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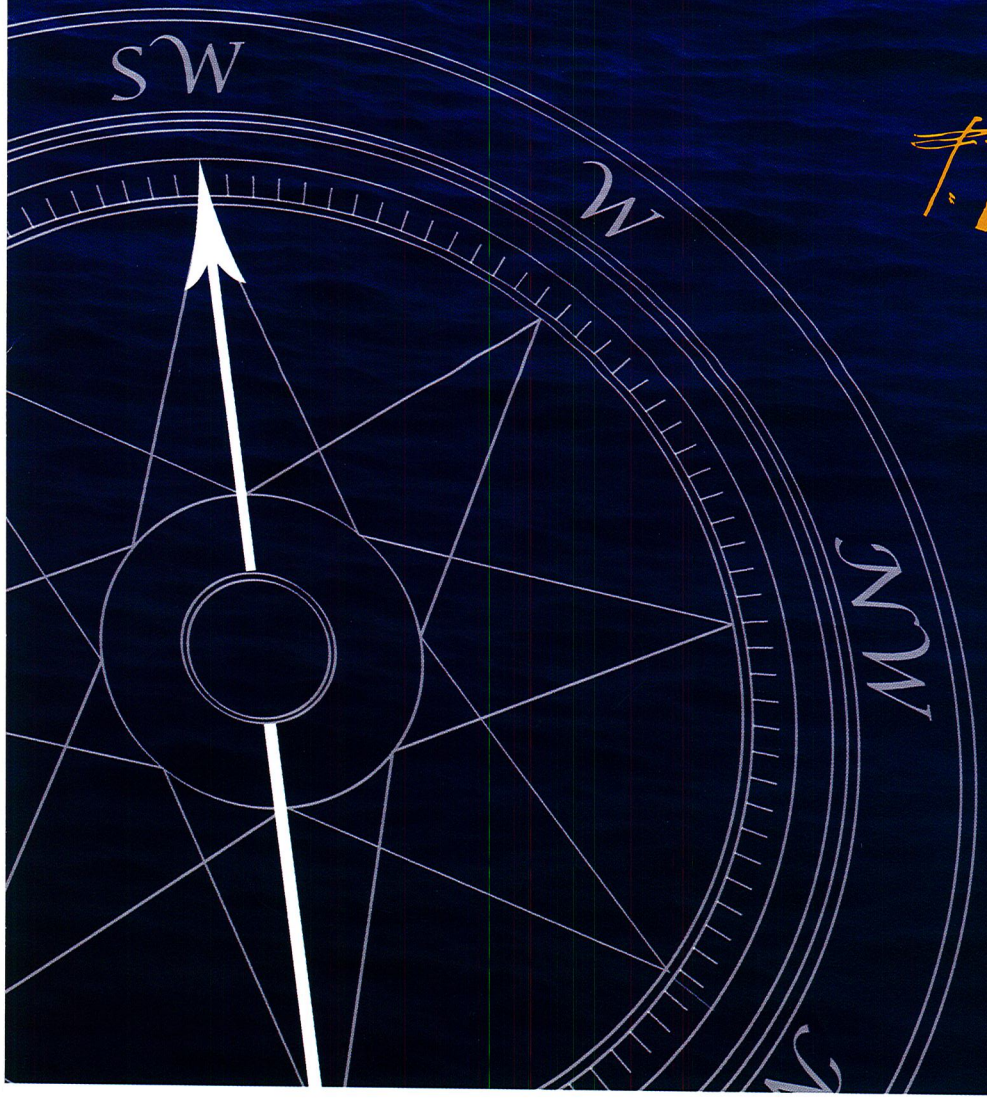
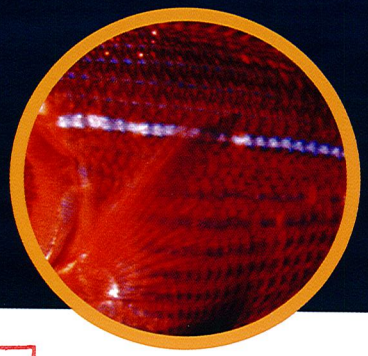


The way ahead for Australia's South-west Oceans



Australian Government
Department of the Environment and Heritage

Marine Bioregional Planning in Commonwealth Waters

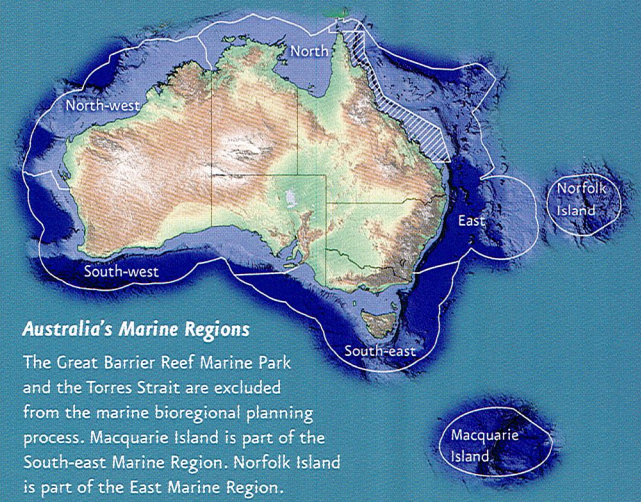
Marine bioregional planning for the South-west Marine Region

What are Marine Bioregional Plans?

Australia is leading the world in developing plans for effective environmental management of our vast ocean territory. Through the marine bioregional planning programme, the Australian Government will:

- Prepare Marine Bioregional Plans for Commonwealth waters under the Environment Protection and Biodiversity Conservation Act (EPBC Act).
- Establish networks of Marine Protected Areas (MPAs) as the Commonwealth contribution to the National Representative System of MPAs.

Marine Bioregional Plans are being developed across five marine regions – the South-west, North, North-west, East and South-east. The South-east Regional Marine Plan was completed in 2004 and will provide the basis for a Marine Bioregional Plan to be developed under the EPBC Act.



Australia's Marine Regions

The Great Barrier Reef Marine Park and the Torres Strait are excluded from the marine bioregional planning process. Macquarie Island is part of the South-east Marine Region. Norfolk Island is part of the East Marine Region.

While we know little about our oceans compared to the terrestrial environment, Marine Bioregional Plans will consolidate available knowledge to provide us with the best possible basis for decision-making about the conservation of the marine environment.

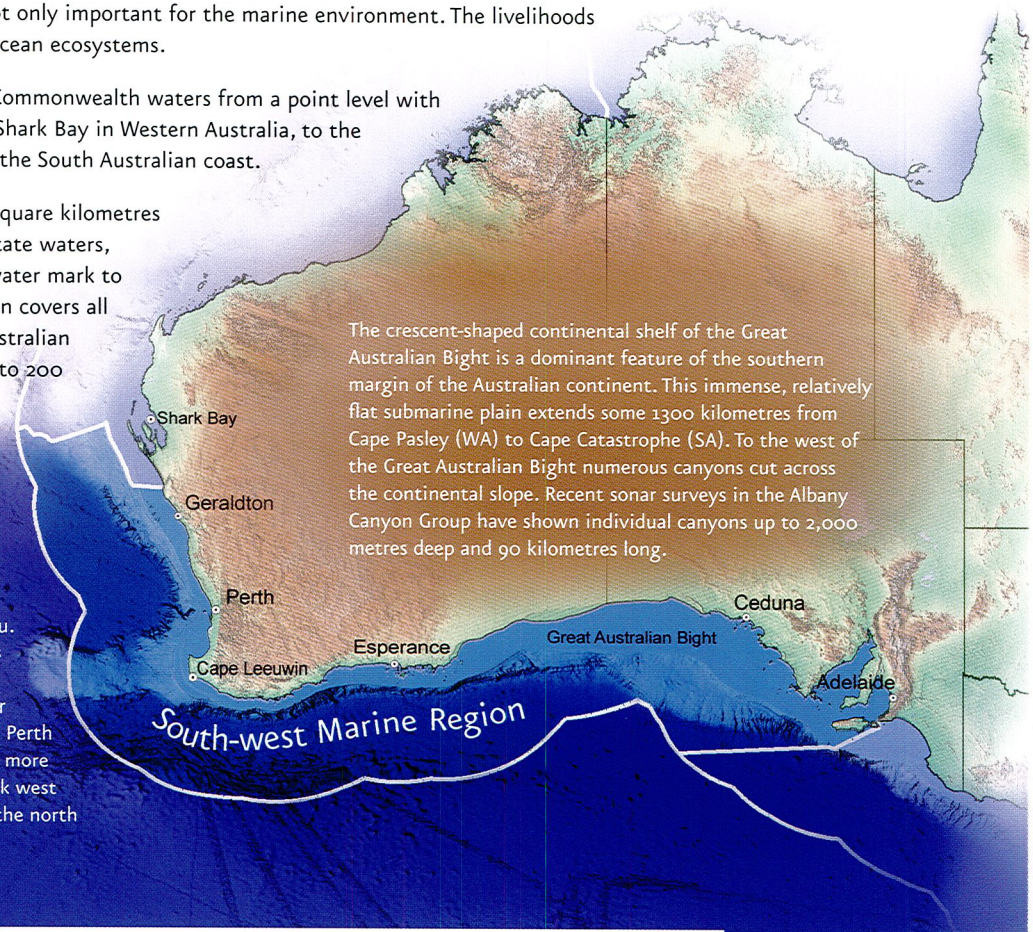
As an island nation, the historic wealth and future prosperity of Australia is closely tied to the ocean.

If we manage our oceans sustainably, we can ensure the future of our marine industries and coastal communities. Sound management is not only important for the marine environment. The livelihoods of many Australians hinge on healthy ocean ecosystems.

The South-west Marine Region covers Commonwealth waters from a point level with Cape Inscription on the outer coast of Shark Bay in Western Australia, to the easternmost tip of Kangaroo Island off the South Australian coast.

The Region covers around one million square kilometres of ocean waters. It abuts the inshore State waters, which generally stretch from the low water mark to the three nautical mile limit. The Region covers all waters under the jurisdiction of the Australian Government, which extend from three to 200 nautical miles offshore.

Off the west coast, the Rottnest Shelf slopes gently offshore for some 100 kilometres to the west of Cape Leeuwin, before rising to form the Naturaliste Plateau. This submarine table is over 400 kilometres long and 250 kilometres wide, and covers almost 90,000 square kilometres of seafloor between 2000 and 5000 metres depth. The Perth Canyon crosses the slope, and meanders for more than 160 kilometres between the shelf-break west of Rottnest Island and the abyssal plain to the north of the Naturaliste Plateau.



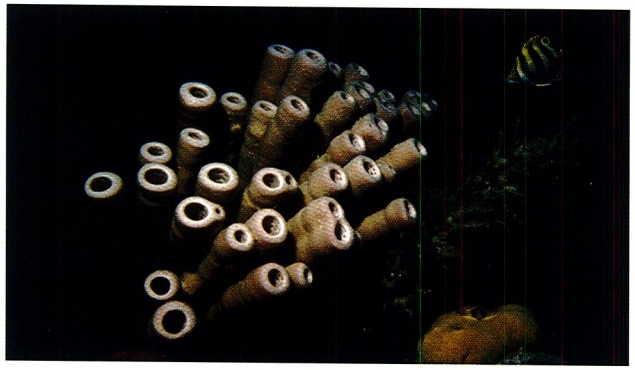
The crescent-shaped continental shelf of the Great Australian Bight is a dominant feature of the southern margin of the Australian continent. This immense, relatively flat submarine plain extends some 1300 kilometres from Cape Pasley (WA) to Cape Catastrophe (SA). To the west of the Great Australian Bight numerous canyons cut across the continental slope. Recent sonar surveys in the Albany Canyon Group have shown individual canyons up to 2,000 metres deep and 90 kilometres long.

As a proud West Australian, I am delighted that this region will be one of the first to benefit from the Government's world-leading programme of marine bioregional planning. When complete, I am confident that this Plan will deliver certainty for industry, protection for this remarkable marine environment and conservation of its biodiversity. I look forward to working with all those with an interest in the South-west Marine Region to see this commitment delivered.

Senator the Hon. Ian Campbell, Minister for the Environment and Heritage

An area of importance for biodiversity conservation

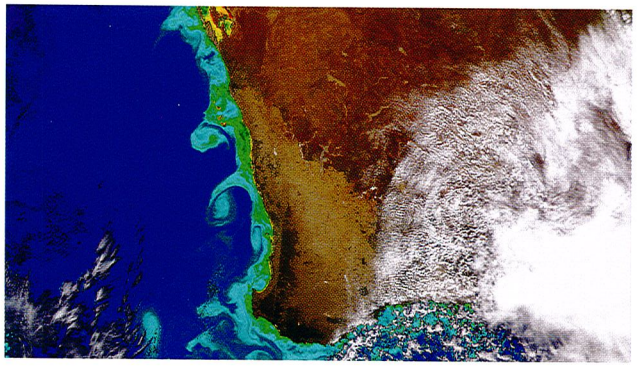
Much of the South-west Marine Region has high species diversity and endemism (meaning species that are found nowhere else). This is attributed to a range of factors including the continent's 65 million years of geological isolation. In the Great Australian Bight an incredible 85 per cent of known fish species, 95 per cent of known molluscs and 90 per cent of known echinoderms (sea stars, urchins and sea cucumbers) are thought to be unique to the area. By comparison, in tropical regions of Australia, it has been estimated that only 13 per cent of fish, 10 per cent of molluscs and 13 per cent of echinoderms are endemic.



Off the west coast of Western Australia is one of the world's marine biodiversity hotspots, with high levels of endemism in corals, fish, snails and lobsters. To the north, tropical species dominate the South-west Marine Region's ecosystems, but further down the coast more temperate marine plants and animals dominate.

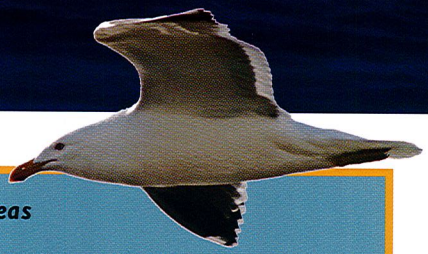
The South-west Marine Region is also rich in seabird life with 81 of the 110 known Australian seabird species found in the Region. It has been estimated that more than 1.5 million pairs of seabirds, including short-tailed shearwaters and little penguins, regularly breed in South Australia. Other important bird species, such as albatrosses, petrels and prions also inhabit the Region.

Currents are major contributors to the unique ecosystems of the South-west Marine Region. The Leeuwin and Flinders Currents, and seasonal current systems such as the Capes Current, act as conveyor belts, carrying marine plants and animals over great distances. The Leeuwin Current funnels warm tropical waters down the coast of Western Australia and into the Great Australian Bight and beyond. As a result, species that are generally associated with Australia's tropical waters can often be found in the South-west Marine Region. The satellite image below shows currents and eddies off the Western Australian coast in the autumn.



Around 38 species of cetaceans (whales, dolphins and porpoises) inhabit the Region. These include endangered blue whales, attracted by the krill that abounds in upwellings particularly to the south and west of Kangaroo Island, and around the rim of the Perth Canyon.

Within the Great Australian Bight, southern right whales, also listed as endangered under the EPBC Act, breed during the winter-spring period in the Region's shallow sandy bays. Another important species, the Australian sea lion, also inhabits the area and is currently listed as threatened.



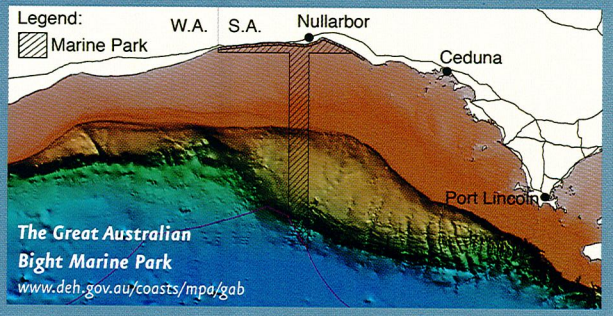
Marine Protected Areas

The Australian Government is committed to the establishment and management of a comprehensive, adequate and representative system of Marine Protected Areas (MPAs) to contribute to the long-term ecological viability of marine and estuarine systems, to maintain ecological processes and systems, and to protect Australia's biological diversity at all levels. Networks of MPAs will be established in each Australian marine region under marine bioregional planning.

In the South-west Marine Region a network of representative MPAs will be established through the marine bioregional planning process.

There is already a Commonwealth MPA in the South-west Marine Region. The Great Australian Bight Marine Park stretches from 200 kilometres west of Ceduna in South Australia, and follows the coast to the Western Australian border. The Park is made up of adjoining Commonwealth and South Australian protected areas. The Marine Mammal Protection Zone of the Park is primarily intended to provide for undisturbed calving for southern right whales and protection of Australian sea lion colonies.

The Benthic Protection Zone of the Park is a 20 nautical mile-wide representative strip of the ocean floor that extends to the edge of the Exclusive Economic Zone of Australia. This area aims to protect a sample of the unique and diverse plants and animals that live on, or are associated with, the seabed.



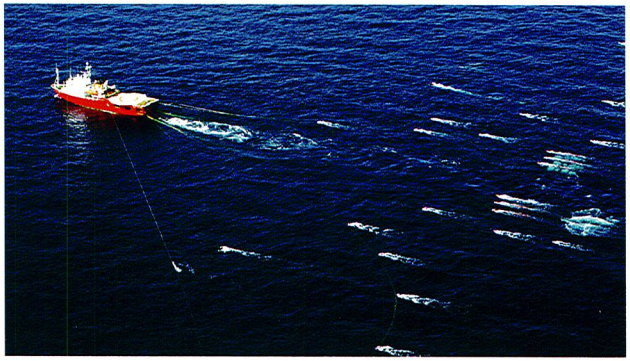
How we use the South-west Marine Region

Marine industries have played a major role in shaping the cities and communities of Western Australia and South Australia.

Major marine industries associated with the South-west Marine Region include commercial fishing, marine-based tourism, shipping, oil and gas exploration, boat and ship-building, defence activities and aquaculture.

Twenty ports (all within State waters) are adjacent to the South-west Marine Region. These range from small fishing harbours to the major ocean hub of Fremantle. A large percentage of Australia's trade is conducted from ports such as Albany, Bunbury, Esperance and Geraldton in Western Australia, and Port Adelaide, Port Lincoln, Port Pirie, Thevenard and Whyalla in South Australia.

While there is no current oil and gas production in the South-west Marine Region, exploration has identified three frontier basins with petroleum potential – the Perth Basin, Naturaliste Plateau and Bight Basin.



Australian Government-managed commercial fisheries in the Region target a range of species including southern bluefin tuna, yellowfin and bigeye tuna, blue-eye trevalla, ling and shark. In 2003, fishers active within Australian Government-managed fisheries in the Region caught around $140 million worth of fish.

In the the West Australian and South Australian State-managed fisheries, rock lobster, abalone, scallop, shark, King George whiting and prawn, mostly caught in State waters, have a gross value of production nearing $400 million a year. More than 3,600 people are directly employed by the fishing industry across the South-west Marine Region and a further 800 employed in the aquaculture sector.

Other people with an interest in the Region's fish species are recreational fishers who are increasingly moving further offshore to target a range of deep-sea species. Popular recreational species in the South-west Marine Region include snapper and samson fish, West Australian dhufish, and baldchin groper.

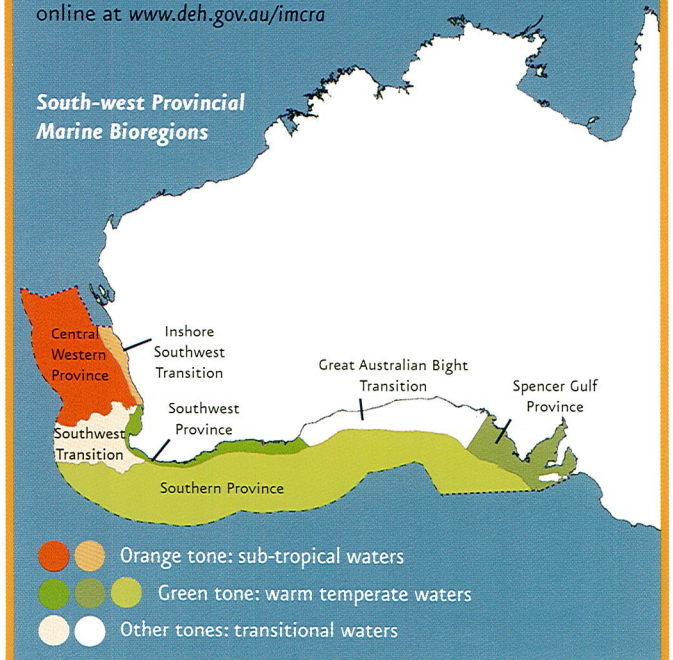
Aboriginal people have lived in, managed and used the South-west Marine Region for many thousands of years. The enduring links of Aboriginal people to the Region are maintained through cultural practices and heritage sites, as well as knowledge of, and engagement in, contemporary marine resource management.

A remarkable marine environment

The South-west Marine Region encompasses a range of bioregions, from the cool, temperate waters of the Great Australian Bight to the warm waters of the mid Western Australian coast off Shark Bay.

A bioregion is an area that contains a geographically distinct grouping of plants and animals. For the purpose of marine planning, the Australian Government recognises seven bioregions in the South-west.

To learn more about these bioregions, see the Integrated Marine and Coastal Regionalisation for Australia, available online at *www.deh.gov.au/imcra*



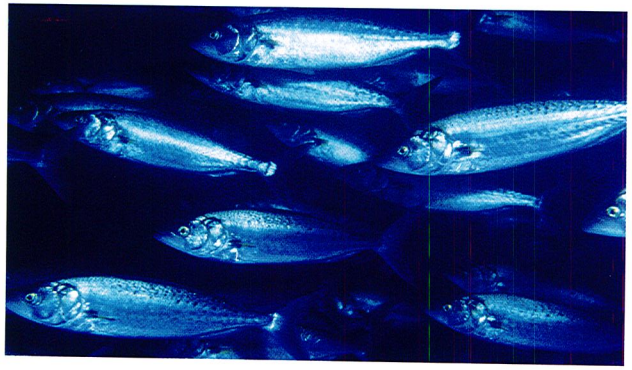
Marine Bioregional Plans

It is important that all those who use and care for the ocean and its ongoing health understand how Marine Bioregional Plans may affect them.

In 2005, the Australian Government brought its programme of regional marine planning directly under the EPBC Act – one of the most comprehensive pieces of environmental legislation in operation anywhere in the world.Under this new approach, Marine Bioregional Plans will now be developed under section 176 of the EPBC Act.

Section 176 of the EPBC Act provides a general description of the provisions a Marine Bioregional Plan may include:

- Descriptions of the biodiversity, economic, social and heritage values of the Region.
- The objectives of the Plan relating to biodiversity and other values.
- Priorities, strategies and actions to achieve the objectives.
- How the community can be involved in the Plan.
- Mechanisms for monitoring and reviewing the Plan over time.



How will Marine Bioregional Plans be used?

The Minister for the Environment and Heritage will have to consider the contents of Marine Bioregional Plans when making decisions under the EPBC Act that are relevant to a marine region. For example, in considering whether a fishery should be granted export approval, the Minister will take into account the way any potential impact by that fishery on the marine environment is managed.

The Marine Bioregional Plans will help ensure decisions can be made consistently, and will give industry advance notice of the key conservation values and the Government's conservation priorities in each bioregion.

Did you know that the Commonwealth marine environment is a "matter of national environmental significance" under the EPBC Act?

This means that anyone proposing to take an action that may have a significant impact on the marine environment should refer that action to the Minister for the Environment, who will assess whether the action can take place.

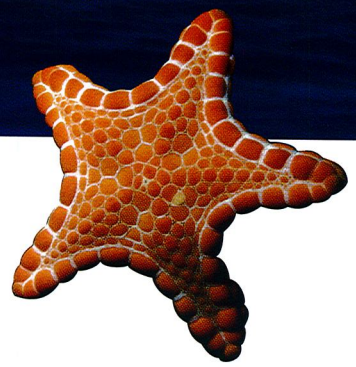
When will the marine bioregional planning programme be completed?

Marine bioregional planning is underway under the leadership of the Marine Division of the Department of the Environment and Heritage. The Plans will be progressively completed over the next four to six years.

How do we engage with stakeholders?

The Government recognises the importance of all ocean users and coastal communities and will actively engage them in the planning process.

There will be consultation at key points in the planning process. There will also be formal consultation on each Draft Plan as required under the EPBC Act.



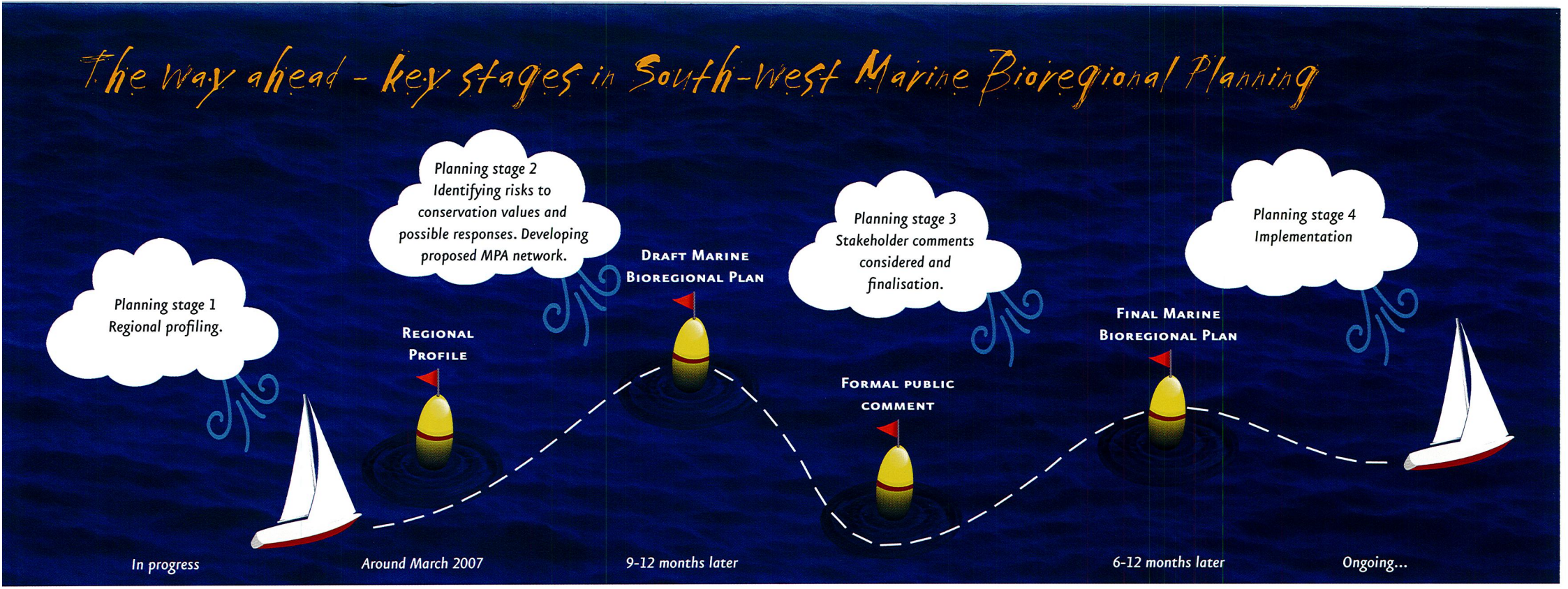
What does this mean for industry?

Marine industries will benefit from this new approach. Once a Marine Bioregional Plan is in place, marine industry proponents will have a comprehensive information system to draw on to help them understand the obligations they have under the EPBC Act for that marine region.

Industries have generally been supportive of the EPBC Act, because it focuses on achieving environmental outcomes rather than prescribing ways in which they must be achieved. This means that industry has more flexibility in how it meets obligations.

How are the State Governments involved?

The States and the Northern Territory are responsible for the marine environment for the first three nautical miles from the shore. In Western Australia, the State also has responsibility under the Offshore Constitutional Settlement for the management of most fish stocks out to the 200 nautical mile limit of the Australian Fishing Zone. Many ecological processes work across both the State and Commonwealth waters. Therefore, the Australian Government will work cooperatively with all States, in this case Western Australia and South Australia, in developing and implementing the Marine Bioregional Plans.



Stage 1 – The Regional Profile

The first step in the planning process is to gather information about the South-west Marine Region. The Department of the Environment and Heritage is working with the major scientific institutions in the Region and with those that hold key data to bring together and evaluate information about the geology, oceanography and ecology of the Region. This process has commenced.

This information will be published in the Regional Profile in a way that everyone can access and understand. The Profile will also contain economic and social information about the Region, particularly as it relates to the marine environment.

The Profile will not contain specific proposals for conservation measures nor for MPAs. It will, however, include details about the process for identifying MPAs. It will also identify the major habitat types or ecosystems that will be considered for representation in the MPA network. The MPA network will be developed over the next two stages. Development of the Profile is expected to take around 12 months. During this time, the Department will contact stakeholder groups to brief them on the process and on the progress of the Profile, and to identify how best to engage them during the rest of the planning process.

Stage 2 – The Draft Plan

Stakeholders will have an opportunity to provide input to the Government in this stage of the planning process, during the identification of priorities to be addressed and options to address them. The social and economic impacts of proposed conservation measures, including possible MPAs, will be evaluated in consultation with stakeholders.

It will take another 12 months to develop a Draft Marine Bioregional Plan, which will be published before a period of formal comment, which is required under the EPBC Act.

Stage 3 – The Final Plan

Any impacts on people (for example, on fishing enterprises displaced from MPAs) will be considered and resolved before the Marine Bioregional Plan is formally adopted. At this stage the final shape (location, size and zoning) of new MPAs is decided and any action necessary to give effect to the Plan is started.

Stage 4 – Implementation and Review

Once it is finalised, the Minister will be guided by the Marine Bioregional Plan for all decisions affecting the Region that the Minister must make under the EPBC Act. An implementation strategy will be developed and the formal legal processes to declare the MPA network will commence.

The Plan will be reviewed, from time to time, in light of new information and needs.

Stakeholder and community consultation

The planning process provides several opportunities for stakeholders to have input and to raise issues. The Government regards this as an important part of the process and will be actively seeking the engagement of all groups. Initial consultations will concentrate on helping stakeholders prepare for the development of the Draft Plan.

Find out more

For more information about marine bioregional planning visit the Department of the Environment and Heritage website *www.deh.gov.au/mbp*

For more information on the EPBC Act, visit *www.deh.gov.au/epbc*

For more information about MPA development and management, see *www.deh.gov.au/coasts/mpa*

If you have questions about marine bioregional planning in any of Australia's marine regions, email *oceans@deh.gov.au*

Image information

Cover: Background image and compass illustration - Chloe Lucas. Details of red snapper, short-headed seahorse and gorgonian fan - Marine Life Society of South Australia.

Page 1: Maps of Australia's Marine Regions - Commonwealth of Australia.

Page 2: Satellite image courtesy of NASA/GSFC Orbimage SeaWiFS Project. Southern right whale photograph by Clive McMahon, Australian Antarctic Division - Commonwealth of Australia. Kelp gull - Tim Prior. Organpipe sponge - Marine Life Society of South Australia.

Page 3: Submarine and dolphin - Department of Defence. Marine seismic survey acquisition courtesy of Veritas DGC Inc. LPG tanker in outer port - Fremantle Port Authority. Tuna fishing - Elise Hardiker. Map of Marine Bioregions in the South-west - Commonwealth of Australia.

Page 4: Western Australian salmon, vermillion seastar and warty prowfish - Marine Life Society of South Australia.

Page 6: Ornate cowfish and giant cuttlefish - Marine Life Society of South Australia. Fishing boat - Chloe Lucas.

Back cover: Southern rock lobster, bryozoans and southern basketstar - Marine Life Society of South Australia.

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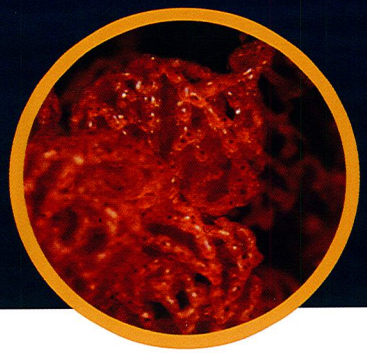

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