

## Trial Artificial Reef Program – Moreton Bay Marine Park



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## Trial Artificial Reef Project for Moreton Bay Marine Park

### *Program Objective*

- The artificial reefs will provide alternate sites to recreational fishers, following the re-zoning of sections of the Marine Park as Green Zones, which preclude fishing but allow diving and boating.



## Project development

- Desktop constraint mapping – identification of candidate sites
- Consultation on candidate sites
- Physical site assessment
- Site identification
- Further consultation
- *Site evaluation*
- *Proposal & permit application*
- *Construction and deployment*
- *Monitoring and reporting*

## Desktop constraint mapping – identification of candidate sites

*Guiding principles:*

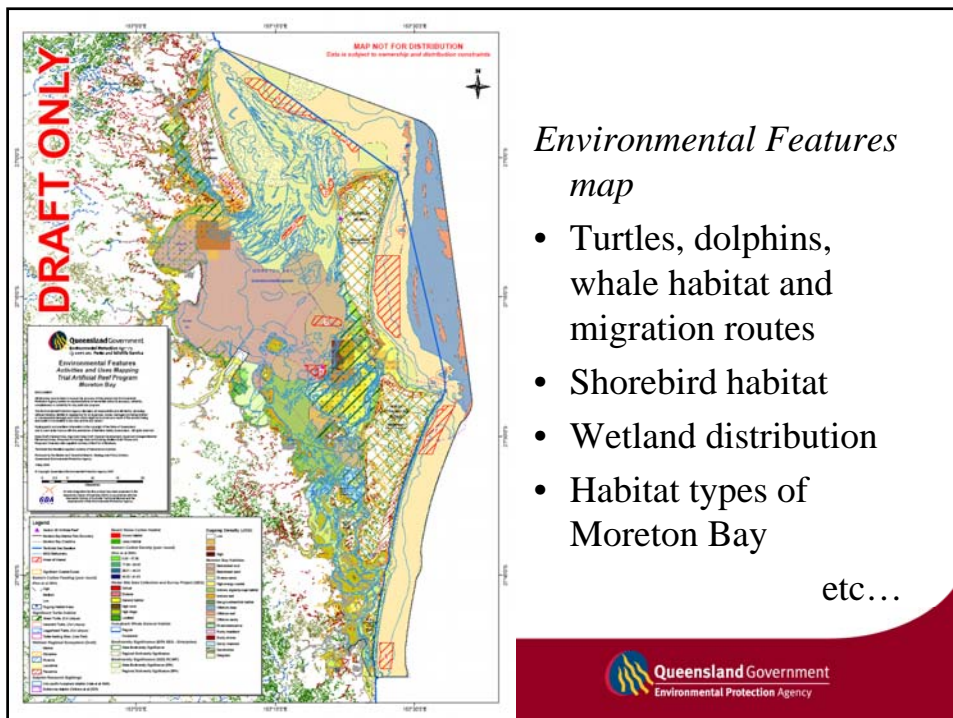
- Limited by depth
- Substrate type and movement
- Outside of existing activities
- Outside of areas of high conservation values or species/habitat
- Limited by legislative constraints

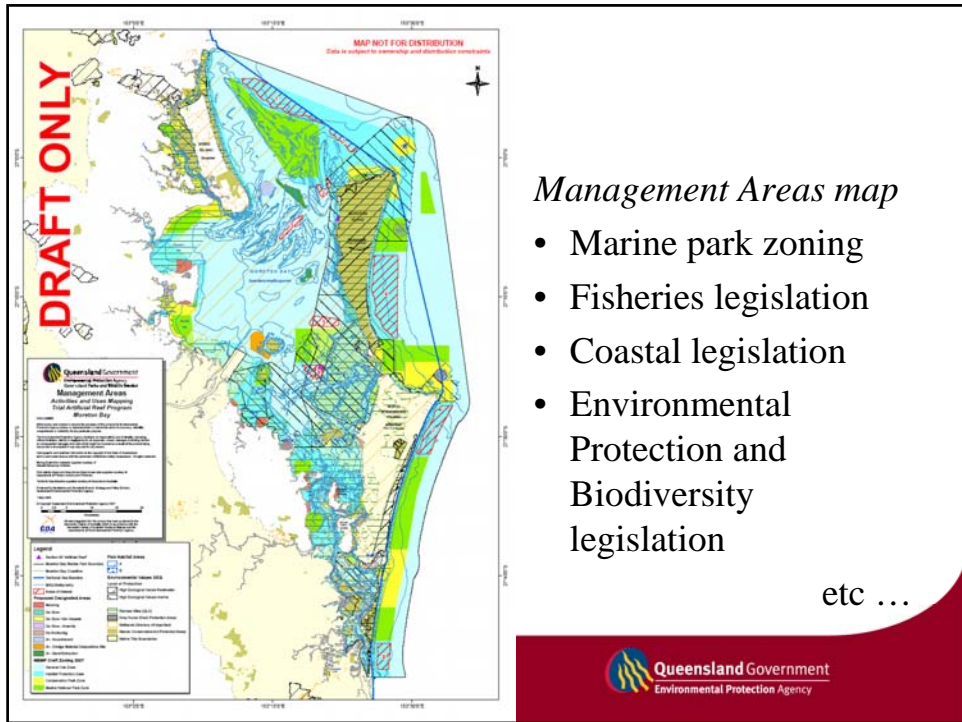
**\*\*\* 500m buffer to all known social, economic, cultural and environmental features \*\*\***

## Desktop constraint mapping – identification of candidate sites

Constraint mapping:

- Environmental features (eg. species and habitat)
- Management areas (eg. legislative)
- Transport operations and activities (eg. navigation channels)
- Fisheries (eg. commercial and recreational, fishing hot-spots and boating activity)

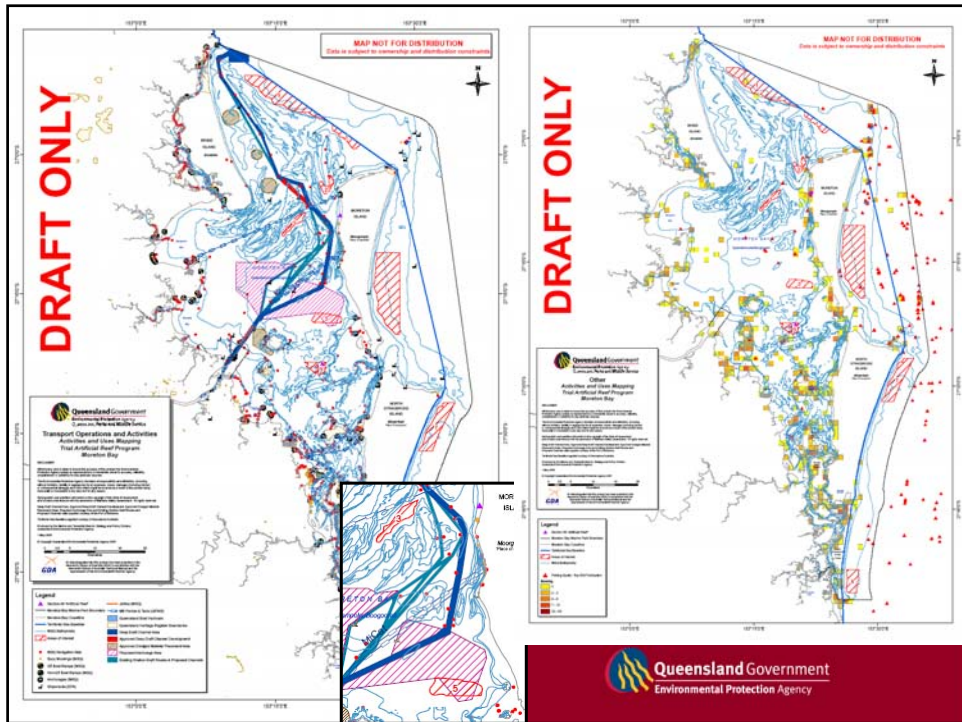




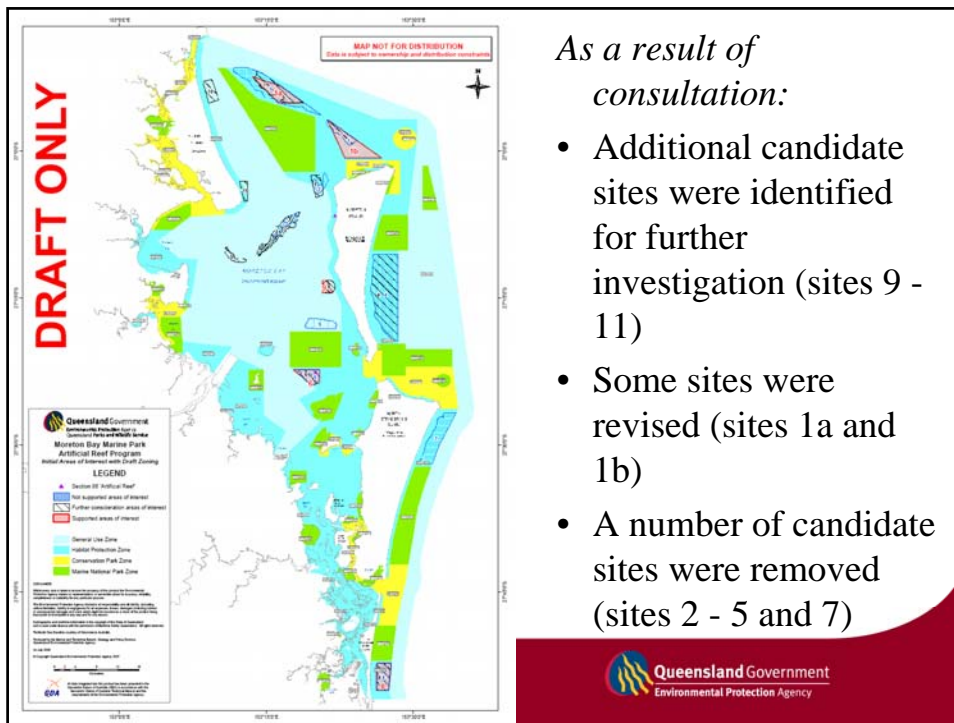
*Management Areas map*

- Marine park zoning
- Fisheries legislation
- Coastal legislation
- Environmental Protection and Biodiversity legislation

etc ...







*As a result of consultation:*

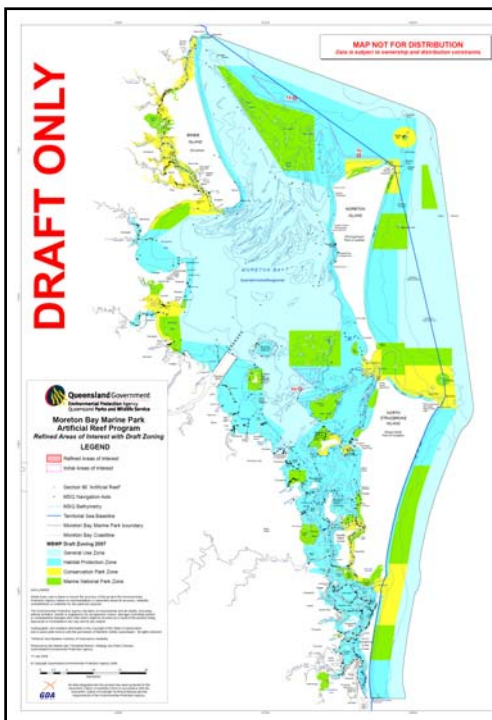
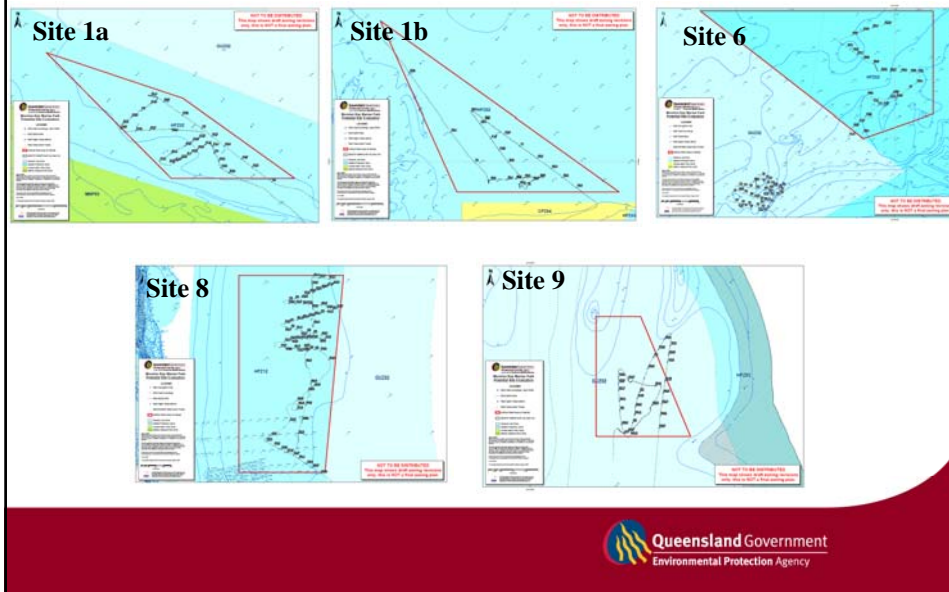
- Additional candidate sites were identified for further investigation (sites 9 - 11)
- Some sites were revised (sites 1a and 1b)
- A number of candidate sites were removed (sites 2 - 5 and 7)

## What sites are remaining for physical site assessment?

*Sites:*

- 1a – North Wild Banks area
- 1b – North Moreton Island area
- 6 – Existing Harry Atkinson’s Reef
- 8 – Outside Gold Coast Seaway
- 9 – South of Tangalooma Wrecks

# Physical site assessment

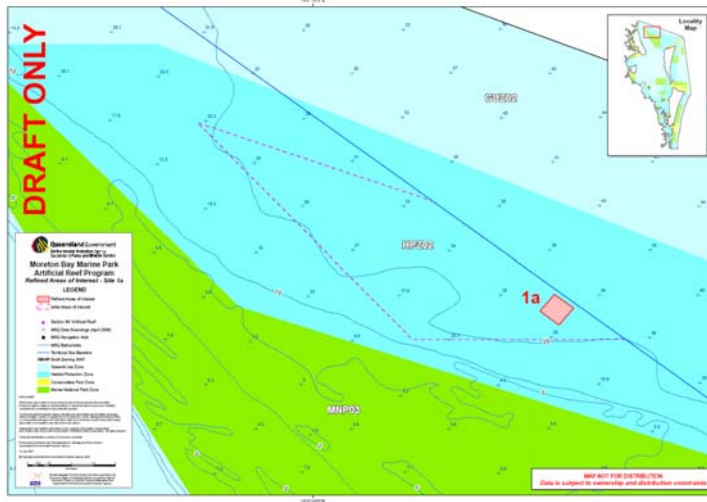


## Site identification

*Proposed sites for further investigation:*

- Three (3) candidate sites:
- 1a – North Wild Banks area
- 1b – North Moreton Island area
- 6a – Existing Harry Atkinson artificial reef

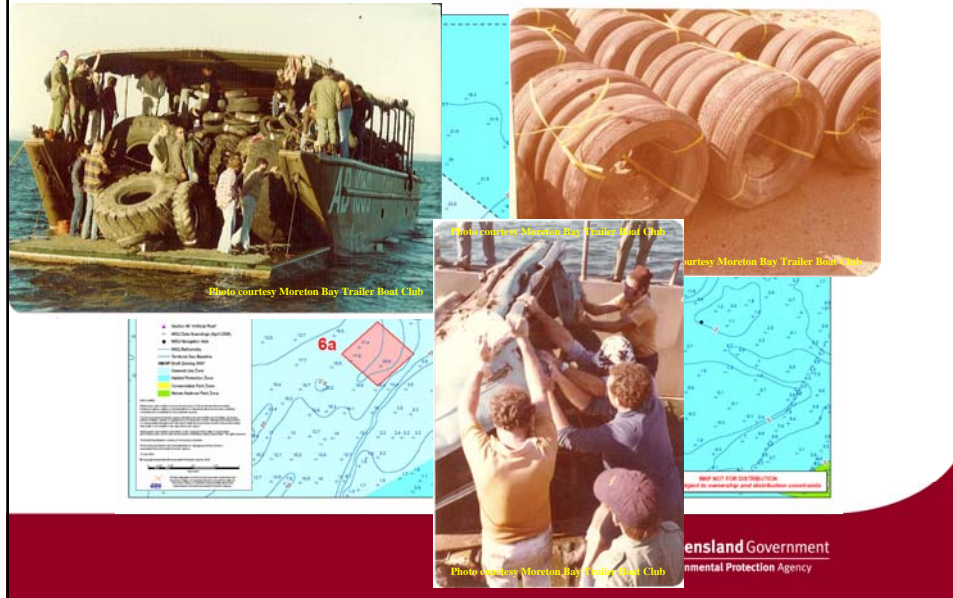
# Site 1a - North Wild Banks area



# Site 1b - North Moreton Island area



## Site 6a - Existing Harry Atkinson artificial reef



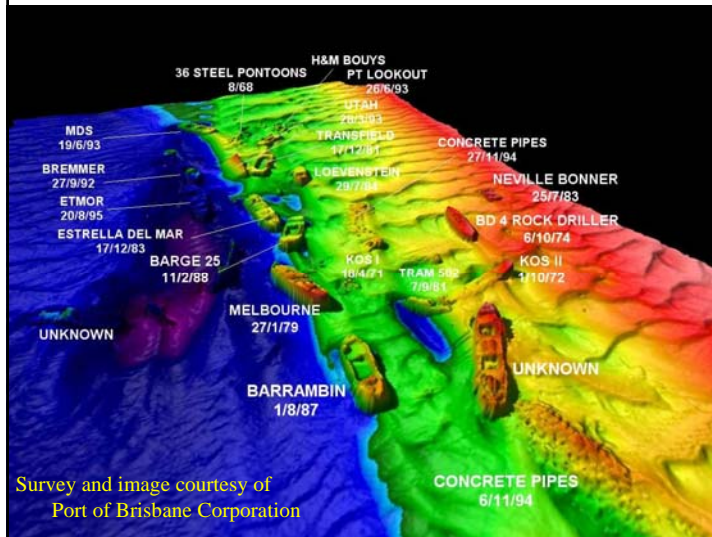
## Further consultation

*Targeted stakeholder meetings were conducted to:*

- Identify any outstanding issues with the proposed sites
- Confirm the candidate sites remain priorities for key stakeholder groups
- Confirm stakeholder expectations for each of the sites
- Overview of site constraints
- Overview of application, assessment and approvals process

**\*\*\* Result = in principal support \*\*\***

## Site evaluation



Survey and image courtesy of  
Port of Brisbane Corporation

- EIS parameters
- Multi-beam sonar (in partnership with the Port of Brisbane Corporation)

## Proposal and Permit Application

- Develop a proposal for the location, construction and deployment of the artificial reef
- Apply for permits to conduct the activity:
  - Evidence of resource entitlement
  - Coastal permit to deploy the artificial reef
  - Marine parks permit
  - Any C'wealth permits if necessary

## *Construction and deployment*

### *Artificial Reef Habitat Design:*

- Constructed of non-polluting materials (concrete, natural rock or steel structures)
- Heavy and stable
- Large enough to provide for fishing and support productivity processes



## *Construction and deployment*

### *Deployment:*

#### Timeframe –

- End of 2008
  - Site 6 – Existing Harry Atkinson's Reef
- Mid 2009
  - Site 1a and 1b – North of Wild Banks and Moreton Island areas

## *Monitoring and reporting*

- Physical:
  - Survey location, condition of material, movement, sediment transport etc
- Socio-economic:
  - Popularity of site and stakeholder satisfaction
- Environmental:
  - Census monitoring of fish and encrusting community development