

CHAPTER 1

INTRODUCTION

Australia's Oceans Policy

Australia's Oceans Policy was launched by the Australian Government in 1998, the International Year of the Ocean. The Policy has a number of aims, including: exercising and protecting Australia's rights over its marine jurisdiction; meeting obligations under the United Nations Convention on the Law of the Sea (UNCLOS); understanding and protecting the marine environment; promoting ecologically sustainable economic development; and establishing integrated planning and management.



Regional Marine Planning

At the core of Australia's Oceans Policy is regional marine planning, which aims to put in place a management regime at the large marine ecosystem level. Regional marine plans will integrate economic, environmental, social and cultural objectives. The plans will provide a focus for coordination between existing and developing ocean uses and the range of sectoral and administrative agencies with responsibility for marine systems. The first regional marine plan was released in May 2004 for the South-east Marine Region.

Northern Planning Area

Planning is now underway in the Northern Planning Area.

The Area covers the Torres Strait, the Gulf of Carpentaria and eastern Arafura Sea (to a line 133°23' East, which coincides with the Goulburn Islands).

The Northern Planning Area is a region of great diversity in its land and sea scapes, its biodiversity and its people. It is an area of rich Indigenous cultural diversity but with a sparse population, located chiefly in isolated communities. Its main industries are fishing and mining, but compared with much of Australia's marine domain, it is economically largely undeveloped.

Marine planning in the Torres Strait is being considered as part of a separate process and is not covered by the arrangements agreed between the Queensland and Australian Governments for scoping the northern marine planning process. This is in recognition of the distinct ecological, cultural and institutional arrangements that characterise the Torres Strait.

The National Oceans Office

The National Oceans Office was formally established on 22 December 1999. The Office, based in Hobart, is responsible for the implementation and further development of Australia's Oceans Policy. The Office is responsible for managing the development of regional marine plans around Australia.

The National Oceans Office coordinates a National Science Work Program to provide scientific information to support implementation of Australia's Oceans Policy through regional marine plans. Examples of relevant scientific information include bioregionalisation, socio-economic and marine scientific datasets and performance assessment.

The focus of the National Science Work Program is on priority projects that are more efficiently and effectively undertaken on a national scale or are critical for work in priority areas for regional marine planning. This national approach provides considerable efficiency gains over a "region by region" approach. It also ensures a level of consistency between regions and opportunities to link with, and add value to, existing or planned activities of science agencies, including international collaboration.

A senior level Oceans Policy Science Advisory Group and technical Working Groups provide advice and direction for the National Science Work Program. One major focus for the Program is a National Mapping Project.





This Atlas

This atlas contains a series of maps depicting the non-fisheries uses of Australia's marine jurisdiction within the Northern Planning Area. The atlas has been prepared for the National Oceans Office as the result of a national project involving the collation of marine-related datasets of various standards and formats from numerous organisations, including State and Australian Government agencies, private organisations and scientific research agencies.

The aim of this atlas is to demonstrate where activities occur and interact with each other in Australia's marine jurisdiction.

In order to focus on the marine environment, in most cases only information that is within 50 kilometres inland of the coast is depicted.



Other Atlas Documents

This Northern Atlas, which contains a set of maps for the Northern Planning Area, is complemented by a similar hard copy atlas that contains a series of National maps. Maps for other regions are available on-line at the website of the National Oceans Office (http://www.oceans.gov.au/nonfish_atlas.jsp) and also on CD-ROM.

Each Regional Atlas contains a similar set of information.

Spatial Datasets

The datasets drawn on to produce the maps contained in this atlas have been sourced from a large number of organisations. A list of organisations from which data has been obtained is included in Chapter 7.

Neptune

Additional details on the datasets used can be sourced from the National Oceans Office metadata database called NEPTUNE (viewable at <http://neptune.oceans.gov.au>.) A description of all map products is also available on NEPTUNE.



CHAPTER 2

DESCRIPTION OF AUSTRALIAN MARINE REGIONS

Maps in this atlas include a set of maps for the Northern Planning Area. A further series of maps has been created, based on the marine regions identified in Figure 1. These regions have been defined by the existence of large ecosystems within Australia's marine jurisdiction and do not specifically relate to jurisdictional or regional marine planning boundaries.

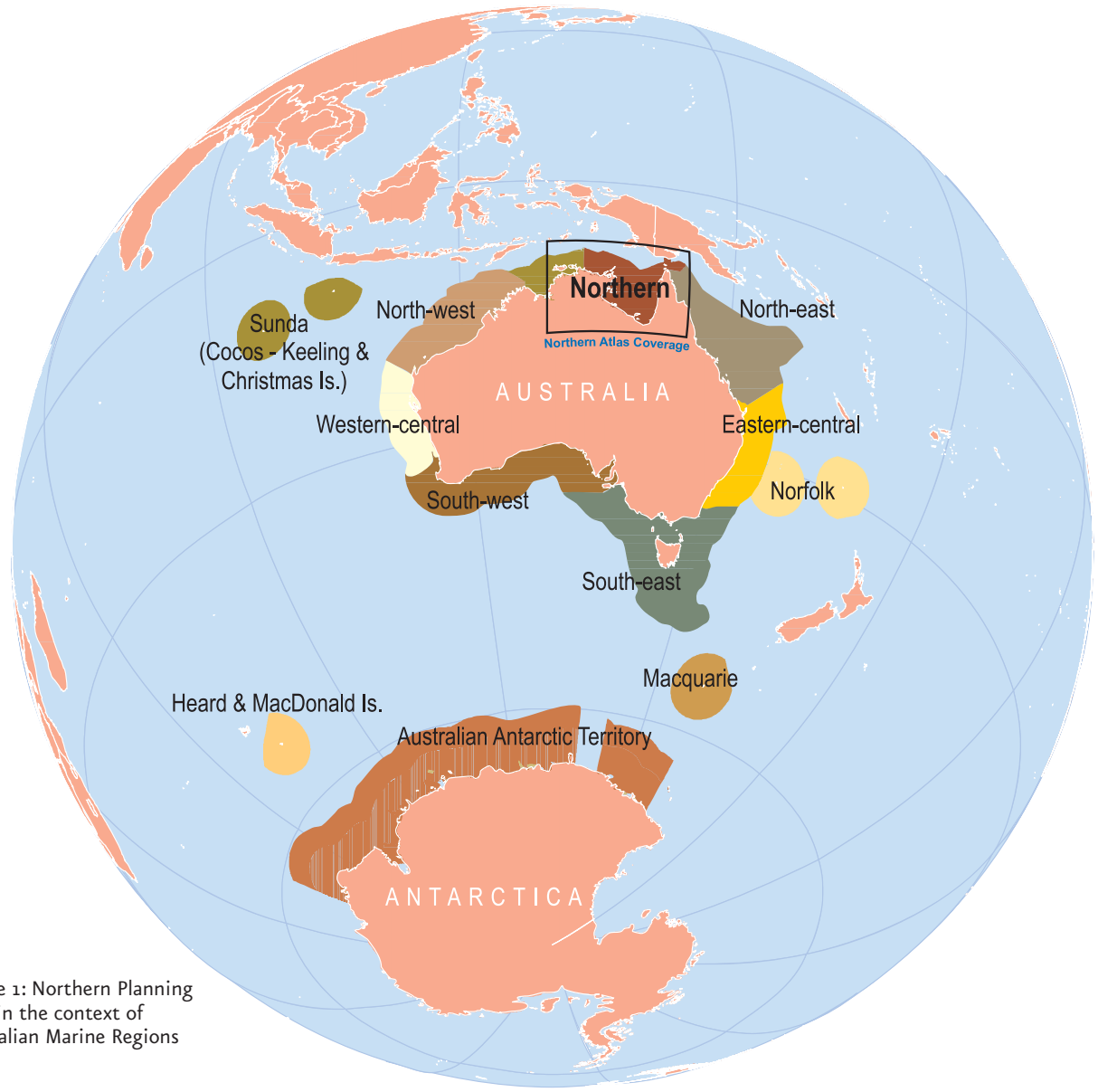


Figure 1: Northern Planning Area in the context of Australian Marine Regions





Northern Marine Region

The Northern Region covers about 860 thousand square kilometres of water off the Northern Territory and Queensland coast, and includes the Torres Strait and the Gulf of Carpentaria. The Region extends from Admiralty Gulf, Northern Territory in the west to north-west Queensland, where it includes the west side of the Cape York Peninsula.

North-west Marine Region

The North-west Region covers about 980 thousand square kilometres of water off northern Western Australia, and includes Ashmore Reef and Exmouth Gulf. The Region extends from Admiralty Gulf in the north-east, to around the town of Exmouth in the south (at latitude 21° 48'S).

Western-central Marine Region

The Western-central Region covers about 620 thousand square kilometres of water off central Western Australia, and includes Shark Bay. The Region extends from around the town of Exmouth in the north (at latitude 21° 48'S) to Perth in the south (at latitude 31° 58'S).

South-west Marine Region

The South-west Region covers about 1.1 million square kilometres of water off southern Western Australia and South Australia, and includes the Great Australian Bight and Kangaroo Island. The Region extends from Perth in the west (at latitude 31° 58'S) to Victor Harbor, South Australia in the east (at 138° 5'E and 35° 37'S).

South-east Marine Region

The South-east Region covers more than 1.2 million square kilometres of water off eastern South Australia, Victoria, Tasmania, and southern New South Wales, and includes Bass Strait and Macquarie Island. The Region extends from Victor Harbor, South Australia in the west to Bermagui, NSW (south of latitude 36° 30'S) in the east.

Eastern-central Marine Region

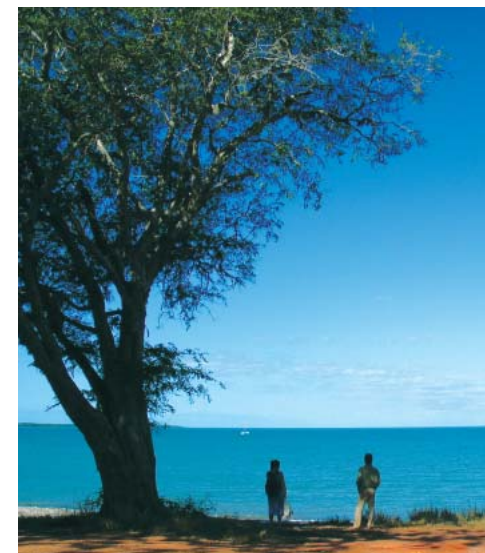
The Eastern-central Region covers about 720 thousand square kilometres of water off central and northern New South Wales and southern Queensland, and includes the waters off Sydney, Brisbane and Fraser Island. The Region extends from Bermagui, NSW (at latitude 36° 30'S) in the south, to Lady Elliot Island, Queensland (at latitude 24° 17'S) in the north.

North-east Marine Region

The North-east Region covers more than 1.3 million square kilometres of water off central and northern Queensland, and includes the Great Barrier Reef and Whitsunday Islands. The Region extends from Lady Elliot Island (at latitude 24° 17'S) in the south, to around Cape York (at latitude 10° 41'S) in the north.

Sunda Marine Region

The Sunda Region covers two separate areas totalling more than 1.1 million square kilometres of water off Cocos Island and Christmas Island. These islands are located about 1.2 thousand and 2.2 thousand kilometres respectively from Exmouth in north-west Western Australia.



CHAPTER 3

DESCRIPTION OF MAP THEMES

Maps in this atlas are presented under a series of non-fisheries marine-related themes for the Northern Planning Area. The maps aim to show important mappable themes for non-fisheries uses in Australia's marine jurisdiction. The atlas specifically excludes fisheries information (including aquaculture), including the social and economic component of fisheries.

Atlas maps themes are listed below with a brief explanation of the information shown in each theme.



Cultural Heritage

- Shipwrecks
- Coastal fortifications
- Custom houses

Indigenous

- Native Title claims and Indigenous land use agreements
- Language group map

Natural Heritage

- Marine protected areas
- Coastal protected areas
- Selected listed species
- Introduced marine species
- Threatened species
- Marine and Coastal Community Network membership

Ocean Disposal

- Pollution
- Sewerage waste facilities
- Ocean disposal sites

Petroleum/ Mining

- Petroleum titles, current leases and new acreage
- Seismic surveys
- Oil and gas wells
- Petroleum fields and infrastructure
- Offshore mining sites

Research

- Wave rider buoys
- Tide gauges
- Marine research institutes
- Marine research voyages
- Argo floats
- Mean annual average wave heights

Shipping

- Lighthouses
- Shipping routes
- Ports





- Port statistics
- Port limitations

Tourism, Recreation, Sport

- Boat ramps
- Charter boat operations

Miscellaneous

- Australian coast guard operational areas
- Jurisdictional boundaries

Multiple Use Maps

Interactions between various uses across the marine jurisdiction



CHAPTER 4

BASE MAP DETAILS

An explanation of base map symbology used on each map is described in this chapter. This information has not been shown on individual maps due to space limitations and to reduce unnecessary clutter. The information presented should be cross referenced when viewing individual atlas maps.

Datum and Projections

All maps are in geographic projection.



Map Scale

Map scales are:

Northern Marine Planning Area 1:6.6M

Torres Strait 1:2.3M

Reference Maps

A reference map is provided as the first map in both the Northern and Torres Strait series of maps. This map contains information that is not included on other maps in the atlas. The map is provided for reference purposes to clarify key geographical features and place names.

Map Data Caveats

Atlas maps presented in this publication should be viewed in conjunction with the Map Data Caveats detailed in Chapter 6.

Disclaimer Information

The National Oceans Office and Spatial Vision make no claims as to the accuracy of the information shown on maps contained in this atlas, or the accuracy of information provided by third parties.









While every effort has been made to ensure that the information is accurate, the National Oceans Office and Spatial Vision will not accept any liability for any loss or damage which may be incurred by any person acting in reliance upon the information.

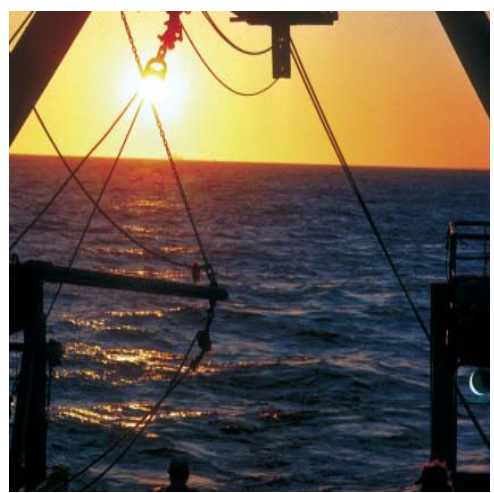
The maps have been prepared for illustrative purposes only and should not be used for navigation purposes.

EXPLANATION OF MAP SYMBOLS ON BASE MAPS

Bathymetry

Bathymetric depth (depth below mean sea level)

-  1m below mean sea level (msl)
-  >5000m below msl.
-  Australian Marine Jurisdiction
-  Marine Planning Boundary
-  Torres Strait Protected Zone
-  Australian Outside But Near Area
-  Road
-  Drainage





CHAPTER 5

ATLAS MAPS – NORTHERN MARINE PLANNING AREA

	Page
Northern Base Map	
Reference Map	Pg 12
Cultural Heritage	
Sites of Historic Significance and Shipwrecks (1622 - 1999)	Pg 13
Indigenous	
Indigenous Language Group with Registered National Estate	Pg 14
Status of Native Title Claims and Indigenous Land Tenure (2003)	Pg 15
Natural Heritage	
Anthropogenic (Human Induced) Threats to Reefs	Pg 16
Estuaries and Conservation Status of Coastal and Marine Areas	Pg 17
Distribution of Selected Species	Pg 18
Number of Introduced Marine Species by IMCRA Region	Pg 19
Number of Listed Threatened Species by IMCRA Region	Pg 20
Ocean Disposal	
National Pollution Inventory (2002) - Industry Type	Pg 21
Ocean Disposal Sites	Pg 22
Petroleum/Mining	
Coastal Mineral Extraction	Pg 23
Mining Industry Employment (Census 2001)	Pg 24
Petroleum Industry Seismic Surveys	Pg 25
Petroleum Titles, Current Leases, Acreage, Releases and Wells (2003)	Pg 26
Research	
Selected Marine Research Voyages	Pg 27
Wave Rider Buoys and Tide Gauges	Pg 28

Shipping

Australian Registered Vessel Movements (2002)	Pg 29
International Registered Vessel Movements (2002)	Pg 30
Port Handling Facilities (2003)	Pg 31
Selected Port Facilities - Fresh Water and Fuel	Pg 32
Selected Port Facilities - Railway Facility, Dry Dock and Pilotage	Pg 33
Ship Visits per Year	Pg 34
Shipping Movement by Vessel Type (2002)	Pg 35
Shipping Routes and Ports	Pg 36

Tourism, Recreation, Sport

Charter Boat Operations	Pg 37
Marinas and Boat Ramps	Pg 38

Miscellaneous

Australian Volunteer Coast Guard Operational Areas (2002)	Pg 39
Cyclone Density	Pg 40
Jurisdictional Boundaries	Pg 41

Multiple Use

Volunteer Coast Guard and Shipping Density	Pg 42
Industry Pollution, Ocean Disposal and Sea Grass	Pg 43
Introduced Marine Species by IMCRA and Shipping Density	Pg 44
Lighthouses and Shipping Density	Pg 45
Native Title and Conservation Status	Pg 46
Non-fisheries Activities	Pg 47
Research and Seismic Surveys	Pg 48
Research, Wave Rider Buoys and Tide Gauges	Pg 49
Selected Species and Petroleum Activities	Pg 50
Shipping Density and Boating	Pg 51
Shipping Density and Petroleum	Pg 52
Threatened Species by IMCRA and Petroleum Activities	Pg 53
Threatened Species by IMCRA and Research	Pg 54
Threatened Species by IMCRA and Shipping Density	Pg 55





ATLAS MAPS – TORRES STRAIT

	Page		
Torres Strait Base Map		Tourism, Recreation, Sport	
Reference Map	Pg 56	Boat Ramps	Pg 76
Cultural Heritage		Charter Boat Operations	Pg 77
Sites of Historic Significance and Shipwrecks (1622 - 1999)	Pg 57	Miscellaneous	
Indigenous		Australian Volunteer Coast Guard Operational Areas (2002)	Pg 78
Indigenous Language Group	Pg 58	Cyclone Density	Pg 79
Status of Native Title Claims and Indigenous Land Tenure (2003)	Pg 59	Jurisdictional Boundaries	Pg 80
Natural Heritage		Multiple Use	
Anthropogenic (Human Induced) Threats to Reefs	Pg 60	Volunteer Coast Guard and Shipping Density	Pg 81
Estuaries and Conservation Status of Coastal and Marine Areas	Pg 61	Industry Pollution, Ocean Disposal and Sea Grass	Pg 82
Distribution of Selected Species	Pg 62	Lighthouses and Shipping Density	Pg 83
Number of Introduced Marine Species by IMCRA Region	Pg 63	Native Title and Conservation Status	Pg 84
Number of Listed Threatened Species by IMCRA Region	Pg 64	Non-fisheries Activities	Pg 85
Ocean Disposal		Research, Wave Rider Buoys and Tide Gauges	Pg 86
National Pollution Inventory (2002) - Industry Type	Pg 65	Shipping Density and Boating	Pg 87
Ocean Disposal Sites	Pg 66	Threatened Species by IMCRA and Research	Pg 88
Research		Threatened Species by IMCRA and Shipping Density	Pg 89
Selected Marine Research Voyages	Pg 67		
Wave Rider Buoys and Tide Gauges	Pg 68		
Shipping			
Australian Registered Vessel Movements (2002)	Pg 69		
International Registered Vessel Movements (2002)	Pg 70		
Port Handling Facilities (2003)	Pg 71		
Selected Port Facilities - Fresh Water and Fuel	Pg 72		
Selected Port Facilities - Railway Facility, Dry Dock and Pilotage	Pg 73		
Shipping Movement by Vessel Type (2002)	Pg 74		
Shipping Routes and Ports	Pg 75		

