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## Beware Reef Marine Sanctuary



Management Plan July 2006



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**BEWARE REEF MARINE SANCTUARY  
MANAGEMENT PLAN**

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**July 2006**

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## **Acknowledgements**

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 sanctuary is part of *Country* of the Traditional Owners.

Parks Victoria is grateful to all those organisations and individuals who have contributed to this approved Management Plan. Special thanks go to members of the East Gippsland Marine Management Plan Advisory Group: John Ariens, Jeff Cross, Barry Kenny, Jenny Mason, John Minehan, Luke Molan, Leo OpDen Brouw, Josh Puglisi and Peter Sands.

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

## **Disclaimer**

This plan is prepared without prejudice to any negotiations or litigated outcome of any native title determination applications covering land or water 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 plan 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, which may arise from you relying on any information in the publication.

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## FOREWORD

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Beware Reef Marine Sanctuary makes an important contribution to Victoria's system of Marine National Parks and Marine Sanctuaries, renowned for its offshore granite reef, historic shipwrecks and diversity of marine life.

The exposed rocky platform of the reef is a haul-out site for Australian and New Zealand fur seals, whilst underwater a colourful and diverse range of species flourish including soft corals, sponges, fish and sea anemones.

Indigenous tradition indicates that the sanctuary is part of the *Country* of the Bidwell and Gunai/ Kurnai Indigenous people and that other Indigenous people including the Monero-Ngarigo people and Moogji Aboriginal Council also have an association with the coastal region of this area.

The sanctuary is particularly renowned for its three steamship wrecks, the *Auckland*, *Ridge Park* and *Albert San* whose wrecks provide an important habitat for marine flora and fauna and are important recreational diving venues.

Recreational diving and boating activities are the most popular activities in the sanctuary today.



**JOHN THWAITES MP**  
**Minister for Environment**

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

The care of the Beware Reef Marine Sanctuary 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 management of the sanctuary, particularly with Indigenous communities, local community groups and individuals, and key government agencies.

I am pleased to take the opportunity to thank those many individuals and organisations who made submissions on the Draft Plan and contributed to this plan by responding to requests for information or views. In particular, I thank representatives of the East Gippsland Marine Management Plan Advisory Group for their valuable contribution to development of the plan, and I look forward to the community's ongoing support for the management of Beware Reef Marine Sanctuary.

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## APPROVED MANAGEMENT PLAN

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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 Beware Reef Marine Sanctuary. It was finalised following consideration of the 17 submissions received on the Draft Management Plan.

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

MARK STONE  
Chief Executive  
Parks Victoria

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## INTRODUCTION TO THE MARINE ENVIRONMENT

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Victorians are custodians of some of the most remarkable and diverse 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 as well as maritime artefacts and areas of significance to Indigenous communities.

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, and 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 summarised 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 Beware Reef Marine Sanctuary to the statewide system**

Beware Reef Marine Sanctuary makes an important contribution to this representative statewide system. The sanctuary is renowned for its offshore granite reef, historic shipwrecks and diversity of marine biota, which provide a truly amazing underwater experience.

### **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 Beware Reef Marine Sanctuary 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 historic and cultural places is also a challenge because it is difficult to identify an underwater place 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 Beware Reef Marine Sanctuary and to strengthen its protection while respecting cultural and community associations with the area.



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## SUMMARY

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Beware Reef Marine Sanctuary (220 ha) contains a partially exposed granite reef environment which provides habitat for a rich diversity of marine biota. There are many species of fish present and a range of invertebrates, including soft corals, sponges, sea anemones and zooanthids. Intertidal and subtidal reef, subtidal soft sediment and pelagic communities are represented in the sanctuary. The exposed rocky platform of the reef is a haul-out site for Australian Fur Seals and New Zealand Fur Seals.

The sanctuary has high landscape and seascape values, with open pristine waters and an exposed reef swept by wind and waves. To the north the shoreline of Cape Conran Coastal Park dominates, providing views of granite rocky outcrops, sandy beaches and coastal heathland vegetation that have been largely undisturbed by human influences.

Indigenous tradition indicates that Beware Reef Marine Sanctuary is part of the *Country* of the Bidwell<sup>1</sup> and Gunai / Kurnai<sup>1</sup> Indigenous people. Indigenous tradition also indicates that the Monero-Ngarigo<sup>1</sup> people have an association with the coastal region of this area. Other Indigenous groups, including Moogji Aboriginal Council, also have an association with the sanctuary. At the time of publication, there were several Indigenous groups asserting traditional ownership of areas within the sanctuary.

The remains of three shipwrecks — the steamships *Auckland* (1871), *Ridge Park* (1878) and *Albert San* (1915) — provide opportunities for divers with interests in maritime archaeology. These shipwrecks are significant in the history of shipping along the coast and provide places and habitats for marine biota and areas for people to explore.

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<sup>1</sup> This management plan adopts the spelling used by the Native Title Unit, Department of Justice. There are a number of alternative spellings and pronunciations. For the Bidwell they include ‘Bidawal’, ‘Biduelli’, ‘Bid doo wal’, ‘Bidwal’, ‘Biduell-mittang’, ‘Bidwilli’, ‘Bidwelli’, ‘Birtowall’, ‘Biddiwell’ and ‘Birdhawal’. For the Gunai / Kurnai these include ‘Ganai’, ‘Gun-na’, ‘Kanny’, ‘Kani’, ‘Knai’ and ‘Kannnai’. For the Monero-Ngarigo they include ‘Monaro’ and ‘Ngarigu’.

All recreational activities in the sanctuary are boat-based, providing excellent opportunities for diving and snorkelling. Most visitors come from Cape Conran Coastal Park, where a boat launching facility is provided at West Cape. Access can be limited by weather and sea conditions, and visitors need to be experienced and well prepared.

Beware Reef Marine Sanctuary will be managed as a world-class marine protected area for conservation, and for recreation that is consistent with its status. The sanctuary contributes to the overall maintenance of marine biodiversity in the Twofold Shelf marine bioregion, protecting a range of marine ecological communities, threatened marine mammals and shorebirds.

Protecting natural processes within the sanctuary will be an important management goal, as will be improving partnerships with local communities, community groups, relevant Indigenous communities and other Government agencies.

Significant management directions for the sanctuary 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 Beware Reef Marine Sanctuary.
- Identified threats to the sanctuary 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, marine habitat mapping and threat assessment, will be undertaken as outlined in the Statewide Management Strategy (Parks Victoria 2003a) and through collaborative research links.
- Historic relics and places, including shipwrecks, will be conserved by protecting them from damaging activities.

- The Traditional Owners' cultural lore, interests and rights in the sanctuary and aspirations relating to *Country*, will be reflected in the sanctuary's planning and management, in accordance with legislation and policies, and through strong cooperative working relationships with the relevant Indigenous communities.
- Maritime and other cultural heritage will be interpreted, with priority given to the historic theme 'Shipping Along the Coast'.
- Visitors' safety and their understanding and appreciation of the sanctuary's natural and cultural heritage values will be enhanced by information, interpretation and education programs, integrated with management of the nearby Cape Conran Coastal Park.
- 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 sanctuary will be encouraged.
- Impacts of illegal harvesting will be minimised through information, interpretation, education and improved surveillance and enforcement.

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# 1 INTRODUCTION

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## 1.1 Location and planning area

Beware Reef Marine Sanctuary is an offshore sanctuary approximately 400 kilometres east of Melbourne and 30 kilometres south-east of Orbost, in the East Gippsland region. It lies offshore 5 kilometres south-east of Cape Conran (figure 1). The sanctuary covers an area of 220 hectares, reserved under Schedule 8 of the National Parks Act.

The closest shoreline from the sanctuary boundary is approximately 3 km away at Yeerung River. The sanctuary boundary covers Beware Reef and its surrounds, an area of approximately 1.5 square kilometres (figure 2).

## 1.2 Creation of the sanctuary

Beware Reef Marine Sanctuary 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 sanctuary under the National Parks Act. Beware Reef Marine Sanctuary was included on Schedule 8 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 apply for taking or damaging fauna, plants or objects from these areas.

## 1.3 Plan development

This first management plan for Beware Reef Marine Sanctuary was prepared by Parks Victoria, with significant input from the East Gippsland Marine Management Plan Advisory Group and other stakeholders. It takes into account existing information, reports and research findings that relate to the sanctuary 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 Beware Reef Marine Sanctuary. As a public document, the plan establishes how Parks Victoria will protect the natural and cultural values of the sanctuary, and describes the services and facilities that will be provided to help visitors enjoy, appreciate and understand the sanctuary 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 sanctuary.

As a working document for the sanctuary, 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 17 submissions were received (appendix 2). Where necessary, further consultation with the community and stakeholders was undertaken.

Key changes made to the draft plan in preparing this final management plan include:

- refined and more detailed background text on past uses of the area and to assist in understanding of management strategies
- greater clarification of the role of Parks Victoria and other government agencies
- strategies to increase community and visitor involvement in reporting of incidents and illegal activities
- an increased emphasis on the no-fishing provisions of the sanctuary
- enhanced text and strategies to encourage visitor safety.

This management plan will direct future management of Beware Reef Marine Sanctuary until reviewed.

### 2.1 Regional context

Beware Reef Marine Sanctuary forms part of a representative system of 13 Marine National Parks and 10 other 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 (ANZECC TFMPA 1999).

Beware Reef Marine Sanctuary is within 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 (ANZECC TFMPA 1999).

The Twofold Shelf marine bioregion encompasses the marine environment extending from the east of Wilsons Promontory to Tathra in southern New South Wales, including the Kent Group of islands in Tasmania (IMCRA Technical Group 1998). Three Victorian Marine National Parks and one Marine Sanctuary (Beware Reef Marine Sanctuary, Point Hicks Marine National Park, Cape Howe Marine National Park and Ninety Mile Beach Marine National Park) occur in the Twofold Shelf marine bioregion along with the Kent Group Marine Reserve in Tasmania. The Twofold Shelf marine bioregion is characterised in the far eastern area by a coastline punctuated by rocky headlands and localised outcrops of granite and metamorphic rocks such as at Cape Conran. Sea temperatures are generally warmer than elsewhere in Victoria due to the influence of the East Australian Current. The continental shelf is close to the shore and brings upwellings of cold water into the bioregion. The marine flora and fauna of the region includes eastern temperate, southern temperate and cosmopolitan species (Parks Victoria 2003a).

Indigenous tradition indicates that the sanctuary is part of the *Country* of the Bidjil and Gunai/ Kurnai Indigenous people (section 5.1). Indigenous tradition also indicates that the Monero-Ngarigo people also have an association with the coastal region of this area. At the time of publication, there were several

Indigenous groups asserting traditional ownership of areas within the sanctuary.

As the sanctuary is nearby to the Far East Gippsland Basin, it is influenced by activities within the catchment, in the East Gippsland Catchment Management Authority (CMA) region (section 4.2).

The coastline near the sanctuary is part of Cape Conran Coastal Park, which is within the Shire of East Gippsland and is managed by Parks Victoria under the National Parks Act.

The coastline near the sanctuary is naturally scenic, with long sandy beaches, vegetated dunes and rocky outcrops. The area is a popular tourist destination because of its largely undisturbed natural features and the opportunities for nature-based activities and relaxation.

Beware Reef Marine Sanctuary is in Tourism Victoria's Destination Gippsland marketing and promotion region. Camping and accommodation areas are located close to the sanctuary within the Cape Conran Coastal Park and at Marlo and Orbost. *The East Gippsland Planning and Development Strategy* (East Gippsland Shire Council 1997) identifies the need to enhance nature-based tourism in the nearby town of Marlo. Some 51% of visitors to Gippsland take part in nature-based activities, which is 5% above Victoria's regional average (Tourism Victoria 2004). Marine and water-based experiences are an important strength of the region (Tourism Victoria 2004).

Beware Reef Marine Sanctuary is 220 hectares, covering an area of approximately 1.5 square km around Beware Reef. The sanctuary is complemented by Cape Conran Coastal Park, Point Hicks Marine National Park, Cape Howe Marine National Park and Croajingolong National Park and other natural attractions in the region.

### 2.2 Sanctuary significance and values

Beware Reef Marine Sanctuary 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 and

sanctuaries also provide opportunities for all people to enjoy and appreciate natural and cultural values, and many make important contributions to tourism.

The sanctuary is assigned to the International Union for the Conservation of Nature and Natural Resources (IUCN) Category II of the United Nation's List of National Parks and Protected Areas. Category II areas are managed primarily for ecosystem protection and recreation.

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

Important values for the sanctuary are listed below.

#### **Natural values**

- a diversity of habitats, including subtidal and intertidal reefs, exposed reefs and subtidal soft sediment
- a haul-out area for Australian Fur Seals and New Zealand Fur Seals
- a diversity of invertebrates and fish species
- a reef environment, including shipwrecks, rich in marine biota
- threatened fauna, including several bird species and marine mammals
- outstanding landscapes, seascapes and spectacular underwater scenery
- excellent opportunities for scientific investigation and learning
- opportunities to build knowledge of marine protected areas and their management and to further understand marine ecological function and changes over time.

#### **Cultural values**

- a seascape of high cultural significance to Indigenous people
- a place of significance to Indigenous people
- a diverse and rich maritime and post settlement history

- three historic shipwrecks.

#### **Recreational and tourism values**

- opportunities for boat-based recreational activities including diving and snorkelling within a pristine environment
- spectacular views of Cape Conran Coastal Park
- opportunities for interpretation and education about the marine environment.

### **2.3 Evidence of past use**

As recently as 10 000 years ago sea levels were approximately 50 metres lower and Victoria was connected to Tasmania by a 'land bridge' (Wallis 1998). During this time much of Beware Reef Marine Sanctuary was a terrestrial habitat, and no doubt occupied by Indigenous people.

Terrestrial areas nearby the sanctuary contain evidence of a range of places and objects of particular significance to Indigenous people. The abundance of food remains at nearby sites on the mainland indicate the area was important for food collection, camping, tool making, learning and teaching.

Beware Reef Marine Sanctuary is particularly renowned for three historic steamship wrecks, whose extensive remains can be found around the south-western and northern side of the reef. Remains of the steamships *Auckland*, *Ridge Park* and *Albert San* lie within the sanctuary (Heritage Victoria 2001).

It is likely that whaling and sealing activities occurred in the area in the early-mid 1800s, although no evidence of these activities has been found in the sanctuary.

In more recent years, the area of coast which was to become Beware Reef Marine Sanctuary has made important social and economic contributions. The area was used extensively for commercial abalone and rock lobster harvesting (ECC 2000). Abalone was harvested from the area for more than 40 years. The fishing industry has a sense of guardianship towards the area and holds a wealth of knowledge about the sanctuary and its surrounding waters. Recreational anglers and divers have also fished in the sanctuary prior to its declaration. As a result of the proclamation of Beware Reef Marine

Sanctuary, all forms of extraction, including commercial and recreational fishing, are no longer permitted.

## 2.4 The sanctuary visitor

Due to its offshore location, visitors to the sanctuary arrive by boat. Visitor numbers are therefore low because of the remoteness and difficulty of access. Diving and snorkelling are the most common recreational activities.

Most visitors to the sanctuary arrive from Cape Conran Coastal Park, where there is a boat launching facility at West Cape. Access is dependent on weather and sea conditions, and can be difficult. Cape Conran Coastal Park provides basic camping facilities and cabin accommodation close to the sanctuary.

The towns of Marlo and Orbost provide a range of accommodation and facilities for tourists in the area. The *East Gippsland Planning and Development Strategy 1997–2010* (East Gippsland Shire Council 1997) recommends that Marlo be enhanced as a nature-based tourism venue.

## 2.5 Legislation and ECC recommendations

### Legislation

Beware Reef Marine Sanctuary 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 sanctuary and its natural and other features and, subject to this, to provide for the use of the sanctuary 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 the sanctuary.

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

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

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

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

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

An application made by the Gunai / Kurnai people for a Native Title determination covering areas of Crown land and waters in East Gippsland including the sanctuary was lodged with the Native Title Tribunal on 1 April 1997 (VC97/4) and registered on the 1 April 1999. An application lodged by the Bidwell Clan covering Far East Gippsland has been discontinued.

The *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth) applies to the whole of the sanctuary 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 in the sanctuary.

The *Parks Victoria Act 1998* (Vic.) enables management services for Beware Reef Marine Sanctuary to be provided by Parks Victoria on behalf of the Secretary to Department of Sustainability and Environment.

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

### ECC recommendations

The former Environment Conservation Council (ECC) in its *Marine, Coastal and Estuarine Investigation Final Report* (ECC 2000), recommended the creation of Beware



Reef Marine Sanctuary for its contribution to a comprehensive, adequate and representative system of marine protected areas along the Victorian coast (ECC 2000). It also recommended the sanctuary for its contribution to the reef environments of the Eastern biophysical region and values for underwater recreation.

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

Recommendation B Use of Beware Reef Marine Sanctuary (B11) in accordance with the general recommendations for Marine Sanctuaries.

R3 Planning and management relating to traditional interests and uses in coastal marine areas will be based on recognition of and respect for the traditional relationship of Aboriginal people with the land and sea.

R13 Further research will 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 will 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 will 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 will 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.

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

## 2.6 Policies and guidelines

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

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

The sanctuary is also managed within a broader context of a number of other plans and strategies including:

- *East Gippsland Regional Catchment Strategy 2005* (EGCMA 2005).
- *Integrated Coastal Planning for Gippsland - Coastal Action Plan* (GCB 2002)
- *Nature Based Tourism –Directions and opportunities for Victoria 2000–2003* (Tourism Victoria 2000)
- *Policy for Sustainable Recreation and Tourism on Public Land* (NRE 2002)
- *Victorian Coastal Strategy* (VCC 2002)
- *Victorian Heritage Strategy – Shipwrecks 2005* (Heritage Victoria 2000).

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## 3 STRATEGIC DIRECTIONS

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### 3.1 Sanctuary vision

A future visitor to Beware Reef Marine Sanctuary finds a wave-swept granite knoll protruding from the ocean's vastness, signalling a marine wonderland of stunning beauty and richness beneath the surface. The sanctuary is widely renowned as an ocean diver's paradise for its dramatic relief, myriad of colours, shipwrecks, and abundance and diversity of marine life.

The biodiversity and sanctuary values of this offshore haven are conserved through sensitive management and are well protected through education, surveillance and enforcement programs.

Australian Fur Seals and New Zealand Fur Seals are regularly seen hauling out onto the exposed reef to rest and bask in the sun, unperturbed by human onlookers, who maintain a suitable distance.

Research and monitoring programs enable sound management and an increased understanding of the sanctuary's natural values, ecological processes and the specific requirements of significant marine flora and fauna.

Indigenous cultural heritage is respected, protected and managed through strong collaborative relationships with Indigenous communities, informed by a sound understanding of the cultural and spiritual significance of the sanctuary to the Traditional Owners.

Post-settlement cultural heritage is protected, and stories relating to the three shipwrecks within the sanctuary add to the area's mystique.

Community groups, local divers, educational institutions and volunteers work collaboratively with Parks Victoria to foster an appreciation of marine environments and to achieve common goals that are consistent with the management aims for the sanctuary.

Visitors enjoy the sanctuary's unique marine environments by scuba diving, boating or sea kayaking. Many others discover the magic of Beware Reef through images and educational material on the Internet, through schools, and

at interpretive centres. Licensed tourism operators offer boat and dive tours to the reef from Cape Conran. Visitor numbers to the sanctuary have steadily increased, mainly because of the popularity of the reef as a dive site. The reserve makes a modest but meaningful contribution to regional tourism through such icon experiences and the inspirational images they connote. The impact of visitation on natural and cultural values is minimal.

### 3.2 Zoning

A management zoning scheme is normally used to define areas, 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).

In this sanctuary, a Special Protection Area — Natural Values overlay applies. The Special Protection Area — Natural Values overlay is used to highlight special protection requirements for habitat values. Details of overlay characteristics are provided in table 1, and recreational opportunities are shown in table 2. The boundaries of the overlay are shown in figure 2.

### 3.3 Management directions

Major management directions for the sanctuary 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 Beware Reef Marine Sanctuary.
- Identified threats to the sanctuary will be minimised through addressing the outcomes of ongoing monitoring, risk assessment and, where feasible, complementary adjacent, coastal and catchment management.

**TABLE 1 MANAGEMENT OVERLAY**

OVERLAYS	AREA/LOCATION	VALUES	GENERAL MANAGEMENT AIM	ACCESS
Special Protection Area — Natural Values	Area detailed in figure 2 (<1% of sanctuary area) — All exposed areas of Beware Reef	The exposed reef is a haul-out area for Australian & New Zealand Fur Seals and provides habitat for seabirds.	Protect significant habitat areas from impacts associated with human disturbance.	Access to exposed areas of Beware Reef is prohibited.

- 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.
- Impacts of changes to water quality will be minimised through cooperation with catchment managers and other relevant agencies.
- 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**

- Indigenous places and objects will be protected from interference or damaging activities.
- The Traditional Owners' cultural lore, interests and rights in the sanctuary and aspirations for *Country*, will be reflected in the sanctuary's planning and management, in accordance with legislation and policies.
- Historic relics and places including shipwrecks will be conserved by protecting them from damaging activities.
- 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 sanctuary will be encouraged and supported as appropriate,

in consultation with the relevant Indigenous and wider communities.

#### **The sanctuary visit**

- Visitors will have opportunities to learn about the sanctuary and its special values.
- Visitor understanding and appreciation of the sanctuaries natural and cultural values will be enhanced by a range of information services and interpretation and education programs.
- Visitor enjoyment will be enhanced by appropriate management of recreation activities.
- Recreational opportunities will be provided in accordance with table 2.
- Management of visitor access will be integrated with management of the nearby Cape Conran Coastal Park, in particular the West Cape boat ramp.
- Access to exposed areas of reef will be prohibited to protect sensitive natural values.
- Cultural values and places, including shipwrecks, will be interpreted to reflect the historic theme 'Shipping Along the Coast'.
- Visitors will be encouraged to adopt minimal-impact techniques and to adhere to industry-developed standards appropriate to their activity.
- Visitors will have opportunities to observe marine life, enjoy water sports and participate in other recreational activities compatible with management objectives.

### **Community awareness and involvement**

- 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 sanctuary's planning and management.
- Friends, volunteers, Indigenous and other community groups will be encouraged and supported to participate in areas of sanctuary management that relate to their interests.
- An awareness and understanding of the sanctuary and its management, and a sense of custodianship, will be encouraged among local communities and visitors.
- Strong relationships will be developed and maintained with people, groups and communities with strong connections with or interests in the sanctuary, as a basis for encouraging their appropriate participation in the sanctuary's management.
- There will be ongoing opportunities for individuals, groups, communities and government agencies to discuss aspirations and issues of mutual concern relating to the sanctuary.
- Collaborative partnerships will be established with relevant agencies to ensure ongoing compliance and future protection of the sanctuary.

**TABLE 2 SUMMARY OF RECREATIONAL OPPORTUNITIES**

<b>ACTIVITY</b>	<b>SANCTUARY</b>	<b>MANAGEMENT OVERLAY: SPECIAL PROTECTION AREA — NATURAL VALUES</b>
(Percentage of the sanctuary)	(100%)	(<1%)
Aircraft — landing or taking off (section 6.5)	N	N
Anchoring (section 6.3)	Y	N/A
Bait collection	N	N
Bird watching	Y	N
Boat launching/ landing	N/A	N/A
Camping (boat-based)	N/A	N/A
Diving and snorkelling (section 6.4)	Y	N/A
Dogs (section 6.5)	N	N
Feeding wildlife	N	N
Fishing (all forms)	N	N
Guided activities	Y	N/A
Kite boarding / wind surfing (section 6.3)	Y	N/A
Licensed tours (section 6.6)	Y	N/A
Mooring	N	N
Motorised boating (including personal water craft) (section 6.3)	Y	N/A
Nature observation (excluding intertidal rockpooling)	Y	N
Nature photography, painting, etc.	Y	N
Non-motorised boating	Y	N/A
Prospecting and metal detecting	N	N
Sailing	Y	N/A
Shell collection	N	N
Sightseeing	Y	N
Swimming	Y	N
Walking (intertidal zone)	N/A	N
Whale, dolphin, seal watching (section 6.3)	Y	N
Wreck diving (section 6.4)	Y	N/A

NOTE: The sanctuary is remote and isolated. Recreational activities should only be carried out by those experienced in the activity, and all visitors need to be self-reliant.

Key:

Y Yes, subject to overlay prescriptions and conditions prescribed by legislation, licensed tour permits or elsewhere in the plan as indicated.

N Not permitted.

N/A Not applicable.

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## 4 STRATEGIES FOR NATURAL VALUES CONSERVATION

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### 4.1 Geological and geomorphological features

Beware Reef Marine Sanctuary consists of a permanently exposed granite reef rising from a subtidal sandy substrate in water between 20 and 30 metres depth. The western side of the reef drops steeply to the seabed, while on the north-west edge a ridge occurs between 6 and 8 metres. The reef is characterised by numerous bisecting subtidal gutters (Plummer et al. 2003).

The sanctuary contains subtidal and intertidal reef, subtidal soft sediment and exposed reef. The substrate relief is high profile reef, with a substrate texture consisting of broken reef, gutters, outcrops, coarse sand, medium sand, shell rubble and grit (Plummer et al. 2003).

The nearby coastline has a varied surface geology, most of which is Tertiary (2 – 65 million years old) or Quaternary sediments (<2 million years old). Minor surface occurrences of Lower Devonian granite (approx. 400 million years old) and Ordovician sedimentary rocks (approx 500 million years old) outcrop at Cape Conran (LCC 1974).

There are no known geological or geomorphological sites of significance within the sanctuary (Plummer et al. 2003), although there have been few surveys of the Victorian marine environment. Nevertheless, a comprehensive survey of geological and geomorphological features in Victoria's marine environment may reveal sites of significance within the sanctuary.

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

Because Beware Reef Marine Sanctuary is offshore with relatively low visitation, direct threats to the geological and geomorphological values of the sanctuary are low.

#### Aims

- Allow natural geological and geomorphological processes to continue without human interference.

- Provide opportunities for appropriate research, appreciation and education in relation to geological and landform features.

#### Management strategies

- *Encourage research into geological and geomorphological features within the sanctuary and protect them from damaging activities.*
- *Provide information, interpretation and education programs that promote visitors' appreciation of geological and landform features (section 6.1).*
- *Identify, interpret, respect and protect geological and geomorphological features of special cultural importance to the Traditional Owners in cooperation with the relevant Indigenous communities (sections 5.1 and 8.2).*

### 4.2 Catchment and water quality

Beware Reef Marine Sanctuary is nearby to the Yeerung Catchment Planning Unit, which is within the Far East Gippsland Basin (basin 21) of the East Gippsland Catchment Management Authority region (EGCMA 2005 & EGCMA 2006). Three river systems flow into the ocean near the sanctuary. These include: the Yeerung River, which enters the ocean directly north of the sanctuary; the Snowy River, whose mouth is about 15 kilometres west of the sanctuary; and, the Bemm River, which flows to sea approximately 20 kilometres east of the sanctuary at Sydenham Inlet. Water quality monitoring occurs in the Yeerung and Bemm Rivers by Waterwatch, and in the Snowy River by the Gippsland Regional Water Monitoring Partnership.

The *Coasts and Estuary Assessment 2000* report (NLWRA 2000) described the Yeerung estuary as being 'near pristine' and the Snowy River estuary as 'modified'. Water quality within Beware Reef Marine Sanctuary may be influenced by these sources, particularly during flood events.

Beware Reef Marine Sanctuary is considered to be at relatively low risk from land-derived

pollution (e.g. agricultural runoff) because of its remoteness and the protection provided by terrestrial parks and forests within the catchment area. Most of the catchment area is heavily forested and in a largely natural state. More than 70% of the river and stream lengths in the Far East Gippsland Basin are in good to excellent condition (EGCMA 2005).

Litter originating on land or at sea can pose a threat to the marine environment, including injury or death to marine wildlife through entanglement or ingestion. The offshore location of Beware Reef Marine Sanctuary ensures there is a relatively low threat of land-derived litter.

The likelihood of a major oil or chemical spill close to the sanctuary is low. However, the impacts of such an event further offshore could be widespread and affect the sanctuary.

Localised pollution may result from bilge discharge, particularly from recreational vessels or commercial fishing vessels operating nearby the sanctuary.

Vessels have been grounded on the reef in the past, and future vessel strandings, sinkings or mishaps within the sanctuary are likely to pose a pollution risk.

Sanctuary visitors can play a role in the early reporting of pollution incidents such as oil or chemical spills within the sanctuary.

Parks Victoria works with and supports many other agencies such as the Department of Sustainability and Environment, Marine Safety Victoria and the Environment Protection Authority in catchment and water quality management (section 8.3).

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. In Victorian waters the *Victorian Marine Pollution Contingency Plan (VICPLAN)* (MSV 2002) outlines broad response arrangements to a potential oil or chemical spill. 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.

All wildlife is protected under the *Wildlife Act 1975* (Vic), and DSE has the responsibility for collecting, assessing, cleaning and rehabilitating wildlife affected by marine pollution (section 4.4). DSE has developed the *Wildlife Response Plan for Oil Spills* (NRE 1997b) to manage such situations.

Marine Safety Victoria has responsibility under the *Marine Act 1988* (Vic) and the National Plan to combat Pollution of the Sea by Oil and other Noxious and Hazardous Substances to ensure that there is an effective response to marine pollution incidents in Victorian waters (section 8.3).

The *Integrated Coastal Planning for Gippsland — Coastal Action Plan* (GCB 2002) 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 sanctuary.

The *East Gippsland Regional Catchment Strategy 2005* (EGCMA 2005) applies to land and water within the East Gippsland CMA region (basins 21 to 24), including the sanctuary. The strategy provides a strategic management framework for the protection of natural and cultural values within the catchment, including coastal and marine environments.

The *East Gippsland Regional River Health Strategy (2005–2010)* (EGCMA 2006) aims to protect rivers and streams to meet the environmental, economic, recreational and cultural needs of current and future generations.

*Gippsland's Water Quality Action Plan 2005* (WGCMA & EGCMA 2005) aims to protect and preserve water quality throughout West and East Gippsland, by identifying water quality issues and prioritising actions across the regions. This action plan supports existing programs such as Waterwatch (section 8.2) and the Gippsland Regional Water Monitoring Partnership. The Gippsland Regional Water Monitoring Partnership is a group of agencies, authorities, local government and industries that have made a commitment to water quality

and quantity monitoring in the Gippsland region.

#### **Aims**

- Ensure the integration of planning and management for the sanctuary and the adjacent catchment, including Cape Conran Coastal Park.
- Maintain a high quality of water within the sanctuary and surrounding waters to ensure that natural biological and physical processes can occur.
- Minimise impacts of threatening processes from activities in the catchment.

#### **Management strategies**

- *Encourage visitors to the sanctuary to follow minimal impact codes and leave no trace of their visit.*
- *Encourage visitors to report pollution incidents such as oil or chemical spills to the EPA and Marine Safety Victoria.*
- *Work collaboratively with the East Gippsland CMA, Gippsland Coastal Board and other agencies to ensure the objectives for the sanctuary are considered and incorporated into the current and future planning and development of the Regional Catchment Strategy, Regional River Health Strategy, Water Quality Action Plan, Regional Catchment Investment Plan and Coastal Action Plans, and support actions that seek to reduce catchment derived impacts and implement the sanctuary's vision.*
- *Liaise with East Gippsland Shire Council regarding future developments in the nearby coastal zone, ensuring impacts to catchment values and water quality within the sanctuary are given due consideration.*
- *Work collaboratively with Marine Safety Victoria and Gippsland Ports in the event of an oil or chemical spill, in accordance with the Victorian Marine Pollution Contingency Plan (MSV 2002) and the Gippsland Region Marine Pollution Contingency Plan (Gippsland Ports 2005).*
- *Integrate themes relating to oil spills, marine plastics pollution, bilge discharge, catchment pollution and litter reduction*

*into existing marine information, interpretation and education programs (section 6.1).*

- *Support water quality monitoring in the catchment by Waterwatch and the Gippsland Regional Water Monitoring Partnership.*
- *Work collaboratively with Marine Safety Victoria to ensure that vessels stranded or wrecked in the sanctuary are salvaged to minimise pollution.*

#### **4.3 Hydrodynamics**

Beware Reef Marine Sanctuary lies within the Twofold Shelf marine bioregion. Waters in this region are generally warmer than elsewhere in Victoria. Due to the influence of the East Australian Current, cool southern waters mix with warm northern waters bringing increased nutrients, creating an ecosystem high in productivity (Parks Victoria 2003a) (section 4.4).

Water depth within the sanctuary varies greatly; 25 hectares of the sanctuary is 0 to 20 metres deep, 115 hectares is 20 to 30 metres deep, and 80 hectares is 30 to 40 metres deep (Plummer et al. 2003).

Prevailing winds and swells are generally from the south-west and south-east. The sanctuary is influenced by high-energy waves and currents and twice-daily tides. Tidal variation is 0.9 metres for spring tides and 0.6 metres for neap tides (Plummer et al. 2003). Water temperatures average 18.5°C in summer and 13.5°C in winter (Plummer et al. 2003).

Because human-induced changes to local hydrodynamic processes could affect sanctuary values, any proposals for new infrastructure, including artificial reefs, will generally be inappropriate for Marine National Parks and Marine Sanctuaries. Natural hydrodynamic events such as storm surges and regular sand erosion or deposition are considered to be ongoing natural processes.

There is no existing or proposed infrastructure within the sanctuary (section 6.3).

Infrastructure developments in the nearby coastal zones could influence hydrodynamic processes, such as sand or water movement.



**Aim**

- Minimise impacts on sanctuary values from human-induced changes to local hydrodynamic processes.

**Management strategies**

- *Encourage research to improve the understanding of hydrodynamic processes.*
- *Provide advice to East Gippsland Shire Council on planning applications for developments that could affect local hydrodynamic processes (section 7.2).*
- *Restrict the construction of infrastructure in the sanctuary to that which is necessary for the protection of the sanctuary's natural and cultural values (section 6.3).*

**4.4 Habitats and communities**

Beware Reef Marine Sanctuary supports five known marine ecological communities: subtidal soft sediment, subtidal reef, intertidal reef, exposed reef and pelagic communities (Plummer et al. 2003). These communities reflect a diversity of habitats and together with the shipwrecks (section 5.2), provide important substrates, food, shelter, and spawning and nursery areas for a variety of flora and fauna.

Marine ecological communities represent a 'community-level' classification approach to provide an overview of the larger, more visible and common species (Plummer et al. 2003). Complex and dynamic food webs and interactions occur in the marine environment. Species are continuously interacting and influencing each other. For example, Long-spined Black Sea Urchins that live below the reef in the north of the sanctuary graze on erect algal species, creating barren, modified habitats (Edmunds et al. 2005). This habitat modification reflects the importance of grazing and predatory relationships in the marine environment. Physical factors such as substrate, exposure to swell, water depth and clarity, and temperature can also influence the nature and composition of communities.

New species are found within Victoria's marine environment every year, even in intertidal areas. There is still much to be learned about the habitats and communities occupying the marine environment, including within the sanctuary. Broad-scale habitat mapping of the sanctuary commenced in 2005

and this information will assist in improving knowledge and understanding about ecological communities within the sanctuary.

Subtidal soft sediment communities are the most widespread community within the sanctuary. No biological surveys have been undertaken of this community within the sanctuary to date, but it probably supports numerous polychaetes, isopods, gastropods, euphasids, ophiuroids, bivalves, amphipods, cumaceans and cephalopods (Bird & Watson 1993). A trawl survey conducted near the sanctuary indicates that the presence of some species within this community is seasonal, common species found included: Sparsely Spotted Stingaree, Gurnard, Flathead, Common Gurnard Perch, Banded Stingaree and School Whiting (Bird & Watson 1993).

Thick stands of Bull Kelp dominate lower intertidal reef communities in the sanctuary, with coralline algae and fleshy green and brown algae occurring elsewhere. The Cunjevoi *Pyura stolonifera* is the dominant invertebrate on the intertidal reef.

Subtidal reef communities within the sanctuary have been studied in greater detail. The varied and dramatic underwater topography of this environment provides shelter and habitat for a broad range of fauna and flora. A variety of brown algae occupy waters less than 10 metres deep, along with red coralline turf algae and Bull Kelp on the edges of the reef (Plummer et al. 2003; Edmunds et al. 2005). In deeper waters (13–20 m) Long Striped Ecklonia dominates the flora. There are mixed stands of the canopy forming brown algae Crayweed and Common Kelp (Edmunds et al. 2005).

An abundant and diverse assemblage of invertebrates is occupy the subtidal reef area, including anemones, encrusting sponges, large finger sponges, colonial and stalked ascidians, urchins, Blacklip Abalone, sea whips and Red Bait Crabs (Plummer et al. 2003; Edmunds et al. 2005). There are high densities of the suspension feeding feather star *Cenolia trichoptera*, whilst Blacklip Abalone and the Long-spined Black Sea Urchin are also present.

The diversity of fish species is greatest on the northern side of the reef. Butterfly Perch can congregate in very large numbers: over 1000 individuals were sighted in the last survey

(Edmunds et al. 2005). Butterfly Perch is a plankton feeding species and its large numbers reflect the site's isolation and steep vertical profile reef (Edmunds et al. 2005). Other fish species present include: Blue Throat Wrasse, Purple Wrasse, Maori Wrasse, Port Jackson Shark, Wobbegong Shark and Weedy Sea Dragon.

Current research and ongoing monitoring is targeted at collecting baseline biological information that will be used to understand long-term changes in population, abundances, community structure and ecological processes during the life of this plan. One long-term subtidal reef monitoring site is established within Beware Reef Marine Sanctuary, and another in a comparable location outside the sanctuary (Edmunds et al. 2005). Research and monitoring compares areas outside the sanctuary boundaries with those inside the sanctuary. This on-going subtidal reef monitoring program will assist in identifying indicator species and habitats, and in the monitoring of marine community changes and trends over time. The results, available on Parks Victoria's website, will enable an assessment of the ecological condition of the sanctuary to be made.

Introduced marine pests (section 4.6), oil and other chemical spills (section 4.2), litter (section 4.2), and anchor damage (section 6.3) can all pose a threat to marine communities and species, particularly subtidal reef areas.

The exposed reef community inhabits a gently rounded granite platform, which is wave-swept in high seas. Large barnacles and mussels cover much of the rock, while other areas are bare. Australian Fur Seals and New Zealand Fur Seals use the platform as a haul-out site for most of the year. Little Penguins rest on the platform throughout the year, and it is a common roosting and feeding area for other seabirds, particularly cormorants. To minimise disturbance to fur seals and roosting sea birds, access to exposed areas of Beware Reef is prohibited (section 3.2, table 1 and figure 2).

The pelagic community (open waters) is made up of a diverse range of plankton, many invertebrates, an array of fishes and transient reptiles and mammals such as dolphins and whales. Southern Right Whales, Humpback Whales, Killer Whales (Orcas), Bottlenose Dolphins and Common Dolphins are transient

visitors to the sanctuary. Whales and dolphins passing through the sanctuary could become stranded, entrapped, entangled or wounded. The *Victorian Cetacean Contingency Plan* (NRE 1999c) details arrangements for incident response. The *Wildlife Response Plan for Oil Spills* (NRE 1997b) guides the rescue and treatment of injured or oiled wildlife.

Sanctuary visitors can play a role in the early reporting of wildlife strandings or entanglements within the sanctuary.

The Wildlife Act and Wildlife (Whale) Regulations 1998 (Vic.) afford protection to marine mammals. Two whale species are listed as matters of national environmental significance under the Environment Protection and Biodiversity Conservation Act; the Southern Right Whale is listed as endangered and the Humpback Whale is listed as vulnerable. The Southern Right Whale is also listed under the Flora and Fauna Guarantee Act.

The Great White Shark has been observed in the sanctuary. This species is listed under the Flora and Fauna Guarantee Act and as vulnerable under the Environment Protection and Biodiversity Conservation (EPBC) Act, and therefore a 'matter of national environmental significance'.

Very few seabird sightings have been recorded for the sanctuary. There are known occurrences of Pied Cormorants, Gannets, and Little Penguins resting on the exposed reef. Many species of shorebirds and seabirds have been recorded in areas surrounding the sanctuary, including the White-bellied Sea Eagle, which is listed under the Flora and Fauna Guarantee (FFG) Act and on the China–Australia Migratory Bird Agreement (CAMBA). It is highly likely that such species occur in the sanctuary.

All species recorded within the sanctuary, listed as threatened or protected by international agreements or other legislation are birds, fish or marine mammals. This reflects the current vertebrate focus of threatened species management. Environmental management within the sanctuary takes a habitat-based rather than a species –based approach. Management of marine ecological communities within the sanctuary, rather than threatened species, is

also likely to protect 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.

Illegal harvesting of fauna, including fish, from the sanctuary poses a significant threat, particularly to subtidal reef communities. Fisheries Victoria has primary responsibility for enforcing fishing prohibitions under the National Parks Act, with support from Parks Victoria (section 8.3).

All forms of extraction including recreational and commercial fishing are prohibited within the sanctuary. The feeding of animals, including fish and birds, is not permitted in the sanctuary.

The diversity and abundance of marine fauna and flora are significant to Traditional Owners and other relevant Indigenous communities today (section 5.1).

#### **Aims**

- Protect marine ecological communities and indigenous flora and fauna and allow natural processes to continue.
- Improve knowledge of marine ecological communities, flora and fauna and threatening processes to aid management, protection and appreciation.

#### **Management strategies**

- *Map habitats at scales suitable for management purposes in accordance with statewide habitat mapping programs.*
- *Establish and implement an appropriate long-term habitat monitoring program as part of relevant statewide marine habitat monitoring programs.*
- *Implement priority actions from approved action statements or recovery plans to address threats to threatened species or communities listed under the FFG and EPBC Acts.*
- *Ensure all significant sightings of marine flora and fauna are recorded on Parks Victoria's Environmental Information System.*
- *Undertake regular risk assessments to assess the major threats to flora, fauna*

*and marine communities in the sanctuary, and review management programs as appropriate.*

- *Encourage research into key threatening processes and major knowledge gaps, including baseline data collection for subtidal soft sediment and intertidal communities.*
- *Manage visitor activities to minimise impacts on flora, fauna and communities particularly in relation to compliance with no-fishing provisions (section 8.3).*
- *Respond to cetacean incidents in accordance with the Victorian Cetacean Contingency Plan (section 8.3).*
- *Work collaboratively with DSE to ensure that wildlife affected by marine pollution is collected, assessed, cleaned and rehabilitated in accordance with the Wildlife Response Plan for Oil Spills (NRE 1997b).*
- *Encourage visitors to report wildlife strandings or entanglements to the Department of Sustainability and Environment.*
- *Encourage research to identify Indigenous cultural lore relating to communities and species (section 5.1). Reflect Indigenous knowledge of communities and species in management practices as appropriate, and ensure that their significance to the Traditional Owners is respected in all management and visitor activities.*

#### **4.5 Landscape and seascape**

Beware Reef Marine Sanctuary has high scenic values, with a vast, open expanse of ocean and a rocky outcrop swept by wind and waves. To the north, Cape Conran Coastal Park provides vistas of rocky headlands, expansive dunes and largely undisturbed native heathland vegetation.

Seascapes of Beware Reef Marine Sanctuary are a diver's paradise, with colourful and abundant marine biota. The tip of the reef above the water surface is a resting spot for Australian Fur Seals and New Zealand Fur Seals, while below the surface the remains of old shipwrecks can be found.

The landscape and seascape values of the sanctuary are also intrinsic elements of *Country* for the Traditional Owners, in accordance with tradition (section 5.1).

Landscape and seascape values of the sanctuary are sensitive to human-induced change. The protection afforded by the nearby mainland is high, but future developments such as oil platforms in waters surrounding the sanctuary could potentially have an impact on landscape and seascape values. Impacts on seascape could arise from human induced changes to hydrodynamics (section 4.3).

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 (ICZM) principles to integrate planning and management across the land / sea interface. This involves the co-ordination 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.

Landscape setting types are used to broadly characterise different landscape types (VCC 1998a). The sanctuary is within the Victorian Coastal Council's Landscape Setting Type 33 (Coastal Plain and Estuaries) (VCC 1998a). This Landscape Setting Type recommends special considerations, including the following:

- Avoid any development that directly fronts the coast.
- This area is of outstanding scenic quality and requires special landscape protection to ensure that development does not impact on landscape values.

There are no existing or proposed facilities within the sanctuary (sections 4.3 and 6.3).

The *Landscape Setting Types for the Victorian Coast* (VCC 1998a) and *Siting and Design Guidelines for Structures on the Victorian Coast* (VCC 1998b) are designed to assist coastal land managers and the community to implement the Victorian Coastal Strategy. This ensures sympathetic development that complements the surrounding landscape and results in sensitive design and development along the Victorian coast.

The East Gippsland Planning Scheme ([www.dse.vic.gov.au/planningschemes/eastgippsland/home](http://www.dse.vic.gov.au/planningschemes/eastgippsland/home)) provides a statutory framework for managing proposals and developments for land nearby the sanctuary. East Gippsland Shire Council administers the planning scheme, including the assessment of developments that could have an impact on landscape and seascape values. Parks Victoria provides input into planning applications to ensure the protection of sanctuary values.

#### **Aims**

- Preserve and protect landscape and seascape values of the sanctuary, including the natural character, aesthetic qualities and values of significance to Indigenous communities.
- Minimise the visual impact of developments and management activities, including those adjacent to the sanctuary.

#### **Management strategies**

- *Ensure that other agencies whose activities have the potential to affect landscape values, including the East Gippsland Shire Council, consider the importance of the sanctuary's landscape and seascape values in planning and managing their activities.*
- *Consider the traditional significance of landscape and seascape values to relevant Indigenous communities in planning and implementing management activities, interpretation and education programs (sections 5.1, 6.1 and 8.2).*

#### **4.6 Marine pests**

Over 100 exotic marine species are known to have become established in Victorian marine waters (Hewitt et al. 1999). Some have become marine pests.

There are no known records of introduced marine pests or diseases within Beware Reef Marine Sanctuary. The New Zealand Screw Shell is established in Bass Strait, and possibly occurs in the sanctuary, occupying soft sediment habitats. The impacts of New Zealand Screw Shell 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 (NIMPIS 2002). A number of other introduced marine pests also have the potential to colonise the sanctuary, especially if they became established in the more sheltered waters of nearby Cape Conran.

The sanctuary is vulnerable to pest introductions from ballast water and biofouling. Recreational vessels and users are also potential vectors for exotic species and diseases (e.g. from contaminated diving equipment) (section 6.4). The provision of boat launching facilities outside the sanctuary may influence boating activity and levels of use, thereby influencing the potential for exotic pest incursions within the sanctuary.

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).

Impacts from introduced marine pests are as diverse as the species themselves and include altering natural nutrient cycles and out-competing native species for food and or space. Introduced marine pests can also have economic (e.g. commercial fisheries) and social impacts (e.g. affect public health and safety).

Prevention of marine pest invasions is the most effective management option. Prevention involves reducing the risk that a pest will be introduced to the sanctuary. In a very limited number of cases, with specific criteria, control measures may be attempted for established pest populations generally as part of coordinated regional or national response. However, experience elsewhere has shown that proposals to control established marine pests need to consider fully their 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 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 for 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 (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 *Cleaner Marinas: EPA Guidelines for Protecting Victoria's Marinas* (EPA 1998).

Parks Victoria rangers, Fisheries Victoria fisheries officers, community-based organisations (e.g. dive clubs), and sanctuary visitors play an important role in the monitoring and early detection of marine pests in the sanctuary.

### Aims

- Minimise the risk of introduction of marine pests by human activities, and their subsequent establishment in the sanctuary.
- Establish arrangements for the detection of new incursions within the sanctuary in support of Victorian marine pest management arrangements.

- Implement national or Victoria-wide control arrangements as they relate to the sanctuary.

### **Management strategies**

- *Support DSE in educating Parks Victoria staff, Fisheries Victoria officers and the community to identify marine pests.*
- *Encourage community groups, researchers, licensed tour operators and contractors to integrate the identification of marine pests into their activities and to report any sightings*
- *Ensure the detection of marine pests is reported in accordance with Victorian pest management arrangements and recorded on Parks Victoria's Environmental Information System (EIS) and other relevant databases.*
- *Manage all pest incursions in accordance with the Interim Victorian Protocol (NRE 1999b) (section 8.3).*
- *Establish an ongoing program to minimise the risk of marine pest introduction and subsequent spread that addresses improving the understanding of potential means of introduction and spread and formalise arrangements for prevention, reporting, monitoring and response.*
- *Undertake authorised pest programs only where research indicates that control or eradication is feasible and likely to be effective or as part of a co-ordinated regional or national response.*
- *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 sanctuary are maintained according to Victorian Government boat-cleaning protocols (DSE 2004).*
- *Include boat-cleaning protocols in contracts, licenses or permits of contracted vessels, research vessels, and licensed tour operator vessels operating in the sanctuary (section 6.3).*
- *Investigate opportunities for regular monitoring for marine introduced pests by community groups in accordance with standard protocols (e.g. Reef Watch and dive clubs) (section 8.2).*
- *Encourage recreational divers and snorkellers to adopt protocols to ensure that all diving equipment is clean (section 6.4).*
- *Ensure that any new marine infrastructure within the sanctuary is treated to remove marine pests (sections 4.3 and 6.3).*
- *Seek to involve Indigenous communities in planning and implementing marine pest programs.*

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## 5 STRATEGIES FOR CULTURAL VALUES CONSERVATION

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### 5.1 Indigenous cultural heritage

Indigenous tradition indicates that Beware Reef Marine Sanctuary is part of *Country* of the Bidwell and Gunai / Kurnai Indigenous people. Indigenous tradition also indicates that the Monero-Ngarigo people also have an association with the coastal region of this area<sup>1</sup>. Other Indigenous groups including Moogji Aboriginal Council, also have an interest in the sanctuary. At the time of publication, there were several groups asserting traditional ownership of areas within the sanctuary.

Indigenous tradition suggests the sanctuary and surrounding coastal waters are significant in that they comprise an area of shared *Country* between the Bidwell and Gunai / Kurnai people to the south, and the Monero-Ngarigo people to the north. It is believed the Monero-Ngarigo people were permitted by the Bidwell and Gunai / Kurnai people to access the coastal region to obtain seasonally abundant food. This relationship was built on mutual respect for the seasonal availability of marine food resources. Evidence of this shared *Country* is available today where similar tools have been found in both areas, and the same stories are told from Elders of each community.

Throughout periods of changing sea levels, Traditional Owners have maintained a strong and continual association with the sanctuary for thousands of years. This association continues today.

Beware Reef Marine Sanctuary contained important areas for food collection, story-telling, tool making, teaching and learning. Children were taught important techniques for the hunting, collection and preparation of seasonally abundant food and other resources. These 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 sanctuary.

On-shore areas near Beware Reef Marine Sanctuary contain evidence of a range of places and objects of particular significance to the Traditional Owners (Schell & Long 2000). The abundance of food remains from marine species indicates the area was important for food collection, camping, tool making, learning and teaching. Seasonally abundant shellfish, fish, birds and seals were all important components of the diet of Indigenous people of the area, as was a variety of plant material (Coutts 1984).

As significant Indigenous places and objects within the sanctuary become known, some may require active management to ensure their protection, while others may be relatively secure because of their location. Degradation by erosion and pillaging of material are threats to the integrity of cultural places and objects. Monitoring and management of cultural places and objects will be determined in collaboration with the relevant Indigenous communities.

All Indigenous 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. Moogji Aboriginal Council is the scheduled Aboriginal Community in accordance with Part IIA of the Aboriginal and Torres Strait Islander Heritage Protection Act.

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

Parks Victoria respects the Traditional Owner's cultural lore, interests and rights in the land, and aspirations for *Country* and seeks to reflect these in planning and management (Parks Victoria 2005a).

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<sup>1</sup> Unless cited otherwise, information is based on oral history information provided by the relevant Indigenous communities.

## Aims

- Protect Indigenous cultural heritage from interference or damaging activities.
- Nurture Indigenous cultural lore relating to the sanctuary.

## Management strategies

- *Protect and care for all Indigenous places and objects in partnership with the Traditional Owners and in co-operation 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 management programs to integrate relevant Indigenous practices and minimise the potential for impact of management activities on Indigenous cultural heritage in consultation with the Traditional Owners and the scheduled Aboriginal community.*
- *Maintain confidentiality in respect of Indigenous cultural lore, places, objects and aspirations, in accordance with tradition and the views of the Traditional Owners (sections 6.1 and 8.2).*
- *Ensure that all management actions are in accordance with the Native Title Act.*
- *Respect Indigenous cultural lore and the Traditional Owner's aspirations for Country, and in collaboration with them and the 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 sanctuary (sections 4.1, 4.5, 6.1 and 8.2).*
- *Encourage the identification, recording and risk assessment of Indigenous areas and objects, and Indigenous cultural lore, relating to the sanctuary, in collaboration*

*with relevant Indigenous communities and in liaison with AAV (section 8.3).*

- *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 8.2).*

## 5.2 Maritime and other cultural heritage

Although there is no physical evidence it is likely that whaling and sealing activities occurred in the area in the early to mid 1800s. At that time there were whaling stations at Eden to the east and Refuge Cove, on Wilsons Promontory, to the west (Buttrose ms, Welling 1931, Lennon 1974, Howard 1998).

Shipping along this section of the Victorian coastline increased with the influx of settlers into the Orbost area in the early 1870s (Green 1984). At this time the Snowy River became a major means of transport for supplies and trading goods to and from Orbost, and subsequently a port was developed at Marlo (Green 1984). This busy port serviced trading vessels carrying local produce such as wattle bark, maize, skins and pigs (Green 1984). The Snowy River Shipping Company, founded in 1880, traded until the turn of the century when it was replaced by the Orbost Shipping Company. Large numbers of vessels, including ketches, schooners and steamers, operated between Marlo, Lakes Entrance and Melbourne. However, local commercial shipping gradually declined, and ceased in 1915 with the extension of the railway to Orbost (Green 1984).

In the 1880s commercial fishing vessels from Lakes Entrance and Paynesville sailed along the east coast to fish for bream and salmon. The Cape Conran holiday settlement, established in the 1940s on the shore, was occasionally used as a base by commercial fishermen. Relics of early commercial fishing, such as the concrete lobster pit or 'coff' at West Cape, are evidence of early commercial fishing in the vicinity of Beware Reef. Abalone and Rock Lobster were harvested in the sanctuary's waters until the sanctuary's declaration (ECC 2000).

Beware Reef Marine Sanctuary is particularly renowned for three steamship wrecks – the



*Auckland*, *Ridge Park* and *Albert San* – whose extensive remains lie around the south-western and northern side of the reef. These ships are listed on the Victorian Heritage Register and their remains are protected under the *Historic Shipwrecks Act 1976* (Vic.).

On the night of 27 May 1871, the inter-colonial screw steamer *Auckland* struck Beware Reef. The bow section, rudder post, iron hull plating, engine, beams and bladed propeller are today visible at a depth of 19–26 metres. A memorial plinth was placed on the sea floor at the site by a dive club following a diving fatality on the site (Heritage Victoria 2001). The engines of the *Auckland* are highly significant because they were the first marine steam engines to be compounded (adapted to run at high pressure) in Australia by its owners, the Australasian Steam Navigation Company. It was a unique adaptation and the only evidence of the modification made to an original direct-acting steam engine (Heritage Victoria 2001). A Marine Board enquiry found that the wreck was the result of the compasses not having been adjusted by the owners to compensate for the extra mass of iron following the engine modifications (Heritage Victoria 2001).

The collier *Ridge Park* was lost on 10 February 1881 when it struck the north-western side of Beware Reef, with no lives lost. Today its scattered remains include a bow structure, winch, boiler, engine, propeller and broken hull. Indigenous stockmen reportedly discovered a piano from the wreck washed up on the shore (Pepper 1980).

The site known as ‘Sailors Graves’ on the mainland at East Cape is thought to have been named following the wreck of the *Ridge Park*, although no lives were lost in this wreck. It is possible that during the salvage operations some of the salvage crew lost their lives and were buried there (R. Anderson pers. comm. 2004).

During both world wars Bass Strait was an important shipping route. German mining of eastern Bass Strait led to the loss of allied lives and ships. The *Albert San* (previously named the *Brolga*) was requisitioned and used by the Royal Australian Navy throughout 1917–18 for auxiliary minesweeping work around Gabo Island and the New South Wales coast (Heritage Victoria 2001). Having returned to

duties as a steam fishing trawler on 13 August 1926 during a voyage from Melbourne to Sydney, the *Albert San* struck Beware Reef and began to sink bow-first. Wreckage, including plating, the propeller and the propeller shaft, is lying on sand in 26.5 metres depth on the north-west side of the reef (Heritage Victoria 2001).

The Friends of Beware Reef Marine Sanctuary undertake mapping and monitoring of historic shipwrecks remains within the sanctuary (section 8.2).

Pillaging of shipwreck remains has occurred in the past and continues to pose a threat to the integrity of the wrecks. Parks Victoria supports Heritage Victoria to ensure the protection of these remains.

The historic shipwrecks within the sanctuary are an important part of Victoria’s maritime heritage, in particular their role in documenting and contributing to our understanding of the importance of the shipping trade and communication.

Historic and cultural places are managed in accordance with the *Heritage Act 1995* (Vic.), *Historic Shipwrecks Act*, the *Burra Charter: the Australia ICOMOS Charter for Places of Cultural Significance* (Australia ICOMOS 1999) and Parks Victoria’s *Heritage Management Strategy* (Parks Victoria 2003b).

Heritage Victoria has primary responsibility for the management of shipwrecks and other maritime artefacts within the sanctuary. A Memorandum of Understanding between Parks Victoria and Heritage Victoria identifies respective roles and responsibilities with regard to protection, compliance and interpretation of shipwrecks, shipwreck artefacts and other archaeological sites within the sanctuary (Parks Victoria & Heritage Victoria 2004).

‘Shipping Along the Coast’ is a priority historical theme identified within Parks Victoria’s *Heritage Management Strategy* (Parks Victoria 2003b). The shipwrecks in the sanctuary demonstrate this theme through sub themes of war and defence, Bass Strait shipping, inter-colonial steam navigation, the coal trade and commercial fishing (section 6.1).

### **Aims**

- Conserve places of historic and cultural significance.
- Encourage learning and understanding of the historic heritage of the sanctuary.

### **Management strategies**

- *Manage historic places including shipwrecks and values of historic and cultural significance in accordance with the provisions of the Heritage Act, the Burra Charter of Australia ICOMOS, Parks Victoria's Heritage Management Strategy, the Historic Shipwrecks Act and the Victorian Heritage Strategy – Shipwrecks 2005.*
- *Continue to work collaboratively with Heritage Victoria in accordance with the Memorandum of Understanding, including the provision of compliance activities to protect cultural values.*
- *Co-operate with and support Heritage Victoria to document the heritage values of the sanctuary and assess the risks to those values. Ensure such information is entered in Parks Victoria's Asset Management System.*
- *Support the Friends of Beware Reef and dive clubs in locating, photographing and documenting historic shipwrecks within the sanctuary and record the information in Parks Victoria's Asset Management System (section 8.2).*
- *Prepare a heritage action statement for the sanctuary in close consultation with Heritage Victoria and community groups, to guide the management of the historic shipwrecks and artefacts.*
- *Encourage research into the heritage values of the sanctuary, and incorporate information gained into management programs and information, interpretation and education programs.*
- *Integrate the interpretation and promotion of maritime and other cultural heritage values related to Parks Victoria's key historic theme 'Shipping Along the Coast' into existing and new information, interpretation and education programs for the sanctuary and nearby terrestrial parks and reserves (section 6.1).*

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## 6 STRATEGIES FOR VISITORS

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### 6.1 Information, interpretation and education

Providing information, interpretation and education can help orientate and inform visitors, increase visitor enjoyment and satisfaction, foster an understanding and appreciation of the sanctuary's special natural and cultural values, and management activities, and help visitors to experience the sanctuary in a safe and appropriate manner. Parks Victoria delivers information, interpretation and education to visitors by various means, including its website, interaction with visitors, Park Notes, 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 marine protected areas. At the same time, a range of information, interpretation and education products that are specific to the key features of the sanctuary will be provided.

Parks Victoria supports the provision of tourism and marketing information that highlights the natural and cultural values of the sanctuary, fosters an awareness of Indigenous culture and heritage, and, promotes appropriate behaviours in visitors that are compatible with conservation of natural and cultural values.

The sanctuary is within Tourism Victoria's Destination Gippsland marketing and promotion region. A number of local tourism groups exist including the Bemm River Progress Association and Orbost Chamber of Commerce and Industry Inc.

There is considerable potential to raise public interest and awareness of sanctuary, and to promote sanctuary opportunities to a diverse range of Victorian, interstate and overseas visitors. Parks Victoria's information and interpretation programs are integrated with statewide and regional marketing strategies of Tourism Victoria (e.g. Tourism Victoria 2002; 2004).

The *Gippsland Regional Tourism Development Plan 2004–2007* (Tourism Victoria 2004), *Far East Gippsland Eco-tourism Strategy* (NRE & Parks Victoria 1997), *East Gippsland Planning and Development Strategy 1997-2010* (East Gippsland Shire Council 1997) and the East Gippsland Shire Councils Tourism Policy all set the tourism framework for East Gippsland, including the sanctuary.

Information, interpretation and community education will build on themes related to the sanctuary's marine diversity, its natural character and pristine waters, its cultural values, including shipwrecks, as well as emphasising the need for minimal impact and self-reliance in undertaking activities in the sanctuary. The existing services and facilities provided within the Cape Conran Coastal Park will be considered in planning programs.

Pre-visit orientation information for the sanctuary is available on Parks Victoria's website and at accredited information centres and other local outlets, including Parks Victoria's Orbost and Cape Conran offices.

Interpretive facilities for the sanctuary are provided at various locations. Information about the sanctuary's boundaries, its natural and cultural values, and regulations is provided on signs in Cape Conran Coastal Park at East Cape, West Cape boat ramp, Yeerung Beach and Cape Conran Cabins, and also at the Orbost Parks Victoria office and Marlo boat ramp.

Interpretive walks, talks and other activities are a powerful method of communicating targeted messages to a variety of visitors. The location of the sanctuary allows for a range of interpretive activities on land nearby, particularly in the holiday periods when camping venues are busy.

Parks Victoria provides guided interpretive activities and walks within Cape Conran Coastal Park. There are also opportunities for the managers of Cape Conran Cabins to provide face-to-face interpretation of the sanctuary. These activities are an ideal way of increasing the community's awareness and understanding of the sanctuary's importance, values and threatening processes.

Opportunities also exist for information, education and interpretation to be provided by tour operators (section 6.6) and relevant Indigenous communities through adventure activities such as diving and snorkelling.

However, weather conditions and the sanctuary's location offshore are factors likely to limit business opportunities in this area.

Collaboration with other organisations involved in environmental education in the local area including Fisheries Victoria, Fishcare, Waterwatch, Coast Action/Coastcare, Friends of Beware Reef Marine Sanctuary, Friends of Cape Conran Coastal Park, Bairnsdale Scuba Club and local primary and secondary schools will also be an important tool for delivering key messages about the sanctuary.

The *Marine National Parks and Marine Sanctuaries Resource Kit* (Parks Victoria 2003d) provides educators, students, community and Friends groups with a comprehensive collection of materials for communicating the importance and values of marine sanctuaries. Parks Victoria's *Discover Victoria's Marine National Parks and Sanctuaries Activity Book* (Parks Victoria 2004) is designed to increase children's interest in the marine environment. Both resources are available from Parks Victoria's website.

Park Victoria has developed minimal impact guidelines (Parks Victoria 2003c) in partnership with providers of education to help minimise the impact of interpretive activities on natural and cultural values within the sanctuary.

### **Aims**

- Promote and encourage visitors to discover, enjoy and appreciate the sanctuary's natural and cultural values in a safe and appropriate manner through information, interpretation and education.
- Encourage public support for the sanctuary and sanctuary management practices.
- Foster relevant collaborative education projects with other organisations or groups delivering environmental education in the East Gippsland area.

- Provide opportunities for people to learn about and understand the cultural and spiritual significance of the sanctuary to Indigenous people.

### **Management strategies**

- *Ensure that pre-visit information about the sanctuary is available from the Parks Victoria Information Centre, tourist information centres, Parks Victoria's website, and Parks Victoria offices.*
- *Maintain and update as necessary information signs at key locations, including East Cape, West Cape boat ramp, Yeerung Beach, Cape Conran Cabins, the Orbost Parks Victoria office and the Marlo boat ramp.*
- *Develop information on potential dive sites, marine life and associated risks within the sanctuary (section 6.4).*
- *Provide visitor, information, interpretation and education on the sanctuary's recreational opportunities, minimal impact techniques, reporting of marine related incidents such as wildlife strandings/entanglements (section 4.4) and oil spills (section 4.2), visitor safety, sanctuary values and threatening processes (sections 4.4, 5.1, 5.2, 6.3, 6.4, 6.7).*
- *Regularly evaluate information and interpretive programs related to the sanctuary.*
- *Integrate information, interpretation and education programs for Beware Reef Marine Sanctuary and associated facilities into existing Cape Conran Coastal Park plans and programs.*
- *Promote greater public understanding and appreciation of, and respect for, Indigenous culture by incorporating information about Indigenous cultural heritage in information, interpretation and education programs, in collaboration and accordance with the views of the Traditional Owners (sections 5.1 and 8.2).*
- *Encourage and support relevant Indigenous communities to participate in interpretation of Indigenous cultural heritage relating to the sanctuary (section 8.2).*

- *Provide face-to-face interpretation of sanctuary values where appropriate.*
- *In conjunction with Fisheries Victoria, continue to provide information, interpretation and education material to achieve voluntary compliance with regulations, and where necessary enforcement (section 8.3).*
- *Work collaboratively with local educational providers, community groups, local tourism/ business groups and other agencies to improve knowledge and understanding of marine environments, to foster custodianship of the sanctuary and encourage research.*
- *Liaise with State and regional tourism authorities to ensure the sanctuary is appropriately promoted in regional visitor information centres and in regional tourism strategies.*
- *Ensure staff and licensed tour operators are adequately trained in interpreting the marine environment and in promoting minimal impact practices.*
- *Assist licensed tour operators in identifying opportunities for providing appropriate interpretive and educational experiences (section 6.6).*

## 6.2 Access

Access to Beware Reef Marine Sanctuary is only by sea. Most visitors reach the sanctuary by boat from Cape Conran Coastal Park, where a boat-launching facility is available at West Cape. The West Cape boat ramp is the most used ocean access point between Lakes Entrance and Mallacoota (Parks Victoria 2005c).

The exposed nature of the coast, variable weather and changing sea conditions can influence opportunities to launch vessels. In south-westerly conditions the ramp can become unsuitable for boat launching/retrieval. Other prevailing wind conditions (such as south-easterly winds) can create conditions unsuitable for boating within a short distance of the launching site. When conditions are favourable, boats less than six metres in length can be successfully launched provided operators are experienced (section 6.3).

On the open ocean and within the sanctuary, sea conditions can change rapidly and become hazardous (section 6.7). Therefore visitors need to be experienced, well-prepared and extremely self-reliant (section 6.7).

For the protection of Australian Fur Seals and New Zealand Fur Seals, access to the exposed areas of the reef is prohibited (table 1, figure 2, section 4.4).

### Aim

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

### Management strategies

- *Ensure access to the sanctuary is integrated with facilities and access within the nearby Cape Conran Coastal Park.*
- *Evaluate and monitor changes to existing boating facilities outside the sanctuary that may influence sanctuary values.*
- *For the protection of the Australian Fur Seals and New Zealand Fur Seals prohibit access to the Special Protection Area (i.e. exposed areas of Beware Reef) (table 1, figure 2).*

## 6.3 Recreational boating and surface water sports

Recreational boating and other surface water activities are relatively uncommon in the sanctuary, as weather and sea conditions limit access (section 6.2). All boat launching access points are located outside the sanctuary (section 6.2) and there are no landing opportunities, as access to the exposed areas of Beware Reef is prohibited for the protection of Australian and New Zealand Fur Seals (section 6.2). Boat operators need to be experienced and self-reliant (section 6.7).

Boating within the sanctuary primarily associated with diving and sightseeing activities can be expected to increase, as the populations of nearby coastal towns increase. The provision of future boat-launching facilities outside the sanctuary could also influence boat use in the sanctuary.

Personal water craft (PWCs), sea kayaks and windsurfers can be used within the sanctuary when weather conditions are favourable.

PWCs and other vessels if used inappropriately could disturb wildlife and reduce the remote recreational experience offered by the sanctuary.

Anchoring, primarily associated with diving activities (section 6.4), can impact on sensitive marine environments particularly subtidal reef communities, but at the current level of visitation, any impacts are thought to be minor. Impacts of visitor use including anchoring will be monitored and management actions implemented to protect natural and cultural values if required.

Recreational vessels are potential vectors of marine pests (section 4.6).

State Environment Protection Policies prohibit vessel operators from discharging sewerage, oil, garbage, sediment, litter or other wastes to surface waters in any Victorian State waters. While the EPA has primary responsibility for pollution management, Parks Victoria supports the provision of waste receiving and pump out facilities at marinas, ports, and other suitable sites.

As in all Victorian coastal waters, a speed limit of five knots applies in specified circumstances in the sanctuary (MSV 2005). Parks Victoria works collaboratively with Marine Safety Victoria to ensure compliance with these regulations (section 8.3).

Parks Victoria, Victoria Police and Fisheries Victoria interact regularly with sanctuary visitors (including boat users), providing opportunities to learn about the sanctuary.

Marine mammal viewing occasionally occurs in the sanctuary, usually by independent boat operators taking advantage of chance encounters with seals, whales and dolphins.

Under the Marine Act and the Wildlife (Whale) Regulations recreational vessels and PWCs must stay at least 100 metres from whales and dolphins, while a minimum distance of 30 metres applies to swimmers and 50 metres to surfers. Other conditions apply to licensed tour operators and commercial vessels.

#### **Aims**

- Allow for a range of recreational boating activities, surface water sports and marine

mammal observation while protecting natural, cultural and recreational values.

- Promote safe boating and water safety within the sanctuary.

#### **Management strategies**

- *Permit a range of boating activities in the sanctuary in accordance with table 2 and the 5 knot speed restriction within: 50 m of a swimmer or other vessel, 100 m of a vessel or buoy with a diver below signal and 300m of a whale or dolphin.*
- *Integrate messages regarding safe and appropriate boating and anchoring into existing information, interpretation and education programs for Cape Conran Coastal Park (section 6.1).*
- *Ensure boat operators, kayakers and other visitors comply with the Wildlife Act and Wildlife (Whale) Regulations, when observing marine mammals.*
- *Monitor the impacts of visitor use, including boating and anchoring, and if necessary take appropriate action to minimise any impacts on natural and cultural values.*
- *Permit the establishment of permanent moorings or other infrastructure only for the protection of natural and cultural values, particularly subtidal reef environments and shipwrecks.*
- *Encourage the use of minimal impact techniques for boating and surface water activities.*
- *Encourage boat users to adopt best practice vessel cleaning and maintenance standards before entering the sanctuary (section 4.6).*

#### **6.4 Diving and snorkelling**

Snorkelling and scuba diving enable visitors to experience the underwater habitats and view species and habitats that are difficult to observe from above the surface, particularly smaller or cryptic animals such as seahorses, sea urchins, nudibranchs, sponges, octopuses and cuttlefish.

Beware Reef is an excellent diving and snorkelling location with a great diversity of

marine flora and fauna, and a number of shipwrecks.

The sanctuary offers opportunities for snorkelling and diving from boats. The rocky reef and wrecks within the sanctuary are ideal for underwater activities if weather and sea conditions are suitable. However, strong currents, undertows and sudden changes in weather are common. Only experienced divers and snorkellers should undertake this activity (section 6.7).

Current levels of use are low, but could increase as the promotion and awareness of the sanctuary and its diversity of marine life increases.

Potentially threatening processes associated with diving include anchor and fin disturbance to plants and animals attached to the reef and ocean floor, translocation of marine pests (section 4.6) and disturbance or damage to historic shipwrecks (section 5.2).

Educating divers and snorkellers about historic shipwreck protection (section 5.2) and minimal impact practices, particularly those new to these activities, will help minimise impacts and assist with sanctuary 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* at [www.orc.org.au](http://www.orc.org.au) (ORC 2004).

Divers and snorkellers need to be aware of the no-take provisions within the sanctuary (section 4.4) and can assist in the early detection of marine pests in the sanctuary (sections 4.6 and 8.2), and the detection of unrecorded species, and cultural places and objects.

#### Aim

- Provide opportunities for diving and snorkelling in the sanctuary while protecting natural and cultural values.

#### Management strategies

- *Continue to allow diving and snorkelling in the sanctuary in accordance with table 2.*
- *Encourage safe diving and snorkelling practices and integrate safety messages into existing information, interpretation and education programs (section 6.1).*
- *Integrate minimal impact messages into existing information, interpretation and educational programs to protect the natural and cultural values of the sanctuary (section 6.1).*
- *Encourage divers and snorkellers to participate in Reef Watch and community-based marine monitoring programs (section 8.2).*
- *Encourage the use of clean diving equipment to prevent the translocation of marine pests (section 4.6).*
- *Promote compliance of snorkellers and recreational SCUBA divers with relevant codes of practice and Adventure Activity Standards.*
- *Support dive clubs and industry representatives to develop codes of practice that promote environmentally responsible diving practices.*
- *Liaise with dive clubs and other visitors to determine the level of use and opportunities to increase awareness and understanding of the values of the marine sanctuary.*

#### 6.5 Other activities

Local pilots at Orbost and Lakes Entrance offer domestic charters and sightseeing tours of the area. Light aircraft and helicopters sometimes fly over the sanctuary and may be used for opportunistic wildlife sightings. Under the Wildlife (Whale) Regulations, aircraft and helicopters must stay a minimum distance of 300 m from whales. Restrictions also apply to flying heights under Commonwealth legislation.

‘Fly Neighbourly’ agreements can specify appropriate flying times, behaviours and activities to ensure sanctuary values and experiences are protected, while allowing opportunities for flying activities. Such an

agreement may be negotiated for the sanctuary if necessary.

Helicopters and aircraft are not permitted to take off or land in the sanctuary, except for emergency response and management purposes.

Dogs are not permitted in the sanctuary, unless confined within a vessel.

#### **Aims**

- Monitor and minimise the impact of helicopters and aircraft on natural and cultural values.
- Minimise impacts of dogs on the natural and cultural values of the sanctuary.

#### **Management strategies**

- *Monitor the level of activity and use by aircraft and helicopters and implement Fly Neighbourly agreements if required.*
- *Liaise with scenic flight operators and Air Services Australia as necessary to encourage sensitive flight practices over the sanctuary.*
- *Prohibit the landing of aircraft and helicopters in the sanctuary, except for emergency response and management purposes.*
- *Allow dogs in the sanctuary if confined to a vessel.*

### **6.6 Tourism services**

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

Opportunities for licensed tour operators are likely to emerge in the future, but the sanctuary's remoteness and weather and sea conditions are likely to limit potential operators. There are currently no tour operators licensed to conduct tours in Beware Reef Marine Sanctuary.

Activities by licensed tour operators are managed by conditions that detail access, permitted activities and site-specific restrictions. Licensed tour operators must adhere to industry-developed Adventure Activity Standards (section 6.7), including the

*Scuba Diving and Wildlife Swims – Adventure Activity Standards (ORC 2004).*

Parks Victoria works collaboratively with Tourism Alliance Victoria, a membership-based industry association, in administering the tour operator licensing system for Victoria's public land estate, including the sanctuary.

#### **Aim**

- Encourage the provision of appropriate tourism services, while minimising impacts on the natural and cultural values of the sanctuary.

#### **Management strategies**

- *Ensure all tour operators using the sanctuary are licensed and adhere to permit conditions.*
- *Ensure that all licensed tour operators working in the sanctuary have appropriate training and accreditation.*
- *Encourage licensed tour operators and relevant Indigenous communities to develop and deliver guided tours that enhance the experience of visitors and are compatible with the protection of sanctuary values.*
- *Work collaboratively with tour operators and Tourism Alliance Victoria to ensure:*
  - *provision of a high-quality service*
  - *that activities adhere to minimal impact practices as specified in the tour operator licence*
  - *that information conveyed to visitors is consistent with objectives for the sanctuary.*
- *Monitor activities and use of licensed tour operators to ensure values of the sanctuary are protected, and amend licence conditions if necessary.*
- *Ensure that tour operator licenses include appropriate conditions to protect marine mammals.*
- *Liaise with the tourism industry and community to identify and promote visitor opportunities in the sanctuary.*



## 6.7 Public safety

Because of the rapidly changing weather and sea conditions in the region, there are inherent dangers associated with a number of activities in the sanctuary, including boating, diving and snorkelling. In general, the sanctuary is not safe for inexperienced visitors.

A number of emergency incidents have occurred within the sanctuary and surrounding area. Most have been vessels in distress or that have run aground on the reef.

Visitors need to be aware of safety risks to themselves and other users to ensure that they enjoy a safe visit. Public information and education programs are one of the most effective ways to promote safety (section 6.1). Safety messages are presented to visitors through signs, Park Notes and ranger presence.

To assist in achieving safe practice, Adventure Activity Standards are being developed by the outdoor recreation industry for all adventure activities, including diving and snorkelling (section 6.4). The Outdoor Recreation Centre will facilitate the development and updating of these standards.

Visitors are encouraged to ensure they comply with the standards relevant to their activity, and undertake the required training and accreditation before visiting the sanctuary.

Any person operating a powered recreational vessel in Victorian waters must have a current boat operator licence. Recreational boating accidents are highest in Victoria during January, and most fatalities are associated with aluminium dinghies (MSV 2005). Marine Safety Victoria conducts safety and awareness programs for recreational boat users, and the *Victorian Recreational Boating Safety Handbook* (MSV 2005) contains necessary safety information and outlines the requirements for operating a recreational vessel in Victoria (section 6.3).

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 most emergency

response situations. Instead, it supports other agencies including the Department of Sustainability and Environment, Marine Safety Victoria, the Country Fire Authority, the State Emergency Service and Victoria Police, in emergency incidents where required. Marlo Coast Guard volunteers also respond to emergencies within the sanctuary.

Relevant agencies respond to incidents within the sanctuary in accordance with the Municipal Emergency Management Plan. Parks Victoria's response to emergency incidents during normal operating activities within the sanctuary is guided by an Emergency Management Plan.

### Aims

- Promote visitor safety and awareness of safety issues and risks within the sanctuary.
- Promote and observe safe practices, and support emergency services.

### Management strategies

- *Encourage compliance with Adventure Activity Standards to ensure the safety of visitors undertaking activities such as diving and snorkelling.*
- *Increase visitors' awareness of safety issues and potential hazards in the sanctuary through the use of Park Notes, ParkWeb and signage (section 6.1).*
- *Support responsible agencies in emergency response and ensure that Parks Victoria staff have adequate levels of training in emergency procedures.*
- *Liaise with East Gippsland Shire Council to ensure that Municipal Emergency Response Plans make adequate provision for likely incidents within the sanctuary.*
- *Review and update as required the Emergency Management Plan for the 'Orbost Ranger in Charge Area' to ensure protocols are identified to address all potential incidents within Beware Reef Marine Sanctuary.*

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## 7 STRATEGIES FOR AUTHORISED AND ADJACENT USES

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### 7.1 Authorised uses

There are a number of uses and activities that may be permitted in the sanctuary subject to specified conditions to minimise impacts.

Petroleum extraction, exploratory drilling, mineral exploration and mining, and invasive searching for or extraction of stone and other materials, are prohibited in the sanctuary under the National Parks Act. Petroleum exploration such as seismic survey from 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 sanctuary 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 and Marine Sanctuaries for petroleum exploration. There is no petroleum exploration permit over this sanctuary. 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 occasionally host search and rescue, field navigation and incident response activities. Activities are subject to a permit with conditions and are undertaken in accordance with Parks Victoria's operational policies, to ensure that values of the sanctuary are protected.

All research and monitoring planned in a Marine National Park or Marine Sanctuary, by external organisations or individuals, requires a research permit under the National Parks Act, issued by the 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 sanctuary. This is achieved through a permit system for all filming and 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.

### Aim

- Manage authorised uses and permitted activities in accordance with the National Parks Act and minimise their impact on sanctuary values.

### Management strategies

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

### 7.2 Boundaries and adjacent uses

Management of the sanctuary will be integrated with that of nearby Cape Conran Coastal Park (figure 2). The management of access and the delivery of education and interpretative programs for the sanctuary will be integrated with the relevant programs for the coastal park.

The sanctuary is located offshore, 5 km south-east of Cape Conran. The closest shoreline from the sanctuary boundary is approximately 3 km away at Yeerung River. The sanctuary includes all subtidal areas of Beware Reef and covers an area of 220 ha (figure 2).

State waters and the underlying sea bed adjoining the sanctuary are currently unreserved Crown land. The Government accepted the ECC's recommendation that a Coastal Waters Reserve be established under the *Crown Land (Reserves) Act 1978* (Vic.) 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).

Commonwealth waters commence three nautical miles offshore, and do not abut the sanctuary.

As fishing is prohibited in the sanctuary, clear boundary identification is paramount. Shore-based boundary markers are not appropriate because of the distance of the sanctuary from the shore. Offshore boundary markers are not feasible because they might not be sighted from vessels under way and could be a hazard, and because of the high costs of installation and maintenance.

The most practical method of communicating boundaries is by pre-visit information, including Marine Note brochures, signage and maps at key access points. Pre-visit information identifies map coordinates of the sanctuary boundaries, landmark features and encourages visitors to use Global Positioning Systems. Face-to-face communication by rangers and fisheries officers is also an important means of communicating boundary information.

### **Aims**

- Ensure the integration of management with adjoining waters and nearby land as appropriate, consistent with the protection of natural and cultural values.
- Effectively communicate the location of sanctuary boundaries.

### **Management strategies**

- *Ensure information, interpretation and education programs for the sanctuary are integrated with those for nearby Cape Conran Coastal Park (section 6.1).*
- *Work collaboratively with agencies involved in the management of State waters adjacent to the sanctuary.*
- *Provide face-to-face communication of boundaries by rangers and fisheries officers as required (section 6.1).*
- *Ensure the boundaries of the sanctuary can be clearly identified at sea, by providing pre-visit information and encouraging the use of maps and global positioning systems.*

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## 8 STRATEGIES FOR COMMUNITY AWARENESS AND INVOLVEMENT

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### 8.1 Community awareness

Raising the community's awareness of the sanctuary's values is an essential step in developing a sense of custodianship for the sanctuary and engagement in the area's management. The community is more likely to develop a sense of custodianship for the sanctuary if its views and values are respected and sanctuary-related social networks are encouraged and supported. A strong connection with the sanctuary among visitors and in the local and wider community will assist in broader public education, raising awareness and reaching others in the community.

Information, interpretation and education programs play an integral role in raising community awareness (section 6.1). 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.

Dive clubs can assist in raising community awareness of the value of marine areas, through organised club activities. Local commercial fishers who worked in the area before the sanctuaries proclamation could also contribute a wealth of information about the general marine environment.

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 through participation.

Friends of Beware Reef Marine Sanctuary can raise the awareness of sanctuary values through their involvement with the local community and management activities in the sanctuary.

Returning family groups and individuals, staying in the Cape Conran Coastal Park, have a diversity of knowledge and a strong association to the area. Capturing this transient population's enthusiasm for the area is desirable.

Raising the awareness of the sanctuary through working with local schools is a good way of passing knowledge on to children who in turn pass this knowledge on to their parents.

There are opportunities to build broader community awareness of the significance of the sanctuary to Indigenous communities. This will aid in the development of greater respect for and recognition of Indigenous culture in the broader community.

#### Aims

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

#### Management strategies

- *Encourage and support community based projects aimed at communicating the benefits of marine conservation and protection.*
- *Encourage opportunities to profile the work of the Friends of Beware Reef Marine Sanctuary, dive clubs, volunteers and community groups.*
- *Build broader community awareness through direct involvement in community based marine monitoring programs, and information, interpretation and education (sections 6.1 and 8.2).*
- *Continue to encourage general programs that promote marine sanctuary values and catchment protection.*
- *Encourage and support Friends of Beware Reef Marine Sanctuary, Coast Action / Coastcare, Waterwatch and other volunteer groups including dive clubs, operating in the sanctuary or in the nearby Cape Conran Coastal Park, focusing particularly on community interpretation and education.*
- *Encourage and support volunteers and community groups to further develop an*

*understanding of the sanctuary's values, including Indigenous cultural heritage and its significance to Indigenous communities (section 5.1).*

## 8.2 Community participation

Participation of community groups and individuals in the sanctuary's management is pivotal in the effective long-term planning, use and care of the sanctuary's values.

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

The interests of community groups can often overlap and may not be complementary. There can be considerable mutual benefits when such groups work together and with Parks Victoria to achieve common goals.

The Traditional Owners have considerable interest in and aspirations for the sanctuary as part of *Country*. They are an important source of traditional knowledge about the area that has yet to be documented. A strong working relationship with Traditional Owners will be essential to the reflection of their cultural lore in the sanctuary's planning and management, and reconciliation of their interests and aspirations with those of other members of the community. Other Indigenous communities may also have a particular interest in the sanctuary.

With appropriate training and support, volunteers can provide useful information that complements more detailed scientific surveys of the sanctuary, such as the early detection of marine pests (section 4.6).

Reef Watch, a non-profit project developed by the Australian Marine Conservation Society, involves volunteer divers in helping describe and monitor marine life in a variety of habitats. Parks Victoria endorses the Reef Watch program as a mechanism for the involvement of the community in marine monitoring. Because of the remoteness of the sanctuary and the need for divers to be well trained and experienced before diving on the reef,

community monitoring programs and Reef Watch activities in the sanctuary can be limited. However, local dive clubs, including Bairnsdale Scuba Club, are active in the sanctuary and currently undertake monitoring.

There are a number of dive clubs and operators in the region, including Sale Scuba Club and Bairnsdale Scuba Club. The Bairnsdale Scuba Club undertakes regular activities in the sanctuary, including monitoring programs and photography. Its members have a wealth of knowledge in the area. The Scuba Divers Federation of Victoria (SDFV) represents many local dive clubs across Victoria.

The nearest Coast Action group is at Marlo. Community members can participate in programs facilitated by Coast Action / Coastcare, including interpretation and education programs.

The Friends of Beware Reef Marine Sanctuary provide an avenue for community involvement and participation. The group is involved in the mapping and monitoring of historic shipwrecks including the *Ridge Park* and *Auckland* (section 5.2), photography and in the promotion of the natural and cultural values of the sanctuary amongst the community. Other potential projects include natural values monitoring such as flora and fauna monitoring in conjunction with dive clubs and the sea search program.

Sea Search is a community based monitoring program whereby volunteers can undertake systematic surveys in the sanctuary, including subtidal rocky reef flora and fauna monitoring. Such programs aim to involve community members and existing volunteer groups such as Friends of Beware Reef Marine Sanctuary, in monitoring programs that increase knowledge of the sanctuary's natural and cultural values. Currently no Sea Search activities occur in the sanctuary.

East Gippsland Waterwatch is a community based water quality monitoring program. Monitoring occurs at many locations outside of the sanctuary around the Orbost area. Such information is valuable in determining the quality of water entering the ocean near the sanctuary.

Other volunteer organisations including Field Naturalists Club of Victoria (Marine Research Group), Birds Australia, Conservation

Volunteers of Australia and tertiary and work experience students may also assist in projects to benefit the sanctuary.

Parks Victoria's research partnerships will be expanded to incorporate priorities for marine research. Tertiary student research into the sanctuary can be undertaken through research partnerships.

Opportunities to develop networks between interest groups, community organisations and volunteers will be encouraged.

#### **Aim**

- Support and encourage the active participation of community groups and volunteers in protection, conservation and monitoring projects to enhance management of the sanctuary.

#### **Management strategies**

- *Continue to encourage and support volunteer groups in the sanctuary, including Friends of Beware Reef Marine Sanctuary and Bairnsdale Scuba Club to undertake marine values monitoring, marine photography and community education.*
- *Encourage and support volunteer and community groups, including Bairnsdale Scuba Club and Friends of Beware Reef Marine Sanctuary, in pursuing funding for appropriate community projects in the sanctuary.*
- *Support networks between groups interested or involved in the management of the sanctuary.*
- *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.*
- *Continue to pursue opportunities for involving the community (including dive clubs and Friends Groups) in Reef Watch programs that are relevant to the sanctuary.*
- *Encourage existing groups such as Waterwatch, Coast Action and dive clubs*

*to expand their interests into the sanctuary.*

- *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 Parks Victoria.*

### **8.3 Agency partnerships**

Although Parks Victoria is directly responsible for management of the sanctuary, a number of other agencies have key responsibilities for planning, managing, or regulating over all or parts of the sanctuary.

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

The Department of Sustainability and Environment (DSE) establishes parks and sanctuary's, and provides strategic direction and policy advice for the management of the sanctuary, including marine flora and fauna values and threatening processes. Parks Victoria is a support agency, operating at the direction of DSE for emergency wildlife response including oiled wildlife (section 4.2) and cetacean stranding or entanglement (section 4.4).

As part of agreed service delivery arrangements, Fisheries Victoria – Department of Primary Industries has primary responsibility for enforcing fishing prohibitions under the National Parks Act. Parks Victoria will continue to work in partnership with Fisheries Victoria to ensure compliance with the provisions of the National Parks Act and Fisheries Act in accordance with the *Statewide Compliance Strategy* (Parks Victoria 2002a) and the *East Region Marine Compliance Plan* (Parks Victoria 2005b). Collaborative activities such as cooperative patrol, support arrangements and the sharing of information will have ongoing importance.

The Gippsland Coastal Board provides long-term strategic planning for the eastern coast of Victoria, in accordance with the *Victorian Coastal Strategy 2002* (VCC 2002), including the preparation of Coastal Action Plans (section 4.2).

East Gippsland Catchment Management Authority (EGCMA) is responsible for the protection and sustainable development of land, vegetation and water resources within the region, including preparation of the regional catchment strategy to address the impacts of land use and management on the catchment (section 4.2).

Environment Protection Authority (EPA) Victoria has the primary responsibility for environment protection for all waters in Victoria and is responsible for administering and enforcing the *Environment Protection Act 1970* (Vic.), 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 (SEPP) for State waters.

Marine Safety Victoria is responsible for administering the Marine Act, including planning and implementing pollution response and marine safety initiatives (sections 4.2 and 6.7). Parks Victoria works collaboratively with Marine Safety Victoria to ensure boating safety within the sanctuary and is a support agency at a statewide and regional level for marine pollution incidents, contributing on-site response and incident management as well as technical advice.

East Gippsland Shire Council has a key role in administering the planning scheme for land nearby the sanctuary, including assessment of developments with the potential to impact on sanctuary values. Parks Victoria provides input into planning applications to ensure the protection of sanctuary values.

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 marketing and

promoting Victoria to Australian and international travellers.

Through Aboriginal Affairs Victoria (AAV), the Department for Victorian Communities (DVC) 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.

Heritage Victoria (DSE) is the central government agency which provides information and advice about places listed on the Victorian Heritage Register and Archaeological Inventory. It supports the Heritage Council through research, recommends additions to the Register and issues permits for alterations to heritage places.

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

#### **Aim**

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

#### **Management strategies**

- *Work collaboratively with all agencies to implement the plan vision and directions. In particular, work with:*
  - *DSE regarding future planning and management, including protection of marine flora and fauna from potentially threatening processes*
  - *Fisheries Victoria to implement the fishing prohibition and the East Region Marine Compliance Plan*
  - *Gippsland Coastal Board on any future planning and strategies that relate to the sanctuary*
  - *East Gippsland CMA to reduce the impacts of land use and management on the sanctuary and development of appropriate actions in the Regional Catchment Strategy*

- *EPA Victoria to minimise any impacts associated with discharge of waste into the environment particularly those from litter, stormwater, boating and shipping*
- *AAV on compliance with the relevant cultural heritage legislation.*
- *AAV and the Gippsland Cultural Heritage Unit on issues relating to cultural heritage protection*
- *Heritage Victoria on heritage management, and compliance with the Heritage Act and Historic Shipwrecks Act*
- *State and regional tourism authorities to promote the sanctuary in regional visitor information centres and in regional tourism strategies*
- *Marine Safety Victoria on the planning and implementation of marine safety initiatives within the sanctuary and adjacent waters*
- *Marine Safety Victoria to provide support in the management of marine pollution incidents*
- *East Gippsland Shire Council regarding the administration of the planning scheme, including the provision for Parks Victoria input into developments that may impact on the sanctuary*
- *Commonwealth Department of the Environment and Heritage on management of regional ecosystem conservation issues.*
- *Maintain communications with Minerals and Petroleum Division (DPI), the petroleum industry and other agencies with respect to petroleum activities near the sanctuary.*
- *Provide updated information for contingency plans for marine pollution incidents, such as oil and chemical spills, and cetacean / wildlife incidents as required and communicate arrangements to staff, relevant agencies and interested parties.*



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## 9 PLAN IMPLEMENTATION

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### 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 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 sanctuary 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 is 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 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](http://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 Parks Victoria's website will also include information on management performance in the sanctuary.

### 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 damaging activities and threats.
- Minimal impact of permitted uses.

#### **Protecting cultural values**

- Progress towards working with Traditional Owners in managing the sanctuary 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 sanctuary.
- 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 Owner and 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 has partnered with external research agencies to establish benchmarks and indicators for major communities and habitats. By using 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

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**Algae** – plant like organisms which use light energy to create food. Unlike plants, not differentiated into roots, stems and leaves. Commonly called seaweed.

**Ascidian (sea squirt)** – common solitary or colonial marine animal. Closest common invertebrate relative to humans in the ocean.

**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 our 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 particular underlying environmental and ecological features.

**Bivalve** – type of mollusc possessing two shells (e.g. scallop, mussel).

**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 (three nautical miles, or 5.5 km) and the land and inland waters within the coastal catchment.

**Coastal action plan** – 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, where the land meets the sea.

**Country** – in Indigenous usage, all of nature, culture 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.

**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.

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

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

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

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

**Indigenous people** – people who are descendants of Aboriginal Australians.

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

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

**Intertidal zone** – 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 that represent the range of marine environments in Victoria, in which no fishing, extractive or damaging activities are allowed.

**Marine protected area** – term used internationally to describe a marine area that has some form of protection and is managed for conservation objectives.

**Marine Sanctuary** – in Victoria, a smaller, highly protected area designated to protect special values, 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.

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

**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.

**Plankton** – mostly microscopic animals and plants that float or swim in the ocean.

**Public land** –see *Crown land*.

**Relevant Indigenous communities** – includes the Traditional Owners, the scheduled Aboriginal Community/s for areas included in the park and other interested local Indigenous communities.

**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 sanctuary.

**Sediment** – insoluble material suspended in water, consisting mainly of particles derived from rock, soil and organic material.

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

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

**Threatening process** – a source of potential harm or situation with 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 sanctuary area that is based on direct descent from the original Indigenous custodians of *Country* and is in accordance with Indigenous tradition.

## 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.

**CMA** – Catchment Management Authority.

**CRIMP** – Centre for Research on Introduced Marine Pests.

**CSIRO** – Commonwealth Scientific and Industrial Research Organisation.

**DSE** – Department of Sustainability and Environment (Victoria).

**ECC** – Environment Conservation Council.

**EGCMA** – East Gippsland Catchment Management Authority.

**EPA** – Environment Protection Authority (Victoria).

**GCB** - Gippsland Coastal Board.

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

**LCC** – Land Conservation Council.

**MSV**- Marine Safety Victoria.

**NIMPIS**– National Introduced Marine Pest Information System.

**NRE** – former Department of Natural Resources and Environment (Victoria).

**NRSMMPA** – National Representative System of Marine Protected Areas.

**VCC** – Victorian Coastal Council.

**WGCMA** – West Gippsland Catchment Management Authority.

## APPENDIX 1 MANAGEMENT OBJECTIVES FOR MARINE SANCTUARIES

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 on the Victorian Legislation and Parliamentary Documents website: [www.dms.dpc.vic.gov.au](http://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 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 –

- (a) 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.

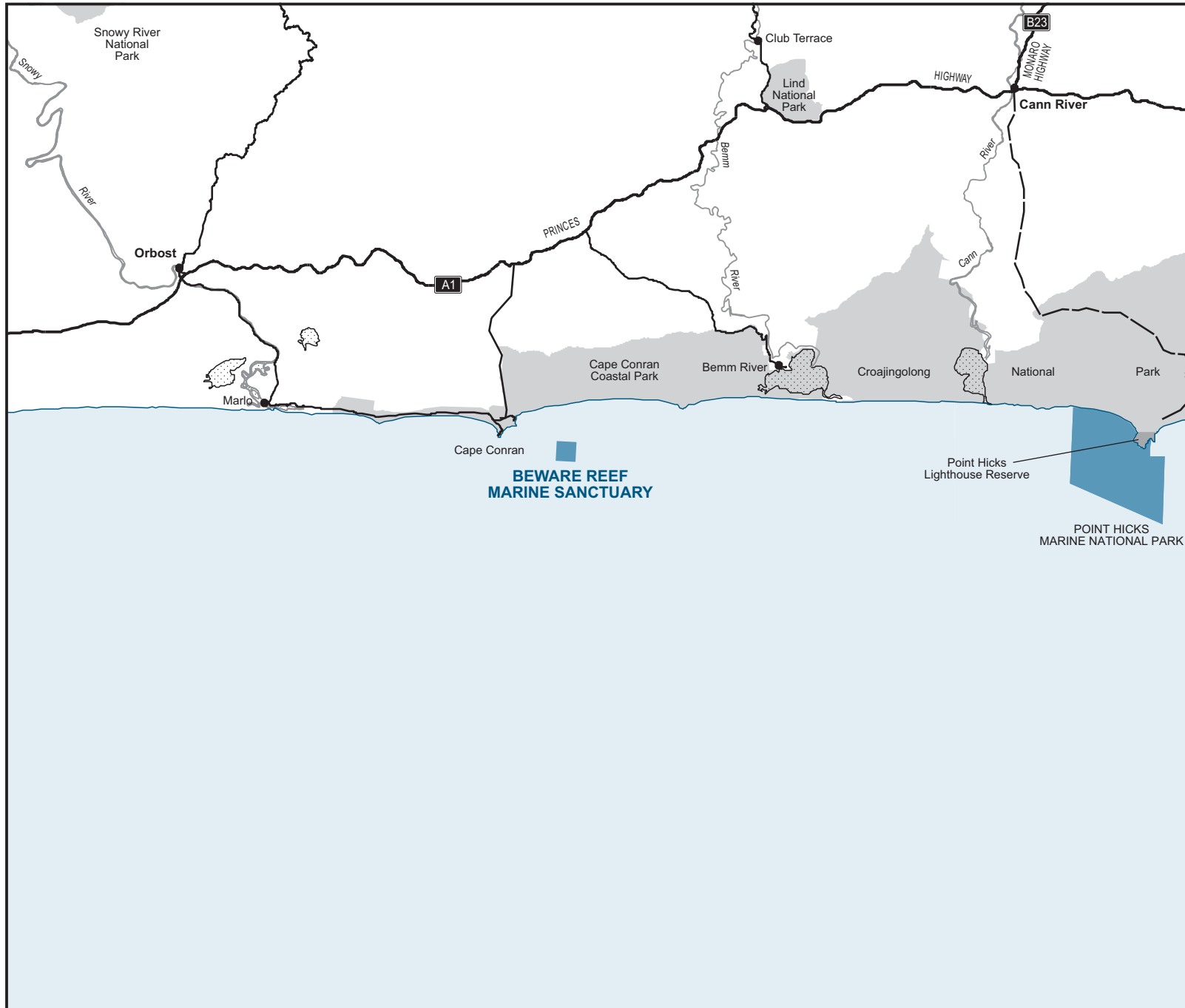


## APPENDIX 2 SUBMISSIONS ON THE DRAFT MANAGEMENT PLAN







A total of 17 submissions were received on the Draft Management Plan (September - December 2005) from the following organisations and individuals.

Note: Two submissions were marked confidential.

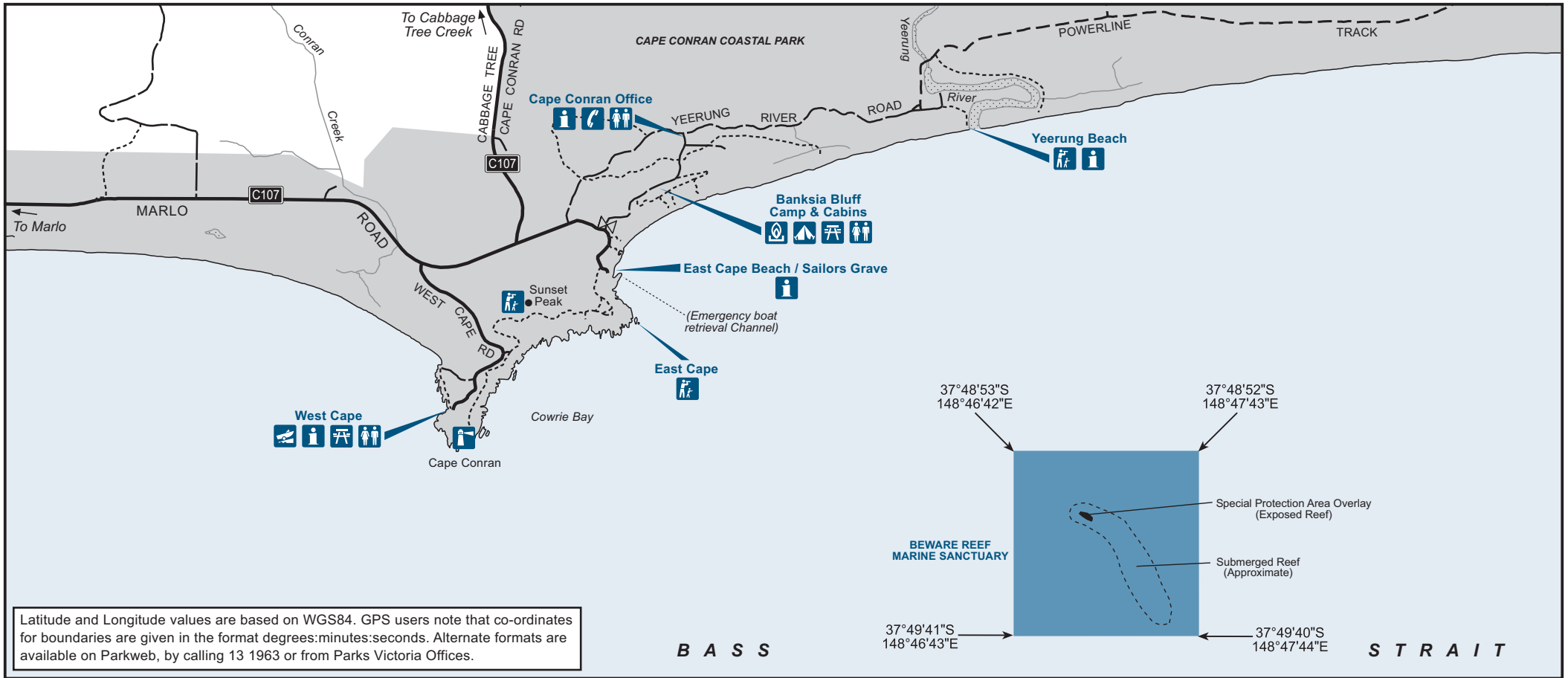
ORGANISATION / GROUP	SUBMISSION No.	INDIVIDUALS	SUBMISSION No.
<b>Submissions from groups</b>	<b>Total: 13</b>	<b>Submissions from individuals</b>	<b>Total: 4</b>
Aboriginal Affairs Victoria	5	Confidential	10
Department of Defence (Commonwealth)	7	Confidential	12
Department of Primary Industries	9	John Ariens	14
Department of Sustainability and Environment	16	Peter Sands	15
Eastern Zone Abalone Industry Association	17		
Environment Protection Authority	1		
Gippsland Ports	2		
Marine Safety Victoria	3		
Scuba Diving Federation of Victoria	8		
Tourism Victoria	4		
Victorian Sea Kayak Club Inc.	6		
VRFish	13		
West & East Gippsland Catchment Management Authority	11		



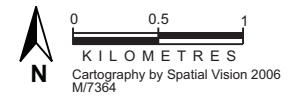
**Figure 1 LOCATION  
BEWARE REEF  
MARINE SANCTUARY**

-  Highway
-  Major sealed road
-  Major unsealed road
-  Marine National Park / Marine Sanctuary
-  Other Parks & Reserves
-  Waterbody





**BEWARE REEF MARINE SANCTUARY**  
**Figure 2**



- |               |                              |              |              |
|---------------|------------------------------|--------------|--------------|
| Sealed road   | Beware Reef Marine Sanctuary | Barbecue-Gas | Light Beacon |
| Unsealed road | Coastal Park                 | Boat ramp    | Lookout      |
| Walking track |                              | Camping      | Picnic table |
| Waterbody     |                              | Information  | Telephone    |
| Reef          |                              | Toilets      |              |

