



**Fisheries New Zealand**

Tini a Tangaroa

# **Review of Deemed Value Rates for Selected Stocks for 2020/21**

Fisheries New Zealand Discussion Paper No: 2020/21

ISBN No: 978-1-99-002527-3 (online)

ISSN No: 2624-0165 (online)

**May 2020**

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# 1 Executive Summary

- Deemed values are the charges that commercial fishers must pay for every unprocessed kilogram of QMS fish landed in excess of their ACE holdings (\$/kg). Deemed values rates are set by the Minister, by Gazette Notice, under section 75 of the Fisheries Act 1996 (the Act). By providing incentives for commercial catch to not exceed the available ACE, deemed values are a key component of the catch balancing regime.
- As commercial catches of many fish stocks can be hard to accurately predict, the deemed values regime must be sufficiently flexible to provide fishers with a mechanism to deal with unintended and accidental catch in excess of ACE, whilst providing incentives and constraint to limit over-catch.
- Deemed value rates are grouped into three types:
  - Interim rates:** the rate charged during the year, which is remitted if ACE is obtained;
  - Annual rates:** the base rate charged at the end of the fishing year for catch in excess of ACE; and
  - Differential rates:** increased annual rates for higher levels of excess catch (also known as ramping).
- The setting of deemed value rates and differential schedules is guided by the Deemed Value Guidelines.<sup>1</sup> However, in consideration of the particular circumstances relevant to each stock, the Minister has discretion on where to set the interim and annual rates, and what differential schedule to apply.
- Eleven stocks have been identified for deemed value rate review for the fishing year starting 1 October 2020 (Table 1).
- Fisheries New Zealand seeks the views of tangata whenua and stakeholders on the proposed deemed value rate adjustments.

**Table 1: Current and proposed deemed value rates (\$/kg) for selected stocks from 1 October 2020.**

| Species     | Stock              | Current                    |              |                                |              | Proposed      |              |                                |                           |
|-------------|--------------------|----------------------------|--------------|--------------------------------|--------------|---------------|--------------|--------------------------------|---------------------------|
|             |                    | Interim \$/kg <sup>2</sup> | Annual \$/kg | Annual at maximum excess \$/kg | Differential | Interim \$/kg | Annual \$/kg | Annual at maximum excess \$/kg | Differential <sup>3</sup> |
| Arrow squid | SQU 1J             |                            |              |                                |              |               |              |                                |                           |
|             | SQU 1T             | 0.79                       | 0.88         | 1.76                           | Standard     | 1.08          | 1.20         | 2.40                           | Special                   |
|             | SQU 6T             |                            |              |                                |              |               |              |                                |                           |
| Bluenose    | BNS 3              | 3.60                       | 4.00         | 10.00                          | Special      | 2.70          | 3.00         | 7.50                           | Special                   |
|             | BNS 3 <sup>4</sup> | 1.26                       | 1.40         | 11.00                          | Special      | 1.26          | 1.40         | 2.80                           | Special                   |
| Gemfish     | SKI 1              |                            |              | 3.00                           | Standard     | 1.80          | 2.00         | 4.00                           | Standard                  |
|             | SKI 2              | 1.35                       | 1.50         | 5.40                           | Special      | 1.35          | 1.50         | 3.00                           | Standard                  |
|             | SKI 7              | 0.65                       | 0.72         | 1.44                           | Standard     | 0.65          | 0.72         | 1.44                           | Special                   |
| Pilchard    | PIL 7              | 0.41                       | 0.45         | 0.45                           | Not applied  | 0.18          | 0.20         | 0.20                           | Not applied               |
|             | PIL 8              |                            |              |                                |              |               |              |                                |                           |
| Redbait     | RBT 3              | 0.45                       | 0.50         | 1.00                           | Standard     | 0.45          | 0.50         | 0.70                           | Special                   |
| Trevally    | TRE 2              | 1.13                       | 1.25         | 5.00                           | Special      | 1.13          | 1.25         | 2.50                           | Standard                  |

<sup>1</sup> <https://www.mpi.govt.nz/dmsdocument/40250-deemed-value-guidelines>

<sup>2</sup> Decisions to increase the interim deemed value rates of 362 October stocks to 90% of the annual rate were made as part of the April 2020 Sustainability round. These decisions will not be given effect until 1 October 2020. However, decisions made as part of the October 2020 Sustainability round would supersede these changes <https://www.fisheries.govt.nz/news-and-resources/consultations/review-of-sustainability-measures-for-1-april-2020/>

<sup>3</sup> Where there is already a special differential set, the change to the special in this column is due to the annual rate change and not to the differential percentages applied.

<sup>4</sup> Different deemed value rates applicable to fish landed to a licenced fish receiver located on the Chatham Islands.

## 2 Deemed values regime

### 2.1 Deemed value framework

7. The Quota Management System (QMS) is the backbone of the New Zealand fisheries management regime, and includes a total of 642 fish stocks representing 98 species or species groups. Balancing catch against catching rights is known as the catch balancing regime and is key to ensuring the integrity of the QMS.
8. On the first day of the fishing year all quota owners are provided with annual catch entitlement (ACE), based on their quota share and the current total allowable commercial catch (TACC). Under the catch balancing regime, fishers are required to balance their catch with ACE or pay a deemed value on all catch in excess of ACE.
9. Deemed values are charges that commercial fishers must pay for every unprocessed kilogram of QMS fish landed in excess of their ACE holdings (\$/kg).
10. The purpose of the deemed values regime is to provide incentives for individual fishers to acquire or maintain sufficient ACE to cover catch taken over the course of the year while allowing flexibility in the timing of balancing, promoting efficiency and encouraging accurate catch reporting. By achieving this purpose, deemed values act to protect the long term value of stocks and support kaitiakitanga by providing incentives for the overall commercial catch for each QMS stock to remain within the total available ACE.
11. However, the effectiveness of the incentives provided by the deemed values regime are dependent upon individual fishers compliance with landing and reporting requirements, their responses to the incentives provided and of the impact on other incentives (e.g. those created by market conditions).

### 2.2 Legal basis

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.<sup>5</sup>
13. Section 75(1) of the Act requires the Minister to set deemed value rates for all stocks managed under the QMS. Section 75(2)(a) requires the Minister, when setting deemed value rates, to take into account the need to provide an incentive for every commercial fisher to acquire or maintain ACE that is not less than the fisher's total catch of each stock taken.
14. Section 75(2)(b) allows the Minister, when setting deemed value rates, to have regard to:
  - the desirability of commercial fishers to land catch for which they do not have ACE;
  - the market value of ACE;
  - the market value of the stock;
  - the economic benefits obtained by the most efficient fisher, licensed fish receiver, retailer or any other person from the taking, processing or sale of the fish or associated with the fish;
  - the extent to which the catch of that stock has exceeded or is likely to exceed the TACC for the stock in any year; and
  - any other matters that the Minister considers relevant.

### 2.3 Types of deemed value rate

15. The deemed values regime does not create a standard deemed value rate, but a set of rates that apply under different circumstances:

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<sup>5</sup> <https://www.fisheries.govt.nz/news-and-resources/consultations/review-of-sustainability-measures-for-1-october-2020/>

- **Interim deemed value rates** are charged each month for every kilogram of unprocessed fish landed in excess of ACE. If the fisher subsequently sources ACE to cover his or her catch, the interim deemed value payments are remitted. Operational policy requires that interim deemed value rates should be set at 90% of the annual rate.
- **Annual deemed value rates** are charged at the end of the fishing year on all catch in excess of ACE. If the fisher has not sourced ACE by the end of the fishing year, the difference between the interim and annual deemed value rates is charged for all catch in excess of ACE.
- **Differential deemed value rates** are the progressively increased deemed value rates that apply to some stocks as the percentage by which a fisher's catch in excess of ACE also increases. The standard approach is to increase the annual rate in 20% increments, up to a maximum of 200% of the annual deemed value, however more or less stringent schedules may be applied depending on the specific circumstances of the stock.<sup>6</sup> Differential rates provide fishers with a stronger incentive to remain within their ACE and reflect the increasingly detrimental impact of higher levels of over-catch on sustainability and the long-term value of the resource.

## 2.4 Review of the deemed values regime

16. A multi-stakeholder review of the operation of the deemed values regime was conducted during 2019.
17. The outcome of the review was a series of recommendations on how the operation of the deemed values regime could be improved. These recommendations were subsequently accepted by Fisheries New Zealand and have been used to develop options for deemed value rate review within this paper.
18. The final report of the deemed values review is available online.<sup>7</sup>

## 2.5 Deemed Value Guidelines

19. The Deemed Value Guidelines (2020) are the operational policy statement used to guide the development of advice on the setting of deemed value rates. The 2020 iteration of the Guidelines were developed as part of the deemed values review and supersede the previous (2012) version.
20. In summary, the Guidelines provide six statements used to inform the setting of deemed value rates:
  1. Deemed value rates should incentivise fishers to balance catch against ACE
  2. Deemed value rates should incentive accurate catch reporting;
  3. Differential deemed values may be set;
  4. Other relevant matters may be considered when setting deemed value rates;
  5. The interim deemed value rates of all stocks should be set at 90% of the annual rate; and
  6. The deemed value rates for Chatham Island landings may be lower.
21. The Guidelines are not intended to be overly prescriptive and should provide for flexibility in the deemed value settings of individual stocks so as to meet the sustainability and utilisation objectives of the Act. As such, the deemed value rates of some stocks may depart from the Guidelines, if appropriate.

## 3 Identifying stocks for deemed value rate review

22. Stocks for deemed value rate review were identified through the Catch Balancing Review Process (Appendix 1).

<sup>6</sup> For vulnerable or rebuilding stocks, or those taken with a high degree of selectivity, a more stringent differential schedule may be appropriate. Likewise, less stringent differential schedules may be more appropriate for low value, low TACC stocks where targeted fishing does not occur.

<sup>7</sup> <https://www.mpi.govt.nz/dmsdocument/40253-deemed-values-working-group-final-report>

23. The purpose of the Catch Balancing Review Process is to identify those stocks where catch balancing issues are of concern and provide options for management responses based upon the potential causes of the over catch/economic changes in the fishery and stock specific considerations. The Catch Balancing Review Process was developed during the 2019 review of the deemed values regime.
24. The Commercial Catch Balancing Forum, comprising industry representatives, Te Ohu Kaimoana and Fisheries New Zealand officials will meet annually as part of the Review Process. The purpose of the Forum is to discuss stocks where catch balancing issues are of concern and provide information and input into decision making on what the appropriate management response may be.
25. The stocks prioritised for deemed value rate review as part of the October 2020 sustainability round, and accompanying rationale, are provided in Table 2.

**Table 2: Rationale for stocks prioritised for review**

| Species     | Stock          | Rationale for review   |
|-------------|----------------|--|
| Arrow squid | SQU 1J         |  |
|             | SQU 1T         | - Landed price of squid has increased during recent years.   |
|             | SQU 6T         |  |
| Bluenose    | BNS 3          | - Deemed value rates for BNS 3 currently set at the same level as the adjacent BNS 2 stock.<br>- Economic and fishery characteristics of both stocks differ, therefore identical deemed value rates may no longer be appropriate as current reporting requirements have mitigated the risk of area misreporting. |
|             | SKI 1          | - Current deemed value rates not providing sufficient incentive for fishers to avoid catching in excess of SKI 1 ACE.  |
| Gemfish     | SKI 2          | - Current stringent differential schedule not appropriate for a stock taken primarily as bycatch.  |
|             | SKI 7          | - Decision to increase SKI 7 TACC from 1 Oct 2019 not given effect due to court injunction regarding '28N' rights.<br>- Differential deemed value rate adjustment proposed to reduce the financial costs incurred by fishers as a result of ongoing court proceedings.   |
|             | PIL 7<br>PIL 8 | - Deemed value rates set above landed price.   |
| Pilchard    | RBT 3          | - Current deemed value rates not providing sufficient incentive for fishers to remain within available ACE.  |
| Trevally    | TRE 2          | - Current stringent differential schedule not appropriate for a stock taken primarily as bycatch.  |

26. The current review of the management settings of kingfish (KIN 2, 3, 7 & 8) and snapper (SNA 7) also provides the opportunity for a review of the deemed value rates applicable to these stocks. However, Fisheries New Zealand does not initially propose any changes to the deemed value rates of KIN 2, 3, 7 & 8 or SNA 7. For more information please see the appropriate consultation papers available on the Fisheries New Zealand sustainability consultation [webpage](#).

## 4 Input and participation of tangata whenua

27. 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 these fisheries. Particular regard will be given to kaitiakitanga when making sustainability decisions.

28. Iwi Fisheries Forums may also be used as entities to consult iwi with an interest in fisheries.
29. Due to COVID-19 travel restrictions, input and participation from Iwi Fisheries Forums was sought through remote mechanisms. In late April 2020, a two-page document with information on the proposal to review the deemed value rates of these eleven stocks was provided to Iwi Fisheries Forums, and input sought.
30. Mai i nga Kuri a Whareki Tihirau Iwi Forum (Bay of Plenty) expressed concern regarding the deemed value framework and commented that the current regime incentivised the discarding of unwanted fish that could otherwise be distributed (e.g. distributed through marae).
31. Te Tai Hauauru Iwi Forum (Taranaki and Manuwatu) supported the proposed deemed value changes for all stocks.
32. Given the disruption to services, not all Input and Participation from the Iwi Fisheries Forums has been received. Any further input will be included in the final advice and recommendations provided to the Minister.
33. Representatives of Te Ohu Kaimoana attended the Commercial Catch Balancing Forum meeting held in November 2019. At this meeting, the proposed management approaches for BNS 3, SKI (all stocks), RBT 3 and TRE 2 were considered, and opportunity was provided for the discussion of the deemed value rates of other stocks.

## 5 Proposed Options

34. Table 3 sets out the key information that informed the development of proposals for the prioritised stocks. Relevant fishery information is also discussed alongside the options presented below.

**Table 3: Information to support review of deemed value rates for stocks that meet the criteria**

| Stock  | 2018/19 TACC (t) | % caught 2018/19 <sup>8</sup> | ACE \$/kg <sup>9</sup> | Interim DV \$/kg | Annual DV \$/kg | 2019/20 Port Price \$/kg |
|--------|------------------|-------------------------------|------------------------|------------------|-----------------|--------------------------|
| SQU 1J | 5,000            | <1%                           | - <sup>10</sup>        | 0.79             | 0.88            | 1.14                     |
| SQU 1T | 44,741           | 69%                           | 0.07                   | 0.79             | 0.88            | 1.22                     |
| SQU 6T | 32,369           | 26%                           | 0.09                   | 0.79             | 0.88            | 1.24                     |
| BNS 3  | 93               | 112%                          | 0.84                   | 3.60             | 4.00            | 3.13                     |
| SKI 1  | 210              | 168%                          | 1.08                   | 1.35             | 1.50            | 1.98                     |
| SKI 2  | 240              | 135%                          | 1.03                   | 1.35             | 1.50            | 2.10                     |
| SKI 7  | 300              | 312%                          | 0.49                   | 0.65             | 0.72            | 1.37                     |
| PIL 7  | 150              | 52%                           | 0.12                   | 0.41             | 0.45            | 0.83                     |
| PIL 8  | 65               | 97% <sup>11</sup>             | 0.12                   | 0.41             | 0.45            | 0.83                     |
| RBT 3  | 2,190            | 111%                          | 0.20                   | 0.45             | 0.50            | 0.10                     |
| TRE 2  | 241              | 110%                          | 0.78                   | 1.13             | 1.25            | 1.99                     |

<sup>8</sup> 2018/19 landings against available ACE, as opposed to the TACC.

<sup>9</sup> Average price paid per kg of ACE transferred (exc. GST) during the 2018/19 fishing year (as reported by FishServe). Excludes transfers considered unrepresentative of true ACE price.

<sup>10</sup> Unavailable due to lack of activity within the SQU 1J ACE market.

<sup>11</sup> Available PIL 8 ACE for the 2019/20 fishing year was 167% caught as of April 2020.

## 5.1 Arrow squid/wheketere (SQU 1J, 1T & 6T) - Nationwide

### Fishery information

35. Excluding the Kermadec Islands, arrow squid (*Nototodarus gouldi*; *N. sloanii*) in New Zealand are managed as three fisheries based on a combination of fishing method and geographical area:
  - **SQU 1J**: All squid taken using the method of jigging<sup>12</sup> around New Zealand, excluding the Auckland and Campbell islands;
  - **SQU 1T**: All squid taken using methods other than jigging around New Zealand, excluding the Auckland and Campbell islands; and
  - **SQU 6T**: All squid taken from the Auckland and Campbell Islands regardless of fishing method (also known as the southern squid fishery).
36. Historically, large amounts of squid were taken using the method of jigging, principally by foreign charter vessels. Such vessels have not been active in New Zealand during recent years and consequently the amount of squid balanced with SQU 1J ACE has been negligible (<1 tonne).
37. Almost all squid in SQU 1T are taken through targeted fishing by large (>40 m) trawl vessels, primarily along the Stewart/Snares shelf. All squid in SQU 6T are targeted by large trawl vessels around the Auckland Islands.
38. Squid biomass is highly variable between years due to the biological characteristics of the species (squid are fast growing, live for 12-18 months and die following spawning). Due to the variation in abundance, catches of squid for SQU 1T & 6T also show high inter-annual variability.
39. To reflect the variability in squid availability, all squid stocks are listed on schedule 3 of the Act which allows for in-season increases to the TAC (and TACC). Both SQU 1T & 6T have high TACCs (44,741 t and 32,369 t respectively). As landings of SQU 1T or 6T have not approached the TACC in recent years, in-season increases have not been required. However, this provision has been used in SQU 1T historically (most recently in 2005/06)
40. Landings of squid have generally remained within the available ACE for the respective stocks. However, available SQU 1T ACE was occasionally over caught by small proportions (<2%) during the mid-2000s.

### Deemed value rates

41. The landed price of squid has increased during recent years, with the port prices of SQU 1T & 6T increasing from less than \$0.80/kg in 2008/09 to greater than \$1.20/kg in 2019/20. The deemed value rates of squid stocks have remained unchanged since 2001.
42. To reflect the increase in the landed price of squid, Fisheries New Zealand proposes adjusting the deemed value rates of SQU 1J, 1T & 6T as shown in Table 4.

**Table 4: Current and proposed deemed value rates (\$/kg) for SQU 1J, 1T & 6T.**

| Stock           | Option   | Interim | Annual 100-120% | Differential rates (\$/kg) for excess catch (% of ACE) |          |          |          |       |
|-----------------|----------|---------|-----------------|--|----------|----------|----------|-------|
|                 |          |         |                 | 120-140%   | 140-160% | 160-180% | 180-200% | >200% |
| SQU 1J, 1T & 6T | Current  | 0.79    | 0.88            | 1.06   | 1.23     | 1.41     | 1.58     | 1.76  |
|                 | Proposed | 1.08    | Annual 100-105% |  | 105-130% |          | >130%    |       |
|                 |          |         | 1.20            |  | 1.60     |          | 2.40     |       |

43. The proposed change would both increase the annual deemed value rate of squid stocks, and introduce a more stringent differential schedule (with the rate at each step on the differential schedule increasing in proportion with the change to the annual rate).
44. A more stringent differential schedule is considered appropriate as all stocks have relatively high TACCs and fishers have a high degree of control over their level of catches (as almost all squid are taken through targeted fishing). Therefore, catches in excess of the available ACE are unlikely to occur by chance.

<sup>12</sup> Any fishing method for taking squid by means of a line rather than a net.

## 5.2 Bluenose/matiri (BNS 3) – South & East Coasts of the South Island, Chatham Rise and sub-Antarctic

### Fishery information

45. Bluenose (*Hyperoglyphe Antarctica*) in BNS 3 is primarily taken as bycatch in the alfonsino trawl fishery or by longline vessels targeting ling or hapuka/bass, although small amounts are taken through targeted longline fishing (approx. 10% of landings).
46. Since 2007/08 the TACC of BNS 3 has been progressively reduced from 925 tonnes to 93 tonnes due to concerns regarding the status of the stock.<sup>13</sup> Over the last decade, catches of bluenose have regularly exceeded the available ACE, however catches during 2018/19 were at the lowest level since 1989/90.

### Deemed value rates

47. To reduce the risk of area misreporting, the deemed value rates of BNS 3 are currently set at the same level as that of the adjacent bluenose stock (BNS 2).
48. However, the economic and fishery characteristics of both stocks are noticeably different. For example, approximately 70% of bluenose in BNS 2 are taken through targeted longline fishing, with a higher proportion of fish taken in BNS 3 landed as lower value frozen product. Such differences in economic and fishery characteristics are reflected in consistent differences in the landed price between the stocks (Table 5).

**Table 5: Comparison of the port price index of BNS 2 and BNS 3 between the 2015/16 and 2019/20 fishing years.**

| Stock      | Port price (\$/kg) |         |         |         |         |                   |
|------------|--------------------|---------|---------|---------|---------|-------------------|
|            | 2015/16            | 2016/17 | 2017/18 | 2018/19 | 2019/20 | Five year average |
| BNS 2      | 5.40               | 6.49    | 5.11    | 6.05    | 5.41    | 5.62              |
| BNS 3      | 3.24               | 6.23    | 4.65    | 3.97    | 3.13    | 4.24              |
| Difference | 2.16               | 0.26    | 0.46    | 2.08    | 2.28    | 1.45              |

49. As all commercial fishing vessels are currently required to report all catch and position data electronically, the risk of area misreporting is considered to be significantly lower than when fishers reported using paper forms. Therefore, it may no longer be appropriate to set identical deemed value rates for BNS 2 and BNS 3.
50. As such, Fisheries New Zealand proposes to reduce the deemed value rate of BNS 3, as shown in Table 6.

**Table 6: Current and proposed deemed value rates (\$/kg) for BNS 3**

| Stock | Option   | Interim deemed value rate | Annual 100-110% | Differential rates (\$/kg) for excess catch (% of ACE) |          |          |          |          |       |
|-------|----------|---------------------------|-----------------|--|----------|----------|----------|----------|-------|
|       |          |                           |                 | 110-120%   | 120-130% | 130-140% | 140-150% | 150-160% | >160% |
| BNS 3 | Current  | 3.60                      | 4.00            | 5.00   | 6.00     | 7.00     | 8.00     | 9.00     | 10.00 |
|       | Proposed | 2.70                      | 3.00            | 3.75   | 4.50     | 5.25     | 6.00     | 6.75     | 7.50  |

51. The proposed change would reduce the annual rate and, the rate at each step on the differential schedule, by one third to reflect the approximate difference in the five year average port prices between the stocks. However, the proposed change would retain a stringent differential schedule so as to provide a strong incentive for fishers to not exceed their ACE given the importance of constraining BNS 3 catch to the available ACE under the rebuild plan.

### Chatham Island deemed value rates

52. Bluenose from BNS 3 landed to a licenced fish receiver located on the Chatham Islands are subject to lower deemed value rates than BNS 3 landed elsewhere. This is because the price

<sup>13</sup>  $B_{2016}$  was estimated to be at 17-27%  $B_0$  and was considered 'Unlikely' to be at or above the management target (40%  $B_0$ ).

received for fish landed in the Chatham Islands is generally lower than the price for the same species landed since there is a higher cost of transporting fish to markets.

53. The annual deemed value rate of BNS 3 applicable to fish landed to the Chatham Islands is currently set at 35% of the annual deemed value rate applicable to BNS 3 landed elsewhere. Other species that share similar characteristics to BNS 3 to which different Chatham Island deemed value rates apply generally have the Chatham Islands annual deemed value rate set closer to the nationwide annual deemed value rate (Table 7).

**Table 7: Comparison of the annual deemed value rate for fish landed to the Chatham Islands compared to those landed elsewhere. Stocks shown are those that show similar characteristics to BNS 3 (e.g. frequently taken on longlines, likely to be taken by non-Chatham Island based vessels capable of landing to the Chatham Islands, similar value)**

| Stock            | Annual deemed value rate (\$/kg) |           | Ratio |
|------------------|----------------------------------|-----------|-------|
|                  | Chatham Islands                  | Elsewhere |       |
| BNS 3 (current)  | 1.40                             | 4.00      | 35%   |
| BYX 3            | 1.10                             | 2.20      | 50%   |
| SCH 4            | 0.80                             | 1.05      | 76%   |
| HPB 4            | 1.31                             | 1.80      | 72%   |
| TRU 4            | 1.44                             | 1.50      | 96%   |
| BNS 3 (proposed) | 1.40                             | 3.00      | 47%   |

54. Given the above, Fisheries New Zealand did not propose reducing the annual deemed value rate of BNS 3 landed to the Chatham Islands at this time as doing so may create an incentive for non-Chatham Island based fishers to preferentially land BNS 3 to the Chatham Islands so as to avoid the higher deemed value rate that would otherwise apply.
55. However, Fisheries New Zealand proposes that the rate at each step on the differential schedule be reduced so that the rate at maximum excess is at 200% of the annual rate (Table 8).

**Table 8: Current and proposed deemed value rates (\$/kg) for BNS 3 landed to licenced fish receivers located on the Chatham Islands.**

| Stock | Option   | Interim | Annual 100-120% | Differential rates (\$/kg) for excess catch (% of ACE) |          |          |          |          |       |
|-------|----------|---------|-----------------|--|----------|----------|----------|----------|-------|
|       |          |         |                 | 120-130%   | 130-140% | 140-150% | 150-160% | 160-220% | >220% |
| BNS 3 | Current  | 1.26    | 1.40            | 4.00   | 6.00     | 7.00     | 8.00     | 9.00     | 10.00 |
|       | Proposed | 1.26    | Annual 100-120% | 120-130%   | 130-140% | 140-150% | 150-160% | >160%    |       |
|       |          |         | 1.40            | 1.68   | 1.96     | 2.24     | 2.52     | 2.80     |       |

### 5.3 Gemfish/maka-tikati (SKI 1) – Northern North Island

#### *Fishery information*

56. Prior to 2014/15, the majority of gemfish (*Rexea solandri*) in SKI 1 were taken as part of a target trawl fishery, however in recent years almost all gemfish have been taken as bycatch by trawlers targeting species such as hoki or tarakihi.
57. Landings of gemfish in SKI 1 have increased during recent years and have exceeded the available ACE, by progressively increasing margins, since 2016/17. Minimal gemfish targeting has occurred during this time with the increase in landings driven by increased catches from the western Bay of Plenty hoki fishery.
58. When targeting hoki in the western Bay of Plenty, gemfish regularly comprises a substantial (>30%) proportion of the total catch, particularly over the winter months. The amount of effort targeting hoki in the western Bay of Plenty during the winter months has increased over recent years, despite the increased catches of SKI 1 (and consequent deemed value invoices).

#### *Deemed value rates*

59. The deemed value rates of SKI 1 have remained unchanged since 2008. During this time, the landed price received by fishers has increased.
60. Given that the current deemed value rates have not constrained fishers from operating in fisheries with high levels of gemfish bycatch, Fisheries New Zealand proposes to increase the annual deemed value rate to reflect the increase in landed price (Table 9).

**Table 9: Current and proposed deemed value rates (\$/kg) for SKI 1**

| Stock | Option   | Interim | Annual<br>100-120% | Differential rates (\$/kg) for excess catch (% of ACE) |          |          |          |       |
|-------|----------|---------|--------------------|--|----------|----------|----------|-------|
|       |          |         |                    | 120-140%   | 140-160% | 160-180% | 180-200% | >200% |
| SKI 1 | Current  | 1.35    | 1.50               | 1.80   | 2.10     | 2.40     | 2.70     | 3.00  |
|       | Proposed | 1.80    | 2.00               | 2.40   | 2.80     | 3.20     | 3.60     | 4.00  |

61. The proposed change would increase the annual deemed value rate by \$0.50/kg to reflect the change in the port price index between 2007/08 (when the deemed value rates of SKI 1 were last reviewed) and 2019/20.<sup>14</sup>
62. No changes are proposed to the differential schedule of SKI 1, however the rate at each step on the schedule would change in proportion to the change in the annual rate.

## 5.4 Gemfish/maka-tikati (SKI 2) – East Coast North Island

### *Fishery information*

63. Gemfish in SKI 2 are both targeted, and taken as bycatch in various inshore and middle-depth fisheries
64. Landings of SKI 2 have progressively increased over the last five years and exceeded the available ACE during 2017/18 and 2018/19. The increase in landings has been driven by increased catches from the tarakihi trawl fishery, with a decrease in gemfish targeting during this time.
65. When targeting tarakihi, gemfish are taken as bycatch during all months of the year, with gemfish typically comprising a relatively low proportion of the catch.<sup>15</sup> However, catches can sporadically occur in large quantities with 30% of the gemfish catch from tarakihi target over the last three years taken during 30 fishing events (0.3% of total tarakihi effort during this time).

### *Deemed value rates*

66. A stringent differential schedule is currently applied to SKI 2, with the rate at maximum excess (set at 360% of the annual rate) incurred when catches exceed 180% of an operators ACE holdings.
67. As gemfish in SKI 2 is mostly taken as bycatch, has a relatively low TACC (240 tonnes) and is not considered to be of sustainability concern, a stringent differential schedule may not be appropriate for this stock. Therefore, Fisheries New Zealand proposes to adjust the differential schedule of SKI 2 to that shown in Table 10.

<sup>14</sup> The port price of SKI 1 in 2007/08 was \$1.54/kg, compared with \$1.98/kg for 2019/20.

<sup>15</sup> On average, gemfish comprised 2% of the total catch when targeting tarakihi off the east coast of the North Island between 2016/17 and 2018/19.

**Table 10: Current and proposed deemed value rates (\$/kg) for SKI 2**

| Stock | Option   | Interim | Annual<br>100-120% | Differential rates (\$/kg) for excess catch (% of ACE) |          |          |          |       |
|-------|----------|---------|--------------------|--|----------|----------|----------|-------|
|       |          |         |                    | 120-140%   | 140-160% | 160-180% | >180%    |       |
| SKI 2 | Current  | 1.35    | 1.50               | 3.60   | 4.20     | 4.80     | 5.40     |       |
|       | Proposed | 1.35    | Annual<br>100-120% | 120-140%   | 140-160% | 160-180% | 180-200% | >200% |
|       |          |         | 1.50               | 1.80   | 2.10     | 2.40     | 2.70     | 3.00  |

68. The proposed change would adjust the differential rates to the standard schedule applicable to most stocks, with the rate at maximum excess set at 200% of the annual rate. No changes are proposed to the annual deemed value rate of SKI 2.

## 5.5 Gemfish/maka-tikati (SKI 7) – West Coast South Island

### *Fishery information*

69. Gemfish in SKI 7 are principally taken as bycatch in the West Coast South Island hoki fishery, although smaller quantities are taken in a small target fishery, or by inshore vessels targeting species such as tarakihi.
70. The biomass of gemfish in SKI 7 has increased considerably over recent years. The increase in abundance has resulted in increased catches, particularly in the hoki fishery landings. This has led to landings exceeding the available ACE by progressively increasing margins over the last three years (the stock was 312% caught during 2018/19). Such levels of over catch have resulted in significant deemed value obligations for fishers, with invoices for the most recent fishing year exceeding \$800k.
71. To reflect the increase in abundance, the Minister decided to increase the TACC of SKI 7 from 300 tonnes to 599 tonnes as part of the Oct 2019 sustainability round. However, due to the association of preferential allocation ('28N') rights with this stock, the Minister's decision was subject to court proceedings and frozen by court order. As this issue has yet to be resolved, the TACC of SKI 7 remains at 300 tonnes.
72. Therefore, SKI 7 is unique in that there are known to be no sustainability risks associated with catching in excess of the available ACE (providing that total catches do not exceed 599 tonnes).

### *Deemed value rates*

73. Given the lack of a sustainability risk associated with catching in excess of the TACC, Fisheries New Zealand proposes to adjust the deemed value rates of SKI 7 as shown in Table 11.

**Table 11: Current and proposed deemed value rates (\$/kg) for SKI 7**

| Stock | Option   | Interim | Annual<br>100-120% | Differential rates (\$/kg) for excess catch (% of ACE) |          |          |          |       |
|-------|----------|---------|--------------------|--|----------|----------|----------|-------|
|       |          |         |                    | 120-140%   | 140-160% | 160-180% | 180-200% | >200% |
| SKI 7 | Current  | 0.65    | 0.72               | 0.86   | 1.01     | 1.15     | 1.30     | 1.44  |
|       | Proposed | 0.65    | Annual<br>100-220% | 220-240%   | 240-260% | 260-280% | 280-300% | >300% |
|       |          |         | 0.72               | 0.86   | 1.01     | 1.15     | 1.30     | 1.44  |

74. The proposed adjustment would retain the annual rate, and the rate at each step on the differential schedule. However, differential rates would not be incurred until a fisher exceeded their ACE holdings by 200%.
75. This adjustment would result in fishers not incurring increased deemed value invoices until they exceeded their ACE holdings by 200% (i.e. what a fishers ACE holdings would likely have been had the Ministers decision to increase the SKI 7 TACC been given effect). Therefore, the proposed adjustment would have the effect of reducing the financial costs incurred by fishers as a result of ongoing court proceedings.

76. Should the legal issues regarding '28N' rights be resolved, and the Ministers decision be given effect, Fisheries New Zealand will give consideration to reviewing the deemed value rates of SKI 7 and reinstating the standard differential schedule.

## 5.6 Pilchard/mohimohi (PIL 7 & 8) – West Coast of the North and South Island

### Fishery information

77. Almost all pilchard (*Sardinops sagax*) in PIL 7 and PIL 8 are taken as bycatch by large (>80 m) trawl vessels targeting pelagic species such as jack mackerel.
78. Due to the large volume nature of pelagic trawl fisheries, all pilchard brought on board are typically in poor condition and are not suitable for entry into the frozen bait market (the usual destination for pilchard caught elsewhere in New Zealand). Therefore, all pilchard are processed into low-value fish meal at sea.
79. The TACC of pilchard in PIL 7 and PIL 8 is set conservatively to reflect the importance of the species within the wider marine system. Landings of PIL 7 and PIL 8 are highly variable between years and are believed to be driven by environmental-induced changes in pilchard abundance and/or distribution. During years when pilchard in PIL 7 and PIL 8 are more available, catches are very sporadic but can occur in large quantities.<sup>16</sup>

### Deemed value rates

80. The annual deemed value rates of PIL 7 and PIL 8 are currently set at \$0.45/kg. This rate is based on the port price index of both stocks (\$0.83/kg), which is influenced by the landed price of pilchard landed whole for entry into the frozen bait market. As all pilchard in PIL 7 and PIL 8 are processed into fish meal, this estimate of landed value is likely an overestimate.<sup>17</sup>
81. Given that the current annual deemed value rates of PIL 7 and PIL 8 is set above the likely landed price, Fisheries New Zealand proposes adjusting the deemed value rates as shown in Table 12.

Table 12: Current and proposed deemed value rates (\$/kg) for PIL 7 and PIL 8

| Stock     | Option   | Interim | Annual >100% |
|-----------|----------|---------|--------------|
| PIL 7 & 8 | Current  | 0.41    | 0.45         |
|           | Proposed | 0.18    | 0.20         |

82. The proposed adjustment would set the interim and annual deemed value rates of both stocks at the same rates as JMA 7, the targeted stock with which both PIL 7 and PIL 8 are taken in association with.
83. The proposed adjustment would also retain the absence of a differential schedule, given that both stocks have a relatively low TACC and are entirely taken as bycatch.

## 5.7 Redbait (RBT 3) – South & East Coasts of the South Island, Chatham Rise and sub-Antarctic

### Fishery information

84. Almost all redbait (*Emmelichthys nitidus*) in RBT 3 are taken by large pelagic trawl vessels, principally as bycatch but also through targeted fishing
85. Landings of RBT 3 during 2018/19 exceeded the available ACE by over 10%. The increase in landings during 2018/19 was driven in part by a greater than three-fold increase in the amount of

<sup>16</sup> Available PIL 8 ACE for the 2019/20 fishing year was 167% caught as of April 2020, with over 50% of landings taken during three fishing events.

<sup>17</sup> The export price of fish meal for the 2019 calendar year was approximately \$0.44/kg (taken from [https://www.seafood.org.nz/fileadmin/documents/Export\\_data/19.12.10a.pdf](https://www.seafood.org.nz/fileadmin/documents/Export_data/19.12.10a.pdf) using data for fish products (processed flours, meals, pellets) unfit for human consumption).

redbait taken as bycatch in the squid fishery. However, approximately 17% of RBT 3 catches during 2018/19 were taken during fishing events targeting redbait, with targeted redbait fishing taking place after the squid season had finished.

#### Deemed value rates

86. As the RBT stock has a high TACC (2,190 tonnes),<sup>18</sup> and those operators which target redbait also take the vast majority of the bycatch, fishers have a high degree of control over the amount of RBT 3 taken over the course of the year.
87. As landings of RBT 3 exceeded the available ACE during 2018/19 (and previous years) despite fishers having a high degree of control over the amount of fish taken, Fisheries New Zealand proposes adjusting the deemed value rates of RBT 3 as shown in Table 12.

**Table 13: Current and proposed deemed value rates (\$/kg) for RBT 3**

| Stock | Option   | Interim | Annual 100-120% | Differential rates (\$/kg) for excess catch (% of ACE) |          |          |          |       |
|-------|----------|---------|-----------------|--|----------|----------|----------|-------|
|       |          |         |                 | 120-140%   | 140-160% | 160-180% | 180-200% | >200% |
| RBT 3 | Current  | 0.45    | 0.50            | 0.60   | 0.70     | 0.80     | 0.90     | 1.00  |
|       | Proposed | 0.45    | Annual 100-105% |  | 105-150% |          | >150%    |       |
|       |          |         | 0.50            |  | 0.60     |          | 0.70     |       |

88. The proposed adjustment would introduce a stringent differential schedule to provide a greater incentive for fishers to balance catch with ACE.
89. Economic information on redbait is uncertain, however the species is widely acknowledged to be of low value, with a 2019/20 port price of \$0.10/kg. Fisheries New Zealand proposes retaining the current annual deemed value rate, despite it being set above the estimate port price, as the annual rate did not constrain catch to the available ACE (despite fishers having a high degree of control over catches).
90. However, Fisheries New Zealand proposes adjusting the rate at maximum excess, as a reduced rate (\$0.70/kg) is considered to be sufficient to prevent deliberate overfishing.

## 5.8 Trevally/arara (TRE 2) – East Coast North Island

#### Fishery information

91. Although targeted fishing does occur, the majority (80-90%) of commercially caught trevally (*Pseudocaranx dentex*) in TRE 2 are taken as bycatch by inshore trawl vessels targeting tarakihi or gurnard.
92. The TACC of TRE 2 has remained unchanged since 1992 and is regularly over caught by between 5% and 20%.

#### Deemed value rates

93. A very stringent differential schedule is currently applied to TRE 2, with the rate at maximum excess (set at 400% of the annual rate) incurred when catches exceed 120% of an operators ACE holdings.
94. As trevally in TRE 2 is mostly taken as bycatch, and has a relatively low TACC (241 tonnes), a stringent differential schedule may not be appropriate for this stock. Therefore, Fisheries New Zealand proposes to adjust the differential schedule of TRE 2 to that shown in Table 14.

<sup>18</sup> Over catch may occur more frequently as a matter of change for stocks with a low TACC.

**Table 14: Current and proposed deemed value rates (\$/kg) for TRE 2**

| Stock | Option   | Interim | Annual<br>100-110% | Differential rates (\$/kg) for excess catch (% of ACE) |          |          |          |       |
|-------|----------|---------|--------------------|--|----------|----------|----------|-------|
|       |          |         |                    | 110-120%   | >120%    |          |          |       |
| TRE 2 | Current  | 1.13    | 1.25               | 3.50   |          |          | 5.00     |       |
|       | Proposed | 1.13    | Annual<br>100-120% | 120-140%   | 140-160% | 160-180% | 180-200% | >200% |
|       |          |         | 1.25               | 1.50   | 1.75     | 2.00     | 2.25     | 2.50  |

95. The proposed change would adjust the differential rates to the standard schedule applicable to most stocks, with the rate at maximum excess set at 200% of the annual rate.
96. No changes are proposed to the annual deemed value rate of TRE 2.

## 6 Conclusion

97. Fisheries New Zealand proposes adjustments to the deemed value rates of eleven stocks. Proposals for adjustments have been developed based on statutory requirements, the Deemed Value Guidelines and other key information.
98. Fisheries New Zealand is seeking information and views from tangata whenua and stakeholders to support the development of final advice to the Minister on the setting of revised deemed value rates for the fishing year commencing 1 October 2020.
99. It is important to note that the Minister has broad discretion in exercising his powers of decision-making. He will make his own independent assessment of the information presented to him before making final decisions on deemed value rates.

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

- Do you support the proposed deemed value adjustments? Why?
- If you do not support the proposed options, what alternative(s) should be considered? Why?

## 8 How to get more information and have your say

100. 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.
101. 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).

# Appendix 1 – Catch Balancing Review Process

## Catch Balancing Review Process

