



EBM in Australia: National, Regional and Local Approaches

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www.csiro.au



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Background

**Marine industry
value**

**\$48
billion**

(AIMS Index of
Marine Industry
2014)

Offshore oil & gas
exploration and
extraction

\$24.2bn

Marine tourism &
recreational activities

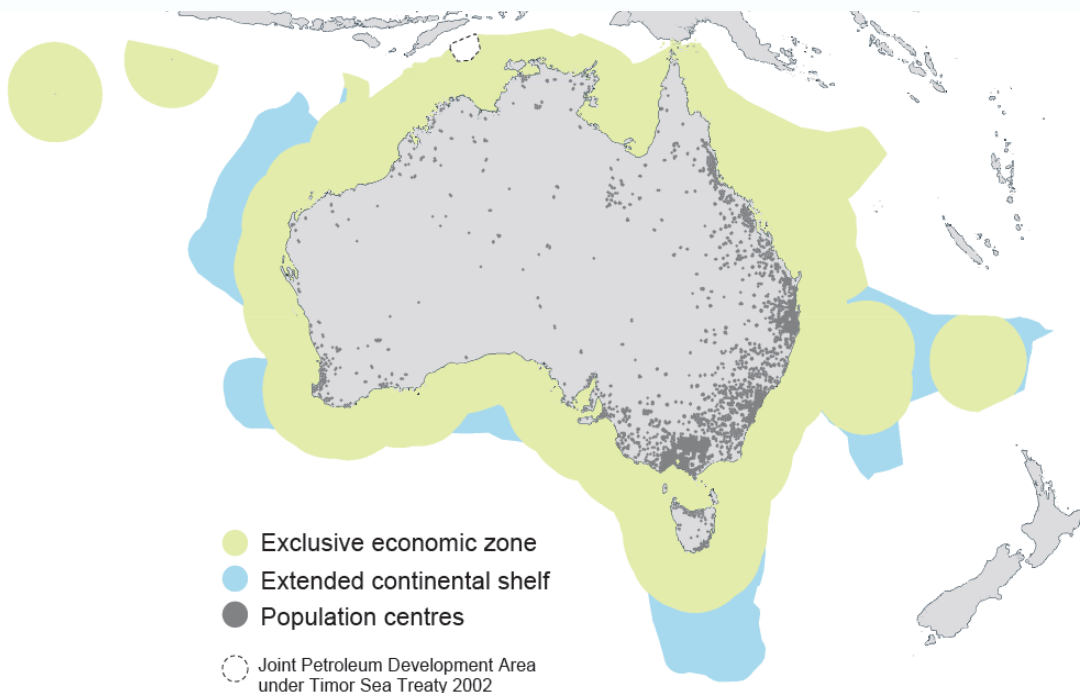
\$11.1bn

Ship building, repair,
maintenance services
& infrastructure

\$6.4bn

Commercial fishing &
aquaculture

\$2.3bn



Australia is a Federation of states

- States have coastal and fishery jurisdiction to 3 miles
- Remainder federal jurisdiction

Ecosystem Based Management

Several definitions of EBM but a core principal is recognition of connections between marine, coastal and terrestrial systems as well as between ecosystems and human societies

Simply put it aims to balance human activities and environmental stewardship in a multiple-use context



Australia's Oceans Policy 1998

National Ocean Office 2000 – 2005

- Integrated oceans management
- Council of ministers
- NOAG, OPSAG

Environment Department 2005 – present

- NOO disbanded
- Focus from multiple use to environmental issues

Marine Bioregional Plans

- Commonwealth Marine Reserve Network CMRN (2012)

Science input to

- Marine bioregionalization
- Principles of Ocean Policy
- CMRN – design and now monitoring and evaluation

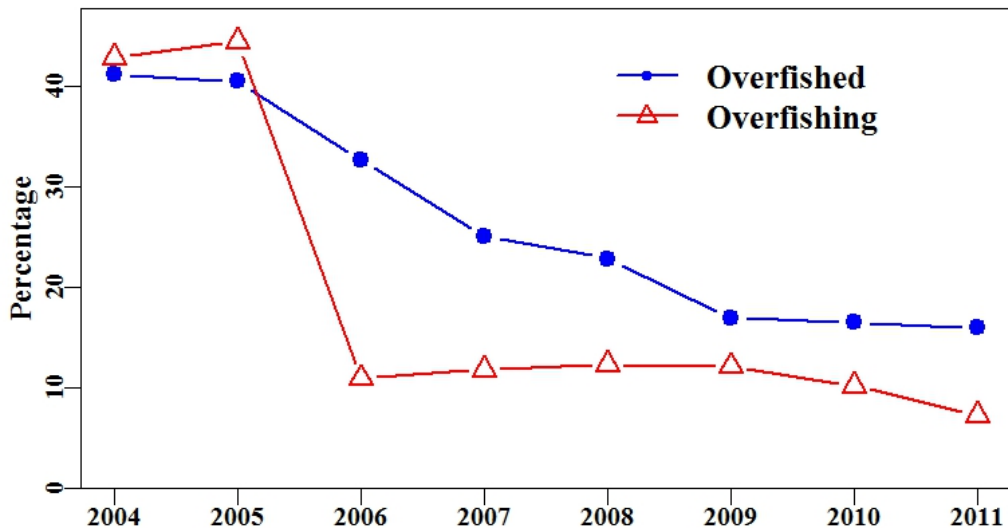
Australia's Oceans Policy

So why did it fall short of expectations?

Key learnings (Vince et al 2015. Marine Policy 57)

- Too ambitious
- No legislative basis initially but then EPBC Act 1999 (primarily conservation and environment)
- Lack of clear ownership of policy process
- States effectively excluded
- Need and form of integrated management
- Need for clear objectives, priorities and standards
- Sectors at various stages of operational implementation of ESD
- Policy in front of science

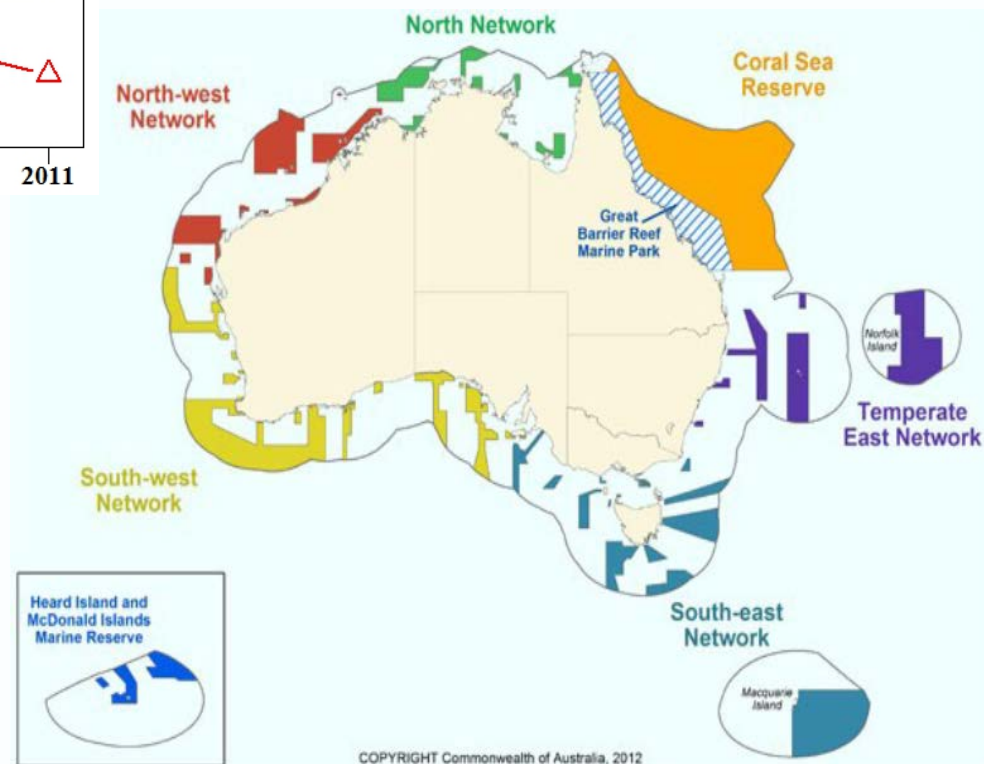
Australia's Ocean Policy



(ADM Smith et al 2014. ICES JMS 71)

Closer links between fisheries and environmental management

Roll-out of Commonwealth Marine Reserves



Great Barrier Reef

GBRMP Act 1975

Great Barrier Reef Marine Park Authority

First section declared 1979

Large rezoning in 2003

came into effect July 2004

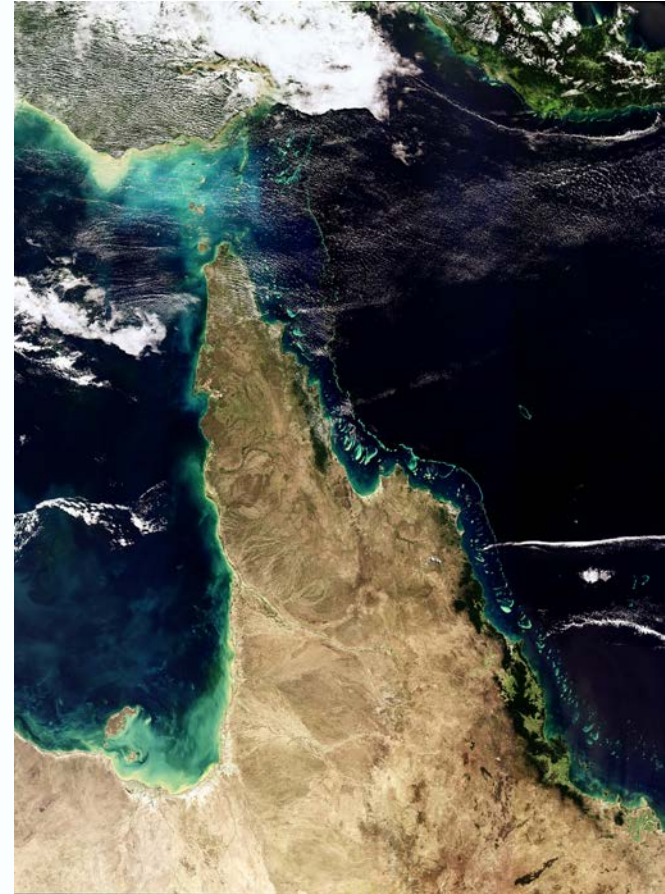
no-take areas increased - <5% to >30%

Multiple-use management

fisheries, tourism, shipping, conservation

interactions with land-based activities

dredging, port developments



www.gbrmpa.gov.au

Great Barrier Reef

Iconic status

Strong legislative base

Commonwealth and Queensland

Operational agency GBRMPA

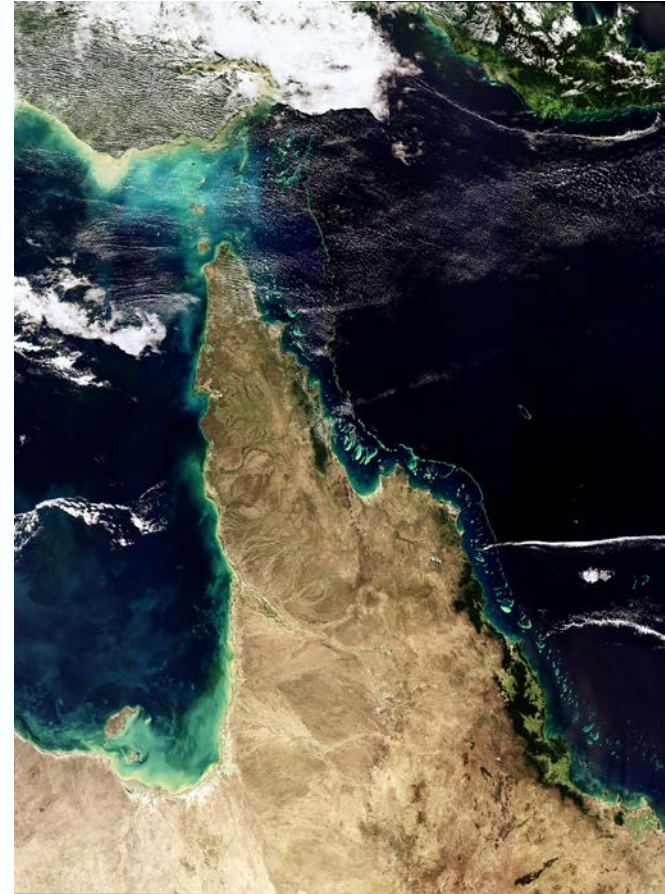
Head of Power allows it to adapt and evolve

Commitment to working

at local and regional level

with people adjacent to the reef

www.gbrmpa.gov.au



NSW Marine Estate

NSW Marine Estate Management Authority

- Reports to Ministers for Primary Industry, Environment
- High-level representatives from Trade, Environment, Transport, Planning
- Supported by Expert Knowledge Panel

“Managing the Marine Estate as an integrated body represents a new chapter in coastal & marine management in NSW”

NSW Marine Estate Management Authority 2013

www.marine.nsw.gov.au



Gladstone Healthy Harbour Partnership (GHHP)

QLD government established GHHP 2014

Delivers a shared vision for a healthy Gladstone Harbour

Forum: industry, community, science, government, statutory bodies & management

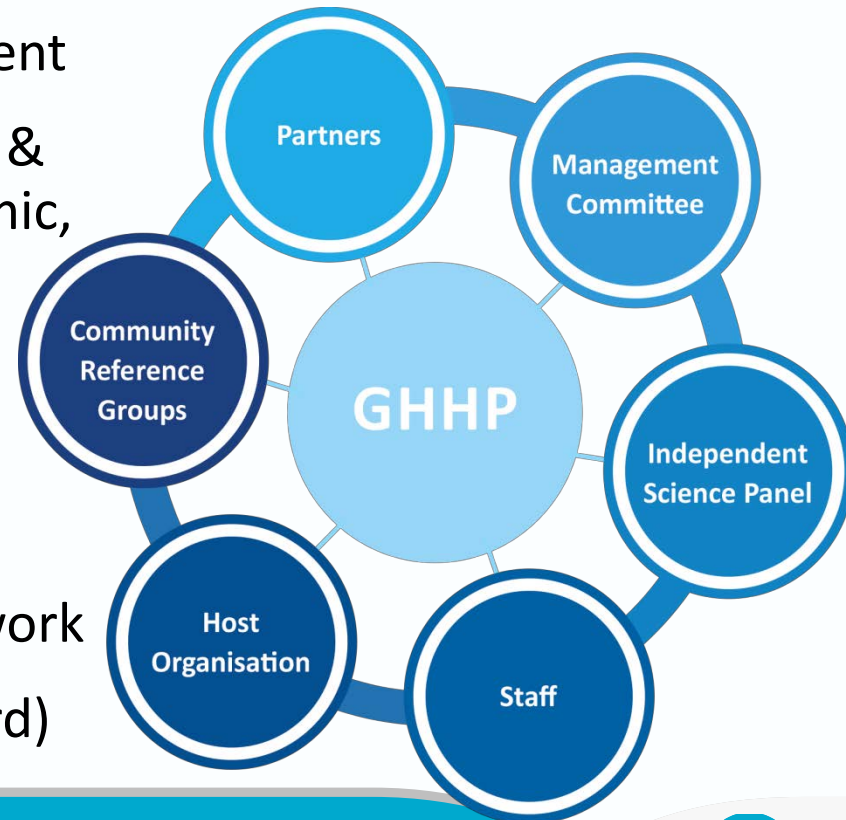
Work together to understand relationships & interdependencies (environmental, economic, social and cultural)

Aligns research & management activities

Harnesses co-investment opportunities (Government + partners fund work)

Implements adaptive management framework

Communicates with community (report card)



Spencer Gulf Ecosystem and Development Initiative

To drive sound outcomes for gulf users and the environment

Supported by ~\$2.5 m of industry and research

Forum for stakeholder engagement

Better Information

data, tools, capabilities & networks

Inform approval applications

reduce costs & delays, assist development

Reduce conflict and increase community support

Thriving Gulf

balance environmental, economic and social objectives



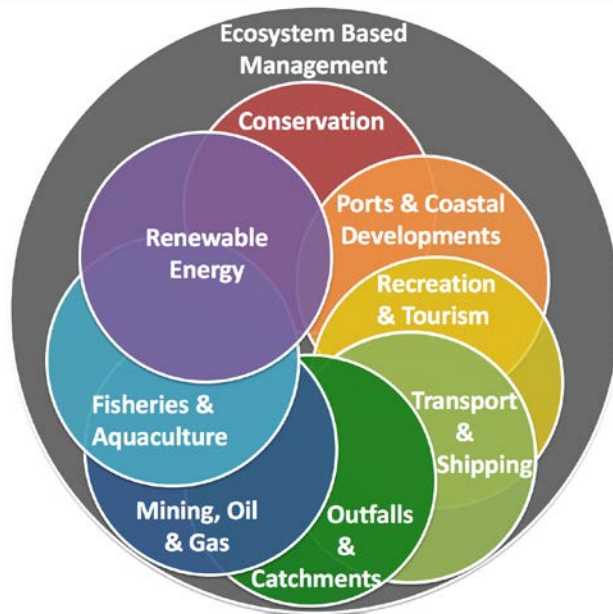
SARDI

Concluding thoughts

Need

- Clarity around form of EBM
- Legislative basis or strong governance framework
- Stakeholder ownership
- Operational objectives

It is about identifying trade-offs not optimisation



or



Concluding thoughts

Further research is required on:

- Cumulative impacts, eg
 - synergistic or antagonistic impacts
 - non-linearity
 - thresholds
- Role of spatial management
- Acceptable impacts
- Social Licence to Operate (in Australia at least)

Do we need new models, tools?

Thank you

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Policy Drivers in Australia

major policy drivers include:

- Adoption of ESD - 1992
- Australia's Oceans Policy - 1998
- Environment Protection & Biodiversity Conservation Act - 1999
 - Marine bioregional plans and marine parks
 - Threatened species
 - Whales
 - Environmental impact assessment
 - Sustainable fisheries and export controls
- EBFM adopted as policy goal in mid 2000s
- Ministerial Direction on Fisheries
 - Harvest Strategy Policy - stop over-fishing and rebuild overfished stocks
 - Reduce environmental impact of fisheries
- International agreements/conventions (eg WSSD, CBD, RFMOs)