

# Marine Spatial Planning: *Experience*

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# **What Can We Learn from International Experiences?**

# International Experiences

Authority	United Kingdom
Participation	USA/Massachusetts
Financing	China
Ecosystem-based	Australia
Integration (Sectors)	Norway
Integration (Trans-boundary)	Germany
Future Orientation	Netherlands
Adaptive	Australia (GBRMP)

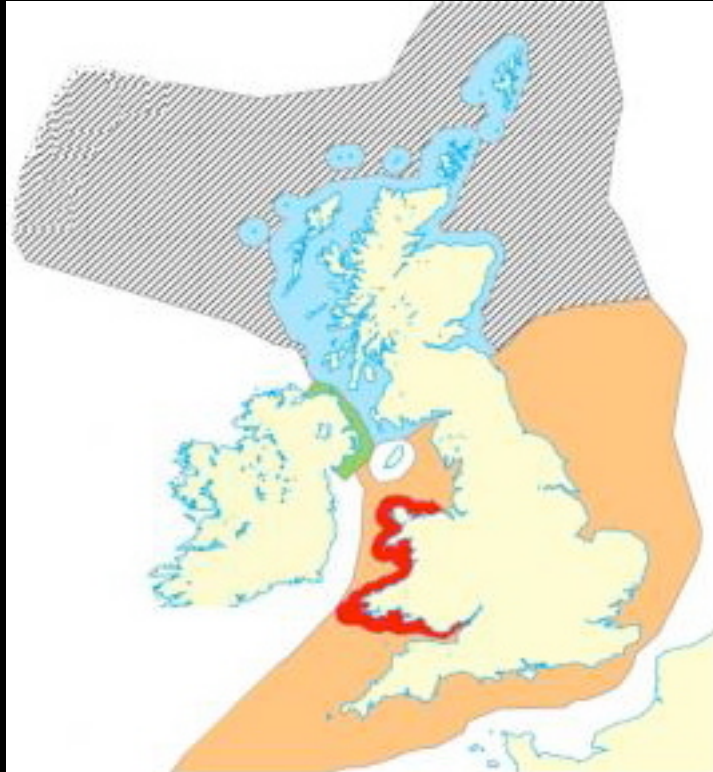
# Authority

## Issue

MSP must have clear authority for planning and implementation



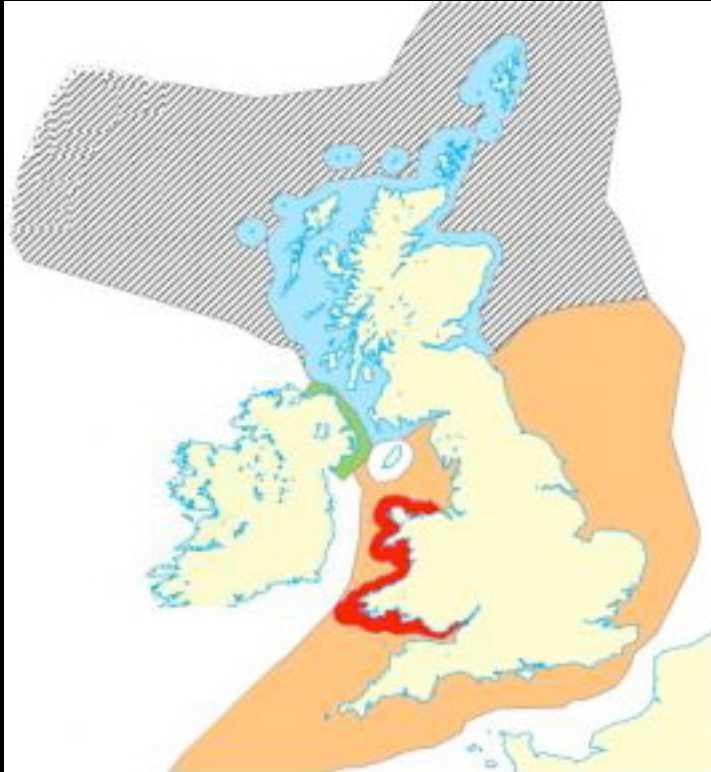
# Authority



DEFRA's Marine Stewardship Report in 2002 and the UK government's response in 2003 suggested new approach to managing marine activities is needed

DEFRA's Five-Year Strategy in 2004 included plans to draft Marine Bill to protect marine environment and simplify regulations

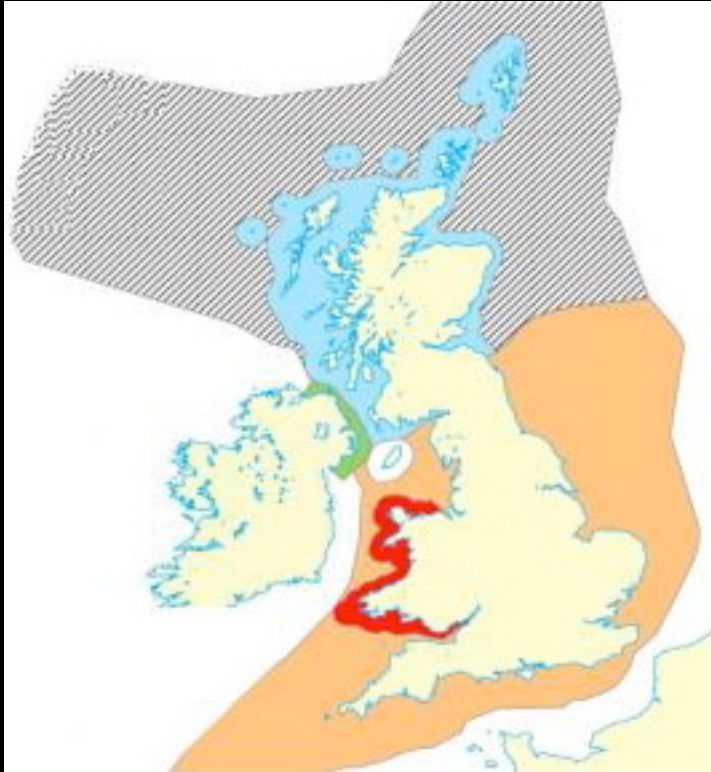
# Authority



Marine Bill White Paper laid out proposal including:

- UK-wide system for MSP
- Streamlined permitting
- Establishment of Marine Management Organization

# Authority



New Marine and Coastal Access Bill  
published in December 2008

Completed passage by House of  
Lords in June 2009 and introduced to  
House of Commons

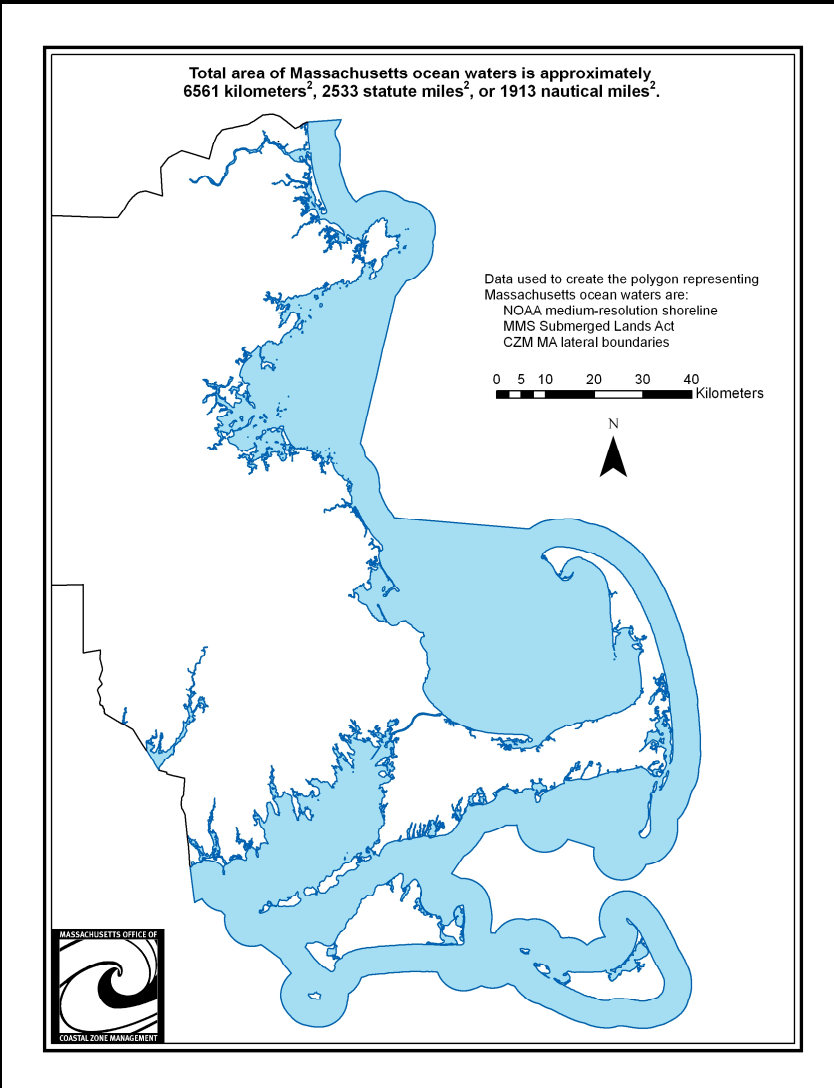
Royal Assent (bill became law) on 12  
November 2010

# Participation

## Issue

Continuing, effective stakeholder participation is essential to MSP

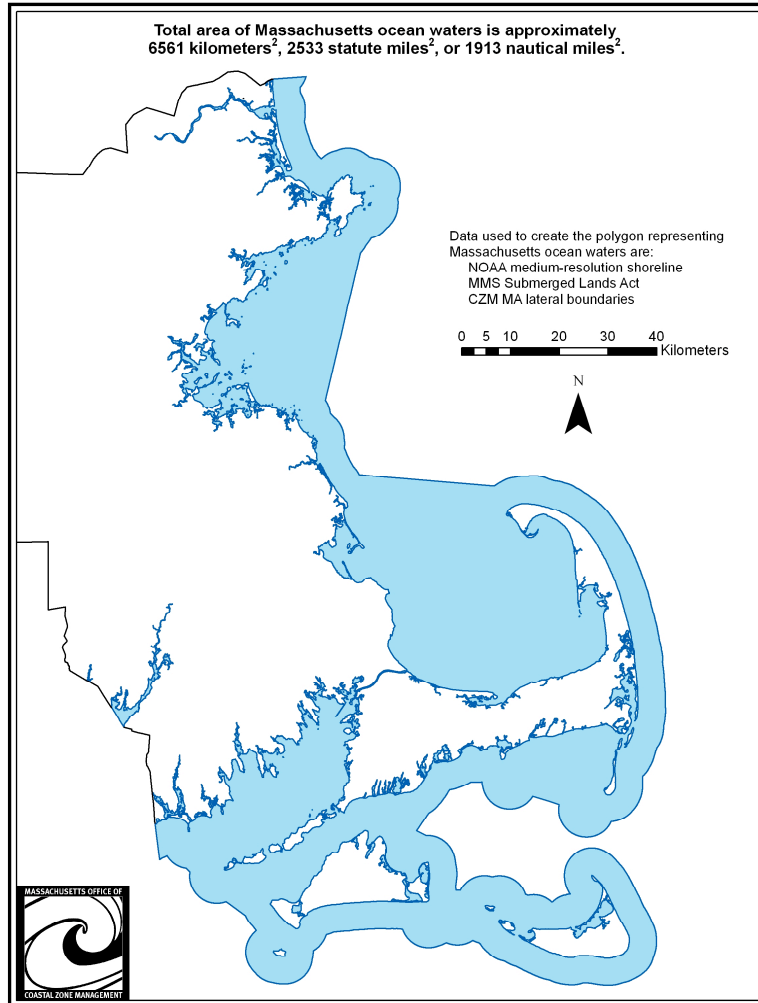
# Participation



Massachusetts Executive Office of Energy & Environmental Affairs (EEA) spent considerable effort to reach out to general public and ocean user groups between June 2008 - May 2009

# Participation

Two stakeholder workshops (110 representatives) explored data availability for planning



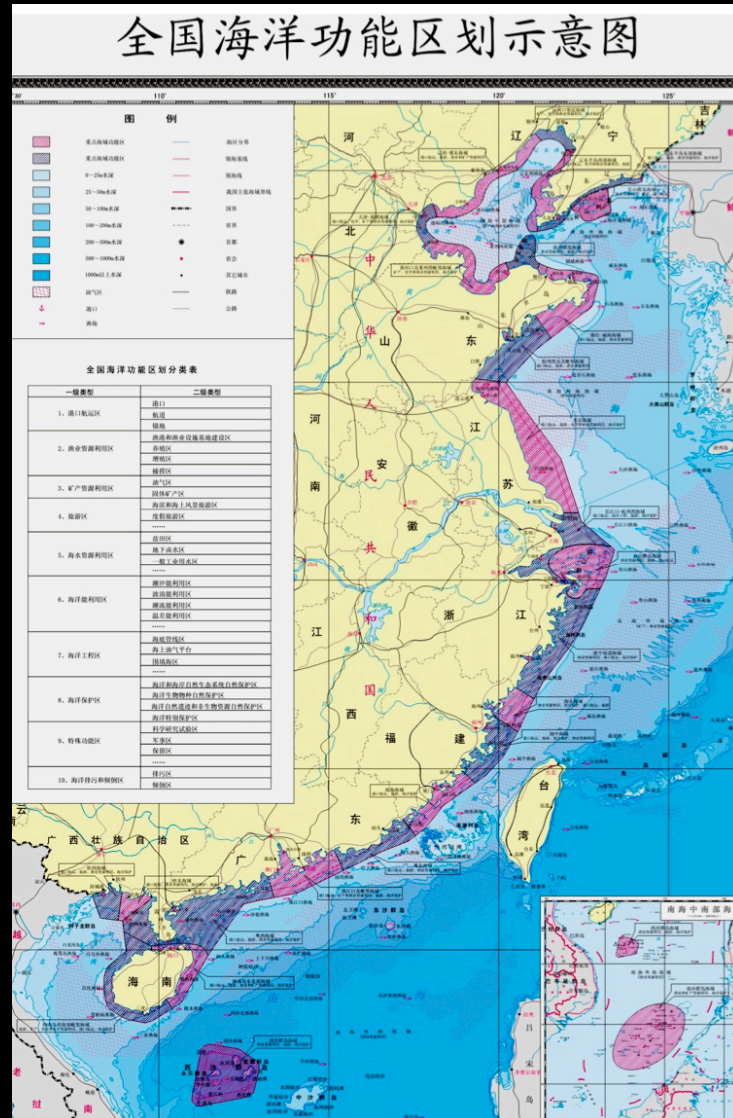
# Financing

## Issue

Effective MSP must have  
adequate financing



# Financing



In 2002 China passed its Law on Management of Sea Uses based on three principles:

- Right to sea use
- Marine functional zoning system
- User fee system

The sea is recognized as a State-owned asset

Users must pay for using the sea

70% of fees return to provincial government for marine management

China has collected about \$1.7 billion in user fees between 2005-2008

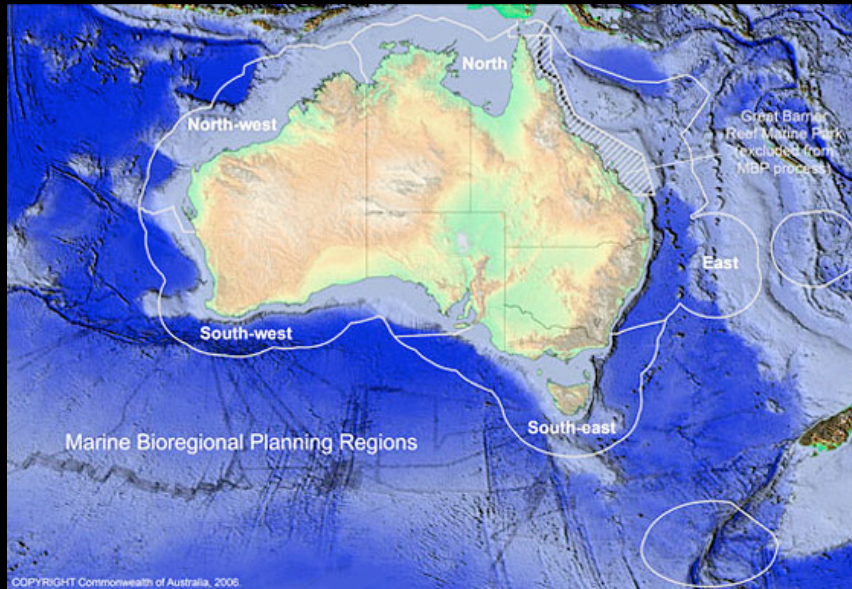


# Ecosystem-based

## Issue

MSP should be ecosystem-based to ensure maintenance of ecosystem services

# Ecosystem-based



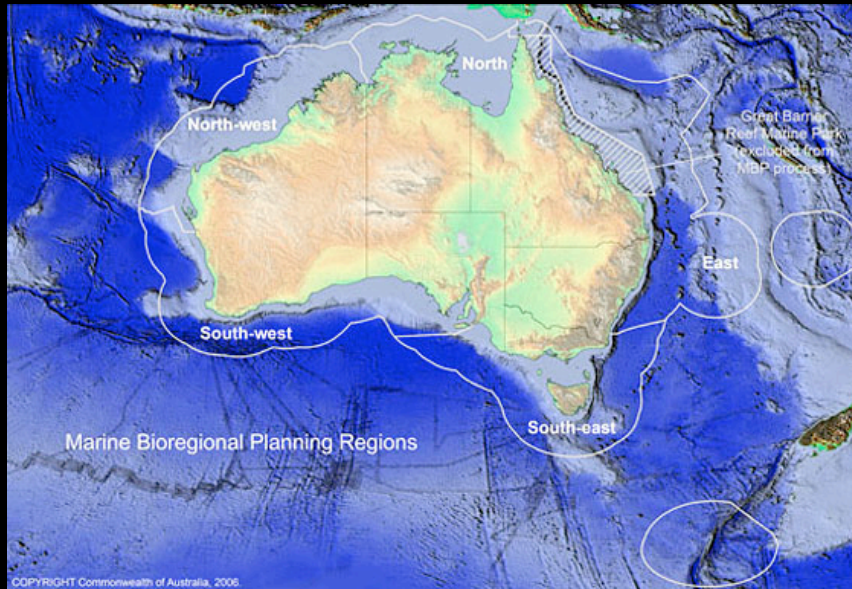
Australia's marine bioregional planning is based on an "integrated marine and coastal regionalization of Australia"

Based on data about benthic and pelagic environments

Used to describe and determine ecosystem boundaries for planning and management of five marine bioregions:

- Southeast
- Southwest
- Northwest
- North
- East

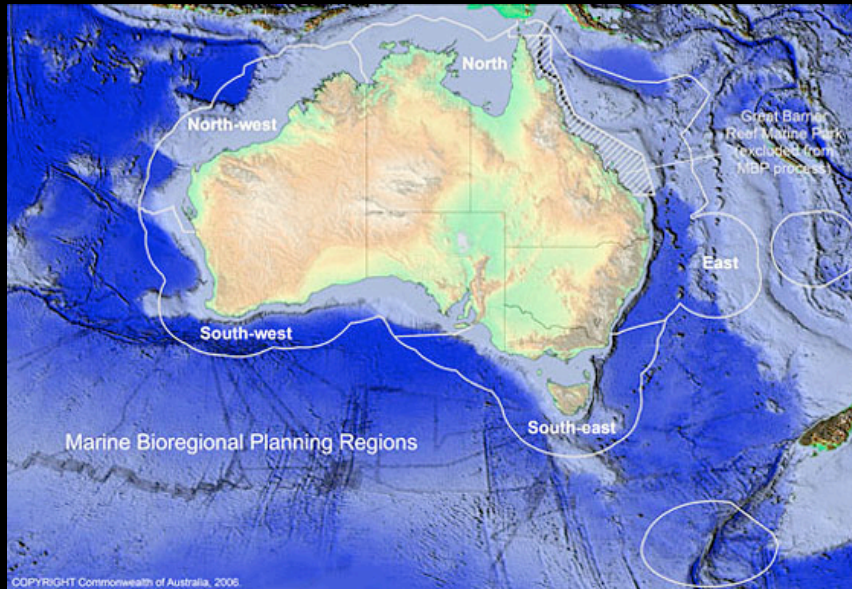
# Ecosystem-based



For each marine bioregion, a “bioregional profile” has been completed containing information on:

- The marine environment of the marine bioregion
- Conservation values
  - Key ecological features
  - Protected species
  - Protected places
- Establishing new marine protected areas
- Description of human activities
- Next steps in developing a marine bioregional plan

# Ecosystem-based



The Bioregional Profile is the first product of the marine bioregional planning process

It forms the information base for the Marine Bioregional Plan

All marine Bioregional Plans will be completed by 2012

# Integration (Sectors)

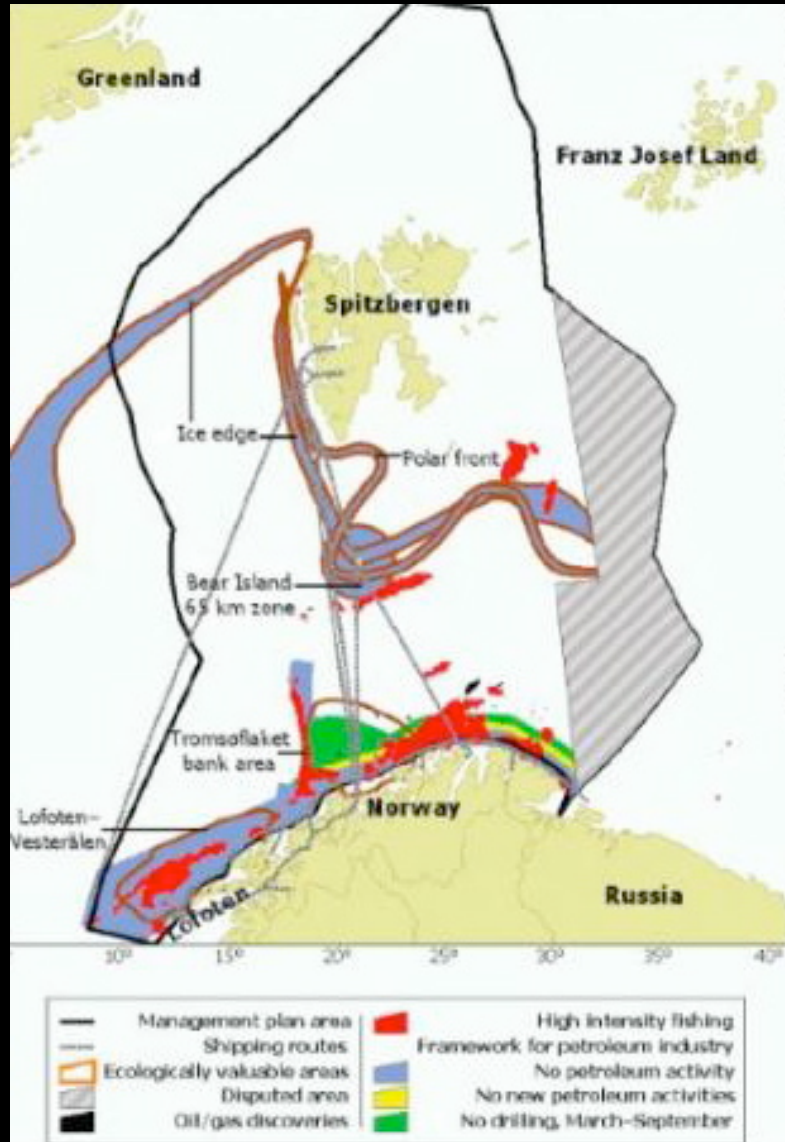
## Issue

All economic sectors should be included in MSP

However, in practice, some sectors, e.g., fishing, are often excluded from the MSP process



# Integration (Sectors)

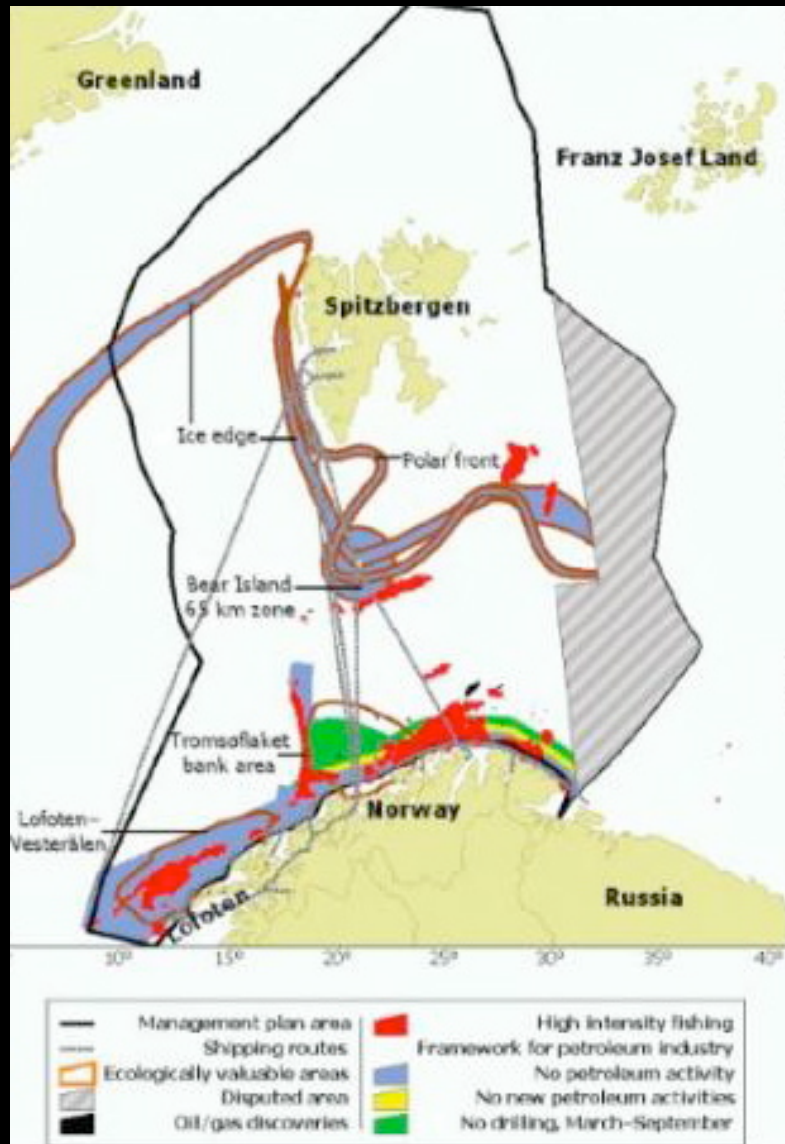


Norway's plan integrates its two most important economic sectors (oil and gas development and fishing)

Norway's plan for the Barents Sea (2002-2006) provides an overall framework for managing all human uses (oil and gas, shipping, and fishing) while ensuring the continued health, production, and function of the ecosystem

The plan identifies areas of special importance from both ecological and economic perspectives

# Integration (Sectors)



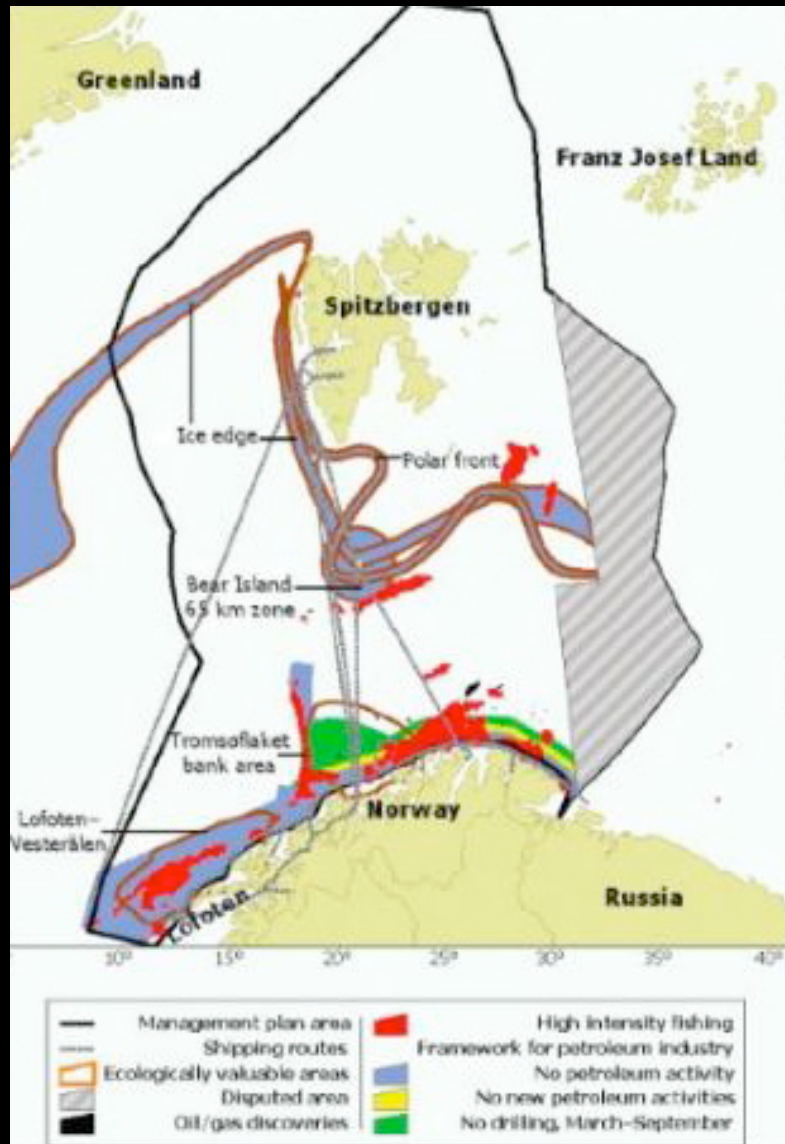
Plan development led by steering group chaired by Ministry of Environment

The time frame for the plan was 2006-2010 with revisions planned every four years

Status reports prepared on fisheries, aquaculture, ecologically valuable marine areas, and shipping

Environmental assessments were carried out covering impacts of fishing, shipping, hydrocarbon extraction, and pollution on environment, resources, and local communities

# Integration (Sectors)



Results were synthesized, focusing on total impact of all human activities up to 2020, space conflicts among human activities, and between human use and the natural environment

Fishing not expected to grow, but growth in shipping and hydrocarbon development expected

The plan is a synergy of previously separate management regimes for fishing, shipping, oil and gas development, and marine protected area management

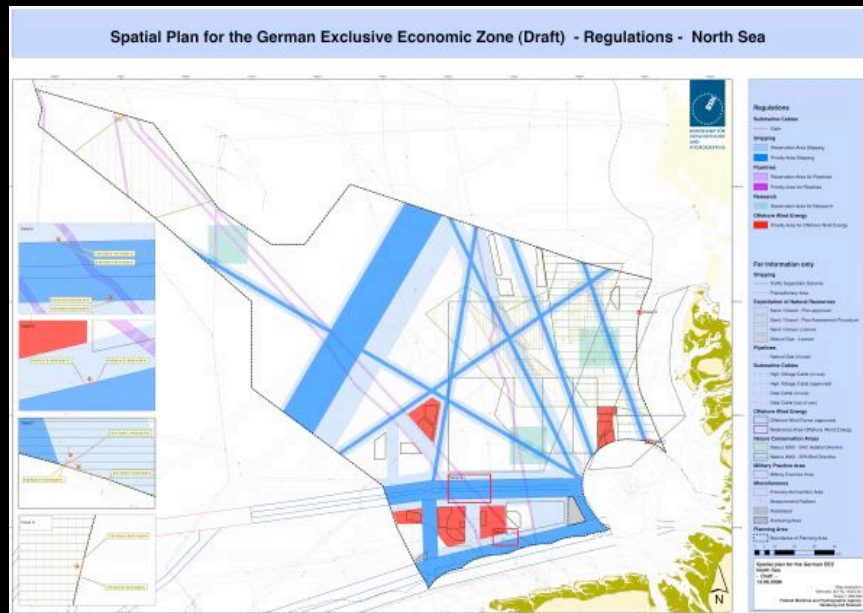


# Integration (Trans-boundary)

## Issue

Marine spatial plans should be consistent across international and federal-state, and state-state boundaries

# Integration (Trans-boundary)



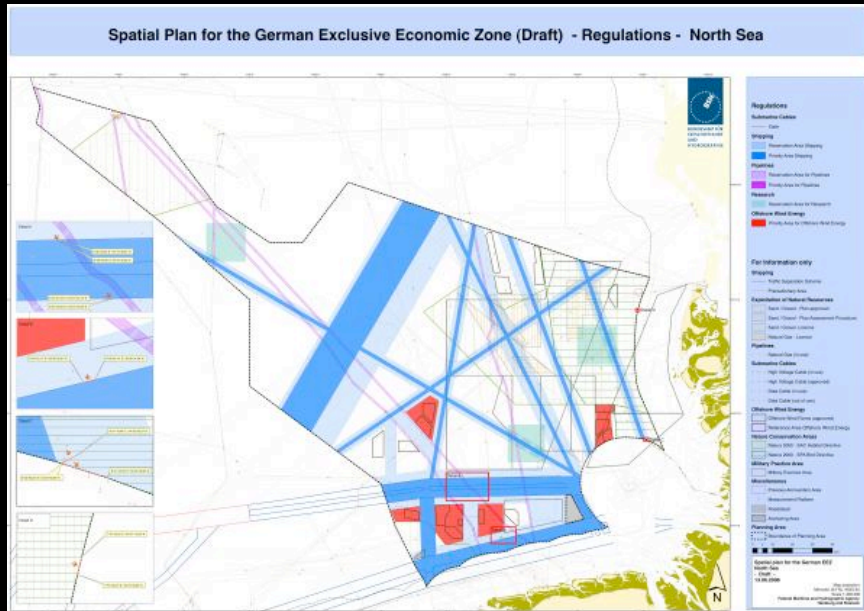
Germany expanded its Federal Spatial Planning Act to the EEZ in 1994

In 2008 the Federal Maritime and Hydrographic Office completed a draft marine spatial plan and environmental assessment of Germany's EEZ

Within the German territorial sea (12 nautical miles) the German states (länder) are responsible for spatial planning

Mecklenburg-Vorpommern (Baltic Sea, 2005) and Niedersachsen (North Sea) have expanded their existing spatial plans from land to the territorial sea

# Integration (Trans-boundary)



Trans-boundary public consultation with The Netherlands is completed; Poland is underway

Informal planning is now underway among Germany, The Netherlands and Belgium to ensure consistency of MSP across international borders

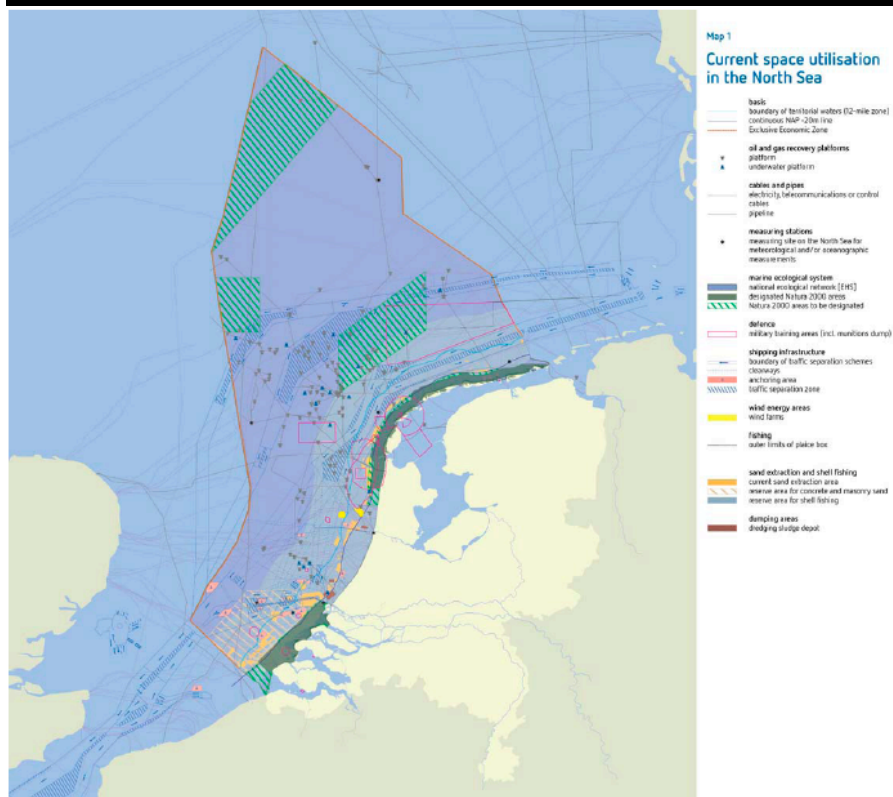
Key issue is maritime safety with respect to other uses and the consistency among nature conservation plans

# Future Orientation

Issue

MSP should focus on the future

# Future Orientation



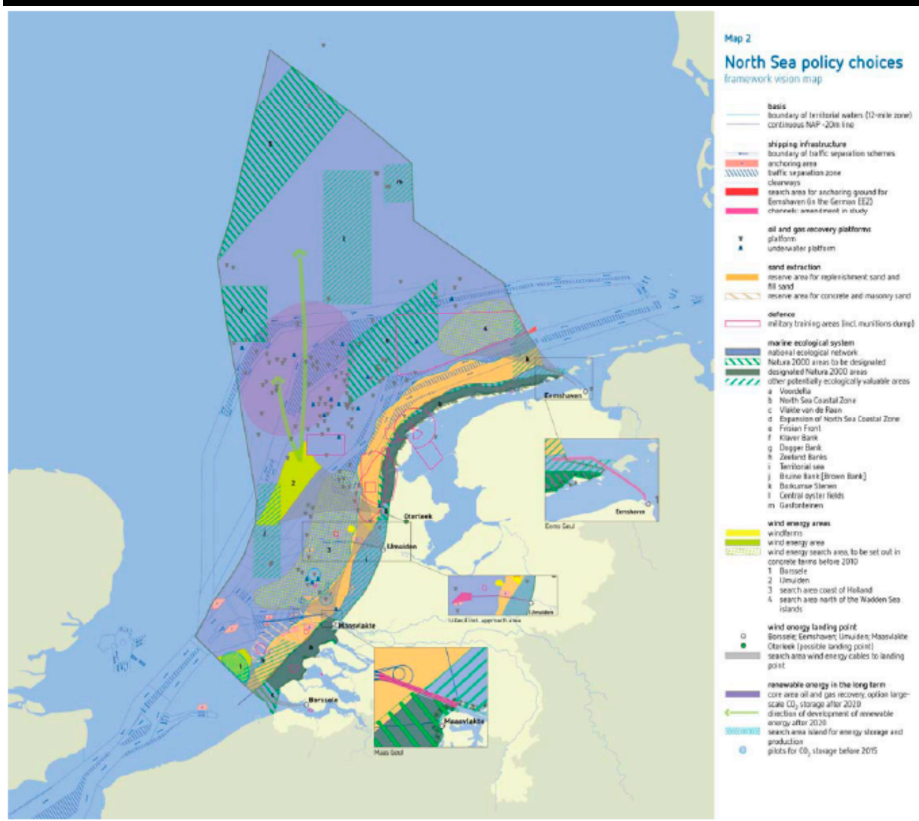
The Netherlands completed its first plan for the North Sea in 2005, including the identification of biologically important areas

It has now created a sea use scenario for 2015

The scenario includes (by sector)

- Expected economic development
- Policy development
- Technical or operational development
- Spatial requirements until and after 2015

# Future Orientation



Economic value relative to demand for space

Visualization of maximum, medium, and minimum growth scenarios

Climate change

- Three alternative sea level rise scenarios

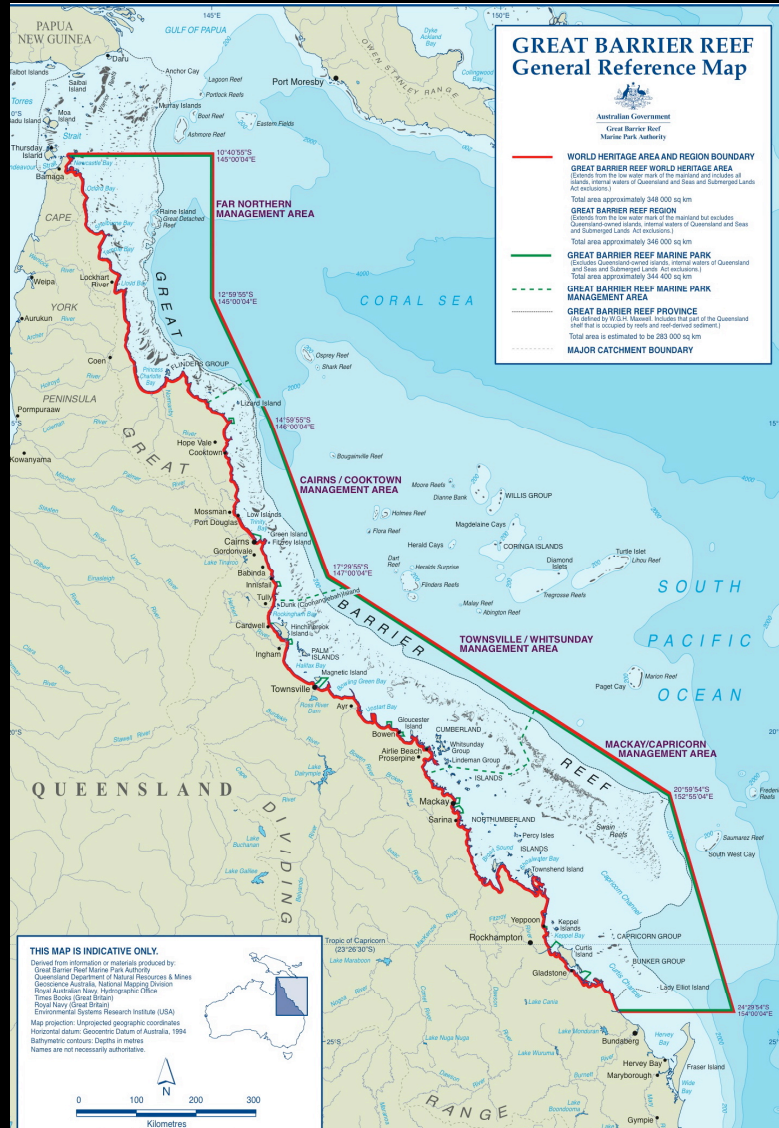
# Adaptive

## Issue

Learning by doing should be an essential characteristic of MSP



# Adaptive



Between 1983-1988 zoning plans were developed for four sections of the GBRMP

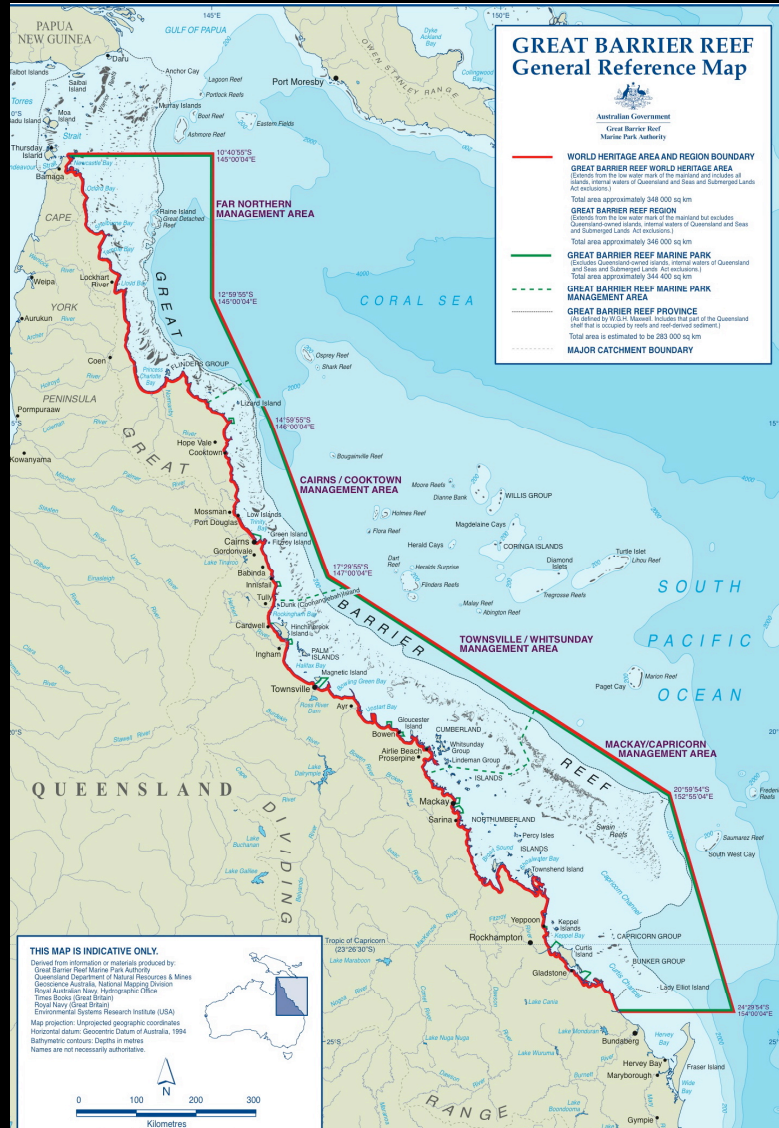
Based on best available information, 4.5% of the GBRMP was designated as “no take” areas

In late 1990s recognition that existing plan did not adequately protect marine biodiversity

Representative Areas Program (RAP) initiated to determine major habitat types of GRRMP and develop new zoning plan



# Adaptive



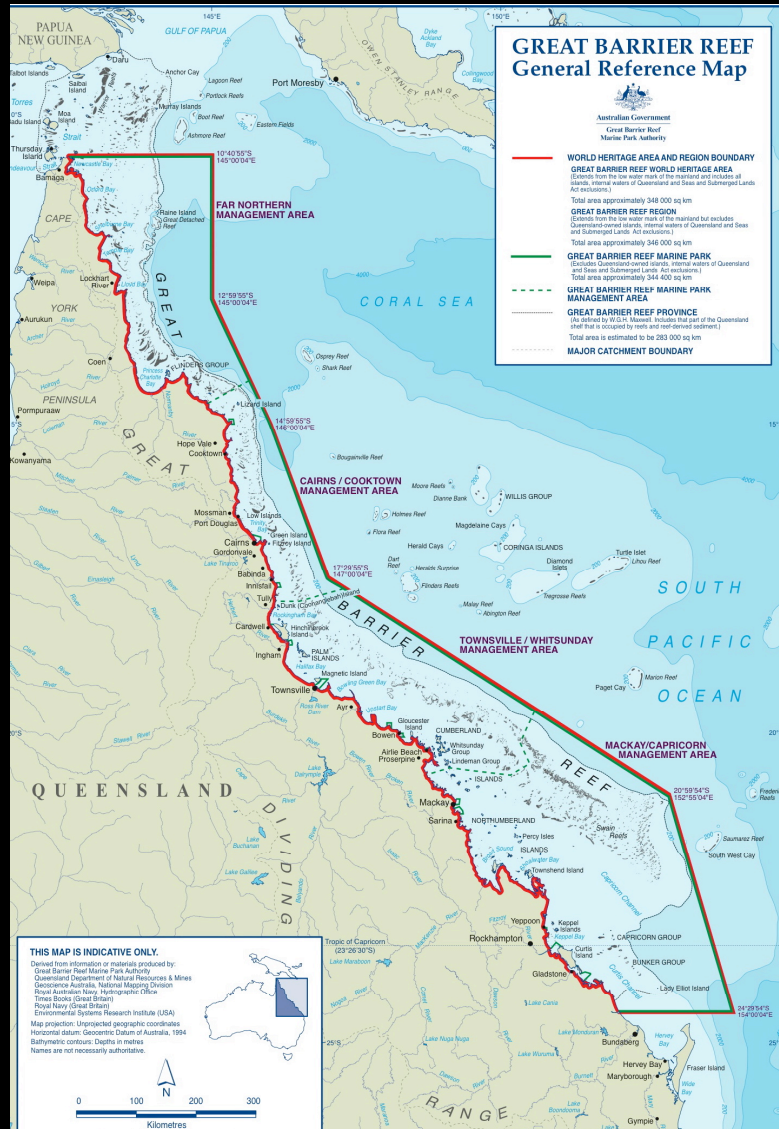
In 1998-99 available biophysical, biological, and oceanographic data sets were compiled

From 1999-2000, 70 bioregions were identified and became the fundamental basis for the RAP

In late 1990s recognition that existing plan did not adequately protect marine biodiversity

In May 2002 public participation phase began; 10,000 public comments received

# Adaptive



Expert opinion, stakeholder involvement, and analytical techniques were used to identify options for no-take networks

By mid-2003 a Draft Zoning Plan was developed and released for public comment; 21,000 new comments received

The revised Zoning Plan was completed in 2003; it now protects 33% of the GBRMP as no-take areas and includes adequate examples of all 70 bioregions

# Summary

- MSP is a public process of analyzing and allocating spatial and temporal distribution of human activities in marine areas to achieve ecological, economic and social objectives
- Three fundamental questions are:
  - Where are we today?
  - Where do we want to be?
  - How do we get there?
- MSP should be integrated, ecosystem-based, place-based, strategic, participatory and adaptive

# Summary

- Oceans are not homogeneous; some areas are more important than others
- MSP should address spatial and temporal heterogeneity
- Benefits include greater certainty to private sector, streamlined permitting, and identification of areas for development
- Benefits also include identification of biologically important areas, finding space for nature conservation, and ultimately the maintenance of the natural services of marine ecosystems

# Summary

- MSP involves a set of steps, all of which should be carried out to achieve successful results
- Finally, valuable lessons can be learned from examining what has worked and not worked in other MSP experiences around the world

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[ioc3.unesco.org/marinesp](http://ioc3.unesco.org/marinesp)

# Thank you!



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