

## **CONFIDENTIAL**

Scientific Advisory Committee  
c/- SAC Executive Officer.  
Martin O'Brien  
Executive Officer, Scientific Advisory Committee  
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### **NOMINATION NUMBER 808**

Dear Person,

Since there was no scientific research conducted by Fisheries Victoria to justify increasing the daily take of yabbies (see FOI document included) from 20 to 30 litres per person per day with no size limit and no requirement to return berried yabby females I believe that Mr Chara's example calculations below are a valid way of showing a **“potentially threatening process”**.

#### **Example calculations to show a “potentially threatening process”.**

Since Recreational Fishers are permitted to take commercial quantities of bait yabbies without the requirement to submit monthly catch and effort returns no data is made available. To give you an idea of the possible yearly take I will put forward a simple scenario.

For example, If **1%** of participating Recreational Fisherman caught the new allowable limit of Yabbies (bait) **12** times per year (one day per month) the total wild catch of yabbies would be in the vicinity of 1467 tonnes for the year.

Fisheries Regulations 2010

- No Size limit.
- Not required to return berried females.
- Allowed 30 litres of live Yabbies per person per day.

One practical test showed that 113 live bait sized Yabbies between 4 to 6 grams in weight filled a one litre container. 30 litres of bait Yabbies would be equivalent to 3390 yabbies. About 6000 yabbies between 3 to 4 grams.

The latest figures show that there are 721,000 Victorians per year participating in recreational fishing.

1% = 7210 persons. If 1% of Recreational fishers catch the new allowable limit 12 times per year (one day per month) the total catch per year would be,

7210 persons x 3390 yabbies x 5 grams (average weight per yabby) x 12 days of a year, divided by 1000,000 to convert to tonnes = 1467 tonnes per year.

If 1% caught a limit of 200 bait Yabbies 12 times per year it would equate to 87 tonnes per year.

Even this is excessive. More research is required into recreational fishing habits.

**Statement by Stephen Chara**

I am concerned that it appears the SAC has rejected the nomination based on Fisheries Victoria's comments which are NOT based on scientific research.

*"However, limited data from the Department of Primary Industries Fisheries Victoria Division did not support any decline in this widespread species"*

**How can this statement be made when we have been in a prolonged draught and suffering the effects of climate change. If Lakes, streams and water holes have been dry surely yabby numbers would have been effected.**

The nomination is for a "**potentially threatening process**". Overfishing is a proven threatening process. I consider a regulation that allows Recreational Fishers to take commercial quantities of bait yabbies (30 litres or 6000+ bait sized yabbies per person per day) is overfishing and thus a threatening process that will remove a food source for more than two species of native fauna and impact on viable numbers of more than two species of non *Cherax* and *Cherax sp.* Even Fisheries Victoria supports this. **"Taking yabbies at a commercial rate will deplete their numbers and have broader ecosystem impacts"**.

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**In my opinion,**

**SAC comments** *"However no case was clearly made in the nomination that showed "Overfishing for bait of the Common Yabby (Cherax sp) and localised endemic crayfish species under Fisheries Victoria Regulations" either poses or has the potential to pose a significant threat to the survival of two or more Victorian species or any community as required under the Flora and Fauna Guarantee regulations 2001"* **is not justified,**

and I therefore do **not** support SAC's Preliminary Recommendation to reject the nomination.

Yours Sincerely

**CONFIDENTIAL**

Full Name:

Complete Contact Address:

Email Address:

Signed:



## Department of Primary Industries

Our ref: Gv/01/0149

15 July 2009

Mr Stephen Chara  
250 Portreath Road  
**BELLBRAE VIC 3228**

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GPO Box 4440 Melbourne  
Victoria 3001 Australia  
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Our Ref:

Dear Mr Chara

### **FREEDOM OF INFORMATION APPLICATION – EVIDENCE THERE ARE NOT SUSTAINABILITY ISSUES IN YABBY HARVESTING AT CURRENT OR PROPOSED LEVELS**

I refer to your request dated 8 June 2009 (received on 12 June 2009) in which you requested, under the *Freedom of Information Act 1982* (FOI Act), access to all documentation and scientific evidence that supports the comment "*Current information suggests there are not sustainability issues in yabby harvesting at current or proposed levels*" in the document DPI Stakeholder Feedback and Decisions (p7 Yabby Final Decision column comment).

I understand your FOI request relates to the feedback document that was supplied to individuals who made submissions to the Draft Fisheries Regulations 2009 and the associated Regulatory Impact Statement.

I wish to advise that after consulting Fisheries Victoria, no documents have been located that are relevant to your request. The common Victorian yabby (*Cherax destructor*) is not recognised as a threatened species under either the Victorian Flora and Fauna Guarantee Act or the Federal Environment Protection Biodiversity and Conservation Act. The above sustainability comment about yabbies was based on both their non threatened species status and a collation of verbal comments from telephone conversations from Departmental staff and at working group meetings and represented the judgement of experienced field staff and scientists.

In accordance with section 27(1)(e) of the Act you have the right to complain to the Ombudsman if you are dissatisfied with this decision that no documents exist. The Ombudsman's address is: The Ombudsman, Level 9, 459 Collins Street (North Tower), Melbourne Vic 3000. Telephone: (03) 9613 6222.

If you wish to discuss this matter further, please contact me on (03) 9658 4030.

Yours sincerely,

STUART ATKINS, Manager FOI & Privacy



**Version No. 002**  
**Flora and Fauna Guarantee Regulations 2001**  
**S.R. No. 147/2001**

Version as at 22 February 2008

Flora and Fauna Guarantee Regulations 2001

S.R. No. 147/2001 **Sch. 2**

**11 In the case of any potentially threatening process**

- (1) A statement identifying the potentially threatening process.
- (2) The statement must—
  - (a) specify the potentially threatening process in accordance with a relevant text or reference; or
  - (b) describe the potentially threatening process in such a way that it is distinguishable from all other potentially threatening processes.
- (3) The potentially threatening process must be described as a process and not as a cause or a symptom of a process.

**12 In the case of a potentially threatening process nominated for addition to the Processes List**

- (1) Evidence showing that primary criterion 5.1 or 5.2 in Schedule 1 is satisfied by the potentially threatening process.
- (2) The evidence must indicate—
  - (a) the range of flora or fauna affected or potentially affected; and
  - (b) the significance of the threat which the potentially threatening process poses or has the potential to pose.

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|-----------------------------|--|
| <b>Eligibility criteria</b> | <i>Indicate which of the primary criteria and sub-criteria stated in the Regulations the potentially threatening process satisfies, on what evidence the case is based and cite the sources of this evidence. The evidence may have been presented in full in the preceding sections, but, in this section, a summary of the logic of the case should be provided. Unsupported statements which need to be verified delay the SAC's consideration of the nomination.</i> |
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5.1 *the potentially threatening process poses or has the potential to pose a significant threat to the survival of a range of flora and fauna.*

Allowing recreational fishermen to take commercial quantities of bait sizes yabbies *Cherax spp.* “will deplete their numbers and have broader ecosystem impacts” Note Fisheries Media release and comments p19 . I have consistently reported low wild stock numbers and other observations as a commercial bait collector and I am submitting a higher number of Catch and Effort Returns that are marked as Nil Fishing.

I am entitled to collect bait within a 75 Km radius of my home. Due to lowering wild stock numbers over the last few years it is no longer viable to trap for bait Yabbies in my designated area.

5.1.1 *the potentially threatening process poses or has the potential to pose a significant threat to the survival of two or more taxa;*

Since there is no requirement by recreational fishermen to be able to distinguish various species then being allowed to take crayfish at commercial quantities would severely impact on *Geocharax spp*, *Gramastacus spp*, *Engaeus spp*, and *Euastacus spp*. The impact on *C. albidus* is of great concern having a smaller range than *C. destructor*, see p16 . Duck hunters are tested for their ability to distinguish between duck species but there is no such requirement for obtaining a Recreational Fishing licence.

5.1.2 *the potentially threatening process poses or has the potential to pose a significant threat to the survival of a community of flora and fauna.*

Yabbies are a food source for many other species. Reducing yabby numbers will impact on the survival of these species. Refer to VRFish (Peak Body for recreational fishers) comments p18.

5.2 *the potentially threatening process poses or has the potential to pose a significant threat to the evolutionary development of a range of flora and fauna.*

As the number of Wild Stock Yabbies reduces the range of fauna that has yabby on its menu will be forced to seek an alternative food source. This in turn will impact on this food source which will impact on other species and so on. This effect will have an evolutionary impact on many species. Observations made as an experienced Commercial Aquaculturist and Commercial Fisherman.

5.2.1 *the potentially threatening process poses or has the potential to pose a significant threat to the evolutionary development of two or more taxa;*

There is a significant threat to the evolutionary development of *Cherax albidus*, *Cherax destructor* and an un-named *Cherax* species (spanner claw or Barmah swamp yabby). By observation and experience if you constantly remove the best performers (growth rate) and larger Yabbies the gene pool for these Yabbies will be severely reduced resulting in smaller average sizes and Yabbies berrying at a smaller size. Reducing a food source ultimately results in the reduction in size of a species.

5.2.2 *the potentially threatening process poses or has the potential to pose a significant threat to the evolutionary development of a community of flora and fauna.*

There is a significant threat to the evolutionary development to a community of fauna and flora. Reducing a specific food source will result in fauna searching for an alternative which can result in a change to a species range. This can then impact on other species. Less Yabbies results in less fish that eat Yabbies which results in less birds that eat fish etc. Yabbies eat plants so less Yabbies more plants, more plants then less access to water for birds and so on.

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FLORA & FAUNA  
GUARANTEE

NOMINATION NO. 808  
PTP

## FLORA AND FAUNA GUARANTEE - SCIENTIFIC ADVISORY COMMITTEE

### PRELIMINARY RECOMMENDATION ON A NOMINATION FOR LISTING

#### Overfishing for bait of the Common Yabby (*Cherax* sp) and localised endemic crayfish species under Fisheries Victoria Regulations (Potentially Threatening Process)

**Date of consideration:** 11 February, 27 April, 19 July 2010 **File No.:** FF/54/3190  
**Validity:** The nomination is for a valid item  
**Prescribed Information:** The prescribed information was provided.

Name of the Nominator is adequately provided.

#### Name and Description of the process:

In the opinion of the SAC the process is adequately defined and described.

The nominated process is defined as the 'Overfishing for bait of the Common Yabby (*Cherax* sp) and localised endemic crayfish species under Fisheries Victoria Regulations'.

Victorian freshwater crayfish comprise the following genera (number of Victorian species in brackets): *Cherax* ('smooth yabbies', two species plus at least one yet to be described taxa), *Engaeus* ('burrowing crayfish', 22 species), *Euastacus* ('spiny crayfish', 11 species), *Geocharax* ('land crayfish', two species) and *Gramastacus* ('swamp crayfish', two species). The *Engaeus* and *Euastacus* genera share the bulk of the native crayfish species recorded from Victoria (O'Brien 2007).

Semi-aquatic crayfish inhabit streams, lakes, dams etc. and are adapted to the naturally unpredictable nature of water availability in Australia, so that when water bodies become dry they burrow underground to reach moister conditions until the next rains. This group can live for some time out of water and also travel overland to other water bodies. They tend to be smaller than the true aquatic forms (125-150 mm when fully grown) and lack spines on the body. The best-known example of this group are the 'yabbies' (genus *Cherax*).

A number of Victorian crayfish (mainly the larger species i.e. crayfish growing to more than a kilogram in weight) are the target of recreational fishing (e.g. Murray Spiny Crayfish, Gippsland Spiny Crayfish and Glenelg Spiny Crayfish). These species tend to be slow-maturing and long-lived and are well known amongst anglers for their eating qualities. By far the main target of many crayfish anglers is the widely-distributed yabby (*Cherax destructor*) which now occurs across most of lowland Victoria (DSE 2010). The species is well known for its broad environmental tolerances and colonisation abilities (Coughran *et al.* 2009).

The natural distribution of *Cherax destructor* was originally the river systems west of the Great Dividing Range in Queensland, NSW, ACT, Victoria, South Australia and NT. The species has been introduced into Western Australia and Tasmania (see Coughran *et al.* 2009 for references) and widely translocated to other parts of Australia and coastal rivers in NSW. Within this range it supports important recreational and commercial fisheries and the aquaculture industry (Coughran *et al.* 2009).

Yabbies (especially *Cherax destructor*) are commercially grown for a number of purposes (Coughran *et al.* 2009)

- as food for humans and animals.
- as aquarium species and as food for other aquarium species.
- as bait for recreational fisherman.
- as stock to seed farm dams as a food source.

Some figures for yabbies sold at the Melbourne Fish Market are: 1979 - 10.92 tonnes, 1980 - 17.92T, 1981 - 13.41T (DSE data), many of these may have been artificially grown in ponds. The commercial catch of yabbies has also been increasing (ENRC 2000) viz. 1994 - 6.3T, 1995 - 6.1T, 1996 - 17.3T and 1997 - 25.5T. Aquaculture production for yabbies is far greater than the wild harvest, but the wild harvest is also growing (ENRC 2000). The commercial catch figures for freshwater yabbies in Victoria are: 2004 - 744 kg, 2005 - 1016 kg, 2006 - 1038 kg, 2007 - 1028 kg, 2008 - 2359 kg, 2009 - 3840 kg (Fisheries Victoria data, provided 2010).

Demand for yabbies is increasing both within and outside Australia. Most of the current production goes to the domestic market. They can be sold at a wide range of sizes, from seed stock to table-size yabbies (50 grams plus). Intermediate sizes are used for manufacturing and garnish, as well as for pets and bait. Markets are expanding, with demand exceeding supply (ENRC 2000). In 1997, total Australian production returned \$2,139,000, with Victoria contributing 15 per cent of the total, or \$325,000 from approximately 24 tonnes of product. Farmed production of yabbies in NSW, Victoria and SA occurs mainly in purpose built ponds. In 2001-02 these three states produced 71 tonnes of yabbies valued at \$800,000 (Australian Aquaculture Portal, May 2010, Piper 2000).

#### Additional Information

- There is a proposal to nominate translocation of *Cherax destructor* as a Key Threatening Process in NSW (Coughran *et al.* 2009).

- The 2008-2009 commercial catch of freshwater Yabby in Victoria was 4 tonnes (DPI 2009).

#### Decision of the Scientific Advisory Committee

Victoria's Fisheries Regulations were reviewed and approved in March 2009. These changes meant the allowable daily take of whole yabbies (*Cherax species*) was increased from 20 litres to 30 litres.

The nomination argued that:

- the significance of the threat would be a dramatic reduction in yabby (and native cray) populations, especially during extended dry periods and conditions of climate change.
- the 2009 regulations under the *Fisheries Act 1995* will permit 721,000 Victorian recreational anglers to take an increased number (commercial quantities) of bait-sized yabbies (but not other native crays) without any form of monitoring. (In Victoria commercial bait fishermen are required to submit monthly catch and effort returns so Fisheries Victoria can monitor the health of fisheries).
- recreational fishermen are not required to be able to distinguish different species of native crays so crayfish that are not *Cherax* species would also be targeted. For example the nomination argued that *Geocharax* spp, *Gramastacus* spp, *Euastacus* spp and *Engaeus* spp (especially those that have an Occipital Carapace Length of less than 5 cm) would also be severely affected by increased recreational harvesting of crays for bait. Another un-named rare species of *Cherax* found in northern Victoria (Barmah Swamp Yabby, Edney *et al.* 2002) would also be potentially targeted.
- as a result of increased recreational fishing pressure of yabbies for bait, the average size of yabby populations could be significantly reduced leading to yabby/cray populations being more vulnerable to non-human predation.
- the amended Fisheries Regulations have no size restriction placed on a volume take of Yabbies and no requirement to return berried females this would also lead to declines in populations of these crustaceans.

The Scientific Advisory Committee (SAC) has assessed the information provided with the nomination, literature references and additional expert advice and determined as follows.

The SAC agrees that while there are limited data for commercial catches of freshwater yabbies there appears to be no monitoring of the harvest of yabbies for bait in Victoria. However, limited data from the Department of Primary Industries Fisheries Victoria Division did not support any decline in this widespread species.

The nomination identified *Cherax albidus*, *Engaeus* spp., *Euastacus* spp., *Geocharax* spp., and *Gramastacus* spp and the undescribed 'Barmah Swamp Yabby' as cray species threatened by the process. However no case was clearly made in the nomination that showed 'Overfishing for bait of the Common Yabby (*Cherax* sp) and localised endemic crayfish species under Fisheries Victoria Regulations' either poses or has the potential to pose a significant threat to the survival of two or more Victorian species or any community as required under the Flora and Fauna Guarantee Regulations 2001. The relevant information prescribed in Schedule 2 of the Flora and Fauna Guarantee Regulations 2001 was not provided.

The SAC has therefore made a Preliminary Recommendation to reject the nomination under Section 13(3)(c) of the Act.

#### **Selected references:**

- DPI (2010) *Fisheries Victoria Commercial Fish Production Information Bulletin 2009*. Department of Primary Industries, Melbourne. Internet document at - [http://new.dpi.vic.gov.au/\\_data/assets/pdf\\_file/0017/29042/FV-Info-Bulletin-2009.pdf](http://new.dpi.vic.gov.au/_data/assets/pdf_file/0017/29042/FV-Info-Bulletin-2009.pdf)
- DSE (2010) *Atlas of Victorian Wildlife* (electronic fauna database). Department of Sustainability & Environment, Melbourne.
- Coughran, J., McCormack, R.B. & Daly, G. (2009) Translocation of the Yabby *Cherax destructor* into eastern drainages of New South Wales, Australia. *Australian Zoologist* 35(1): 100-103.
- Edney, G. N., McNeil, D. G. & Lawler, S. H. (2002) The Swamp Yabby (*Cherax* sp.) of the Murray River Catchment. *The Victorian Naturalist*. 119 (4): 200-204.
- ENRC (2000) *Inquiry into the Utilisation of Victorian Native Flora and Fauna*. Environment & Natural Resources Committee, Parliament of Victoria, Melbourne. Internet document at: <http://www.parliament.vic.gov.au/enrc/inquiries>
- O'Brien, M. B. (2007) Freshwater and terrestrial crayfish (Decapoda, Parastacidae) of Victoria: status, conservation, threatening processes and bibliography. *The Victorian Naturalist* 124 (4): 210-229.
- Piper, L. (2000) *Potential for expansion of the Freshwater Crayfish Industry in Australia*. A report for the Rural Industries Research and Development Corporation. RIRDC Publication no. 00/142.  
Internet document at - <https://rirdc.infoservices.com.au/downloads/00-142.pdf>


#### **Relevant websites:**

Australian Aquaculture Portal (Freshwater Yabby):

[http://www.australian-aquacultureportal.com/PDF/industry\\_fwcrayfish\\_yabby.pdf](http://www.australian-aquacultureportal.com/PDF/industry_fwcrayfish_yabby.pdf)

#### Endorsement by the Convenor of the Scientific Advisory Committee

Date

  
Assoc Prof David Morgan  
Convenor

26.7.10