

RIG 2 (SPO 2): Final Advice Paper

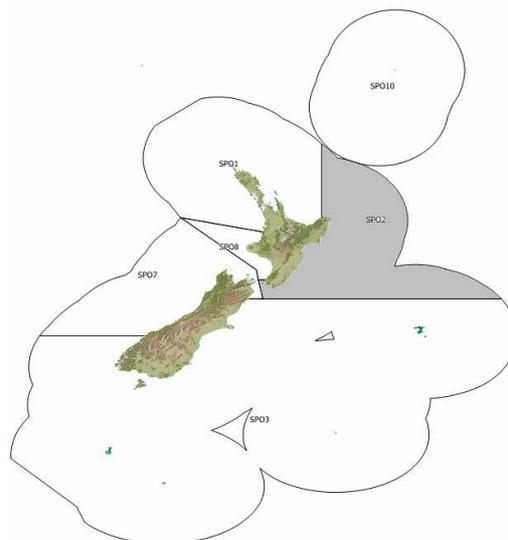


Figure 1: Quota Management Areas (QMA) for Rig

Summary

1 The Ministry recommends that you increase the Total Allowable Catch (TAC) for SPO 2 from 122 tonnes (t) to 130 t from 1 October 2011 (Option 2).

2 To achieve the new TAC, the Ministry recommends you increase the Total Allowable Commercial Catch (TACC) and allowance for other sources of fishing-related mortality to 108t and 7t respectively, retain the existing recreational allowance, and decrease the customary Maori allowance to 5t.

Table 1: Final proposals - TACs, TACCs and allowances for SPO 2

Option	TAC(t)	TACC(t)	Customary Maori (t)	Recreational (t)	Other sources of Mortality (t)
Option 1 (status quo)	122	86	20	10	6
Option 2	130	108	5	10	7

3 The Ministry considers that the SPO 2 TAC may be constraining commercial fishers' ability to maximise value in associated target fisheries while potentially providing an incentive to discard rig for those fishers who do not have enough Annual Catch Entitlement (ACE) to cover their catch.

4 Increasing the TAC would provide an opportunity for more utilisation while still ensuring sustainability. Commercial catch has exceeded the TACC for the past 20 years requiring commercial stakeholders to pay total annual deemed values ranging from \$36,240 to \$100,081.

5 Neither TAC proposed under Option 1 nor Option 2 is inconsistent with the objective of maintaining the stock at or above, or moving the stock towards or above, a level that can produce the maximum sustainable yield. However, Option 1 may reduce the ability of commercial stakeholders to maximise the value of catch taken in SPO 2 and associated target fisheries.

6 The TACC proposed under Option 2 is consistent with the existing level of commercial catches, which are unlikely (<40% probability) to cause stock decline. Increasing the TACC would provide for increased utilisation of the SPO 2 stock and potentially increase the overall commercial value of SPO 2 and associated target fisheries, as well as possibly reduce the deemed value payments for SPO 2.

7 The recommended adjustments to the customary Maori and other sources of fishing-related mortality reflect new information on stock status and proposed increased catch levels respectively.

8 The Ministry received six submissions on the IPP, including two from recreational groups, one from customary interests, one from an environmental group and two from the commercial sector. All but two of the submissions support Option 2. The two submissions in support of the status quo note concerns about the catch consistently exceeding the TACC. Three submissions also requested an onboard monitoring system. The submission from the customary sector, while supporting a TACC increase, does not support the decrease in the customary allowance.

Key Considerations

Need to Act

9 The Ministry considers that the SPO 2 TAC may be constraining fishers' ability to maximise value in SPO 2 and associated target fisheries. A TAC increase from 122t to 130t would provide an opportunity for more utilisation while still ensuring sustainability.

10 Commercial catches in SPO 2 have exceeded the TACC for the last 20 years. TACCs for all SPO stocks have been reviewed several times with changes occurring to the SPO 2 TACC in 1991/92 (TACC increase), 1997/8 (TACC decrease) and finally in 2004 (TACC increase). Current information on relative abundance of rig in SPO 2 suggests that, although catches exceed the TACC, the current levels of catch are sustainable.

11 Increasing the TAC may also help fishers reduce their deemed value payments. Commercial fishers are legally required to land all rig caught and must pay a deemed value for any rig they are unable to balance with ACE. This requirement has reduced the value of the SPO 2 fishery.

Relevant Fishery Information

12 Rig (*Mustelus lenticulatus*) is relatively long-lived and has low fecundity, which means it may recover more slowly from a depleted state than a more productive species. Mature females breed annually and give birth once each year producing between two and 37 offspring.

13 A standardised catch per unit effort (CPUE) series for all SPO 2 bottom trawl fisheries provides information on the relative size of the SPO 2 stock through time. This data series suggests stock size increased gradually from 1989/90 to 2002/03 after which the series remains reasonably stable through to 2009/10.

14 The majority of rig taken commercially in SPO 2 is bycatch of target fisheries, such as tarakihi (TAR 2), red gurnard (GUR 2), flatfish (FLA 2), blue warehou (WAR 2) and blue moki (MOK 1).

15 The inability of some fishers to cover their bycatch of rig with ACE and the cost of deemed values may be creating an incentive to illegally discard. Although some discarded rig is likely to survive return to sea, actual commercial fishing mortality in SPO 2 might be greater than what is reported.

16 Information on Maori customary and recreational catch levels is limited and uncertain.

17 Minimal new customary harvest information is available from reporting of customary authorisations. The information relates to a portion (approximately half) of the quota management area (QMA) as iwi in other parts of the QMA are operating under regulation 27 and 27A of the Fisheries (Amateur Fishing) Regulations 1986, in which reporting is not required for customary landings. Only one customary permit for rig from SPO2 was granted in the last two years. No information on the level of customary harvest was provided in submissions.

18 Quantitative estimates of other sources of fishing-related mortality are not available for rig.

Proposals Consulted On

19 An IPP was released 1 July 2011 and proposed the following two options (Table 2).

Table 2: Proposed TACs, TACCs and allowances for SPO 2

Option	TAC(t)	TACC(t)	Customary Maori (t)	Recreational (t)	Other sources of Mortality (t)
Option 1 (status quo)	122	86	20	10	6
Option 2	130	108	5	10	7

20 Option 1 is the status quo. This option reflects a cautious approach in response to uncertainty in information on the status of the stock.

21 Under Option 2, the SPO 2 TAC, TACC, and allowances would be adjusted to better reflect the existing catch levels. Available information suggests these catch levels are sustainable. Option 2 would better enable value to be maximised from use of the SPO 2 stock.

Submissions

22 The Ministry received six submissions on the IPP from:

- Te Ohu Kaimoana Trustee Ltd (TOKM)
- New Zealand Sport Fishing
- New Zealand Recreational Fishing Council (NZRFC)
- Sanford Ltd (Sanford)
- Area 2 Inshore Finfish Management Company Ltd (Area 2)

- Environment and Conservation Organisation of NZ Inc (ECO).

23 TOKM, Sanford, Area 2 and NZRFC all support the TACC increase from 86 tonnes to 108 tonnes to better reflect current catch levels of SPO 2.

24 NZ Sport Fishing and ECO do not support the TACC increase and believe that an increase will not halt the over catch that has occurred over the previous 20 years and that measures should be taken to address the over catch.

Final Proposals

25 The Ministry is proposing the following final options for SPO 2 for your consideration. These options are unchanged from those consulted on in the IPP.

Table 2: Proposed TACs, TACCs and allowances for SPO 2.

Option	TAC(t)	TACC(t)	Customary Maori (t)	Recreational (t)	Other sources of Mortality (t)
Option 1 (status quo)	122	86	20	10	6
Option 2	130	108	5	10	7

26 The Ministry believes adjusting the TAC is the most appropriate tool available to you to provide for additional levels of utilisation.

27 Before a TAC can be set under section 13(2) of the Act an assessment of $B_{CURRENT}^1$ and B_{MSY}^2 is required. The available information on SPO 2 is insufficient to enable estimates of $B_{CURRENT}$ or B_{MSY} .

28 Where estimates of $B_{CURRENT}$ or B_{MSY} cannot be reliably estimated, section 13(2A) of the Act enables you to use the best available information to set a TAC that is not inconsistent with maintaining the stock at or above B_{MSY} , or moving the stock towards or above, B_{MSY} .

29 Best available information to inform TAC setting at this time is the standardised CPUE series for SPO 2, which suggests that the stock is unlikely to decline under either of the options proposed. The Ministry considers this is consistent with your obligations under 13(2A)(c).

Option 1

30 Under Option 1, the existing TAC would be retained. This option reflects a cautious approach given the uncertainty in the information on the status of the stock. Two submitters, NZ Sport Fishing and ECO, support this option.

31 The Ministry notes that the current TAC does not reflect the current catch levels. Retaining the TAC for SPO 2 at 122 tonnes may unnecessarily reduce the ability of

¹ $B_{current}$ is the current biomass (usually a mid-year biomass)

² B_{MSY} is the average stock biomass that results from taking an average catch of the maximum sustainable yield (MSY) under various types of harvest strategies.

commercial stakeholders to maximise the value of catch taken in SPO 2 or associated target fisheries, as well as result in incentives to discard unwanted catch.

Option 2

32 Under Option 2, the SPO 2 TAC would be increased from 122t to 130t. Increasing the TAC would provide for increased value to be achieved from current levels of utilisation of the SPO 2 stock and thereby increase the overall commercial value of SPO 2 and associated target fisheries.

33 Available information suggests Option 2 is not inconsistent with the objective of maintaining the stock at or above, or moving the stock towards or above, a level that can produce the maximum sustainable yield.

34 Under this Option it is proposed that the TAC increase is allocated solely to the commercial sector by increasing the TACC from 108t to 130t. The new TACC represents the average commercial catch reported in the last six years. Increasing the TACC would provide economic benefits to commercial fishers through greater levels of utilisation without fishers incurring deemed values.

35 It is proposed to reduce the existing customary allowance from 20t to five tonnes. The existing allowance was based on a percentage of the recreational allowance which does not reflect actual customary harvest of rig in area 2.

36 TOKM and NZ Sport Fishing are opposed to the proposed reduction in the customary allowance. TOKM believes the customary allowance should be left as is and that a reduction in the current allowance will act as a disincentive for iwi and hapu to report their catch of rig. NZ Sport Fishing believes the Ministry is applying a catch-it or lose-it principle to all non-commercial allowances.

37 The Ministry notes that the revised allowance is based on best available information of customary harvest and is not a loss or reallocation of catch. The adjustment does not constrain customary Maori harvest. If information in future suggests that customary catch is different from the allowance set then the allowance can be reviewed.

38 No change to the recreational allowance is proposed. Although information on the level of recreational catch is uncertain. There is no information to suggest that the current recreational allowance needs to be changed.

Additional Management Controls

Addition of rig to the Sixth Schedule of the Fisheries Act

39 The Ministry has consulted on the addition of all rig stocks (SPO1, 2, 3, 7 and 8) to the Sixth Schedule of the Act to enable commercial fishers to immediately return rig (e.g. if taken as incidental bycatch) to the sea, if it is likely to survive on return and if the return takes place as soon as practicable after the rig is taken. The full proposal is outlined in the final advice paper *Sixth Schedule – addition of rig*.

40 The addition of rig onto the Sixth Schedule of the Act may reduce the current level of deemed values paid by commercial fishers, as live rig could be returned to the sea with no ACE or deemed value cost incurred. Addition to the Sixth Schedule would also support maximisation of value as fishers would only need to use ACE to cover rig bycatch not likely to survive if returned to sea.

SPO 2 Deemed Value Rates

41 The Ministry has consulted on changes to deemed value rates for a number of fisheries, including SPO 2.

42 The Ministry is separately proposing you increase the deemed value rates for SPO 2 to an annual deemed value rate of \$3.00, an interim deemed value of \$1.50 and differential deemed value rates starting at 5% over catch. It is the Ministry's view that the proposed change to the current SPO 2 settings would help increase the incentive for fishers to balance their catch with ACE. For further information, please refer to the final advice paper *Review of Deemed Value Rates for Inshore Stocks*.

Assessment against Statutory Obligations

General Obligations

43 The Ministry considers that all options presented in this paper satisfy your obligations under section 8 of the Act in that they provide for utilisation of the SPO 2 stock while ensuring sustainability. Each management option proposed will ensure the long term sustainability of the stock. Option 1 is more cautious but is likely to limit utilisation opportunities. In contrast, increasing the TACC from 86t to 108t under Option 2 (the Ministry's recommended option), will allow for the current level of utilisation while maximising the benefits obtained from it.

44 In setting or varying sustainability measures, you must also act in a manner consistent with New Zealand's international obligations to fishing and the provisions outlined in the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992.

45 The Ministry also considers the proposed management options to be consistent with the provisions outlined in the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992 (s 5 (b)). Ongoing work is being done within the area covered by SPO 2 to recognise customary use and management practices including but not limited to supporting tangata whenua to gazette their rohe moana and supporting iwi to form integrated Iwi Forums and develop Iwi Fisheries Plans.

46 In making management decisions, you must be consistent with the actions and objectives in the National Plan of Action for Sharks (NPOA).³ The options proposed in this paper support the actions and objectives of the NPOA, as well as the overarching goal of the International Plan of Action for Sharks: *"to ensure the conservation and management of sharks and their long-term sustainable use."*

TAC

47 Section 13(2A) requires you to set a TAC that is "not inconsistent" with the objective of maintaining the stock at or above, or moving the stock to a level at or above B_{MSY} . In setting a TAC, you must have regard to the interdependence of stocks, the biological characteristics of the stock, and any environmental conditions affecting the stock, and use the best available information. You must not use the absence of or uncertainty in the best available information as a reason for postponing or failing to set a TAC.

³ New Zealand National Plan of Action for the Conservation and Management of Sharks October 2008

48 Rig, which are caught in coastal waters throughout New Zealand, have biological characteristics that can make them vulnerable to fishing effects such as a long lifespan and a low fecundity.

49 The majority of rig taken commercially in SPO 2 is bycatch of other target fisheries. Rig is predominately taken as bycatch from the tarakihi (TAR 2) and red gurnard (GUR 2) trawl fisheries (59% in the previous six years). Other fisheries catching rig include the flatfish (FLA 2), rig target (SPO 2), blue warehou (WAR 2) and blue moki (MOK 1) fisheries.

50 In considering the way in which and rate at which a stock is moved towards or above B_{MSY} , you must have regard to such social, cultural, and economic factors that you consider relevant. There is no statutory guidance on what an appropriate 'way and rate' might be in any given case – it is a matter for you to determine having regard to social, cultural and economic factors. Relevant social, economic and cultural information is set out in the paper.

51 The TAC options presented in this FAP take into account the requirements listed in section 13 of the Act, and offer differing approaches to managing the fishery that reflect the uncertainty in available information.

Input and Participation

52 The Ministry has an obligation to provide for input and participation of tangata whenua and have particular regard to kaitiakitanga (under s 12). The Ministry sought input from and provided an opportunity for participation from iwi listed under Schedule 3 of the Maori Fisheries Act 2004, the Ministry's Iwi Forums (via the forum chairs) and tangata whenua groups with a Fisheries Protocol. This opportunity was provided in writing prior to the development of the IPP. The Ministry did not receive any input on kaitiakitanga and customary interest in SPO 2 during this time although the Ministry acknowledges timeframes for input were short due to the development process. The Ministry is looking at ways to provide more time for input and participation of tangata whenua in the future.

53 In addition to an opportunity to input and participate in the development of the IPP, the Ministry also consulted (as defined in section 12 of the Act) with the above tangata whenua groups and with tangata whenua who have registered an interest in SPO 2, on the options developed through the IPP. In particular, due to the uncertainty of the information the Ministry currently holds on customary permit fulfilment, the Ministry sought information from tangata whenua on levels of customary harvest. However, no additional information was submitted during the consultation period. The Ministry will continue to work with tangata whenua to improve reporting and information on customary non-commercial catches.

Environmental Principles

54 The Act requires that adverse effects of fishing should be avoided, remedied or mitigated. More specifically, section 9 requires you to take into account that associated or dependent species should be maintained at or above a level that ensures their long-term viability, that the biological diversity of the aquatic environment should be maintained, and habitat of particular significance for fisheries management should be protected.

55 SPO 2 is predominately a bycatch fishery. The proposed options are not expected to result in increased fishing activity so existing impacts are not likely to change under either Option 1 or 2.

Information Principles

56 Section 10 requires that you take into account the information principles which require you to make decisions based on best available information and that you are cautious in making your decisions in instances where the information may be uncertain, unreliable or inadequate. Both options and the analysis proposed in this paper reflect the best available information on SPO 2 and outline the uncertainty in the information available where it is relevant to your decision making.

Section 11 considerations

57 In making your decision on sustainability measures for SPO 2 you must satisfy the requirements of section 11 of the Act as follows:

- a) Section 11(1)(a): Before setting or varying any sustainability measure for any stock, you must take into account any effects of fishing on any stock and the aquatic environment. The majority of SPO 2 commercial take is as bycatch in bottom trawl and set net fisheries targeting gurnard and tarakihi. As the TAC proposals do not affect catch limits for the key species targeted when SPO 2 is taken, or exceed historical recorded landings of rig, it is not anticipated that the proposed TAC (and TACC) options proposed would result in a significant change to fishing operations. Therefore, it is not anticipated that there will be an increase in impacts on the marine environment or on the harvest of other stocks.
- b) Section 11(1)(b): Before setting or varying any sustainability measure for any stock, you must take into account any existing controls under the Act that apply to the stock or area concerned. Standard management controls apply to the SPO 2 fishery, for example deemed value rates, recreational bag limits and general fishing method constraints. The proposed changes to the TAC do not affect most of these measures. The Ministry is proposing increases to deemed value rates. This approach creates an economic incentive for fishers to act appropriately and balance any over-catch against ACE, if ACE is available. The Ministry is also proposing the addition of rig to the Sixth Schedule to allow for return of rig to the sea if likely to survive. Separate advice papers address these matters.
- c) Section 11(1)(c): Before setting or varying any sustainability measure for this stock, you must take into account the natural variability of the stock. It is believed that for rig, the natural variability in year class strength is probably low, in view of the low fecundity. Therefore, the Ministry is not aware of any aspect of rig natural variability that should influence your decision.
- d) Sections 11(2)(a) and (b): Before setting or varying any sustainability measure for any stock, you must have regard to any provisions of any regional policy statement, regional plan, or proposed regional plan under the Resource Management Act 1991 and any management strategy or management plan under the Conservation Act 1987 that applies to the coastal marine area and you consider relevant. The Ministry is not aware of any provisions, management plans or strategies that apply to the coastal marine area that you might consider relevant.
- e) Section 11(2)(c): Before setting or varying any sustainability measure for any stock, you must have regard to sections 7 and 8 of the Hauraki Gulf Marine Park Act 2000 that apply to the coastal marine area and you consider relevant. The

boundaries of the quota management area for this stock do not intersect with the Park boundaries.

- f) Section 11(2)(d): In setting or varying sustainability measures, you must take into account any planning documents lodged by a customary marine title group under section 91 of the Marine and Coastal Area (Takutai Moana) Act 2011. The Ministry is unaware of any customary planning documents which would apply to the quota management area for SPO 2.
- g) Section 11(2A)(b): Before setting or varying any sustainability measure for any stock, you must take account of any relevant and approved fisheries plans. There is no approved fisheries plan in place for SPO 2 at this time.
- h) Sections 11(2A)(a) and (c): Before setting or varying any sustainability measure for any stock, you must take into account any conservation or fisheries services, and any decision not to require such services. The CPUE information for SPO 2 was recently updated and was used to inform this advice. Proposals relating to SPO 2 deemed values and the addition of rig to the Sixth Schedule have been noted. The Ministry is not aware of any other existing or proposed services that would be affected by the options set out in this paper.

Setting Allowances

58 Section 21 of the Act requires you to allow for Maori customary non-commercial interests, recreational fishing interests, and for any other sources of fishing-related mortality, when setting or varying the TACC. The Act does not provide an explicit statutory mechanism to apportion available catch between sector groups either in terms of a quantitative measure or prioritisation of allocation. Accordingly, you have the discretion to make allowances for various sectors based on the best available information.

59 Option 2 reduces the customary allowance from 20 tonnes to 5 tonnes. Although current information on customary catch is not complete due to lack of coverage by Customary Regulations, the Ministry believes the proposed allowance better reflects the information that is available on customary catch of rig in the area, as well as takes into account any catch that is not reported.

60 Option 2 also allows for an increase in the TACC, which more closely reflects the current commercial catch levels. The Ministry's best available information about this stock has determined that these levels are unlikely to cause the stock to decline. Additionally, by increasing the TACC, fishers are more likely to be able to cover any additional catch with ACE and, therefore, will less likely incur with deemed value payments.

61 Section 21(4) requires that any mātaihai reserve or closures/restrictions under s 186A to facilitate customary Maori fishing be taken into account. The Ministry is aware of the Palliser Bay Taiapure and the Porangahau Taiapure, as well as the Ta Tapuwae O Rongokako, Te Angiangi, Taputeranga, and Moremore mātaihai reserves. The Ministry notes that the proposals in this paper will not impact on, or be impacted by, the mataihai reserves or Taiapures.

Conclusion

62 The Ministry's preferred option is Option 2: increasing the TAC, TACC and allowance for other sources of fishing-related mortality, retaining the existing recreational allowance and decreasing the customary Maori allowance. The variations to the TAC and allowances

reflect current catch levels, are unlikely to result in any sustainability issues, and will enable more value to be derived from use of the SPO 2 fishery.

Summary of Recommendations

63 The Ministry recommends that for the SPO 2 fishery you choose either:

Option 1 YES/NO

- A. **Agree to** retain the existing TAC , TACC and allowances for SPO 2 as follows:
- (i) **retain** the existing TAC at 122 tonnes
 - (ii) **retain** the Maori customary fishing allowance at 20 tonnes
 - (iii) **retain** the recreational fishing allowance at 10 tonnes
 - (iv) **retain** the other sources of fishing related mortality allowance at 6 tonnes
 - (v) **retain** the existing TACC at 86 tonnes.

OR

Option 2 (*Ministry's preferred option*) YES/NO

- B. **Agree to** vary the TAC, TACC and allowances for SPO 2 as follows:
- (i) **set** the TAC at 130 tonnes
 - (ii) **set** the Maori customary fishing allowance at 5 tonnes
 - (iii) **retain** the recreational fishing allowance at 10 tonnes
 - (iv) **set** the allowance for other sources of fishing related mortality at 7 tonnes
 - (v) **set** the TACC at 108 tonnes.

Leigh Mitchell
for Director General

AGREED / AGREED AS AMENDED / NOT AGREED

Hon Phil Heatley
Minister of Fisheries and Aquaculture

/ / 2011