



Australian Government

Great Barrier Reef  
Marine Park Authority

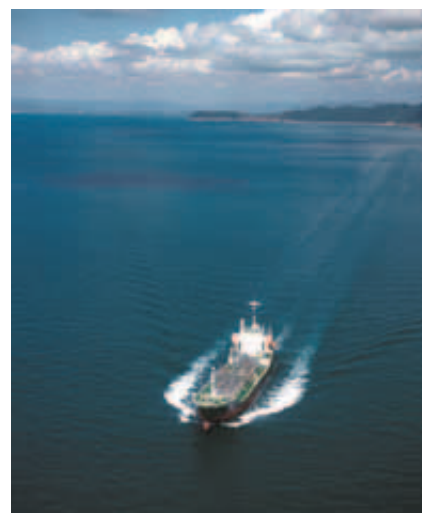
# Shipping in the Great Barrier Reef Marine Park

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The Great Barrier Reef Marine Park is the world's largest coral reef system, and one of the most diverse and environmentally significant marine ecosystems. It is a sanctuary for thousands of species, including many threatened and endangered species like dugongs and turtles. It also supports a range of important habitats, such as mangroves, sand cays, rock islands, seagrass, algae and sponge gardens.

The Great Barrier Reef Marine Park provides for multiple uses, such as fishing, tourism, recreation and shipping. The Park is managed and protected under Commonwealth law by the Great Barrier Reef Marine Park Authority (GBRMPA), which works with a number of state, federal and international



our great barrier reef  
let's keep it great



agencies to keep the Reef great. The Reef was recognised as a World Heritage Area in 1981, and the GBRMPA works to maintain its World Heritage values and ensure they are recognised at the local, regional, national and international level.

## The shipping industry

Shipping is an international industry, managed mainly by international laws, conventions and codes. The United Nations Convention on the Law of the Sea (UNCLOS) deals with international rights of navigation and marine environment protection (among other matters). Under the international conventions, all foreign vessels have the right of innocent passage through international and territorial waters and as such the Australian government does not generally prevent ships from travelling through the Marine Park.

The majority of Queensland's ports are located on the coast next to the Great Barrier Reef (GBR), linked by several shipping routes used for travelling through the GBR. Around 2,000 ships use these routes each year, carrying products like coal, sugar, iron ore and oil. Less than 10% of ships are oil or chemical tankers, with crude oil transported to southern ports using the Outer Route. About 75% of all ships travelling through the Reef use the Inner

Route, with the remainder using Grafton, Palm and Hydrographers Passages, to access or leave Queensland coastal waters and associated ports.

## Preventing accidents

There is a lot of community concern about the possibility of

a major pollution incident, such as an oil spill, within the Reef region. The effects of a spill on the marine environment could be devastating, threatening the lives of thousands of marine species, and affecting industries like tourism and fishing.

Oil spill risk assessments help plan, prepare for, and respond



to oil spills. High-risk routes have been identified according to shipping patterns, maritime incidents, the area's environmental and socio-economic vulnerability, and navigational requirements. These include: Inner Route (north of Cape Flattery), Whitsunday Islands, Hydrographers Passage and the Torres Strait.

In 1990, the International Maritime Organisation (IMO) declared the Great Barrier Reef Region as the world's first 'Particularly Sensitive Sea Area', allowing the Federal Government to actively pursue measures to improve shipping safety within the GBR.

The Australian Maritime Safety Authority (AMSA), Marine Safety Queensland (MSQ), the GBRMPA and the Commonwealth Department of Transport and Regional Services all work together to manage shipping in the Marine Park and prevent accidents that could result in an oil spill.

One such measure is compulsory pilotage, introduced to reduce the number of groundings and collisions caused by unpiloted ships, and to improve shipping safety. The Inner Route (Cape York to Cairns), Hydrographers Passage and the Whitsundays all have compulsory pilotage requirements due to their navigational difficulty. There has also been strong support for



the introduction of compulsory pilotage in the Torres Strait.

AMSA and MSQ jointly manage and fund REEFREP, a mandatory ship reporting system for tracking ships in the inner waters of the GBR from Torres Strait to the Capricorn Channel. REEFREP is operated from the Reef Centre at Hay Point, south of Mackay. This system helps reduce the potential for shipping accidents by providing navigational and safety information to ships travelling through the Inner Route.

Automatic Identification Systems (AIS) are a new type of shipboard reporting system that allows ships to automatically send information, such as identity, position, course and cargo details to other ships.

Other technologies in the form of navigation aids, electronic navigation charts, electronic chart display and information systems (ECDIS) linked to the

ship's GPS also help improve safety and provide navigational assistance to ship's captains.

The Global Positioning System (GPS) provides for an accurate satellite based navigation system operated by the United States Government. It has worldwide coverage and provides real time position, speed and heading information. Nearly all commercial vessels using the GBR have GPS on board. Increased positional accuracy is provided by Differential Global Positioning Systems (DGPS). AMSA maintain a network of coastal DGPS broadcast stations in Australia, seven of which are located on the Queensland coast, providing total coverage of Torres Strait and the inner route of the GBR.

## Responding to a disaster

While the GBRMPA and other Commonwealth and State authorities work together to prevent disasters, it's essential





to be prepared in case one does occur. *The National Plan to Combat Pollution of the Sea by Oil and other Noxious and Hazardous Substances* provides for the integration of Commonwealth, State and oil industry resources including emergency towage and salvage facilities. These resources are made available as required, according to the nature and scale of an oil or chemical pollution incident. Each Queensland port has resources capable of responding to minor spills of up to 10 tonnes. The Townsville and Brisbane Ports have resources for responding to spills up to 1,000 tonnes. For larger spills of up to 10,000 tonnes, interstate and international resources may be called upon.

Under the oil spill response arrangements, the GBRMPA or the Environmental Protection Agency (EPA) may be called upon to provide scientific support and environmental

planning information in support of the response operation. The GBRMPA and EPA also have responsibility for ensuring compliance with marine pollution and environmental damage legislation, coordination of shoreline assessment, clean up programs, coordination of post spill monitoring, and resource rehabilitation programs.

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## For Further Information

**Visit the Great Barrier Reef Marine Park Authority's website:**  
[www.gbrmpa.gov.au](http://www.gbrmpa.gov.au)

**Visit or write to us:**  
2-68 Flinders Street  
PO Box 1379 Townsville Qld 4810  
AUSTRALIA

**Send an email:** [info@gbrmpa.gov.au](mailto:info@gbrmpa.gov.au)

## Web links

International Maritime Organisation [www.imo.org](http://www.imo.org)  
Australian Maritime Safety Authority [www.amsa.gov.au](http://www.amsa.gov.au)  
Marine Safety Queensland [www.transport.qld.gov.au](http://www.transport.qld.gov.au)

## Enforcement

AMSA, the GBRMPA and Queensland authorities regularly monitor shipping activities to ensure that local, national and international laws are followed, and to record and evaluate shipping information for future policies. Ship owners, captains and crews face heavy fines and possible prosecution if they do not follow the rules and regulations of shipping within the Great Barrier Reef Marine Park.

## Report marine incidents

If you see an oil spill, collision or grounding, please contact either:

EPA 1300 130 372;  
AMSA 1800 641 792; or  
GBRMPA (07) 3830 4919 (pager).