

# North West Shelf

JOINT ENVIRONMENTAL MANAGEMENT STUDY



Dear Community Member,

You are being asked to help in the environmental management of the North West Shelf waters – the coastal waters from Exmouth to Port Hedland. You can help by having your say as part of the community consultation process conducted by the Department of Environmental Protection and the Commonwealth Scientific and Industrial Research Organisation (CSIRO).

Just complete the attached survey, which will take you approximately 30 - 45 minutes, to enable us to understand the community values and aspirations for the North West Shelf marine area.

## PLEASE BE ASSURED THAT YOUR INPUT WILL REMAIN CONFIDENTIAL.

Your views are important and to ensure they are considered please complete the survey by the closing date, **30<sup>TH</sup> SEPTEMBER 2001** and post to: **PO Box 658, KARRATHA WA 6714**, or you can fax your completed survey to Tonia on: 9185 6790.

Alternatively you may wish to complete and submit the survey on our web page:

[www.marine.csiro.au/nwsjems/index.html](http://www.marine.csiro.au/nwsjems/index.html)

# WIN

By completing the survey, you also have the chance of winning a trip for two to Tasmania\*, the Apple Isle, which includes:

Two return tickets flying ANSETT from Karratha to Tasmania  
One week fully paid accommodation in beautiful Launceston  
One week free hire car  
Complimentary Tour of CSIRO Marine Research Laboratories in Hobart.

# PLUS

Just imagine, you could be enjoying an autumn break in one of Australia's most scenic states!  
The winner will be contacted and announced in local newspapers by the 31<sup>st</sup> October 2001.

The NWSJEMS is proudly supported by Ansett Australia 'Absolutely' and Tas Vacations 'Tasmania's Largest Independent Travel Specialist'.

\* some conditions apply.

# About the study

The North West Shelf Joint Environmental Management Study is a joint initiative between Western Australia and CSIRO Marine Research. The study officially commenced in June 2000.

The study area extends from the coast to the 200-metre depth contour, from Exmouth to Port Hedland. This is an area of 110,000 square kilometers. It does not include the Ningaloo Marine Park.

The major objective of the study is to gather as much information about the region as possible and to use it in combination with models of the marine ecosystem. This will help to predict the impacts of natural events and human activities on the North West Shelf. Natural events include tropical cyclones, coral bleaching and events related to the effects of El-Nino, while human activities include fishing, oil and gas exploration and production, mineral processing, recreation and tourism.

The information will be combined with environmental, economic and



social objectives to develop a computer system that will enable the evaluation of existing and proposed management strategies for the many uses of the North West Shelf. This system will assist in the development of a more integrated approach to planning and management of the North West Shelf region with the goal of achieving ecologically sustainable development.

A collaborative approach to integrated management is essential to balancing competing uses and avoiding conflict. This will provide a holistic framework for future decisions about uses of the marine ecosystem.

Critical to the study is information from the community about development options for the North West Shelf environment. Therefore, the values the community places on the environment and economic development, as well as their components, are an important part of the study.

The community consultation process will help to achieve this.

## FURTHER INFORMATION ABOUT THE STUDY IS AVAILABLE FROM:

Web Pages:  
<http://www.marine.csiro.au/nwsjems/index.html>  
<http://epagate.environ.wa.gov.au>

**Tonia Swetman** - Cognito Consulting  
 Ph: (08) 9185 6790 Email: cognito@kisser.net.au

**Dr Chris Fandry** - WA Department of Environmental Protection  
 Ph: (08) 9222 7019 Email: fandry@environ.wa.gov.au

### 5. Where do you live, or live closest? (please tick ✓ one box ONLY)

<input type="checkbox"/> Exmouth	<input type="checkbox"/> Onslow	<input type="checkbox"/> Roebourne
<input type="checkbox"/> Dampier	<input type="checkbox"/> Point Samson	<input type="checkbox"/> Wickham
<input type="checkbox"/> Karratha	<input type="checkbox"/> Port Hedland	<input type="checkbox"/> Other (list) _____

### 6. In answering this survey, who do you best represent? (please tick ✓ one box ONLY)

<input type="checkbox"/> Myself, as a resident of the area	<input type="checkbox"/> Pastoral Industry	<input type="checkbox"/> Recreational Group
<input type="checkbox"/> Myself, as a visitor to the area	<input type="checkbox"/> Tourism Industry	<input type="checkbox"/> Local Government
<input type="checkbox"/> Oil and Gas Industry	<input type="checkbox"/> Salt Industry	<input type="checkbox"/> State Government
<input type="checkbox"/> Pearing Industry	<input type="checkbox"/> Iron Ore Industry	<input type="checkbox"/> Federal Government
<input type="checkbox"/> Commercial Fishing Industry	<input type="checkbox"/> Conservation / Environmental Group	<input type="checkbox"/> Other (list) _____

### 7. Which of the following recreational activities do you do regularly – or would like to do regularly - in or around the study area? (please tick ✓ as many as you like)

<input type="checkbox"/> Fishing	<input type="checkbox"/> Diving / Snorkeling	<input type="checkbox"/> Viewing Aboriginal rock art
<input type="checkbox"/> Walking along the shore	<input type="checkbox"/> 4 Wheel Driving	<input type="checkbox"/> Other (list) _____
<input type="checkbox"/> Surfing	<input type="checkbox"/> Collecting seafood, shellfish	_____
<input type="checkbox"/> Boating	<input type="checkbox"/> Skiing	_____
<input type="checkbox"/> Swimming	<input type="checkbox"/> Looking for/watching marine wildlife	_____
<input type="checkbox"/> Collecting shells	<input type="checkbox"/> Enjoying the view	<input type="checkbox"/> I don't do – or want to do – anything at the coast regularly

### 8. Rate the following possible future outcomes concerning the study area according to their importance to you. (please tick ✓ whether you believe the possible outcome is 1 very important, 2 fairly important or 3 not important.)

	1	2	3		1	2	3
Increased employment opportunities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Protection of marine plants and animals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Speedy approval process for development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Open, easily understood government approval process	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thorough approval process for development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unrestricted access for small boats	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Easy and safe shipping for imports and exports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Community education about the marine environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unpolluted waters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sharing the marine environment with visitors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Accessible beaches for swimming, diving and boating	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Publishing study results	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Natural view(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Safe waters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased national income from resource developments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Diversification of industry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increase in local business trade	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Being able to access the islands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Simplified regulation and management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Being able to camp on the islands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Scientific research	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Being able to build infrastructure on the islands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mangrove protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Having more marine parks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recognition of Aboriginal heritage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

## JOINT ENVIRONMENTAL MANAGEMENT STUDY

1. Name: (essential to enter competition) \_\_\_\_\_

2. Phone Number and/or Postal Address: \_\_\_\_\_

3. Email Address: \_\_\_\_\_

4. Are you of Indigenous descent? (please tick ✓ one box ONLY)  Yes  No

9. What are the three **(3) most important outcomes** from question 8 that you would like to see happen?

i. \_\_\_\_\_  
 ii. \_\_\_\_\_  
 iii. \_\_\_\_\_

10. The marine environment has many **natural qualities** and **uses**. How important would you rate the following **natural qualities** of the North West Shelf marine environment? (please place one tick ✓ whether you believe the possible outcome is **1** very important, **2** fairly important or **3** not important for each natural quality.)

	1	2	3		1	2	3
Water quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Healthy and natural environment ( <i>ecosystem integrity</i> )	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Variety of plants and animals ( <i>biodiversity</i> )	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Other (list) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Number of plants and animals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Health of plants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Health of animals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aesthetic ( <i>or attractiveness</i> ) values	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. What are the **three (3) most important** natural qualities to you in question 10?

i. \_\_\_\_\_  
 ii. \_\_\_\_\_  
 iii. \_\_\_\_\_

12. How important would you rate the following **uses** of the North West Shelf marine environment? (please place one tick ✓ whether you believe each use is **1** very important, **2** fairly important or **3** not important for each.)

	1	2	3		1	2	3
Recreational fishing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Transportation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skiing and surface water sports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Aquaculture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Swimming	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pearling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Crabbing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Indigenous cultural activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diving	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Monitoring activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boating	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Coastal development (associated with industrial and population growth)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Four wheel driving	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Other (list) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Camping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Commercial non-trawl fishing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Commercial fish trawling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tourism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Resource extraction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. List what you believe to be the **three (3) most important uses** in question 12.

i. \_\_\_\_\_  
 ii. \_\_\_\_\_  
 iii. \_\_\_\_\_

14. The following activities (natural and human) that occur in the study area impact upon the environment in different ways. Rate them according to the level of threat they are to the marine environment. (please tick ✓ whether you believe the activities **1** pose a great threat, **2** pose some threat or **3** are not a threat to the marine environment.)

	1	2	3		1	2	3
Commercial non-trawl fishing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Dredging	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eco tourism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Oil and gas industry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pearling operations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Iron ore industry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aquaculture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Climate change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tourism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Coastal effluents (e.g. sewage)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diving	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Commercial fish trawling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Small boats	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Coastal development (associated with industrial and population growth)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shipping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Other (list) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pastoral (coastal) land use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cyclones	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recreational fishing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

15. List the **three (3) greatest threats** to the marine environment from question 14 and explain why they are threats and where in the study area they are of most concern to you.

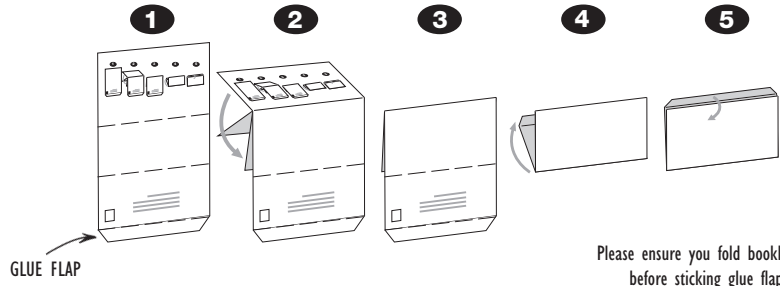
i. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 ii. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 iii. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

16. Are there any other activities or events (natural and human) apart from those listed above, that you consider to be major threats to the marine environment in the North West Shelf study area? If so, **what** are they, **where** are they threats and **why** are they threats?

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



# MAILING BACK YOUR COMPLETED SURVEY FORM



Please ensure you fold booklet **FIRMLY** before sticking glue flap down.

6 7 1 4

Tonia Swetman  
Community Liaison Manager  
North West Shelf Joint Environmental Management Study  
PO Box 658  
KARRATHA WA



AFFIX POSTAGE  
STAMP HERE