Commonwealth of Australia

AUSTRALIA'S OCEANS POLICY

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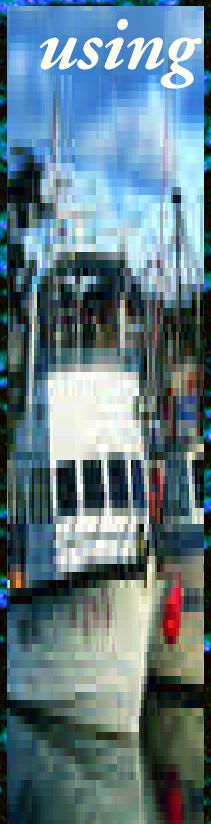

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This document has been prepared by the Commonwealth Government in consultation with all Australian States, the Northern Territory and the Australian Local Government Association (ALGA) as the basis for a national Oceans Policy. It does not present a formal position or outcomes agreed by State and Territory Governments, their agencies or ALGA.

Australia's Oceans Policy
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Progress in implementation of *Australia's Oceans Policy* will be reviewed in two years from the date of its release. Your input, comments and suggestions for an effective national Oceans Policy would be welcome at any time.

Electronic versions of the Oceans Policy documents are available at http://www.environment.gov.au/net/oceanspo.html

Comments can be sent to the address below or by e-mail to: oceans@ea.gov.au

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AUSTRALIA'S OCEANS POLICY

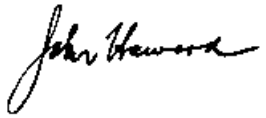
A MESSAGE FROM THE PRIME MINISTER

Our oceans contain resources of enormous potential benefit to all. These resources must be managed carefully to ensure economic benefit exists side by side with sensitive environmental care. We have a shared responsibility of ensuring the long term health of our oceans. Australia is a world leader in many areas of marine resource management, scientific endeavour and industry practices. With the release of *Australia's Oceans Policy* we again demonstrate our world leadership by implementing a coherent, strategic planning and management framework capable of dealing with the complex issues confronting the long term future of our oceans.

Australia's Oceans Policy provides that framework. It also outlines a broad range of commitments that will translate the Policy into a programme of positive action to take us into the new millennium. Through the Policy's implementation we will be in a strong position to protect and sustainably manage our ocean resources. This will bring benefits in terms of investment security as well as soundly based conservation outcomes.

While my government has taken the lead in developing *Australia's Oceans Policy*, an effective policy must be shaped by the nation as a whole. This Policy has been developed with considerable consultation, sharing ideas with governments, the community, conservation groups, industry and other resource users on how to ensure the conservation and sustainable development of our vast natural assets. Many of these ideas have been incorporated into the Policy. I would like to record my appreciation of the constructive contributions that have been made by so many in government, industry and the wider community.

Putting *Australia's Oceans Policy* into action requires partnerships between all spheres of government, the private sector, and the scientific and wider communities. I am confident that the Policy will, like our marine resources, be owned by all Australians.



John Howard
Prime Minister of Australia

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EXECUTIVE SUMMARY

Australia's Oceans Policy sets in place the framework for integrated and ecosystem-based planning and management for all of Australia's marine jurisdictions. It includes a vision, a series of goals and principles and policy guidance for a national Oceans Policy. Building on existing effective sectoral and jurisdictional mechanisms, it promotes ecologically-sustainable development of the resources of our oceans and the encouragement of internationally competitive marine industries, while ensuring the protection of marine biological diversity.

At the core of the Oceans Policy is the development of Regional Marine Plans, based on large marine ecosystems, which will be binding on all Commonwealth agencies. The first Regional Marine Plan will be developed for the south-eastern region of Australia's Exclusive Economic Zone. Broadly, this will include waters off Victoria, Tasmania, southern New South Wales and eastern South Australia.

Australia's Oceans Policy establishes a series of arrangements for implementation, including :

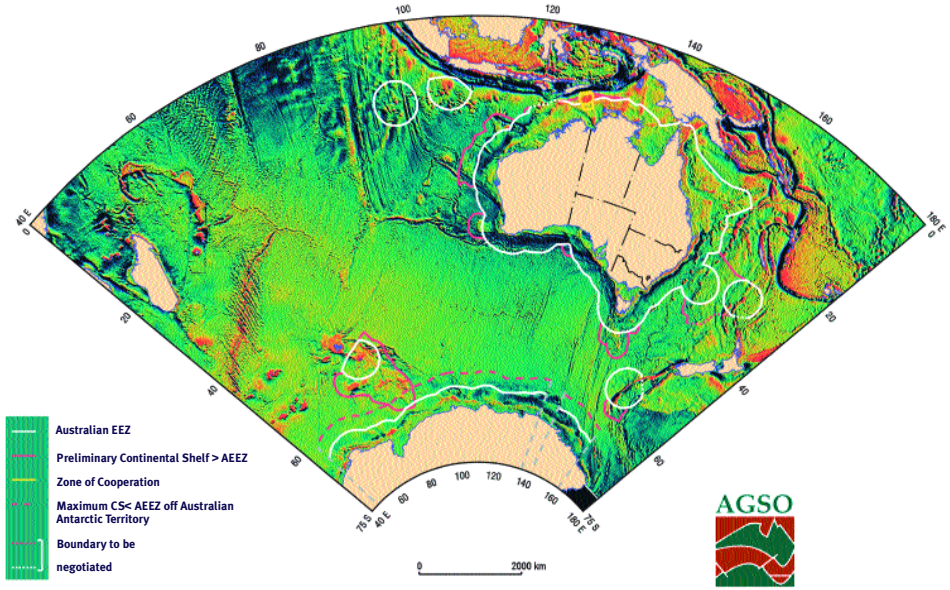
- a National Oceans Ministerial Board of key Commonwealth Ministers, chaired by the Minister for the Environment and Heritage. The Board will be the decison-making body regarding Regional Marine Plans;
- a National Oceans Advisory Group of industry, community and government stakeholders;
- Regional Marine Plan Steering Committees, which will include regional stakeholders; and
- a National Oceans Office, located in Environment Australia, which will provide secretariat and technical support and programme delivery for oceans policy initiatives.

State and Territory governments will be encouraged to participate in the development of Regional Marine Plans and on the Steering Committees. Commonwealth-State coordination on oceans policy matters in general is proposed to take place through the Australian and New Zealand Environment and Conservation Council.

Australia's Oceans Policy - Specific Sectoral Measures details the major challenges and the proposed responses in some twenty areas of oceans planning and management. These range from the conservation of marine biological diversity, shipping, marine pollution, fisheries and indigenous interests, to understanding the oceans and protection of the national interest. An important component is the progressive assessment of the effectiveness of the Oceans Policy and its implementation.

The Government has committed $50 million over three years for implementation of the Policy. Specific actions on which commitments have been made include:

Australia's Marine Jurisdictional Zones (Preliminary)



- commencement of Regional Marine Planning;
- improved understanding of the marine environment, including environmental baseline surveys and sustainability indicators, monitoring and improved assessment of the impacts of commercial and recreational activities - all targeted to support Regional Marine Plans;
- accelerated development and improved management of marine protected areas;
- support for national mandatory standards for marine and estuarine water quality;
- support for the development of a single national ballast water management system;
- trials to treat acid sulfate soil problem areas;
- a National Moorings Programme for sensitive marine areas; and
- support for the early phased withdrawal of the use of toxic organotin anti-fouling paints, including tributyltin paints.

State and Territory Governments will be invited to endorse *Australia's Oceans Policy* as an agreed national approach, and will play an important part in ensuring its effective implementation.

FOREWORD

The release of *Australia's Oceans Policy* in the International Year of the Ocean positions Australia as a world leader in implementing integrated oceans planning and management.

Through development of *Australia's Oceans Policy*, the Government has joined in a partnership with the Australian community to ensure the care, understanding and wise use of our oceans.

The planning and management system outlined here responds to the need for national coordination and consistency of policy, while allowing for regional diversity and continued responsibility within the well established industry sectors.

The size of our marine jurisdictions and our scant knowledge about their resources pose enormous problems for management. We have been fortunate in that conflict between sectors and environmental degradation has, in relative terms, been minimal. The use of our ocean resources is expected to grow. A key goal of this Policy is therefore to ensure that we have the management tools in place to avoid potential conflict between ocean users. It is an approach that learns from of some of the mistakes made in relation to land management.

Access to the common ocean resources will be guided and monitored by the Government on behalf of the community to ensure ecological sustainability, security and wealth generation.

Australia's Oceans Policy is neither solely an environment protection policy nor solely an economic development policy. It is both. It is a Policy for the ecologically sustainable development of our oceans.

The Oceans Policy establishes the broad principles and planning and management approaches necessary to achieve that goal. It also commits the Government to a $50 million package over three years to implement a range of initiatives that will translate those approaches into action. This builds on the record levels of funding already provided by the Government through the $125 million *Coasts and Clean Seas* initiative of the Natural Heritage Trust.

Maintaining the health and integrity of our marine ecosystems is fundamental to good oceans management. Our actions must not threaten the biological diversity and ecological processes on which continued ocean uses depend. This is the foundation on which we will pursue the multiple use management of our oceans.

The oceans are important influences on our climate and so on our primary agricultural productivity. Thousands of jobs and millions of dollars of export earnings come from marine industries such as fishing, tourism and petroleum. No less important are the social, recreational and cultural uses we make of the oceans.

Decisions about ocean resource assessment, access and use will be transparent, sustainable and provide equitable opportunities for the Australian community now and for future generations.

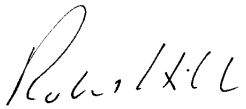
Australia's Oceans Policy is targeted to give early tangible results.

- Our marine jurisdictions will be regionalised, based on large marine ecosystems, for the purposes of integrated ocean planning and management.
- Regional Marine Plans will be developed. The resources of the marine regions will be assessed, pressures for use identified, and planning and management options derived in partnership with key stakeholders.
- Our goals for Regional Marine Plans are to determine the conservation requirements of each marine region, including the establishment of marine protected areas, prevention of potential conflict between sectors in relation to resource allocation and provision of long term security to all ocean users.
- We will promote and facilitate the development of our marine industries as core components of our economy and drivers of employment growth.
- Our marine and coastal natural resources will receive additional national protection from pollution, both from land and sea sources.
- The implementation of the National Representative System of Marine Protected Areas will be accelerated as a key component in the strategy to protect our marine biological diversity.
- Together with the *Marine Science and Technology Plan*, the Policy will improve monitoring and understanding of the global ocean processes that influence our marine and terrestrial environments.

Most of the area of ocean under Australian jurisdiction is the direct responsibility of the national Government, but there are also significant coastal waters where the Commonwealth has handed the primary management responsibility to the States and Territories.

Implementing a national oceans policy will need better coordination between the national, State and Territory Governments in integrating planning and management to ensure that jurisdictional boundaries do not hinder effective management. The Government will seek the early and full endorsement of *Australia's Oceans Policy* by the States and Territories.

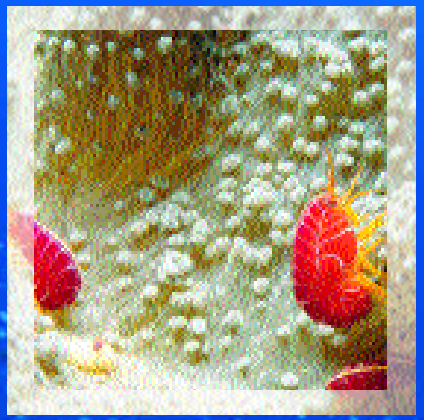
Our oceans are valuable national resources and community assets. *Australia's Oceans Policy* signals the Government's continuing intention to care for, understand and use these resources wisely for the benefit of all Australians.



Senator the Hon Robert Hill
Leader of the Government in the Senate
Minister for the Environment and Heritage

A VISION FOR AUSTRALIA'S OCEANS

Healthy oceans: cared for, understood and used wisely for the benefit of all, now and in the future.



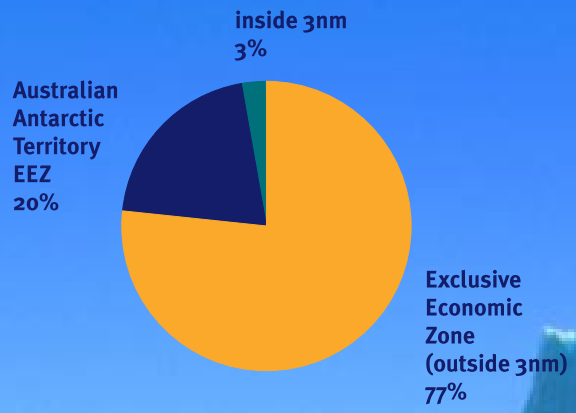
GOALS FOR AUSTRALIA'S OCEANS

In seeking to care for, understand and use our oceans wisely, *Australia's Oceans Policy* has the following broad goals.

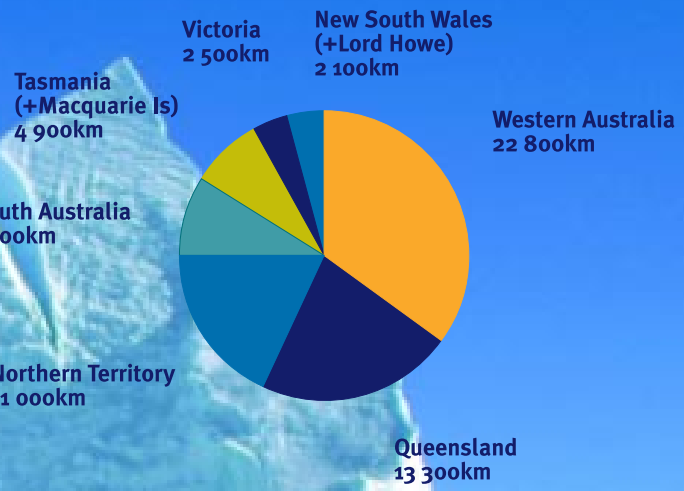
1. **To exercise and protect Australia's rights and jurisdiction over offshore areas, including offshore resources.**
2. **To meet Australia's international obligations under the United Nations Convention on the Law of the Sea and other international treaties.**
3. **To understand and protect Australia's marine biological diversity, the ocean environment and its resources, and ensure ocean uses are ecologically sustainable.**
4. **To promote ecologically sustainable economic development and job creation.**
5. **To establish integrated oceans planning and management arrangements.**
6. **To accommodate community needs and aspirations.**
7. **To improve our expertise and capabilities in ocean-related management, science, technology and engineering.**
8. **To identify and protect our natural and cultural marine heritage.**
9. **To promote public awareness and understanding.**

CONTENTS

Proportions of Australia's total current marine jurisidiction areas



Coastline lengths - km (1:100 000 base)



THE CONTEXT FOR AUSTRALIA'S OCEANS POLICY

AUSTRALIA'S MARINE JURISDICTIONS

Under the United Nations Convention on the Law of the Sea, Australia has rights and responsibilities over some 16 million square kilometres of ocean - more than twice the area of the Australian continent.

The great majority of Australia's marine area is under sole Commonwealth Government jurisdiction.

The areas of ocean and seabed adjacent to Australia's External Territories comprise around half of the total area of the Australian Exclusive Economic Zone (EEZ) and adjacent continental shelf. They are of considerable economic, social, scientific and cultural importance, but their isolation and the harsh conditions in the Antarctic and subantarctic territories pose particular challenges for resource development, conservation and management.

The small island territories are also an important part of Australia's External Territories. The Government aims to provide residents of the inhabited islands with the same rights, opportunities and responsibilities as all Australians. This includes promoting residents' economic development and the protection of their natural and cultural heritage.

Around continental Australia, sole Commonwealth Government jurisdiction stretches from the external boundaries of the EEZ and continental shelf to three nautical miles from the coastal baseline.

However the inshore areas, in particular those within the three nautical mile zone, fall within the primary jurisdiction of State and Territory Governments under the Offshore Constitutional Settlement. These areas are the most directly affected by land-based and inshore activities. Local Governments also play a significant role in the planning and management of the coasts and coastal waters.

For references and further detail on Australia's marine jurisdictions, see Appendix 2 - *The legal and constitutional framework of Australia's marine areas.*

AUSTRALIA'S OCEAN ENVIRONMENTS

Australia is one of the most biologically diverse nations on earth and our marine environments are home to spectacular arrays of species, many of which are unique to Australian waters.

In the southern temperate waters as many as 80 per cent of species are endemic (not found elsewhere). In the north, which is connected by currents to the Indian and Pacific Oceans, overall diversity is higher, although the proportion of endemic species is lower at around ten per cent.

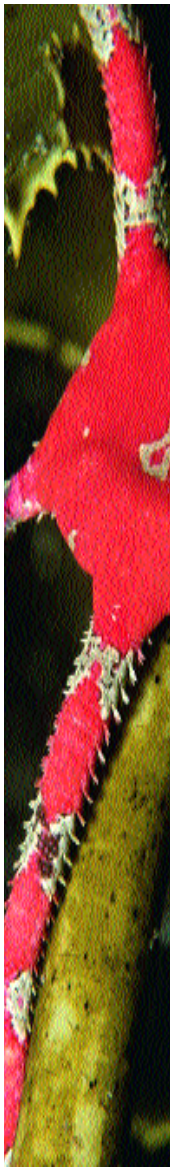
The vast marine area for which Australia has responsibility is dynamic in nature and experiences continuous variability of physical, chemical and biological properties on time scales that range from days to decades.

Australia's marine areas are in generally good condition in comparison with other countries. This is reflected in Australia's international reputation for clean and contaminant-free seafood products and marine tourism destinations. We must maintain the health of our oceans to keep that reputation.

There is no room for complacency. Our ocean systems are under increasing pressure from many uses, such as fisheries, shipping, mineral and petroleum activities and tourism and recreation. These give rise to significant environmental pressures, such as those from coastal development and agriculture, fisheries bycatch and introduced marine pests.

The impact of run-off and point source pollution from urban, agricultural and industrial activities places substantial pressure on the marine environment. Population growth, both here and overseas, will inevitably place increasing demands and pressures on Australia's marine resources.

Action now to put in place a comprehensive system for integrated ocean planning and management will reduce the risk of a progressive decline and irreversible



damage to our marine systems. In this way we will also be able to prevent environmental, economic, social and cultural losses that would reduce options for future use.

For references and further details on Australia's marine environments, see *State of the Marine Environment Report 1995, Australia: State of the Environment 1996, Oceans Policy Issues Paper 7* and *Background Paper 1.*

MARINE INDUSTRIES

Australia's marine industries have been growing strongly over recent years. They are highly export oriented and are major providers of jobs, often in coastal communities. These industries are important to the economy, contributing around $30 billion a year or eight per cent of gross domestic product. They also contribute substantially to export performance – estimated at $6.6 billion in 1994 or seven per cent of total exports.

Marine industries have excellent potential to contribute to future economic and employment growth. In particular, marine tourism and aquaculture can create new jobs in regional Australia. This will be very important in regions where alternative investment and employment opportunities are limited.

Australia is competitive by world standards in many marine industries. Current strengths include the designing and building of high speed aluminium ships and ferries, offshore oil and gas, marine research, tourism, environmental management, algal aquaculture, fish farming and fisheries management.

Growth in marine industries of eight per cent per annum has been recorded in recent years. At the last major review it was estimated that our marine industries might well be valued annually at between $50 billion and $85 billion by the year 2020.

For references and further details on Australia's marine industries, see the *Marine Industry Development Strategy 1997.*

THE INTERESTS OF INDIGENOUS AUSTRALIANS

The changing coastline and seas of Australia have played a part in shaping indigenous cultures over at least 50 000 years. Their cultural and economic importance for Aboriginal and Torres Strait Islander communities will continue.

Indigenous communities have an important part in the development of integrated approaches to the planning and management of marine resources. There are several processes under way to identify and agree upon indigenous peoples' interests in the oceans, including those relating to marine management and conservation aspirations and responsibilities, fishing rights and continued access to traditional marine resources.

The Torres Strait Treaty, entered into by Australia and Papua New Guinea in 1985, deals with sovereignty and maritime boundaries in the Torres Strait, and provides for protection of the way of life and livelihood of traditional inhabitants and the marine environment. The Treaty establishes the Seabed Jurisdiction and Fisheries Jurisdiction lines, with recognition of Australian sovereignty over fifteen islands or cays north of the

Seabed Jurisdiction line, including the inhabited islands of Boigu, Saibai and Dauan. Traditional inhabitants of Torres Strait can engage in cross-border traditional fishing, but are subject to the laws applying in the waters of the country they visit.

THE INTERNATIONAL CONTEXT

As a party to the United Nations Convention on the Law of the Sea, Australia has sovereign rights to explore, exploit, conserve and manage the natural resources within the area of our Exclusive Economic Zone. We have further rights and responsibilities to the limits of the continental shelf. The protection and ecologically sustainable management of the ocean on the basis of best available scientific information are fundamental responsibilities which came with those sovereign rights.

In meeting its national and international obligations as a claimant state to the Australian Antarctic Territory and adjacent oceans, the Government's objectives are to build a systematic knowledge of the Antarctic through strategic scientific research, to contribute to an understanding of global climate change, and to protect and conserve the Antarctic environment. That will provide the capacity for greater national effectiveness in the Antarctic Treaty System and in the areas covered by the Antarctic Treaty and the Convention for the Conservation of Antarctic Marine Living Resources.

Australia recognises the importance of maintaining the Antarctic Treaty System as an effective mechanism for protecting the Antarctic Environment, pursuing science and achieving all of Australia's Antarctic policy objectives.

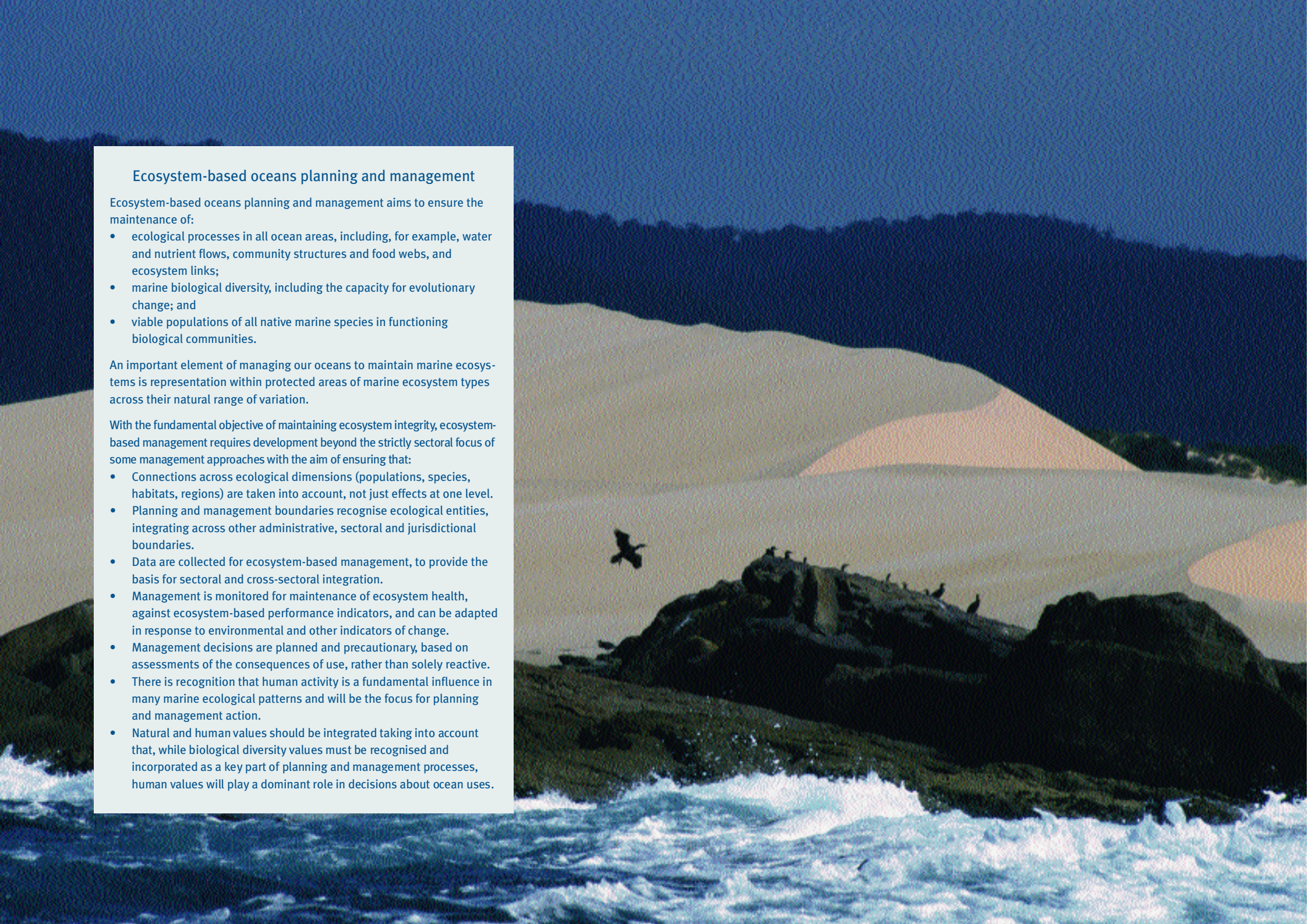
Australia also has extensive obligations under other ocean-related conventions and cooperative arrangements dealing with matters including shipping, meteorology, fisheries, biological diversity,

pollution and the conservation of whales, dolphins and porpoises.

As examples, international shipping is guaranteed freedom of navigation in Australia's EEZ.

We have maritime boundaries with five other nations; Indonesia, Papua New Guinea, the Solomon Islands, New Zealand and the French sub-antarctic and tropical territories. We have land boundaries in Antarctica with Norway, New Zealand and France.

For references and further details on Australia's international obligations, see the *Oceans Policy Background Paper 2.*



Ecosystem-based oceans planning and management

Ecosystem-based oceans planning and management aims to ensure the maintenance of:

- ecological processes in all ocean areas, including, for example, water and nutrient flows, community structures and food webs, and ecosystem links;
- marine biological diversity, including the capacity for evolutionary change; and
- viable populations of all native marine species in functioning biological communities.

An important element of managing our oceans to maintain marine ecosystems is representation within protected areas of marine ecosystem types across their natural range of variation.

With the fundamental objective of maintaining ecosystem integrity, ecosystem-based management requires development beyond the strictly sectoral focus of some management approaches with the aim of ensuring that:

- Connections across ecological dimensions (populations, species, habitats, regions) are taken into account, not just effects at one level.
- Planning and management boundaries recognise ecological entities, integrating across other administrative, sectoral and jurisdictional boundaries.
- Data are collected for ecosystem-based management, to provide the basis for sectoral and cross-sectoral integration.
- Management is monitored for maintenance of ecosystem health, against ecosystem-based performance indicators, and can be adapted in response to environmental and other indicators of change.
- Management decisions are planned and precautionary, based on assessments of the consequences of use, rather than solely reactive.
- There is recognition that human activity is a fundamental influence in many marine ecological patterns and will be the focus for planning and management action.
- Natural and human values should be integrated taking into account that, while biological diversity values must be recognised and incorporated as a key part of planning and management processes, human values will play a dominant role in decisions about ocean uses.

INTEGRATED AND ECOSYSTEM-BASED OCEANS PLANNING AND MANAGEMENT

THE NEED FOR INTEGRATED AND ECOSYSTEM-BASED OCEANS PLANNING AND MANAGEMENT

Australia's ocean ecosystems and their marine biological diversity are core national assets. If our use of them is well managed, they can meet a broad range of economic, social and cultural aspirations. They also provide a range of essential environmental services that would be extremely costly or impossible to restore or replace if ecosystem functioning was impaired.

Urban and infrastructure development in the coastal zone, together with the development of marine industries, continue to place increasing demands on our coastline and oceans. Past management practices have not allowed us to assess and ameliorate the cumulative impacts of our actions on ocean health and productivity.

If we were to continue without integrating our oceans planning and management we could not be confident that Australia would avoid following so much of the rest of the world in a spiral of marine resource degradation.

The collapse of a number of major marine ecosystems and fisheries resources in the northern hemisphere, with the associated economic damage and social dislocation, is a stark warning of the vulnerability of marine systems. In Australian waters, the degrading of our unique temperate seagrasses and serious declines in stock of important commercial fish species such as southern bluefin tuna, southern sharks, orange roughy and gemfish, show that we are not immune from such threats.

The Commonwealth and all State and Territory Governments have made commitments in the past under the National Strategy for Ecologically Sustainable Development which are relevant to the Oceans Policy (see box page 18). In applying that Strategy to our oceans, the emphasis to date has been on actions within the separate sectors, such as fisheries, petroleum, and protected areas. While progress has been made, until now management and decision making have not been integrated across the various sectoral interests.

Management of our oceans purely on an industry-by-industry basis will not be sustainable in the long run. Activities such as fishing, tourism, shipping, aquaculture, coastal development and petroleum production must be collectively managed to be compatible with each other and with the ecological health of the oceans.

With *Australia's Oceans Policy*, the Government is introducing a refinement of the commitment to ecologically sustainable development. The Government is committed to integrated ecosystem-based planning and management for multiple uses of our oceans. This includes pursuing improved coordination between the States and the Commonwealth to ensure that jurisdictional boundaries do not hinder effective planning and management.

The Government recognises the need to provide for increased capacity to understand our marine environments, through increased scientific effort. That understanding is fundamental to the good management of our oceans and the protection of ecosystems and marine biological diversity.

REGIONAL MARINE PLANNING – THE WAY FORWARD

The Commonwealth's commitment to integrated and ecosystem-based planning and management will be implemented through the introduction of a major Regional Marine Planning process. The process will be designed to improve linkages between different sectors and across jurisdictions.

Regional Marine Plans – based on large marine ecosystems – will integrate sectoral commercial interests and conservation requirements. In developing Regional Marine Plans, the Commonwealth will seek the participation of the relevant States and Territories, to ensure, as far as possible, the integration of planning and management across State and Commonwealth waters. The broad Principles for Ecologically Sustainable Ocean Use that will be applied are given in Section 4, with additional Policy Guidance in Appendix 1.

Either singly or in combination, our ocean and land-based uses must not threaten ocean ecosystem health. The objective is to manage our actions to:

- ensure continuing marine ecosystem health;
- safeguard marine biological diversity;
- promote diverse, strong and sustainable marine industries;
- provide increased certainty and long-term security for all marine users; and
- ensure the establishment of a representative system of marine protected areas.

In pursuing this, the Government will accelerate the development of the National Representative System of Marine Protected Areas (NRSMPA).

Further information on ecosystem-based management is at Appendix 3 and on the NRSMPA and internationally recognised protected area categories at Appendix 4.

All relevant agencies will be required to abide by the outcomes of the Plans. In developing the framework for Regional Marine Planning, the Government will consult with stakeholders on the need for and form of a statutory base for the development and implementation of Regional Marine Planning.

ESSENTIAL STEPS IN PLANNING AND MANAGEMENT

Prudent management of our ocean resources requires an orderly process of oceans planning and management. The Government will establish planning and management arrangements for our oceans which are capable of accommodating the following steps, including developing a regionalisation of our oceans based on large marine ecosystems, to underpin the preparation and implementation of Regional Marine Plans. For each marine region we will need to:

- assess our ocean resources, on a biogeographical basis;
- understand the current uses of those resources and the emerging pressures on them;
- evaluate what is needed to maintain ecosystem health and integrity, and the implications for sectoral activities and conservation reservation;
- propose allocations of ocean resources, delivered principally through existing responsible sectoral management arrangements, using multiple use principles to generate income and employment and to optimise long-term benefits to the community;
- assess and control the external impacts of proposed resource uses;
- continually monitor the performance of ocean planning and management processes; and
- maintain flexibility to respond to emerging information within this broad framework.

The governance mechanisms to implement these integrated planning and management processes are detailed in Section 3 - Implementation Arrangements for Oceans Planning and Management.

These mechanisms emphasise the role of the National Oceans Ministerial Board in overseeing and approving Regional Marine Plans, which will be developed with the guidance of Regional Marine Plan Steering Committees of key non-government and government stakeholders.

THE CONTENT OF REGIONAL MARINE PLANS

The development of Regional Marine Plans will provide a structured and orderly process for the ecosystem-based allocation of resource access and use across and within sectors.

Key interest groups and government agencies will be represented on Steering Committees established to oversee the development of each Regional Marine Plan. Extensive community consultation will be undertaken, to ensure an open and transparent process.

Current jurisdictional boundaries do not reflect the boundaries of marine ecosystems. One of the goals of the Regional Marine Planning process will be to establish complementary management regimes in both State and Commonwealth

MARINE BIOLOGICAL DIVERSITY

'Marine biological diversity' refers to the 'variety of living organisms in the estuaries and oceans, their genes, and the ecosystems of which they form a part' (Source: *National Strategy for the Conservation of Australia's Biological Diversity*, 1996).

A marine ecosystem is a 'dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit' (Source: *Convention on Biological Diversity*, June 1992).

waters. State Governments will therefore be invited and encouraged to participate in the process so that the Regional Marine Plans cover both Commonwealth and State waters.

All Commonwealth agencies will be required to operate in accordance with the Plans. For each marine region the Regional Marine Plan will, broadly:

- identify ocean resources and economic and other opportunities;
- identify current and emerging threats to ecosystem health and determine planning and management responses to those threats;
- within the region, set out what is known of ecosystem characteristics and a broad set of objectives for those systems;
- identify the requirements and priorities for environmental baseline and basic biological inventory and other surveys in the development of Regional Marine Plans;
- identify priorities and put in place measures to meet conservation requirements and determine those areas that should be assessed for marine protected area declaration;
- identify community and sectoral interests, including the interests of Aboriginal and Torres Strait Islander communities;
- identify priorities for industry and economic development of the region;
- put in place a planning regime to prevent conflict between different sectors over resource access and allocation;
- provide a framework within which there is increased certainty and long-term security for marine-based industries; and
- establish indicators of sustainability and requirements for monitoring, reporting and performance assessment.

Additional guidance on ecosystem-based planning and management and on multiple use of the oceans is contained in Appendices 1 and 3.

Effective planning and management for multiple ocean uses and the maintenance of ocean ecosystem health requires integration across economic, environmental and social and cultural objectives.

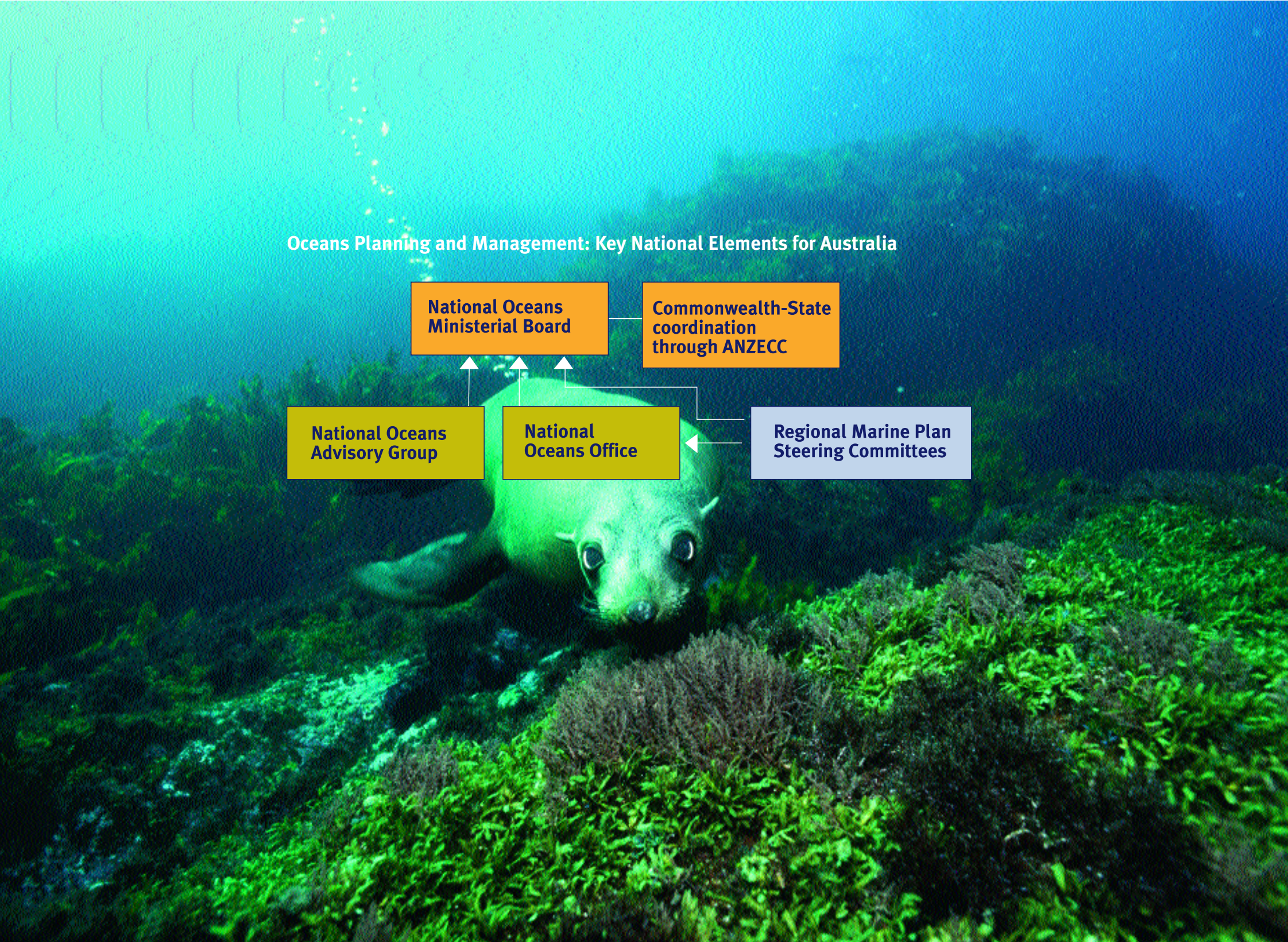
The Regional Marine Plans will have to draw on available environmental, resource and economic and social information. They must be able to provide the increased security required by industry and other users and the capacity to respond adaptively to new information, to new opportunities, and to unforseen impacts on ocean systems.

We will need to develop innovative approaches to deal with the scale and complexity of our marine ecosystems. Existing major planning and management

tools that can be drawn on in the development of Regional Marine Plans include:

- development of clear regional objectives for uses, resources and ecosystems;
- zoning for multiple or single uses, including sequential and seasonal uses;
- resource-specific allocations for access and use, through the existing responsible sectoral management arrangements;
- complementary planning and management requirements implemented by individual sectors;
- outcome-based measures, with industry or user-determined mechanisms for implementation; and
- sustainability indicators, monitoring, reporting and adaptive development of management controls.

These planning and management tools can be used singly or in combination. Regional Marine Plans will be developed to accommodate the different circumstances that will apply amongst Australia's very diverse regional marine environments.


Oceans Planning and Management: Key National Elements for Australia
National Oceans Ministerial Board
Commonwealth-State coordination through ANZECC
National Oceans Advisory Group
National Oceans Office
Regional Marine Plan Steering Committees

IMPLEMENTATION ARRANGEMENTS FOR OCEANS PLANNING AND MANAGEMENT

IMPLEMENTATION ARRANGEMENTS FOR THE OCEANS

Australia's Oceans Policy will be implemented through institutional arrangements which emphasise ministerial responsibility, consultation and stakeholder participation and well-coordinated government support.

Key Elements

- National Oceans Ministerial Board
- National Oceans Advisory Group
- National Oceans Office
- Regional Marine Plan Steering Committees

These Commonwealth arrangements have been framed with a view to encouraging the cooperation and participation of the States and Territories, coordinated through the Australian and New Zealand Environment and Conservation Council and the development of Regional Marine Plans.

National Oceans Ministerial Board

A National Oceans Ministerial Board will be established. It will include the Commonwealth Ministers responsible for the environment (Chair), industry, resources, fisheries, science, tourism and shipping. It will be able to co-opt other ministers as necessary, including for example defence and foreign affairs.

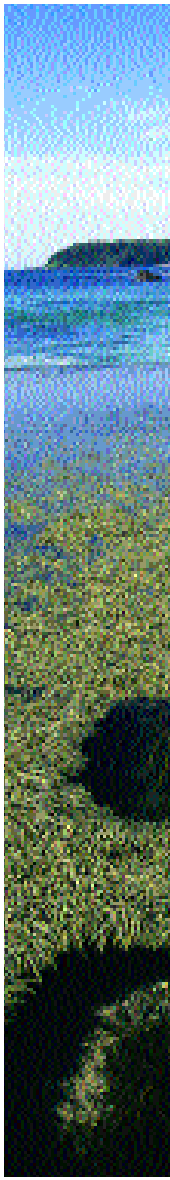
The principal responsibility of the Board will be to oversee the Regional Marine Planning process. The Board will develop the scope and timetable for Regional Marine Plans and ultimately approve each Plan.

The Board will also:

- have primary responsibility for the implementation and further development of Australia's Oceans Policy;
- coordinate cross-sectoral oceans policy issues relating to Commonwealth waters, jurisdiction and obligations;
- consult on the coordination of priorities for programme expenditure on marine issues relating to national oceans policy implementation and regional marine planning, having regard to the existing priorities and programmes within Commonwealth agencies;
- consider marine research priorities related to development and implementation of Australia's Oceans Policy;
- promote strategic coordination across the agencies responsible for the development and representation of Australia's positions in international marine and oceans forums;
- establish the National Oceans Advisory Group as a non-government consultative and advisory body; and
- guide the actions of the National Oceans Office, through the Chair.

National Oceans Advisory Group

The National Oceans Advisory Group will be comprised predominantly of members with non-government interests, such as industry, science and conservation, selected for expertise in oceans issues. The Advisory Group will be established by and report to the National



Oceans Ministerial Board, which will agree its agenda and work programme.

The National Oceans Advisory Group will:

- work through and advise the Board on cross-sectoral and cross-jurisdictional oceans issues, focussing on gaps, overlaps and priorities and examining matters such as integration issues and ecosystem-based planning and management;
- advise on the scope and effectiveness of the Regional Marine Planning process;
- be a forum for exchanging information and views between the various ocean sectors; and
- be supported by the National Oceans Office.

National Oceans Office

A National Oceans Office will be established to support the National Oceans Ministerial Board, the National Advisory Committee and Regional Marine Plan Steering Committees. It will provide secretariat and technical support and programme delivery, in consultation with other Commonwealth agencies. It will assist the Board in the implementation and further development of *Australia's Oceans Policy*. The Office will report to the National Oceans Ministerial Board and will be housed in Environment Australia.

By reference from and under the direction of the National Oceans Ministerial Board, the National Oceans Office will undertake a range of functions, including those to:

- support the National Oceans Ministerial Board and the National Oceans Advisory Group;
- support Regional Marine Plan Steering Committees and coordinate the development of Regional Marine Plans. The Plans will be put to the National Oceans Ministerial Board for consideration and endorsement;
- coordinate the overall implementation and further development of the Oceans Policy;
- support the Australian and New Zealand Environment and Conservation Council (ANZECC) in its consideration of matters related to the development and implementation of oceans policy;
- act as the main administrative coordination point between the Commonwealth, States and Territories on oceans policy implementation, including the involvement of relevant State and Territory agencies in the development and implementation of Regional Marine Plans; and
- coordinate and distribute information on oceans policy implementation and regional marine planning matters to all stakeholders,
- provide advice to the Ministerial Board on marine research priorities related to development of the Oceans Policy.

Regional Marine Plan Steering Committees

Regional Marine Plan Steering Committees, including key non-government and government stakeholders, will be established by the National Oceans Ministerial Board. The Steering Committees will oversee development of Regional Marine Plans, working closely with the National Oceans Office and report to the Board.

State and Territory governments and agencies will be encouraged to participate on the Steering Committees where they are involved in Regional Marine Plans.

Commonwealth-State Cooperation

The Government will propose that the Australian and New Zealand Environment and Conservation Council be the coordination forum for Commonwealth-State consultations on the implementation of *Australia's Oceans Policy*. In working through ANZECC the Commonwealth Government will emphasise the need to accommodate the interests of all sectors, noting that the Council of Australian Governments protocol on the operation of Ministerial Councils requires representatives to take whole-of-government positions to Council meetings.

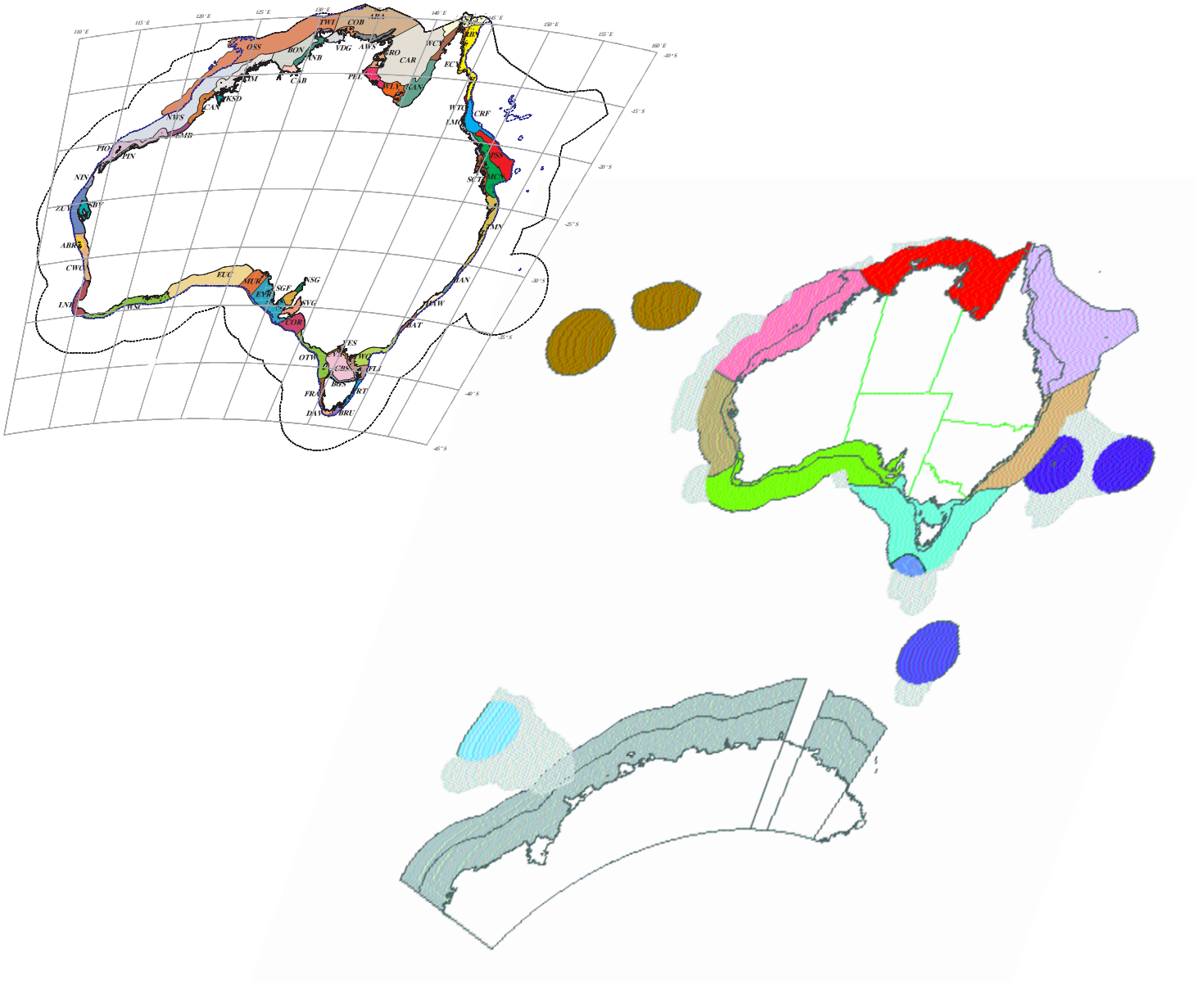
When developing the framework for Regional Marine Plans, the Commonwealth will work through ANZECC to ensure the integration of planning across State and Commonwealth waters. Other relevant Commonwealth-State ministerial councils, such as those with responsibilities for transport, fisheries and minerals, will continue to maintain their sectoral responsibilities. They will be expected to accommodate the cross-jurisdictional consultations on oceans policy which take place through ANZECC.

Members of the National Ministerial Oceans Board who are also members of relevant Commonwealth/State ministerial councils will ensure that linkages are made on issues of mutual interest.

In addition to this general coordination role proposed by the Government, ANZECC has agreed that it has a particular role in pursuing cross-jurisdictional policy development and implementation for a range of oceans policy issues. These include marine biological diversity conservation, marine protected areas, achieving ecologically sustainable ocean resource use, ecosystem-based oceans planning and management and marine pollution. ANZECC has also agreed that it will take on the responsibility for overall reporting on the cross-jurisdictional aspects of the environment and conservation performance of Australia's Oceans Policy.

The implementation arrangements described above recognise the following.

- Existing sectoral management arrangements will remain. Integrating ocean planning and management across all sectors should provide an additional impetus for improving sectoral management.
- Management arrangements for some resource sectors have been significantly modified in recent years to take account of commitments to wider community consultation, incorporation of concern for ecosystem impacts, and developments required by new industries and changing technological capacities.
- Institutional arrangements will reflect the need for stability in the investment climate and minimum necessary compliance costs for ecologically sustainable marine industries.
- The Offshore Constitutional Settlement remains the basis for the management of specific sectors across jurisdictional boundaries. However, consideration will be given to administrative changes that may be needed so that the full range of cross-jurisdictional issues can be addressed effectively in implementing the Regional Marine Planning processes.



Biogeographic perspectives of Australia's marine jurisdictions are provided at two different scales: the diagram at upper left is from the Interim Marine and Coastal Regionalisation of Australia (IMCRA, Commonwealth of Australia 1998) the other an initial Large Marine Ecosystem or marine domain regionalisation (CSIRO Division of Marine Research 1998)

THE NATIONAL STRATEGY FOR ECOLOGICALLY SUSTAINABLE DEVELOPMENT

The goal of Australia's National Strategy for Ecologically Sustainable Development is 'development that improves the quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends'.

The core objectives of the Strategy are:

- to enhance individual and community well being and welfare by following a path of economic development that safeguards the welfare of future generations;
- to provide for equity within and between generations; and
- to protect biological diversity and maintain essential ecological processes and life-support systems.

4

PRINCIPLES FOR ECOLOGICALLY SUSTAINABLE OCEAN USE

THE NATIONAL POLICY CONTEXT

The institutional arrangements for ocean planning and management outlined in Section 3 will be expected to abide by the policy guidance contained in this section and Appendix 1.

The vision and goals for *Australia's Oceans Policy* are consistent with a range of related national policies and agreements, including:

- the *National Strategy for Ecologically Sustainable Development* (1992);
- the *National Strategy for the Conservation of Australia's Biological Diversity* (1996); and
- the *Intergovernmental Agreement on the Environment* and the *Heads of Agreement on Roles and Responsibilities* (1998).

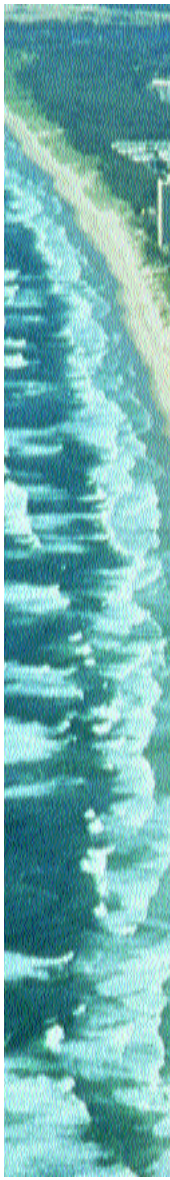
Australia's Oceans Policy has been developed within the context of these national policies.

PRINCIPLES FOR ECOLOGICALLY SUSTAINABLE OCEAN USE

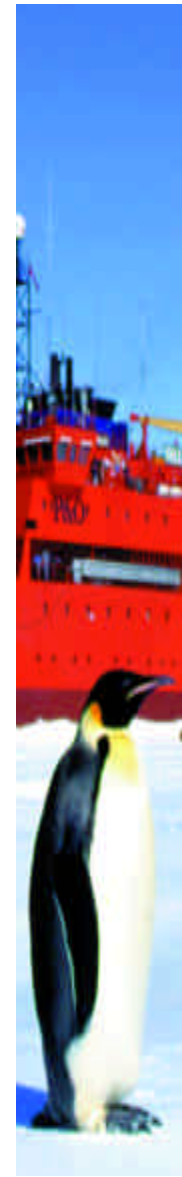
The following principles should be applied to all decisions and actions affecting access to and use of Australia's marine jurisdictions and adjacent waters, and the associated resource base. They should be considered together, recognising that ocean ecosystem health and integrity is fundamental to ecologically sustainable development.

- The maintenance of healthy and productive marine ecosystems is fundamental to the management of both the oceans and of the land.
- The benefits from the use of Australia's common ocean resources, and the responsibilities for their continued health and productivity, should be shared by all Australians.
- Internationally competitive and ecologically sustainable marine industries are essential for wealth generation, employment and continued regional development.
- Economic, environmental, social and cultural aspirations are to be accommodated through integrated planning and management of multiple uses of ocean resources.
- Management of human activities that affect our oceans will require progressive improvement in our understanding of living and non-living ocean resources and processes.
- Ocean planning and management decisions should be based on the best available scientific and other information, recognising that information regarding ocean resources will often be limited.
- If the potential impact of an action is of concern, priority should be given to maintaining ecosystem health and integrity.
- Incomplete information should not be used as a reason for postponing precautionary measures intended to prevent serious or irreversible environmental degradation of the oceans.
- The processes for assessing, planning, allocating and managing the ocean resources should:
  - be easily understood and openly justified;
  - be certain;
  - have clear lines of accountability;
  - provide for equity within and between generations;
  - be designed to deliver outcomes that balance long and short-term economic, environmental, social and cultural considerations;
  - involve the minimum effective regulatory burden on ocean users required to meet economic, environmental, cultural and social objectives;
  - ensure cooperation and coordination between governments and across the sectors which use the oceans; and
  - take into account wider interests and ensure effective community involvement.

Appendix 1 contains detailed Policy Guidance that is to be used by managers in implementing and reporting on planning and management arrangements for Australia's oceans.



IMPLEMENTING AUSTRALIA'S OCEANS POLICY - *some key initial actions*



Australia's Oceans Policy takes a substantial step towards caring for, understanding and using our oceans wisely.

The following measures provide a solid basis for translating the principles of the policy into action, and for the long-term ecological health and continued economic development of our marine jurisdiction. They also provide the building blocks for effective national integration across jurisdictional boundaries.

The Government will provide $50 million over three years for the implementation of these initiatives.

The initiatives complement a broad range of Government programmes and activities already addressing many of the issues identified in this Policy.

For example, *Coasts and Clean Seas* programmes under the Natural Heritage Trust are providing record levels of funding to address major issues such as land-based sources of marine pollution, introduced marine pests, coastal degradation, fish habitat rehabilitation and marine species protection. Other Natural Heritage Trust funded programmes such as Landcare, Bushcare, Waterwatch and the Endangered Species Program are also helping to achieve Oceans Policy goals.

Industry has already begun to move towards sustainable use of ocean resources, minimising the environmental impacts of sectoral activities. Australia's Oceans Policy continues to emphasise individual sectoral management responsibilities and stewardship to achieve our vision for the oceans.

It is important to note that the actions described in this section are not exhaustive. The accompanying document, *Australia's Oceans Policy - Specific Sectoral Measures* outlines the range of actions necessary to address the implementation of this Policy in and across the oceans sectors.

The National Oceans Office will be charged with developing a detailed and auditable implementation schedule, which will be finalised within six months of the release of this Policy. This will address the actions as necessary to ensure the conservation and ecologically sustainable use of our oceans identified during development of the Policy.

The actions and initiatives set out below will support the central themes of this Policy and address sector specific issues.

INTEGRATED OCEAN PLANNING AND MANAGEMENT

New institutional arrangements

The new institutional arrangements for the Oceans Policy comprise the National Oceans Ministerial Board, the National Oceans Advisory Group and the National Oceans Office and Regional Marine Plan Steering Committees. The functions of these bodies and their linkages are detailed in Section 4.

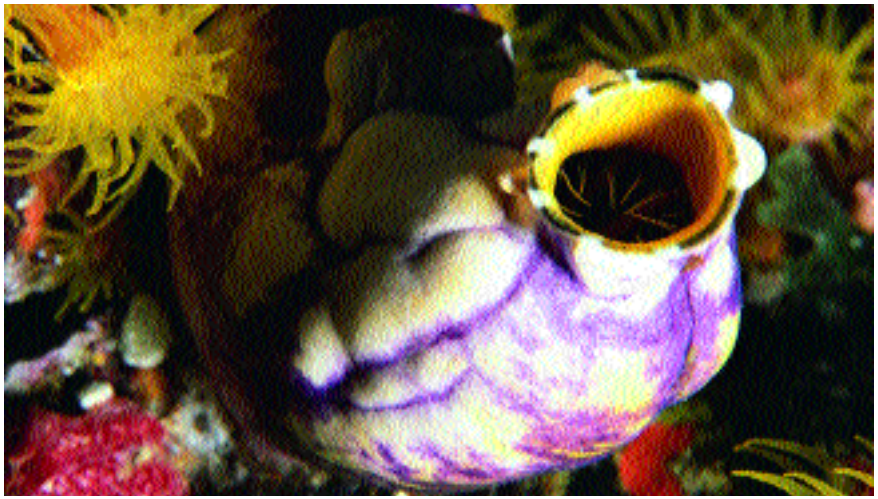
Regional marine planning for the south-eastern region of Australia's EEZ

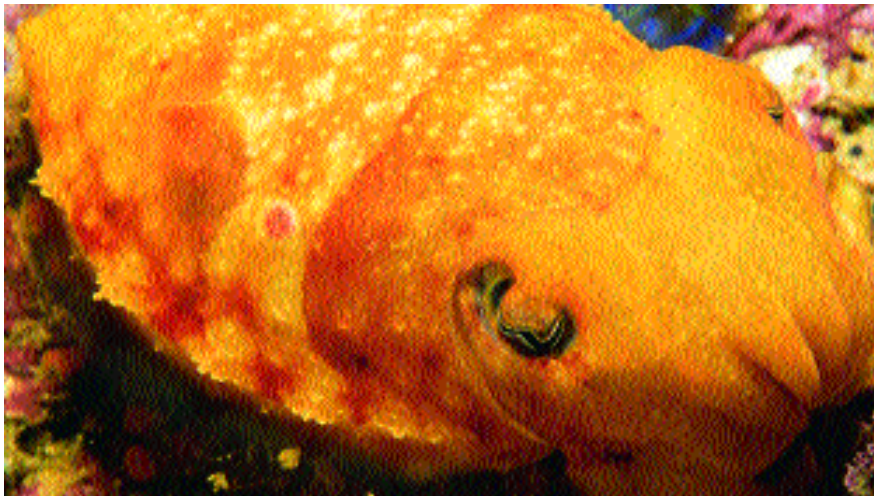
The Government will implement ecosystem-based management for our oceans through the development of Regional Marine Plans (detailed in Section 2).

Regional Marine Plans will be based on large marine ecosystems. They will maintain ecosystem heath and integrity while promoting multiple use of our oceans by integrating sectoral commercial interests and conservation requirements.

The Government believes it is important that early progress is made on integrated planning and management of an important oceans region to demonstrate the benefits of the approach more generally.

The first Regional Marine Plan will be developed for the south-eastern region of Australia's EEZ. Its boundaries will be determined by the National Oceans Ministerial Board, but on available information the Plan is likely to include the Commonwealth waters off the south east of South Australia, Tasmania, (including





Macquarie Island), Victoria and south-eastern New South Wales.

This south-eastern region encompasses some 12-15% of the national coastline; involves the jurisdictions of the Commonwealth and four states; and it has more than 50 per cent of the national population in the adjacent coastal lands.

The area also contains major marine industries such as tourism, fisheries, aquaculture, offshore petroleum and sea transport which are essential to the regional and national economies.

The development of Regional Marine Plans will involve undertaking regional resource assessments of marine areas, including consideration of current and possible uses, and proposals for broad cross-sectoral priorities and resource allocations among the sectoral uses.

The Commonwealth will seek the cooperation and participation of the Tasmanian, South Australian, Victorian and New South Wales governments to ensure, as far as possible, the integration of planning and management in the south-eastern region.

National marine resource surveys, sustainability indicators and monitoring

Our limited national capacity to collect marine information has affected not only our understanding of processes and our knowledge of the basic resource base, but also our capacity to identify and assess individual and cumulative impacts from ocean uses. The Government is committed to improving the understanding of ocean systems.

- Funds will be provided to support rapid assessments of the biological resources of Australia's oceans. The resulting information base will underpin effective regional integration for planning and management, including core components such as the National Representative System of Marine Protected Areas. These assessments will also benefit industry by providing information on potential new resources such as deepwater fisheries and pharmaceuticals.

- A series of indicators of ocean environmental health and integrity will be developed. These can also serve as indicators of the sustainability of ocean uses for ocean planning and management purposes. Resources will also be provided for increasing the level of assessment of the environmental impacts of commercial and recreational activities and for monitoring and performance assessment of Australia's Oceans Policy.

CONSERVATION OF MARINE BIOLOGICAL DIVERSITY

Our seas include an amazing variety of plants and animals which all contribute towards Australia's rich marine biological diversity. Australia is the only developed nation which has been described as 'mega-diverse'. Our relative isolation means that an unusually large proportion of our marine fauna and flora is unique to Australian waters, especially in our cooler temperate areas.

Conservation of our marine biological diversity is an important goal of the Government which will be achieved through a variety of means.

National Representative System of Marine Protected Areas

The Government is committed to accelerating the development of the National Representative System of Marine Protected Areas. It is essential that the NRSMPA is established as quickly as possible both for conservation purposes and to give regional security for industry access to ocean resources.

- Additional funding will be provided to:
  - accelerate the declaration and management of marine protected areas in Commonwealth waters, including the declaration of five new parks now under assessment;
  - refine tools for identification and selection of marine protected areas;
  - develop partnerships with key stakeholders to assist in the implementation of the NRSMPA; and
  - develop performance measures for the NRSMPA.

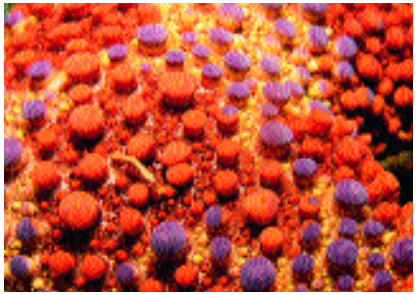
As far as possible, future representative marine protected area proposals under the Commonwealth's NRSMPA programme will be developed as part of the Regional Marine Planning process. Areas of known outstanding conservation significance will, however, continue to be assessed for protection in accordance with the existing processes.

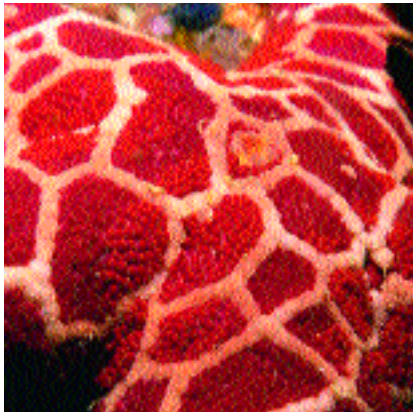
Great Barrier Reef Marine Park

The Great Barrier Reef is one of Australia's best known natural wonders. The Government has placed a high priority on improving its management and protection through the Great Barrier Reef Marine Park Authority.

The Government will:

- add to the Great Barrier Reef Marine Park further areas in the Great Barrier Reef Region which are not yet in the Park;
- increase surveillance and enforcement measures in the Great Barrier Reef;
- implement a policy requiring the use of bycatch reduction devices and turtle excluder devices in the Great Barrier Reef World Heritage Area by 31 March 2000; and
- complete a review of existing protective arrangements to ensure appropriate levels of protection for all habitat types within the Great Barrier Reef World Heritage Area.





Marine Species Protection

Protection of Australia's native fauna and flora, especially our endangered species has been an important commitment of the Government.

The Government will:

- nominate the Great White Shark for international protection;
- within two years, introduce regulations on access to genetic resources in Commonwealth waters;
- ensure that recovery plans for all threatened marine species and communities will be required, even if they do not occur in Commonwealth waters;
- provide for regulations to be made defining specialised criteria for the assessment of the conservation status of marine biota; and
- recognise in legislation for the first time, 'conservation dependent' species and vulnerable ecological communities.

Whales

Australia has been a world leader in the protection of whales. The Government has a strong commitment to protecting whales which it has vigorously pursued.

The Government will:

- nominate for international protection under the Convention on Conservation of Migratory Species of Wild Animals 1979 (the Bonn Convention) all dolphins and porpoises inhabiting Australian waters which meet the relevant criteria;
- strengthen protection for whales by legislating to create the Australian Whale Sanctuary and to ban capture for live display;
- continue to pursue an international ban on commercial whaling; and
- promote the establishment of a South Pacific Whale Sanctuary to complement the Southern Ocean Whale Sanctuary and as an important step towards a Global Whale Sanctuary.

Protection for matters of national environmental significance

The *Environment Protection and Biodiversity Conservation Bill* before Parliament identifies the marine environment as one of a range of matters of national environmental significance. This is consistent with the Council of Australian Governments' Heads of Agreement on Roles and Responsibilities for the Environment.

- With limited exceptions, all actions and decisions which may have a significant impact on Commonwealth marine areas, or which take place within Commonwealth marine areas and may have a significant impact on the environment, will be subject to the environment protection procedures under the new legislation.

The *Environment Protection and Biodiversity Conservation Bill* also provides for strategic assessments of the impacts of actions arising from policies, plans and programmes, allowing for recommendations from the Minister for the Environment and Heritage and subsequent endorsement of the policies, plans and programmes by the Minister.

- The Government will, as appropriate, use strategic environmental assessment as a key mechanism in the development, endorsement and implementation of Regional Marine Plans.

OCEAN USES AND IMPACTS

Progress has been made in developing ecologically sustainable industry sectors which contribute to the economic and social well being of Australia.

In addition to the increased certainty, long-term security and new opportunities for economic growth that will arise as a result of the Regional Marine Planning process, the Government will foster industry-generated development and progress within the sectors.

Fisheries and Aquaculture

Management

Catches in well managed fisheries are sustainable in the long term. Australia's commercial fisheries management is well regarded internationally. The Australian Fisheries Management Authority has the lead in developing co-management arrangements for ecologically sustainable fisheries. However over capacity and excess effort in some fisheries has led to overfishing and a reduction in the viability of fishing operations and marine species populations.

Measures to remove excess capacity from Australian domestic fisheries will continue to be pursued so that fishing effort does not exceed ecologically sustainable levels.

The adoption of self-funded adjustment strategies implemented through a range of economic incentives for those fisheries identified as needing adjustment will be addressed.

The Government will:

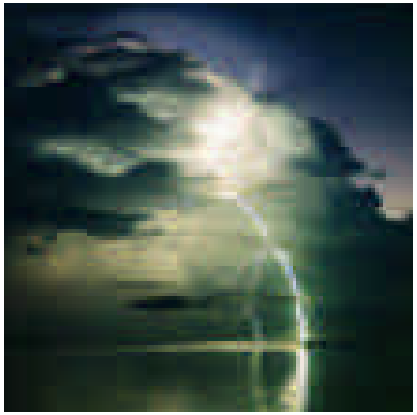
- carry out an industry development programme in 1999 in the southern shark fishery to make the industry more viable while protecting the environment;
- establish a government-industry working group to look at options for an industry development programme in the southeast non-trawl fishery;
- through the Competition Policy Review carry out a comprehensive review of our fisheries laws and regulations by July 1999 to streamline procedures and minimise compliance costs for small businesses; and
- continue the existing cost recovery policy for fisheries and not impose resource rent on the industry.

The Government recognises that recreational, charter and commercial fishing often compete for the same resources. The management of these activities must be integrated to reflect that fact.

- As an important aspect of the ecosystem-based approach, the procedures for integrated regional planning and management will include mechanisms for resolving questions of resource allocation between these fishing sectors.
- The Government will also appoint a gamefishers' representative to the Eastern Tuna and Billfish Fishery Management Advisory Committee.
- The Government will also conduct a $1.8 million National Recreational Fishing Survey to assist in better management of both the recreational and commercial fishing sectors.

Aquaculture has great potential to develop further export markets for high value products and contribute to regional development opportunities.

Site selection, waste management, disease and pest control, and feedstock sourcing are emerging as critical challenges in the industry's long term sustainability. In some cases, the development of aquaculture enterprises has sparked considerable community opposition.



- The Government will continue to support the development of a comprehensive aquaculture industry policy framework, including regulatory guidelines and co-management strategies.

Bycatch

Bycatch reduction is a key area for action by governments and the fishing industry. It is essential to implement an ecosystem-based approach to fisheries management.

- The Government will finalise and implement a Commonwealth Fisheries Bycatch Policy.
- Fundamental to the Bycatch Policy's implementation will be the development of fisheries specific action plans, including the formal incorporation of Bycatch Action Plans in Commonwealth fisheries management arrangements.
- A National Bycatch Policy will also be developed, drawing on the development of the Commonwealth Policy.

The Government recognises the importance of educating the fishing community about environmental issues and the

applicability of bycatch reduction devices. Most fishers recognise their environmental responsibilities and, with the right advice and support, implement environmentally sound fishing practices.

- The Government is providing $700,000 to assist the establishment of a network of fisheries officers which will promote environmentally sound fishing practices. This is in support of a joint initiative by the Australian Seafood Industry Council, Oceanwatch and the Australian Marine Conservation Society.
- The Government will implement the Threat Abatement Plan to reduce the impact of fishing on seabirds.

Environmental impact assessment

There can be significant environmental effects on sea floor communities and on juvenile fish from trawling and scallop dredging. Together with the impacts of overfishing, there is sufficient community concern regarding the sustainability of fisheries to warrant a strategic approach to demonstrating that fisheries will be managed sustainably.

- The Government will undertake strategic environmental impact assessments of all new management plans for Commonwealth fisheries, and, within a five year period, all those fisheries that do not have a management plan. The *Environment Protection and Biodiversity Conservation Bill,* currently before the Parliament, will be the vehicle for this.
- The Government will remove the current blanket exemption of marine species from wildlife export controls to ensure exemptions are available only for marine species harvested in accordance with sustainable and ecologically-based management arrangements.

Offshore petroleum and minerals

Offshore petroleum is a major economic use of Australia's marine environment. The offshore minerals industry is in a very early stage of development with limited knowledge of offshore resources.

Future growth in use of offshore minerals and petroleum will be influenced by the availability of capital for high risk investments and the long lead times to full development.

- Accordingly, the Government will continue to improve petroleum offshore strategies to maintain relevant and effective access to exploration acreage.
- The Government will also improve Australia's international investment attractiveness through continued investment in pre-competitive geoscientific surveys and analysis, and improved access to public exploration data lodged under legislative requirements.
- The Government will spend an additional $33 million over four years to help identify new offshore oil zones in Australia's Exclusive Economic Zone, including the southern continental margin of the Great Australian Bight.

The *Petroleum (Submerged Lands) Act* 1967 is the primary legislation for the administration of Australia's offshore petroleum resources. The Act is over 30 years old and has become complex and unwieldy.

- The Commonwealth Government will rewrite the Act to reduce compliance costs for government and the industry while maintaining a high level of environmental protection.

The industry's environmental record has been exemplary in Australia.

- To help maintain this reputation, the Government is developing objective-based environment protection regulations for the industry.
- To encourage increased cooperation with the offshore petroleum industry in the development of joint approaches for the protection of marine habitats in areas under existing leases, the Government will remove the existing legislative constraint on the establishment of

marine protected areas where there are pre-existing leases, recognising the need for cooperative action without compromising pre-existing rights.

Shipping

Shipbuilding Industry

Australia's commercial shipbuilding industry has emerged from a period of extensive restructuring. It is entrepreneurial, aggressive, innovative and extremely successful in international markets. More than 90% of the industry's output is exported.

- The Commonwealth Government will introduce a new Ships Bounty Scheme and a Shipbuilding Innovation Scheme at a cost of around $68.8 million over four years. The Schemes will lay the basis for many new jobs in shipbuilding and related industries.

National management and regulatory framework

Australia's economy is absolutely dependent on shipping. About 97 per cent of the volume of our trade is carried by ships, with about 95 per cent of that carried by foreign flagged vessels.

- The Government will continue to promote shipping, waterfront and regulatory reforms to ensure that access to efficient and competitive shipping services is maintained.

Our international economic competitiveness requires that we be in step with international approaches to shipping regulation. At the same time our marine environment is relatively unpolluted in comparison with many of our trading partners and so it is more vulnerable to pollution.

- For this reason Australia will continue to take a leadership role in the International Maritime Organization (IMO) to develop and promote a strong international regulatory framework for ship safety and the prevention of pollution.

Ballast water

Ballast water is a major source of harmful marine pests. As a consequence of lack of effective ballast water treatment and testing techniques, and the current voluntary code of national and international ballast water control, Australia is exposed to a high risk of further devastating pest introductions.

To address ballast water effectively, Australia requires a single national management regime that applies to both Commonwealth and State waters

- The Government will support the Australian Quarantine Inspection Service (AQIS) in developing a single national management regime for ballast water
- AQIS will accelerate the development of decision support systems for the management of ballast water and associated treatment and testing techniques to minimise marine pest incursions.

Marine pests incursion management

In recent years there has been growing concern over the potentially devastating impacts of aquatic pests and the lack of a nationally coordinated response capability to address aquatic pest outbreaks. At least 170 species of exotic marine organisms have been translocated into Australian waters.

While an interim ready response capability is being developed with funding from the *Coasts and Clean Seas* initiative, a more durable nationally coordinated and fully functional incursion response system for marine pests is required.

- The Government will provide funding

to assist in the establishment of a comprehensive introduced marine pest incursion management system to minimise potential damage to both the environment and marine industries. This system will be developed in cooperation with the States and Territory Governments through the Australian and New Zealand Environment and Conservation Council.

Tributyltin (TBT) Anti-Fouling Paint

TBT is a highly toxic biocide used in the shipping industry to prevent marine organisms attaching themselves to ship's hulls.

There has been increasing international pressure to phase out the use of toxic organotin compounds in antifouling paints.

- The Government will support the International Maritime Organization and will:
  - promote the introduction of a global ban on TBT; and
  - ban the use of TBT by 2006 on vessels being repainted in Australian docks unless the IMO sets an earlier date for such a ban, in which case Australia will ensure it complies with any such arrangement, noting Defence operational requirements.

MARINE POLLUTION

Marine and Estuarine Water Quality Standards

The decline in marine and estuarine water quality is regarded as one of the most serious threats to Australia's marine and coastal environments. The management of marine and estuarine water quality should be part of the integrated planning and management of our marine resources, including the maintenance of environmental and natural resource values.

The joint Commonwealth-State-Territory National Environment Protection Council (NEPC) has been considering the development of a National Environment Protection Measure (NEPM) for ambient marine and estuarine water quality. This could include mandatory standards, goals, guidelines and protocols. States and Territories would implement the NEPM within the context of their own regulatory and management approaches.

The Government believes that a NEPM for marine and estuarine water quality should be developed as a matter of priority. The community has a right to expect that nationally consistent bacterial standards for ambient water quality will be developed and applied for their protection when they come into contact with estuarine and marine waters areas which are used for recreation.

- The Government will support the development of national marine and estuarine water quality standards through the National Environment Protection Council.

Improving treatment of sewage and stormwater

We are an urban nation with our full share of environmental problems. Urbanisation in Australia and population growth pose challenges that need to be managed by governments and the community if we are to maintain our quality of life.

Sewage and stormwater pollution of Australia's beaches and coastlines, particularly near urban centres, is of concern to all Australians.

Effective protection of our marine waters will involve attacking the problem of sewage and stormwater at source as well as taking regulatory and ameliorative measures.

For the first time, the Commonwealth is making a substantial financial contribution to improve the treatment of sewage and stormwater through the $125 million *Coasts and Cleans Seas* initiatives.

- The Government will continue to provide support for such improvements through *Coasts and Cleans Seas*.

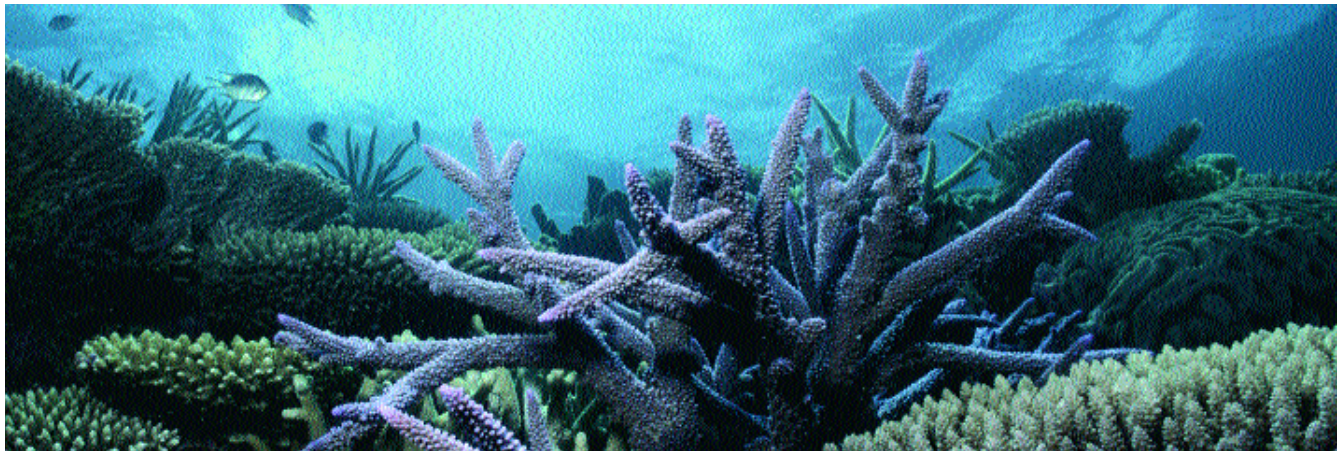
Acid sulfate soils rehabilitation

Extensive agricultural, residential and tourism development activities along the coastal strip have led to disturbance and increased exposure of acid sulfate soils. This has resulting in a reduction in inshore water quality, habitat degradation and loss of biodiversity.

- The Government will work with the States to develop and finalise the action plan for the implementation of the National Strategy on Acid Sulfate Soils.
- The Government will provide financial support for demonstration projects to illustrate the options available to the community and governments in handling areas which are prone to acid sulfate soil problems that result in damage to coastal marine resources.

MARINE TOURISM

Australia's tourism industry relies heavily on our extensive and diverse coastline and marine environments for its international competitiveness. The industry also has an important role in the stewardship of many unique and fragile environmental and tourism resources.



Over the next decade the industry is likely to continue its growth, generating substantial export earnings and employment opportunities.

The implementation of the Regional Marine Planning process will assist the industry in planning and managing its expansion. It will also enhance security of access to high quality environmental resources while ensuring that their environmental values are not degraded.

The Government will:

- continue to promote the development of an environmentally sustainable tourism industry;
- assist and encourage the industry with research directed towards maintaining and enhancing the natural environment; and
- continue to ensure that, within the context of precautionary management and the priority of protecting world heritage values, access and capacity limitations on tourist operators in World Heritage Areas are in accordance with management plans and that operators have the level of certainty and tenure required to develop operations of high environmental quality.

The Government recognises the vital importance of the promotion of Australia to overseas markets. New areas to be targeted will include adventure travel and cruise shipping.

The Government has recognised the importance of encouraging a wider dispersal of tourism around Australia. The economic benefits of spreading tourism beyond the major gateways are considerable and there is significant potential for growth in many regions, including those on the coast.

- The Government is considering increased funding for regional tourism by expanding the Regional Tourism Program. Much of the Program will be directed towards 'hard' infrastructure such as interpretive centres and 'soft' infrastructure such as skills development and training.

National moorings programme

Damage from boat anchors and inappropriately designed moorings is a serious environmental issue in popular marine and coastal areas. Corals and seagrasses, which are already at risk from a variety of threats, are particularly vulnerable.

- The Government will provide funding to establish well-designed moorings in particularly sensitive areas.

COMMUNITY PARTICIPATION

Community participation is a key to promoting and instituting a duty of care for the marine environment.

National Oceans Forum

- The Government will hold a National Oceans Forum in 1999 to promote the implementation of *Australia's Oceans Policy*. A broad national cross-section of those with a stake in the management of our oceans will participate. The Forum will have the opportunity to meet with members of the National Oceans Ministerial Board.

Community Networks

Community involvement in coastal and marine management has been enhanced through Coastcare and fisheries extension programmes and the Marine and Coastal Community Network, which operate in both urban and regional centres.

- The Government will continue to support the community's involvement in coastal and marine management by maintaining funding for the Marine and Coastal Community Network and support for Coastcare and other facilitators.

Aboriginal and Torres Strait Islander communities

The social, cultural and economic relationships that many Aboriginal and Torres Strait Islander communities have with the ocean environment means they have established interests in the use, conservation and management of Australia's oceans.

The Government will ensure that where there are specific Aboriginal and Torres Strait issues under discussion, the Minister responsible is able to carry those to the National Oceans Ministerial Board. The Government will also :

- provide for Aboriginal and Torres Strait Islander representation on the National Oceans Advisory Group and on Regional Marine Plan Steering Committees;
- provide for Aboriginal and Torres Strait Islander participation at the National Oceans Forum; and
- consult with peak indigenous groups on the requirements for establishing a national consultative mechanism, such as an annual forum.

In the context of developing integrated ocean planning and management processes, the Government will seek to ensure that:

- traditional conservation and use practices are valued;
- that the reliance by many coastal indigenous communities on marine resources is treated as an important ocean use; and
- that indigenous communities are given every opportunity to take up commercial activities related to the oceans.

The Government will continue to work with indigenous communities to establish indigenous protected areas and to support Aboriginal and Torres Strait Islander training and employment in jointly managed parks.

UNDERSTANDING THE OCEANS

Australia's Oceans Policy, the *Marine Science and Technology Plan* and the *Marine Industry Development Strategy* highlight the need for greater knowledge and scientific understanding of marine ecosystems and resources to underpin their conservation and sustainable use.

- The Government will assist in the establishment of a new marine science research and teaching centre at Coffs Harbour.

Marine research needs to be well coordinated to make the most effective use of the available resources. Stronger linkages between scientists, industry and environmental managers in setting priorities and goals for marine science is critical to integrated ocean planning and management.

- The National Oceans Ministerial Board will consider Government priorities for publicly funded marine research related to the implementation of the Oceans Policy. A major driver of these priorities will be the development and implementation of Regional Marine Plans.
- The National Oceans Office will provide advice to the Ministerial Board on marine research priorities relevant to the Oceans Policy and ensure that the marine research agencies are kept informed of the Government's emerging priorities.

Knowledge of the natural variability of the oceans is essential for many marine activities, from ship routing to recreation. The most well known of these is the El Niño-Southern Oscillation effect. Such knowledge is also essential to our understanding of the major global changes which influence our environment, economy, cultural and social fabric. The development, implementation and review of Regional Marine Plans will also require a sound understanding of ocean systems.

- The Government will promote and support the Australian, Pacific and Global Oceans Observing Systems as mechanisms to develop the oceans-related data capture and exchange necessary for improving prediction and management.
- The Government will support the establishment and operation of a Regional Office of the International Oceanographic Commission in Perth, Western Australia.

PROTECTING THE NATIONAL INTERESTS

Regional development of Oceans Policy

Given the dynamic nature of the marine environment, effective implementation of the Oceans Policy requires cooperation with our immediate neighbours and other countries in our region.

- The Government will cooperate with our maritime neighbours to address transboundary impacts and improve regional cooperation on ocean issues such as pollution prevention, fisheries management and marine protected areas.
- Recognising the direct interactions that will be required with New Zealand on a range of oceans management issues in the Tasman Sea and Southern Ocean, the Government proposes to work with New Zealand to:
  - develop, through ANZECC, a trans-Tasman understanding on oceans plannning and management; and
  - examine with the New Zealand Government a possible role in the development of the Regional Marine Plan for the southeastern region of Australia's EEZ in relation to issues of joint interest.

Surveillance and enforcement

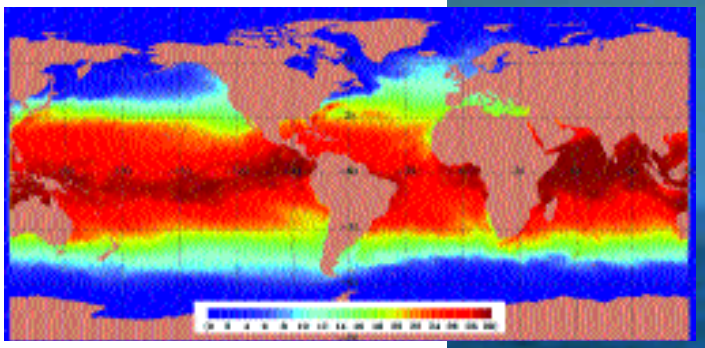
Effective surveillance and enforcement within Australia's marine jurisdiction is fundamental to protecting our national interests and the Government will continue its assertion of our sovereign interests in this area.

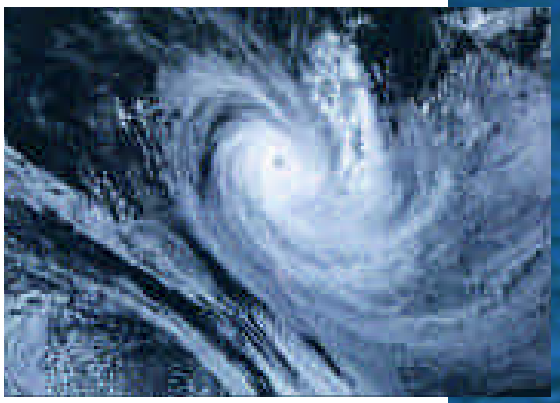
- The Government will provide increased support for the established civil patrols in our sub-Antarctic waters to deter illegal fishing.
- The Government will employ more fisheries officers to make sure the increased emphasis on the sub-Antarctic does not affect our ability to police illegal fishing off northern Australia.
- The Government will amend the fisheries laws to make surveillance and enforcement of foreign fishing more effective.
- The Government will continue its multilateral and bilateral activities to reduce incursions into Australian waters.
- The Government will also examine complementary actions and possible alternatives to traditional surveillance and enforcement such as trade certification and restriction for fisheries resources.

ASSESSING EFFECTIVENESS

Performance assessment is an integral part of the Policy to ensure that the identified strategic directions and specific actions contribute effectively towards the achievement of the Policy's goals.

- An initial review of progress in implementation of the Policy will be undertaken within two years.
- Comprehensive reviews of the effectiveness of the Policy will be undertaken at least every five years.





Ocean processes occur across national and international boundaries and jurisdictions and many marine species are highly mobile or migratory. We need to improve our understanding of the effects of ocean processes on our weather, climate, marine biological diversity and primary production.

MARINE SCIENCE AND TECHNOLOGY AND MARINE INDUSTRIES

The *Marine Industry Development Strategy* and the *Marine Science and Technology Plan* are key elements of the conservation and resource development focus of *Australia's Oceans Policy*. They identify priorities for scientific, technological and industrial development to increase the national capacity to care for, understand and use our marine resources wisely.

The Strategy and the Plan are also characterised by a long-term perspective, with flexibility to respond to changes in priorities for marine industry development and marine science and technology. This will help maintain a consistent connection between the Strategy, the Plan and Australia's Oceans Policy.

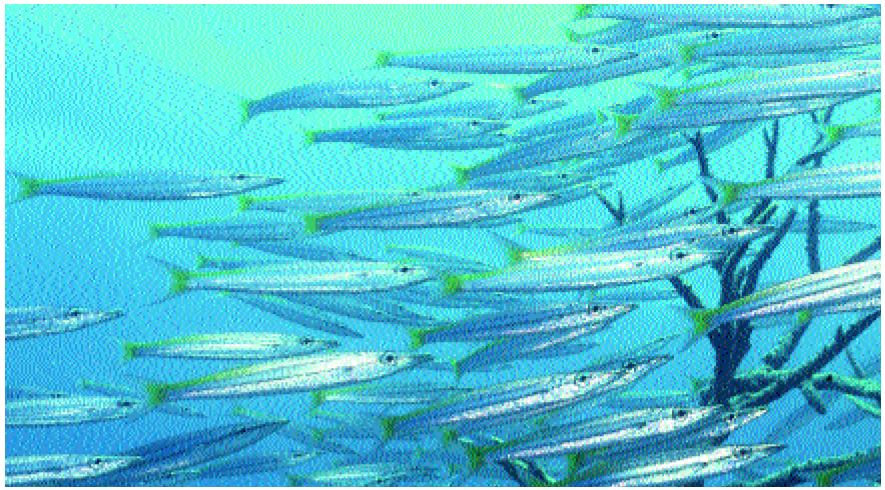
THE MARINE SCIENCE AND TECHNOLOGY PLAN

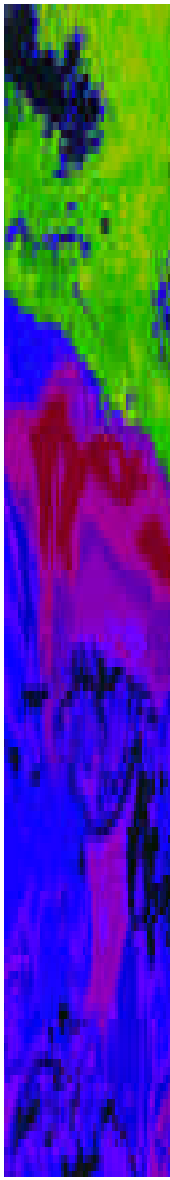
The *Marine Science and Technology Plan* is designed to improve knowledge of Australia's marine jurisdictions. Under the broad umbrella of the Oceans Policy, the Plan will address existing and emerging priorities for marine science, technology and engineering at a national scale.

The Plan will encompass all the marine science, technology and engineering programmes currently in operation in Commonwealth Government departments and agencies, and other relevant bodies. It will provide a framework for the development of our capabilities in these fields during the next ten to fifteen years.

Three priority areas have been identified for the Plan. These are to:

- characterise and improve our understanding of the coastal zone, Australia's marine jurisdictions and the adjacent oceans, the oceans' interaction with the atmosphere, their biological resources and ecological systems, and their underlying geological features;
- provide the scientific, technological and engineering basis for the ecologically sustainable use and management of Australia's marine jurisdictions and their resources; and
- provide the physical infrastructure, appropriate skills base and information support for Australian marine science, technology and engineering; and coordinate the management of national programmes in marine science, technology and engineering.





MARINE INDUSTRY DEVELOPMENT STRATEGY

The Commonwealth Government has endorsed the *Marine Industry Development Strategy*. It reinforces the Oceans Policy's approach of a comprehensive and long-term framework for growth in our marine industries. To achieve this growth the industries must be internationally competitive and ecologically sustainable.

In keeping with *Australia's Oceans Policy*, the Strategy emphasises cross-sectoral features that are often not adequately considered by the existing sector-based management approaches. The Strategy also endorses a coordinated approach to marine development that fully accommodates the multiple use of ocean resources.

The Strategy's recommendations are aligned closely with the Commonwealth Government's business improvement agenda, which includes improved regulatory arrangements. Recommendations to foster marine industry development include:

- a review of government marine policy and related decision-making processes;
- development of consistent legislation to define and apply the principles of ecologically sustainable development;
- collection of basic data for marine industry development and environmental management; and
- implementation of objective-based regulations.

Initiatives will be undertaken by the Commonwealth Government in consultation with State and Territory Governments. These include:

- facilitating the development of marine industry associations and networks to strengthen the representative capacity of marine industries;
- working with industry to raise the community's awareness of marine industries, their economic contribution, and issues affecting their ecologically sustainable development; and to provide channels for community views and aspirations on maintenance of natural resources; and
- pursuing the Strategy for the Development of a National Marine Data Programme based on the work of the Marine Data Group and its networks and developed in the context of the *Marine Science and Technology Plan.*

For references and further details see *Marine Industry Development Strategy 1997* and *Marine Science and Technology Plan* (to be released in 1999).

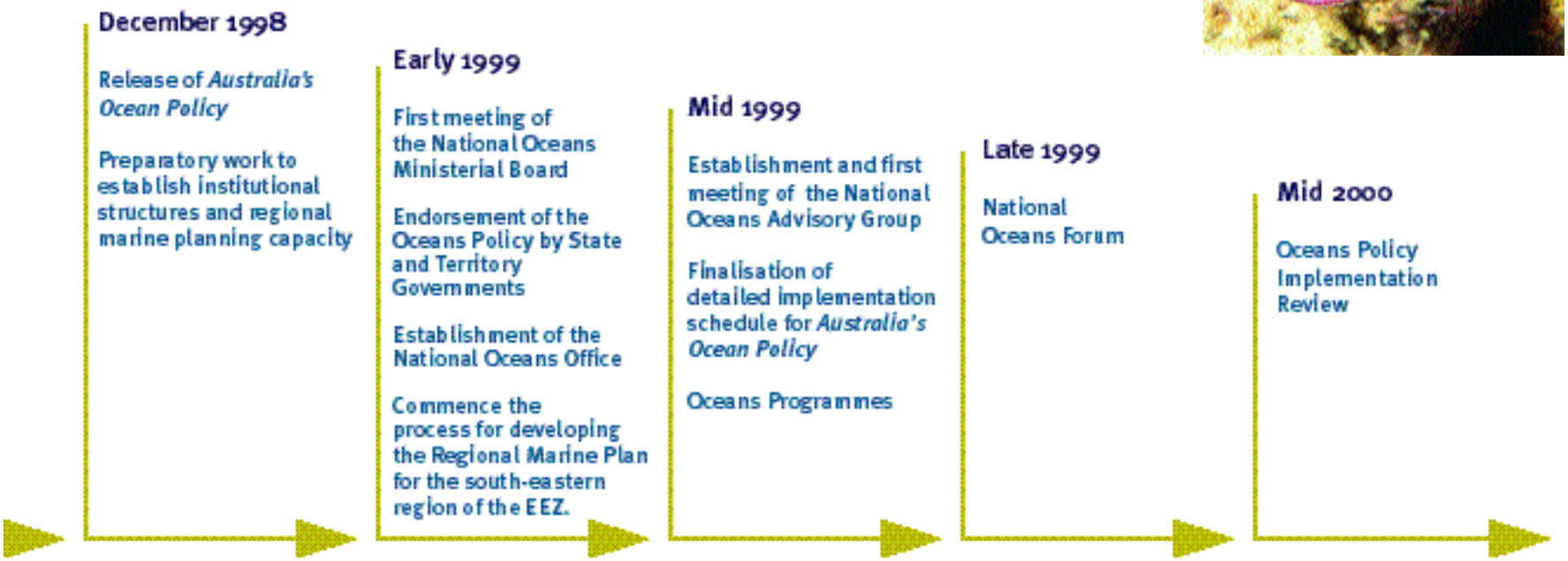
AUSTRALIA'S OCEANS POLICY - *next steps*

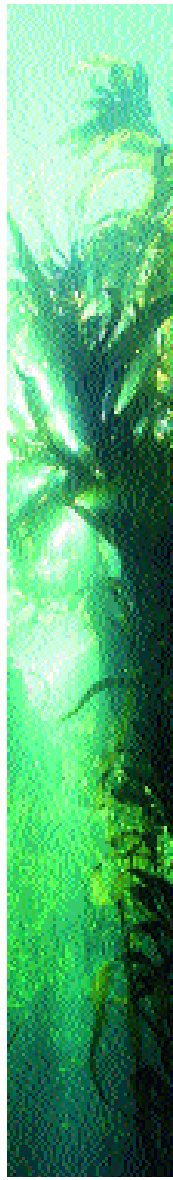
Following release of the Policy, the Government will establish the institutional structures outlined in Section 3. The National Oceans Office will finalise a detailed and auditable implementation schedule addressing jurisdictional and sectoral responsibilities and a timetable for implementation.

The Government will continue its consultations with the State and Territory Governments with a view to the early and full endorsement of *Australia's Oceans Policy.*

A regional marine planning framework will be established with the first Regional Marine Plan to address the south-eastern region of Australia's EEZ.

The following illustration indicates key milestones for the effective implementation of *Australia's Oceans Policy.*





APPENDICES

APPENDIX 1

POLICY GUIDANCE FOR OCEANS PLANNING AND MANAGEMENT

The following policy statements are intended to help apply the principles for ecologically sustainable ocean use when developing and implementing planning and management arrangements for Australia's oceans. They are also intended, in association with more specific national and regional objectives, to provide the basis for reporting and performance assessment in the implementation of *Australia's Oceans Policy.*

Maintenance of ecosystem integrity

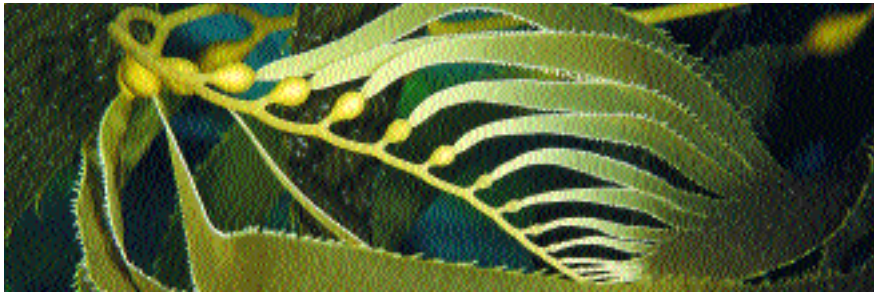
- The ecological links between the land and oceans, as well as within and between ocean ecosystems, must be taken into account in ocean planning and management.
- Maintenance of natural ecosystem structure and function should be used to develop agreed objectives and indicators for ecosystems and resource uses, on the basis of the best available information available on assessment of:
  - natural levels of temporal and spatial variability and the sensitivity or resilience of the ecosystems likely to be affected by proposed uses;
  - the extent and levels of change in ecosystem components or impacts on ecosystem integrity likely to arise from proposed uses and other impacts, singly and in unison;
  - levels of induced change considered acceptable;
  - levels of change in ecosystem characteristics considered incompatible with maintenance of ecosystem health or recovery within a reasonable period; and
  - gaps or uncertainty in information on resources, uses or ecosystem processes and the capacity to monitor, detect and assess change in indicators of ecosystem health.

Integrated oceans planning and management for multiple ocean use

- The economic, environmental, social and cultural values of ocean resources should be assessed, as should the impacts of proposed uses on those values, before resource allocation decisions are made.
- Ocean resources should be allocated to the mix of uses within a planning area that offers the greatest long-term community benefits (taking economic, environmental, social and cultural values into account) compatible with maintaining ecosystem health.
- Direct, indirect and cumulative adverse impacts of resource use should be minimised:
  - uses that may diminish the value of an area or resource for subsequent uses require careful assessment of long-term costs and benefits and of alternative uses.
- Multiple uses of the same ocean resource should be considered jointly so that their overall impacts on the oceans, and the impacts they have on each other, can be understood.
- Resource use activities should be assessed within a planning framework which considers impacts on ecosystems, against management goals, and through an objective, transparent and open analysis of risk, costs and benefits.
- Where good management suggests that uses of particular areas should be restricted, primarily for a single purpose or for a specific set of purposes, access for resource users with different interests may be managed through zoning on the basis of area and/or time.
- Multiple use planning and management of the oceans should incorporate, as a central component, a comprehensive, adequate and representative national system of marine protected areas.

Promotion of ecologically sustainable marine-based industries

- Healthy marine ecosystems are essential for the long term productivity of marine industries.
- Planning and management for ocean use should explicitly include the development of sustainable, internationally competitive marine industries that contribute to national economic growth, employment and regional development.
- Allocation of ocean resources under existing sectoral management regimes should provide for integrated ocean use and should:
  - support industry efforts to generate wealth through growth, innovation and value enhancement;
  - encourage industry in promoting its international competitiveness and international trade and investment opportunities; and
  - encourage continuous improvements in environmental management and cleaner production strategies.



- Governments and industry should cooperate to ensure cost-effective access to high-quality information about resources, environmental baseline and monitoring information required for managing existing industries, and for identification of new opportunities.
- Unnecessary regulatory impediments to the development of ecologically sustainable marine industries should be removed. This can be achieved by:
  - simplifying and streamlining regulatory frameworks, including removing unnecessary regulations;
  - improving valuation and pricing of resource access and government services; and
  - managing uncertainties in resource access, use and allocation processes, for example, by creating tradeable rights, where compatible with maintaining the productivity and health of marine ecosystems and other community equity considerations.

Governance

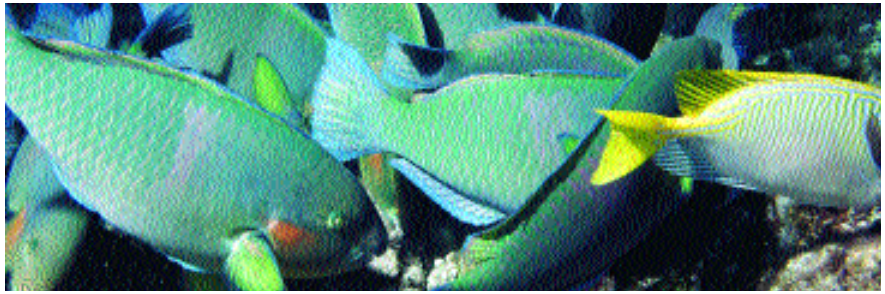
- The distribution of roles and responsibilities between the Commonwealth, States, Territories and local government should be consistent with the Intergovernmental Agreement on the Environment and the outcome of the Council of Australian Governments' review of roles and responsibilities for the environment.
- Partnerships between governments, industry and the community should be a major component of institutional arrangements for assessing, planning and managing ocean resources:
  - recognising coastal and marine policies and strategies in place or being developed by Commonwealth, State and Territory Governments; and
  - recognising the responsibilities carried by governments to develop and implement policies for community benefit and in the national interest
- Planning and management arrangements should incorporate a duty of care towards the health of our oceans on the part of individuals and corporate and government bodies.
- To the extent possible, the regulatory framework for ocean use should:
  - be outcome or objective based, and provide incentives for improved performance;
  - not impose unnecessary costs or regulatory burdens on users and managers;
  - be consistent across jurisdictional boundaries where they impact on the same oceans resource;
  - be developed cooperatively with community and industry;
  - use market based approaches where they are able to address adequately the full range of economic, environmental and community values; and
  - be consistent with internationally agreed measures.
- Institutional arrangements and decision making processes for the oceans should enable conciliation and dispute resolution. However, such arrangements will not fetter governments from carrying out their responsibilities to the Australian people.
- The Commonwealth Government will continue to involve State and Territory Governments in considering existing and new international treaties relating to the marine environment, particularly where they may affect State or Territory interests.

Managing for uncertainty

- Planning and management for use of ocean resources, particularly the living marine resources, must be able to accommodate considerable uncertainty. Regimes should be adaptive and:
  - be able to accommodate uncertainty in the accuracy of assessments of resources and of risks and the variability and unpredicability of the marine environment;
  - allow for changes in resource values and improvements in technology and information that may alter risk assessments and provide new opportunities for resource use; and
  - be capable of rapid responses to assessment of adverse impacts; this includes reducing or ceasing resource use to assure an acceptable rate of recovery or remediation of ecosystem health.

Application of the precautionary principle

- If the potential impact of an action is uncertain, priority should be given to maintaining ecosystem health and productivity.
- Incomplete information on possible impacts should not be used as a reason for postponing precautionary measures intended to reduce or avoid unacceptable levels of change or to prevent serious or irreversible environmental degradation of the oceans.
- In the application of the precautionary approach, public and private decisions should be guided by:
  - careful evaluation to ensure that changes arising from a use or uses remain within limits considered acceptable, to avoid, wherever practicable, serious or irreversible damage to the environment; and



  - assessment of the risk-weighted consequences of various options.
- If there is a risk of serious and irreversible environmental damage resulting from an ocean use, that use should be permitted only if the damage can be mitigated, or it is limited in its extent, and there is an overriding net community benefit from the use:
  - the higher the risk of unacceptable levels of change or of serious or irreversible environmental damage, the more conservative should be the measures required to reduce that risk.
- Ocean users carry a responsibility to assure the ecological sustainability of their operations and an obligation to identify and implement precautionary measures.

User-pays and other economic instruments

- Charges for access to ocean resources should reflect the community interest and short- and long-term economic, environmental, social, and cultural costs and benefits.
- Where it is not possible to quantify these costs and benefits, their existence and relative importance should be taken into account in setting charges.
- Risk of losing ecosystem health and productivity should be presumed to have a high cost to the community.
- Access to common ocean resources for private profit should be priced to give a reasonable rate of return to the community, where consistent with government resources policies.
- Public-funding principles should apply for services provided for the public good.
- Unless there is an overriding public interest, the costs of commercial development potentially impacting on the oceans — including infrastructure, environmental management, monitoring and remediation, and the costs of managing natural hazards — should be borne by development proponents.
- Those who generate and release wastes into the ocean should bear the costs of containment, avoidance, abatement, or remediation to the level of best practice.
- Approvals for resource use proposals should be contingent on the proponents having in place credible arrangements for bearing these costs.
- Pollution which results in loss of amenity or diminished value of the oceans resource to other users is a form of resource use and, while it continues, should be costed accordingly.

Reporting, monitoring and assessment

- Ocean planning and management should include the development of outcome-based performance indicators and performance assessment procedures.
- Use of ocean resources should be monitored to ensure that estimates of impacts are accurate. If assessments of impacts differ significantly from forecasts, management procedures should allow for the initiation of remedial action, including reviews of resource allocation.
- Monitoring and assessment programmes should be structured so that they provide sufficient statistical power for detection of potential impacts, including design for replication and appropriate control or reference areas. Such programmes should be subject to public and independent peer review.
- Ocean conditions should be monitored to underpin improved understanding and decision making and to detect variability and long-term change. Effective linkages with national and international ocean monitoring programmes should be maintained.
- Ocean managers should have access to data which are essential for good oceans management.
- Access to and use of ocean resources carry with them a responsibility for users to provide information in the form and at the level of detail required for good management.
- Ocean managers have complementary responsibilities:
  - to communicate clearly what information is required and the form in which it is to be provided;
  - to recognise and minimise the transaction costs of requiring information from resource users; and
  - to provide feedback on the use made of the information and its management value.
- Monitoring of the performance of management agencies should be open and transparent, with the results made publicly available.

Duty of care and stewardship

- Australian governments, marine industries, communities and individuals should acknowledge and apply a duty of care in use of Australia's ocean resources. A collective sense of stewardship is a critical element in sharing the responsibility for these assets across all sectors.

Interests and responsibilities of indigenous peoples

- The cultural interests and traditional knowledge and management practices of Aboriginal and Torres Strait Islander peoples should be recognised and incorporated in ocean planning and management and related policy development.
- Local communities should be encouraged to participate in local industries and in management strategies and to continue to share responsibility for the management of ocean resources.

Broader community participation

- Effective public participation in ocean planning and management requires that:
  - the public should have access to sufficient information about current ocean resource uses, proposals and alternative uses and their impacts;
  - the public should have sufficient opportunities for informed community contributions to decisions and management; and
  - there is a clear understanding of the responsibilities of governments for planning and management in meeting community and national interests.
- Ocean management decisions and how they are made should be open for public scrutiny.
- Local communities and local industries should be encouraged to participate in planning and management strategies and share responsibility for the management of ocean resources.

Regional and global responsibilities

- Australia's obligations in relation to the oceans under conventions, agreements and arrangements to which it is party must be acquitted in the assessment, allocation and management of ocean resources:
  - including commitments relating to peaceful use of the oceans and cooperation in access for national and international scientific research and monitoring programmes.
- Government and industry should cooperate internationally to incorporate the full environmental costs associated with ocean related production.
  - multilateral development and implementation of market-based measures to protect the health of our oceans is an important strategy for maintaining the international competitiveness of our marine industries while promoting global environmental protection.
- International trans-boundary resources should be allocated and conserved in a fair and equitable way, placing a premium on the peaceful settlement of any differences regarding their use.
- Australia should provide leadership regionally and internationally in the management of our oceans, recognising the possibility that national activities may have effects on the marine jurisdictions of neighbouring countries.

APPENDIX 2

THE LEGAL AND CONSTITUTIONAL FRAMEWORK OF AUSTRALIA'S MARINE AREAS

Maritime zones

Consistent with the provisions of international law, Australia has declared a range of maritime zones under the *Seas and Submerged Lands Act 1973*. The outer limits of all of these zones are measured from the territorial sea baseline, located for the most part at the low-water line along the coast. However, it also consists of bay and river closing lines and some straight baselines between the mainland and adjacent islands and across parts of the coast that are deeply indented.

The zones, which are measured both from mainland Australia and from islands forming part of Australia, including the external Territories, are as follows:

The territorial sea - The outer limit of the territorial sea is 12 nautical miles (nm) seaward of the baseline. Australia has sovereignty over the territorial waters. It may therefore impose comprehensive controls in this area, with the one major exception that it must respect the right of innocent passage of foreign vessels.

The contiguous zone - This is the area between 12 nautical miles and 24 nautical miles seaward of the baseline. In the contiguous zone, Australia can take limited enforcement measures in relation to customs, fiscal, sanitary and immigration matters.

The Exclusive Economic Zone (EEZ) - This is the area between the lines 12 nautical miles and 200 nautical miles seaward of the territorial sea baselines. In this area Australia has the right to explore and exploit living and non-living resources, and the concomitant obligation to protect and conserve the marine environment.

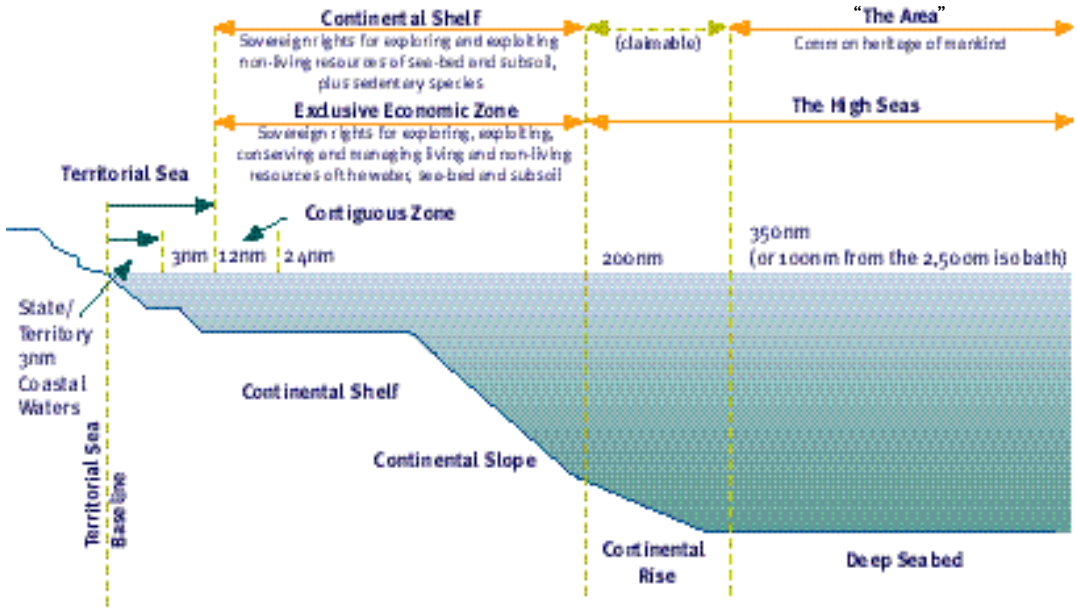
The continental shelf - The area between 12 nautical miles and 200 nautical miles seaward of the territorial sea baseline (that is, it covers much of the same area as the EEZ) and any areas of physical continental shelf beyond 200 nautical miles. Australia has the right to explore and exploit the living and non-living resources of the shelf. A diagram of our maritime zones is adjacent.

An Australian Fishing Zone (AFZ) was declared in 1979 and is now under the *Fisheries Management Act* 1991. The zone is the area of waters between 3 nautical miles and 200 nautical miles seaward of the baselines. Waters off the Australian Antarctic Territory were excepted from the AFZ in 1979 for foreign national and vessels. These waters are regulated in accordance with the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR).

The Offshore Constitutional Settlement

In the early 1970s the States challenged the Commonwealth's assertion of sovereignty under the *Seas and Submerged Lands Act 1973* over the then three nautical mile territorial sea. The High Court upheld the Commonwealth's assertion of sovereignty in the Seas and Submerged Lands Case. The Commonwealth and the States subsequently came to a series of arrange-

Australia's Maritime Zones



ments collectively known as the Offshore Constitutional Settlement (the OCS). The purpose of the OCS was to give the States a greater legal and administrative role in offshore areas. The principle legislation implementing the OCS (*Coastal Water States, Power and Title Act* 1982) entered into force in February 1983.

There are two fundamental elements underpinning the OCS arrangements. First, the States and the Northern Territory were given title to an area called 'coastal waters' consisting of all waters landward of the three nautical mile limit but not including internal waters that are within the constitutional limits of a State; for example, Sydney Harbour. Second, the States and the Northern Territory were given concurrent legislative power over coastal waters; that is, they were given the same power to legislate over coastal waters as they would have over their land territory. The legislation implementing the OCS made it clear that should the territorial sea subsequently be extended from three nautical miles to 12 nautical miles the OCS arrangements would continue to apply only to the three nautical miles limit. In 1990 the territorial sea was extended to the 12 nautical miles limit, but the relevant limit for the purposes of the OCS remains at the three nautical miles.

In effect, through the OCS, the Commonwealth agreed to give the States primary responsibility over coastal waters (out to 3 nautical miles). Beyond that the Commonwealth retains primary responsibility. The OCS also included a number of cooperative arrangements for the management of resources offshore, such as fisheries and petroleum. These cooperative arrangements are reflected in the relevant Commonwealth, State and Northern Territory legislation.

Examples of such arrangements are those entered into under the *Fisheries Management Act* 1991 to enable a fishery both within and outside State coastal waters to be managed by one authority (State or Commonwealth) under one law (State or Commonwealth).

Constitutional power

A range of constitutional powers enable the Commonwealth Parliament to pass laws relating to the oceans and their management. These include: Commonwealth powers over trade and commerce, external affairs, corporations, defence, fisheries, territories and quarantine. A number of aspects of the external affairs power are relevant, but principally that aspect that allows the Commonwealth to legislate with respect to matters physically external to Australia—that is, beyond low water mark. The Commonwealth can also legislate under the external affairs power to give effect to treaties, matters of international concern and matters affecting Australia's relations with other countries.

As noted, the States and the Northern Territory were given power to legislate over coastal waters as part of the OCS. After implementation of the OCS in 1983, however, the High Court held that the general power of each State to make laws for the 'peace, order and good government' of the State enables each State to legislate in relation to its adjacent maritime area, provided there exists a reasonable connection between the State and the activity covered by the legislation. This means that the extension of State legislative powers to coastal waters as part of the OCS is now largely redundant.

The OCS does not prevent either the Commonwealth or the States from exercising their full legislative powers in the offshore area. However, the practice largely has been to exercise those powers in a manner consistent with the OCS. Nevertheless, if there is a conflict between State and Commonwealth laws applying to the maritime area then, in accordance with section 109 of the Constitution, the Commonwealth law would prevail. The State law would be invalid to the extent of the inconsistency.

APPENDIX 3

WHAT IS ECOSYSTEM INTEGRITY?

Fully-functioning natural ecosystems are significant community assets, providing a range of essential environmental services and other direct benefits that can be sustainable in the long-term.

- All ecosystems, including ocean ecosystems, vary in space and time. They are naturally in a state of constant flux within limits or trends that under natural conditions are characteristic of each system.
- Information on ocean ecosystem structure and function is, and will continue to be, incomplete. There is uncertainty and unpredictability about the processes, the limits to natural variability, and the effects of induced changes that require a conservative and precautionary approach to resource development.
- All human uses of the oceans result in change in ocean ecosystems and there are direct and indirect impacts from a range of land-based activities. Such changes may be relatively small or transient when compared with natural levels of variability, or they may be marked, persistent or irreversible.

Deciding on acceptable levels of change requires an open, objective and scientifically credible process for determining ecosystem characteristics, indicators of change and assessment of the associated risks to continued ecosystem structure, functioning and evolutionary potential. The same considerations apply to assessments of other direct and indirect impacts, costs and benefits.

A range of indicators of ecological structure (such as species richness, composition and trophic organisation, and habitat status), function (such as primary production, energy and material flows) and information on natural and induced levels of variability, can be used as reference points in assessing the state of an ocean ecosystem. Ecosystem integrity is regarded as being maintained when the selected indicators remain within limits that are agreed as likely to avoid a significant risk of progressive or irreversible change or decline. There are thus several main elements in decisions about the maintenance of ecosystem integrity:

- establishing what the ecosystem characteristics are, and broadly what our objectives are for those ecosystems;
- understanding the scale and levels of natural variability and cyclic and long-term trends in ecosystem characteristics or components;
- selection and testing of a robust set of indicators of those characteristics;
- assessing the levels of change attributable to direct and indirect effects of resource use, singly or in combination; and
- deciding on the level of change considered acceptable, the criteria for determining the level of change, and agreement on implemention of appropriate corrective measures if those limits are exceeded.

Some ocean resource uses result in significant changes in ecosystem components. They can result in the establishment of extensively modified habitats, in which new cycles and levels of ecosystem functions become established. While such changes may sometimes be reversed relatively quickly, in other cases recovery may take a long time, and require the re-establishment of slow-growing ecosystem components or of key system processes.

As an example, achieving the maximum ecologically sustainable harvests in a fishery necessarily results in significant changes in abundance, age structure and other characteristics of target stocks and some associated species. Achieving acceptable levels of harvest requires an informed and open basis for assessing environmental, economic, social and cultural costs and benefits. It also requires making decisions on the balance points for industry and fisheries management objectives, ecosystem structure and functioning and other community aspirations for fisheries and other resource uses in the area.

MULTIPLE OCEAN USES

Planning and management for multiple ocean uses involves the integrated allocation of resource access and use to reach an acceptable balance of outcomes. It must take into account the full range of uses, users and values, while ensuring that the integrity of ecosystems is maintained. It includes consideration, before resource allocation decisions are made, of uses which can occur in much the same area at the same time, and those which require separation in space or in time, with the objective of retaining the greatest number of possible options for the future.

Management must also be adaptive, able to respond to indications of adverse change in the environment, changes in social, cultural and economic values, and changes in understanding and technology.

Before decisions are made about allocation of ocean resources, a number of factors need to be taken into account:

- objective assessments of the resources and values of an area and potential impacts from proposed uses;
- the value and impacts of alternative uses;
- the levels of compatibility amongst potential uses of the resources of an area and the potential for maximising the benefits or value to the community by encouraging multiple uses of the resources, either at the same time or sequentially; and
- identification of means of detecting undesirable environmental outcomes and actions to be taken to avoid or mitigate adverse impacts.

Planning and management for multiple uses should ensure that decisions about resource access or use and the allocation of benefits are equitable, objective and transparent. They should include explicit assessments of impacts, in particular on other recognised uses and on ecosystem integrity. Integrated management of multiple uses should provide a capacity to manage conflicts between uses and sensitive environmental concerns adaptively. It should ensure that the mix of uses optimises the flow of benefits to the community in terms of environmental, social, cultural and economic outcomes in the longer term.

It is inevitable that some potential users will not be able to use the same area at the same time, or may only co-occur with constraints on particular activities. In some cases, assessments may result in allocations for exclusive uses. For example some oceans areas will need to be set aside as scientific reference areas for monitoring undisturbed ocean ecosystem structure and functions and ocean health. Some localities within petroleum exploration tenements will need to be managed exclusively for that use during testing and production.

In all cases of resource allocation that exclude or constrain some uses, arrangements for multiple use management should include processes for review of allocations that take into account changes in environmental, social, cultural and economic information, understanding and values, and changes in technology.

APPENDIX 4

NATIONAL REPRESENTATIVE SYSTEM OF MARINE PROTECTED AREAS

What is a marine protected area?

The generalised definition of protected area is intended to apply equally to marine and terrestrial areas. As adopted in the context of the Australian National Reserves System it is:

An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means.

(IUCN 1994, Commonwealth 1997)

Australian Conservation Agencies have adopted the World Conservation Union (IUCN) classification for protected areas for the purposes of national reporting. IUCN has identified six categories of protected area in its classification. These range from Category I, strict nature reserves or wilderness areas managed for science or wilderness protection, through national parks, habitat or species management areas, to Category VI, managed mainly to ensure protection and maintenance of biological diversity while providing a sustainable flow of natural products and services to meet community needs.

National Representative System of Marine Protected Areas

The development of the National Representative System of Marine Protected Areas (NRSMPA) was endorsed by Australian Governments under the Intergovernmental Agreement on the Environment. There are commitments by all Australian Governments to its establishment in key strategies such as the National Strategy for Ecologically Sustainable Development (1992) and the National Strategy for the Conservation of Australia's Biological Diversity (1996).

The NRSMPA brings together biodiversity conservation and human activites, incorporating multiple-use and ecologically sustainable development principles, into an established and deliverable mechanism supported by all Governments.

The primary goal of the NRSMPA is:

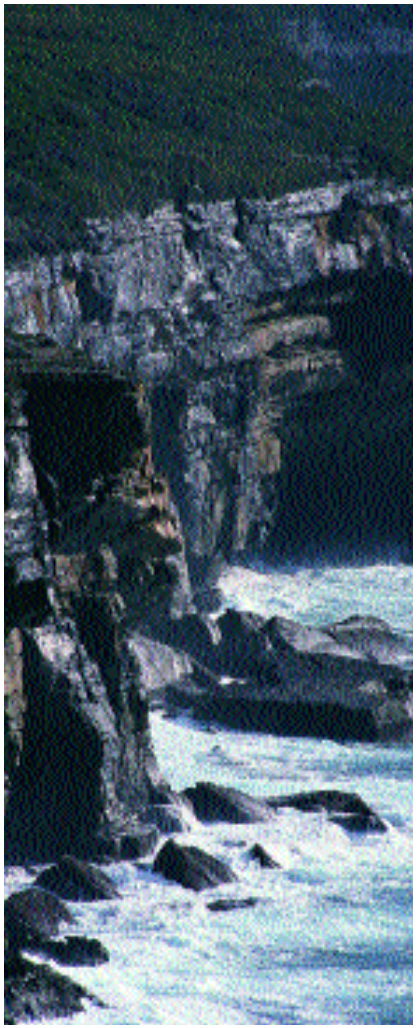
To establish and manage a comprehensive, adequate and representative system of marine protected areas to contribute to the long-term ecological viability of marine and estuarine ecosystems, to maintain ecological processes and systems, and to protect biological diversity at all levels.

The NRSMPA has secondary goals to incorporate integrated ecosystem management; manage human activities and to provide, among other things; for the needs of species and ecological communities; and for the recreational, aesthetic, cultural and economic needs of indigenous and non-indigenous people where these are compatible with the primary goal.

The Australian and New Zealand Environment and Conservation Council established the Task Force on Marine Protected Areas to advance the establishment of the NRSMPA. Development of partnerships with industry and indigenous groups is important in this process. The Commonwealth Government is identifying priority areas within the Exclusive Economic Zone for the establishment of marine protected areas. It is committed to substantial progress by 2001 in establishment of the NRSMPA in cooperation with State and Territory Governments.

Key tasks in the development of the NRSMPA are:

- refinement and application of a national bioregionalisation for inshore and offshore waters (IMCRA - see overleaf);



- development of guidelines, criteria and processes for selection of candidate areas;
- identification of potential areas in Commonwealth, State and Northern Territory waters for inclusion in the NRSMPA;
- compilation and maintenance of accessible information on the characteristics of existing marine protected areas;
- development and implementation of effective management for marine protected areas; and
- development of performance measures for the NRSMPA, including assessment of the contribution of marine protected areas to the conservation of biological diversity in the context of integrated ocean management.

IMCRA—an ecosystem-based regionalisation of Australia's oceans

The Interim Marine and Coastal Regionalisation for Australia (IMCRA) is an ecosystem-based classification of Australia's marine waters. It describes regions at the 100s to 1000s of kilometre scale (meso-scale) and the >1000s of kilometre scale (macro-scale), drawing on information about the biological, physical and chemical variability of the sea floor and overlying waters.

A meso-scale regionalisation out to the 200 metre isobath around the Australian mainland and Tasmania recognises 60 regions. These regions range in size from the largest at 240 000 square kilometres to the smallest at 3000-5000 square kilometres in embayments and major gulfs. Preliminary work on a macro-scale regionalisation of the exclusive economic zone and the continental shelf has also been completed.

Regionalisations such as those used in IMCRA are conceived and developed for specific purposes. Ecologically based regionalisations provide the first layer in a broad ecological planning framework within which more detailed information on ecosystems, communities and/or species distributions can be used to assist decision-making across or within a region.

The regionalisations will continue to be refined as data becomes available. The meso-scale and macro-scale regionalisations contribute to an understanding of the variation of Australia's marine environment and form an important input to planning decisions that may be made at different spatial scales. For some decisions more detailed mapping and classification of the marine environment will be required.

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'Burraltja', Djambawa Marawili, Baniyala, NT, courtesy of Buku Larrnggay Mulka, Yirrkala, NT

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19 detail - Coastal development

20 shallow inshore waters, *Tony Karacsonyi*
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23 fishery catch, *Tony Karacsonyi*
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estuarine jellyfish

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32 large-scale ocean processes, *Bureau of Meteorology*
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33 SE Australia current detail, sea surface temperature, *Bureau of Meteorology*
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36 Lizard Island, Northern Great Barrier Reef

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MUNUK-GAPU

Rom	
Bapurru	*Yaku Gapu*
Yirritja	*Mungurru gä Garingirr*
Dhuwa	*Balamumu gä Gundutja*

"Bamanpuy Dhawu munuk-puy gapu-wuy gä nhä ngunalami Madayin gapungura. Gä wanamaîa dhiyangu manda bapurru nguli barakbarak-dhun gapu-lili.

Gapu nguli wandirri binguru mayangu bala munuk-lili bala manapan-mirri nha, ngulangu gapungu nganapu nguli manikay barakbarak-dhun ringitj-nguru gä yaku, nhirran yothu-nha yudana.

Marrama gapu mandana yaku-mirri.

Yaku Mungurru gä Gundutja, gä wanami manda nguli gulyun, ngunala manda nguli gulyun - wangupini marratji dhuwathun, gä ngunalana nganyi nguli gapu-munuk rom madayin manikay nguli gulyun.

Manda gapu yirritja mungurru gä garingirr. Mari gutharra gä manda Balamumu gä gundutja mari-gutharra gä wanangu Yirritja gapu Dhunarrana Binguru-Bitjunguru gä Dhuwa gapu Dhunarrana binguru Milingurr-nguru.

Dhuwala manda gapu Dhawu-mirri Yolngu barpurrwuy gä rom-gu gä madayin-gu gä bulu manda liyamirri marrama-wuy Yolngu bapurru.

Nganapungu rom yukurra dharra wiyingmirri bamanpuy, gä bamanpuy ngangu gapu-wuy yanabili dhiyangubala balakurra manikay gä bungulk."

AN EXPLANATION OF YOLNGU LAW OF THE SALT WATER

"Yolngu people are divided into two moieties connected by law, known as Yirritja and Dhuwa. So are the land and water. The Yirritja ocean is known by the names Mungurru and Garingirr. The Dhuwa ocean is known by the names Balamumu and Gundjuta. These Yirritja and Dhuwa names of the oceans were given by Barama and Djan'kawu, who were the ancestral creators of Yolngu and the oceans.

Mungurra and Garringirr are related as mari-gutharra (grandfather and grandson). The two Dhuwa oceans are also related in the same way. The Yirritja and Dhuwa oceans are related as yothu-yindi (mother and child). These relationships are celebrated by Yolngu in our secret and sacred songs about the ocean, the totems and of the ancestors.

The songs tell us how the two moieties are connected to each other and to the water, and who owns the water. The songs we sing give us the names from Barama and Djan'kawu, for our yothu (children). This is the Yolngu law of the salt water ocean.

Fresh water flows from the rivers and joins the salt water, connecting fresh water Yolngu and salt water Yolngu. The Yirritja fresh water flows from Bitjngu to Mungurru, and Dhuwa fresh water from Milingurr to Balamumu. Both waters join up and flow side by side to where the songs stop, over the horizon where the clouds rise. That's where our law (rom) of the ocean stops and returns to the land on the high tide.

The ocean contains very important history about the Yolngu clans, totems, law, ceremony and kinship. Our customary law of the ocean, which has been with us for thousands of years, is still with us through song and dance today."

Illustration of song cycle
Painting *Burraltja* natural earth pigments on bark
Artist Djambawa Marawili, of the Madanapa, B niyala.
Image courtesy of Buka Larrnggay Mulka, Yirrkala