

Consultation on fishery reforms

Discussion paper

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### Background

The crab fishery resource is of immense social, cultural and economic value to Queenslanders. The fishery is subject to a suite of management controls, including limited commercial licensing and quotas, recreational catch and size limits and gear restrictions.

On 5 June 2023, the Australian and Queensland governments announced over \$160 million to significantly reduce gillnet fishing and other high-risk fishing activities impacting protected species. Parts of the commercial fishing sector, as well as conservation groups and recreational fishers, have raised concerns and proposed a range of initiatives for managing impacts associated with the transfer of fishing effort into the crab fishery due to the phaseout of gillnets in the Great Barrier Reef Marine Park and the rezoning of the Great Sandy Marine Park. The Queensland government is currently administering a structural adjustment package for eligible licence holders to mitigate the social and economic impacts.

This discussion paper is seeking feedback on reforms proposed by parts of the commercial sector for the commercial crab fishery on the east coast of Queensland and in the Gulf of Carpentaria to ensure the economic and sustainable management of the fishery.

Results from this discussion paper will be discussed with the crab fishery working group and the Sustainable Fisheries Expert Panel before any decisions are made.

Find out more about the:

- > Queensland Sustainable Fisheries Strategy: 2017-2027
- > crab fishery working group
- > phase-out of gillnets.

### Have your say



### No decisions have been made and none will be made until after consultation

Fisheries Queensland is seeking feedback from commercial, recreational, charter and traditional fishers, environmental groups and other stakeholders on management reform options presented in this discussion paper. Feedback on the range of management options proposed by a group of industry participants will be used to guide the future management strategies to ensure the sustainable management of the fishery.

Different management reform options will have different impacts on sectors (e.g. commercial fishers, recreational fishers, traditional fishers, fish shop owners, tackle retailers and environmental organisations). Therefore, it is important to understand the preferences of people who have an interest in the fishery.

The fastest and easiest way to provide your feedback is to complete the online survey.

The survey questions are also available at the end of this document if you would prefer to print the survey and post your submission to:

Crab fishery discussion paper Department of Agriculture and Fisheries GPO Box 46 Brisbane Qld 4001

PLEASE NOTE: The survey questions are designed to seek your input - they are not a voting tool. Answers to these questions will be used to help develop options for fisheries management action and provide an insight into the preferences of all stakeholders.

Submissions close 5 pm, Thursday 9 May 2024.



For more information, email fisheriesmanagers@daf.qld.gov.au or call 13 25 23.

### About the fishery

The Queensland crab fishery includes commercial, recreational, traditional and charter fishing that predominantly target mud crabs, blue swimmer crabs and three-spotted crabs. The commercial fishery is managed under the C1 fishery symbol.

The fishery operates throughout the state's coastal waters, including the east coast and Gulf of Carpentaria (Figure 1). The commercial fishing season is from 1 July to 30 June the following year.

The main gear used by all fishers to catch mud crabs is wire-mesh crab pots and trawl-mesh (nylon) collapsible traps. Blue swimmer crabs can also be retained in the trawl fishery. Due to the ease of access to this fishery, there is a high level of use by all sectors. It is characterised by both high effort and high catches, with the harvest of mud crabs totalling more than all other Australian mud crab fisheries combined (Northern Territory, Western Australian and New South Wales).

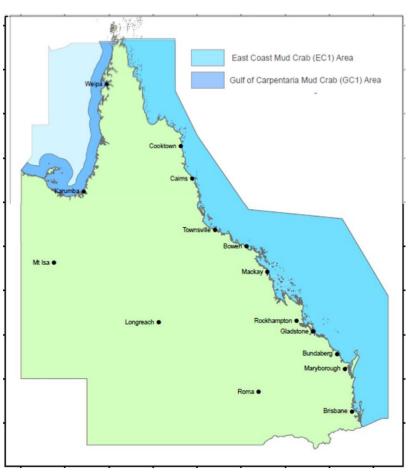


Figure 1: Queensland C1 fishery area – east coast blue swimmer and mud crab fishing area, Gulf mud crab fishing area (dark blue shading) and Gulf blue swimmer crab fishing area (light blue shading)

The fishery is managed under individual harvest strategies for mud crab and blue swimmer crab. The objectives of the harvest strategies are to manage the fishery in accordance with the objectives of the *Fisheries Act 1994* and the *Queensland Sustainable Fisheries Strategy: 2017–2027*. Both mud crab and blue swimmer crab stocks are considered sustainable throughout their range in North-Eastern Australia. The aim is to manage the fishing mortality of crabs through setting a total allowable catch at a level that allows the stock to achieve specified biomass targets and maintain sustainable catch shares amongst commercial, recreational and traditional fishing sectors.

Current management of the fishery is based on a series of input controls (including commercial fishing licences and gear limitations) and output controls (individual transferable quota and associated total allowable commercial catch (Table 1 overleaf). The commercial mud crab fishery also has a minimum quota entitlement of 1.2 tonnes required for the intended management area (e.g. east coast mud crab) prior to being able to commercially fish in that region of the fishery.

Table 1: Summary of C1 management arrangements

Total C1 symbols	PCFLs* with C1	Fishery area	Crab species	Total allowable commercial catch	Gear
	302	Gulf of Carpentaria	Mud	108,000 kg	PCFL with one C1 fishery symbol – 50 pots
409		Queensland east coast	Mud	770,000 kg	PCFL with 2 C1 fishery symbols – 100 pots
			Blue swimmer	263,000 kg	PCFL with 3 or more C1 fishery symbols – 150 pots**

<sup>\*</sup> PCFL – primary commercial fishing licence

<sup>\*\*</sup> No more than 100 crab pots may be used at the same time to take crabs in the Hervey Bay crab area or Moreton Bay crab area. Up to 150 crab pots may be used at the same time in areas other than the Hervey Bay crab area or Moreton Bay crab area for blue swimmer, coral and three-spotted crabs.

### **Catch statistics**

### Mud crabs

The commercial catch of mud crabs has declined in recent years, with combined harvest from the east coast and Gulf of Carpentaria falling from around 1,419 tonnes in 2011 to around 863 tonnes in 2017. Effort has remained high with an average of 37,000 fishing days per year. Since the mud crab harvest strategy was implemented in 2021, there has been a further decline in harvest with an increase in catch rate (Figures 2 and 3).

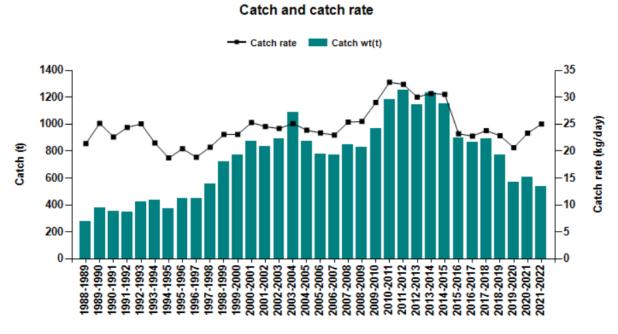


Figure 2: Commercial catch and catch rate of mud crab on the east coast (financial years)

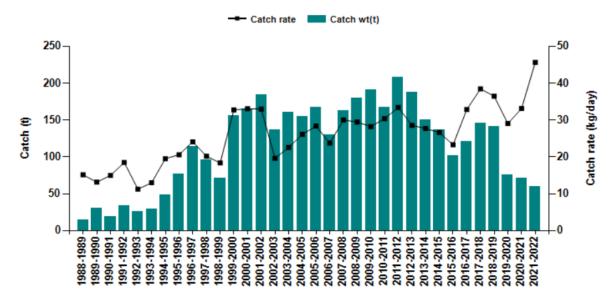


Figure 2: Catch and catch rate of mud crab in the Gulf of Carpentaria (financial years)

### Blue swimmer crabs

The total commercial pot catch of blue swimmer crabs in recent years has been between 350 and 400 tonnes, with the lowest recorded catch of 188 tonnes in the 2018–19 season. Many commercial fishers report current catch rates are no longer economically viable. Since the blue swimmer crab harvest strategy has been in place, there has been a slight improvement in catch rate with pots (Figure 4) while catch rates from trawl have remained constant (Figure 5).

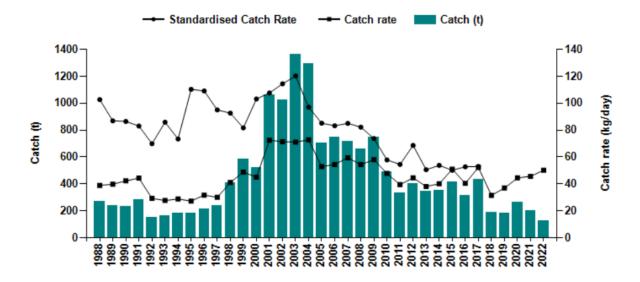


Figure 4: Commercial pot catch and catch rate of blue swimmer crabs on the east coast

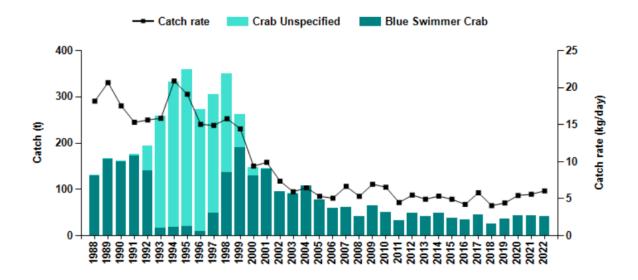


Figure 5: Commercial trawl catch and catch rate of blue swimmer crabs on the east coast

# Proposed management reforms

Fisheries Queensland is seeking feedback on fishery reforms proposed by parts of the commercial sector to ensure the economic and sustainable management of Queensland crab fisheries for the future.

These management reform options have been raised by various sectors, including parts of the commercial sector in submissions to Fisheries Queensland in 2023. The management options represent the initiatives of industry and their concerns around the need to manage the risk of transfer of fishing effort from other fisheries, support commercial economic opportunities and ensure the sustainable management of the fishery.

#### 1. Reforms to manage the transfer of fishing effort:

- decrease the total allowable commercial catch of mud crab
- increase the minimum quota entitlement for mud crab
- introduce requirement for two C1 symbols on a primary commercial fishing licence.

#### 2. General fishery reforms:

- increase number of crab pots permitted on a single trotline
- close all crabbing and ban the use of crabbing gear in Eurimbula Creek
- clarify the scope of the C1 fishery
- review escape vent sizes for commercial crab pots.

# 1. Reforms to manage the transfer of fishing effort

### Decrease the total allowable commercial catch of mud crab

The aim of the mud crab harvest strategy is to maintain the species at, or return it to, a target biomass level that aims to maximise economic yield for the fishery. When individual transferable quota (ITQ) was introduced to the mud crab fishery, the total allowable commercial catch (TACC) was based on historic harvest reported in commercial logbooks. There are concerns that harvest was overreported by operators in anticipation of gaining a higher allocation of individual transferrable quota units. This was, in part, ameliorated at the time ITQs were introduced by forensic analysis of catch reporting and modelling of future catches. Nevertheless, uncertainties remained around the accuracy catches reported and subsequent TACC that was set.

Due to potential over reporting, there are concerns the mud crab TACC may be currently overallocated and above the level that achieves maximum economic yield. Due to this, the current TACC may not be achieving the primary harvest strategy objective. The mud crab TACC has only slightly exceeded the 70% minimum catch required to avoid triggering decision rule 1.7 of the harvest strategy for the last two seasons (the breakout rule). The breakout rule ensures the TACC can be reduced if the stock is not performing, and that stock biomass levels are set at the appropriate level to achieve maximum economic yield.

There are ongoing concerns that excess B-grade and C-grade crabs are being taken to ensure the 70% target is met, to avoid reducing the TACC. Implementing the breakout rule ahead of the harvest strategy review timelines is being considered to ensure the TACC can better achieve the primary objective of the harvest strategy.

In line with the mud crab and blue swimmer crab harvest strategies, a review of the catch and effort data, and whether implementation of the breakout rule for the 2024/25 fishing season needs to be implemented will undergo consultation with the crab working group mid-March 2024.

### Increase the minimum quota entitlement for mud crab

To promote responsible fishing practices and support viable commercial operations, the primary management method for the east coast and Gulf of Carpentaria mud crab fishery is a minimum quota entitlement of 1.2 tonnes for operators to participate in the fishery.

This management method is intended to allow fishers to arrange their fishing operations at the least possible cost while meeting objectives under the *Queensland Sustainable Fisheries Strategy: 2017–2027*. The intent is also to ensure the consolidation of quota occurred amongst those who were to remain active in the fishery and that fishers remain reasonably invested and reduce the risk of threatened, endangered and protected species interactions.

Some industry members have proposed an increase to the minimum quota entitlement to 3 tonnes to discourage unsustainable and inconsistent operations and provide more economic assurance for those that remain active and invested in the fishery. Although an increase in the minimum quota holding could consolidate operators in the fishery, it would also limit participation for those who do not hold or are not able to invest in additional quota. The economic impact to a fishing business of having to purchase an extra 1.8 tonnes of mud crab quota is estimated to be \$63 000 based on the current quota market of \$35 per kg.

# Introduce requirement for two C1 symbols on a primary commercial fishing licence

Two-for-one licensing policies have been used in several different commercial fisheries around Australia and the world to address excess capacity. Under the current management arrangements, an operator is required to have one C1 symbol attached to a primary commercial fishing licence to participate in the fishery and use up to 50 pots. Multiple C1 symbols on a licence allows the use of additional pots, with a maximum of three C1 symbols permitting the use of 150 pots (in some areas).

There are currently over 100 unused C1 symbols that could be purchased and reinvested in the fishery. A requirement for two C1 symbols on a licence could:

- have similar economic benefits as the proposed increase to the minimum quota entitlement;
- could consolidate operators in the fishery; and
- reduce the total number of pots used in the fishery reducing fishing effort and reducing the risk to threatened, endangered and protected species (including marine turtle entanglement, which is known to occur.

This proposal may provide incentives for those in the fishery to implement sustainable practices and efficiencies, as well as motivate those who wish to leave the fishery and trade their C1 symbol for a financial return. Based on current information provided to Fisheries Queensland, the market value of a C1 is approximately \$25,000 to \$35,000.

# 2. General fishery reforms

### Increase number of crab pots permitted on a single trotline

Under the current management arrangements, no more than 10 crab pots can be fixed to a single line or attached to each other in sequence (e.g. on a trotline).

Commercial fishers have identified this restriction does not promote efficiency in the offshore areas of the crab fishery, as more trotlines must be set to achieve maximum permitted fishing effort. This requires fishers to use several sets of gear (including lead lines, floats and prescribed markers) in addition to being required to steam between multiple locations to check the apparatus.

There are additional concerns that increasing the number of apparatus in the water may increase the risk of interaction with protected species and potentially create surface entanglement risks with recreational and commercial vessels.

Allowing more crab pots to be used on each trotline could improve efficiency for the same amount of fishing effort. An increase in the maximum number of pots that can be attached to an individual trot line is being considered. Fishers would still be able to use fewer pots per trotline if required, while complying with the marking requirements. It is proposed to amend the commercial regulations to allow no more than 15 crab pots fixed to a single trotline.

### Close all crabbing and ban the use of crabbing gear in Eurimbula Creek

Eurimbula Creek (Eurimbula National Park on the Central Queensland coast) includes waters closed to taking mud crabs. See Schedule 1 of the <u>Fisheries Declaration 2019</u> for regulated waters in Queensland.

Under the current regulations, a person must not take or possess a mud crab taken from the Eurimbula Creek regulated waters. This restriction has been in place since before 1995 to provide a 'sanctuary' for mud crabs; however, the use of crab gear is allowed to take other crabs, such as blue swimmer (sand) crabs.

This creates an enforcement issue for Fisheries Queensland and marine park rangers, as crab gear is commonly used in Eurimbula Creek and it is not possible to ensure all mud crabs are returned following capture.

It is proposed to close all crabbing and restrict the use of crab gear in Eurimbula Creek. This complete closure would ensure mud crabs are protected and improve environmental outcomes for Eurimbula Creek by reducing the risks of marine debris and ghost fishing.

### Clarify the scope of the C1 fishery

The current regulation states:

'Crabs, other than spanner crabs, may be taken under the C1 licence.'

Under the C1 symbol, commercial fishers can fish for prescribed inshore and offshore crab species within the C1 fishery area.

The C1 fishery is currently accredited under Part 13 of the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, which protects fishers from prosecution for unintentional interactions with threatened, endangered and protected species when fishing in Commonwealth waters. There has been recent interest in the operation of deepwater offshore crabbing that targets crystal crab and other deepwater crab species. These species, although permitted species within the C1 fishery area, have not been historically targeted and have not formed part of the fishery.

Different gear and operational mechanisms are required to carry out efficient deep-sea fishing operations, which have different risks of interactions with threatened, endangered and protected species (such as whales). There are concerns that increased targeting and fishing in the offshore regions of the fishery may trigger a review of the current Wildlife Trade Operation accreditation, which would impact all fisheries under the C1 symbol.

The intent of the C1 symbol is to manage the commercial harvest of inshore crab species such as mud crabs, blue swimmer crabs and three-spotted crabs. The sustainability of deep-sea crab species is largely unknown at this time, it was not envisaged to provide access to a potential deepwater crab resource. The development of these fisheries is encouraged under Fisheries Queensland's *Developmental fishing policy*. Investigation into the economic and sustainable management of the offshore parts of the fishery can be investigated under a developmental fishing permit. However, there are concerns that the current C1 management arrangements constrain developmental fishing and exploration into the viability of deep-sea commercial fishing activities.

The intent of the C1 symbol is being considered, in particular to focus of management arrangements on the inshore part of the fishery and excise this entitlement from the C1.

### Review escape vent sizes for commercial crab pots

Escape vents must be installed on each commercial crab pot – one large rectangular escape vent (120 mm x 50 mm), 2 small rectangular escape vents (each 7 5mm x 60 mm) or one round escape vent (105 mm diameter).

The review of escape vent regulations was briefly discussed with the crab fishery working group in September 2023. As a result of limited evidence of functionality, it is proposed to remove the smaller escape vent and only regulate the requirement to have one large rectangular escape vent (120 mm x 50 mm) or one round escape vent (105 mm diameter). The use of one escape vent is considered sufficient to allow undersized crabs and smaller non-target species to escape capture.

# Survey questions

Your say matters and we want to hear from you about which management measures you prefer. The questions with an asterisk (\*) are mandatory.

The Department of Agriculture and Fisheries is collecting the information on this form to inform future management of the C1 crab fishery under the *Fisheries Act 1994* and subordinate legislation.

This information is being collected for the purpose of obtaining feedback on proposed changes to management actions. Your personal information will not be disclosed to any other parties unless authorised or required by law.

Que	stion 3.	species do you currently fish for?* (You may select more than one option.)
	Mud o	crab
	Blue	swimmer crab
	Other	– Please specify the species.
	N/A	
Com	ments:	
Que	stion 4.	If you are a Queensland commercial fisher in the C1 fishery, do you have more than one C1 symbol on a primary commercial fishing licence?*
	Yes	
	No	
Com	ments:	
Que	stion 5.	If you are a Queensland commercial fisher in the C1 fishery, do you operate in the east coast or Gulf of Carpentaria management region?
	East (	Coast
	Gulf c	of Carpentaria
Coi	mments:	

Qu	estion 6.	commercial catch (TACC) of mud crab?
	Yes	
	No – Ple	ase provide further explanation.
Со	mments:	
Qu	estion 7.	Do you agree with the industry proposal increasing the minimum quota entitlement for mud crab to 3 tonnes? (Please provide reasoning in the comment section below.)
	Yes	
	No	
Со	mments:	
Qu	estion 8.	Do you think the commercial take of B-grade and C-grade grade mud crab is impacting stock sustainability and industry viability?
	Yes	
	No – I	Please provide further explanation.
	Unsur	re
Co	mments:	
-		

Qu	estion 9.	primary commercial fishing licence?
	Yes	
	No – Plea	ase provide further explanation.
Со	mments:	
Qu	estion 10.	Do you agree with increasing the number of pots permitted on a single trotline to no more than 15 pots?
	Yes	troume to no more than 10 pots:
	No – F	Please provide further explanation.
Со	mments:	
Qu	estion 11.	Do you agree with closing all crabbing and banning the use of crab gear in Eurimbula Creek regulated waters?
	Yes	
	No – F	Please provide further explanation.
Со	mments:	

Qu	estion 12.	Do you agree with clarifying the scope of the C1 fishery to focus its management arrangements on the inshore part of the fishery?
	Yes	
	No – F	Please provide further explanation.
Co	mments:	
Qu	estion 13.	Do you think the management arrangements for the C1 symbol enables sustainable development of the deep-sea part of the fishery? ( <i>Please provide reasoning in the comment section below.</i> )
	Yes	
	No	
Co	mments:	
Qu	estion 14.	Are there other management reforms in the C1 crab fishery that should be considered?
	Yes – Ple	ease specify details and what action is required.
	No	
Co	mments	
-		

Thank you for your submission and for taking the time to provide feedback on these important management considerations.