

**APPLICATION TO THE DEPARTMENT OF THE ENVIRONMENT AND
WATER RESOURCES ON THE
*BECHE-DE-MER FISHERY***

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

September 2007



Department of Fisheries
Government of Western Australia



Fish for the future

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Auxiliary Documents

Final Application to the Australian Government Department of the Environment and Heritage
on the Beche-de-mer Fishery Against the Guidelines for the Ecologically Sustainable
Management of Fisheries August 2004

Department of the Environment and Heritage: Assessment of the Western Australian Beche-
de-mer Fishery December 2004

1. BACKGROUND

The purpose of this report is to update the Department of the Environment and Water Resources (DEW) on changes in the Beche-de-mer Fishery to enable the re-assessment of the fishery against the *Guidelines for Ecologically Sustainable Management of Fisheries*.

In August 2004, the WA Department of Fisheries (the Department) submitted an application to DEW (then the Department of Environment and Heritage) for assessment of the fishery against the *Guidelines for the Ecologically Sustainable Management of Fisheries*, seeking continued listing of the six species taken in the fishery on the section 303DB list of exempt species under the *Environment Protection and Biodiversity Conservation Act 1999*. (EPBC Act)

On 16 December 2004, Ian Creswell, Associate Secretary, Wildlife Trade and Sustainable Fisheries Branch, as delegate of the Minister for the Environment and Heritage, declared the operations for the harvesting of species that are, or are derived from, fish or invertebrates, other than specimens of species listed under Part 13 of the EPBC Act, taken in the Beche-de-mer Fishery to be an approved Wildlife Trade Operation (WTO). The approval was granted until 22 December 2007 and was subject to 13 recommendations.

A copy of the Department's application and DEW's assessment are available on the DEW website at:

www.environment.gov.au/coasts/fisheries/wa/beche-de-mer/.

A summary of developments in the fishery since the last assessment, and the Department's responses to each of the 13 recommendations of the original assessment are outlined below.

Further information on the Beche-de-mer Fishery can be obtained from the Department's *State of the Fisheries* reports. *State of the Fisheries* reports published since the current WTO was declared (2004-05 and 2005-06) is presented at Appendix 1 to this report and can also be downloaded from <http://www.fish.wa.gov.au/docs/sof>.

2. KEY CHANGES IN THE BECHE-DE-MER FISHERY SINCE LAST ASSESSMENT

Other than the development and implementation of a compulsory research logbook, there have been no major developments in the Beche-de-mer Fishery since its original assessment by DEW.

The fishery continues to be managed by a condition of WA Fishing Boat Licences. These conditions are currently scheduled to expire on 31 December 2007, by which time it had been intended to undertake a formal management review. However, the Department considers that the fishery remains developmental in nature, and it is now not anticipated that the major review will take place for the next two to three years. This timeframe will also increase the

time series of finer scale data available from the logbook program, which may assist in decisions on future management. In addition, although there are six authorisations to operate in the Fishery, these are currently either held or controlled by a single operator. This operator is actively undertaking a developmental fishing program, including the use of data loggers to collect real-time information. The Department intends to work closely with them in the management review process.

3. PROGRESS IN IMPLEMENTING RECOMMENDATIONS

- 1. DFWA to advise DEH of any material change to the BDMF's legislated management arrangements that could affect the criteria on which EPBC decisions are based, within three months of that change being made.**

There has been no changes to the management regime for this fishery since its initial assessment.

- 2. DFWA to ensure, where appropriate, that any relevant indigenous and conservation groups interests in the fishery are considered through consultative mechanisms throughout the development of the fishery.**

There has been no consultation undertaken since the fishery's original assessment that has necessitated involvement by conservation or indigenous representatives. However, in general terms, the Department supports and encourages involvement by the broad range of stakeholders in its consultation processes.

- 3. The ESD Report, including all performance measures, responses and information requirements to be incorporated into the management regime and decision making process.**

The status of the Fishery is recorded in the Department's annual *State of the Fisheries Report* based upon performance measures in the ESD report.

- 4. DFWA to develop and implement compliance risk assessment for the BDMF and implement a compliance strategy to address any identified risks.**

A compliance risk assessment has not yet been undertaken for the Beche-de-mer Fishery, but it is intended that this will be completed in due course.

- 5. 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.**

Activity in the fishery against the performance measures relating to the annual catch and catch rate for beche-de-mer, as specified in the Department's original application, are now reported in the *State of the Fisheries Report*. *State of the Fisheries Reports* published since the initial assessment are at Appendix 1 can also be downloaded from <http://www.fish.wa.gov.au/docs/sof>.

6. Within 6 months DFWA to implement a revised logbook, inclusive of species specific data, to provide more reliable and comprehensive data for fishery management.

The Department has worked with industry to develop and trial a daily logbook for the fishery. The use of these logbooks is now compulsory. Its use will enable species specific, fine scale catch and effort data, environmental information (e.g. depth fished) and protected species interactions to be obtained.

7. DFWA to cooperate with other jurisdictions in efforts to undertake research on key gaps in the understanding of beche-de-mer biology and ecology.

In general terms, the Department supports collaborative research projects with other agencies, subject to availability of resources and WA research priorities. With regard to beche-de-mer, the Department maintains links with the CSIRO and AIMS and has reviewed information on other States' beche-de-mer fishery assessments.

8. Within 2 years DFWA to implement data validation mechanisms to ensure that current information collected on the catch and effort patterns within the fishery is available to adequately inform management.

As discussed under *Recommendation 6* above, the Department has developed a comprehensive daily logbook for the fishery which will greatly improve the nature and standard of data collected for the Fishery.

9. DFWA to obtain estimates of sustainable harvest levels for key target species in the fishery.

The Department has developed a biomass dynamics model for the Beche-de-mer Fishery. This model suggests an annual Maximum Sustainable Yield for the currently fished stocks of 110 tonnes. Catches have mostly been below this level in recent years. Summaries of recent catches can be found in the *State of the Fisheries Reports* at Appendix 1.

In the Department's original application, it was stated that it was intended to run the biomass dynamics model for individual catch and effort blocks known to be of particular importance to the fishery. This modelling has not yet been undertaken because of the lack of fine scale data available at this time.

10. Within 18 months DFWA to review performance measures to take into account the best available information on sustainable harvest levels for the beche-de-mer fishery, implement species specific performance measures and revise the management response for the fishery to provide clear timeframes for the implementation of management action if a performance measure is exceeded.

The implementation of a daily catch logbook for the fishery will enable information to be gathered to inform the development of these indicators. However, the time series

of fine scale data currently available is insufficient to allow this recommendation to be met.

11. DFWA to develop and implement within 18 months, measures to minimize localized depletion and serial depletion in the fishery.

Some preliminary investigation of this matter has been undertaken using data obtained during the daily logbook trial. This work has resulted in the identification of five different stock areas for *Holothuria scabra*. However, as yet the data series is not sufficient to allow detailed analysis at this finer scale. Over time, the more detailed information that can now be obtained on the fishery will be used to guide management decisions to minimise the risk of local depletion.

12. Within 2 years DFWA to review the current size limits on all target species to ensure that they are set in a precautionary manner consistent with available research on the size at first maturity of beche-de-mer species.

The Department acknowledges that ideally, research on the size at maturity for beche-de-mer species in WA is required to verify the appropriateness of current legal minimum lengths. However, the beche-de-mer fishery is a non-cost recovered developmental fishery. Operators make no financial contribution to management, research or compliance activities (they pay only for the annual renewal of their Fishing Boat and Commercial Fishing Licences) meaning that these activities are currently entirely reliant on WA Government Consolidated Revenue funding. Competing research priorities mean that there are insufficient resources to undertake research on legal minimum sizes at the present time.

It is also worth noting that data from the logbook trial indicates that although six species are notionally targeted by the fishery, over 99% of all beche-de-mer taken are *Holothuria scabra*. This suggests that if work on size at maturity is possible, it may be useful to specifically target research towards this species.

The soft-bodies nature of beche-de-mer means that it is difficult to accurately measure their length. The Department is working with industry to try and achieve a practical solution to this problem, but unless the issue can be overcome, it could be argued that the effectiveness of legal minimum lengths as a management tool is limited.

13. DFWA to provide a mechanism which allows fishers to record interactions with protected/listed species. DFWA to ensure that industry has the capacity to make these reports at an appropriate level of accuracy.

The daily logbook that has been developed for the fishery provides the capacity for licensees to record interactions with protected species.

4. CONCLUSION

The Department believes that this report should provide adequate information to allow DEW to re-assess the fishery against the *Guidelines for the Ecologically Sustainable Management of Fisheries* under Part 13 and 13A of the EPBC Act. However, should any clarification or further information be required, please contact Mr Paul Fitzpatrick on (08) 9193 8600 or e-mail paul.Fitzpatrick@fish.wa.gov.au.

APPENDIX 1 – State of the Fisheries