



Fisheries New Zealand

Tini a Tangaroa

Review of Sustainability Measures for Rubyfish (RBY 4) for 2020/21

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1	Stocks being reviewed	1
2	Summary	1
3	Quota Management System	2
4	Legal basis for managing fisheries in New Zealand	2
5	Treaty of Waitangi obligations	2
5.1	Input and participation of tangata whenua	2
5.2	Kaitiakitanga	3
6	Relevant plans, strategies, statements and contexts	3
6.1	National Deepwater Plan	3
7	Current state of the stocks	3
8	Recent catch levels and trends	3
9	Current TAC, TACC and allowances	4
10	Options – varying the TAC and TACCs and allowances	4
10.1	Total Allowable Catch	4
10.2	Allowances	5
10.3	Total Allowable Commercial Catch	5
11	Uncertainties and risks	5
12	Environmental interactions	5
13	Questions for submitters on option for varying TACs, TACCs and allowances	6
14	Deemed values	6
15	Referenced reports	6
16	How to get more information and have your say	6

1 Stocks being reviewed

Rubyfish (RBY 4) *Plagiogeneion rubiginosum*

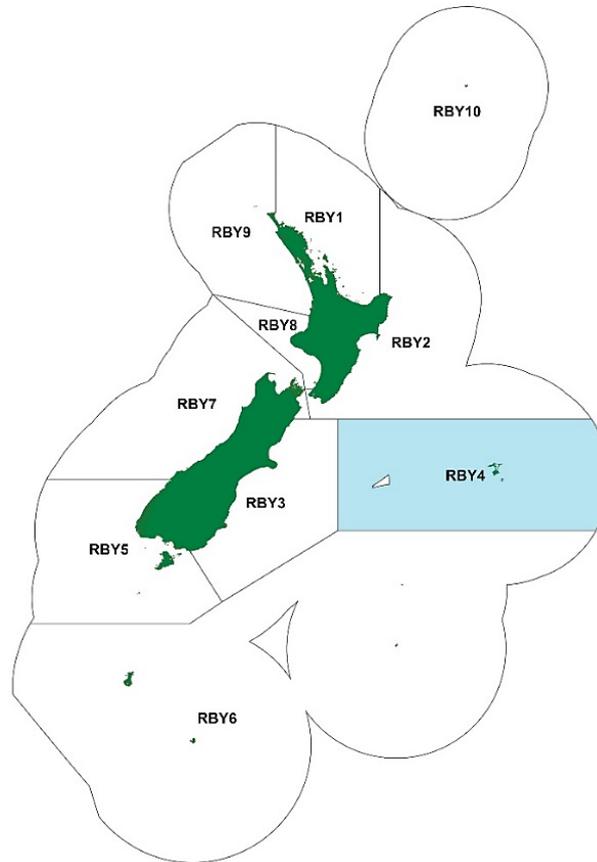


Figure 1: The Quota Management Area (QMA) for RBY 4

2 Summary

1. Fisheries New Zealand is reviewing the sustainability measures for rubyfish in Quota Management Area 4 (RBY 4) for the 1 October 2020 fishing year.
2. Rubyfish is a Tier 2¹ commercial species that occurs throughout the New Zealand EEZ. There are ten RBY fishstocks, with the main rubyfish fisheries in RBY 1 and 2.
3. In RBY 4 (Chatham Rise), rubyfish is not targeted, but is taken as bycatch by trawl vessels targeting other species such as alfonso, silver warehou and hoki. Catches can occasionally occur in very large quantities, sometimes exceeding the catch limit in a single fishing event.
4. The Total Allowable Catch (TAC) of the stock is currently 19 tonnes, which comprises a Total Allowable Commercial Catch (TACC) of 18 tonnes and a 1 tonne allowance for other fishing-related mortality. At present, there are no allowances for recreational or customary catch.
5. The TAC for this stock is set based on recent catch information. This proposal takes a similar approach, which results in an increase in the TAC based on updated catch data.

¹ Tier 2 fisheries are typically less commercially valuable, comprise bycatch fisheries, or are only targeted periodically throughout the year.

6. RBY 4 is a low knowledge stock, meaning there is limited monitoring data and no information on stock status. However, there is no known sustainability concern for this stock and given that it is a bycatch species, Fisheries New Zealand do not expect increased rubyfish targeted fishing or catch in RBY 4.
7. One option is proposed for RBY 4:
Option 1 is a 32% increase to the TAC, with an increase to the TACC to 24 tonnes and retaining the 1 tonne allowance for other fishing-related mortality. As there is little evidence for recreational or customary take in RBY 4, no changes to current allowances of zero tonnes are proposed (noting that an allowance of zero tonnes does not preclude customary catch).
8. Fisheries New Zealand is seeking feedback and submissions on the proposal to increase the TAC and TACC for RBY 4.

3 Quota Management System

9. Rubyfish was introduced to the QMS on 1 October 1998, with a nominal TAC and TACC set at 3 tonnes for RBY 4.
10. The last TAC review for RBY 4 occurred in 2010, when the TAC was increased to 19 tonnes, based on average catch over the previous seven years plus an extra 10%), comprised of a TACC of 19 tonnes and a 1 tonne allowance for other fishing-related mortality.
11. For more information about the QMS go to <https://www.mpi.govt.nz/law-and-policy/legal-overviews/fisheries/quota-management-system/>.

4 Legal basis for managing fisheries in New Zealand

12. The Fisheries Act 1996 provides the legal basis for managing fisheries in New Zealand, including the Minister's responsibilities for setting and varying sustainability measures. See the separate document *Overview of legislative requirements and other considerations* at <https://www.fisheries.govt.nz/dmsdocument/40502> for more information.

5 Treaty of Waitangi obligations

5.1 Input and participation of tangata whenua

13. Input and participation into the sustainability decision-making process is provided through Iwi Fisheries Forums, which have been established for that purpose. Each Iwi Fisheries Forum has developed an Iwi Fisheries Forum Plan that described how the iwi in the Forum exercise kaitiakitanga over the fisheries of importance to them, and their objectives for the management of their interest in fisheries. Particular regard will be given to kaitiakitanga when making sustainability decisions.
14. Iwi Fisheries Forums may also be used as entities to consult iwi with an interest in fisheries.
15. Due to COVID-19 travel restrictions, input and participation from Iwi Fisheries Forums was sought through remote mechanisms.
16. Prior to a proposed Te Waka a Maui hui on 18 March 2020, Fisheries New Zealand provided forum members with a longlist of stocks for comment. In late April 2020, information on the proposal to review RBY 4 was provided to a number of Iwi Fisheries Forums electronically, and input sought. At the time of publication, no specific input had been received in respect of RBY 4.
17. Given the disruption to services, the opportunity for input from the Iwi Fisheries Forums has been impacted and any further input will be included in the final advice and recommendations provided to the Minister.

5.2 Kaitiakitanga

18. Rubyfish from RBY 4 are not named specifically as a taonga species by Iwi Forum Fisheries Plans; however the Te Waipounamu Iwi Forum Fisheries Plan considers all fish species taonga.
19. Fisheries New Zealand considers the proposals in this consultation document for RBY 4 align with management objectives of Te Waipounamu Iwi Forum Fisheries Plan. The management objectives which are particularly relevant to the management option proposed for RBY 4 are:
 - **Management Objective 3:** to develop environmentally responsible, productive, sustainable, and culturally appropriate commercial fisheries that create long-term commercial benefits and economic development opportunities for South Island iwi.
 - **Management Objective 5:** to restore, maintain and enhance the mauri and wairua of fisheries throughout the South Island.
20. There are no customary fisheries management tools such as mātaimai, taiāpure or Section 186B temporary closures relevant to this review.

6 Relevant plans, strategies, statements and contexts

6.1 National Deepwater Plan

21. Rubyfish is managed as a Tier 2 species within the National Fisheries Plan for Deepwater and Middle-depth fisheries 2019 – Part 1A (National Deepwater Plan). The National Deepwater Plan sets out a series of Management Objectives for deepwater fisheries, the most relevant to RBY 4 being:
 - **Management Objective 1:** Ensure the deepwater and middle-depth fisheries resources are managed so as to provide for the needs of future generations.
 - **Management Objective 11:** Ensure New Zealand's deepwater and middle-depth fisheries are transparently managed.
22. The National Deepwater Plan is a formally approved s11A plan which the Minister must take into account when making sustainability decisions.
23. There are no other plans, strategies or statements particularly relevant to this review.

7 Current state of the stock

24. RBY 4 is a low knowledge stock, and there is little information with which to reliably estimate stock status. As such, the stock status of RBY 4 is unknown.

8 Recent catch levels and trends

25. Based on reported estimated catch, Figure 2 below shows that catch in RBY 4 has generally fluctuated around the TACC with no catch trend. However, catches can occasionally exceed RBY 4 catch limits during fishing targeted at other species.

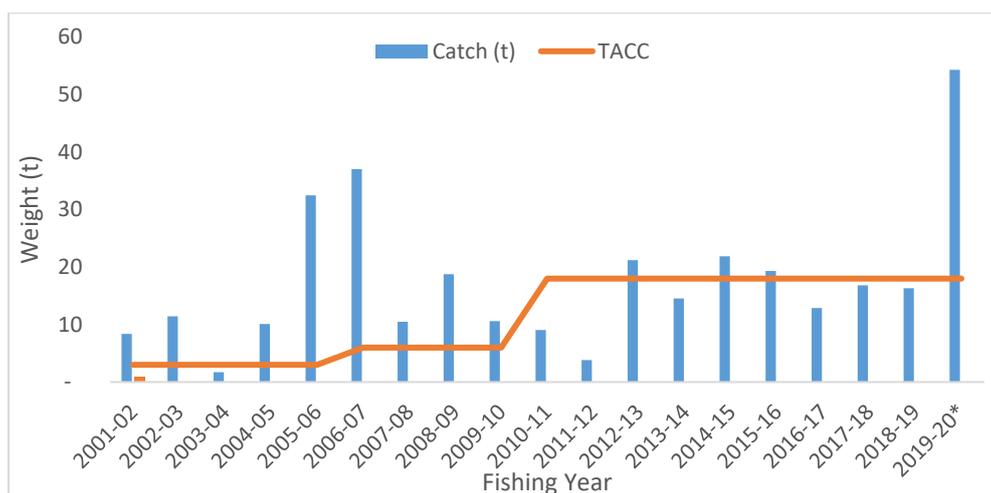


Figure 2: Estimated catch for RBY 4. *note: the 2019/20 fishing year is incomplete

26. Large catches are usually the result of very few tows and/or fishing trips. For example, the high catches in the 2019/20 fishing year result from two trips and very few tows.
27. There has been no reported targeting of rubyfish in RBY 4 since 2014, when 0.6 tonnes were caught on two rubyfish target tows.

9 Current TAC, TACC and allowances

Table 1: RBY 4 current TAC, TACC and allowances (tonnes).

	Total Allowable Catch	Total Allowable Commercial Catch	Allowances		
			Customary Māori	Recreational	All other mortality to the stock caused by fishing
RBY 4	19	18	0	0	1

10 Options – varying the TAC and TACCs and allowances

28. One option is proposed for the TAC, TACC and allowances for each stock. Feedback is sought on this option, or an alternative.

Table 2: Option for varying TAC, TACC and allowances RBY 4 (tonnes)

Stock	Option	Total Allowable Catch	Total Allowable Commercial Catch	Allowances		
				Customary Māori	Recreational	All other mortality to the stock caused by fishing
RBY 4	<i>Status quo</i>	19	18	0	0	1
RBY 4	Option 1	25 ↑ (32%)	24 ↑ (33%)	0	0	1

10.1 Total Allowable Catch

29. Option 1 proposes to increase the TAC from 19 tonnes to 25 tonnes, which is an approximate 32% increase. This is based upon average catch of rubyfish in RBY 4 over the past five fishing years, including the current fishing year (2015/16 to 2019/20).

30. Fisheries New Zealand will continue to monitor catch and other abundance information to ensure that catch limits remain sustainable.

10.2 Allowances

31. There is no reported customary or recreational catch in RBY 4, and the current allowances for customary and recreational fishing are set at zero. As there is no evidence to the contrary, we propose to retain these settings, but request any information that may support amendment of the allowances.
32. The allowance for other sources of fishing-related mortality is currently set at 1 tonne. This allowance is intended to provide for unrecorded mortality of fish associated with fishing activity. This includes fish that escape through trawl net mesh and subsequently die from injuries, accidental loss from lost or ripped trawl net cod-ends, predation, and illegal take.
33. Under Option 1, the allowance for other sources of fishing-related mortality is retained at 1 tonne.

10.3 Total Allowable Commercial Catch

34. There is no proposed change to the TACC under the *status quo*.
35. Option 1 is a 33% increase to the TACC for RBY 4. Fisheries New Zealand proposes to base this increase on the same rationale that was used to set TACs and TACCs during the 2006 review of low knowledge stocks; this approach uses the average landings from the stock over more recent years to account for occasional distortions in catch history.
36. For RBY 4, the total catch is not expected to increase. Option 1 takes into account that commercial bycatch of rubyfish sporadically exceeds the current TAC.
37. Under Option 1, the TACC would increase from 18 to 24 tonnes based upon average catches of rubyfish in RBY 4 over the past five years. This increase to the TACC could support fishers' ability to balance catch with ACE and based on the 2018/19 reported port price of \$0.24/kg, could support an approximate increase in revenue of \$1,400 per year.

11 Uncertainties and risks

38. The stock boundaries and number of rubyfish stocks in New Zealand are unknown. Their biology is also poorly understood, although information indicates that they are likely to be a long-lived and slow-growing species.
39. The stock status and sustainability of RBY 4 remains unknown, and there is no stock assessment for RBY 4.

12 Environmental interactions

40. RBY 4 is predominantly taken by midwater trawling as bycatch in a number of other target fisheries. The proposed increase to the TACC for RBY 4 is unlikely to result in any change the total amount of fishing effort. As a result Fisheries New Zealand does not foresee there to be significant changes in fishing interactions with marine mammals, fish bycatch, seabirds or the benthic environment.

13 Questions for submitters on option for varying TACs, TACCs and allowances

- Which option(s) do you support for revising the TAC? Why?
- If you do not support the option listed, what alternative(s) should be considered? Why?
- Are the allowances for customary fishing appropriate? Why?
- Are the allowances for other sources of mortality appropriate? Why?
- What other management controls should be considered for both recreational and commercial fishers? Why?

41. Please provide detailed, verifiable information and rationale to support your views.

14 Deemed values

42. Deemed values are an economic tool that incentivises commercial fishers not to catch in excess of their individual annual catch entitlements. No changes are proposed to deemed value rates for RBY 4.

15 Referenced reports

43. Fisheries Assessment Plenary May 2020: <https://www.fisheries.govt.nz/news-and-resources/science-and-research/fisheries-research/>

16 How to get more information and have your say

44. Fisheries New Zealand invites you to make a submission on the proposals set out in this discussion document. Consultation closes at 5pm on 1 July 2020.

45. Please see the Fisheries New Zealand sustainability consultation webpage (<https://www.fisheries.govt.nz/news-and-resources/consultations/review-of-sustainability-measures-for-1-october-2020/>) for related information, a helpful submissions template, and information on how to submit your feedback. If you cannot access to the webpage or require hard copies of documents or any other information, please email FMSubmissions@mpi.govt.nz.