

Recreational fishing for Murray Crayfish Species Impact Statement – Summary

April 2014

Proposed Ministerial Order

The Fisheries Scientific Committee added Murray Crayfish (*Euastacus armatus*) to the vulnerable species list under the NSW *Fisheries Management Act 1994* (FM Act) in 2013. This means Murray Crayfish is fully protected as a threatened species.

There is currently an Interim Order allowing the continuation of recreational fishing for Murray Crayfish to reduce the social and economic impacts pending the development of a Species Impact Statement (SIS) and the making of a permanent Order.

The Minister for the Department of Primary Industries proposes to make a permanent Order under section 221IA of the FM Act, to permit recreational fishing activities targeting the vulnerable species Murray Crayfish. If the proposed Order is permitted it will be subject to applicable fishing regulations and should result in minimal social and economic impacts.

The Ministerial order will replace the Interim Order discussed previously.

A SIS that has been prepared to assess the impact of the proposed Ministerial Order to permit recreational fishing for Murray Crayfish in areas currently open for fishing.

Legal status of Murray Crayfish

Murray Crayfish is listed as 'vulnerable' in the *Fisheries Management Act 1994*. The species is listed as 'threatened' in Victoria under the *Flora and Fauna Guarantee Act 1988*, 'protected' in South Australia's *Fisheries Act 1982*, and 'vulnerable' in the Australian Capital Territory's *Nature Conservation Act 1980*. Nationally the status of Murray Crayfish is 'indeterminate threatened' and internationally the species is classified as 'vulnerable'.

Why is Murray Crayfish threatened?

Murray Crayfish once existed throughout the Murray and Murrumbidgee rivers, and many of their tributaries. Murray Crayfish have totally disappeared from some parts of their natural range, particularly in the Murray River downstream of Mildura, and are often very rare or absent in many other areas where they were once abundant.

Murray Crayfish is a large, long lived and low fecundity species. Their life history characteristics make Murray Crayfish slow to recover from decline and compound the effects of threatening processes. There are a number of processes which may threaten the survival of Murray Crayfish and impact their populations in NSW waterways. These include:

- Removal of woody debris (de-snagging) in rivers and streams
- Thermal pollution from dams
- River regulation (installation and operation of structures that alter natural flow regimes)
- Water quality decline
- Degradation/ loss of habitat
- Recreational fishing activities

Purpose of the Species Impact Statement

The object of this SIS is to assess the potential impact of the proposed Ministerial Order on Murray Crayfish. The findings of the SIS, together with advice from the Fisheries Scientific Committee (FSC), other relevant advisory councils and public submissions must be taken into account by the Minister before an Order is made.

During the preparation of the SIS the Minister must provide the public with an opportunity to make written submissions regarding the Order. Prior to making the Order a copy of the proposed Order must be provided to the FSC and other relevant advisory councils for their advice. The Aboriginal Fishing Advisory Council and the Advisory Council of Recreational Fishing are the relevant advisory councils for the purposes of this specific Order. A copy of the finalised SIS will also be provided to these advisory councils.

Subject to the outcomes of this SIS, a Ministerial Order may be implemented to continue recreational fishing under the current regulations.

Species Impact Statement's findings in regard to recreational fishing

There is very limited data available on recreational fishing catch rates for Murray Crayfish in Australia and specifically NSW. Accurate estimates of recreational catch are needed to fully assess the potential impact that continued recreational fishing in NSW has on Murray Crayfish populations.

Despite closures of the commercial fishery and recreational fishery in ACT, SA and VIC there has been no significant recovery of the species in these regions, and population declines have continued in NSW in both closed and open fishing areas. The cause(s) of these declines have not been objectively determined.

The role of recreational fishing in the decline and/or prevention of recovery of Murray Crayfish populations is unclear. Several life history characteristics, such as slow growth, late maturity, low fecundity and limited dispersal capability make Murray Crayfish vulnerable to over-exploitation and slow to recover from decline. From an ecological perspective, continued removal of mature adults is likely to have some negative impact on population numbers. This concern is offset by recent changes to fishing regulations which reduced allowable take and possession of Murray Crayfish in terms of size, number, season and area permitted to be fished.

There is a recognised social value in the Murray Crayfish recreational fishery, and this factor has strongly influenced the recommendation of this SIS to continue the fishery in its current form, while undertaking further research on the impact of recreational fishing. There is also a relatively small economic value in the fishery, largely related to transport, camping and fishing gear expenditure.

Further monitoring and assessment of the species status, and relevant fishing regulations is recommended if the Ministerial Order is implemented.

Conclusions of the Species Impact Statement

With limited scientific evidence on the direct impact of recreational fishing, and recognising the important social value of the fishery, **this SIS recommends the proposed Ministerial Order be made to permit the continuation of the Murray Crayfish recreational fishery under the applicable regulatory controls**, provided a comprehensive and scientifically rigorous program is implemented to assess the impact of recreational fishing activity and the status of the Murray Crayfish population. The fishery regulations must be reviewed at five year intervals and modifications made in light of information from the research and monitoring program to ensure that efforts to rebuild Murray Crayfish stocks are successful and Murray Crayfish are conserved for future generations. The SIS also recommends the implementation of a targeted angler education program to educate fishers about concerns for Murray Crayfish populations and encourage strict compliance with regulations, and maintenance of a strong enforcement program to ensure high levels of compliance with regulations relating to Murray Crayfish.

Your views are important!

NSW DPI is interested in your comments on the conclusions of this SIS and on the proposed Order to permit recreational fishing for Murray Crayfish in specified areas.

A copy of the SIS and proposed Ministerial Order are available DPI website at www.dpi.nsw.gov.au/fisheries. For further information or to receive a copy of the proposed order and SIS please call (02) 4916 3811

Written submissions can be made by:

Post: Murray Crayfish Order
NSW Department of Primary Industries
Locked Bay 1
Nelson Bay NSW 2315

Email: fisheries.threatenedspecies@dpi.nsw.gov.au

If you wish your submission to remain confidential please mark your response accordingly.

Submissions close on Friday 2 May 2014

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Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (April 2014). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of the Department of Primary Industries or the user's independent adviser.

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