



**Fisheries New Zealand**

Tini a Tangaroa

# **Review of Sustainability Measures for Black Cardinalfish (CDL 5) for 2020/21**

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

# 1 Stocks being reviewed

## **Black cardinalfish (CDL 5)** *Epigonus telescopus*, Akiwa

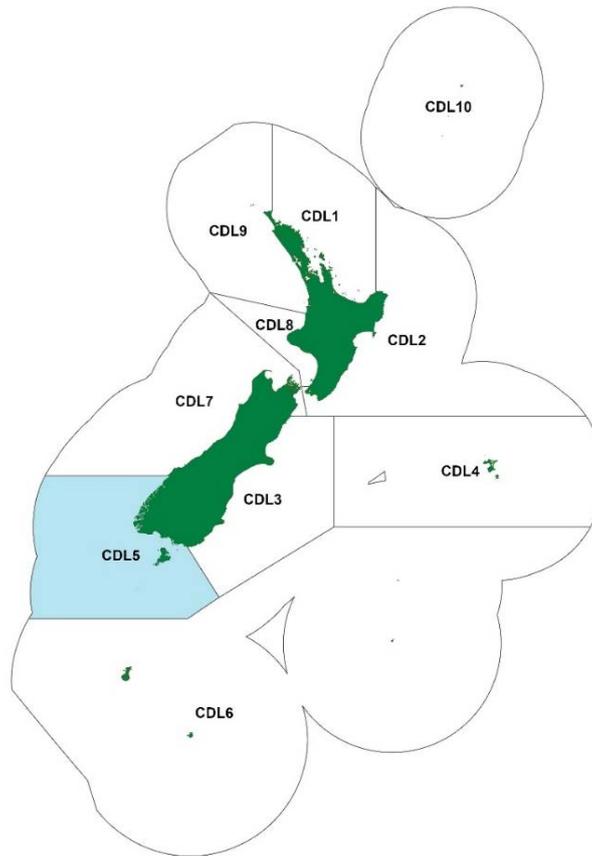


Figure 1: The Quota Management Area (QMA) for CDL 5

## 2 Summary

1. Fisheries New Zealand is reviewing the sustainability measures for cardinalfish in Quota Management Area 5 (CDL 5) for the 1 October 2020 fishing year.
2. Black cardinalfish is a Tier 2<sup>1</sup> commercial species that occurs throughout the New Zealand EEZ at depths of 300-1100 m. There are ten CDL fishstocks, with the main cardinalfish fishery in CDL 2.
3. In CDL 5 (Southland), black cardinalfish is not targeted, but is taken as bycatch by deepwater trawl vessels targeting other species such as ling or white warehou. Catches are sporadic but can occasionally occur in very large quantities, sometimes exceeding the catch limits in a single fishing event.
4. The Total Allowable Catch (TAC) of the stock is currently 22 tonnes, all of which comprises the Total Allowable Commercial Catch (TACC). At present, there are no allowances for recreational catch, customary catch or other sources of fishing-related mortality.

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

5. The CDL 5 TAC is currently based on historical catch. Taking a similar approach, this proposal seeks to increase the TAC based upon updated catch data.
6. CDL 5 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 cardinalfish targeted fishing or catch in CDL 5.
7. Two options are proposed for CDL 5:
 

**Option 1** is a modified *status quo* that increases the TAC by 1 tonne to 23 tonnes to provide an allowance for other sources of fishing-related mortality.

**Option 2** is a 55% increase to the TAC, with a 50% increase to the TACC, and a 1 tonne allowance for other sources of fishing-related mortality. As there is little evidence for recreational or customary take in CDL 5, no changes to the 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, TACC, and allowance for other sources of fishing-related mortality for CDL 5.

### 3 Quota Management System

9. Black cardinalfish was introduced to the QMS on 1 October 1998, with a nominal TAC set for CDL 5 of 2 tonnes.
10. The TAC for CDL 5 was last reviewed in 2006 when the TAC and TACC were increased to 22 tonnes based on average catch over the previous eight years, plus an extra 10%.
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 describes 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<sup>th</sup> March, Fisheries New Zealand provided forum members with a longlist of stocks for comment. In late April 2020, information on the proposal to

review CDL 5 was provided to Iwi Fisheries Forums electronically, and input sought. At the time of publication, no specific input had been received in respect of CDL 5.

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. Cardinalfish (akiwa) are not named specifically as a taonga species by any Iwi Fisheries Forum Plan, but all fish species are considered taonga in Te Waipounamu Iwi Forum Fisheries Plan.
19. Fisheries New Zealand considers the proposals in this consultation document for CDL 5 align with management objectives of the Te Waipounamu Iwi Forum Fisheries Plan. The management objectives which are particularly relevant to the management options proposed for CDL 5 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 mātaítai, taiāpure or Section 186B temporary closures relevant to this review.

## 6 Relevant plans, strategies, and fish plans

### 6.1 National Deepwater Plan

21. Cardinalfish in CDL 5 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 CDL 5 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. CDL 5 is a low knowledge stock, and there is little information with which to reliably estimate stock status. As such, the stock status of CDL 5 is unknown.

## 8 Recent catch levels and trends

25. Based on reported estimated catch, Figure 2 below shows that catch in CDL 5 has generally been below the TACC, but with occasional catches in excess of the TACC.

26. Large catches are usually the result of very few tows and/or fishing trips. For example, the high catches in the 2018/19 fishing year resulted primarily from a single tow targeting ling.

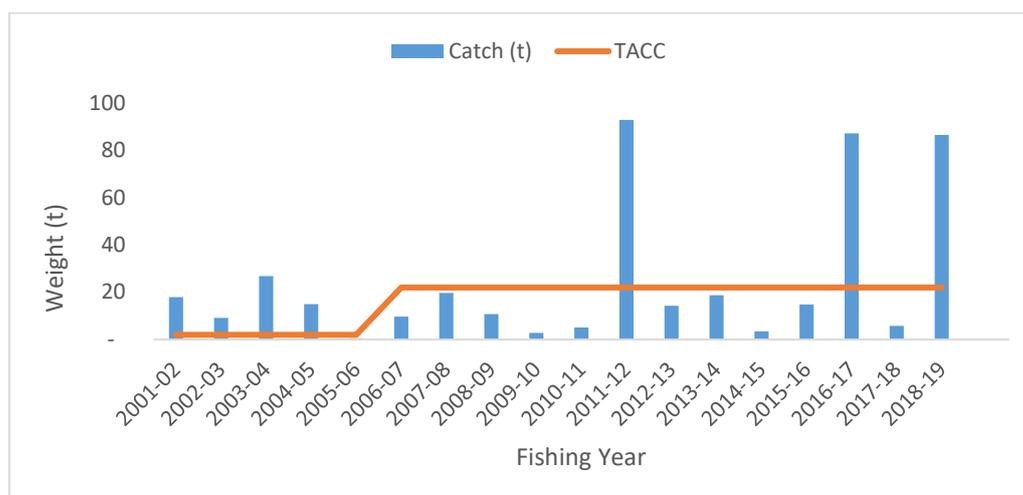


Figure 2: Estimated catch for CDL 5

## 9 Current TAC, TACC and allowances

Table 1: CDL 5 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 |
| CDL 5 | 22                    | 22                               | 0               | 0            | 0  |

## 10 Options – varying the TAC and TACCs and allowances

27. Two options are proposed for the TAC, TACC and allowances for each stock. Feedback is sought on these options, or alternatives within this range.

Table 2: Options for varying TAC, TACC and allowances CDL 5 (tonnes)

| Stock | Option                                 | Total Allowable Catch | Total Allowable Commercial Catch | Allowances      |              |  |
|-------|--|-----------------------|----------------------------------|-----------------|--------------|--|
|       |  |                       |                                  | Customary Māori | Recreational | All other mortality to the stock caused by fishing |
| CDL 5 | Option 1 (modified <i>status quo</i> ) | 23                    | 22                               | 0               | 0            | 1  |
| CDL 5 | Option 2                               | 34 ↑ (55%)            | 33 ↑ (50%)                       | 0               | 0            | 1  |

### 10.1 Total Allowable Catch

28. Option 1 is the *status quo* plus a 1 tonne allowance for other sources of fishing-related mortality, for a TAC of 23 tonnes.

29. Option 2 would increase the TAC from 22 tonnes to 34 tonnes, which is an approximate 55% increase. This option is based upon average catches of cardinalfish in CDL 5 for the past 10 fishing years, including the current fishing year (2010/11 to 2019/20). It also includes a 1 tonne allowance for other sources of fishing-related mortality.
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 CDL 5, 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. Fisheries New Zealand note that an allowance of zero tonnes does not preclude customary Maori or recreational catch.
32. To date, no allowance for other sources of fishing-related mortality has been set. 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 both options, the allowance for other sources of fishing-related mortality would be set at 1 tonne.

## 10.3 Total Allowable Commercial Catch

34. There is no proposed change to the TACC under Option 1 (*status quo*).
35. Option 2 is a 50% increase to the TACC for CDL 5. 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 CDL 5, the total catch is not expected to increase as cardinalfish are not targeted in CDL 5, and catches above the TACC that occur during fishing targeting other species occurs infrequently.
37. Under Option 2, the TACC would increase from 22 to 33 tonnes, based upon average catches on cardinalfish in CDL 5 over the past ten 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 \$0.67/kg, could support an approximate increase in revenue of \$7,000 per year.
38. Option 2 would also reduce payment of deemed values for unintentional catch where ACE is unavailable. In 2018/19, catch in excess of the TACC resulted in fishers paying deemed values of \$33,879.

## 11 Uncertainties and risks

39. The stock boundaries and number of black cardinalfish stocks in New Zealand are unknown. Their biology and is also poorly understood, although they are known to be a long-lived species. Spawning areas have been identified in CDL 1, 2, 7 and 9 and outside of New Zealand's EEZ.
40. The stock status and sustainability of CDL 5 remains unknown, and there is no stock assessment for CDL 5.

## 12 Environmental interactions

41. CDL 5 is predominantly taken by bottom trawling and is largely taken as bycatch in a number of other target fisheries. The proposed increase to the TACC for CDL 5 is unlikely to result in any change to the total amount of fishing effort. As a result, Fisheries New Zealand does not foresee significant changes in fishing interactions with marine mammals, fish bycatch, seabirds or the benthic environment from these proposals.

## 13 Questions for submitters on options for varying TACs, TACCs and allowances

- Which option(s) do you support for revising the TAC? Why?
  - If you do not support any of the options 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?
42. Please provide detailed, verifiable information and rationale to support your views.

## 14 Deemed values

43. 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.

## 15 Referenced reports

44. 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

45. 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.
46. 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](mailto:FMSubmissions@mpi.govt.nz).