

# Marine Park 6

## Sir Joseph Banks Group Marine Park

### Park at a glance

Sir Joseph Banks Group Marine Park is in lower western Spencer Gulf and includes waters adjacent to Tumby Bay, the islands of the Sir Joseph Banks Group and Dangerous Reef.

At 2,627 km<sup>2</sup>, it represents 10% of South Australia's marine parks network.

### Community and industry

- The Nauo-Barngarla Aboriginal people have traditional associations with the region.
- Commercial fishers target pilchards, abalone, rock lobster and scalefish species.
- Aquaculture, such as tuna sea-cages, is also economically important to the region.
- Also featured in the park are numerous sites of historical significance such as the *Governor Gawler* and *Eleanor* shipwrecks.
- The region is a major tourism destination.
- Sailing, fishing, swimming, snorkelling, diving and kayaking are popular, with the Sir Joseph Banks Group Islands a well known destination for scuba divers.

### Fauna and flora

- Dangerous Reef hosts one of the largest breeding colonies of Australian sea lions.
- It is also an important feeding area for the protected great white shark, particularly for breeding females.
- A range of seabirds nest on many of the islands in the Sir Joseph Banks Group.

### Habitat

- This marine park includes parts of the Eyre and Spencer Gulf Bioregions.
- Habitats typical of this region include:
  - the islands,
  - shallow reefs, sheltered sandy bays and rocky limestone shores,
  - seagrass meadows, saltmarsh communities and
  - deep water in lower Spencer Gulf, at the park's eastern end.

- The habitats inside Sir Joseph Banks Group 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.
- The mouth of Spencer Gulf represents a transition zone between the influences of the Gulf and the influences of the oceanic waters to the south.
- Land and sea are also linked at important sites, including the islands in the Sir Joseph Banks Group and the Tumby Island Conservation Parks.

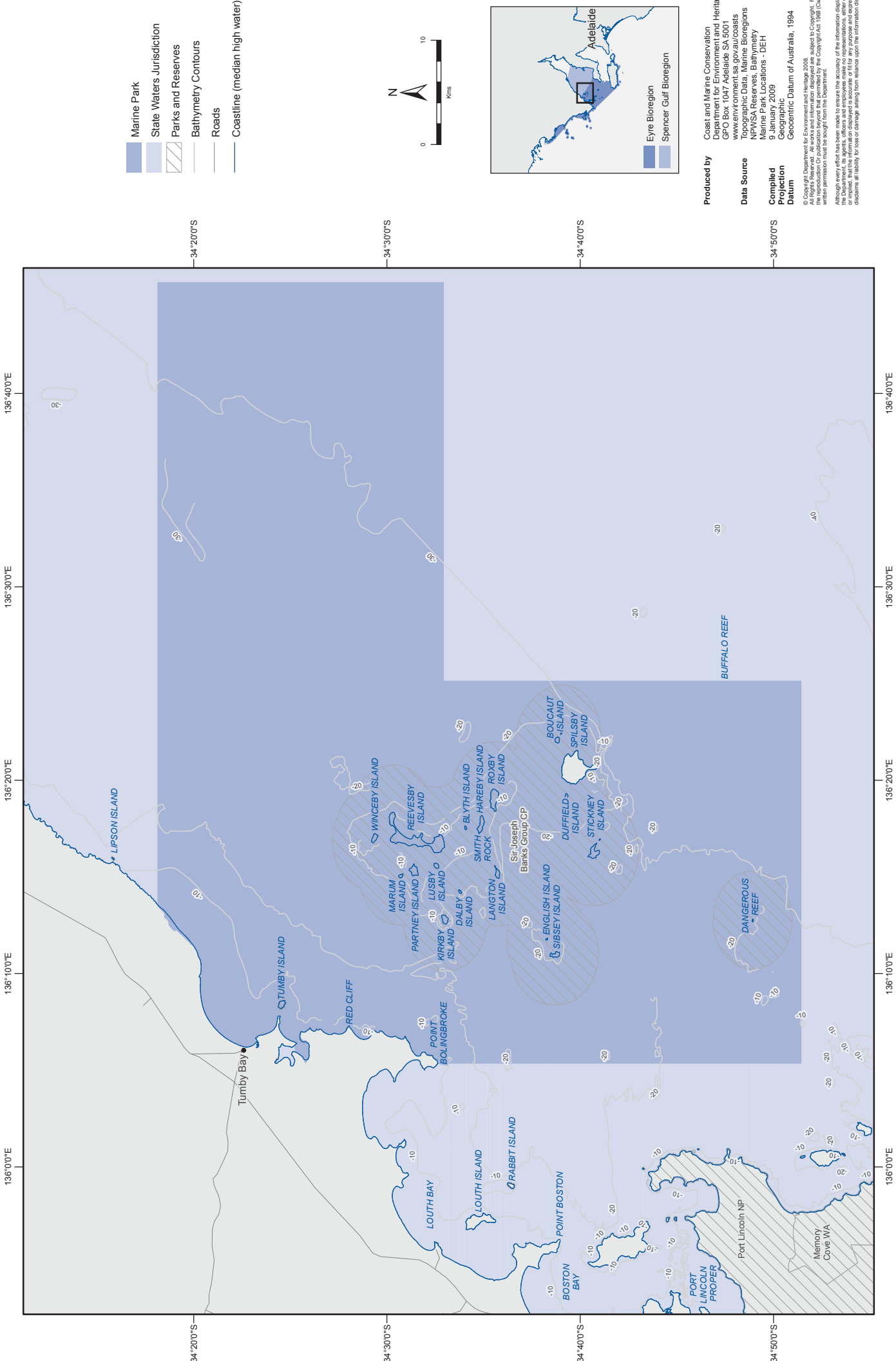
### Boundary description

The Sir Joseph Banks Group Marine Park comprises the area (exclusive of Spillsby Island above median high water) bounded by a line commencing on the coastline at median high water at a point 136°13'33.52"E, 34°18'7.57"S, then running progressively:

- easterly along the geodesic to a point 136°45'44.94"E, 34°18'7.57"S;
- southerly along the geodesic to a point 136°45'44.94"E, 34°32'56.4"S;
- westerly along the geodesic to a point 136°25'8.4"E, 34°32'56.4"S;
- southerly along the geodesic to a point 136°25'8.4"E, 34°51'26.1"S;
- westerly along the geodesic to a point 136°5'20.36"E, 34°51'26.1"S;
- northerly along the geodesic to its intersection with the coastline at median high water at a point 136°5'20.36"E, 34°32'37.8"S (at or about Point Bolingbroke); and
- generally north-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).

# Sir Joseph Banks Group Marine Park



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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 Eyre and Spencer Gulf Bioregions, Sir Joseph Banks Group 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 are influenced by a transition from the oceanic waters of the lower Eyre Peninsula to the semi-sheltered waters of Spencer Gulf. The marine park includes the islands of the Sir Joseph Banks Group, a sample of the deep waters of lower Spencer Gulf and the Australian sea lion breeding colony at Dangerous Reef.

## 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. 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 Eyre and Spencer Gulf Bioregions, 14973 km<sup>2</sup> (80%) and 7669 km<sup>2</sup> (66%), respectively, of seabed habitats are yet to be surveyed.

As a precautionary measure, 1978 km<sup>2</sup> (6% of Eyre and 15% of Spencer Gulf) of unsurveyed habitats are included within Sir Joseph Banks Group Marine Park. Including unsurveyed habitats increases the likelihood that all habitats that exist in a 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.

Sir Joseph Banks Group Marine Park covers 2,627km<sup>2</sup> (10% 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.

Sir Joseph Banks Group Marine Park spans the junction of the Eyre and Spencer Gulf Bioregions with almost equal areas in each. This area also comprises the mouth of Spencer Gulf, which represents a transition zone between the Gulf and oceanic waters.

The section of the park within the Eyre Bioregion includes large seagrass meadows in the shallow waters off Tumby Bay, and further south between Dangerous Reef and the mainland. The Sir Joseph Banks Group Islands represent a shoal complex with associated granite reefs and as such is distinct from other island groups in the region such as the Neptune and Gambier Islands.

The section of the marine park in the Spencer Gulf Bioregion contributes mainly sparse seagrass. The relatively small coastline of the park is characterised by sheltered sandy beaches with small pockets of rocky shores.

### 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.

Sir Joseph Banks Group Marine Park creates continuous Connectivity and Linkages along-shore from south of Point Bolingbroke to a point between Salt Creek Beach and Lipson Island, and offshore by including the Sir Joseph Banks Group Islands and a section of Spencer Gulf's deep waters.

Protecting all the waters from land to the deep waters beyond the Sir Joseph Banks Group Islands allows protection of species whose life cycles depend on access to 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.

Dangerous Reef, for example, supports one of the three largest Australian sea lion breeding colonies in the



world. Female sea lions from Dangerous Reef have been tracked foraging around the Sir Joseph Banks Group Islands, demonstrating the ecological linkage between these areas. Similarly, seabirds nest on the islands but feed over a much larger area in the surrounding region. The sheltered waters of Tumby Bay provide protection during the vulnerable juvenile stages of the life cycles of many fish species, before they move as adults into deeper, more exposed waters around the islands and beyond.

### 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 and more vulnerable animals in the Sir Joseph Banks Group Marine Park include the populations of Australian sea lions at English Island, which have been identified as highly susceptible to human pressures. Dangerous Reef has also been identified as one of only six sites within South Australia which produces more than 100 pups per breeding cycle. A number of the islands also provide important nesting habitat for the rare Cape Barren goose.

More vulnerable habitats, plants and animals have less capacity to recover once pressures are removed. Coastal wetlands are a particularly vulnerable habitat type found at Tumby Bay. The seagrass meadows in Tumby Bay are less resilient to physical disturbance and declining water quality and would be slow to recover if damaged.

### Ecological Importance Principle

Sir Joseph Banks Group Marine Park straddles the ecological transition area between the Gulf waters and open oceanic waters. The area is characterised by a higher diversity of marine species as well as species which may be close to the edge of their preferred range.

Dangerous Reef supports one of the three largest breeding colonies of Australian sea lions in the world and is also a haul-out site for the New Zealand fur seal, with breeding and/or haul out sites also found at English Island, Langton Island, Reevesby Island and Smith Rock.

The marine park is an important area for great white sharks, including breeding females.

Many of the islands, such as Kirkby, Stickney and Langton islands, support breeding populations of the endangered fairy tern. Species protected under international treaties are located on some of the islands, including Caspian and crested terns and the white faced storm petrel.

Tumby Bay has been identified as a Wetland of National Importance and includes mangroves, algae and seagrass that are important habitats for various fish species to support feeding, spawning and nursery activities.

The eastern stargazer fish is also regularly observed in the Tumby Bay area. The stargazer is only recorded in South Australian gulfs and is considered uncommon at the national level.

The Sir Joseph Banks Group and Dangerous Reef are important to a range of commercially and recreationally significant species, such as King George whiting, at key stages in their life cycles.

Shells of conservation concern, such as extensive colonies of *Zoila friendii* *thersites*, occur in sandy reef and sponge habitats around islands in the Sir Joseph Banks Group.

## Community Design Principles

### Synergies with Existing Protected Areas Principle

By aligning with existing protected areas, marine areas can contribute to the establishment of protected corridors across the land and sea interface. Sir Joseph Banks Group Marine Park includes Tumby Island and the Sir Joseph Banks Group 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 Tumby Bay plays an important role in managing coastal Crown lands which abut and, in some cases, are included in the marine park. Sir Joseph Banks Group 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 Peninsula Natural Resources Management (NRM) Board is responsible for mitigating impacts on the marine environment from land-based activities. Ongoing monitoring of ecosystem health in Sir Joseph Banks Group Marine Park will help the NRM Board prevent land-based pollution from reaching the sea.

The Department of Primary Industries and Resources South Australia's (PIRSA) Aquaculture Division has developed aquaculture policy zones in the Port Lincoln area. All existing aquaculture leases and zones within Sir Joseph Banks Group Marine Park will be accommodated. Marine park management will seek to integrate with existing management by PIRSA Aquaculture to ensure that the established aquaculture industry can continue to benefit from healthy seas in the region.

PIRSA's Fisheries Division has implemented a netting closure north of Salt Creek Beach, extending north of Red Point. Management of Sir Joseph Banks Group 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.

Several boat ramps, jetties and lighthouses are within the marine park, which will accommodate the ongoing management and maintenance needs of these facilities.

Wherever possible, provision will be made in the Sir Joseph Banks Group 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 Sir Joseph Banks Group 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 target pilchards and other scalefish species, abalone and rock lobster. Proclamation of the 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 Sir Joseph Banks Group Marine Park management plan with zoning to avoid effort displacement wherever possible.

Aquaculture is very important to the economy of the lower Eyre Peninsula and there are a number of aquaculture licences in Sir Joseph Banks Group Marine Park. No existing aquaculture activities will be displaced as a result of the marine park proclamation or the future marine park management plan with zoning. In addition, no further approvals or permits will be required to conduct these existing activities. The habitats of the region are also important for biodiversity conservation and the marine parks program will seek to integrate with existing management strategies delivered by PIRSA Aquaculture to ensure that the needs of both marine parks and aquaculture are met.

The region is a major tourism destination and the coastal environment, fishing and boating are drawcards. Charter boats provide for fishing, diving, marine mammal watching and bird watching. Aquaculture companies also contribute to the tourism experience by demonstrating farm operations to visitors.

The outer boundary of the Sir Joseph Banks Group 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 Sir Joseph Banks Group Marine Park, except in small areas designated as “sanctuary” or “restricted access” zones. These zones will be determined over the next couple of years as the Sir Joseph Banks Group Marine Park management plan with zoning is developed.

With input from a Marine Park Local Advisory Group, industry and the community, a management plan with zoning will be developed for Sir Joseph Banks Group Marine Park which will cater for on-going 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 and marine environment. Aboriginal people have expressed the aspiration to negotiate traditional Aboriginal fishing rights through an Indigenous Land Use Agreement (ILUA). The Sir Joseph Banks Group Marine Park will provide for continued traditional fishing in accordance with any fishing ILUAs.

#### Give Consideration to Cultural Heritage Principle

Numerous historic and protected shipwrecks, such as the *Governor Gawler* and the *Eleanor*, are in the marine park as are the Tumby Island and Sir Joseph Banks Group Conservation Parks, which are listed on the Register of the National Estate.

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

Sir Joseph Banks Group Marine Park was designed to ensure ease of identification, compliance and enforcement where possible.

The marine park boundary uses prominent features such as Point Bolingbroke for ease of identification. Along the coastline, the marine park boundary lies at the median high water mark unless otherwise specified. All offshore boundaries follow straight north-south or west-east lines.

#### Provide for Education, Appreciation and Recreation Principle

The Joshep Banks Group Marine Parks 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.