



Australian Government

Australian Maritime Safety Authority

# Maritime Spatial Planning Developments in Australia

## e-Nav Underway 2013

**Nick Lemon (AMSA)**



Australian Government

Australian Maritime Safety Authority

Opinions contained in this presentation are the presenter's and not necessarily those of AMSA or the Australian government

**Disclaimer**



Australian Government

Australian Maritime Safety Authority

# Presentation Outline

- What is MSP?
- MSP in Australia in general
- Water Space Management – NW and NE Australia
- Tools for MSP - AMSIS and S-10X
- Conclusions



Australian Government

Australian Maritime Safety Authority

## What is MSP?

EC – MSP is about planning **and regulating** all human uses of the sea, while protecting marine ecosystems. It focuses on marine waters under national jurisdiction and is concerned only with planning activities at sea. It does not cover management of coastal zones or spatial planning of sea-land interface.

[http://ec.europa.eu/maritimeaffairs/policy/maritime\\_spatial\\_planning/index\\_en.htm](http://ec.europa.eu/maritimeaffairs/policy/maritime_spatial_planning/index_en.htm)



Australian Government

Australian Maritime Safety Authority

# What is MSP?

UNESCO – MSP is a **public process** of analyzing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic and social objectives that have been specified through a political process.

***Management v's Planning*** - Planning is one element of a larger process, which includes implementation, enforcement, monitoring, evaluation, research, public participation, and financing—all of which must be present to carry out effective management over time.



Australian Government

Australian Maritime Safety Authority

## MSP in Australia in general

- MSP well advanced where its been done for ecological reasons, or in some areas where the main purpose has been for coastal zone management.
- As in other places MSP processes have not always adequately addressed shipping or maritime safety.
- AMSA has been engaged in many elements of MSP, but we have previously focused on discrete locations, or regions.
- AMSA formalizing MSP for shipping and maritime safety in the form of a national coastal shipping management plan.

# North Network

North-west Network

Coral Sea Reserve

Great Barrier Reef Marine Park

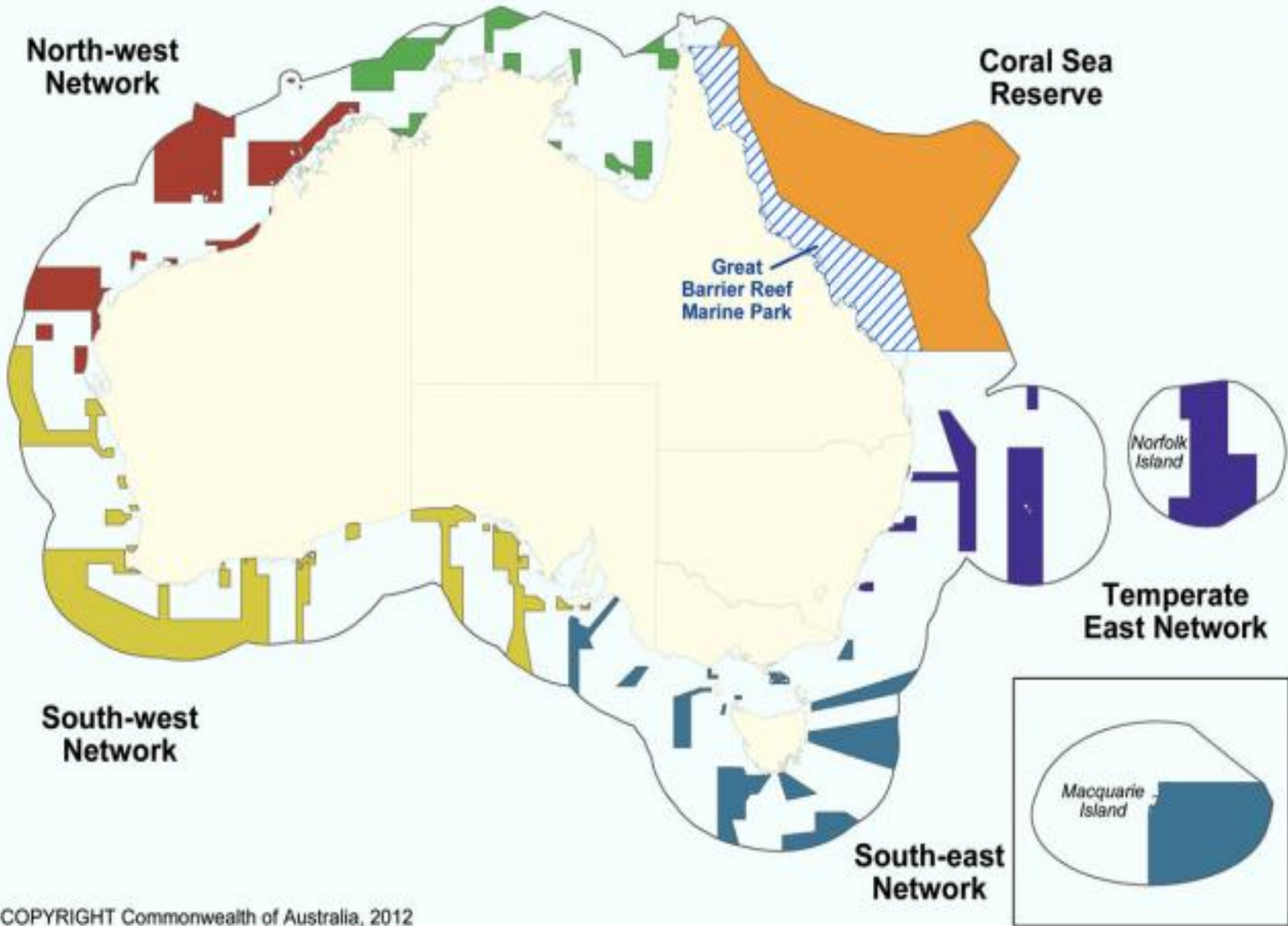
Norfolk Island

Temperate East Network

South-west Network

South-east Network

Macquarie Island





Australian Government  
Australian Maritime Safety Authority

# MSP in Australia

The Australian Great Barrier Reef Marine Park (GBRMP), well known example of marine park zoning.

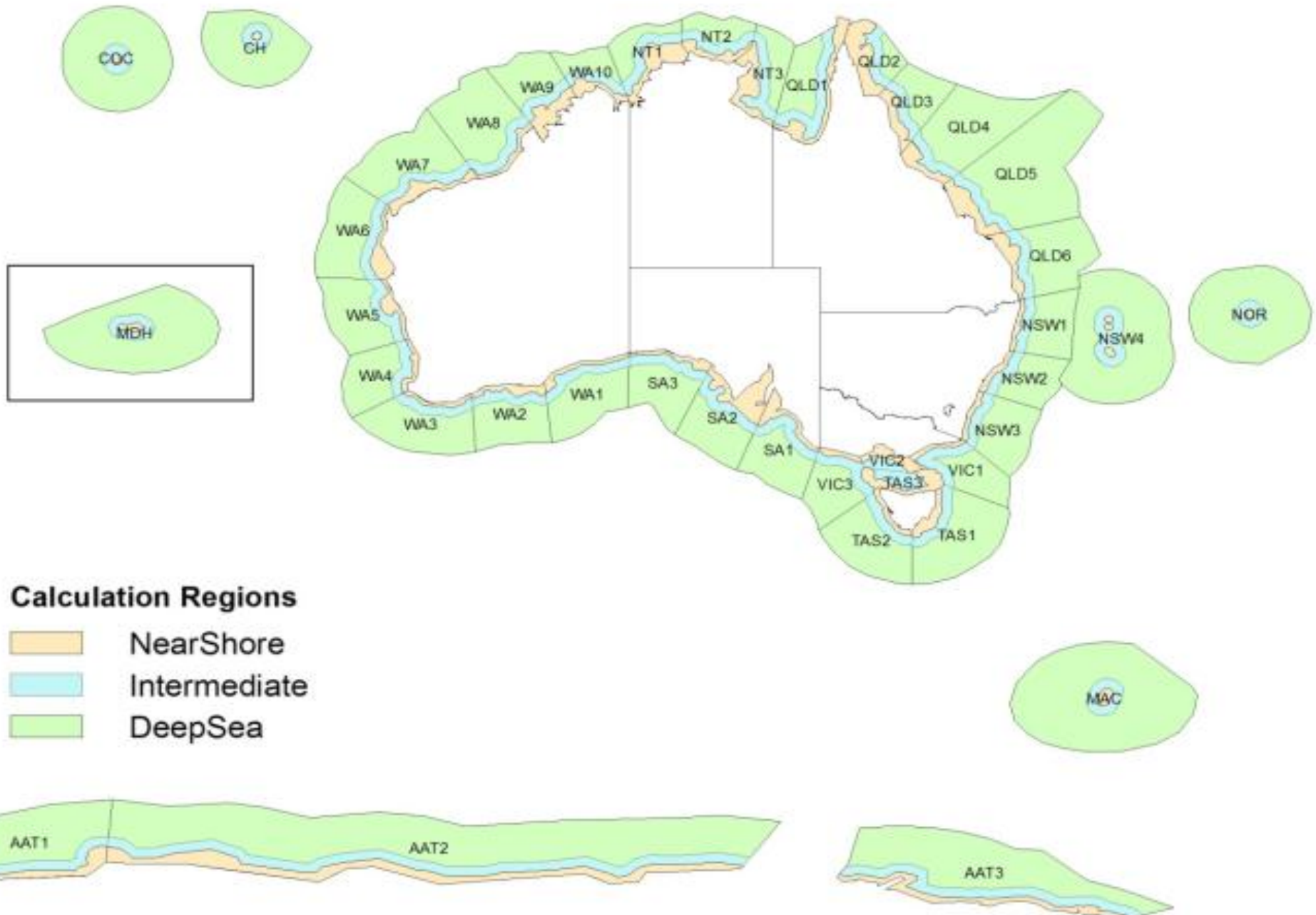
Encompasses 2,300 km of coastline and is one of the world's richest and most diverse marine ecosystems.

The GBRMP covers approximately 344,400 km<sup>2</sup>, making it one of the largest marine protected areas in the world.

[http://www.unesco-ioc-marinesp.be/spatial\\_management\\_practice/australia\\_great\\_barrier\\_reef](http://www.unesco-ioc-marinesp.be/spatial_management_practice/australia_great_barrier_reef)







# AUSTRALIAN COASTAL SHIPPING MANAGEMENT PLAN

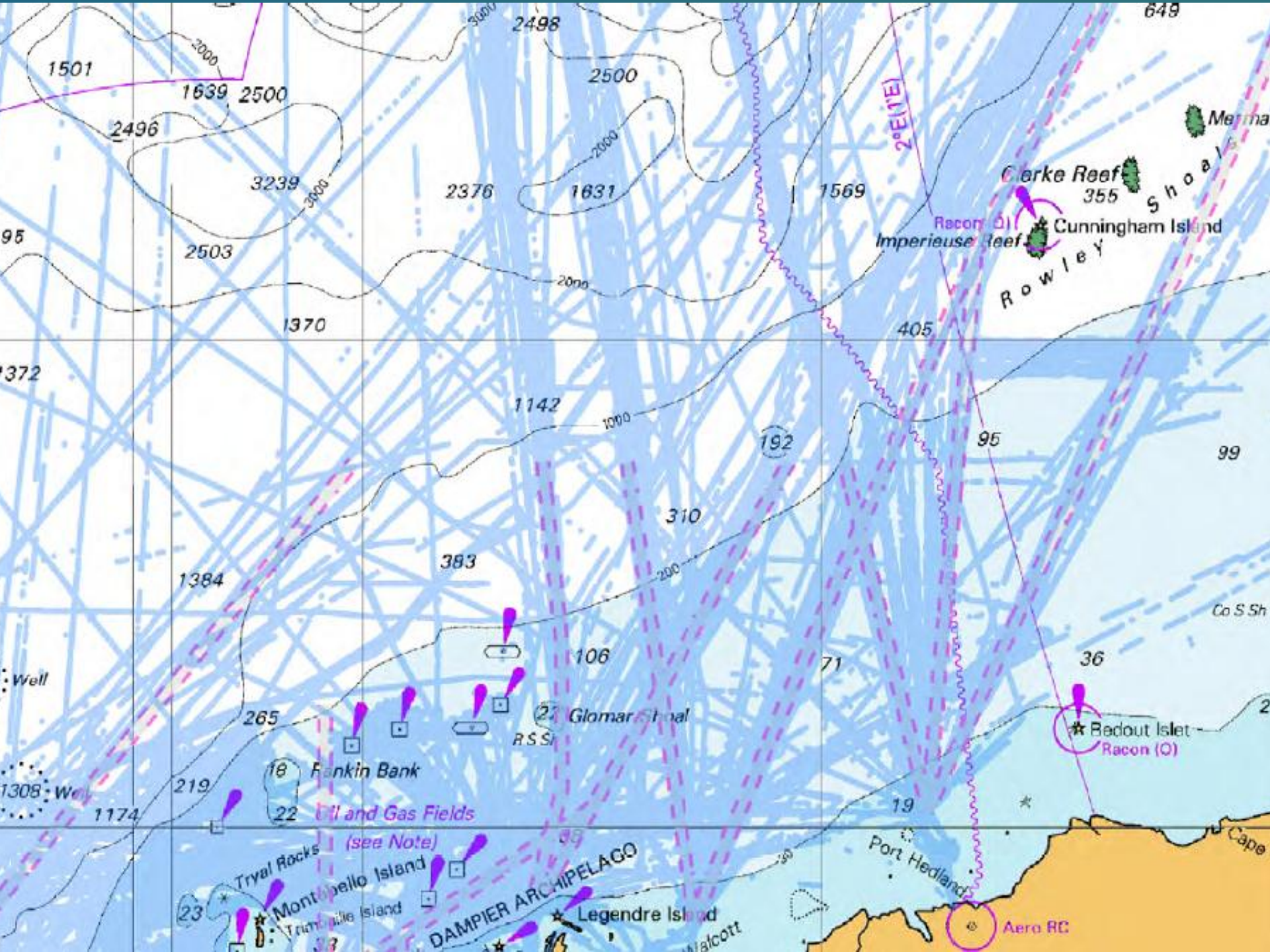


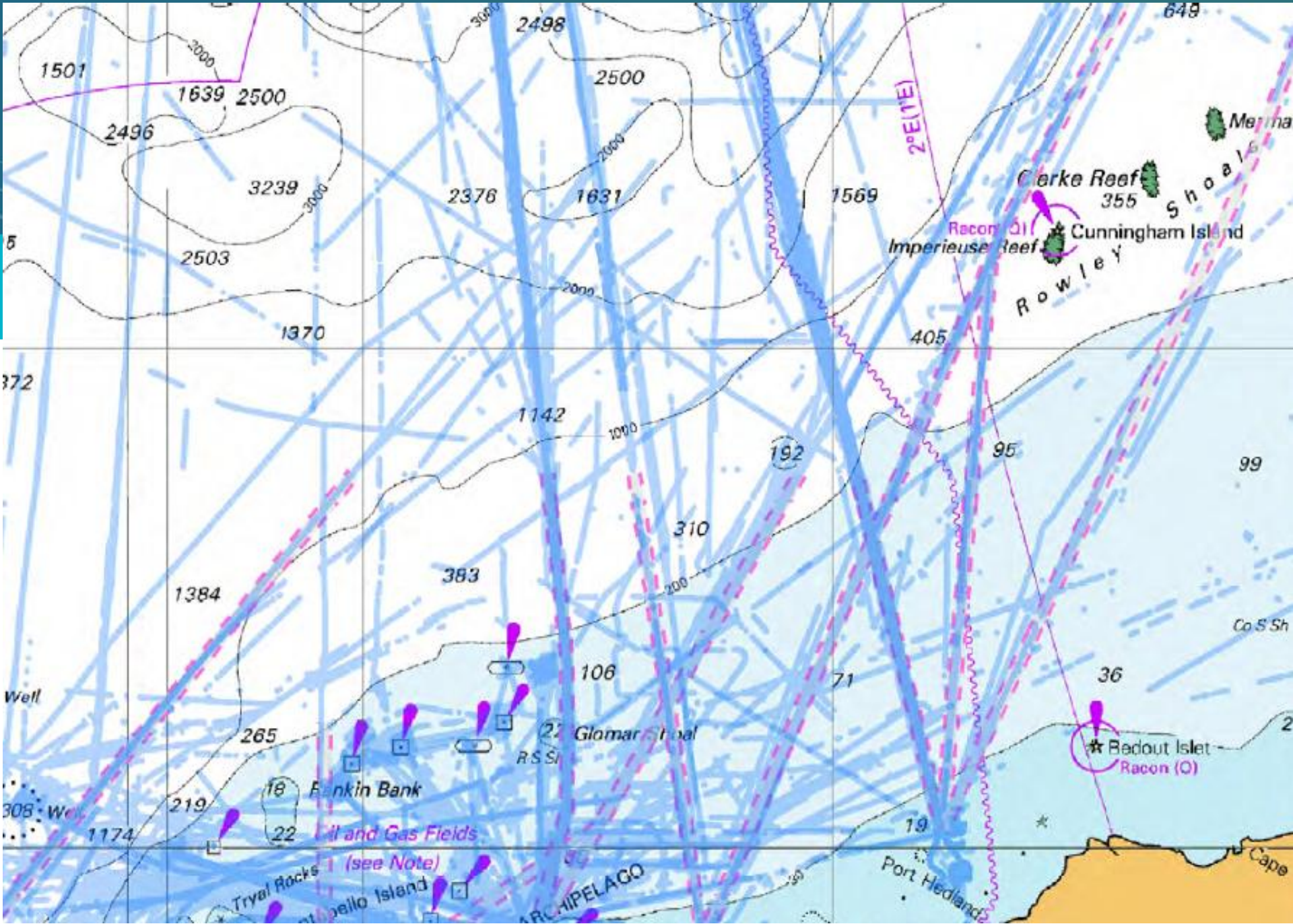
Australian Government

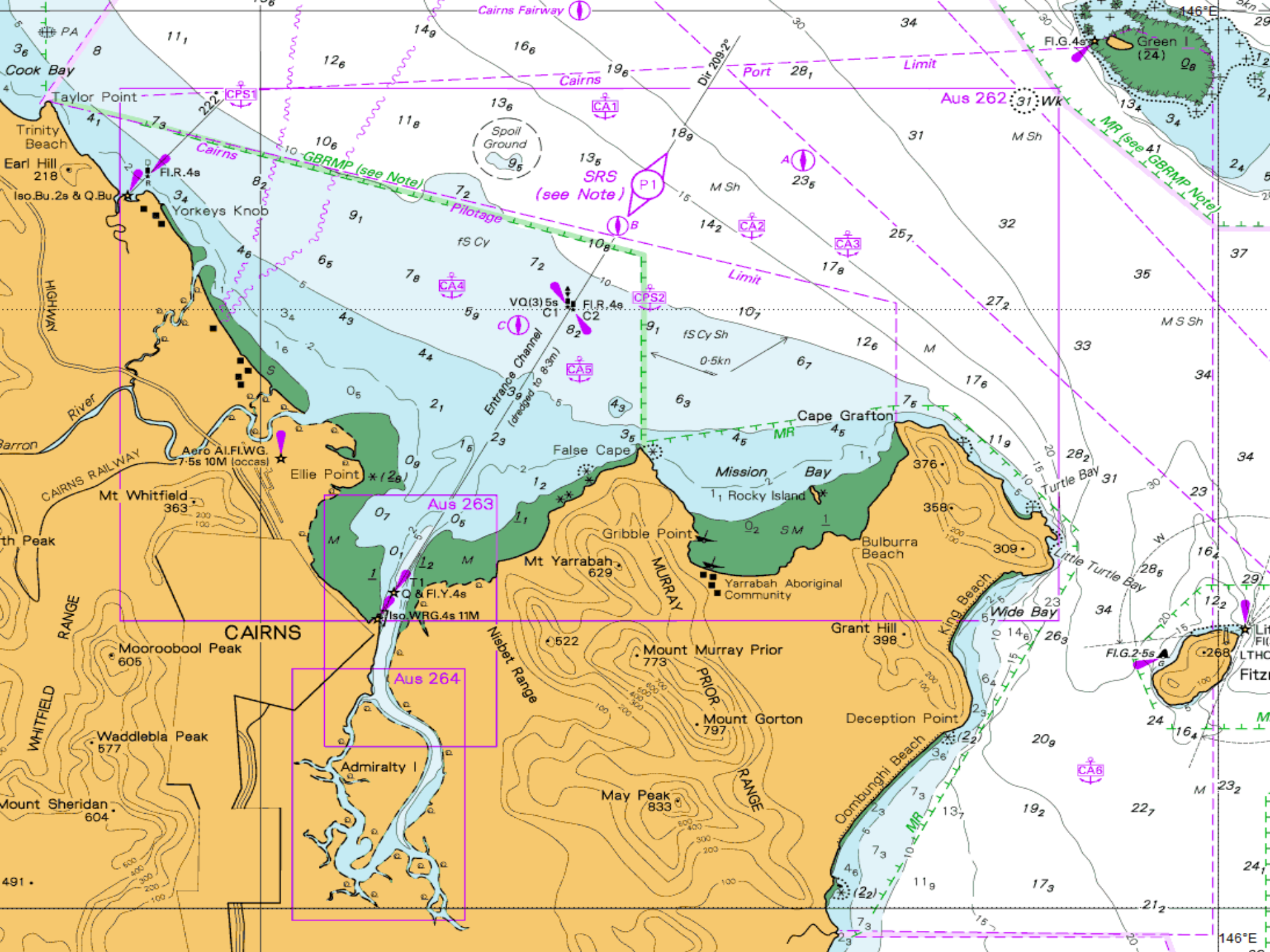
Australian Maritime Safety Authority

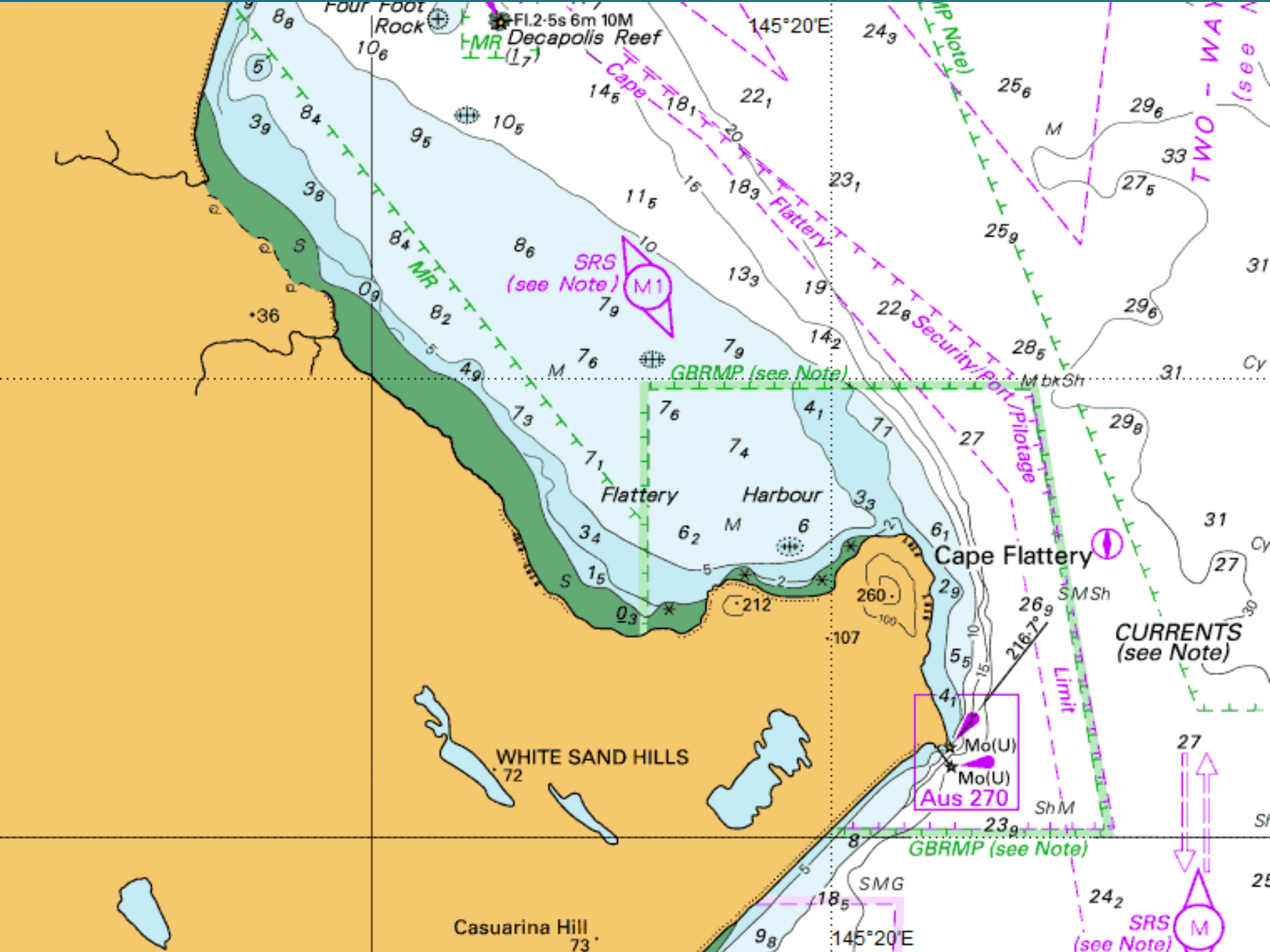
# Water Space Management

- NW Shipping Management Plan
- NE Shipping Management Plan and the NE WSM Working Group
- Examples of issues ‘unearthed’:
  - Port/pilot limits and shipping routes











Australian Government

Australian Maritime Safety Authority

## Tools for MSP – AMSIS

- **Australian Maritime Spatial Information System – AMSIS**
- a web based interactive mapping and decision support system that improves access to integrated government and non-government information
- contains layers of information displayed in themes of Maritime Boundaries, Petroleum, Fisheries, Regulatory, Environment, Native Title and Offshore Minerals.
- Information displayed can be interrogated for further details and deeper understanding

<http://www.ga.gov.au/marine/jurisdiction/amsis.html>



# Australian Marine Spatial Information System (AMSIS)

## Australian Maritime Boundaries Map

Home | About Us | News and Media | Products | Education | Jobs | Contact Us

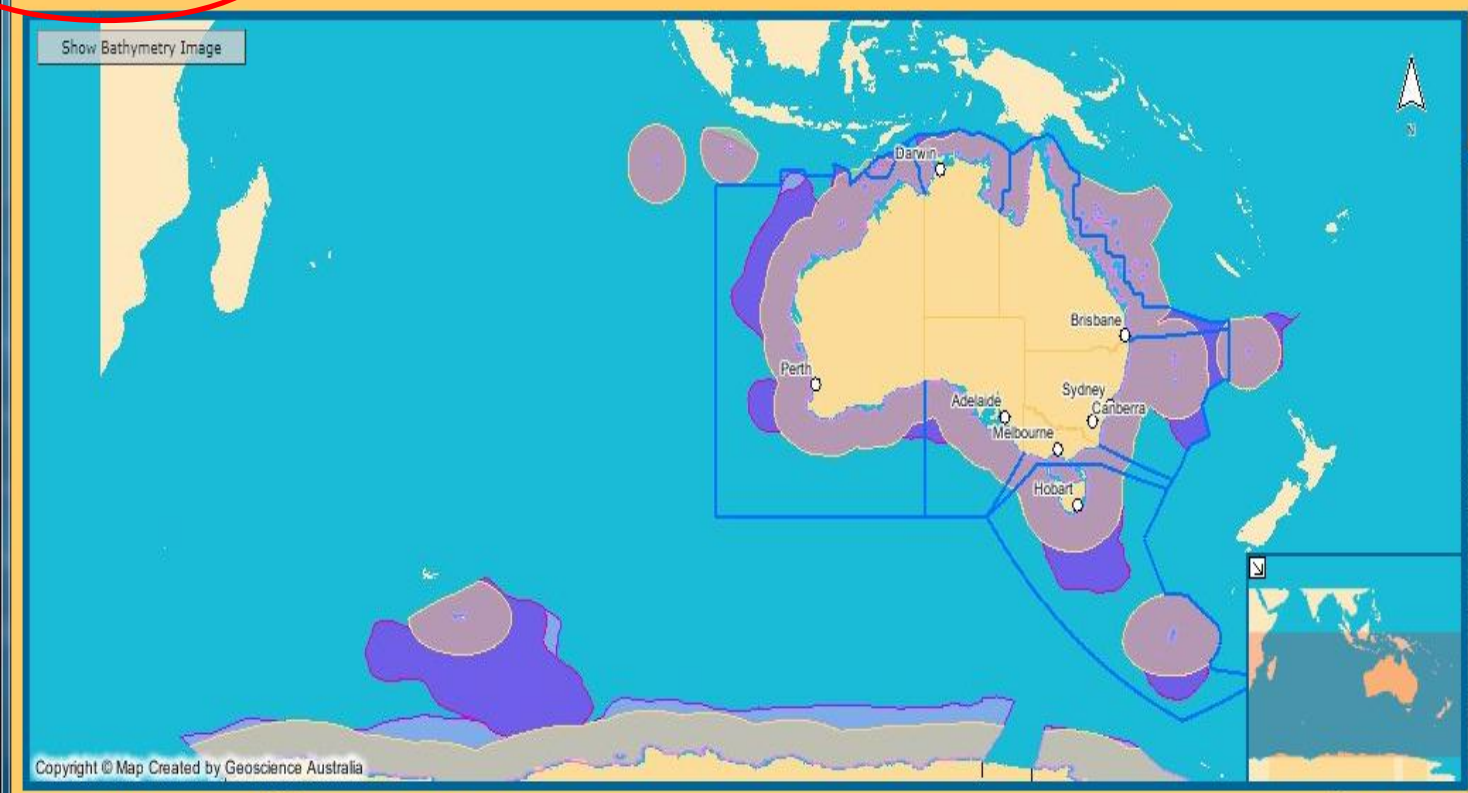
Maritime Boundaries | Petroleum | Fisheries | Regulatory | Environment | Native Title | Offshore Minerals  Keep Map Extent

Maritime

Links

Navigation | Measure | Draw | Data | Save | Information

Navigation icons: Home, Back, Forward, Refresh, Stop, Print, Measure, Draw, Data, Save, Information, Help, Feedback



Legal Interests | Distance to Boundary

Welcome | Layers | Legend | Find

### Australian Marine Spatial Information System (AMSIS)

#### Maritime Boundaries

**What is AMSIS?**  
AMSIS is a web based interactive mapping and decision support system that improves access to integrated government and non-government information in the Australian Marine Jurisdiction. [read more](#)

**What can AMSIS Maritime Boundaries do?**  
AMSIS Maritime Boundaries displays an interactive map of the Australian Maritime Boundaries. The tool on this site allows the user to interrogate the information in the map. [read more](#)

Scale: 1: 71,424,274  Active Map Tool:

Disclaimer  
© Commonwealth of Australia, 2009





# Australian Marine Spatial Information System (AMSIS)

## Australian Maritime Boundaries Map

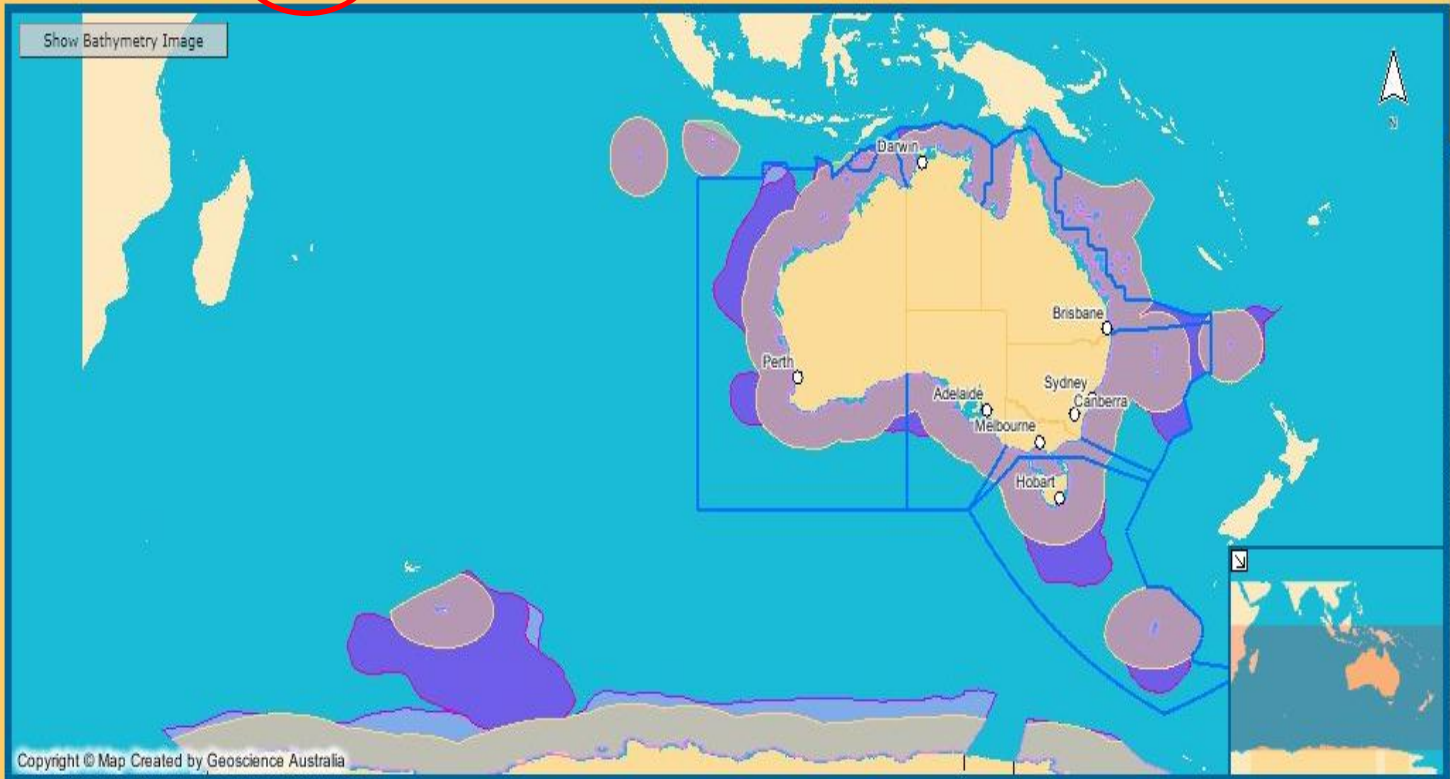
Home | About Us | News and Media | Products | Education | Jobs | Contact Us

Maritime Boundaries | Petroleum | Fisheries | Regulatory | Environment | Native Title | Offshore Minerals  Keep Map Extent

Maritime

Links

Navigation: Measure Draw Data Save Information Help Feedback



Legal Interests | Distance to Boundary | Welcome | Layers | Legend | Find

### Australian Marine Spatial Information System (AMSIS)

#### Maritime Boundaries

**What is AMSIS?**  
AMSIS is a web based interactive mapping and decision support system that improves access to integrated government and non-government information in the Australian Marine Jurisdiction. [read more](#)

**What can AMSIS Maritime Boundaries do?**  
AMSIS Maritime Boundaries displays an interactive map of the Australian Maritime Boundaries. The tool on this site allows the user to interrogate the information in the map. [read more](#)

Scale: 1: 71,424,274  Active Map Tool: Zoom In

Disclaimer  
© Commonwealth of Australia, 2009



# Australian Marine Spatial Information System (AMSIS)

## Australian Maritime Boundaries Map

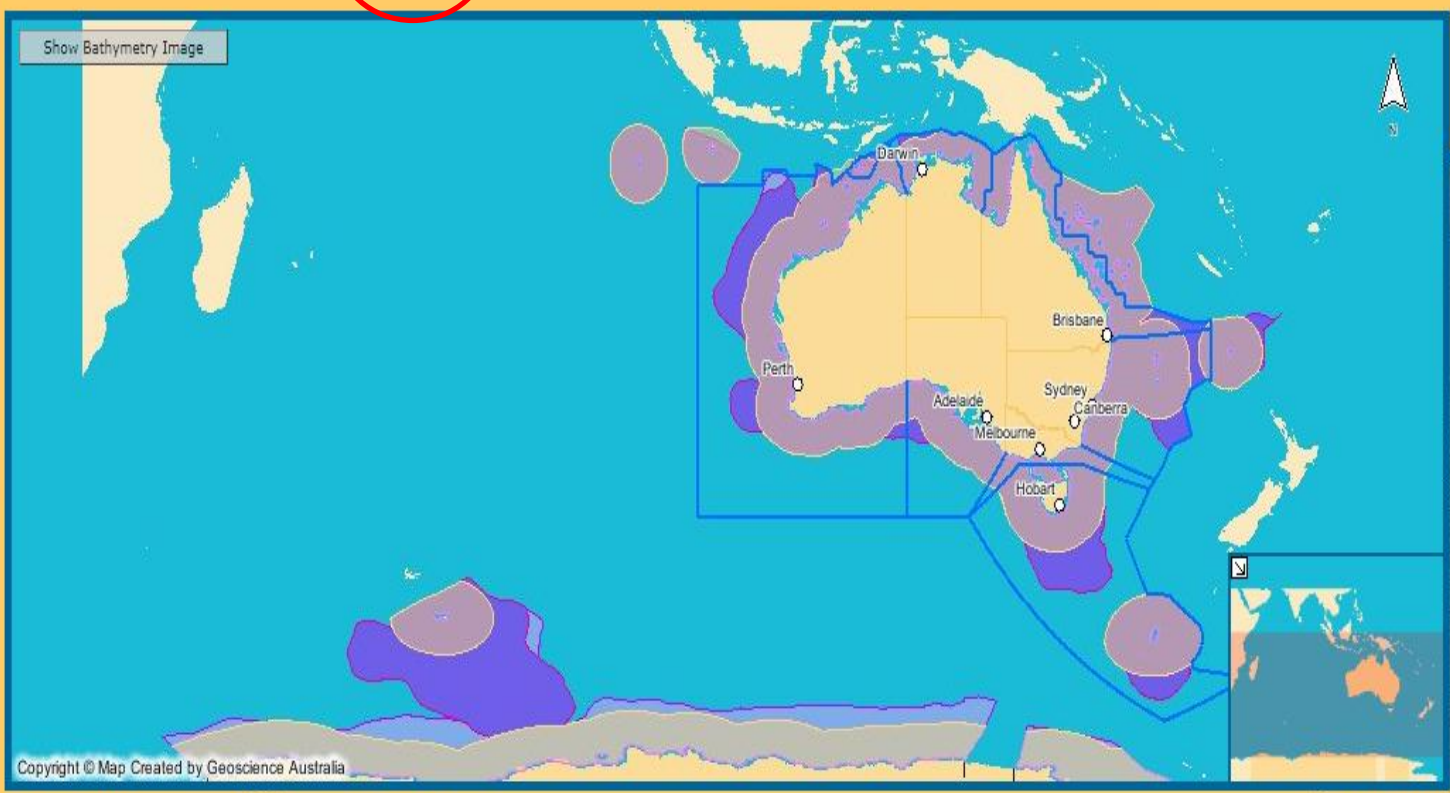
Home | About Us | News and Media | Products | Education | Jobs | Contact Us

Maritime Boundaries | Petroleum | Fisheries | Regulatory | Environment | Native Title | Offshore Minerals  Keep Map Extent

Maritime

Links

Navigation:



Legal Interests | Distance to Boundary | Welcome | Layers | Legend | Find

### Australian Marine Spatial Information System (AMSIS)

#### Maritime Boundaries

**What is AMSIS?**  
AMSIS is a web based interactive mapping and decision support system that improves access to integrated government and non-government information in the Australian Marine Jurisdiction. [read more](#)

**What can AMSIS Maritime Boundaries do?**  
AMSIS Maritime Boundaries displays an interactive map of the Australian Maritime Boundaries. The tool on this site allows the user to interrogate the information in the map. [read more](#)

Scale: 1: 71,424,274  Active Map Tool: Zoom In

Disclaimer  
© Commonwealth of Australia, 2009



# Australian Marine Spatial Information System (AMSIS)

## Australian Maritime Boundaries Map

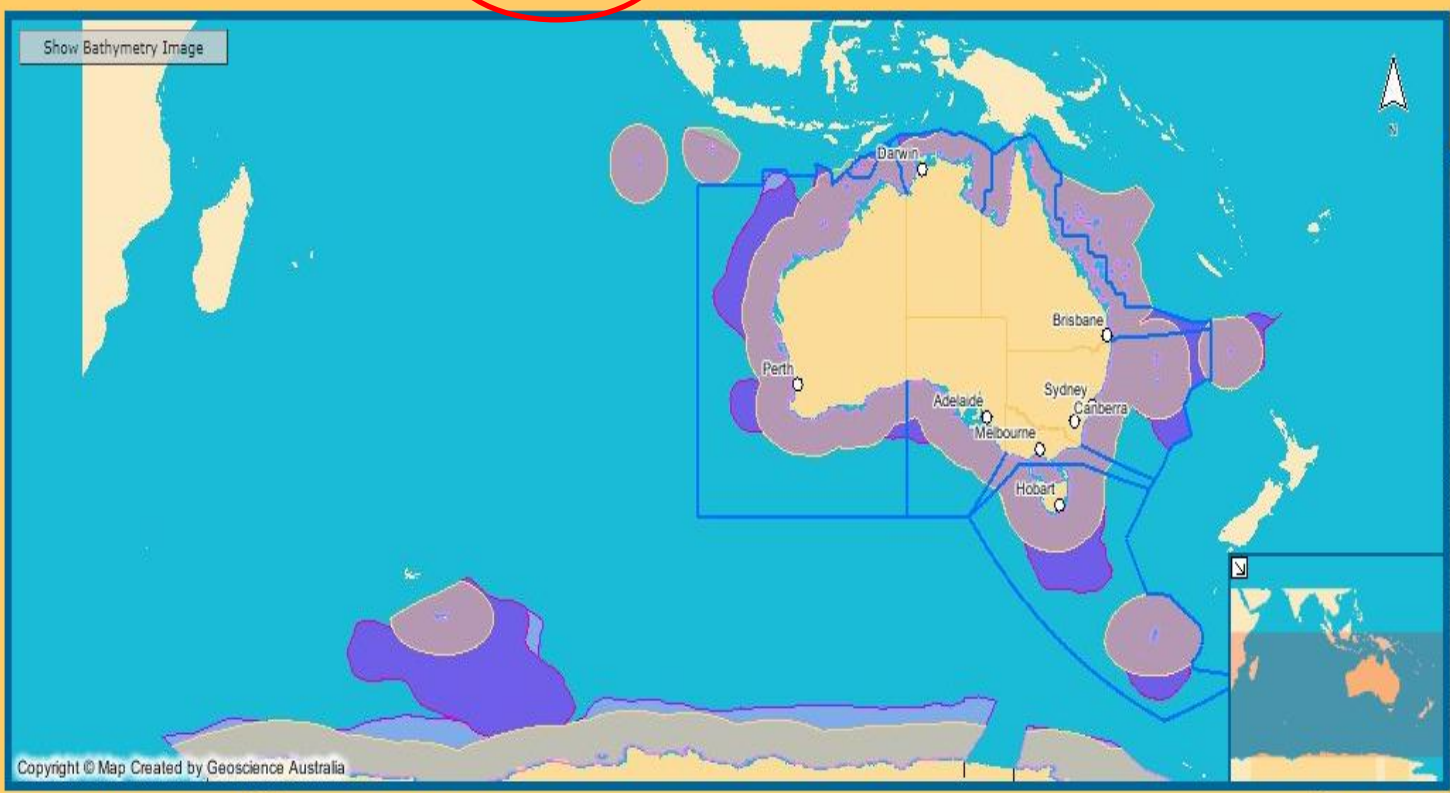
Home | About Us | News and Media | Products | Education | Jobs | Contact Us

Maritime Boundaries | Petroleum | Fisheries | Regulatory | Environment | Native Title | Offshore Minerals  Keep Map Extent

Maritime

Links

Navigation:



Legal Interests | Distance to Boundary | Welcome | Layers | Legend | Find

### Australian Marine Spatial Information System (AMSIS)

#### Maritime Boundaries

**What is AMSIS?**  
AMSIS is a web based interactive mapping and decision support system that improves access to integrated government and non-government information in the Australian Marine Jurisdiction. [read more](#)

**What can AMSIS Maritime Boundaries do?**  
AMSIS Maritime Boundaries displays an interactive map of the Australian Maritime Boundaries. The tool on this site allows the user to interrogate the information in the map. [read more](#)

Scale: 1: 71,424,274  Active Map Tool: Zoom In

Refresh Map

Disclaimer  
© Commonwealth of Australia, 2009



# Australian Marine Spatial Information System (AMSIS)

## Australian Maritime Boundaries Map

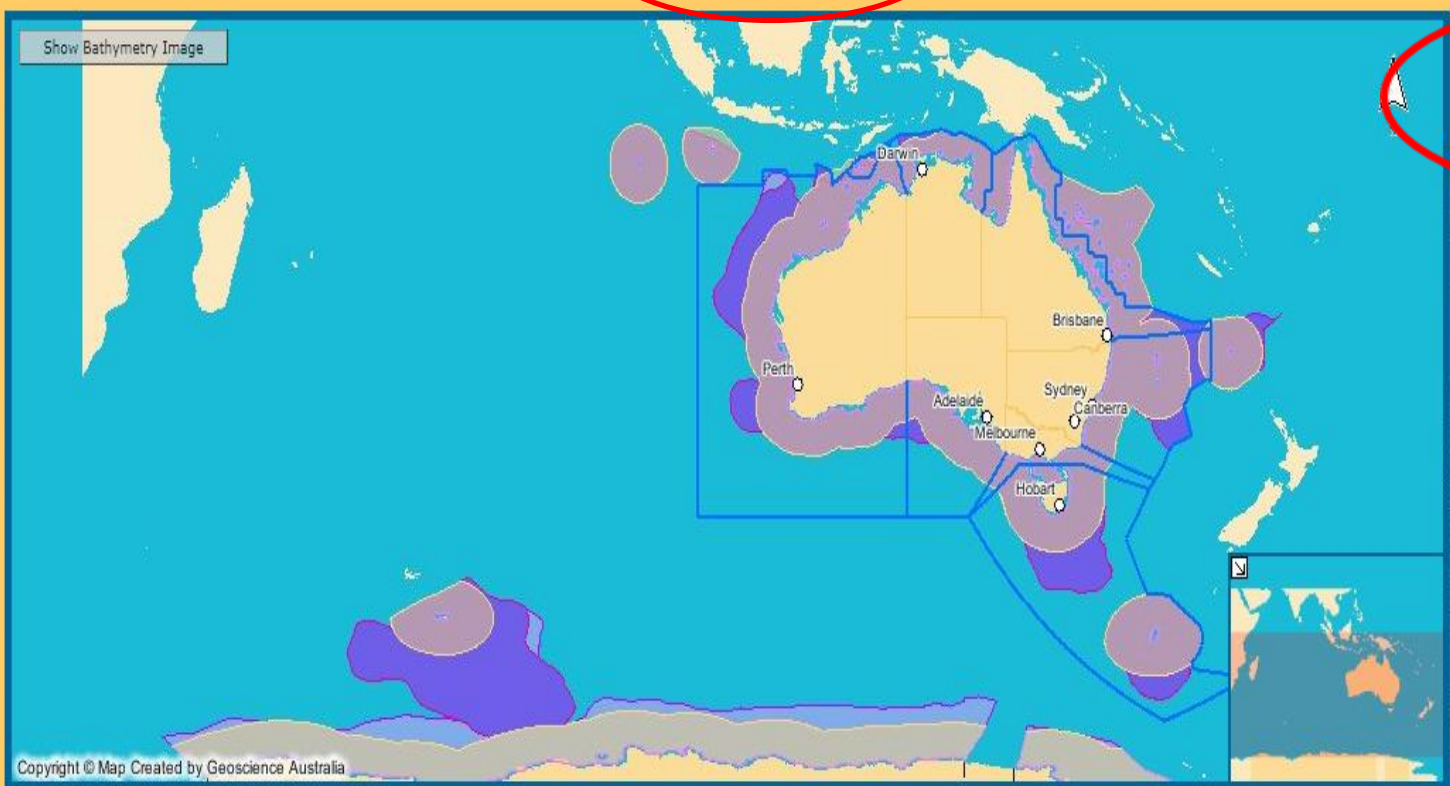
Home | About Us | News and Media | Products | Education | Jobs | Contact Us

Maritime Boundaries | Petroleum | Fisheries | Regulatory | Environment | Native Title | Offshore Minerals  Keep Map Extent

Maritime

Links

Navigation | Measure | Draw | Data | Save | Information | Help | Feedback



Legal Interests | Distance to Boundary | Welcome | Layers | Legend | Find

### Australian Marine Spatial Information System (AMSIS)

#### Maritime Boundaries

**What is AMSIS?**  
AMSIS is a web based interactive mapping and decision support system that improves access to integrated government and non-government information in the Australian Marine Jurisdiction. [read more](#)

**What can AMSIS Maritime Boundaries do?**  
AMSIS Maritime Boundaries displays an interactive map of the Australian Maritime Boundaries. The tool on this site allows the user to interrogate the information in the map. [read more](#)

Scale: 1: 71,424,274  Active Map Tool:

Disclaimer  
© Commonwealth of Australia, 2009



Maritime Boundaries Petroleum Fisheries Regulatory Environment Native Title Offshore Minerals

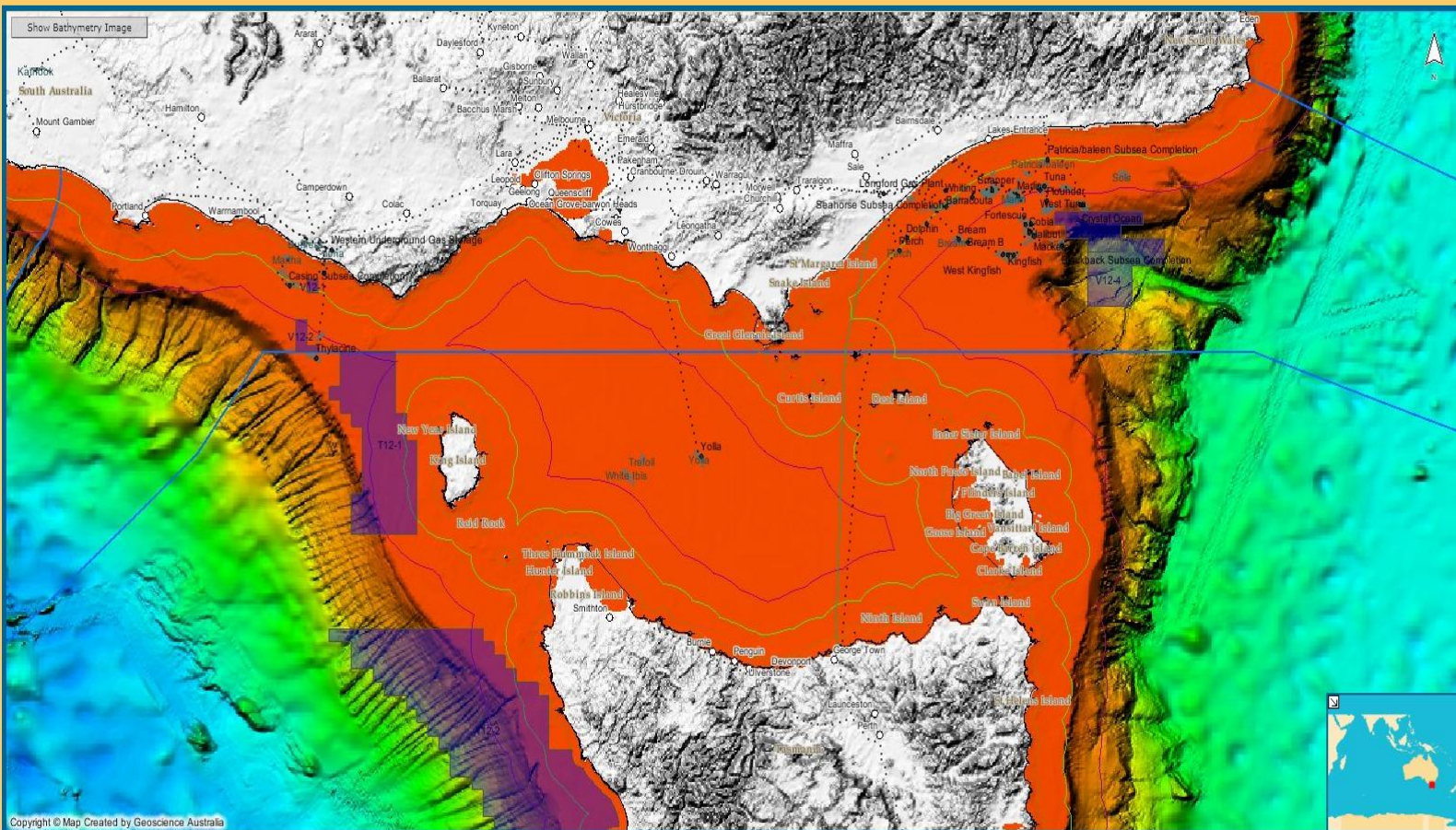
Keep Map Extent

Maritime

Links

Navigation Measure Draw Data Save Information

Show Bathymetry Image



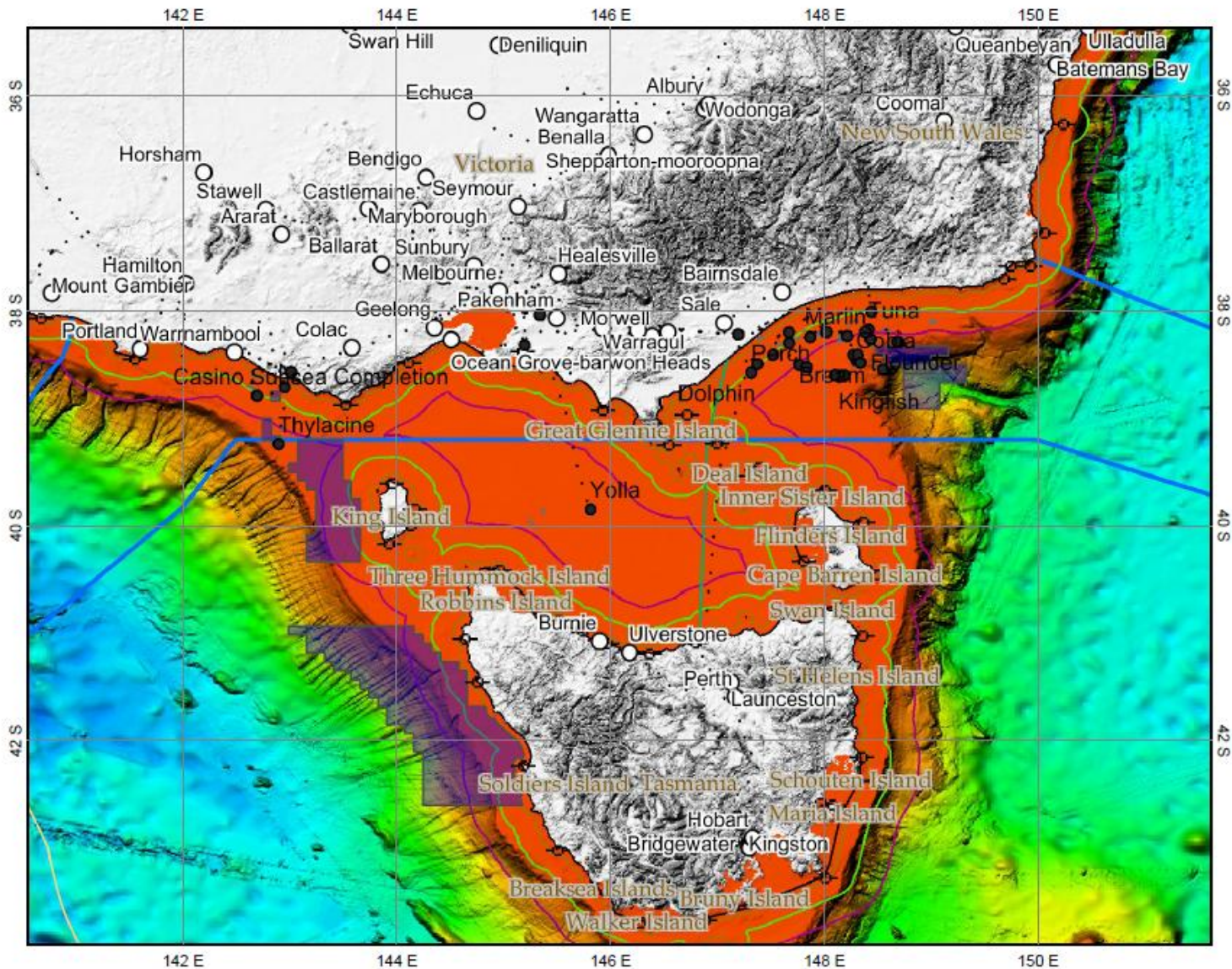
Legal Interests Distance to Boundary

Welcome **Layers** Legend Find

Help

- Maritime Boundaries
  - Low Tide Elevations
  - Territorial Sea Baselines
  - Coastal Waters Limit
  - Territorial Sea
  - Territorial Sea Polygons
  - Contiguous Zone Limit
  - Contiguous Zone Polygons
  - Exclusive Economic Zone Limit
  - Exclusive Economic Zone Polygons
  - Continental Shelf
  - Continental Shelf Polygons
  - Continental Shelf areas yet to be resolved
  - 1997 Perth Treaty EEZ Boundary
  - Treaty Lines
  - Joint Petroleum Development Zone
  - Scheduled Areas under the OPGGS Act
  - Australian Indonesian Memorandum of Understanding
- Other Themes
  - Petroleum
    - Oil and Gas Fields
    - Wells August 2009
    - Petroleum Platforms
    - Petroleum Titles
    - Petroleum Acreage Release 2012
    - Hydrocarbon Pipelines
    - Sedimentary Basins Offshore
  - Fisheries

# Bass Strait



## Legend

- Populated Places (Large Cities)
  - Petroleum Platforms
  - ◻ Navigational Aids
  - ~ Bass Link
  - ⋯ Hydrocarbon Pipelines
  - Petroleum Acreage Release 2012
  - Oil and Gas Fields
  - Low Tide Elevations
  - Territorial Sea Baselines
  - Coastal Waters Limit
  - Territorial Sea
  - Scheduled Areas under the OPGGS Act
  - Contiguous Zone Limit
  - Exclusive Economic Zone Limit
  - Continental Shelf
  - Joint Petroleum Development Zone
- 
- Large Scale Bathy**
- Australian State Boundaries
  - Antarctic Coastline
  - Australian Boundary 1:1 000 000
  - International Coast

Scale: 1:8,843,243

Disclaimer : The Commonwealth cannot guarantee the accuracy, currency or completeness of the document for your particular purpose. Except as required by law, the Commonwealth will not be liable for any loss, damage, expense or cost (including any incidental or consequential loss or damage) incurred by any person or organisation arising out of use of or reliance on the document.

Acknowledgement : This Map was produced using the Australian Marine Spatial Information System (AMSIS) web mapping facility provided by Geoscience Australia. AMSIS incorporates data provided by various Commonwealth government agencies and private sector organisations. For details or contributors refer to <http://www.ga.gov.au/amsis/datacontributors.jsp>. Maps produced using AMSIS may also incorporate information provided by the end users of AMSIS.



Australian Government

Australian Maritime Safety Authority

## Tools for MSP – S-10X

- **Why do we need a new international digital maritime boundary product specification?**
- Exchange by paper charts and lists of coordinates is limited by scale and volume of information
- Digital data transfer is increasingly ubiquitous
- A standard will be useful for ease of exchange and reduce limitations
- There are none in existence, as yet



Australian Government

Australian Maritime Safety Authority

# Conclusions

- MSP – relatively advanced for ecological purposes but less advanced for shipping and maritime safety
- AMSA is increasingly adopting MSP principles – a national coastal shipping management plan
- Water Space Management
  - consultative problem solving
  - needs tools, such as AMSIS
- Geoscience Australia engaged internationally to advance the establishment of an international digital maritime boundary product specification (S-10x)





Australian Government

Australian Maritime Safety Authority

# Conclusions

- International development – a new Global Ocean Commission to be based at Somerville College, Oxford, UK and to be officially launched on 12 February at an event in London.
  - High seas issues
  - Governance and management
  - Key maritime bodies and stakeholders to be involved
  - Supported by influential political, business and philanthropic individuals/organisations



Australian Government

Australian Maritime Safety Authority

# Thank you