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Proposed South Coast Marine Park



PLAN FOR OUR PARKS



Why do we need marine parks?

Marine parks help safeguard marine ecosystems for their intrinsic values and for the benefits they provide to the community.

Western Australia's marine areas are unique and rival our remarkable landscapes in terms of their natural values and ecological significance. They include World Heritage sites like Ningaloo Reef, which is one of the largest fringing coral reefs in the world, and Shark Bay, which has one of the world's largest seagrass meadows and dugong populations. These areas are irreplaceable and, like national parks on land, they warrant safeguarding.

Some human activities can pollute, degrade and deplete the marine environment and put the survival of marine plants and animals at risk. Degradation of the marine environment can happen incrementally over long periods of time as populations and coastal water usage grows; or more suddenly such as when oil or other substances are accidentally released into the water. Marine parks provide tenure, long-term funding and a range of management tools to help to conserve marine ecosystems so that we can continue to appreciate and enjoy these areas into the future.



Top Marine parks provide for biodiversity conservation. *Photo – Peter Nicholas*

Bottom Mother and calf southern right whale. *Photo – Dave and Fiona Harvey*



What are some of the benefits of marine parks?

Marine parks can provide a range of ecological, cultural, social and economic benefits. The degree to which these benefits are achieved largely depends on factors such as the location, design, age and management of the marine park, as well as the level of community support. Some of the benefits marine parks can provide include:

Provide a baseline for the health of marine ecosystems

Sanctuary zones provide a baseline or reference area against which to measure the impacts of localised human activities on marine ecosystems. For example, because these zones prohibit extractive activities such as fishing, the size, abundance and diversity of fish communities in these zones can be compared with those in adjacent fished areas to determine the effects of fishing. This information can help to inform decisions regarding fisheries sustainability.

Conservation of biodiversity and increased resilience of marine ecosystems

Marine parks help to conserve representative habitats and biodiversity. By protecting habitats and biodiversity from human impacts, well-designed marine parks can help to increase the resilience of marine ecosystems against pressures such as pollution, climate change, overuse of resources and marine pests.

Protection of biodiversity associated with unique geological features

Marine parks can help to protect marine biodiversity associated with unique or rare geological features, such as archipelagos and seamounts. For example, in New South Wales the Lord Howe Island Marine Park provides protection for a range of unique biological communities, including fish and invertebrates, which are only found on the slopes of a volcanic seamount that descends to more than 2000 metres deep.

Increased number and size of fished species and positive ecosystem effects

Research carried out in Australia and around the world has shown that in sanctuary zones, where extractive activities such as fishing and collecting are prohibited, the number and size of many fished species has increased over time.

Increases in the number and size of some species can also have positive flow-on effects on marine ecosystems through rebalancing predator/prey relationships. For example, studies in New Zealand have shown that snapper and rock lobster are larger and more abundant in sanctuary zones, while their prey, sea urchins, are smaller and less abundant. Consequently, kelp forests on which sea urchins graze have regrown in these areas, improving ecosystem health.

Fisheries spill-over

Marine parks can potentially benefit commercial and recreational fishers by increasing targeted fish stocks outside of sanctuary zones. This occurs as eggs, larvae and fish from inside sanctuary zones move to adjacent fished areas, although the extent to which this occurs between marine parks varies. A study carried out in the Great Barrier Reef Marine Park showed that populations of coral trout living in three sanctuary zones contributed 83% of offspring to fished reefs outside these zones. Similarly, a study carried out in New Zealand showed that snapper living in a small, well-established marine protected area contributed approximately 11% of juveniles to surrounding fished reefs (up to 40km away).

Larger fish produce more offspring than smaller fish. Because sanctuary zones often support increased numbers and size of fish, the number of offspring produced by fish in these zones is likely to be higher compared to fish outside these zones. Furthermore, eggs and larvae produced by larger fish for many species have been shown to have a greater survival rate compared to those produced by smaller fish.

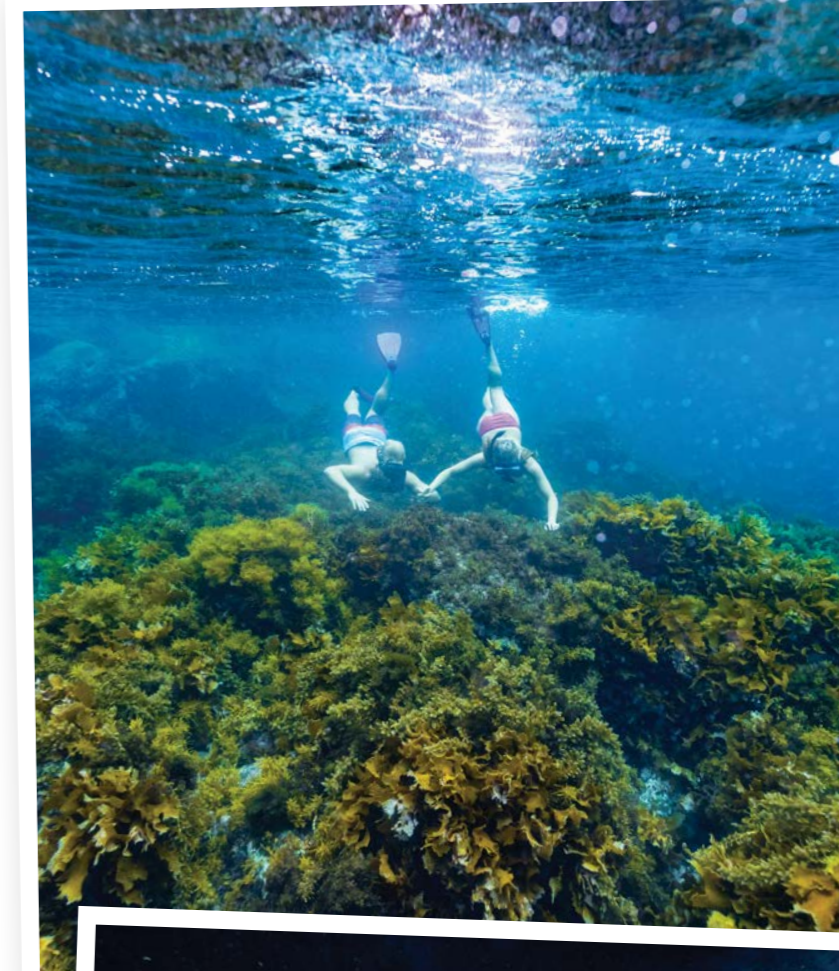
Protection of cultural heritage values

Marine parks can help to protect areas of significant cultural heritage value. For example, marine park management plans in Western Australia include a range of tools such as education and zoning which provide greater recognition and protection for sites that have significant cultural value to traditional owners. These areas provide a focus for increased education and interpretative information for visitors to the park about traditional owners' connection to country.

Support for recreation, tourism and the economy

Recreation and tourism in the marine environment are vital to our regional areas and the capacity of our marine areas to continue to support these uses depends on them remaining healthy. By helping to maintain the long-term health of the marine environment, marine parks can enhance recreational opportunities such as snorkelling and fishing, and support opportunities for marine tourism such as wildlife watching, diving and snorkelling, kayaking, eco-tours and charter fishing.

As well as safeguarding the natural values that support nature-based recreation and tourism, marine parks can help to deliver a range of economic benefits and opportunities for local communities. For example, the Great Barrier Reef Marine Park, attracts about 1.8 million visitors each year, with the tourism industry valued at over \$1 billion annually.



Above Australian sea lions. Photo – Dave and Fiona Harvey

Right Short headed seahorse. Photo – Ocean Imaging

Top Snorkelling. Photo – Tourism WA

Above Harlequinfish. Photo – Ocean Imaging

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Top Dolphin. Photo – Dave and Fiona Harvey

Centre Rangers. Photo – Esperance Tjaltjraak Native Title Corporation

Bottom Tourism operator. Photo – Black Jack Charters

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In Western Australia, tourism, recreation and other activities within the Ningaloo Marine Park, contributes an estimated \$110 million in value to the Western Australian economy and supports more than 1000 jobs.

Education and science

Marine parks are great places to educate people about the marine environment. Seeing a range of marine plants and animals and their habitats in a relatively natural condition highlights the importance of conservation and sustainable use. Marine parks also provide scientists with an opportunity to study marine ecosystems, habitats and biodiversity which have been relatively unimpacted by human activities, allowing them to better understand these systems.

More opportunities for community involvement in caring for our coasts and ocean

Marine parks provide opportunities for community members to become more involved in the management of their local marine environment. For example, citizen science projects have been used in many of Western Australia's existing marine parks and local knowledge is vital for planning successful marine park management activities. A community that is more engaged with the marine park will have a greater appreciation and understanding of the marine values in their local area and their long-term health.



More information

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Header photos: Leafy seadragon. Photo – Peter Nicholas. Southern right whales. Photo – Peter Nicholas/DBCA. Fishing on the south coast. Photo – Tourism WA. Information current at September 2021. This publication is available in alternative formats on request.