



Solitary Islands Marine Park

Summary of social, cultural and economic uses

Introduction

In 1998, the NSW Government declared the Solitary Islands and adjacent waters as one of the first marine parks in the state, and the zoning plan came into effect in August 2002. The Solitary Islands Marine Park extends for 75 km from Muttonbird Island in the south to Plover Island in the north, and from the mean high water mark and upper tidal limits of coastal estuaries to the limit of the NSW State waters. The Solitary Islands Marine Reserve (Commonwealth waters), extends from the State boundary out to the 50-m depth contour; it shares the same northern and southern boundaries with the State marine park (Figure 1).

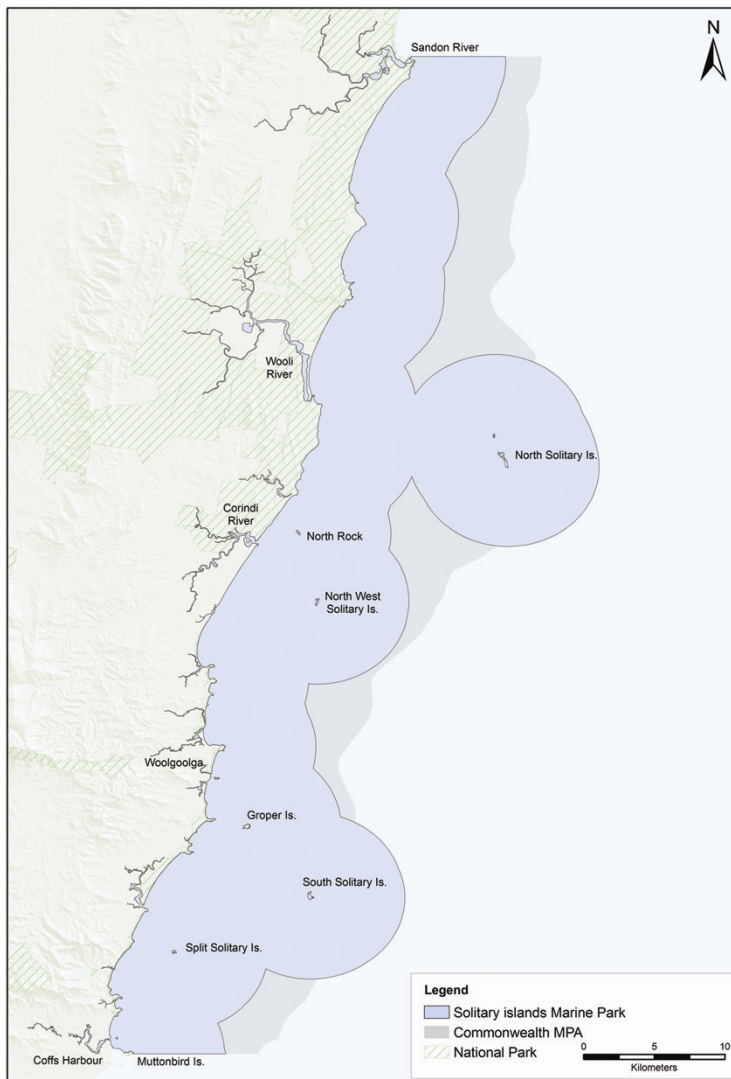


Figure 1: The Solitary Islands Marine Park and Solitary Islands Marine Reserve (Commonwealth waters)

The Solitary Islands Marine Park is a multiple-use marine park that caters for a variety of recreational and commercial activities. The zoning plan protects representative examples of marine biodiversity, including areas of ecological and cultural importance, as well as providing for ecologically sustainable use and public enjoyment. Popular activities undertaken in the marine park include beach activities and walking, swimming, surfing, whale and dolphin watching, recreational and commercial fishing, and snorkelling and scuba diving.

This document brings together information on the social, cultural and economic uses of the Solitary Islands Marine Park.

Community and industry profiles

Solitary Islands Marine Park is adjacent to Coffs Harbour and Clarence Valley Local Government Areas (LGAs) on the mid-north coast of NSW. Coffs Harbour LGA has a population of 67,000 and is growing at a faster rate than NSW in general, with employment growth also occurring at a higher rate than NSW. The population is ageing, with a growing retired population.

All major industry sectors in the region are growing. The property and business sector is the largest contributor to gross regional product (GRP), and has grown by 14.5% from July 2005 to July 2007. The retail sector grew by 12.5% over the same period. The health and community services sector increased by 6.3%, and manufacturing grew by 11% over the previous year. Growth also occurred in other industry sectors such as tourism, education, wholesale trade, and building and construction. Agriculture, fishing, forestry and mining are among the smallest contributors to GRP in the region.

The Marine Parks Authority commissioned a survey of local businesses in 2006 to gauge the effects of the marine park zoning plan on local business. The estimated annual turnover had increased by about 20% from 2001 to 2006. The results of the survey indicated that most of this growth was considered by the businesses surveyed to be due to an increase in visitation to the area.

Uses of the marine park

A number of visitor surveys and an attitudinal survey have been undertaken over the past five years to determine the social, cultural and economic uses of the Solitary Islands Marine Park, including attitudes, perceptions and human use patterns.

Survey results indicate that the marine park is well accepted and supported by the general community. In January 2008, an attitudinal survey of 407 local residents by McGregor Tan Research found 87% support for the conservation of the marine environment. This support was demonstrated across a number of groups including non-fishers (88% in favour of conserving the marine park) and fishers (82% in favour of conserving the marine park). Sanctuary zones in the marine park were also highly supported by 80% of respondents. When asked to rate a list of reasons for protecting the marine park, the reasons given most frequently were allowing future generations to enjoy the marine park, protecting natural habitats, supporting a diverse array of marine and bird life, and providing educational benefits.

Annual visitor surveys between 2002/03 and 2006/07 indicate that people are very satisfied with their visit to the marine park. The overall visitor satisfaction has ranged from 5.3 to 6.5 out of a possible 7. The most popular and frequent activities undertaken in the marine park are beach activities, with swimming, walking and surfing accounting for 70% of all activities

mentioned. Recreational fishing was the next most popular and frequent activity at 10%. Reasons for visitor satisfaction include:

- the relaxing environment
- the beaches
- natural beauty
- lack of crowds
- clean water
- surf
- good weather
- swimming
- children's enjoyment
- fishing
- marine life that is easy to see.

The surveys also indicate that 85% of marine park users primarily use the beach, followed by the estuaries, then rocky shores and headlands. Only 10% of users frequented the islands and offshore locations.

The lower reaches of the Sandon, Wooli Wooli and Corindi Rivers, and Moonee Creek are heavily used recreationally, with substantially less use in the upper reaches. Passive (non-extractive) activities are most common. Recreational fishing is an important activity and generally spread through the extent of the estuaries.

Recreational fishing, including angling and spearfishing, is a popular activity in the entire marine park. Areas of highest use offshore include Sandon Shoals, North Solitary Island and surrounds, North West Solitary Island and surrounds, South Solitary Island and surrounds, Split Solitary Island, Split Bombie and the area adjacent to Macauley's Headland and Park Beach.

Species that are commonly fished include snapper, wahoo, tuna, pearl perch, venus tuskfish, mulloway, teraglin, trevally, mackerel, kingfish, whiting, bream, flathead and luderick.

In addition a number of species are hand-collected for bait or for food, including lobster, abalone, pipis, crabs, beachworms, yabbies, sea cabbage and ribbon weed.

The national survey of recreational fishing estimated that annual expenditure on recreational fishing in the Clarence zone which includes the marine park was \$8.5 million. This represents 1% of the estimated expenditure on recreational fishing in NSW.

Commercial tours and activities

Charter dive operators regularly visit island sites, primarily on South Solitary and North Solitary Islands. The other islands in the Solitary Islands Marine Park, and Pimpnel Rock in the Solitary Islands Marine Reserve (Commonwealth waters), are also popular dive sites. The number of clients peaked in 1997 (approximately 11,000) and have reduced to approximately 7000–8000 clients per annum in recent years.

Marine mammal watching operators have reported that vessel trips remained similar from 2002 to 2006, with approximately 400 trips undertaken each year. Whale watching generally occurs in winter and spring, corresponding to the seasonal humpback whale migration along the east coast, and dolphin watching occurs mainly in summer and autumn.

Other popular commercial activities include canoeing, surf-rafting and sea-kayaking. Eight surf schools also operate in the marine park.

Charter fishing operators have experienced an increase in client numbers from approximately 1500 in 2002 to 4000 in 2007. The summer months and school holidays experience the highest use and operators primarily visit South Solitary Island followed by North Solitary Island, which together account for 75% of charter fishing. Woolli Woolli River is a popular area for the hire of small vessels for fishing.

When considered together, diving, fishing and mammal watching charters conducted in the marine park contribute an estimated \$2.3 million annually to the region.

Tourism is an important industry in the marine park area, and has grown in the Coffs Harbour LGA since 2002. The marine park is largely part in the Coffs Harbour LGA, with a smaller portion in the Clarence Valley LGA. The gross worth of the Coffs Harbour tourism industry in 2002 was estimated at \$54.5 million, employing 813 people and supporting 37 separate accommodation facilities. Annual takings from accommodation in Coffs Harbour were estimated at \$16.1 million in that year. By 2007, takings from accommodation (excluding takings from hotels) had increased to \$20.7 million (an increase of 29%) and employment had increased from 813 people to 1,038 people (an increase of 28%).

Commercial fishing and aquaculture

Commercial fishing activity has reduced in the ocean regions that include the marine park over the last five years. Thirty commercial fishers received a buy-out from the industry in 2002 following the introduction of the zoning plan. Other factors that have caused a general decline in commercial fishing include the cost of diesel, and competition with fish imports. Catches in commercial fishing ocean zones in which the marine park is located (ocean zones 2 and 3) have reduced by 50–66% since 2000. However, this reduction has been mirrored in other ocean zones (1 and 4) to the north and south of the marine park and so does not appear to be directly attributable to the marine park.

Estuarine catches within the marine park have reduced substantially since 2000, as a result of the zoning plan prohibiting mesh netting. Some commercial crab trapping continues in the marine park. Catches within NSW estuaries in general have not changed significantly since 2000. Aquaculture within the marine park involves oyster cultivation in the Woolli and Sandon Rivers.

Indigenous uses of the marine park

Solitary Islands Marine Park is within the Gumbaynggirr Aboriginal Nation. There are a number of Aboriginal communities in the area who utilise the marine park for commercial, community, recreational and ceremonial purposes.

Indigenous use of the marine park is an integral part of the local culture. Local Aboriginal people utilise marine resources throughout the marine park: important sites for collection of marine plants and animals include Coffs Creek, Park Beach, Arrawarra Headland, Corindi River, Corindi Beach and rock platform, and the Sandon River. Some of these sites have been used for thousands of years for resource use, cultural gatherings and story telling, and are very significant to Aboriginal communities. A project funded by the Environmental Trust involves establishing a comprehensive monitoring program for Aboriginal cultural heritage sites in the marine park, employs local Garby people and provides funding for several education programs.

Historic heritage of the Solitary Islands Marine Park

The Solitary Islands were named by Captain Cook in 1770 during his voyage along the east coast of Australia in HM Bark *Endeavour*. Several ships have been wrecked in the marine park, and because of the danger to shipping a lighthouse was built at South Solitary Island, which has been in operation since 1880. A school education program established in 2007 is raising awareness and appreciation of local maritime history.

Conclusion

Solitary Islands Marine Park is an important focus of social, cultural and economic activities in the Coffs Harbour coastal region. The regional economy is generally strong, and the marine park has not had any measurable negative impact on the local or regional economy. Tourism is an important and growing industry in the region. Data obtained by the Marine Parks Authority from local businesses indicates there has been an increase in visits by recreational fishers since the zoning plan has been in operation.

Commercial fishing has declined over the past five years within estuaries in the marine park, as a result of the zoning plan and the associated commercial fishing buy-out. A reduction in commercial fishing has also been seen within the broader ocean regions that include the marine park.

The marine park provides a range of opportunities for recreational and social activities, and a recent attitudinal survey indicates that the marine park and the protection of marine biodiversity within it are strongly supported within the local community.

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