

# Marine Park 19

## Lower South East Marine Park

### Park at a glance

The Lower South East Marine Park is divided into two sections: the first adjacent to Canunda National Park and the second from MacDonnell Bay just west of French Point to the Victorian border.

At 360 km<sup>2</sup>, it represents 1% of South Australia's marine parks network.

### Community and industry

- The Buandig Aboriginal people have traditional associations with the region,
- The marine park lies within the Limestone Coast, a major tourism destination.
- Commercial fishers target rock lobster, abalone and scalefish species.
- Fishing, diving, snorkelling, swimming, beach walking, boating, surfing, camping and four wheel driving are popular pastimes.

### Fauna and flora

- The southern rock lobster.
- Two coastal Wetlands of National Importance provide habitat for a range of migratory shorebirds.
- Migratory and well travelled species such as southern right whales and bluefin tuna link the Lower South East Marine Park with more distant ecosystems.

### Habitat

- Lower South East Marine Park is within the Otway Bioregion.
- Habitats include:
  - high-energy sandy beaches and freshwater springs,
  - various reef types (shore platforms, fringing and limestone),
  - kelp forests, and
  - natural processes such as the Bonney Upwelling.
- The habitats inside the Lower South East Marine Park provide critical baselines to measure any changes to the State's marine ecosystems that may arise over time from, for example, pollution or climate change.
- Land and sea are linked at important sites adjacent to Canunda National Park, and Picaninnie Ponds Conservation Park.

- A small coastal Crown land parcel has been included within the marine park at Brown Bay.
- Also featured within the park are numerous shipwrecks such as the *Sunderland*, lost offshore from Canunda National Park in 1865.

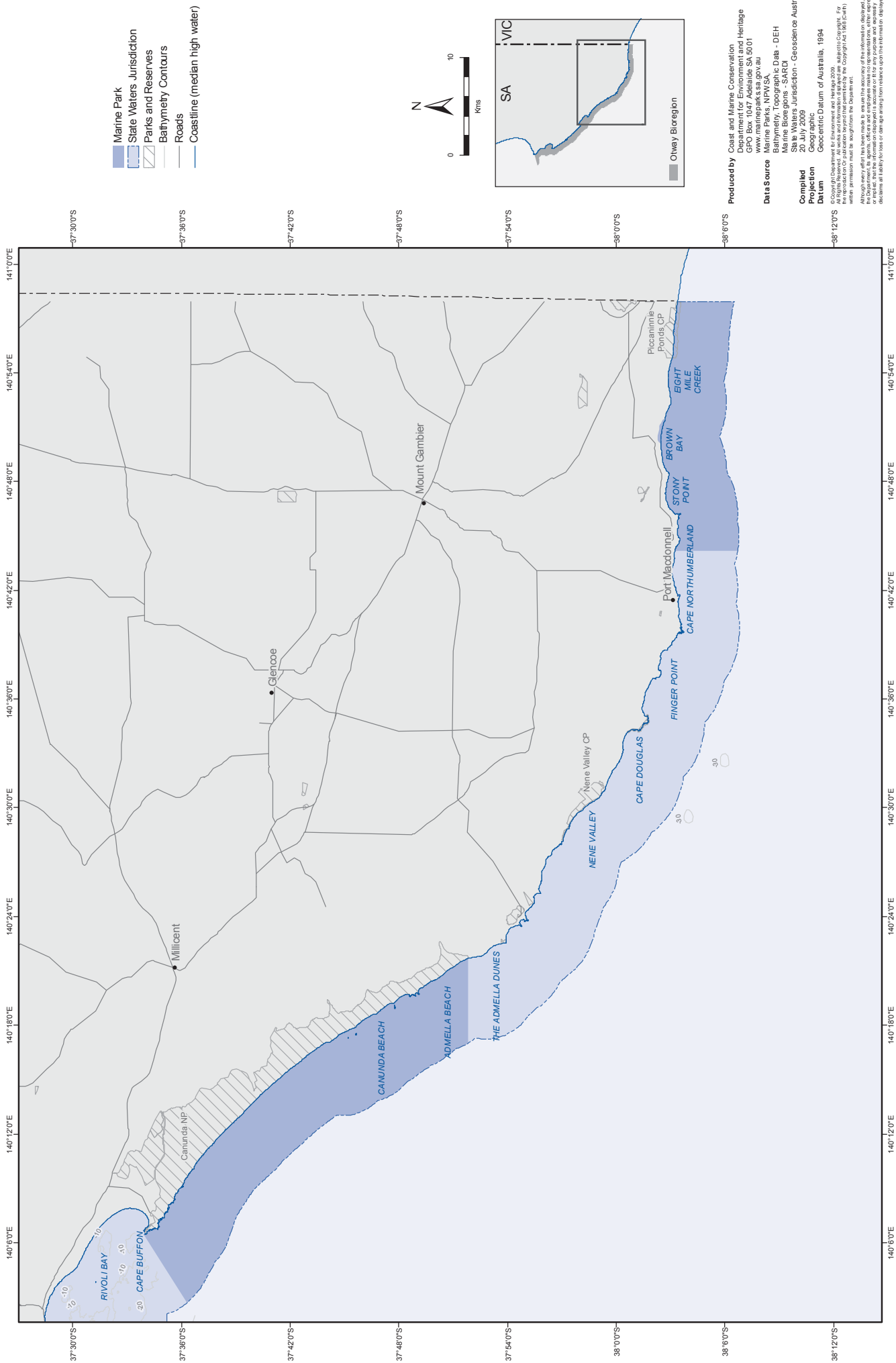
### Boundary description

The Lower South East Marine Parks comprises the two areas set out below.

1. The area bounded by a line commencing on the coastline at median high water at a point 140°21'41.18E", 37°51'48.37S" (at or about Admella Beach), then running progressively:
  - westerly along the geodesic to its intersection with the seaward limit of the coastal waters of the State at a point 140°17'0.76E", 37° 51' 48.37S";
  - north-westerly along the seaward limit of the coastal waters of the State to a point 140°2'42.14E", 37°36'18S";
  - north-easterly along the geodesic to its intersection with the coastline at median high water at a point 140°6'27.97E", 37°33'54.76S" (in the vicinity of Cape Buffon); and
  - generally south-easterly along the coastline at median high water (inclusive of all bays, lagoons and headlands) to the point of commencement.
2. The area bounded by a line commencing on the coastline at median high water at a point 140°57'56.92"E, 38°3'25.45"S (at the South Australian/Victorian border) then running progressively:
  - southerly along the geodesic to its intersection with the seaward limit of the coastal waters of the State at a point 140°57'56.92E", 38°6'30.45S";
  - westerly along the seaward limit of the coastal waters of the State to a point 140°44'14.1E", 38°6'42.48S";
  - northerly along the geodesic to its intersection with the coastline at median high water at a point 140°44'14.1E", 38°3'14.40S"; and
  - generally easterly along the coastline at median high water (inclusive of all bays, lagoons and headlands) to the point of commencement.

**NOTE:** This boundary description is indicative only. It does not describe inclusions and exclusions of specific land parcels. For this detailed information, please refer to the DEH website: [www.marineparks.sa.gov.au](http://www.marineparks.sa.gov.au) or Surveyor-General's office for the relevant marine park plan (known as a Rack Plan).

# Lower South East Marine Park



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**Projection** Geocentric Datum of Australia, 1994

**Datum** Geocentric Datum of Australia, 1994

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## Bioregions and South Australia's marine parks network

Eight biologically distinct regions have been identified off South Australia's coastline. The State's marine parks have been carefully designed to include parts of each bioregion and the various habitats within them.

By including some examples of the marine biodiversity typical of the Otway Bioregion, Lower South East Marine Park contributes to the marine parks network's goal of representing and protecting examples of the full diversity of South Australia's marine life.

The marine life, habitats and natural processes of this region are exposed to high wave energy. This water movement strongly influences the unique kelp beds and reef habitats of the lower south east coast, and the long stretch of sandy beach and extensive coastal sand dunes of Canunda National Park. Bull kelp forests indicate a stronger ecological linkage with waters of Victoria and Tasmania than with South Australia.

## The 14 marine park Design Principles

To guide the initial identification and final selection of South Australia's multiple-use marine parks, 14 Design Principles – including seven Biophysical Principles and seven Community Principles – were defined and adopted by the Government. These Principles help ensure the marine parks network meets the objects of the *Marine Parks Act 2007*, as well as South Australia's national and international obligations for marine protection.

The Biophysical Design Principles guided the identification of proposed marine park sites. The Community Design Principles were then applied to fine-tune site selection of the 19 multiple-use parks in the network.

## Biophysical Design Principles

The seven Biophysical Principles address environmental conservation.

In the first instance, all parks were designed to meet the Precautionary Principle. Rigorous application of the Adequacy, Comprehensiveness and Representativeness Principles ensure the marine parks network meets South Australia's national and international marine protection obligations.

The remaining three Biophysical Principles helped prioritise important local sites, to ensure the marine parks network maximises ecological outcomes (South Australia's Strategic Plan Target 3.4).

### The Precautionary Principle

The Precautionary Principle is a risk-management tool which requires action to be taken now in areas where scientific knowledge is not yet complete. One of the ways the Precautionary Principle has been applied in developing marine parks is to include areas of unsurveyed seabed habitats.

In the Otway Bioregion, 630km<sup>2</sup> (48%) of seabed habitats are yet to be surveyed.

As a precautionary measure, 210km<sup>2</sup> (33%) of unsurveyed habitat in the Otway Bioregion is included within Lower South East Marine Park. Including unsurveyed habitats increases the likelihood that all of the habitats that exist in the region are included within a marine park.

### The Adequacy Principle

Adequacy is achieved if the marine park provides for both ecosystem integrity and the viability of whole populations of species.

A marine park is considered to have achieved Adequacy if both it and the network it contributes to are large enough to protect the species and habitats found there and close enough to connect populations.

Lower South East Marine Park covers 360km<sup>2</sup> (1% of the whole network). It has been designed to include multiple examples of each habitat type where possible, at sizes sufficient to contain viable populations of marine species.

The Principles of Connectivity and Linkages, Resilience and Vulnerability and Ecological Importance also contribute to the Adequacy of a marine park. Ultimately, Adequacy is closely linked to the success of marine park management plans with zoning.

### Comprehensiveness and Representativeness Principles

To meet the Principle of Comprehensiveness, examples of all habitats that occur in a bioregion need to be included within each marine park in that bioregion.

To be Representative, all habitats in a region (e.g. reefs, beaches, seagrass) need to be included across the full variety of physical situations in which they occur (e.g. shallow and deep water reefs, low and high energy beaches). This variety must be represented within the combination of parks created in a bioregion.

Habitats of Lower South East Marine Park include extensive high energy sandy beaches such as Canunda Beach, freshwater springs, rocky headlands with shore platforms and fringing reefs, and extensive offshore limestone low-platform reef structures interspersed by sandy seafloor habitats. The bull kelp and giant kelp forests are a distinctive habitat feature of the Lower South East Marine Park.

### Connectivity and Linkages Principle

Connectivity describes how plants and animals move between different places. Linkages refers to the transfer of materials (e.g. organic matter) and energy flows. Connectivity and Linkages both depend on the way currents, tides and waves move water and on the abilities of marine life to move between different areas.

Lower South East Marine Park creates Connectivity and Linkages along much of the shore adjacent to Canunda National Park and from French Point to the Victorian border, and offshore from the coastline in most cases to the limit of State waters. This helps protect species whose life cycles depend on access to different feeding, spawning, breeding and nursery habitats in small areas, as well as species dependent on areas separated by anything from tens of kilometres to hundreds of kilometres.

A distinctive habitat feature is the presence of bull and giant kelp forests, which are not found in any other South Australian waters. These kelp demonstrate that the region has more ecological links to Victorian and Tasmanian waters than it does with other South Australian waters.

Ecological links in the Lower South East Marine Park are driven by the Bonney Upwelling, in which cold, nutrient-rich waters rise during summer from the depths beyond the edge of the continental shelf, reaching the surface off the Robe area. The additional nutrients brought by the upwellings stimulate the entire food web from plankton to large predators such as tuna, sharks as well as blue whales offshore in Commonwealth waters.

Other examples of Linkages with other regions lie with the many highly mobile and migratory bird, fish and whale species which rely on the habitats and high productivity of the region at key stages in their travels. For example, between May and June, southern right whales are often sighted in the region on their migratory path from Tasmania to the Great Australian Bight. Migratory shorebirds are attracted to the coastal wetlands where they feed and rest before returning to the Northern Hemisphere regions during the Australian winter. Southern bluefin tuna rely on the high productivity of the region for food resources as they migrate eastward through the region.

### Resilience and Vulnerability Principle

The combined Principle of Resilience and Vulnerability encourages the inclusion of places, plants and animals that are more susceptible to degradation or decline and/or less able to recover from damaging impacts.

Less resilient habitats, plants and animals are less able to resist disturbance or pressures. More vulnerable habitats, plants and animals have less capacity to recover once pressures are removed. For example, some seagrasses may take decades or more to recover from disturbance.

Examples of less resilient habitats include the region's distinctive cold-water flora.

### Ecological Importance Principle

The Bonney Upwelling is a major influence on marine life throughout the south east, and provides the natural driving force supporting the whole food web of the region and the highly productive lobster and abalone fisheries.

The Upwelling is also responsible for promoting concentrations of phytoplankton and surface swarms of coastal krill, which attract blue whales to the region.

Freshwater springs/seeps associated with Ewens Ponds and Piccaninnie Ponds (both Wetlands of National Importance) emerge from the beaches and are unusual in South Australia. They influence the ecology of the region and support the presence of a number of estuarine fish (e.g. *congolli*) or fish that have both marine and freshwater stages (e.g. eels, lampreys and the vulnerable Australian grayling).

Bull and giant kelp forests are unique to the south east of South Australia.

Cowries and other specimen shell species are found on reefs in the south eastern areas, including some that are at the western extent of their range.



## Community Design Principles

### Synergies with Existing Protected Areas Principle

By aligning with existing protected areas, marine parks can contribute to the establishment of protected corridors across the land-sea interface.

Lower South East Marine Park abuts several terrestrial protected areas, such as Canunda National Park, and Piccaninnie Ponds Conservation Park, providing the opportunity to protect important ecological connections between land and sea.

### Complementing Existing Management Principle

Management of South Australia's marine parks will complement, but not replace, current management arrangements. By providing a more inclusive management framework, South Australia's marine parks network is designed to help existing environmental management practices.

Wattle Range Council and the District Council of Grant play important roles in managing coastal Crown lands which abut, and in some cases, are included within the marine park. Lower South East Marine Park management will seek to integrate with existing local government management practices for the continued care of coastal Crown land community assets.

The South East Natural Resources Management (NRM) Board is responsible for mitigating impacts on the marine environment from land-based activities. Ongoing monitoring of ecosystem health in the Lower South East Marine Park will help the NRM Board prevent land-based pollution from reaching the sea.

There are established fisheries netting closures in Brown Bay. Management of the Lower South East Marine Park will respect and complement existing fisheries management arrangements, and will not change bag, boat and size limits or other area-based fisheries management arrangements.

All shipping and harbour activities will be accommodated within the Lower South East Marine Park, as will the management and maintenance needs of shipping and boating facilities.

Wherever possible, provision will be made in the Lower South East Marine Park management plan with zoning to accommodate current and future economic, social and infrastructure requirements. Administrative agreements between agencies will support streamlined assessment so that the marine park does not create an extra approval process.

### Give Consideration to the Full Diversity of Marine Uses Principle

The Government is committed to designing marine parks for conservation and for sustainable use, in close consultation with local communities and with minimal impact on existing activities.

The proclamation of the Lower South East Marine Park outer boundary does not change the way people use the marine environment, or change any existing land or sea-bed tenure.

Wildcatch fisheries in the region include South Australia's most valuable, the southern rock lobster fishery, and important fisheries for abalone, shark and scalefish.

Proclamation of the Lower South East Marine Park does not displace any existing commercial fishing activity. The Government recognises that high-value fishery areas occur within the marine park and will work with stakeholders during the development of the park management plan with zoning to avoid displacing commercial fishing effort from those areas wherever possible.

The Limestone Coast is a major coastal tourism destination, both for South Australians and for visitors from Victoria, and this is significant for the economy of the whole region. The waters and coasts of the marine park provide for a wide range of recreational activities such as fishing, swimming and beach walking, surfing at "Browns", and camping and four wheel driving at Canunda National Park.

The outer boundary of the Lower South East Marine Park does not change existing recreational fishing and boating activities and does not affect access to, or use of, jetties, break-walls or boat ramps. Existing access for recreational beach fishing will be maintained throughout the park, except in small areas designated as "sanctuary" or "restricted access" zones in the park management plan with zoning. This will be developed over the next couple of years with extensive community input.

With input from a Marine Park Local Advisory Group, industry and the community, a management plan with zoning will be developed for Lower South East Marine Park which will cater for ongoing community use of the area. The management plan will be subject to community consultation and every effort will be made to minimise impacts on people and businesses.

### Respect Indigenous Interests and Culture Principle

The Government is aware that there may be confidential Aboriginal heritage sites in South Australia's coastal areas. Where possible, these sites have been considered in the planning process. Future management plans will ensure these heritage sites are appropriately respected.

The Buandig Aboriginal people have traditional associations with this region, including with the marine environment and associated marine life.

Aboriginal aspirations for this area are not known by the Department for Environment and Heritage.

### Give Consideration to Cultural Heritage Principle

The marine park contains many shipwreck sites including the *Sunderland*, lost offshore from Canunda National Park in 1865.

### Ensure Ease of Identification, Compliance and Enforcement Principle

Lower South East Marine Park was designed to ensure ease of identification, compliance and enforcement where possible.

The marine park is in two sections. The boundary of the northern section aligns with coastal landmarks including the northern and southern boundaries of Canunda National Park and from just west of French Point to the Victorian Border. Along the coastline, the marine park boundary lies at the median high water mark unless otherwise specified. Offshore, the boundary follows the State waters line.

### Provide for Education, Appreciation and Recreation Principle

Lower South East Marine Park was designed to ensure the things we enjoy in this environment continue, by helping to maintain a healthy marine environment and our uses of it.

Further opportunities for education, appreciation and recreation will be achieved through the zoning and management planning process.

### Need more information?

For further information, please see: *Design Principles Guiding the Development of South Australia's Marine Park Boundaries* and *Technical Report on the Outer Boundaries of South Australia's Marine Parks Network*. Both are available on the marine parks website: [www.marineparks.sa.gov.au](http://www.marineparks.sa.gov.au) or by calling 1800 006 120.