Fisheries New Zealand
Tini a Tangaroa

Submission Form

Review of sustainability measures for 1 October 2021

Once you have completed this form

Email to: FMsubmissions@mpi.govt.nz

While we prefer email, you can also post your submission to:

2021 Sustainability Review, Fisheries Management, Fisheries New Zealand, PO Box 2526, Wellington 6140, New Zealand.

Submissions must be received no later than 5pm on Tuesday 27 July 2021.

Anyone may make a submission, either as an individual or on behalf of an organisation. Please ensure all sections of this form are completed. You may either use this form or prepare your own but if preparing your own please use the same headings as used in this form.

Submitter details:

Name of submitter or contact person: Marty Sullivan	
Organisation (if applicable):	Kaikōura Boating and Recreational Fishing Club
Email:	info@kaikouraboatingclub.org.nz
Fish stock(s) this submission refers to:	BCO 3
Your preferred option as detailed in the discussion paper (write "other" if you do not agree with any of the options presented):	Other

Official Information Act 1982

Note, that your submission is public information. Submissions may be the subject of requests for information under the Official Information Act 1982 (OIA). The OIA specifies that information is to be made available to requesters unless there are sufficient grounds for withholding it, as set out in the OIA. Submitters may wish to indicate grounds for withholding specific information contained in their submission, such as the information is commercially sensitive or they wish personal information to be withheld. Any decision to withhold information requested under the OIA is reviewable by the Ombudsman.

Fisheries New Zealand
Tini a Tangaroa

Submission:[1]

Details supporting your views:

Please see the following 8 pages of the Kaikōura Boating and Recreational Fishing Club Submission on the Fisheries NZ Review of sustainability measures for blue cod (BCO 3) for 2021/22.

Please continue on a separate sheet if required.

[1] Further information can be appended to your submission. If you are sending this submission electronically we accept the following formats – Microsoft Word, Text, PDF and JPG.

Fisheries New Zealand
Tini a Tangaroa

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KAIKOURA Boating & Fishing Club Inc

2021 Sustainability Review
Fisheries Management
Fisheries New Zealand
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25 July 2021

Review of Sustainability Measures

for Blue Cod (BCO 3) for 2021/22

The submitters

1. The Kaikōura Boating and Recreational Fishing Club (KBRFC) appreciates the opportunity to submit feedback on the Fisheries NZ Review of sustainability measures for blue cod (BCO 3) for 2021/22..

2. The KBRFC is a recognised local Kaikōura based sports organisation with approximately 458 members (https://Kaikōuraboatingclub.org.nz/). It is the largest recreational fishing club in the South Island, and the objectives of the Club are:

    - To provide members with facilities for boating
    - To lobby for the preservation and enhancement of recreational fishing opportunities for members
    - To do all such other things as shall be considered necessary or desirable to attain the objects of the Club.

3. The KBRFC is a member of the New Zealand Sport Fishing Council, a recognised national sports organisation of 54 affiliated clubs with over 35,000 members nationwide.

4. The KBRFC is committed to ensuring that sustainability measures and environmental management controls are designed and implemented to achieve the Purpose and Principles of the Fisheries Act 1996, including "maintaining the potential of fisheries resources to meet the reasonably foreseeable needs of future generations…" [s8(2)(a) Fisheries Act 1996].

5. The KBRFC Committee are democratically elected by club members and available to discuss this submission in more detail if required.

Background

6. Fisheries New Zealand is reviewing sustainability measures for blue cod in Quota Management Area BCO 3 for the 1 October 2021 fishing year.

7. No Total Allowable Catch (TAC) or allowances were set when BCO 3 was put in the Quota Management System (QMS) under historical legislation, which only provided for setting a Total Allowable Commercial Catch (TACC). The fishery has not been formally reviewed since.

8. BCO 3 is New Zealand's largest recreational blue cod fishery and an important commercial fishery. Fishing is undertaken predominantly by targeted commercial potting and lining by recreational fishers. Most of the commercial catch (72%) is taken in the southernmost part of BCO 3 (below the Waitaki River).

9. The status of BCO 3 in relation to the harvest and management target (i.e., B_{40}) is unknown as the standardised commercial catch per unit effort (CPUE) series previously used to monitor the stock is now considered unreliable. Standardised potting surveys are also used to assess local blue cod abundance, size, age, and sex structure. In key commercial fishing areas in Otago potting survey results have been trending down. However, there is also serious concern about the validity of using potting survey catch rates as a proxy for the actual abundance of blue cod (Carbines 2016, Carbines and Haist 2017).

10. In the Kaikoura area there is less commercial fishing, and three random site potting surveys have been done in 2011, 2015, and 2017 (Carbines and Haist 2018, Beentjes and Page 2017, 2018). However, there is considerable variability in the catch rates of potting surveys in the Kaikoura area, and it is impossible to conclude any significant trend or changes in the data for blue cod in the Kaikoura area (Figure 2).

11. Blue cod are vulnerable to localised depletion and are suited to fine scale spatial management (Cranfield et al 2002, Carbines 2004, Beer and Carbines 2012, Beer, Wing and Carbines 2013).

12. In 2020, as part of the National Blue Cod Strategy, fine scale recreational daily limits, an increased minimum legal size, and larger pot mesh size for both commercial and recreational fishers were implemented to address concerns about localised overfishing of blue cod.

13. A traffic light system was also implemented to address concerns about localised overfishing of blue cod. The traffic light system assigns a colour rating (i.e., catch limits of green = 15, orange = 10, red=2 blue cod per person) to areas based on information about the state of the stocks and local fishing pressure (Figure 1). The exception is the Kaikoura Marine Management Area where the daily bag limit is six blue cod. The rating can be changed as available information suggests stock health is improving or declining.

14. The traffic light system has resulted in BCO 3 having four different daily limits covering five separate recreational fishing management areas, as well as a low daily limit of two blue cod within the four taiāpure areas within BCO 3. Under this system the Canterbury and Tasman areas surrounding the Kaikoura Marine Area have been

designated 'red' with a recreational daily limit of only two blue cod (See Figure 1).

15. Fisheries New Zealand is now proposing options for setting a TAC, allowances (customary, recreational and other sources of mortality caused by fishing), and a TACC for BCO 3, as follows:

    Option 1 is to set a TAC of 277.732 tonnes, and within this TAC to set an allowance for Māori customary non-commercial fishing of 20 tonnes, to set an allowance for recreational fishing of 83 tonnes, and to retain the current TACC at 162.732 tonnes. The proposed recreational fishing allowance is 20% lower than the last recreational survey estimate, considering that the changes in recreational limits introduced in 2020 are expected to have reduced recreational catch. The allowance for other sources of mortality caused by fishing would be set at 12 tonnes, being 5% of the combined estimate of recreational catch and the TACC.

    Option 2 is to set a TAC of 243 tonnes, and within this TAC to set allowances for Māori customary non-commercial fishing and recreational fishing at the same level as Option 1. The TACC under this option, however, would be reduced by 20% to 130 tonnes. This option considers the declining trend in potting surveys, including within key BCO 3 commercial areas. The allowance for other sources of fishing related mortality would be set at 10 tonnes under this option.

16. The deemed value regime for BCO 3 is also proposed to be changed to better reflect the current nature of the fishery.

17. Fisheries New Zealand is seeking input and views on the proposed TAC, allowances, and TACC options and review of deemed values for BCO 3.

Submission

18. ***Which option do you support for setting the TAC and allowances? Why?*** In recognition of the environmental principles of the Fisheries Act 1996, the KBRFC supports a lower TAC, a lager reduction in the TACC, and a larger allowance for other mortality than is provided by either option 1 or 2.

19. ***If you do not support any of the options listed, what alternative(s) should be considered? Why?*** The National Blue Cod Strategy made very significant cuts to the recreational daily bag limits as part of the implementation of the traffic light system (i.e., from 30 blue cod to 15 for green areas (50%), 30 to 10 for orange areas (66%), and 30 to 2 for red areas (93%)). The KBRFC therefor seeks a more equivalent 50% reduction in the TACC to 81 tonnes, and an 18 tonne increase in the allowance for other mortality (see 24), and therefore a TACC of 214 tonnes.

    As the biology of blue is more suited to fine scale spatial management (Cranfield et al 2002, Carbines 2004, Carbines and McKenzie 2001 and 2004, Beer and Carbines 2012, Beer, Wing and Carbines 2013) the National Blue Cod Strategy subdivided BCO 3 into five smaller management areas for recreational fishers. However, the commercial QMA still covers all five recreational areas in BCO 3 (See Figure 1). The KBRFC therefore support an equivalent subdivision of the commercial QMA into the same five sub-areas used to manage recreational fisheries. A subdivision of BCO 3 will allow

recreational and commercial fisheries to again be managed at an equivalent spatial scale, and it will permanently ensure that commercial fishing effort cannot be moved to take advantage of finer scale recreational restrictions.

In recognising the environmental principles in the Fisheries Act 1996, the KBRFC supports increasing the blue cod harvest and management stock target from B_{40} to B_{50} to ensure blue cod populations are large enough to perform their ecological roles and serves in the marine environment (Pauly and Froese 2020).

20. ***Are the allowances for customary Māori, recreational and other sources of mortality appropriate? Why?*** In recognising the environmental principle in the Fisheries Act 1996, the KBRFC seeks an increase in the allowance for other mortality by 18 tonnes (to 30 tonnes) to allow for the impact of the continued use of destructive mobile bottom fishing methods (Cranfield et al 2002, Carbines et al 2004, Carbines & Cole 2009, Jiang and Carbines 2002) in BCO 3, release mortality (Carbines 1999) and bird predation, and the impacts of global warming and increasing land-based effects.

21. ***Has the way you fish changed or are you travelling further because it is harder to catch blue cod?*** In the Kaikoura area it can sometimes be difficult to catch legal size blue cod inshore (See Strata 1-3 in Figure 2) and many of our Club members fish further offshore in deeper water along the edge of the trench. Note this is an area not included in the Fisheries NZ Kaikoura potting survey.

22. ***Are the proposed new deemed value rates appropriate?*** Given the continued recent commercial over catch of BCO 3, the KBRFC request that the proposed new deemed value rate be substantially increased as a more serious deterrent to overfishing.

23. ***Do you think these options adequately provide for social, economic, and cultural wellbeing?*** The KBRFC believe that the option that we have proposed (see 19) more adequately provides for the sustainability and ecological function of the BCO 3 stock.

24. ***Do you have any concerns about potential impacts of the proposed options on the aquatic environment?*** The KBRFC has concerns about the environmental impacts of destructive mobile bottom fishing methods on blue cod populations (Cranfield et al 2002, Carbines et al 2004, Carbines & Cole 2009, Jiang and Carbines 2002), release mortality (Carbines 1999) and bird predation, the increasing effects of global warming, and increasing land-based impacts on blue cod and their associated benthic habitats. In recognising these fisheries and environmental impacts on the BCO 3 stock, the KBRFC seeks an 18 tonne increase in the allowance for other mortality (increasing from 12 to 30 tonnes).

    In recognising the environmental principles in the Fisheries Act 1996, the KBRFC also supports increasing the blue cod harvest and management stock target from B_{40} to B_{50} to ensure that blue cod populations are large enough to perform their ecological roles and serves in the marine environment (Pauly and Froese 2020). Larger blue cod stocks with bigger fish help to mitigate ecological imbalances from removing too many key predators from the inshore benthic environment. For example, it will reduce the risks of developing kina barrens throughout the fishery.

25. The KBRFC also strongly supports allowing recreational fishers being able to utilise blue cod frames as crayfish bait and minimise waste in the Kaikoura Marine Area.

26. The KBRFC is concerned about the high variability and uncertainty in the catch rates of potting surveys in the Kaikoura region (see Figure 2). Experimental evaluation of pot catchability and size selectivity also raises serious concerns about the validity of using potting survey catch rates as a reliable proxy for blue cod abundance (Carbines 2016, Carbines and Haist 2017, 2018). The KBRFC therefore request that Fisheries NZ facilitates an independent review of the potting survey methodology as recommended in the initial review over a decade ago (Stephenson et al 2009).

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Table 1: Summary of current and proposed catch settings for BCO 3 from 1 October 2021. Figures are in tonnes.

Option	TAC	TACC	Allowances		
			Customary Māori	Recreational	All other mortality caused by fishing
Current settings (*status quo*)	-	162.732	-	-	-
Option 1 (*Set a TAC & allowances*)	277.732	162.732	20	83	12
Option 2	243 ↓	130 ↓ (32.732 t)	20	83	10 ↓

Figure 1: Map of the Blue Cod Traffic Light System.

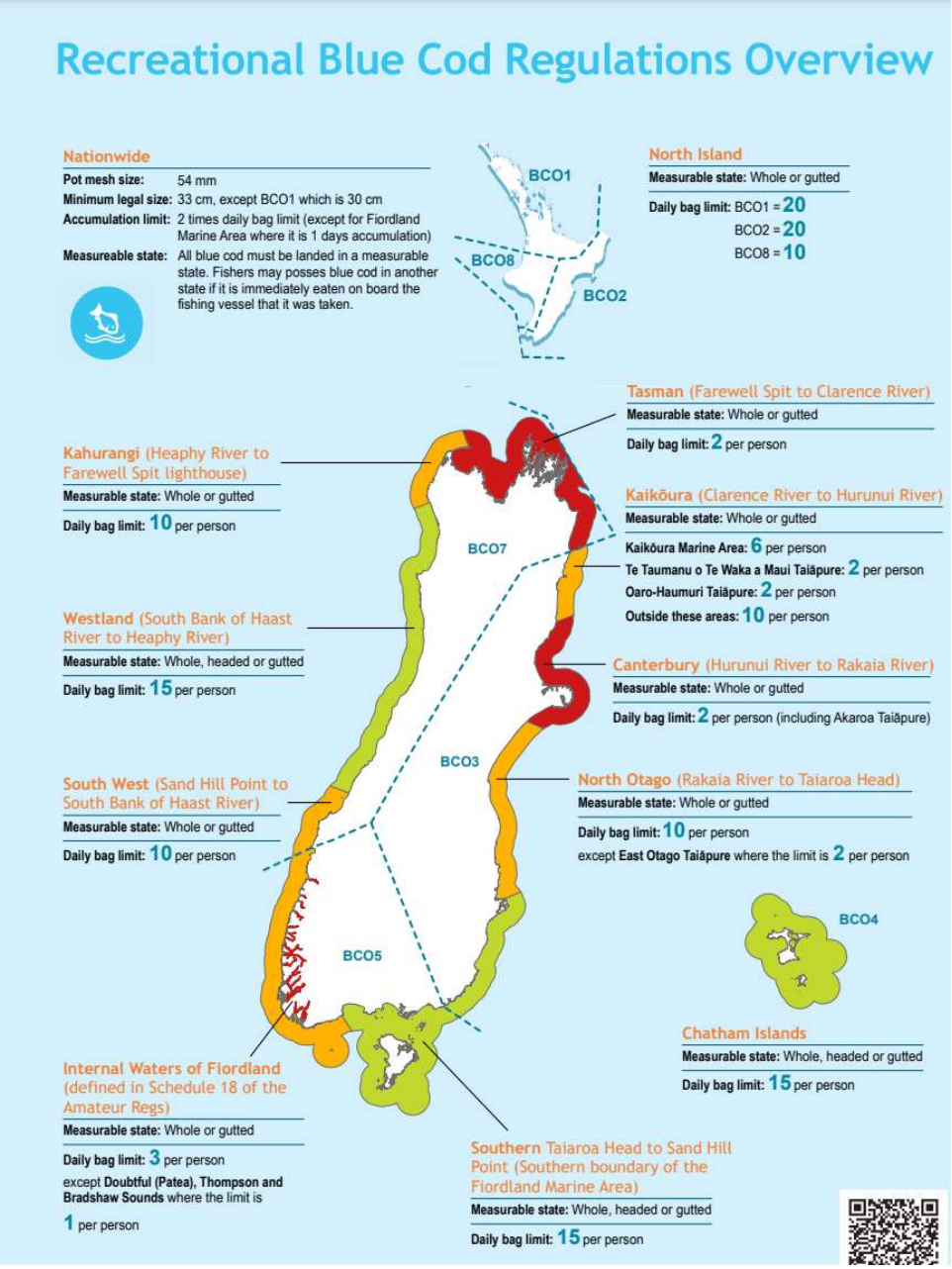

Figure 2: Catch rates (kg.pot^{-1}) of all blue cod and for recruited blue cod (33 cm and over) for Kaikoura random-site potting surveys in 2011, 2015 and 2017. Error bars are 95% confidence intervals. Strata 2a and 2b are combined to allow comparison between years. From Beentjes and Page (2018).