

**APPLICATION TO THE DEPARTMENT OF THE ENVIRONMENT AND  
WATER RESOURCES ON THE  
SOUTH COAST CRUSTACEAN FISHERY**

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

August 2007



**Department of Fisheries**  
Government of Western Australia



*Fish for the future*

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## 1. BACKGROUND

The purpose of this report is to update the Department of the Environment and Water Resources (DEW) on changes in the South Coast Crustacean Fishery (the Fishery) to enable the re-assessment of the Fishery against the *Guidelines for Ecologically Sustainable Management of Fisheries*, seeking a further Wildlife Trade Operation (WTO) under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

### Previous Assessment

In May 2004, the WA Department of Fisheries (DoF) submitted an application to the Department of the Environment and Water Resources (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 on section 303DB of the EPBC Act.

On 17 September 2004, Ian Creswell, as delegate of the (then) Minister for the Environment and Heritage, declared as and approved WTO the harvesting of specimens 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 Fishery.

The approval was granted until 20 September 2007 and was subject to 10 recommendations.

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

<http://www.environment.gov.au/coasts/fisheries/wa/south-coast-crustacean/index.html>

DoF's responses to each of the 10 recommendations of the original assessment are set out below.

## **2. PROGRESS IN IMPLEMENTING RECOMMENDATIONS**

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

Legislative instruments (the *Fish Resources Management Regulations 1995*, *Windy Harbour-Augusta Rock Lobster Managed Fishery Management Plan 1987* and *Esperance Rock Lobster Managed Fishery Management Plan 1987*) and relevant licence conditions establish the management rules for the Fishery, but do not include performance measures and management responses.

In consultation with relevant stakeholders, DoF is progressing the development of formal policy guidelines for all WA commercial fisheries that will include ecological, economic, social and governance objectives and performance indicators. These documents will be publicly available.

While the process of developing the guidelines is well advanced for some fisheries, it has yet to commence for the South Coast Crustacean Fishery. It is not anticipated that DoF will be in a position to progress this matter in the immediate future given the need to address higher priority issues in this Fishery - including the information requirements needed to develop robust performance measures, or alternate management action (see responses to *Recommendation 4* and *Recommendation 7*).

- 2. The Department to advise DEH of any material change to the fishery's legislated management regime that could affect the criteria on which EPBC decisions are based, within 3 months of that change being made.***

There have been no changes to the legislated management regime for the Fishery since its original assessment.

- 3. Ensure where appropriate, that any relevant recreational and conservation interest in the fishery are considered through consultative mechanisms. In particular in consolidating the management arrangements for the sectors of the fishery and in the development of the proposed management plan, objectives, performance indicators and measures. The Dept to specifically seek participation by conservation and recreational interests.***

There have been no consultation processes undertaken since DoF's original submission that have necessitated involvement by the recreational or conservation sectors. However, DoF fully supports, and actively encourages, involving the broad range of stakeholders in its consultation processes.

**4. Develop fishery specific objectives linked to performance indicators and performance measures for Southern Rock Lobster and all target deep-sea crab species and key byproduct species. Also 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 by December 2006.**

The development of objectives, performance indicators and measures has not progressed beyond what was presented in DoF's original submission.

This is due largely to a lack of robust scientific data on which to base such measures (see also response to *Recommendation 7*). However, DoF accepts that current performance measures are inadequate. Specifically, recent catch trends for the Esperance Rock Lobster Managed Fishery suggest that the performance indicator is too high.

In addition, there are currently no performance measures for deep sea crab species, although the results of a series of Fisheries Research and Development Corporation (FRDC) projects (Levings et al. 2001; Smith et al. 2004 and Chuwen and Stevens 2006) FRDC 2003/077) have provided some insight into the abundance, distribution and biology of these species off the south coast.

DoF considers that at this time, an immediate review of management measures to place the sustainability of all components of the Fishery beyond doubt, irrespective of the existence of performance indicators, would be of greater value than allowing the Fishery to continue operating at present levels and measuring its impact against inadequate indicators.

**5. Within 12 months the Department must conduct a compliance risk assessment to determine the most effective use of resources and to specify the measures needed to ensure adequate compliance with the management regime. Within 2 years the Department to develop and implement a compliance strategy for the fishery that includes clear management actions and the means of measuring the performance of [the] strategy on a defined and regular basis.**

A workshop to identify and rank possible compliance risks associated with the Fishery was held on 15 March 2005. The workshop identified and ranked a number of potential compliance risks, including:

- fishing for rock lobster out of season;
- taking of undersized rock lobster; and
- fishing in unauthorised areas.

Based on the outcome of the risk assessment workshop, the Department has identified a range of land and sea based compliance strategies.

**6. The 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.**

Performance of the Fishery against the 40 tonne performance indicator for the Esperance Rock Lobster Managed Fishery is now reported in the annual *State of the Fisheries* report (N.B. there are currently no performance measures for deep sea crabs). Copies of *State of the Fisheries* reports can be downloaded at <http://www.fish.wa.gov.au/docs/sof>

**7. Review the research information needs and priorities to meet the management information, stock assessment and performance measures of the fishery. Analysis of research needs should take into account any gaps in the basic biological parameters required for stock assessment of southern rock lobster and deep sea crab species and the need to examine the appropriateness of the current legal minimum size for southern rock lobster. The Department to develop a research strategy address identified priority areas and explore ways to cooperatively share or take advantage of research done in adjacent fisheries with shared stocks.**

DoF has reviewed the research and information requirements needed to satisfy this recommendation.

As discussed above, current performance indicators are inadequate (and do not exist at all for deep sea crabs). It is also acknowledged that management of the Fishery is reliant on fishery dependent data.

The cost of undertaking the research needed to fulfil the requirements of this recommendation is estimated at approximately \$100,000 per annum. The South Coast Crustacean Fishery is not fully cost recovered, contributing some \$35,000 in licensing fees each year.

Consolidated Revenue funding for research on the Fishery is limited, and will remain so, due to the need to address higher priority issues.

As alluded to under *Recommendation 4*, It may be possible to effectively achieve the objectives of *Recommendation 7* through a combination of a more conservative management approach and the introduction of a compulsory research logbook program to improve the quality of fishery dependent data. Possible management options could include:

- an increase in the minimum legal length of southern rock lobsters;
- removal of latent effort; and
- consideration of a reduction in actual effort.

The introduction of such management changes would need to be subject to stakeholder consultation. Further, the introduction of a compulsory logbook may require discussion with industry on increased cost recovery to fund the initiative.

These consultation processes, and changes to policy and legislation that may follow, would take approximately 18 months to implement.

In the longer term, DoF recognises that there may be merit in implementing a more comprehensive South Coast Crustacean Fishery research program. However, resourcing would remain an issue that would need to be discussed with industry.

**8. The Department to ensure that management arrangements to control the take of deep-sea crab stocks in the West Coast Deep Sea Crab Fishery and South Coast Crustacean Fishery provide consistent management arrangements for the species. In addition, the Department to pursue opportunities to actively engage with other relevant jurisdictions in pursuit of collaborative or complementary management and research of shared rock lobster stocks.**

DoF recognises the need for complementary management arrangements for deep sea crabs across the west and south coasts to ensure ongoing sustainability of these species. However, it is not considered appropriate to implement consistent (the same) management arrangements in both regions.

Management arrangements must take into account the specific stocks – or parts of stocks - being exploited, as well as the nature of the fishery.

The West Coast Deep Sea Crab Interim Managed Fishery is a dedicated deep sea crab fishery involving a small number of operators. By contrast, off the south coast, deep sea crabs are taken as part of a multispecies fishery (the South Coast Crustacean Fishery) by a larger number of more diversified operations.

Regarding collaborative/complementary research and management for southern rock lobster, DoF is generally supportive of involvement in collaborative research projects with other jurisdictions, subject to resourcing requirements and WA research priorities. As discussed above, DoF will consult with stakeholders on an increase to the legal minimum length for southern rock lobsters to make this more consistent with relevant zones of the SA fishery.

**9. By December 2006, the Department to review effort levels in the fishery and develop a strategy to ensure that fishery effort is managed at precautionary levels appropriate to the size of the rock lobster and deep-sea crab resources.**

As reported in the original submission for this fishery, DoF is seeking to limit the number of pots that can be used to target deep sea crabs during the closed season for rock lobster. The need to direct available staff resources to addressing higher priority issues has slowed progress towards introducing this change.

As discussed under *Recommendation 4* and *Recommendation 7* above, DoF intends to engage with stakeholders to bring about reductions in both latent and actual effort in the coming months.

It is also worth noting that the South Coast Crustacean Fishery is in fact a conglomerate of four small fisheries. For some elements of the Fishery, particularly the Windy Harbour-Augusta Rock Lobster Managed Fishery where there are two licensees fishing a total of 350 pots, there is no need for a more precautionary management approach.

**10. As part of the review of the fishery, the Department to assess the adequacy of monitoring and assessment arrangements for detecting change and trends in bycatch composition and quantity.**

As discussed under *Recommendation 7*, DoF intends to raise with industry funding for implementation of a compulsory logbook program. This would allow assessment of trends in the composition and quantity of bycatch taken in the Fishery.

### **3. CONCLUSION**

DoF believed 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 Phil Shaw on (08) 9841 7766 or e-mail [phil.shaw@fish.wa.gov.au](mailto:phil.shaw@fish.wa.gov.au).

### **4. REFERENCES**

Chuwen, B.M., and Stevens, R. 2006. Evaluation of crystal crab (*Chaceon bicolor*) resources on the south coast of Western Australia. FRDC Final Report Project 2003/077.

Levings, A., Mitchell, B.D., McGarvey, R., Mathews, J., Laurenson, L., Austin, C., Murphy, N., Miller, A., Rowsell, M., and Jones, P. 2001. Fisheries biology of the giant crab *Pseudocarcinus gigas*. FRDC Final Report Projects 93/220 and 97/132.

Smith, K.D., Potter, I.C. and Hall, N.G. 2004. Biological and fisheries data for managing the deep-sea crabs *Hypothalassia acerba* and *Chaceon bicolor* in Western Australia. FRDC Final Report Projects 1999/154 and 2001/055.