

Marine Park 4

Investigator Marine Park

Park at a glance

Investigator Marine Park is located off the west coast of South Australia. It includes the surf beaches south of Elliston, the offshore Investigator group of islands and Cap Island Conservation Park.

At 1,185 km², it represents 4% of South Australia's marine parks network.

Community and industry

- The Nauo-Barngarla Aboriginal people have traditional associations with the region.
- Commercial fishers target greenlip and blacklip abalone, southern rock lobster and scalefish species such as snapper and King George whiting.
- Historical features in the park include architectural relics of the sealing industry and two shipwrecks, the *Lady Flinders* and *Kapara*.
- Recreational fishing, and charter boat fishing, as well as diving in the waters surrounding Pearson Island and Topgallant Island, are popular.

Fauna and flora

- The golden roughy (which is not known anywhere else in Australia) and the western blue groper rely on important areas within this marine park.
- White-bellied sea eagles and ospreys nest on coastal cliffs, headlands and islands.
- Little penguins and other seabirds nest and roost on islands inside the marine park, including Ward, Dorothee, Veteran and Pearson Islands.
- Australian sea lions and New Zealand fur seals breed and rest in the park.

Habitat

- Investigator Marine Park includes parts of the Eyre Bioregion.
- Habitats typical of this region include:
 - granitic island mountains, intertidal and deep-water boulder reefs,
 - sheltered seagrass meadows in the lee of some islands,
 - cliffs and high-energy surf beaches along the mainland coast.

- The habitats inside Investigator 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.
- Communities of plants, fish and other animals around the islands are influenced by the unusual conditions created by the mixing of the warm Leeuwin Current from the west and the cold Flinders Current from the south-east.

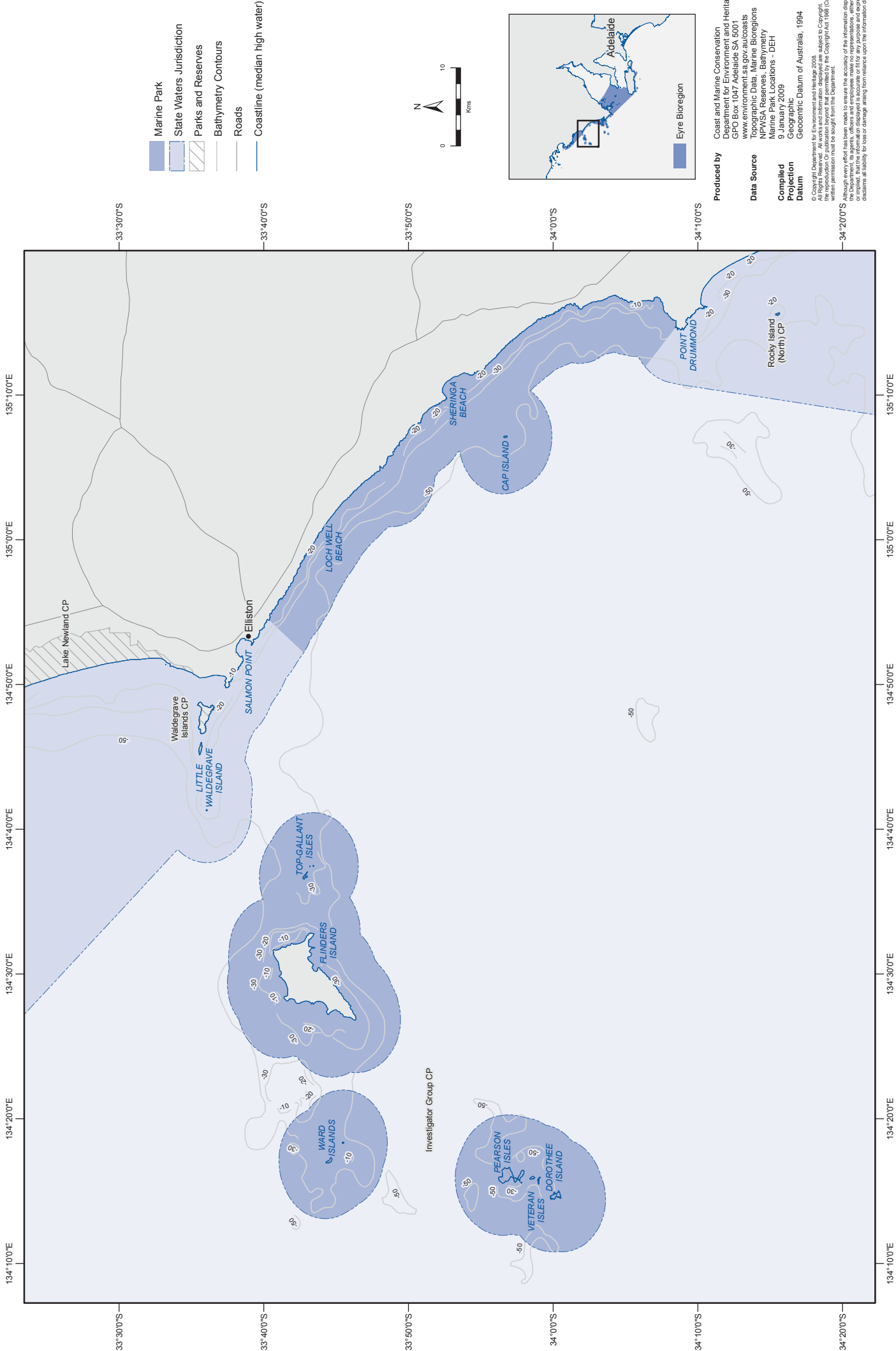
Boundary description

The Investigator Marine Park comprises the four areas set out below.

- The area bounded by a line following the seaward limit of the coastal waters of the State surrounding Pearson Island, Veteran Isles and Dorothee Island.
- The area bounded by a line following the seaward limit of the coastal waters of the State surrounding Ward Islands.
- The area (exclusive of Flinders Island above median high water) bounded by a line following the seaward limit of the coastal waters of the State surrounding Flinders Island and Top-Gallant Isles.
- The area bounded by a line commencing on the coastline at median high water at a point 135°14'38.76"E, 34°8'27.2"S (at or about Point Drummond), then running progressively:
 - north-westerly along the geodesic to its intersection with the seaward limit of the coastal waters of the State at a point 135°11'56.62"E, 34°6'21.82"S;
 - generally north-westerly along the seaward limit of the coastal waters of the State to a point 134°52'11.78"E, 33°42'45.97"S;
 - north-easterly along the geodesic to its intersection with the coastline at median high water at a point 134°54'25.78"E, 33°40'23.56"S; and
 - generally south-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 or Surveyor-General's office for the relevant marine park plan (known as a Rack Plan).

Investigator Marine Park



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 Eyre Bioregion, Investigator 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 typical of this region include the remote offshore Investigator group of islands, as well as inshore ecosystems adjacent to the extensive coastal cliffs and high energy surf beaches of the mainland.

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 were defined and adopted by the Government. The seven Biophysical Principles and seven Community 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. Further, rigorous application of the Comprehensiveness, Adequacy and Representativeness Principles ensure the marine parks network meets South Australia's national and international marine protection obligations.

The remaining three Biophysical Principles helped to prioritise important local sites, to ensure the marine parks network maximises ecological outcomes (South Australian 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 Eyre Bioregion, 14,973 km² (80%) of seabed habitat are yet to be surveyed.

As a precautionary measure, 1,098 km² (7%) of the unsurveyed habitat are included within Investigator Marine Park. Including unsurveyed habitat increases the likelihood that all the habitats existing in a region are included in 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.

Investigator Marine Park covers 1,185 km² (4% 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 whatever marine parks are in that bioregion.

To be Representative, all habitats in a region (e.g. reefs, beaches, seagrass, mangroves) 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 in the marine park include island environments, intertidal and deep water boulder reefs, sandy plains and seagrass meadows in the sheltered lee of Pearson and Flinders Islands. The Investigator group of islands provides unusual examples of granitic island mountains (inselbergs) that rise steeply from deep water.

The shoreline of Flinders Island is a combination of sheltered rocky shores, cliffs and sandy beach on the eastern side and exposed sandy beaches on the western side. Habitats around other islands in Investigator Marine Park are yet to be surveyed.

On the mainland, the coastal strip is mostly comprised of calcarenite cliffs averaging between 40 and 50 metres high. The cliffs are broken by high energy surf beaches such as Sheringa Beach. Surf beaches in this area are an unusual habitat type in that they are comprised of fine sediments, which usually support a higher diversity of invertebrate animals living within the beach sands.

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.

Investigator Marine Park provides continuous Connectivity and Linkages across many different habitat types along-shore from just south of Elliston to Point Drummond and offshore from the coastline to the limit of State waters.

The marine park creates the opportunity to protect connected habitat systems. Sea lions, fur seals, penguins and other seabirds all breed and rest on the islands, and by extending the marine park to the limit of State waters at least some of these animals' foraging grounds – and the passage between the two habitats – can also be protected.

Connectivity and Linkages helps protect species dependent on access to spawning, breeding and nursery habitats that might be separated by anything from tens to hundreds of kilometres.

The islands inside Investigator Marine Park constitute some of South Australia's most remote landmasses. Here, the powerful, warm Leeuwin Current, transporting nutrients and larvae from Western Australia, meets and mixes with the colder Flinders Current from the south east.

Investigator Marine Park therefore provides unique examples of the communities of plants and animals which result from these combined currents.

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 disturbances 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.

Seagrass beds at Pearson and Flinders Islands are the only significant examples of this habitat type for many kilometres. Being regionally isolated, they are particularly significant to the fish and other animals they support.

Reefs such as those at Flinders Island are particularly rich in their diversity of invertebrate animals, which are less able to resist physical disturbances.

Different populations of Australian sea lions at Ward Island and Pearson Island are either highly vulnerable or very highly vulnerable to human pressures.

Ecological Importance Principle

Ward, Pearson and Dorothee Islands provide breeding sites for the Australian sea lion, while Veteran, Pearson, Topgallant and Cap Islands provide haul-out sites. New Zealand fur seals breed and haul out on Ward and Dorothee Islands and use the rock platforms at South Veteran and Pearson Islands for haul-out sites.

Numerous seabirds of conservation concern utilise the Investigator group of islands for breeding and/or roosting. These species include colonies of little penguins on Pearson, Flinders, Veteran and Dorothee islands, and white-bellied sea eagles on Flinders and Dorothee Islands. The protected white faced storm petrel and

short tailed shearwater, protected under international conservation treaties, are also located on Ward Island.

State-wide surveys of blue groper identified Ward and Pearson Islands as being important to this species. The surveys also identified a significant blue groper nursery area at Flinders Island.

Unusual species with affinities for the Investigator islands include the light-emitting fish known as the golden roughy, which has been recorded within the marine park but nowhere else in Australia. Similarly, at least 10 species of *ascidian* (sea squirts) have been recorded only in the Investigator Group Isles.

Perhaps due to the influence of the Leeuwin Current, a high number of macroalgal species with limited ranges and/or tropical affinities are found in the area.

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. Investigator Marine Park includes all the islands in the Investigator Group which are currently protected as conservation parks.

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.

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

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

There is a fisheries netting closure established along the mainland coastline from the northern end of the marine park to just north of Locks Well Beach. Management of Investigator 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.

Lighthouses are located at Pearson Isle and Flinders Island. The marine park will accommodate the ongoing management and maintenance needs of these facilities.

Wherever possible, provision will be made in the Investigator 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 Investigator 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 Investigator Marine Park does not change the way people use the marine environment, or change any existing land or sea-bed tenure.

Wildcatch fisheries in the region target greenlip and blacklip abalone, as well as rock lobster around Ward Island and along the coast. Scalefish species such as snapper and King George whiting are also important. Proclamation of the Investigator Marine Park does not displace any existing commercial fishing activity. The Government recognises that high-value catch areas occur within the marine park and will work with stakeholders during the development of the Investigator Marine Park management plan with zoning to avoid displacing effort from those areas wherever possible.

There is a minerals exploration licence within this marine park. All existing licences and leases within Investigator Marine Park will be accommodated, with no change to existing conditions. Marine park management will seek to integrate with existing management by the Department of Primary Industries and Resources (Minerals) to ensure that the mining industry continues to benefit from the area.

Tourism is an important economic contributor to the region, with the coastal environment, fishing and boating the major attractions. Charter vessels based in a variety of ports offer recreational fishing and diving experiences around the islands.

Recreational fishing is an important activity in the marine park. Recreational fishing opportunities will be maintained at Sheringa Beach and Locks Well Beach and adjacent to freehold land on Flinders Island. Private and charter vessels access Flinders, Ward and Pearson Islands for offshore recreational fishing. Drummond Point is also a popular recreational fishing spot.

The outer boundary of Investigator 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 Investigator Marine Park, except in small areas designated as "sanctuary" or "restricted access" zones in the Investigator Marine Park management plan with zoning. This will be developed over the next couple of years with extensive community input.

Drummond Point, Pearson Island, The Dice and Topgallant Island are visited by divers for their numerous caves and tunnels formed by boulders as well as the abundant marine life.

With input from a Marine Park Local Advisory Group, industry and the community, a management plan with zoning will be developed for Investigator Marine Park to 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 Nauo-Barngarla Aboriginal people have traditional associations with the coastal land between Elliston and Point Drummond. Aboriginal people have expressed the aspiration to negotiate traditional Aboriginal fishing rights through an Indigenous Land Use Agreement (ILUA). Investigator Marine Park will provide for continued traditional fishing in accordance with any fishing ILUAs.

Give Consideration to Cultural Heritage Principle

The remains of the sealing industry at Flinders Island are listed on the State Heritage Register and two historic shipwrecks, the *Lady Flinders* (1937) and *Kapara* (1942) are also of heritage significance.

The shore platforms are of Archaean Kiana granite, some of the oldest rocks in South Australia, and are a geological monument of state significance.

Ensure Ease of Identification, Compliance and Enforcement Principle

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

The marine park boundary commences south of the Elliston township and extends to the prominent landmark of Point Drummond. Along the coastline, the marine park boundary lies at the median high water mark unless otherwise specified. Around the islands, the marine park extends to the limit of the State waters.

Provide for Education, Appreciation and Recreation Principle

Investigator 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 or by calling 1800 006 120.