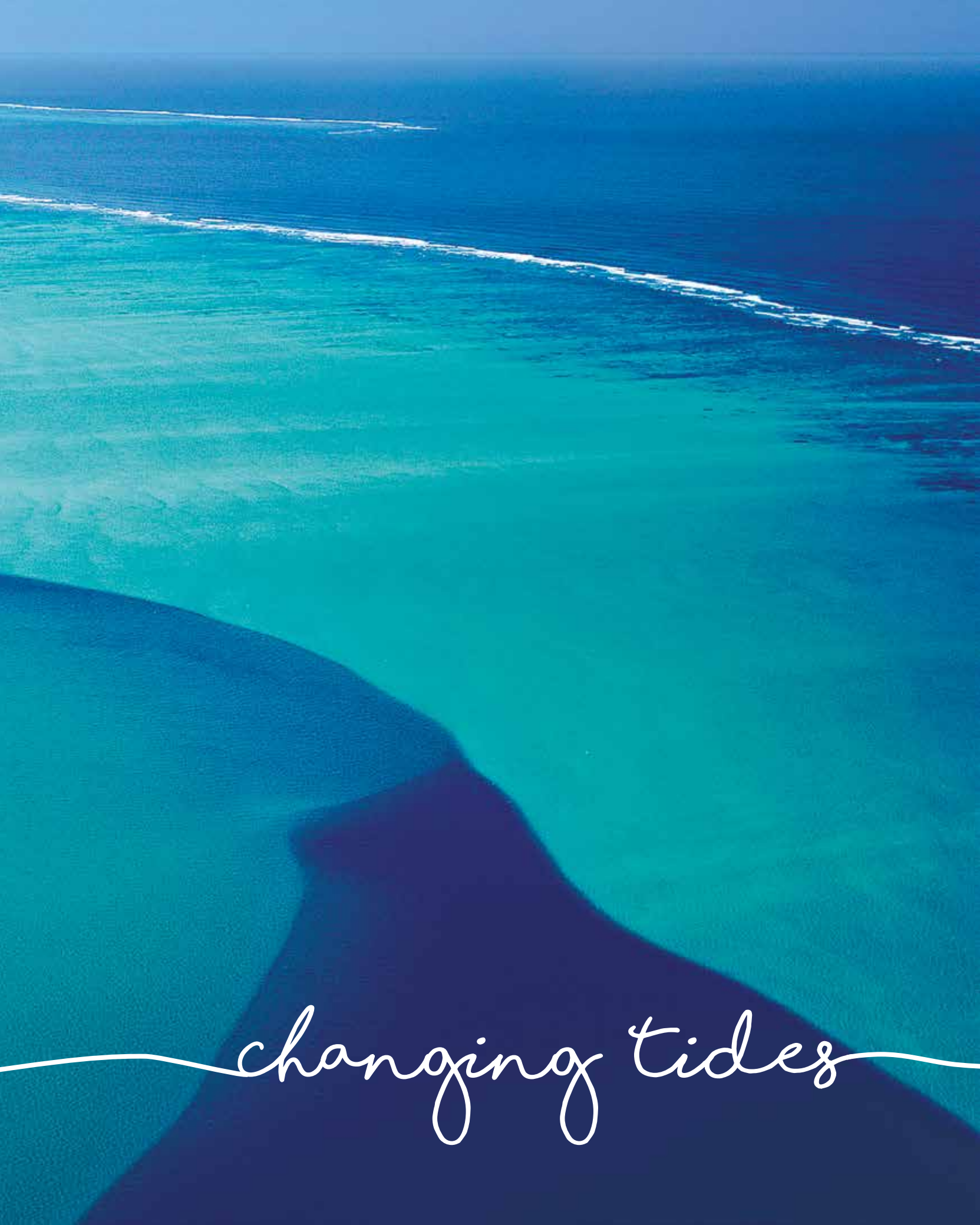




Thirty years of Marmion and Ningaloo marine parks

This year marks 30 years since the first Western Australian marine parks were created – at Marmion and Ningaloo. Their gazettal in 1987 marked a significant development in the management of Western Australia's environment, and a milestone in protecting our marine life.

by Rhianna King and Peter Barnes



changing tides



Western Australia has more than 13,500 kilometres of coastline (about 40 per cent of the continental coastline of Australia), much of which is considered to be among the least disturbed in the world. These spectacular waters are a literal treasure trove of diverse and fascinating marine life – from the New Zealand fur seals that live in Walpole and Nornalup Inlets Marine Park on the State’s south coast to the leafy sea dragons of Ngari Capes Marine Park in the south-west; from the stromatolites of Hamelin Pool Marine Nature Reserve in Shark Bay, to the nursing humpbacks of Lalang-garram / Camden Sound Marine Park in the Kimberley; and a suite of marine plants and animals along the coast that is found nowhere outside Australian waters.

The historic first steps towards WA’s marine reserve system occurred in 1987, when the first two marine parks were created – at Marmion in Perth and at Ningaloo, near Exmouth – to conserve our magnificent marine species. This visionary move began the process of conserving areas of marine biodiversity and providing special places for people to enjoy, appreciate and learn about the spectacular marine life of WA.

DIVER’S PARADISE IN OUR SUBURBS

The waters of Marmion Marine Park were long used by the Nyoongar people, with Trigg Beach being a documented

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Main The stunning Stanley Pool at Ningaloo Marine Park.

Photo – David Bettini

Insets (clockwise from top right) Ningaloo reef attracts a range of bird species. *Photo – Parks and Wildlife*; Baler shell; Marmion Marine Park is a popular surfing spot. *Photos – Ann Storrie*; Marmion Marine Park is a favourite recreational site for locals. *Photo – Rhianna King/Parks and Wildlife*; Reefs along the coastline in Marmion Marine Park provide excellent snorkelling. *Photos – Ann Storrie*; Bullseyes can be found in Burns Reef. *Photo – Pam Sutton/Parks and Wildlife*; Cape Range National Park is an ideal spot to enjoy Ningaloo Marine Park. *Photo – Sally Bostwick/Parks and Wildlife*

Above left Cuttlefish are one of the park’s charismatic creatures.

Photo – Pam Sutton/Parks and Wildlife

Above Sunset at Marmion Marine Park.

Photo – Ann Storrie

camping and fishing site during the warmer months. In the 1960s the natural and recreational values of the Marmion reef and lagoon ecosystems were noted by the Australian Marine Science Association. More than 20 years later, a study recommended that the Environmental Protection Authority assess the Sorrento–Mullaloo reefs with the aim of establishing an ‘aquatic reserve’. In 1985, the then Department of Conservation and Environment commissioned a study to characterise and describe the marine environments and communities of the area and to identify and evaluate present and future impacts on the proposed marine reserve. This research formed the basis of a draft management plan for the marine park, which was prepared with input from more than 65 community and interest groups.

On 13 March 1987 the marine park, which at the time was dubbed the ‘Kings Park of the ocean’, was gazetted – protecting 9,500 hectares of urban coastal waters and foreshore lands from Trigg to Burns Beach and extending 5.5 kilometres offshore. Thirty years later, the marine park attracts as many as 1.75 million visits each year from people who enjoy the ocean and beaches as part of a number of recreational pursuits.

Marmion Marine Park boasts beautiful shallow lagoons perfect for wading and beachcombing, stunning swimming and surfing beaches, and reefs and small islands for divers and snorkellers to explore.

A variety of fish live in the caves and ledges of the reef areas, including western blue devils, old wives, banded sweep, crested and dusky morwong, horseshoe leatherjackets, truncate

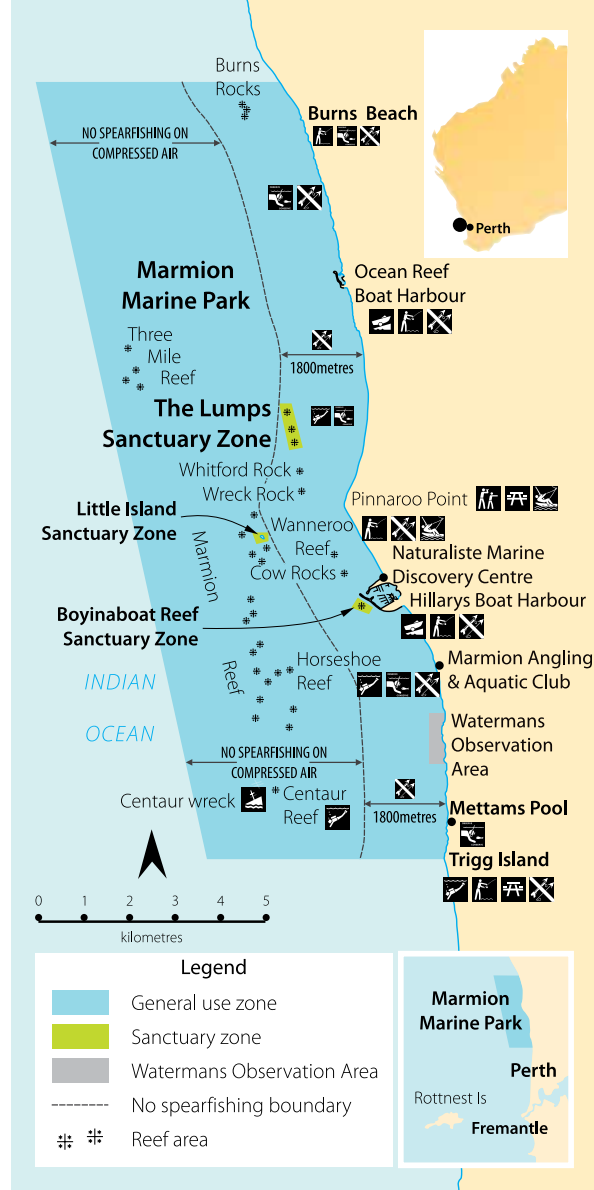


Above Marmion Marine Park provides a perfect kayaking spot.

Photo – Peter Nicholas/Parks and Wildlife

Left An aerial photo of Hillarys Boat Harbour, and its surrounds taken in 1987.

Photo – State Library of WA



coralfish, bullseyes, wrasse and red-striped cardinalfish. You may also be lucky enough to spot colourful nudibranches (sea slugs), sponges, sea fans, hydroids, sea urchins and sea squirts. Green turtles also occur in the area.

A number of diving and snorkelling opportunities exist in the park for those keen to glimpse these amazing species. One of Perth's most popular dive sites, Boyinaboat Reef, is just 75 metres from the sea wall of Hillarys Boat Harbour. Located in a sanctuary (no-take) zone, it lies in about six metres of water at the southern end of a chain of inshore reefs. Alternatively, boat-based diving can be enjoyed at North Lump, Wreck Rock, Cow Rocks and Wanneroo Reef. The *Centaur*, which was wrecked in 1874 in the southern part of the park, is also a popular dive spot. Mettams Pool offers fantastic snorkelling close to the shore, which is perfect for kids and those building confidence.

Bottlenose dolphins and Australian sea lions can be spotted throughout the year in the park, with an unusual white sea lion even recorded swimming with its darker relatives at Burns Rocks in late

2016. Humpback whales pass through the deeper waters during their annual migration between June and November. Tours are available from Hillarys Boat Harbour to take people out to get a closer look at these mammoth creatures – whose fate is a far cry from those targeted by whaling between 1849 and 1852 when a whaling station operated from the beach at Sorrento (just south of where the Sorrento Life Saving Club now stands). The station was established by Irish settler Patrick Marmion, from whom the park gets its name. For a century, the abandoned whaling station was a prominent landmark along the coast due to the large brick chimney that formed part of the processing works. For decades it was used as a navigation aid for boats, until finally being demolished in 1953.

Seabirds flock to the area throughout the year and are best viewed at Little Island, Burns Rocks, Trigg Island and Hillarys Boat Harbour, and gannets, ospreys and sea-eagles are frequently seen diving for fish out to sea. Caspian terns, oystercatchers and little pied cormorants can often be seen along the beaches.

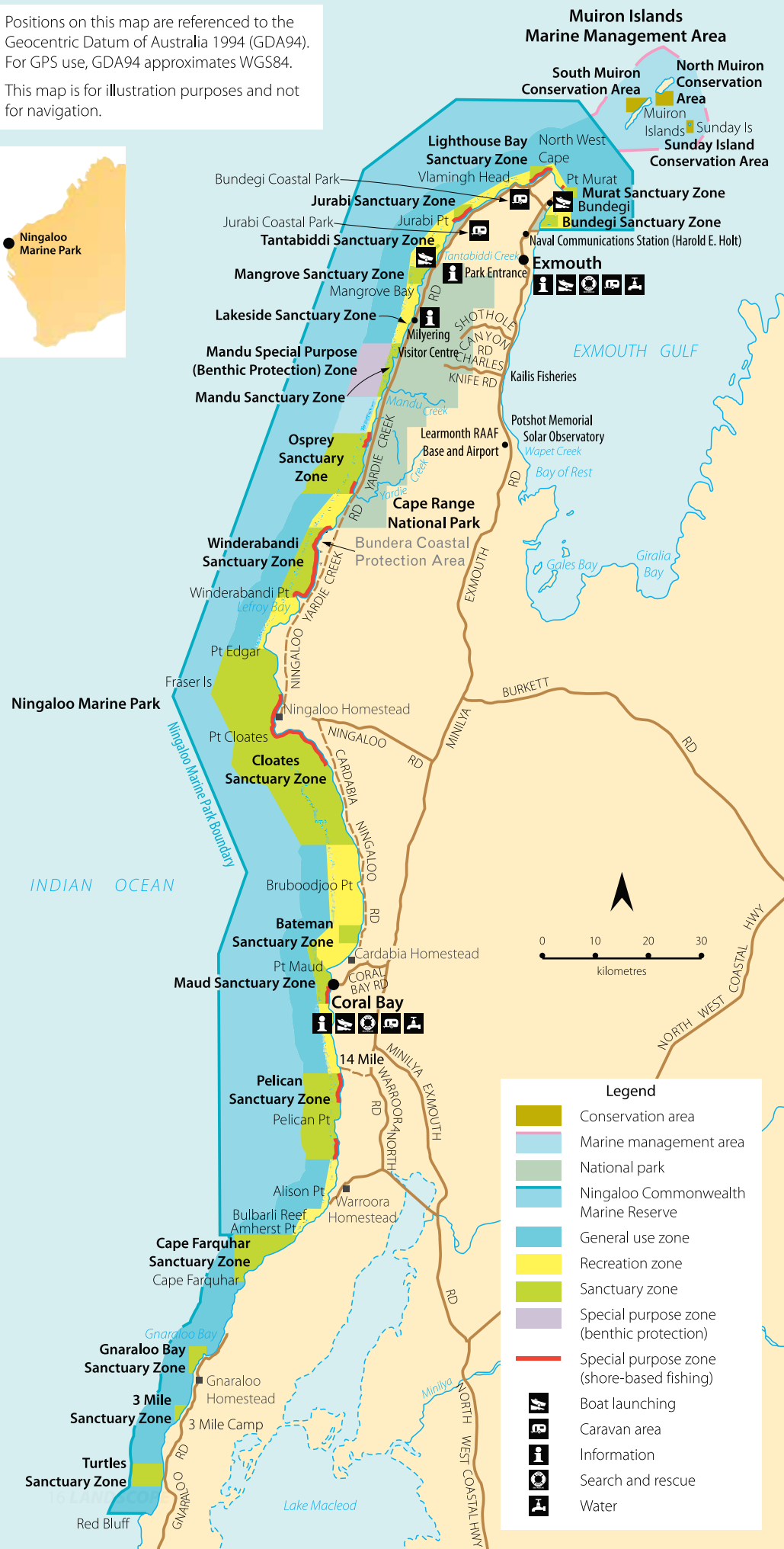
A WATERY WONDERLAND

More than 1,500 kilometres north of Marmion Marine Park, adjacent to the Ningaloo Coast from Red Bluff in the south to Bundegi in Exmouth Gulf, lies Australia's largest fringing coral reef – Ningaloo. This magnificent marine environment finally became a marine park in August 1987, after a long and hard-fought journey.

Like Marmion Marine Park, the Australian Marine Science Association identified that Ningaloo should be protected as a marine park in the 1960s. This recommendation was again made in 1974 by the Conservation and Reserves Committee, and in 1975 the Environmental Protection Authority reviewed the recommendation and submitted it to State Cabinet.

Positions on this map are referenced to the Geocentric Datum of Australia 1994 (GDA94). For GPS use, GDA94 approximates WGS84.

This map is for illustration purposes and not for navigation.



Top Lionfish are found in the reefs of Ningaloo Marine Park

Photo – Tony Howard/Parks and Wildlife

Above Five species of turtle occur in Ningaloo Marine Park, including the Hawksbill turtle.

Photo – Tourism WA

Know your zones

Sanctuary zones are look but don't take zones. No extractive activities are permitted in these zones, which mean no recreational or commercial fishing or removal of marine life or habitats is allowed. Mining activities are also prohibited.

Special purpose zones are managed for a particular priority purpose such as a seasonal event or type of activity. Uses that are incompatible with the priority purpose are not permitted.

Recreation zones are managed for nature conservation and recreation, including recreational fishing where this is compatible with maintaining conservation values.

General use zones are managed for nature conservation while allowing for sustainable commercial and recreational activities.



Above left The magnificent waters of Ningaloo Marine Park.
Photo – Sally Bostwick/Parks and Wildlife

Above The waters of Ningaloo Marine Park house a raft of coral, fish and megafauna to discover.
Photo – Tourism WA

Left An ancient shell necklace was found, providing clues into aboriginal use of the area.
Photo – Parks and Wildlife

“The area was acknowledged for its tourism, fisheries and research values and the local community was optimistic that marine park status would increase visitor numbers.”

The recommendation was endorsed in February 1976; however, in the absence of legislation to create an ‘aquatic national park’, the area was managed under the Fisheries Act by the Department of Fisheries and Wildlife. The area was acknowledged for its tourism, fisheries and research values and the local community was optimistic that marine park status would increase visitor numbers. Finally in 1987, Ningaloo Marine Park was proclaimed by the State and Commonwealth governments with more than 5,000 square kilometres protected. The park boundaries were amended in 1992, and were extended in 2004 to cover the whole 300-kilometre reef system with no-take ‘sanctuary zones’ increased from eight to 34 per cent of the marine park. In 2011, the significance of this area was internationally recognised

when Ningaloo Reef was awarded World Heritage status.

Of course these events have occurred in the relatively recent history of the area, with Aboriginal people inhabiting the Cape Range Peninsula for at least 30,000 years. Deposits of marine shells; the remains of crabs, sea urchins, turtles, turtle eggs and dugongs; and even an ancient shell necklace were found in the area and have provided clues into Aboriginal culture.

European pastoralists arrived in the area in the 1880s but pressure on the ocean and its marine life began as early as 1792 when American whalers began operating off the coast, with commercial whaling occurring in the area up until 1963. Commercial turtle harvesting began in the 1960s and many thousands of turtles were harvested from the area,

with commercial rock lobster fishing also carried out. During the 1970s and 1980s the area became a drawcard for visiting recreational fishers, an activity still popular today. Fortunately, the marine park affords protection to the area’s vast array of marine plants and animals while still offering visitors the opportunity to catch a fish for their dinner in most of the park.

Beneath the idyllic turquoise waters lies a riot of up to 500 fish species including Clark’s anemonefish, convict surgeonfish, beaked leatherjackets, blue angelfish, blue spotted rays, lionfish, blue-green chromis and yellow boxfish and as many as 200 coral species. Many of these can be viewed just metres from the beaches along the entire coast with Lakeside, Turquoise Bay, Gnarlou Bay, Sandy Point and Coral Bay being some of the most popular areas. Those looking for a bit more adventure



can combine snorkelling with kayaking at the moorings at Bundegi Beach, Coral Bay, Osprey Bay and Tantabiddi (see 'Adventure out: Kayaking on Ningaloo Coast', *LANDSCOPE*, Winter 2014).

The charismatic megafauna found at Ningaloo have led it to be considered the marine megafauna capital of the world. Where else can people encounter several species of dolphins (including the newly recognised Australasian humpback dolphin), three species of threatened turtles, dugongs, giant manta rays, the largest population of migrating humpback whales in the world, as well as killer whales, minke whales, pilot whales, pygmy blue whales and of course whale sharks.

Visitors can join one of the organised charters from April to July each year to experience the whale sharks. These gentle giants can grow up to 16 metres long and weigh 11 tonnes. They are thought to live for up to 100 years and only reach sexual maturity after 30 years. Swimming with them is simply amazing and for many visitors is a once-in-a-lifetime experience. Tour operators in the area also take visitors to view the coral from glass-bottom boats, as well as on dive charters, swimming with manta rays and marine wildlife, and whale watching tours. Mass coral spawning occurs each year after the full moon in March or April and is a further drawcard for visitors. The spawning allows coastal

food webs to flourish, attracting the large filter feeders including the whale sharks and manta rays. Visitors also have the opportunity to watch turtles nesting – the unforgettable sight of tiny hatchlings erupting from their nests on the beaches is one to behold. People can also learn about the species that occur in the marine park – loggerhead, green, flatback, leatherback and hawksbill – at the Jurabi Turtle Centre.

Ningaloo Marine Park receives more than 500,000 visits a year. Since its gazettal in 1987, significant works have been undertaken to support nature-based tourism in the marine park and the adjacent Cape Range National Park. Recent upgrades to the national park provide opportunities for people to camp at Kurrajong and Osprey Bay while providing easy access to the nearby marine environment.

FORWARD FLOW

In the years since Marmion and Ningaloo marine parks were created, 15 other marine parks have followed. Like the originals, these were created to protect natural features, and cultural and aesthetic values, while allowing sustainable recreational and commercial uses to continue. To meet their obligations in national and international agreements and conventions, a National Representative System of Marine Protected Areas is

Above left The opportunity to swim with whale sharks draws thousands of visitors to Ningaloo Marine Park each year.

Photos – Danielle Robb/Parks and Wildlife

Above top Yellow polyps (*Tubastrea* sp.) is one species that occurs in the park.

Photo – Tony Howard/Parks and Wildlife

Above Unique and spectacular marine life for divers and snorkellers to discover is abundant at Ningaloo and Marmion Marine Parks.

Photo – Doug Coughran/Parks and Wildlife.

being developed by the Commonwealth and all of the Australian States and the Northern Territory. Central to this work – and similar to that underpinning the terrestrial reserve system – is the idea of a comprehensive, adequate and representative (CAR) reserve system. In WA, this seeks to ensure that where possible marine conservation is 'comprehensive' (that WA has marine reserves within each of its 19 marine bioregions); 'adequate' (that reserves are of the necessary number, size and tenure status to provide effective long-term protection); and 'representative' of plants and animals found in Western Australian waters.

The Western Australian marine reserve system followed the recommendations outlined in the *Wilson*



Report headed by Dr Barry Wilson. The report was the result of seven years' work in which Dr Wilson and his colleagues considered the State's 12,500-kilometre coastline and identified areas which were to be investigated for their marine conservation values and possible dedication as conservation reserves.

Within each marine park there may be four types of management zones that cater for a range of activities. These are recreation zones, general use zones, 'no-take' areas known as sanctuary zones and special purpose zones. WA also has one 'marine nature reserve' at Hamelin Pool, a 'look but don't take' area created primarily for conservation and scientific research to protect a particular significant ecosystem or habitat, in this case the marine stromatolites.

As we look back on the past 30 years, we can be proud that what started as two pioneering marine parks is now part of a statewide system of marine parks and reserves. Together our marine parks conserve about 18 per cent of

Above Kitesurfing is popular at a number of spots along the WA coast.

Photo – Parks and Wildlife

Right Yellow box fish.

Photo – Johnny Gaskell

WA's waters, of which 2.4 per cent are in sanctuary (no-take) areas. This is complemented by fisheries regulations, which also apply in all marine parks. By working together to reduce human impacts on the marine environment we can preserve it for the enjoyment of future generations and protect our precious marine life for years to come.



Rhianna King is a LANDSCOPE editor and can be contacted on (08) 9219 9903 by email (rhianna.king@dpaw.wa.gov.au).

Peter Barnes is a Parks and Wildlife marine program coordinator based in Exmouth. He can be contacted on (08) 9947 8000 or by email (peter.barnes@dpaw.wa.gov.au).

For more information about marine parks in Western Australia, visit www.dpaw.wa.gov.au/management/marine/marine-parks-wa.

Explore Marine Parks WA on your phone

Marine Parks WA is a free Parks and Wildlife app that provides users with an easy-to-use guide to the State's marine parks as well as information about common and unusual marine species.

The 'Explore Marine Parks' section gives users access to maps to help them plan their routes and check their location. Detailed park maps provide information about what activities can be carried out (including fishing) in different zones.

A 'Wildlife' section describes a few key species that can be found in each area and provides information about some of the State's most interesting and iconic marine species, which you can search for by name or location.

Because you download the data onto your iPhone or iPad, you can access the information whenever you need it, even if you're out of range.

The Marine Parks WA app was developed by Parks and Wildlife with support from Department of Fisheries and ExxonMobil Australia and is available for free for iPhones and iPads. Search for 'Marine Parks WA' on the app store.

