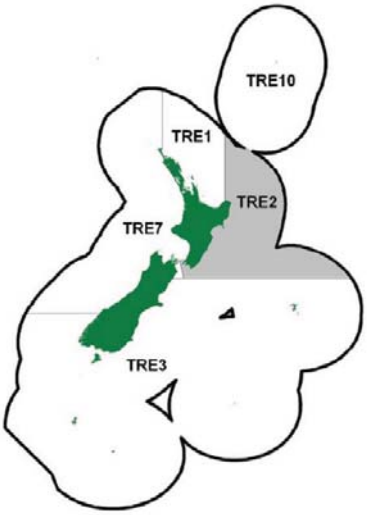
Trevally (TRE 2)

Figure 1: Quota Management Area (QMA) for TRE 2



Summary

1 The Ministry of Fisheries (MFish) recommends you either increase the TAC from 241 t to either 349 t (Option 1) or 371 t (Option 2) for the start of the 2010/11 fishing year. Both options involve the setting of allowances for other sources of fishing related mortality and Maori customary and recreational interests for the first time. New information on relative abundance in the TRE 2 fishery may become available in 2011 and this may provide a better foundation to vary TACs and monitor stock health in the future.

2 MFish also recommends that you increase the annual deemed value rate from $1.10 per kg to $1.25 per kg, increase the interim deemed value rate from $0.55 per kg to $0.70 per kg, increase the 110% differential deemed value rate from $2.00 per kg to $3.50 per kg and the 120% differential deemed value rate from $3.00 per kg to $5.00 per kg. The new deemed value rates will provide increased incentives for fishers to constrain fishing to their available Annual Catch Entitlement (ACE) holdings.

Background

3 TRE 2 was introduced into the Quota Management System (QMS) in 1986. The initial TAC was set at 190 t and applied only to commercial fishing. From 1990, the TAC became the TACC. The TACC increased as a result of a Quota Appeal Authority decisions, reaching 241 t in 1992/93. It has remained at that level since. A TAC and allowances for non-commercial fishing and other sources of fishing-related mortality have not yet been set for TRE 2 and are proposed for the first time in this paper.

4 TRE 2 is being reviewed for the 2010/11 fishing year due to sustained catches in excess of the TACC with no apparent decline in abundance as well as fishing industry requests, and the potential for improved utilisation of this stock.

5 You are being asked to vary the TAC for this stock under s 13 of the Act and to vary the TACC under s 21 of the Act. To assist you to make decisions this paper sets out:

- Background on biological characteristics of the stock, a description of the fishery and best available information on stock status;
- Analysis to inform your decision on varying the TAC, including points raised in submissions; and
- Analysis of matters to inform your decision on allocating the TAC, including points raised in submissions.

6 This paper also contains proposals to amend the deemed value regime for this stock.

Consultation

7 MFish released an IPP for public consultation on 21 June 2010, with submissions closing on 26 July 2010. The IPP was published on the consultation section of the MFish website and posted and emailed to persons and organisations with an interest in TRE 2.

Submissions received

8 MFish received eleven submissions on the TRE 2 IPP from:

- Area 2 Inshore Finfish Management Company Ltd. (Area 2)
- Aotearoa Fisheries Ltd (AFL)
- Challenger Fin Fisheries Management Company Ltd. (Challenger)
- Ngati Kahungunu Iwi Incorporated (NKII)
- Option4, the Hokianga Accord, NZ Sport Fishing and the Council's Zone 4, 4 and 8 Bay of Plenty Clubs (Option4)
- Sanford Limited (Sanford)
- Te Ohu Kaimoana (Te Ohu)
- The New Zealand Federation of Commercial Fishermen (NZFCF)
- The New Zealand Recreational Fishing Council (NZRFC)
- The New Zealand Seafood Industry Council Limited (SeaFIC)
- Zone 5 Fishing Clubs affiliated to the NZ Sports Fishing Council Inc. (Zone 5).

9 Submissions are attached (Appendix A). In general, non-commercial stakeholders expressed concerns that commercial catch data should not be used to justify an increase in the TACC and supported the proposed deemed values (or higher). On the other hand, commercial stakeholders consider the lack of data relating to TRE 2 has resulted in MFish taking too cautious an approach in setting the TACC and, in general, that deemed values should not be increased unless there are corresponding TACC increases.

Biological Characteristics of Trevally

10 Trevally are both pelagic and demersal in behaviour. Trevally are not known to be naturally highly variable from year to year. Trevally is relatively long-lived (in excess of 40 years of age) and moderately productive. Estimates of natural mortality and growth parameters for the TRE 2 stock are not available.

TRE 2 Fishery

11 Since entry into the QMS in 1986, the TRE 2 TACC has been exceeded in 15 of 23 years, by between 1% and 73%. Although commercial landings have varied over that time, average landings per fishing year since 1986 are approximately 262 t. The average landings per fishing year over the past 10 years are approximately 292 t, and the average landings for the last 5 years are approximately 327 t. Reported TRE 2 landings and actual TACCs are shown in Table 1, below.

Table 1: Reported landings (t) of Trevally (TRE 2) from 1983 to 2008/09 and actual TACs (t) from 1986/87 to 2008/09. QMS data from 1986-present

Year	Landings	TACC
1983	77	–
1984	335	–
1985	162	–
1986	161	–
1986–87	237	190
1987–88	267	219
1988–89	177	235
1989–90	275	237
1990–91	273	238
1991–92	197	238
1992–93	247	241
1993–94	230	241
1994–95	179	241
1995–96	211	241
1996–97	317	241
1997–98	223	241
1998–99	284	241
1999–00	309	241
2000–01	211	241
2001–02	243	241
2002–03	270	241
2003–04	251	241
2004–05	319	241
2005–06	417	241
2006–07	368	241
2007–08	230	241
2008–09	302	241

12 Over the last 10 years, the proportion of TRE 2 catch taken as target has varied from 5 – 17%. TRE 2 is most commonly caught as bycatch in the gurnard (GUR 2), tarakihi (TAR 2) and snapper (SNA 2) target bottom trawl fisheries. For example, since 1999, an average of 54% of TRE 2 catches have been caught by fishers when targeting GUR2 and an average of 26% of TRE 2 catches have been caught by fishers when targeting TAR 2.

13 Both TAR 2 and GUR 2 landings appear to have been relatively stable in recent years. The number of hours fished for TAR 2 has been relatively constant since 1996/97 although vessel numbers have almost halved between 1994/95 and 2006/07. The remaining vessels may be more efficient, resulting in more TRE bycatch in the TAR and GUR fisheries.

14 The finfish commercial stakeholder organisation for FMA 2 has previously acknowledged that trevally catch can be avoided or minimised when trawling by reducing trawl speed (trevally are fast swimming fish).

15 MFish understands that TRE 2 is an important stock for Maori customary fishers. However, MFish does not have reliable quantitative information on the level of TRE 2 Maori customary catch. Harvest under customary permits reported to MFish totals just 50 fish since 2007. This information does not necessarily provide a reliable estimate of customary take as the reporting regime does not cover the entire fishery.

16 Estimates of recreational catch from recreational harvest surveys are available. However, the MFish Recreational Technical Working Group suggests caution when using the data from these surveys, noting that:

- They "may be very inaccurate";
- Earlier surveys "may contain methodological errors"; and
- Recent survey estimates are "implausibly high".

17 The most recent recreational TRE 2 catch estimates are 160 t in 2000 and 339 t in 2001. MFish recognises that recreational catch will vary between years and accepts that the estimated 339 t in 2001 is implausibly high, especially when viewed in the context of commercial TRE 2 catches of 243 t in the same year.

18 The inaccuracy of the TRE 2 recreational catch estimates are supported by TRE 1 recreational catch analysis from 2005 boat ramp and aerial over flight surveys. These surveys estimated that only 105 t of trevally was being taken from QMA 1 by recreational fishers. QMA 1 encompasses Auckland and the largest number of recreational fishers in New Zealand.

TRE 2 Stock Status

19 No estimates of current stock size ($B_{current}$) or the stock size that would support the maximum sustainable yield (B_{MSY}) are available for TRE 2. Nor is there an index showing relative abundance through time for the fishstock. Catch information is the only available information which can indicate stock status.

20 An estimate of maximum constant yield (MCY) of 310 t for TRE 2 was determined from average commercial landings over the period 1977 to 1986. That estimate has not been updated. The risk to the TRE 2 stock posed by harvesting at the MCY has not been assessed. The MCY estimate was based on catches prior to QMS introduction and there is the risk that the catch landings data were unreliable then. In addition, catches between 1983 and 1986 varied widely and the estimate does not include estimates of total mortality or non-commercial catch, which raises further uncertainty about the MCY estimate as a basis for management.

21 MFish currently has a research project underway that is characterising the FMA 2 fisheries and will provide Catch per Unit Effort (CPUE) indices of relative abundance for key species (including TRE 2) by March/April of next year. Future management of the stock can be reviewed in light of the new information available in 2011.

Management Options

22 MFish proposed three options for TRE 2 TAC allowances:

Table 2: Management Options Proposed in the IPP for TRE 2

Option	TAC	Customary allowance	Recreational allowance	Other sources of mortality	TACC
1	349	1	100	7	241
2	371	1	100	8	262
3	402	1	100	9	292

Total Allowable Catch

23 The current status of TRE 2 in relation to B_{MSY} is unknown and is unable to be reliably estimated using the best available information. In such circumstances, you may set a TAC under s 13(2A) of the Fisheries Act.

24 Section 13(2A) requires you to have regard to the interdependence of stocks, the biological characteristics of the stock, and any environmental conditions affecting the stocks. It requires you to set a TAC:

- Using the best available information; and
- That is not inconsistent with the objective of maintaining the stock at or above, or moving the stock towards or above, B_{MSY} .

25 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.

26 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 as you consider relevant.

Analysis

27 For TRE 2, best available information to inform TAC setting at this time is commercial catch history, (and the MCY derived from this history), recreational catch estimates, Maori customary permit reports and information on trevally biology and behaviour. Commercial catch provides an indication of the TRE 2 fishery performance over the 23 year period since QMS introduction. On its own, catch is not considered a reliable indicator of abundance or stock status.

28 The latest Plenary Report notes that is not known if the catches over the last few years are sustainable. While there is no reliable information to show whether or not recent increased catches of TRE 2 are related to an increased abundance of trevally, there is also no information to suggest that a higher TAC would not ensure sustainability.

29 MFish notes that a new CPUE analysis for TRE 2 and other FMA 2 stocks is expected in 2011 and that the analysis has the potential to provide for significantly improved information to inform the setting of the TRE 2 TAC. However, as CPUE analysis has not been undertaken for FMA2 before, MFish notes the potential risk that the analysis may not be successful or that the working group may not accept the index of abundance results.

30 The TAC proposed under each option is slightly above the plenary estimate of MCY (310 t). There is, however, considerable uncertainty in the MCY estimate. In particular the MCY estimate was based on commercial catches prior to QMS introduction and there is the risk that the catch landings data were unreliable then. In addition, catches between 1983 and 1986 varied widely, which raises further uncertainty about the MCY estimate as a basis for management.

31 The inter-annual variability in catch over time, and the often small number of fishers responsible for the overcatch, suggests that this is not a simple situation of increasing bycatch of TRE 2 in other stable target fisheries. The catch variability is likely to be driven either by changes in fisher behaviour (variable targeting) or changes in the catchability/availability of TRE 2.

32 A comprehensive understanding of these factors is not currently available but analyses and discussions with fishers in respect of deemed value setting suggest a portion of overcatch in recent years is a response to profitable markets (despite having to pay deemed value payments) having been secured by some fishers.

33 Both commercial and non-commercial stakeholders (Option4, SeaFIC, AFL, Area 2, Te Ohu and NKII) identified that the new CPUE characterisation analysis should provide significantly improved information, allowing MFish greater confidence when reviewing the TRE 2 TAC. As noted above, MFish acknowledges that there is the potential for significantly improved information to become available when the CPUE analysis is reported back in early 2011. However, after analysing the currently available information, MFish is confident that the TAC recommendations contained within this paper are sufficiently robust to allow you to approve an increased TAC that provides modest but immediate utilisation benefits to the fishery. MFish may look to undertake further review of TRE 2, following the consideration of the new information due in early 2011.

34 SeaFIC and Area 2 suggest that MFish should use ‘a consistent approach to reviewing TACCs for low knowledge stocks’, noting that in 2006, when MFish reviewed a number of low knowledge stocks, it considered seven years average commercial catch plus 10% to allow for additional growth in catch levels as appropriate. SeaFIC note that if this approach was used for TRE 2, the TACC would be 340 t, which is higher than the TACC suggested by option 3 in the IPP.

35 In addition, several submissions from commercial stakeholders express a view that the lack of data relating to this stock has resulted in MFish taking too cautious an approach. MFish notes the commercial stakeholder comments; however, given the lack of information on TRE 2, MFish considers its TAC options represent a responsible approach, pending new information, on relative abundance due out next year. MFish is confident that it has assessed the stocks on currently best available information and proposed a range of TACs based on best available information, rather than any particular policy.

36 On the other hand, Option4 submit that “current biomass, abundance and availability of Trevally in Area 2 is not providing for all New Zealander’s social, economic and cultural well-being” and that due to this the TAC should be set at 337 t, even lower than Option 1. MFish believes that an option that is lower than the status quo is not supported by currently available information that shows no evidence of decline in abundance of the stock from catches at historic levels. However, there is only limited data available on stock abundance. MFish believes that a TAC set at, or above, status quo is appropriate.

37 Zone 5 provided records of Hawkes Bay Sports Fishing Club's ramp surveys over the last three years, claiming the records showed 'a steady decline' in Trevally abundance. In analysing the information provided (noting that the level of survey accuracy cannot be determined), MFish notes that it is difficult to draw the conclusion of a 'steady decline' from three data points. Further, MFish notes that while the survey's reported catch rate for Trevally appeared to decline between the 2006/07 and 2008/09 seasons, it increased between the 2008/09 season (0.08 fish per angler day) and the 2009/10 season (0.11 fish per angler day).

38 Both Option 4 and Zone 5 expressed a concern that commercial catch data should not be used to justify an increase in the TACC. They express a concern that this methodology may act as an incentive for commercial fishermen to 'over catch' in future years. MFish notes this concern, however, as discussed above, while there is no reliable information to suggest that recent catch of the TRE 2 is related to an increased abundance of trevally, there is also no information to suggest that a higher TACC could not ensure sustainability, along with appropriate monitoring and management responses, to provide for increased utilisation whilst ensuring sustainability. MFish notes that new information on relative abundance of TRE 2 is expected in 2011.

Relevant Factors

39 Relevant matters for you to take into account in setting or varying a TAC include:

- Any effects of fishing on any stock and the aquatic environment;
- Any existing management controls under the Fisheries Act that apply to the stock or area concerned; and
- The natural variability of the stock.

40 You must also take into account the following environmental principles:

- Associated or dependent species should be maintained above a level that ensures their long-term viability;
- Biological diversity of the aquatic environment should be maintained; and
- Habitat of particular significance for fisheries management should be protected.

41 The majority of TRE 2 commercial take is as bycatch in bottom-trawl fisheries targeting gurnard and tarakihi. As the TAC proposals do not affect catch limits for the key species targeted when TRE 2 is taken or exceed historical recorded landings of TRE 2, it is not anticipated that the proposed TAC (and TACC) options would result in a significant change to fishing operations. Therefore, it is not anticipated there will be an increase in impacts on the marine environment or on the harvest of other stocks. Nor is it anticipated that the proposed TAC (and TACC) options will change fishing operations in a way that will affect the interdependence of these stocks.

42 Standard management controls apply to the TRE 2 fishery, for example amateur bag limits, amateur minimum size limits, and fishing method constraints. The proposed changes to the TAC do not affect these measures.

43 Trevally is not known to be naturally highly variable from year to year. Trevally is relatively long-lived and moderately productive. The species is, therefore, moderately vulnerable to overfishing and caution should be taken when increasing catch limits.

44 As noted above, the TAC proposals do not affect catch limits for the key species targeted when TRE 2 is taken or exceed historical recorded landings of TRE 2.

Therefore, it is not anticipated there will be a significant increase in impacts on the marine environment or associated and dependent species. No habitats of particular significance have been identified in QMA2.

45 You must also have regard to, or take into account, certain other matters set out below.

46 MFish is not aware of any provisions in any statement or plans under the Resource Management Act 1991 that are specifically relevant to setting a TAC for this stock.

47 MFish is not aware of anything in the provisions of management strategies or plans for relevant Conservancies that are relevant to these proposals.

48 TRE 2 does not intersect with the Hauraki Gulf Marine Park. Therefore, there are no relevant considerations under the Hauraki Marine Park Act 2000.

49 MFish is not aware of any fisheries or conservation services, or any decisions not to require fisheries or conservation services, which are relevant to setting a TAC for this fish stock.

50 You must take into account any relevant Fisheries Plan for TRE 2. At this time there is no relevant Fisheries Plan that has objectives that would impact on setting a TAC for TRE 2.

51 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 of the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992.

52 A wide range of international obligations relate to fishing, including use and sustainability of fishstocks; and maintaining biodiversity (s 5(a)). MFish considers that the management options for TRE 2 are consistent with these international obligations.

53 MFish also considers the proposed management options to be consistent with the provisions of the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992 (s 5 (b)). Ongoing work is being done within the area covered by TRE 2 to promote policies that help to recognise customary use and management practices.

Options

Option 1 – Status quo and new allowances (349 t)

54 Under Option 1, a TAC of 349 t would be established based on the current TACC (241 t), and estimates of current catches (including customary and recreational), and other sources of fishing related mortality.

55 Option 1 is the most cautious option; it does not provide for any increased utilisation. This option places greatest weight on the uncertainties regarding the status of the stock. There is no estimate of stock size reletive to B_{MSY} and no estimate of sustainable yield.

Option 2 – TAC increase based on commercial catch history (371 t)

56 Option 2 proposes a TAC based on average reported commercial landings over the 23 years since TRE 2 entered the QMS (prior to this time, commercial catch information was less reliable) as well as estimates of current catches (including customary, recreational) and other sources of mortality.

57 The TAC under this option is above the MCY estimate (310 t). However, the MCY estimate is highly uncertain (for reasons noted earlier). Total catches from the fishery (based on best available information) are likely to have exceeded the MCY estimate for a number of years. There is no evidence of decline in abundance of the stock from catches at historic levels. However, there is only limited data available on stock abundance.

Option 3 – TAC increase based on recent commercial catch history (402 t)

58 Option 3 proposes a TAC based on average commercial landings over the past 10 years and estimates of current catches (including customary, recreational) and other sources of mortality, noting this is average is influenced by relatively high commercial catches in four of the last five years.

59 This option proposes the greatest increase to utilisation (31 t greater than option 2). This option is further above the MCY estimate; however the MCY estimate is uncertain. There is no information to indicate that catches over the last 10 years have impacted on abundance in the fishery, although it is unclear how well catch reflects abundance. The aggregating nature of Trevally creates the possibility that Trevally catches could be maintained despite an underlying decline in biomass.

Allocation of the TAC

60 When setting any TAC, that TAC must be apportioned between the relevant sectors and interests set out under the provisions of s 21 of the Act. Section 21 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.

61 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.

62 In terms of the allocation of the TAC, the submissions from NKII, RZRFC and Zone 5 all state that of the three choices offered, option 1 is the only viable option. NKII and Zone 5 state that the TACC should not be increased, in order to preserve the size of the TRE 2 stock while NZRFC state that while increasing the recreational allowance to 100 t goes some way towards being “fair and reasonable”, it still does not allow for a “fair and reasonable expectation of a decent catch”.

63 Option 4 rejects all options put forward by MFish in the IPP in favour of a “fourth option” made up of a TAC of 337 t, including a customary allowance of 10 t, a recreational allowance of 120 t, an allowance for other mortality of 7 t, and a reduced (from current) TACC of 200 t to “repay excessive past commercial catches”.

Maori Customary Non-Commercial Interests

64 As set out in the TRE 2 Fishery section above, MFish does not have reliable quantitative information on the level of TRE 2 customary Maori catch. Based on information from customary permits, MFish proposes a customary allowance of 1 t for all options.

65 NKII recommend an allowance of 60 to 80 t for customary interests, based on consultation with their Kaitiaki. This submission states that a higher allocation to

customary interests would help to ensure that the capacity and capability to use the resource is more readily available to tangata whenua.

66 Te Ohu note that customary reporting requirements vary around the country and therefore the current level of customary reporting should not be interpreted as the total customary take or needs. Te Ohu suggest that the customary allowance be raised to 5 t based on feedback from Iwi and prior to the development of their work into gaining more accurate information of the customary needs of Iwi/Hapu.

67 MFish notes NKII and Te Ohu's comments and acknowledges the limitations in information on customary take. MFish understands that TRE 2 is an important stock for customary fishers. However, MFish does not have reliable quantitative information to suggest a level of customary catch higher than 1 tonne. MFish will review this allowance as new quantitative information becomes available.

68 Section 21(4) requires that any mātaitai reserve or closures/restrictions under s 186A to facilitate customary Maori fishing be taken into account. MFish is aware of the Moremore Mātaitai reserves. MFish notes that the proposals in this paper will not impact on, or be impacted by, the Mataitai reserve.

Recreational Interests

69 In light of the current inaccuracies around TRE 2 recreational catch estimates, MFish proposes setting an initial recreational allowance of 100 t. This proposal accepts that the estimated catches of 160 t in 2000 and 339 t in 2001 are likely to be over estimates and that the catch is not likely to be more than the recent and improved 2005 estimate for TRE 1 of 104.7 t.

70 Submissions from the commercial sector request that the proposed recreational fishing allowances be decreased. Several submissions also suggest a range of options for the recreational allowance should have been proposed, as was done for the TACC in the IPP. Area 2 suggest a recreational allowance "based on extrapolation of population based on landings in TRE 1", recommending a recreational allowance of 42 t.

71 The general view from the commercial sector appears to be that the recreational fishing allocation of 100 t is unjustified due to the high level of uncertainty in the recreational catch data. SeaFIC state "the proposed TACC increases are insignificant when compared with the uncertainty in the recreational catch data", while AFL noted that without full characterisation of the fishery, an additional 80 t for recreational interests "may increase the sustainability risk of the fishery".

72 Option4 propose increasing the recreational allowance to 120 t while Te Ohu believes that due to the inaccuracies in recreational catch data, the recreational allowance should be set at 20 t.

73 MFish notes the concerns raised in regards to uncertainty over the recreational catch limit proposed. However, MFish believes that the proposed 100 t allowance represents best available information at this time. MFish will review allowances as new quantitative information becomes available.

Allowance for other sources of fishing-related mortality

74 There are various sources of fishing-related mortality for TRE 2. These include mortality caused by fish passing through the trawl net, undersized fish being returned dead or not surviving being returned to the sea, and illegal take or discarding of trevally.

75 MFish notes that when recommending a mortality allowance, the best information that is currently available is from other fisheries that have a similar mortality profile to trevally. As a result, MFish proposes providing an allowance for other sources of fishing related mortality similar to that set for kahawai fisheries, which is 2% of the TAC. To reflect the greater proportion of total TRE 2 catch that is taken by the trawl method when compared to kahawai, an additional 1% has been added, leading to a proposed mortality allowance of 3% of TAC. The trawl method results in a greater level of mortality to fish than purse seine, which is the predominant method of harvesting kahawai.

Total Allowable Commercial Catch (TACC)

76 MFish proposed three options for the TACC in the IPP as follows:

Option 1 - 241 t based on a TAC of 349 t;

Option 2 - 262 t based on a TAC of 371 t; and

Option 3 - 292 t based on a TAC of 402 t.

77 Based on the latest 2010/11 port prices of $2.18 per kilogram, the following table sets out the potential additional revenue that the different options for setting the TRE 2 TACC would provide[35]

Table 3: Proposed TACCs (t) and corresponding change in annual economic return ($) for TRE 2

Option	Proposed TACC	Potential additional revenue over status quo
1	241	nil
2	262	$45,780
3	292	$111,180

78 NZFCF and SeaFIC all suggest the TACC should be increased to a level higher than stated in any of the options proposed by MFish.

Other management measures

Deemed values

79 Under s 75(1) of the Act, you are required to set interim and annual deemed value rates for each quota management stock. Section 75(2A) requires you, when setting deemed value rates, to take into account the need to provide an incentive for every commercial fisher to acquire and hold sufficient annual catch entitlement (ACE) in respect of each fishing year that is not less than the total catch of that stock taken by the commercial fisher.

80 MFish developed a Deemed Value Standard in 2007 to set out a process for managing the setting, reviewing and amendment of deemed value rates. This standard intends to set deemed values for a fishstock between the ACE price and landed price (see table below). This approach creates an economic incentive for fishers to act appropriately and balance any overcatch against ACE, if ACE is

[35] Note that the figures below are higher than those presented in the IPP, due to the fact that when the IPP was published, the 2010/11 port prices were unavailable.

available. Alternatively, if ACE is not available, this approach creates an economic incentive to land and record any overcaught fish rather than discard them at sea.

81 The port price has increased $0.64 to $2.18 per kg and the ACE price has fallen $0.07 to $0.75 per kg.

Table 4: Current ACE price, port price and annual deemed value for TRE 2

Stock	ACE price	Port Price	Current deemed value	Proposed deemed value
TRE 2	$0.75	$2.18	$1.10	$1.25

82 MFish proposes an increase to the existing annual deemed value from $1.10 per kg to $1.25 per kg in order to retain incentives for fishers to balance catch with ACE. MFish also proposes to increase interim deemed value rates from $0.55 per kg to $0.70 per kg. The proposed new deemed value rates are consistent with the current MFish deemed value standard that allows for the setting of deemed value rates up to 90% of port price.

83 In addition, MFish is proposing a new differential deemed value structure for TRE 2. This is because:

- It has been consistently over fished in recent seasons (on average, 135% of available ACE since 2004/05), and;
- Deemed value invoices of $103,188 were issued at the end of the 2008/09 fishing season.

84 Therefore, MFish proposes that current unique differential deemed value rates (ramping) will remain in TRE 2, but that the value of the 110% ramp will increase from $2.00 per kg to $3.50 per kg and the 120% ramp will increase from $3.00 per kg to $5.00 per kg. This will ensure that any opportunity to gain financially from fishing on deemed values is removed.

85 Note that the 1 October Deemed Value review FAP recommends proposed changes to the deemed value rates for TRE1 in order to bring them into line with what is proposed in this paper for neighbouring stock, TRE2, in order to not incentivise misreporting catch.

86 Option4 state that the proposed TRE 2 deemed value increase to $1.25 per kg is too low to equate to the $1.54 per kg port price and will fail to ensure that commercial fishers will not exceed their ACE.

87 The submission from NKII supports the proposed deemed value increase to $1.25 per kg.

88 Sanford supports an increase in deemed values in order to help ensure the sustainability of stocks by making it uneconomical for fishers to catch fish without ACE.

89 AFL does not support increasing deemed values or deemed value differential rates.

90 Three submitters (SeaFIC, Te Ohu and Area 2) suggest the deemed values cannot be determined unless the TACC has been determined. All three submissions states that unless the TACC increases, the deemed values should not increase.

91 MFish notes that TRE 2 is not an unavoidable bycatch species and that the number of fishers significantly exceeding their ACE holdings is small.

92 Therefore, MFish recommends deemed value rates for TRE 2 for the 2010-11 fishing season under all TAC options increase as follows:

- Annual deemed value rate to increase from $1.10 per kg to $1.25 per kg.
- Interim deemed value rates to increase from $0.55 per kg to $0.70 per kg.
- Differential deemed value rates adjusted as set out in the table below:

Table 5: Current and proposed deemed value ramp rates for TRE 2

Percentage above Deemed Value	Current Deemed Value	Proposed Deemed Value
110 – 120%	$2.00 per kg	$3.50 per kg
120% +	$3.00 per kg	$5.00 per kg

Recommendation

93 MFish recommends that, for the TRE 2 fishery, for the fishing year commencing on 1 October 2010, you:

EITHER

a) **Agree** to set a TAC of 349 t (MFish preferred option) and within this:

i) **set** an allowance for customary fishing of 1 t;

ii) **set** an allowance for recreational fishing of 100 t;

iii) **set** an other sources of fishing-related mortality at 7 t; and

iv) **retain** a TACC of 241 t.

OR

b) **Agree** to set a TAC of 371 t (MFish preferred option) and within this:

v) **set** an allowance for customary fishing of 1 t;

vi) **set** an allowance for recreational fishing of 100 t;

vii) **set** an other sources of fishing-related mortality at 8 t; and

viii) **increase** the TACC from 241 t to 262 t.

OR

c) **Agree** to set a TAC of 402 t and within this:

ix) **set** an allowance for customary fishing of 1 t;

x) **set** an allowance for recreational fishing of 100 t;

xi) **set** an other sources of fishing-related mortality at 9 t; and

xii) **increase** the TACC from 241 to 292 t.

AND

d) **Agree** to increase the interim deemed value rate from $0.55 to $0.70

AND

e) **Agree** to increase the annual deemed value rate from $1.10 to $1.25

AND

f) **Agree** to increase the differential deemed value rates as per the following table:

Differential rates	
Catch in excess of ACE holdings (%)	**Deemed value rate**
10 - 20	$3.50 per kg
20+	$5.00 per kg