

**APPLICATION TO THE DEPARTMENT OF THE ENVIRONMENT  
AND WATER RESOURCES ON THE  
NORTHERN DEVELOPMENTAL BLUE SWIMMER CRAB  
FISHERY**

*Against the Guidelines for the Ecologically Sustainable  
Management of Fisheries*

December 2008



**Department of Fisheries**  
**Government of Western Australia**



*Fish for the future*

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### **Appendix**

Appendix 1 - State of the Fisheries Report 2006-2007

Appendix 2 - State of the Fisheries Report 2005-2006

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### **Additional Information**

1. Application to DEH for the Northern Developmental Blue Swimmer Crab Fishery November 2005.
2. DEH Assessment of the Western Australian Northern Developmental Blue Swimmer Crab Fishery

## 1. BACKGROUND

The purpose of this report is to update the Department of the Environment, Water, Heritage and the Arts (DEWHA) on changes in the Northern Developmental Blue Swimmer Crab Fishery (the Fishery) to enable its re-assessment against the *Guidelines for Ecologically Sustainable Management of Fisheries*.

In November 2005, the WA Department of Fisheries (DFWA) submitted an application to DEWHA (then the Department of Environment and Heritage) for assessment of the Fishery against the *Guidelines for the Ecologically Sustainable Management of Fisheries*. In that application the DFWA sought the inclusion of the species taken in the Fishery on the list of exempt species under section 303DB of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

On 1 February 2006, Andrew McNee, delegate of the Minister for the Environment, declared the Fishery to be an approved Wildlife Trade Operation (WTO). The approval was granted for a period of three years until 28 February 2009 and was subject to nine recommendations.

A copy of the DFWA application and the DEWHA assessment report and letter of approval are available on the DEWHA website:  
<http://www.environment.gov.au/coasts/fisheries/wa/blue-swimmer-crab/index.html>

The DFWA's responses to each of the nine recommendations of the original assessment are outlined below.

Further information on the Fishery can also be obtained from the annual *State of the Fisheries* report. *State of the Fisheries* reports published since the original assessment (2004-05, 2005-06 and 2006-07 are presented as Appendices 1-3 to this report) can be downloaded at <http://www.fish.wa.gov.au/docs/sof/>.

## 2. SUMMARY OF REASSESSMENT APPLICATION

Recommendation	Status	Summary comment
DFWA to advise DEWHA of any material change to the Fishery's management regime that could affect the criteria on which EPBC Act decisions are based, within three months of that change being made.	Complete	No Material Changes
The ESD report, including all performance measures, responses and information requirements, should be formally incorporated into the management regime and decision making process.	See comment	DFWA annually reports against the Fishery in the State of the Fisheries publication. The Fishery currently has an experimental status only however future management options for the Fishery are currently being considered.
DFWA to ensure, where appropriate, that any relevant indigenous, conservation and recreational interests in the fisheries are considered through consultative mechanisms.	Complete	Development of the Fishery is steered by an independent Committee, which includes representatives from the Conservation and Recreational Sectors. Broader consultation may be undertaken on an as needed/as recommended basis. The Fishery is understood to be of low indigenous interest.
By the end of 2006, DFWA to develop fishery specific performance measures for the target species (blue swimmer crab) and fishery specific objectives, performance indicators and measures based on the best available information, for the two by-product species.	See comment	The Fishery is essentially managed in a way in which risks to the target species are minimal (relatively low effort levels, size at capture is significantly above size at maturity). Similarly, the impact on byproduct species is regarded as minimal. Fishing methods used are highly selective and few other species are caught as bycatch. At this stage of the Fishery's development, specific performance indicators and performance measures for byproduct species have therefore not been developed.
DFWA to incorporate into the management regime, an objective to minimise protected/listed species interactions, to minimise or maintain at sustainable levels the take of other non-retained species and to minimise impacts on the marine environment.	Complete	The Fishery is managed under the <i>Fisheries Resource Management Act 1994</i> (FRMA). The objects of the FRMA include 'to conserve fish and protect their environment' and 'to ensure that the exploitation of fish resources is carried out in a sustainable manner'. The method of fishing also limits the possibility of interactions with protected species and minimises habitat disturbance.

<p>DFWA, in its Annual State of the Fisheries Report, to report on the performance of the Fishery against performance measures that relate to the sustainability of the Fishery.</p>	<p>Complete</p>	<p>DFWA reports annually on the performance of the Fishery. The species is considered robust and stocks are widespread throughout the area. Sustainability is managed through input controls, minimum size limits and seasonal constraints.</p>
<p>DFWA to develop a research strategy for the Fishery that: Identifies research information needs and priorities to meet the management information, stock assessment and performance measurement needs of the Fishery; and investigates potential synergies with other blue swimmer crab research.</p>	<p>Ongoing</p>	<p>DFWA monitors the findings of other relevant research undertaken on blue swimmer crabs as well as catch and effort data for the Fishery.</p>
<p>Noting the potential for fishing efficiency to increase and for the Fishery to continue to evolve, DFWA, by the end of 2007, to review the management arrangements of the Fishery to ensure that blue swimmer crab stocks continue to be fished within ecologically sustainable levels.</p>	<p>Ongoing - Risk has been assessed as low</p>	<p>Catch and effort is monitored for the Fishery. The Fishery is still in an experimental state and with relatively low effort levels. Changes in gear efficiency are not considered a major risk at this stage given the generally low risk style of management implemented.</p>
<p>DFWA to implement an education program to ensure that industry has the capacity to make protected species reports at an appropriate level of accuracy.</p>	<p>Completed</p>	<p>Fishers have been advised of the need to report interactions.</p>

### **3. PROGRESS TOWARDS IMPLEMENTING RECOMMENDATIONS**

- 1. DFWA to advise DEWHA of any material change to the Northern Developmental Blue Swimmer Crab Fishery's management regime that could affect the criteria on which EPBC Act decisions are based, within three months of that change being made.**

There have been no significant changes to the management arrangements since accreditation in 2006.

- 2. The ESD report, including all performance measures, responses and information requirements, should be formally incorporated into the management regime and decision making process.**

DFWA reports against the Fishery in the annual *State of the Fisheries Report*. In June 2007 DFWA liaised with the conservation, commercial fishing and recreational fishing sectors to review the performance, management arrangements and overall viability of the Fishery, which currently has an experimental status only. The outcomes of the review and long term future of the Fishery are currently being considered.

- 3. DFWA to ensure, where appropriate, that any relevant indigenous, conservation and recreational interests in the fisheries are considered through consultative mechanisms.**

The Fishery is in an experimental state and is part of the Developing New Fisheries process. This process is steered by the Developing Fisheries Assessment Committee, which includes representatives from the Conservation and Recreational Sectors. Input from the committee is sought prior to making significant management changes. There is no indigenous sector representative on the committee as the blue swimmer crab is not considered to be an indigenous fishery and is understood to be of low indigenous interest. The primary crab species associated with indigenous cultures is mud crab. Despite the latter, additional consultation with other interest groups may be undertaken on an as needed/as recommended basis.

**4. By the end of 2006, DFWA to develop fishery specific performance measures for the target species (blue swimmer crab) and fishery specific objectives, performance indicators and measures based on the best available information, for the two by-product species.**

The original assessment indicated that the risks of the fishing activities to the target species (blue swimmer crab) and byproduct species (coral and sand crabs) are minimal due to the relatively low effort levels, seasonal nature of the fishing activity and the species' broad distribution, short life cycle and high fecundity. The legal size permitted at capture is significantly above the size at sexual maturity and fishing methods used are highly selective resulting in few other species being caught as bycatch.

The catch and effort of the target species (blue swimmer crab) and byproduct species (coral and sand crabs) by the two operators is monitored annually. The Fishery landed 53 tonnes in 2005/06, comprising 5.9% of the total blue swimmer catch for the state. Data collected suggests that the management controls currently in place provide adequate measures to maintain a sustainable level of catch and effort. At this stage of the Fishery's development, specific performance indicators and performance measures for these species have therefore not been developed.

**5. DFWA to incorporate into the management regime, an objective to minimise protected/listed species interactions, to minimise or maintain at sustainable levels the take of other non-retained species and to minimise impacts on the marine environment.**

The Fishery is managed under the *Fisheries Resource Management Act 1994* (FRMA) by way of exemption. The objects of the FRMA include 'to conserve fish and protect their environment' and 'to ensure that the exploitation of fish resources is carried out in a sustainable manner'. Furthermore, the Fishery is an experimental fishery and further development occurs within the Developing New Fisheries framework, which is founded on taking a precautionary approach to the development of new fisheries.

Due to its size, developmental status and fishing method employed, significant adverse impacts of this Fishery on the marine ecosystem, including protected/listed species are considered unlikely. The Fishery uses purpose built crab traps which limits both the possibility of bycatch and interactions with protected species. Habitat and greater ecosystem disturbance is also considered minimal (see comments in the initial application).

**6. DFWA, in its Annual State of the Fisheries Report, to report on the performance of the Fishery against performance measures that relate to the sustainability of the Fishery.**

The Department reports on the performance (catch and effort) of the Fishery in the annual *State of the Fisheries Report*. Specific performance measures have not been developed for reasons outlined under Recommendation 4. Activity by the two operators in the Fishery is limited not only by input management controls but also by seasonal constraints, which limit fishing to the cooler months of autumn, winter and spring.

**7. DFWA to develop a research strategy for the Fishery that:**

- **Identifies research information needs and priorities to meet the management information, stock assessment and performance measurement needs of the Fishery; and**
- **Investigates potential synergies with other blue swimmer crab research.**

As there is a low risk of significant adverse impacts on target stocks, ongoing research consists of monitoring the outcomes of other relevant external research into blue swimmer and related crab species and monitoring annual catch and effort data for significant variations.

**8. Noting the potential for fishing efficiency to increase and for the Fishery to continue to evolve, DFWA, by the end of 2007, to review the management arrangements of the Fishery to ensure that blue swimmer crab stocks continue to be fished within ecologically sustainable levels.**

The Fishery is still in an experimental state with relatively low effort levels. Changes in gear efficiency are not considered a major risk at this stage given the generally low risk style of management implemented. As the risk of fishing above ecologically sustainable limits has been assessed as low, the Department's strategy is to monitor fishers' compliance with exemption conditions and monitor annual catch and effort data for significant variations.

As previously mentioned, in June 2007, DFWA liaised with the conservation, commercial fishing and recreational fishing sectors to review the performance, management arrangements and overall viability of the Fishery, which currently has an experimental status only. The outcomes of the review and long term future of the Fishery are currently being considered.

**9. DFWA to implement an education program to ensure that industry has the capacity to make protected species reports at an appropriate level of accuracy.**

All fishers have been given identification booklets for protected species and advised of the need to report all significant or adverse interactions with protected species. Reports of interactions will be reviewed annually to check for any significant level of ongoing adverse interactions.

## **4. CONCLUSION**

This report should provide sufficient information for DEWHA to re-assess the Fishery against the *Guidelines for the Ecologically Sustainable Management of Fisheries*, under Part 13 and 13A of the *EPBC Act 1999*. However, should you require any further information please contact Ross Gould on (08) 9482 7378 or via email [Ross.Gould@fish.wa.gov.au](mailto:Ross.Gould@fish.wa.gov.au)