Moreton Bay—a wetland of international importance

Moreton Bay, situated in South East Queensland, is located in one of Australia's fastest growing regions. The Bay provides a popular destination for tourists and locals and includes the vegetated sand islands of Bribie, Moreton, and North and South Stradbroke. It also contains some of Australia's most significant wetlands. Parts of the Bay are listed as a Ramsar site—a wetland of international importance—under the Ramsar Convention.

Moreton Bay is one of the largest estuarine bays in Australia and sits in an 'overlap zone' where both tropical and temperate species occur. It supports extensive intertidal areas of seagrass, mangroves and saltmarsh that provide vital habitat for waterbirds, including significant populations of migratory shorebirds.

The Moreton Bay Ramsar site is large, covering over 120,000 hectares and incorporating an amazing diversity of wetland types. It encompasses a range of protected areas and sites managed for conservation, including national and conservation parks on many of the Bay's islands. In 1993, the Moreton Bay Marine Park was established to protect the Bay's natural values and resources. As early as 1969, Fish Habitat Areas (FHAs) were declared to protect fisheries values from the impacts of development. There are now 11 FHAs within the Ramsar site.



The Bay's Traditional Owners include the Gubbi Gubbi, Jagera, Turrbal, Yugambeh and Quandamooka people. The area has many archaeological sites, some of which show evidence of Aboriginal people's presence dating back 20,000 years. Traditional Owners today maintain social and cultural connections to the region.

Why is Moreton Bay special?

Moreton Bay is a Ramsar site because of its outstanding coastal wetland values and features. Many of its diverse habitat types retain a near-natural character and are interconnected with other habitats supporting biodiversity.

The Ramsar site is home to nationally threatened plant species that are wetland dependent, such as the endangered swamp daisy, *Olearia hygrophila*, which is only found on North Stradbroke Island.

The site provides habitat for humpback whales and dolphins, as well as six of the world's seven species of marine turtles. Other threatened animals, including the grey nurse shark, dugong, wallum sedgefrog, water mouse and oxleyan pygmy perch fish, also live in the Bay or in surrounding waters and wetlands.

Moreton Bay is one of Australia's important shorebird habitats and is considered a major dugong habitat in Queensland, with herds of more than 100 animals recorded.

What is a Ramsar site?

The Convention on Wetlands of International Importance (more commonly referred to as the Ramsar Convention) aims to halt the worldwide loss of wetlands and to conserve remaining wetlands through wise use and management. The Ramsar Convention encourages the designation of sites containing representative, rare or unique wetlands, or wetlands that are important for conserving biological diversity.

Queensland has five Ramsar sites—Currawinya Lakes, Bowling Green Bay, Shoalwater and Corio Bays, Great Sandy Strait and Moreton Bay. Bowling Green Bay and Moreton Bay were listed as Ramsar sites on 22 October 1993.

Ecological character

As a Ramsar Convention signatory, Australia is expected to describe and maintain the ecological character of each of its current 66 Ramsar sites. An ecological character description (ECD) is an assessment of the ecosystem components, processes and benefits/ services of a site. The ECD is the benchmark against which any changes at the site are assessed for significance.



Queensland Wetlands Program



The Bay's diversity of wetland habitats provides feeding areas, dispersal and migratory pathways, as well as spawning sites for many fish species. The region supports one of the most productive fisheries in Queensland. Although the Bay only represents about 3% of Queensland's coastline, it produces around 10% of the seafood for Queensland managed fisheries.

A special feature of Moreton and North Stradbroke islands is their perched wetlands, including lakes and swamps. Perched wetlands are abundant in the coastal wallum regions of south-eastern Queensland and northern New South Wales, but are scarce in most parts of the world. Perched wetlands form in depressions between dunes where impermeable layers develop in the sand and act like basins holding water higher in the landscape than the water table. They support many unique and interesting animals.



The Moreton Bay Ramsar site contains a wide diversity of wetland types including Blue Lake on North Stradbroke Island. Photo: DES

As the human population and development in South East Queensland increase, so do the pressures upon the Ramsar site and the need to sustainably manage the impacts on its fragile ecosystems. Pollution, altered fire regimes, impacts associated with development and infrastructure projects, resource use, recreational impacts, climate change and groundwater extraction have all been identified as potential threats to the Ramsar site.

Moreton Bay's shorebirds

Moreton Bay is one of the most important migratory shorebird sites in Australia, supporting both a large number and high diversity. During the summer months some 28 species of migratory shorebirds comprising over 30,000 individuals visit the Bay. This encompasses significant proportions of populations, including for critically endangered eastern curlews.

Many species utilising Moreton Bay are recognised in the bilateral agreements for shorebird conservation between Australia, Japan, China and the Republic of Korea. Numerous species migrate from as far away as Siberia and Alaska at the end of the breeding season.



Moreton Bay supports over 30,000 migratory shorebirds during the non-breeding season. Photo: DES

The critically endangered curlew sandpiper, for example, flies some 13,000 kilometres from Siberia.

Regardless of whether the birds end their migration in the Bay and return north after several months, or rest for a while before continuing further south—all of them depend on the Bay's wetlands for habitat.

Increased recreational use and development of coastal areas may lead to habitat loss and disturbance of shorebirds. It is critical to preserve intertidal feeding areas and high tide roosts for shorebirds, the latter of which are often outside protected areas.

Enjoying Moreton Bay

The Bay's proximity to Brisbane makes it ideal for visitors. More than 12 million visits to the Bay in a year have been recorded, with visitors enjoying naturebased activities, from boating to snorkeling, diving, recreational fishing and camping.

The Bay is a paradise for watching migratory shorebirds (September to March) and whales (June to October). You can experience and learn more about the wildlife of Moreton Bay at the national parks, conservation parks and environment centres around the Bay.

For more information on Queensland's wetlands, visit <u>www.wetlandinfo.des.qld.gov.au</u>, or for activities in Moreton Bay, see <u>www.npsr.qld.gov.au</u>

The Queensland Wetlands Program supports projects and activities that result in long-term benefits to the sustainable management, wise use and protection of wetlands in Queensland. The tools developed by the Program help wetlands landholders, managers and decision makers in government and industry. The Program is a joint initiative of the Australian and Queensland governments.

Contact <u>wetlands@des.qld.gov.au</u> or visit <u>www.wetlandinfo.des.qld.gov.au</u>

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