scientific interest; and
- (ii) promote the prevention of the introduction of exotic flora and fauna into the park; and
- (iii) provide for the eradication or control of exotic flora and fauna found in the park; and
- (b) subject to paragraph (a) —
 - (i) provide for the use, enjoyment and understanding of Marine National Parks and Marine Sanctuaries by the public; and
 - (ii) promote and understanding of the purpose and significance of Marine National Parks and Marine Sanctuaries; and
- (c) prepare a plan of management in respect of each marine national park and each marine sanctuary.

APPENDIX 2 SUBMISSIONS ON THE DRAFT MANAGEMENT PLAN

A total of 11 submissions were received on the draft plan (September – November 2005), from the following organisations.

Organisation	Submission No.
Submissions from groups	Total: 11
Aboriginal Affairs Victoria	2
Department of Defence	1
Department of Primary Industries	8
Department of Sustainability and Environment	5
Environment Protection Authority (Victoria)	9
Esso Australia	10
Scuba Divers Federation of Victoria	7
Victorian Sea Kayak Club	3
VR Fish	4
Wellington Shire	11
West Gippsland Catchment Management Authority	6







APPENDIX 3 MARINE ECOLOGICAL COMMUNITIES

MARINE ECOLOGICAL COMMUNITY	DESCRIPTION
Intertidal sandy beach	Intertidal sandy beaches comprise all intertidal areas in the park. The beaches support few organisms, mainly crustaceans in the swash zone and bivalves in the lower intertidal zone.
Subtidal reef	Small areas of low-profile Tertiary calcarenite reef occur offshore between 15 and 20 metres depth. The reefs are dominated by invertebrates, particularly sponges and ascidians.
Unvegetated subtidal sediment	Large areas of bare sand dominate the subtidal seascape of the park. The faunal diversity is very high and dominated by small invertebrates that live on or buried in the sand.
Open water	<p>Microscopic organisms such as diatoms and other phytoplankton are a major food source for filter-feeding fauna, including bivalve molluscs, worms, and ascidians, which are in turn a major food source for wader birds and fish.</p> <p>Open water areas also provide habitat for a range of pelagic marine mammals, including Bottlenose and Common Dolphins and Southern Right Whales.</p>

Source: Plummer et al. 2003



**Figure 1 LOCATION
NINETY MILE BEACH
MARINE NATIONAL PARK**

-  Freeway/Highway
-  Major sealed road
-  Marine National Park
-  Marine and Coastal Parks
-  Other Parks
-  Waterbody



NINETY MILE BEACH MARINE NATIONAL PARK

Figure 2

- | | | | |
|--|---|--|------------------------------|
| | Major sealed road | | Recreation Facilities |
| | Minor sealed road | | Camping |
| | Unsealed road | | Information |
| | Shore boundary marker
(Colour indicated by letter) | | Horseshoe Zone |
| | Waterbody | | Dogs on Leash Zone |
| | Depth contour (metres) | | Dogs Prohibited Zone |
| | Ninety Mile Beach Marine National Park | | |
| | Other Reserves | | |



Parks
VICTORIA

Latitude and Longitude values are based on WGS84. GPS users note that co-ordinates for boundaries are given in the format degrees:minutes:seconds. Alternate formats are available on Parkweb, by calling 13 1963 or from Parks Victoria Offices.

