# MARINE RESERVE IMPLEMENTATION: PILBARA

# PLANNING AND PRE-DECLARATION PROCESSES FOR A MARINE PROTECTED AREA IN THE MONTEBELLO/BARROW ISLANDS REGION

Progress Report: MRI/PI/MBI - 22/1999

A collaborative project between CALM Marine Conservation Branch and the Pilbara Regional Office

A project partially funded through the Natural Heritage Trust's Coast and Clean Seas Marine Protected Area Programme Project No: WA9702

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> > September 1999



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#### **ACKNOWLEDGMENTS**

#### Direction

• Dr Chris Simpson - Manager, Marine Conservation Branch (MCB)

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#### **BACKGROUND**

The Montebello/Barrow islands area was recommended in the *Report of the Marine Parks and Reserves Selection Working Group* (CALM, 1994) as worthy of consideration for reservation.

The Conservation and Land Management (CALM) Act allows for the establishment of multiple-use marine conservation reserves for the purposes of conservation of marine flora and fauna and public recreation. Commercial activities, such as fishing, aquaculture and petroleum exploration and production, are also acceptable within specific zones of multiple-use marine conservation reserves. The Western Australian Fisheries Department manages commercial and recreational fisheries in marine conservation reserves.

The *CALM Act* specifies the statutory process for the reservation of marine conservation reserves, including a public planning process for the development of management zoning schemes that allow for the spatial separation of incompatible activities in a marine park. In anticipation of this process the major marine resources and current uses of a number of the areas recommended for reservation in the Marine Parks and Reserves Selection Working Group report, are being identified. As part of the statutory marine conservation reserve pre-declaration process, it is required that the biological, economic, social and cultural resources of a proposed marine conservation reserve be assessed before the Notice Of Intent (NOI) is issued. This process has been designed improve the community's awareness of the issues concerned with the creation of a marine conservation reserve prior the release of the NOI. The data layers provide the basic information for a consultative process resulting in the determination of preliminary boundaries and zonings, so that current users have a clear appreciation of how the proposed marine reserve will affect their current and future activities.

In December 1997, the Western Australian Government, following advice provided by the Western Australian Marine Parks and Reserves Authority, announced that the Montebello/Barrow islands region as priority areas for the establishment of marine conservation reserves under the *CALM Act*. Designation of the waters of Dampier Archipelago region as a marine conservation reserve was also recommended in the Karratha Area Development Strategy (WAPC, 1998).

Currently, there is no other marine conservation reserve in the "Pilbara offshore" Interim Marine and Coastal Regionalisation for Australia bioregion (IMCRA, 1998).

The Marine Conservation Branch (MCB) of the Department of Conservation and Land Management (CALM) is conducting this project as part of the Marine Reserve Implementation programme, and is being conducted in collaboration with CALM's Pilbara Region in Karratha.

The aims of the project are:

- **1.** to initiate planning and pre-declaration processes for the proposed Montebello/Barrow islands marine conservation reserve;
- 2. to compile the ecological and socioeconomic information;
- **3.** to provide advice to the WA Government, through the stakeholder/community advisory committee process, on the suitable reserve category, boundaries and management zoning options, and;
- **4.** to develop and implement a community consultation process.

This report details progress achieved on Project No WA9702 "Planning and pre-declaration process for a Marine Protected Area in the Montebello/Barrow islands region" up to September 1999.

# AREA OF INTEREST

The are of interest (Figure 1) referred to as the Montebello/Barrow islands region, falls in the Pilbara Offshore IMCRA bioregion.

The area of interest is covered by:

- ♦ AUSLIG Topographic Series 1:250,000
  - SF50-1 Barrow, and;
  - SF50-2 Dampier.
- ♦ AUSLIG Topographic Series 1:100,000
  - 1955 Airlie;
  - 1956 Barrow;
  - 1957 Tryal;
  - 2055 Mardie, and;
  - 2056 Sholl.

The following latitudes and longitudes cover the extent of the area of interest.

Bearing	Latitude	Longitude					
North	20° 17' 24" S	115° 31' 12" E					
North west	20° 28′ 48″ S	115° 24' 00" E					
West	20° 50' 24" S	115° 15' 00" E					
South west	21° 00' 36" S	115° 19' 12" E					
South	21° 09' 00" S	115° 28' 12" E					
South east	21° 01′ 48″ S	115° 32' 24" E					
East	20° 42′ 00″ S	115° 37' 48" E					
North east	20° 21′ 36″ S	115° 37' 12" E					

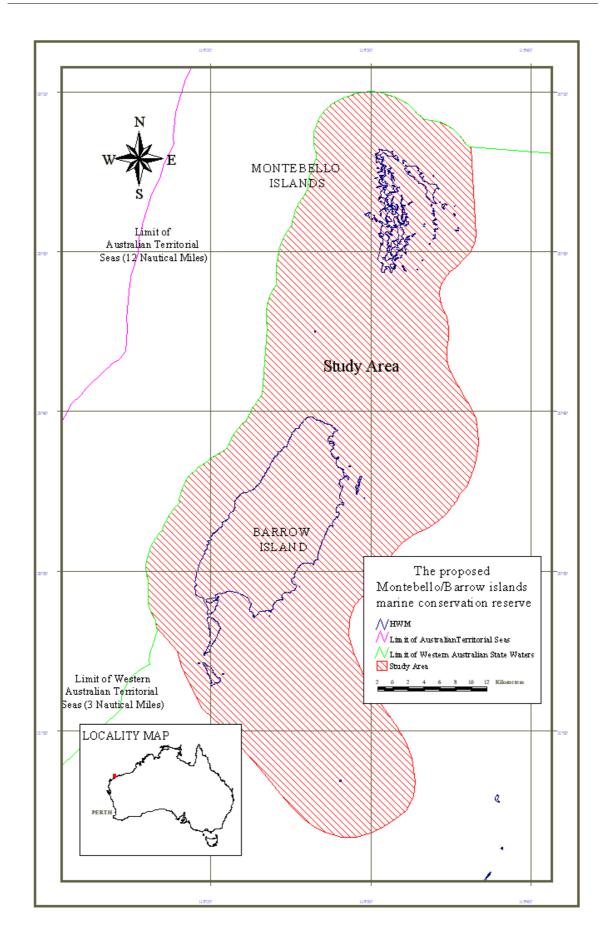


Figure 1. Area of interest. The Montebello/Barrow islands region

# PROGRESS AGAINST PROJECT SCOPE ITEMS

Progress against scope items have been satisfactory (see below)

		%		Information
	Task	Achieved	Details	attached
1.	Review and collation of existing information layers and acquisition of additional layers.	80%	Literature reviews have been undertaken.	
		70%	<ul> <li>Data have been acquired from appropriate government departments and agencies.</li> </ul>	
		70%	Resource assessment of region was undertaken.	(a) Field programme report (Appendix a)
2.	Preparation of advisory committee information package	80%	A regional perspectives paper is well progressed.	(b) Draft table of contents attached (Appendix b)
		70%	<ul> <li>Procedural guidelines for Western Australian marine reserve planning and management legislation.</li> </ul>	(c) Draft attached (Appendix c)
		80%	<ul> <li>Relevant biological, economic and social information layers have been acquired from appropriate government departments and agencies. A number of products are being produced: Broad scale habitat map, tenure, commercial and recreational fishing.</li> </ul>	
3.	Establishment of the community/ stakeholder advisory committee	100%	• Calls for expression of interest for membership of the community advisory committee advertised in the West Australian dated 15/5/99.	(d) Advertisement attached (Appendix d)
		40%	The selection process is well progressed with the scheduled inaugural meeting of the Dampier Archipelago/Cape Preston Advisory Committee currently waiting for approval by the State Minister for the Environment.	
4.	Implementation of community consultation programme	10%	Programme has been initiated.	
		20%	Interpretive posters are being designed.	
		50%	Interpretive brochures are well progressed.	

# **EXPENDITURE TO DATE**

Item	Funding	Expenditure	Balance
NHT funds received 1998/99	\$32.250		\$32,250
Expenditure 1998/99	ФС <b>-,</b> -С б	\$13,561	\$18,689
Funds on progress report (Oct 1999)	\$0	1 - 4	\$18,689
Expenditure 1999/2000 (to Sep 1999)		\$6,482	\$12,207
Residual expenditure 1999/2000		\$22,957	(\$10,750)
Funds on final report 1999/2000	\$10,750	•	<b>\$0</b>
Totals	\$43,000	\$43,000	<b>\$0</b>

# WORK SCHEDULE

NHT funding was not accessible until late December 1998, which resulted in a three month delay in starting the project. When considering the delay, this project is still within time limits. It is envisaged that the Montebello/Barrow islands advisory committee will hold their inaugural meeting in late October or early November 1999.

Tasks	Oct 98	Nov 98	Dec 98	Jan 99	Feb 99	Mar 99	Apr 99	May 99	Jun 99	Jul 99	Aug 99	Sep 99	Oct 99	Nov 99	Dec 99	Jan 00
Review and collation of existing information layers and acquisition of additional data	•	•	•	•	• •	<b>→</b>										
Preparation of an information package, comprising regional and biological perspectives papers; relevant information layers in GIS format and procedural guidelines	•	•	•	•	•	<b>→</b>										
Progress Report						•	•				<b>→</b>	<b>→</b>				
Establishment of community advisory committee process	•	•	•	•	•	•	•	• •	•	<b>→</b>	<b>→</b>	<b>→</b>	<b>→</b>			
Implementation of a community consultation programme				•	•	•	•	•	•	<b>→</b>						
Prepare final draft NHT funding report for comment and submit final report to EA									•	•	•			<b>→</b>	<b>→</b>	<b>→</b>

Work plan as outlined in September 1998

Actual and predicted work plan as of September 1999

#### **REFERENCES**

Bancroft, K.P. (1999). Resource assessment of the Montebello/Barrow islands and the Dampier Archipelago/Cape Preston regions: 14-25 June 1999. Marine Reserve Implementation Field Programme Report MRI/PI/MBI & DA – 20/1999. Unpublished report.

- CALM (1994). A representative marine reserve system for Western Australia. Report of the Marine Parks and Reserves Selection Working Group. Department of Conservation and Land Management. June 1994.
- IMCRA (1998). Interim Marine and Coastal Regionalisation for Australia: an ecosystem-based classification for marine and coastal environments. Version 3.3. Environment Australia, Commonwealth Department of the Environment, Canberra.
- WAPC (1998). Karratha area development strategy. Western Australian Planning Commission.

# **APPENDICES**

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Lowendal Islands region

Barrow Island region

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OCEANOGRAPHY

General

Water level

Waves

Currents

Temperature

Salinity

Cross-shelf salinity temperature gradients

Turbidity due to sediment suspension

#### NATURAL HERITAGE VALUES

REGIONAL CONTEXT

MARINE HABITATS

Coral communities

Rocky shore

Intertidal limestone pavement

Intertidal sand/mud beaches

Subtidal coarse sand/rubble

Subtidal macroalgae & seagrass on sand/limestone pavement

Mangrove communities

MARINE WILDLIFE

Marine mammals

Whales & dolphins

Dugongs

Marine birds

Marine turtles

Fish

Cave-dwelling fauna

Marine invertebrates

Corals

**Molluscs** 

#### NATURE RESERVES AND CONSERVATION PARKS

Within the study area

Montebello Islands Conservation Park

Barrow Island Nature Reserve

Lowendal Nature Reserve

Great Sandy Island Nature Reserve

Boodie, Double, Middle Islands Nature Reserve

Nearby nature reserves

#### **HUMAN USAGE**

**CULTURAL HISTORY** 

Aboriginal history

Maritime history

Existing declared shipwreck sites

Nuclear testing

#### CURRENT ADMINISTRATIVE SETTING

Local Government Authority

The role of State Government agencies in the marine conservation reserve implementation

Department of Conservation and Land management

Fisheries Western Australia

Department of Transport

Department of Mineral and Energy

Environmental Protection Authority

Port Areas and Shipping Routes

Cyclone Moorings

Tenure

Native title

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Managing Petroleum Activities

Environmental Management Issues

Commercial fishing

Pearling

TOURISM AND RECREATION

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North West Shelf Joint Environmental Management Study

CALMScience Rat & cat eradication

WA Mangrove Assessment Project 1999-2000

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# WEST AUSTRALIAN 15/5/99

# FORMATION OF COMMUNITY ADVISORY COMMITTEES PROPOSED MARINE CONSERVATION RESERVES

The Government of Western Australia is committed to the establishment of a statewide system of marine conservation reserves under the Conservation and Land Management Act 1984 for the conservation and sustainable use of the marine environment. To ensure that all community interests are considered in areas proposed as marine conservation reserves, a local community advisory committee is appointed by the Minister for the Environment. This advertisement calls for expressions of interest for membership of two committees to consider proposed marine conservation reserves as the following areas:

- DAMPIER ARCHIPELAGO / CAPE PRESTON
- ♦ MONTEBELLO / BARROW ISLANDS

The committees will advise on the proposals in terms of the appropriate category of manne conservation reserve under the CALM Act, boundaries, zoning and the preparation of an indicative management plan.

Nominations are sought from people with a particular interest in or knowledge of the conservation and management of these areas, including from the perspectives of local government, conservation, recreation and tourism, recreational and commercial fishing, indigenous interests, science and education, industry, and pearling and aquaculture. Members will be appointed in their own right rather than as representatives of organisations. Sitting fees will not be payable.

Inquiries can be directed to Mr Andrew Hill of CALM's Marine Conservation. Branch on ph: 9432 5100; fax: 9430 5408; email: andrewhi@calm wa.gov.au.

Applications for membership, containing a one-page resume outlining your particular interests including relevant experience and knowledge of the area, and specifying which of the two committees you are interested in should be forwarded by no later than Friday 4 June 1999, to.

#### Manager

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DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT