Marine Park 11 Eastern Spencer Gulf Marine Park

Park at a glance

This marine park is on the eastern side of Spencer Gulf, just north of Port Rickaby and extending to Cape Elizabeth. It includes the islands associated with Goose Island Conservation Park.

At 784 km², it represents 3% of South Australia's marine parks network.

Community and industry

- The Narungga Aboriginal people have traditional associations with the region.
- Commercial fishers target abalone, snapper, squid, King George whiting and other scalefish species.
- The area has been a significant holiday destination for many years, with the coastal environment and fishing being important tourism drawcards.
- Recreational activities such as fishing, camping, swimming, snorkelling, scuba diving, windsurfing, sail boarding and yachting are popular.
- Fishing charters and bird and marine mammal watching are also popular. An educational geology trail runs from Port Victoria to Rifle Butts Beach.
- Also featured are the Wardang Island Maritime Heritage Trail and other sites listed on the Register of the National Estate, such as Port Victoria jetty.

Fauna and flora

- Reefs dominated by fragile invertebrates such as sponges.
- Vulnerable seagrass meadows.
- Coastal birds such as the rare peregrine falcon, endangered little tern and vulnerable hooded plover.
- Australian sea lions haul out at several sites in the park.

Habitat

- Eastern Spencer Gulf Marine Park is within the Spencer Gulf Bioregion.
- Habitats typical of this region include: shallow seagrass meadows, reef environments, sheltered sandy beaches and rocky coastlines.

- The habitats inside Eastern Spencer Gulf 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.
- Species in the marine park are influenced by the clockwise circulation of Spencer Gulf waters and by the seasonal fluctuations in the salinity of outflows.

Boundary description

The Eastern Spencer Gulf Marine Park comprises the area (exclusive of Wardang Island above median high water) bounded by a line commencing on the coastline at median high water at a point 137°30′23.94″E, 34°35′16.8″S, then running progressively:

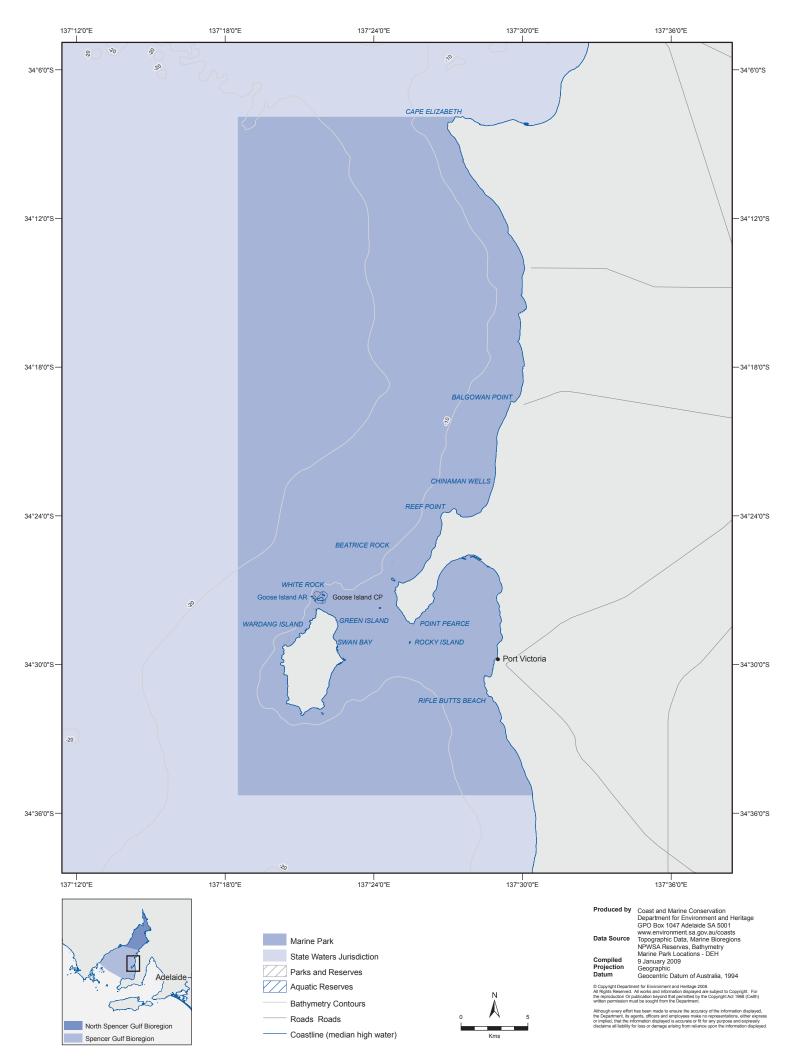
- westerly along the geodesic to a point 137°18'30.65"E, 34°35'16.8"S;
- northerly along the geodesic to a point 137°18′30.65″E, 34°7′54.08″S;
- easterly along the geodesic to its intersection with the coastline at median high water at a point 137°27′16.91″E, 34°7′54.08″S (in the vicinity of Cape Elizabeth); and
- generally southerly 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).



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Eastern Spencer Gulf 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 Spencer Gulf Bioregion, Eastern Spencer Gulf 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 the north-south gradient of swell, salinity and water temperatures along Yorke Peninsula.

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 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 Spencer Gulf Bioregion, 7669 $\rm km^2$ (66%) of seabed habitats are yet to be surveyed.

As a precautionary measure, 259 km² (3%) of the unsurveyed habitats in Spencer Gulf Bioregion are included within Eastern Spencer Gulf Marine Park. Including unsurveyed habitats increases the likelihood that all of the habitats that actually 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.

Eastern Spencer Gulf Marine Park covers 784 km² (3% of the whole marine parks 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 over time 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.

Eastern Spencer Gulf Marine Park spans a considerable north-south gradient as well as shallow inshore to deep offshore areas. Habitats include large shallow seagrass meadows north of Wardang Island and in the bay north of Port Victoria. Limestone reefs interspersed with sandy seafloor habitat from Cape Elizabeth to Point Pearce are distinct from the granite reefs associated with Wardang Island. Between Port Victoria and Wardang Island, reef and patches of sandy seafloor habitat dominate and extend seaward to a depth of 30 metres.

The shoreline of the park is characterised by sheltered sandy beaches backed by large, well vegetated dune systems such as the area from Cape Elizabeth to the south of Balgowan. South of Port Victoria, the beaches are interspersed with sections of rocky coast. Intertidal shore platform reefs are an important feature as they are less common in other marine parks within the Spencer Gulf Bioregion.

Broad sandflats are found at Chinaman's Well. The coastline of Wardang Island comprises sandy beach and saltmarshes on the sheltered landward side, while rocky shores with intertidal and subtidal reefs face the open gulf waters.

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.

Eastern Spencer Gulf Marine Park creates continuous northsouth Connectivity and Linkages along-shore from Cape Elizabeth to the coast north of Port Rickaby. Linking shallow inshore habitats with deep water offshore reefs and sandy plains is also a deliberate design feature of the marine park.

Waters of the southern area of Spencer Gulf, below Whyalla, circulate clockwise, linking habitats throughout the region and influencing the distribution of species. At a more local scale, strong currents around Cape Elizabeth, Balgowan and the areas to the west of Wardang Island may also influence the distribution of species whose larvae drift within the water column.

Eastern Spencer Gulf Marine Park will help to protect 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.

For example, the marine park features Australian sea lion haul-out sites on Goose Island and White Rocks, a species whose foraging range includes both inshore and distant offshore areas. Similarly, during the summer months migratory shorebirds are attracted to the exposed sand flats adjacent to Chinaman's Well, where they feed and rest before their long journey back to the northern hemisphere during the Australian winter.

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.

Examples of less resilient and more vulnerable habitats, plants and animals in Eastern Spencer Gulf Marine Park include reefs dominated by fragile invertebrate animals (e.g. sponges) and seagrass meadows, which are vulnerable to physical disturbance and declining water quality. Other examples include the low-lying sandflats and saltmarshes adjacent to Chinaman's Well, and sensitive habitats in the transition zone between land and sea which are very vulnerable to sea-level rise associated with climate change. These vulnerable habitats are critical for a wide range of fish and crustacean species. The marine park will also provide the opportunity to protect sites important to species such as the protected crested tern and vulnerable hooded plover.

Ecological Importance Principle

Highly saline waters created by high summer evaporation rates flow south during the winter months along the seafloor down the eastern side of Spencer Gulf, influencing the ecology of Eastern Spencer Gulf Marine Park.

Goose Island and White Rocks provide haul out sites for the Australian sea lion.

The coast in this region provides important nesting areas for a range of coastal birds such as the rare peregrine falcon, endangered little tern and vulnerable hooded plover, which nest on beaches above the tidal limit. Rocky Island, White Rocks and Goose Island provide important habitat for the crested tern, a species protected under international treaties. Other seabird species such as the Pacific gull, little penguin and the black faced cormorant also use the islands for nesting and roosting. The exposed sand/mudflats adjacent to Chinaman's Well is a feeding and resting site for numerous local and migratory shorebirds.





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. Eastern Spencer Gulf Marine Park includes Goose Island Conservation Park and Goose Island Aquatic Reserve within its boundary.

Complementing Existing Management Principle

Management of South Australia's marine parks will coordinate with and 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 Yorke Peninsula manages coastal Crown lands which abut and, in some cases, are included within the marine park. Eastern Spencer Gulf Marine Park management will seek to integrate with existing Local Government management practices for the continued care of coastal Crown land community assets.

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

The Department of Primary Industries and Resources SA's (PIRSA) Aquaculture Division has developed an aquaculture policy zone extending from Balgowan to the southern area of the marine park. All existing aquaculture leases and zones within Eastern Spencer Gulf 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.

A netting closure has been established which covers the whole marine park. Management of Eastern Spencer Gulf 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.

Boat ramps are located at Port Victoria and Balgowan. The marine park will accommodate the ongoing management and maintenance needs of these facilities.

Wherever possible, provision will be made in the Eastern Spencer Gulf 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 marine parks do 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 Eastern Spencer Gulf 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 abalone, snapper, squid, King George whiting and other scalefish species. Proclamation of the Eastern Spencer Gulf 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 management plan with zoning to avoid displacing effort from those areas wherever possible.

An aquaculture licence exists on the lee side of Wardang Island. No existing aquaculture activities will be displaced as a result of the proclamation or future marine park zoning arrangements of the Eastern Spencer Gulf Marine Park. 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 developed and delivered by PIRSA Aquaculture to ensure that the needs of both marine parks and aquaculture can be met.

Tourism is a major economic contributor to the economy of Yorke Peninsula. This area has been a significant holiday destination for many years, with the coastal environment and fishing being important drawcards.

Recreational fishing opportunities will be maintained at important sites in the Cape Elizabeth area. Other popular locations are found near the Balgowan and Port Victoria boat ramps and around Wardang Island. The Wardang Island Maritime Heritage Trail is popular with shipwreck diving enthusiasts. The Port Victoria Jetty is also a popular dive location.

The outer boundary of the Eastern Spencer Gulf Marine Park does not change existing recreational fishing and boating activities and does not affect access to, or use of, jetties, break-waters or boat ramps. Existing access for recreational beach fishing will be maintained throughout the marine park, except in small areas designated as "sanctuary" or "restricted access" zones in the park management plan with zoning. These 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 Eastern Spencer Gulf 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 coastal areas contain many significant Aboriginal heritage sites for the Narungga people including campsites and fish traps.

Aboriginal people have expressed the aspiration to negotiate traditional Aboriginal fishing rights through an Indigenous Land Use Agreement (ILUA). Eastern Spencer Gulf Marine Park will provide for continued traditional fishing in accordance with any fishing ILUAs.

Give Consideration to Cultural Heritage Principle

The area contains many sites listed on the Register of the National Estate including the Port Victoria Jetty, an important relic of the South Australian grain industry.

Wardang Island and Port Victoria contain geological monuments.

Many historic shipwrecks, such as the *Aagot*, *Notre Dame d'Arvor* and *Monarch*, can be found along the Wardang Island Maritime Heritage Trail. The trail is popular among shipwreck dive enthusiasts.

Ensure Ease of Identification, Compliance and Enforcement Principle

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

The northern boundary of the marine park utilises the identifiable landmark of Cape Elizabeth. Along the coastline, the marine park boundary lies at the median high water mark unless otherwise specified. Offshore, the boundary follows straight east-west and north-south lines.

Provide for Education, Appreciation and Recreation Principle

The Eastern Spencer Gulf Marine Park is 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.



