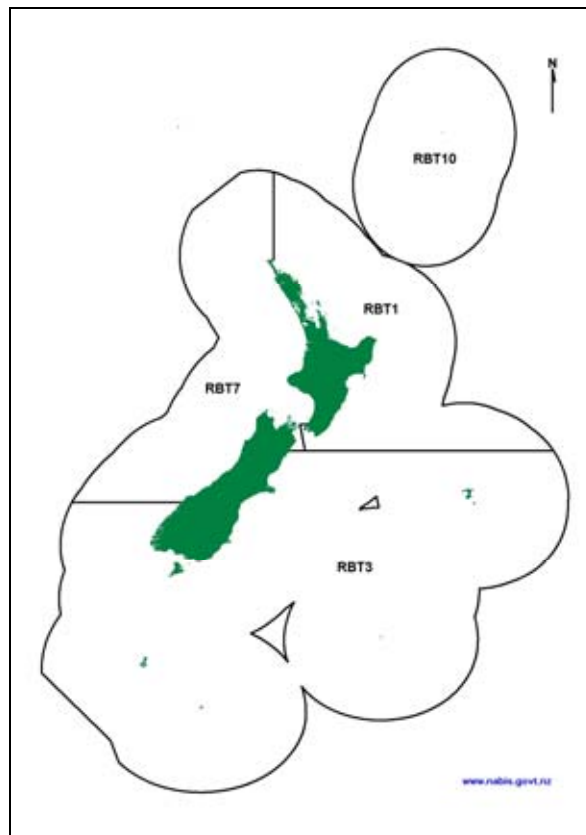


# PART 1: FINAL ADVICE PAPER

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**Figure 1: Quota Management Areas for redbait**

## Executive Summary

- 1 Redbait stocks will enter the QMS on 1 October 2009. The Quota Management Areas (QMAs) for redbait are shown in Figure 1.
- 2 An Initial Position Paper (IPP), released to stakeholders on 22 April 2009, contained proposals regarding:
  - a) The total allowable catches (TACs) and total allowable commercial catches (TACCs) to be set for redbait stocks;
  - b) Deemed value rates for each redbait stock;
  - c) The addition of redbait to Schedule 5 of the Fisheries Act 1996 (the “Act”) to allow a person to own quota up to the equivalent of 45% of the combined TACCs for every redbait stock; and
  - d) Amending the Fisheries (Reporting Regulations) 2001 to include reporting codes for redbait stocks.
- 3 There is no stock assessment information and no estimates of biomass, stock status or sustainable yield for any redbait stock. In the absence of such information the IPP

proposed two approaches upon which to base the initial setting of TACs, TACCs, allowances for customary and recreational fishers and other sources of fishing-related mortality for redbait stocks:

- a) Under Option 1 the proposed TACs were based on the average of commercial catches reported over the past five fishing years (2003/04 – 2007/08). A five year period was chosen in order to reflect recent fishing activity and current interest in the fishery.
  - b) Under Option 2 the proposed TACs were based on a figure around 10% higher than the highest reported annual commercial catch taken during the past five fishing years (2003/04 – 2007/08). This approach recognises that redbait catches are variable and that redbait may have been relatively lightly exploited to date. It also recognises that the biological characteristics of redbait (relatively fast-growing and short-lived) may support greater harvest levels.
- 4 For the RBT1 stock, where catches are minor compared with RBT3 and RBT7, MFish proposed a third option. Under this option the TAC would be set at a level above average catches or the highest reported catch during the past five years to avoid a situation where the entire TAC could be taken in a single trawl.
  - 5 All four stakeholder submissions that addressed the issue of TACs expressed support for the Option 2 approach for the RBT3 and RBT7 stocks and for the Option 3 approach for RBT1. This paper recommends that you set TACs for redbait stocks using these approaches.
  - 6 MFish has received additional information through the submission process upon which to base deemed value rates. MFish recommends setting deemed values based on a representative export price of \$1.00 per kg.
  - 7 MFish recommends adding redbait to Schedule 5 of the Act (quota aggregation limits) to allow a person to own quota up to the equivalent of 45% of the combined TACCs for every redbait stock. MFish also recommends that the Fisheries (Reporting Regulations) 2001 are amended to include reporting codes for redbait stocks. All submissions that addressed these issues also support these proposals.

## The Issue

- 8 On 5 March 2009 you declared, by notice in the *New Zealand Gazette*, that redbait stocks would be subject to the QMS on and from 1 October 2009. Concurrently, you also defined the QMAs (as shown in Figure 1 above).
- 9 Prior to 1 October 2009 you are required to make decisions on the TAC and allowances for all redbait stocks, and to set appropriate deemed value rates; this is the purpose of this advice paper.
- 10 All deepwater species associated with the redbait fishery are currently listed on Schedule 5 of the Act, which enables a person to own quota up to the equivalent of 45% of the combined TACCs for all stocks of that species; the default quota aggregation limit is 35%. To be consistent with the other deepwater species, MFish also proposes to add redbait to this Schedule, which requires a regulatory amendment.

- 11 MFish considers the key issues affecting the setting of sustainability measures and other management controls for redbait stocks are as follows:
- a) There are no estimates of current biomass, sustainable yield, or of stock status for any redbait stock. Stock status can either refer to the stock size in relation to the unfished biomass or to the biomass that can produce the maximum sustainable yield. While past and recent levels of reported catch have not given rise to known sustainability concerns, there is a degree of uncertainty and inadequacy in the best available information.
  - b) Redbait is a significant bycatch to a number of target species, principally jack mackerel and squid. A target fishery for redbait is also developing in New Zealand and some markets do exist for the species. Setting appropriate sustainability measures will be necessary to ensure the sustainable utilisation of the fishery while avoiding constraining the target fisheries.
  - c) The majority of redbait catch is taken using midwater trawls. Catch to date has not given rise to known adverse environmental impacts.
  - d) Almost all available information comes from catch reported by the fishing industry. However, MFish believes that reported catch figures may not be accurate in some cases. It is possible that reported landings may underestimate catches due to discarded fish not being reported or, alternatively, may overestimate catches due to other species being misreported as redbait.
  - e) In Australia, redbait is believed to be a relatively fast-growing and short-lived species. New Zealand redbait is likely to have similar characteristics although research on aging and growth of New Zealand redbait has yet to be undertaken. There is therefore some uncertainty associated with the biological characteristics of New Zealand redbait.

## Consultation

- 12 Your decision on proposed TACs for redbait stocks is made under section 13 of the Act and therefore the consultation requirements of section 12 apply.
- 13 Consultation on the IPP was undertaken with such persons or organisations representative of those classes of persons having an interest in the stock or the effects of fishing on the aquatic environment in the area concerned, including Maori, environmental, commercial, and recreational interests.

## Submissions Received

- 14 Submissions regarding this proposal were received from:
- Graham Metzger
  - The New Zealand Seafood Industry Council Ltd (SeaFIC)
  - Sanford Limited

- Te Ohu Kai Moana Trustee Limited (TOKMTL)
- United Fisheries Limited (UFL)

## Summary of submissions

### TACs, TACCs and allowances

- 15 TOKMTL, SeaFIC, Sanford Ltd and UFL expressed support for setting TACs for the RBT3 and RBT7 stocks based on Option 2 (10% higher than highest reported catch over past five years) and for setting the TAC for RBT1 using Option 3 (relatively high TAC to avoid possibility of entire TAC being caught in one trawl).
- 16 SeaFIC and TOKMTL also support setting nil customary and recreational allowances as well as an allowance of around 5% of the TAC for other sources of fishing-related mortality.

### Addition to Schedule 5

- 17 TOKMTL, SeaFIC and Sanford Ltd support adding redbait to Schedule 5 of the Fisheries Act 1996 to allow a person to own quota up to the equivalent of 45% of the combined TACCs for every redbait stock.

### Amending Reporting Regulations

- 18 TOKMTL and SeaFIC support the proposal to amend the Fisheries (Reporting) Regulations 2001 to include reporting codes for redbait stocks.

### Proposed deemed value rates

- 19 Sanford commented that redbait exports usually obtain values of between \$1.23 and \$1.32 per kg. SeaFIC suggested that the Auckland fish market price of \$1.42 per kg noted in the IPP may not reflect the price received for the majority of redbait caught and processed in New Zealand. They recommended that MFish approach a range of companies directly for the FOB price for redbait and other market information in its assessment of deemed value rates. MFish followed up this suggestion and this is discussed in more detail in the deemed value section of this paper.
- 20 UFL stated that they believed that the proposed deemed value rates are too high. They suggest the initial rate for redbait stocks should be set relatively low to start with, for example no higher than the rate for the JMA7 or FRO7 stocks (both \$0.15 per kg).
- 21 TOKMTL did not support the proposed deemed value rates on the basis that the assumed port price quoted by MFish was too high. They believe the export value of redbait is around \$950 per tonne (\$0.95 per kg) and suggest an annual deemed value rate of \$0.45-\$0.50 would be more appropriate.

### Other issues

- 22 Graham Metzger misinterpreted MFish's proposal for a nil customary allowance to mean that the requirement for 20% of quota for all new species introduced into the

QMS to be transferred to Maori would not apply to redbait. MFish notes that 20% of quota for all redbait stocks will be transferred to Maori on 30 September 2009. MFish has written to Mr Metzger on this matter.

## Background information

- 23 Reported RBT commercial landings for the fishing years 1993/94 – 2007/08 are summarised in Table 1. Landings data from each of the 10 fishery management areas has been grouped into the QMAs that will become effective on 1 October 2009.

**Table 1: Reported landings (greenweight tonnes) of redbait (from MFish catch effort database).**

Year	RBT 1	RBT 3	RBT 7	RBT10	Total
1993/94	0.5	1,676	297	-	1,974
1994/95	0.8	1,967	550	-	2,517
1995/96	0.4	1,532	474	-	2,007
1996/97	0.7	1,194	611	-	1,805
1997/98	3.5	1,497	525	-	2,025
1998/99	0.6	1,823	693	-	2,516
1999/00	1.1	2,392	580	-	2,973
2000/01	0.3	938	745	-	1,684
2001/02	0.6	1,640	1,630	-	3,271
2002/03	0.6	1,218	2,092	-	3,311
2003/04	2.1	1,697	2,719*	-	4,419
2004/05	1.0	802	1,729	-	2,532
2005/06	2.3	2,095*	1,934	-	4,031
2006/07	3.1	939	1,507	-	2,449
2007/08	5.8*	633	2,503	-	3,142

\* Highest reported catch during last 5 years

- 24 Catches are most abundant from stocks RBT3 and RBT7. Small catches have been reported from RBT1 while no catch has been reported from RBT10. In all stocks except RBT10 there is considerable variability between years, the cause of which is not well understood. It is also possible that the reported landings may underestimate catches due to discarded fish not being reported or, alternatively, may overestimate catches due to other species being misreported as redbait. However MFish has no information on the extent to which reported catches may not reflect actual catches.
- 25 When considered in conjunction with the statutory obligations regarding sustainability versus utilisation, environmental issues, and the biological characteristics of redbait, this catch data provides general guidance in setting the introductory TACs for redbait stocks.
- 26 There is no known level of redbait catch for customary Maori purposes or by recreational fishers.
- 27 NIWA was contracted by MFish to compile and summarise known fishery and biological information on redbait. In the report NIWA presents information indicating that redbait is thought to be a relatively fast-growing and short-lived species.

Information from Australian redbait, which is the same species that occurs in New Zealand, indicates that:

- a) redbait grow rapidly in the first few years;
- b) the species typically matures at two – three years; and
- c) maximum age ranges from seven years to 10 years.

## Proposed TACs, TACCs and allowances

### *Basis for setting TACs*

- 28 MFish proposes that TACs for redbait stocks be set under section 13 of the Act. The current status of redbait stocks in relation to  $B_{MSY}$  is unknown, although because of the relatively consistent catch levels over time, MFish considers that redbait stocks are likely to be at a level that is at, or above,  $B_{MSY}$ .
- 29 Section 13(2A) enables TACs to be set under section 13 even where the current biomass of a stock and the biomass that can produce the MSY are not able to be estimated reliably. MFish proposes that TACs for redbait stocks be set under this section, which requires that you must:
- a) not use the absence of, or any uncertainty in, that information as a reason for postponing or failing to set a total allowable catch for the stock; and
  - b) have regard to the interdependence of stocks, the biological characteristics of the stock, and any environmental conditions affecting the stock; and
  - c) set a total allowable catch –
    - i) using the best available information; and
    - ii) that 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.
- 30 Alternative options for setting the TACs are available:
- a) Section 13(2)(a) also enables you to set a TAC that maintains the stock at or above a level that can produce the maximum sustainable yield, having regard to the interdependence of stocks. However, in order to use this section MFish must provide you with an estimate of both current biomass and the biomass that can produce the maximum sustainable yield. MFish is unable to provide these, which precludes the use of section 13(2)(a).
  - b) The Act allows TACs to be set under section 14 if the quota management stock is listed in Schedule 3 (stocks managed with an alternative total allowable catch). Redbait is not currently listed in this Schedule and MFish considers that none of the criteria specified in section 14(8) are applicable to redbait, which means that it is unable to be added to Schedule 3.

- c) Section 14B of the Act enables you to set a TAC that maintains a stock at a level below  $B_{MSY}$ , but above a level that ensures its long-term viability. The intention of section 14B is to ensure the harvest of a target stock is not constrained by the TAC of an associated bycatch species. Section 14A(2) of the Act provides that the use of section 14B depends on owners of at least 95% of the quota shares for a stock proposing that it be used. As quota will not be allocated until 1 October 2009 this section cannot be used for the initial setting of TACs for redbait stocks.

31 Annex One provides additional information on statutory considerations.

### *Basis for setting TACCs and other allowances*

- 32 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 prescribes that in setting a TACC you shall allow for Maori customary non-commercial interests, recreational fishing interests, and for all other sources of fishing-related mortality.
- 33 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.

### *Recreational allowances*

- 34 MFish proposes a nil allowance be made for recreational fishing interests for all redbait stocks. MFish does not have information on the quantities (if any) of redbait that might be harvested by recreational fishers, but believes the current recreational catch to be zero. Redbait is unlikely to be accessible to non-commercial fishers given the depths where the species occurs.

### *Customary Maori allowances*

- 35 MFish proposes a nil allowance for customary fishing interests for all redbait stocks. MFish does not have information on the quantities (if any) of redbait that might be harvested by customary fishers, and is unaware of any information indicating the existence of a customary take of redbait. MFish believes the current customary catch to be zero, for the reasons noted in the preceding paragraph.

### *Allowances for other sources of fishing-related mortality*

- 36 Some level of fishing-related mortality is likely given the species is taken by trawling. MFish proposes that an allowance of around 5% of the TAC for fishing-related mortality be made for the RBT1, RBT3 and RBT7 stocks. This is similar to the mechanism used in other fisheries to account for other sources of fishing-related mortality.

### *Summary of initial MFish proposals*

- 37 The range of options presented in the IPP for the proposed TACs, TACCs, and allowances for recreational and customary fishers and other sources of fishing-related mortality, for redbait stocks are listed in Tables 2 – 4. MFish considered that all

options were consistent with the relevant statutory obligations and the IPP did not express a preferred option.

**Table 2. Option 1 - Proposed TACs (tonnes), TACCs (tonnes), and allowances (tonnes) for redbait stocks based on average commercial catches over the 2003/04 – 2007/08 fishing years.**

Stock	TAC	Customary allowance	Recreational allowance	Other sources of fishing-related mortality	TACC
RBT 1	2.8	0	0	0.1	2.7
RBT 3	1,233	0	0	62	1,171
RBT 7	2,078	0	0	104	1,974
RBT 10	0	0	0	0	0

**Table 3. Option 2 - Proposed TACs (tonnes), TACCs (tonnes), and allowances (tonnes) for redbait stocks based on highest reported commercial catch plus 10% from the 2003/04 – 2007/08 fishing years.**

Stock	TAC	Customary allowance	Recreational allowance	Other sources of fishing-related mortality	TACC
RBT 1	6.4	0	0	0.3	6.1
RBT 3	2,305	0	0	115	2,190
RBT 7	2,991	0	0	150	2,841
RBT 10	0	0	0	0	0

**Table 4. Option 3 - Proposed TAC (tonnes), TACC (tonnes), and allowances (tonnes) for RBT1 only.**

Stock	TAC	Customary allowance	Recreational allowance	Other sources of fishing-related mortality	TACC
RBT 1	20	0	0	1	19

### *Summary of final MFish proposals*

- 38 All of the stakeholder submissions that addressed the issue of TACs supported: a) using the approach of basing the initial RBT1 and RBT3 TACs on the highest reported commercial catch over the past five years plus 10% (Option 2 of the IPP); and b) setting the initial TAC for the RBT1 stock comparatively high to avoid the possibility of the entire TAC being taken in a single trawl (Option 3 in the IPP).
- 39 MFish believes that setting the higher TACs, together with moving to a rights-based management regime, will enhance utilisation opportunities for this species. MFish is also satisfied that the sustainability of redbait stocks will be maintained. For these reasons, together with the stakeholder support, MFish recommends that the TAC, TACC and allowances for recreational and customary fishers, and other sources of fishing-related mortality for redbait stocks be set as listed in Table 5.

**Table 5. Recommended TACs (tonnes), TACCs (tonnes), and allowances (tonnes) for redbait stocks.**

Stock	TAC	Customary allowance	Recreational allowance	Other sources of fishing-related mortality	TACC
RBT 1	20	0	0	1	19
RBT 3	2,305	0	0	115	2,190
RBT 7	2,991	0	0	150	2,841
RBT 10	0	0	0	0	0

***Rationale for proposed TACs***

- 40 The only available information upon which to base the initial TACs for redbait stocks is commercial catch data together with some limited biological information. The guidelines for determining TACs for new species introduced into the QMS provide that TACs may be set at levels based on consideration of known or estimated levels of catch (including catch by all sectors, and also other sources of fishing-related mortality).
- 41 Taking account of the available information, MFish’s rationale for the recommended TACs and TACCs for the RBT3 and RBT7 stocks is that this approach recognises the variability of redbait catches and the fact that redbait may have been relatively lightly exploited to date. The recommended TACs may provide some scope for developing the fishery as well as covering redbait taken as bycatch to other fisheries. Additionally, the likely biological characteristics of redbait (relatively fast-growing and short-lived) may support greater harvest levels than have been reported. As noted earlier however, the biological characteristics of New Zealand redbait have not been researched and information on its biology comes from Australia redbait. Further research on redbait aging and growth rates is required to confirm whether New Zealand and Australian fish have the same biological characteristics.
- 42 MFish considers that the recommended TACs may pose a higher risk to the sustainability of redbait stocks than Option 1 presented in the IPP but that they will provide for greater utilisation opportunities.
- 43 For the RBT1 stock only MFish proposes an option whereby the TAC is set at 20 tonnes. The rationale for this is that setting a comparatively low TAC could potentially result in a vessel taking the entire TAC in one trawl. Setting a TAC of 20 tonnes would reduce the likelihood of this eventuality.
- 44 Bringing redbait into the QMS and the subsequent allocation of rights should provide a more secure basis for investment in the utilisation and development of the fishery. A likely improvement in catch reporting, together with additional biological data and other information from the fishery resulting from redbait’s inclusion in the proposed 10 year research programme for deepwater fisheries, could provide a basis upon which a future review of the TAC for each redbait stock could be undertaken.
- 45 MFish considers that the recommended TACs take into account the best available information on past catches and redbait biology and should ensure stock sustainability. Despite the limited available information, MFish considers that all proposed TACs should enable redbait stocks to be managed at, or above, a level that can produce the MSY. The recommended TACs also provide additional utilisation

opportunities by providing for target fishing rather than just covering redbait bycatch from other target fisheries.

### *RBT1*

- 46 As shown in Table 1, reported commercial landings of redbait in RBT1 are small compared to RBT3 or RBT7. Landings were greatest in 2007/08 at 5.8 tonnes, while landings in other years varied between 0.3 and 3.5 tonnes.
- 47 To date all redbait catches from RBT1 have been reported as bycatch to target fisheries such as rubyfish and cardinalfish. Reasons for the relatively small catches may include:
- a) RBT1 may be at the limit of redbait's distribution in New Zealand waters.
  - b) The jack mackerel fishery, which is the source of the greatest redbait bycatch nationwide, is a purse seine fishery in RBT1 but is a mid-water trawl fishery in all other areas. Because purse seining takes place at the top of the water column this may mean that little fishing has been done in RBT1 over the depth range where redbait is most likely to be found.

### *Preferred option*

- 48 MFish recommends setting the TAC at 20 tonnes with one tonne (5% of the TAC) allocated to other sources of fishing-related mortality and a corresponding TACC of 19 tonnes.
- 49 An analysis of trawl information indicates that it is not uncommon for more than five tonnes of redbait to be caught in a single tow. Despite the absence of large bags of redbait being reported in RBT1 to date MFish recommends this option to avoid the hypothetical situation where the entire TACC is taken in a single trawl. Setting a comparatively high TAC of 20 tonnes would reduce the likelihood of this eventuality.

### *RBT3*

- 50 Reported commercial landings of redbait in RBT3 have varied considerably over the past five fishing years. Landings were greatest in 2005/06 at 2,095 tonnes but have been as low as 633 tonnes in 2007/08, the most recent fishing year.
- 51 RBT3 is mostly taken as bycatch in several fisheries including jack mackerel (JMA), squid (SQU) and barracouta (BAR). More information on RBT3 catches is included as Annex Three.
- 52 The reasons for the variability in landings are not well understood. However, MFish believes the primary factors influencing RBT3 catches are likely to be a combination of the annual variability in abundance of target species such as squid and jack mackerel together with variability in effort directed at the barracouta fishery.

*Preferred option*

- 53 MFish recommends that the initial TAC for RBT3 be set at 2,305 tonnes with 115 tonnes (5% of the TAC) allocated to other sources of fishing-related mortality and a corresponding TACC of 2,190 tonnes.
- 54 Reported catches of RBT3 have not exceeded 2,190 tonnes during the past five years and a TACC set using this approach may encourage development of the fishery.
- 55 Rationale for this option includes the biology of the species (relatively fast-growing and short-lived) and the fact that because catches to date have varied considerably by both location and target species the stock is likely to have been relatively lightly exploited. It is therefore likely that the biomass of the stock is above that which can support the maximum sustainable yield and can sustain additional fishing effort.

*RBT7*

- 56 Reported commercial landings of redbait in RBT7 have shown some variability over the past five years; landings were greatest in 2003/04 at 2,719 tonnes but only 1,507 tonnes was reported during 2006/07.
- 57 In RBT7 the species is primarily taken as bycatch to the jack mackerel fishery. Lesser quantities are taken in the barracouta and hoki fisheries while some targeting has occurred since 2004/05.

*Preferred option*

- 58 MFish recommends that the initial TAC for RBT7 be set at 2,991 tonnes with 150 tonnes (5% of the TAC) allocated to other sources of fishing-related mortality and a corresponding TACC of 2,841 tonnes.
- 59 Rationale for this option includes the biology of the species (relatively fast-growing and short-lived) and the fact that because catches to date have varied considerably by both location and target species the stock is likely to have been relatively lightly exploited. It is therefore likely that the biomass of the stock is above that which can support the maximum sustainable yield and can sustain additional fishing effort.

*RBT10*

- 60 MFish recommends a TAC and a TACC of 0 tonnes for RBT10.
- 61 Redbait has not been reported from QMA10 and most of the area is deeper than 1,000m, which is outside the depth range where redbait occurs. Additionally, the Kermadec fishery management area is subject to the Fisheries (Benthic Protection Areas) Regulations 2007, which means that bottom trawling is prohibited and restrictions are placed on mid-water trawling.

## Other management measures

### *Amendments to reporting regulations*

- 62 The introduction of redbait into the QMS requires an amendment to the Fisheries (Reporting) Regulations 2001 to prescribe reporting codes for redbait stocks that commercial fishers must use when completing their statutory catch returns. In the IPP, MFish proposed to amend Table 1 of Part 1 of Schedule 3 of those regulations to incorporate the following reporting codes in line with the QMAs for redbait: RBT1, RBT3, RBT7 and RBT10.
- 63 The two stakeholder submissions that commented specifically on this issue support MFish's proposal. MFish recommends that you agree to amend the Fisheries (Reporting) Regulations 2001 as detailed in the preceding paragraph.

### *Addition to Schedule 5 of Fisheries Act 1996 (quota aggregation limits)*

- 64 In the IPP MFish proposed that redbait be added to Schedule 5 of the Act to allow a person to own up to 45% of the combined TACCs for redbait stocks.
- 65 The default restriction on quota aggregation is that no person may own quota for a species that is equivalent to more than 35% of the combined TACCs for that species. The only exceptions are for rock lobster, paua and bluenose (where stricter restrictions apply) as well as the species listed on Schedule 5 of the Act, for which the aggregation limit is 45%. All deepwater species taken in association with redbait (for example barracouta, jack mackerel and squid) are already listed on this Schedule.
- 66 An analytical process is in place to determine if a species should be listed on Schedule 5. An assessment of redbait using this process, which is included as Annex 2, indicates that this species qualifies for listing on Schedule 5.
- 67 The three stakeholder submissions that addressed this issue support MFish's proposal and MFish recommends that you agree that redbait be added to Schedule 5.

### *Deemed Values*

- 68 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(2)(a) 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.
- 69 Redbait falls under the "all other" fish stock category as set out in the deemed value review standard. Fishstocks in this category are to have their annual deemed value rate set above ACE price and below landed price to encourage fishers to balance their catch with ACE rather than pay deemed values. Currently redbait is not in the QMS, meaning that there is no ACE price information available that can be used to set deemed value rates.
- 70 Therefore, the initial annual deemed value rates proposed for redbait will be based on a proportion of the estimated landed price in the previous year. The only estimated

landed price information for redbait presented in the IPP was a figure of \$1.42 per kg, which was came from the reported market value for redbait at the Auckland Fish Market.

- 71 In the IPP MFish proposed that annual deemed value rates for the 2009/10 fishing year be set at 50% of the estimated landed price (\$1.42 per kg). In adopting this approach, MFish proposed setting an interim deemed value rate of \$0.36 per kg (excluding GST) and an annual deemed value of \$0.71 per kg (excluding GST) for all redbait stocks for the 2009/10 fishing year.
- 72 As part of the submission process MFish received further export price information for redbait from a range of Industry sources. Although the price information is provided in \$US, when converted back to \$NZ the prices received range between approximately \$0.81 and \$1.50 per kg. MFish considers this price range to be representative of the majority of redbait sales.
- 73 As noted in paragraph 22 above, one submitter proposed setting annual deemed value rates approximately 20% of the rate proposed by MFish in the IPP. MFish notes that setting deemed value rates that are low in comparison to the value of the fish is inconsistent with MFish’s deemed value standard.
- 74 On balance, MFish considers that \$1.00 per kg represents an appropriate point in the export price range upon which to base deemed value rates. MFish considers that as almost all redbait is exported this approach is more appropriate than using the estimated landed price of \$1.42 per kg, which was obtained on the domestic market. Accordingly, MFish recommends that you set annual deemed value rates for all redbait stocks at 50% of the representative export price (i.e. \$0.50 per kg excluding GST) and interim deemed values rates for all redbait stocks of \$0.25 per kg (excluding GST).
- 75 MFish also recommends applying differential annual deemed value rates to redbait stocks in accordance with the deemed value standard. These rates are shown in the table below.

**Table 6: Recommended differential deemed value rates for RBT1, RBT3, RBT7 and RBT10**

Catch in excess of ACE holdings (%)	Recommended deemed value rates for RBT1, RBT3, RBT7 and RBT10 (\$/kg)
20	\$0.60
40	\$0.70
60	\$0.80
80	\$0.90
100	\$1.00

- 76 Once in the QMS rates will be adjusted, as required, when information about ACE price becomes available. Currently deemed values for all species are reviewed on an annual basis. When redbait ACE price information becomes available, redbait will be included in the annual deemed value review process to ensure the correct deemed value rates are set for all redbait stocks.

## Other Management Issues

### *Environmental effects of harvesting methods for redbait*

- 77 MFish does not propose to introduce any additional measures to specifically address possible environmental effects associated with redbait fishing. Over 90% of redbait is taken as bycatch in mid-water trawls, which is a method that does not significantly affect the benthic environment. At this stage, there are no known habitats of particular significance for fisheries management that are likely to require protection from fishing for redbait.
- 78 Most redbait is taken by large factory trawlers, all of which are required to deploy mandatory seabirds scaring devices and to follow Vessel Management Plans (VMPs). The purpose of VMPs is to detail the specific measures a vessel should take to avoid interactions with seabirds. Because of existing measures there is no need for additional seabird mitigation measures to be created specifically for the redbait fishery.
- 79 The vessels that take redbait are also subject to the Industry-managed Marine Mammal Operational Procedure (MMOP), the purpose of which is to reduce the risk of incidental captures of marine mammals during deepwater fishing operations.
- 80 MFish notes that capture of common dolphins by vessels targeting jack mackerel off the North Island west coast is sometimes a problem. Redbait is likely to be taken in that region as well. The MMOP contains specific measures that address common dolphin captures in the North Island west coast JMA fishery and MFish considers those measures are equally applicable to vessels targeting redbait. The MMOP will be updated to ensure vessels targeting redbait also adopt the measures that apply to the jack mackerel fishery. Although this is an Industry initiative, MFish audits vessel performance against the MMOP through the Observer Programme. No additional measures in relation to marine mammals are proposed.
- 81 MFish notes that although there has been a limited amount of target fishing for redbait there appears to be little associated bycatch. Redbait aggregate, and operators appear to be able to take large “clean” bags of redbait. There may be small amounts of bycatch of QMS species such as barracouta, jack mackerel and blue mackerel. The QMS provides mechanisms for ensuring sustainability of such bycatch.

## SUMMARY OF RECOMMENDATIONS

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82 MFish recommends that you agree to:

- a) **Set** a TAC of 20 tonnes for RBT1 and within this set:
  - i) a customary allowance of 0 tonnes;
  - ii) a recreational allowance of 0 tonnes;
  - iii) an allowance for other fishing-related mortality of 1 tonne; and
  - iv) a TACC of 19 tonnes.
  
- b) **Set** a TAC of 2,305 tonnes for RBT3 and within this set:
  - i) a customary allowance of 0 tonnes;
  - ii) a recreational allowance of 0 tonnes;
  - iii) an allowance for other fishing-related mortality of 115 tonnes; and
  - iv) a TACC of 2,190 tonnes.
  
- c) **Set** a TAC of 2,991 tonnes for RBT7 and within this set:
  - i) a customary allowance of 0 tonnes;
  - ii) a recreational allowance of 0 tonnes;
  - iii) an allowance for other fishing-related mortality of 150 tonnes; and
  - iv) a TACC of 2,841 tonnes.
  
- d) **Set** a TAC of 0 tonnes for RBT10 and within this set:
  - i) a customary allowance of 0 tonnes;
  - ii) a recreational allowance of 0 tonnes;
  - iii) an allowance for other fishing-related mortality of 0 tonnes; and
  - iv) a TACC of 0 tonnes.
  
- e) **Amend** the Fisheries (Reporting) Regulations 2001 to specify the redbait reporting codes to be used by commercial fishers when completing their statutory catch returns: RBT1, RBT3, RBT7 and RBT10;
  
- f) **Add** redbait to Schedule 5 of the Fisheries Act 1996 to enable a person to own quota equivalent to 45% of the combined total allowable commercial catches for redbait stocks; and
  
- g) **Set** an annual deemed value rate of \$0.50/kg (excluding GST), an interim deemed value rate of \$0.25/kg (excluding GST), and the differential deemed value rates detailed in the table below for all redbait stocks from 1 October 2009:

Catch in excess of ACE holdings (%)	Recommended deemed value rates for RBT1, RBT3, RBT7 and RBT10 (\$/kg)
20	\$0.60
40	\$0.70
60	\$0.80
80	\$0.90
100	\$1.00

Aoife Martin  
**Manager Deepwater Fisheries**

APPROVED / NOT APPROVED / APPROVED AS AMENDED

Hon Phil Heatley  
**Minister of Fisheries**

/ / 2009

# ANNEX ONE

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## Statutory Considerations

The following statutory considerations have been taken into account in evaluating the management options as proposed in this document.

- a) The purpose of the Act (s 8) is to provide for the utilisation of fisheries resources while ensuring sustainability. The management proposals seek to ensure sustainability of the stocks by setting for each a TAC and other appropriate measures. Utilisation is provided for by way of setting appropriate allowances for commercial, recreational and customary fishers. Section 8 also requires that social and economic effects be considered. This final advice paper proposes setting TACs to provide for utilisation of the redbait resource, while taking an approach that reflects the absence of information on stock status and yield and the uncertainty in the available commercial catch data.
- b) Section 10 sets out information principles that are to be taken into account when setting a sustainability or utilisation measure, such as TACs and TACCs for redbait. Section 10 provides that all persons exercising or performing duties, or powers under this Act, in relation to the utilisation of fisheries resources or ensuring sustainability, shall take into account the following information principles:
  - i) Decisions should be based on the best available information.
  - ii) Decision makers should consider any uncertainty in the information available in any case.
  - iii) Decision makers should be cautious when information is uncertain, unreliable, or inadequate.
  - iv) The absence of, or any uncertainty in, any information should not be used as a reason for postponing or failing to take any measure to achieve the purpose of this Act.

The information principles are particularly important in relation to redbait stocks considered in this document as the status of these stocks remains unknown. MFish has adopted the best available information and adhered to the principles of caution in the face of uncertain or inadequate data in considering the management options for these stocks.

- c) The Act prescribes three possible harvest strategies in setting a TAC. MFish considers it appropriate to set TACs for redbait stocks under s 13(2A), which is used for stocks for which the current biomass and the biomass that can produce the MSY are not able to be estimated reliably. This section requires you: to use the best available information and not use the absence of, or any uncertainty in, that information as a reason for postponing or failing to set a TAC; to have regard to the interdependence of stocks, the biological characteristics of the stock, and any environmental conditions affecting the stock; and to set a TAC that 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.

- d) There is currently no stock assessment information to indicate whether or not redbait stocks are at, above, or below a level that can produce MSY. However, given the species' biology and catches to date, MFish considers that redbait stocks are likely to be at a level that is at or above the level that can produce the MSY. Given the limited information available, MFish considers that the proposed TACs reflect the appropriate level of catch to maintain redbait stocks at or above the  $B_{MSY}$  level.
- e) In regard to the interdependence of stocks (s 13(2A)(b)), redbait are no doubt associated with other species within the benthic ecosystem. However, MFish is not aware of any particular species inter-relationships that affect the setting of TACs at this time.
- f) Section 11(1)(c) requires that the natural variability of the stock concerned is taken into account when setting or varying a sustainability measure such as a TAC. Apart from catch information, MFish does not have information on the natural variability of redbait stocks. However, the recommended TACs are likely to be cautious. The approach should ensure harvesting levels will not contribute to a sustainability risk if there is high natural variability of redbait stocks due to natural fluctuations and environmental conditions.
- g) Section 9 requires the Minister to take into account the following environmental principles:
  - i) Associated or dependent species should be maintained above a level that ensures their long-term viability (s 9(a)).
  - ii) Biological diversity in the aquatic environment should be maintained (s 9(b)).
  - iii) Habitat of particular significance for fisheries management should be protected (s 9(c)).

The available information does not suggest that past fishing or future fishing at the proposed TAC levels is likely to pose risks to the viability of any associated or dependent species, or to the maintenance of biodiversity of the aquatic environment. Habitats of particular significance for fisheries management have not been identified within the areas and depths where fishing for redbait is considered likely.

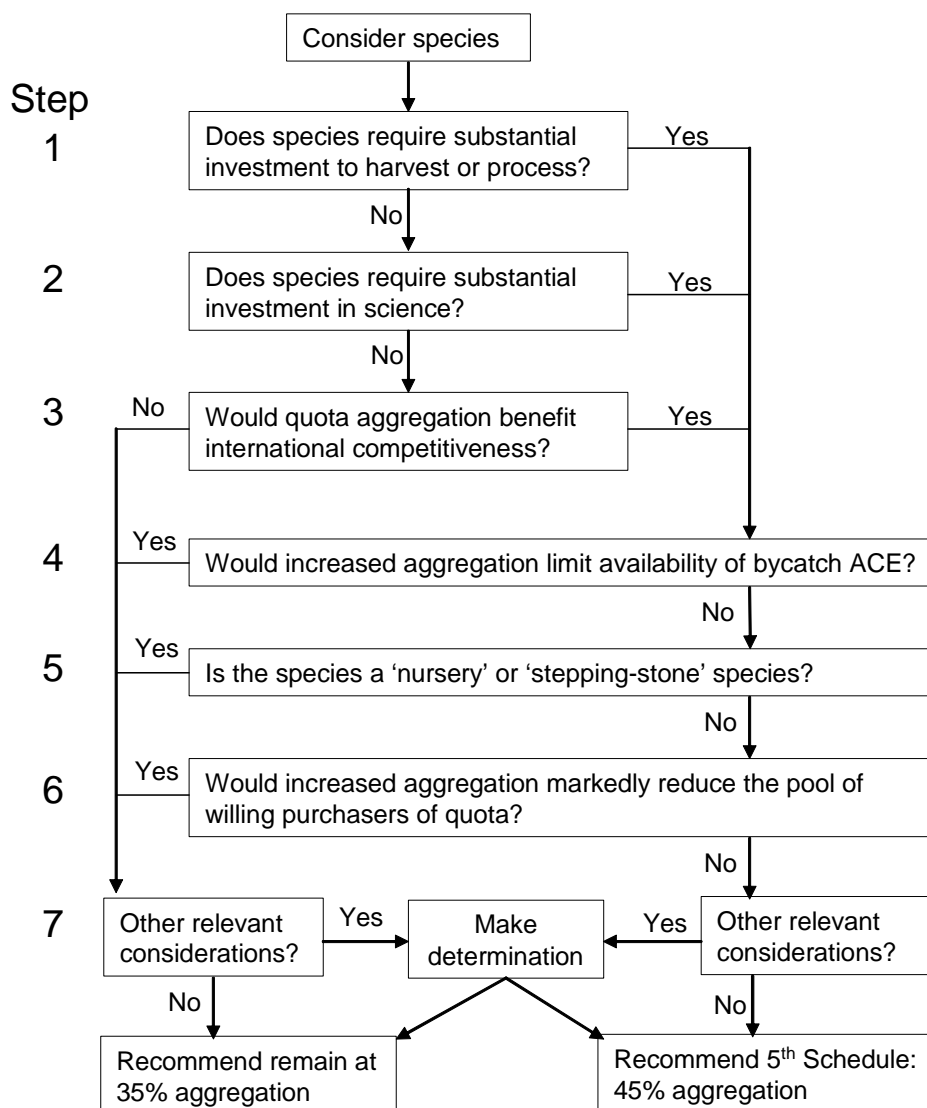
- h) There is a wide range of international obligations relating to fishing (including sustainability and utilisation of fishstocks and maintaining biodiversity). MFish considers the s 5 considerations arising from New Zealand's international obligations and the provisions of the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992 are adequately addressed by the management proposals for redbait stocks, particularly with the introduction of TACs to ensure sustainable use of the resource. MFish is not aware of any issues concerning international obligations and the provisions of the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992 that will result from the proposed TACs and TACCs for redbait.
- i) Section 11(1)(b) requires that existing controls be taken into account when setting or varying a sustainability measure such as a TAC. There are no existing controls that are relevant to setting the TACs for redbait stocks (no size limits, bag limits, catch limits, or other controls).
- j) Section 11(2) requires the consideration of various other matters relating mainly to planning documents. MFish is not aware of any considerations in any regional policy statement, regional plan or proposed regional plan under the Resource Management Act 1991 or any management strategy or management plan under the Conservation

Act 1987 that are specifically relevant to setting TACs for redbait stocks. Similarly, in terms of section 11(2A), MFish is not aware of any fisheries or conservation services, relevant fisheries plans, or any decisions not to require conservation or fisheries services, that are relevant to setting TACs for redbait stocks.

- k) As required under s 11(2)(c), MFish considers that the proposals for redbait meet the requirements of ss 7 and 8 of the Hauraki Gulf Marine Park Act 2000. Implementation of catch limits and associated measures for redbait stocks on entry into the QMS will allow for the sustainable utilisation of the species.
- l) Sections 21(1)(a) & (b), 21(4)(a) & (b) and 21(5) require the Minister to allow for non-commercial fishing interests (recreational and customary), and other mortality to the stock caused by fishing. The proposed TACs reflect the likelihood that there is no customary and recreational fishing for redbait, and certainly there is no information to suggest otherwise.
- m) Section 21(4) requires that when considering the proposed allowances for customary non-commercial interests, the Minister must take into account any mātaimai reserve or s186A closure in the relevant QMA. The proposed zero allowances for customary non-commercial fishing reflect the absence of any knowledge of customary fishing for redbait. MFish does not consider the zero allowances proposed for customary harvest will detract from the intent of any mātaimai or s 186A closures presently in place.
- n) Section 21(5) requires that when considering the proposed allowances for recreational interests, the Minister must take into account any regulations that prohibit or restrict fishing under s 311 (area closures). Closures under s 311 have not been implemented to date.

## ANNEX TWO

### Analytical process to assess species' suitability for addition to Schedule 5 of Fisheries Act 1996.



#### *Application of analytical process to redbait*

- 1 In 2006 the Minister of Fisheries agreed to add several additional species to Schedule 5. The Minister also agreed to an analytical process to be used in future assessments of a species' suitability for addition to Schedule 5. A diagram of that process is shown above while the application of the process to redbait is presented below.
- 2 The process involves determining whether a species fits into one of three categories (Steps 1, 2 or 3) and then further examination to ensure that unwanted consequences are unlikely (Steps 4, 5 and 6).

### ***Application of analytical process to redbait***

*Step 1 – Does species require substantial investment to harvest or process?*

- 3 Most redbait is taken by the factory trawler fleet. For this reason MFish considers that redbait does require substantial investment to harvest or process and therefore fits into this category.

*Step 2 – Does species require substantial investment for science?*

- 4 Records of redbait catches extend back a number of years. MFish considers that redbait does not fit into this criteria as it is an existing fishery.

*Step 3 – Would quota aggregation benefit international competitiveness?*

- 5 MFish considers this criteria does apply to redbait, which is a bulk product where New Zealand producers may be competing with enterprises operating overseas that have access to subsidies, lower labour costs, reduced transportation costs or other advantages that reduce the per unit cost of production. Additionally, some New Zealand operators are attempting to develop a market for redbait overseas. Access to greater quantities of product may be advantageous for this process. The ability to harvest a greater proportion of a species may be required to cover these investment costs.

*Step 4 – Would increased aggregation limit availability of bycatch ACE?*

- 6 The process states that no species should be listed in Schedule 5 if it is considered to be a significant bycatch species only, or is one target species in a multi-species target fishery, unless in either instance all major species in the catch mix are included on the Schedule.
- 7 Redbait is a significant bycatch species although there is a minor target fishery. However all species in the catch mix associated with redbait (BAR, JMA, SQU and HOK) are already included in the Schedule. Redbait therefore meets the “unless all major species in the catch mix are included in the Schedule” rule associated with this criteria; it would be inconsistent to not include redbait in the Schedule.

*Step 5 – Is the species a ‘nursery’ or ‘stepping stone’ species?*

- 8 MFish does not consider redbait to be a ‘nursery’ or ‘stepping stone’ species as it is not a species that requires a relatively low initial investment.

*Step 6 – Would increased aggregation markedly reduce the pool of willing purchasers of quota?*

- 9 MFish does not consider this criteria is relevant to redbait.

### ***Stakeholder comment***

- 10 Three stakeholder submissions commented specifically on this issue and all supported MFish’s proposal.

## ***Conclusion***

- 11 MFish considers that redbait fits the categories detailed in Steps 1 and 3 and that the unwanted consequences detailed in Steps 5 and 6 are not relevant. Additionally, all other major species in the catch mix associated with redbait are already listed on Schedule 5 (Step 4). For these reasons MFish recommends the addition of redbait to Schedule 5 of the Act, which will permit a quota holder to acquire quota up to the equivalent of 45% of the combined TACCs for every redbait stock.

## ANNEX THREE

### Additional catch information for the RBT3 and RBT7 stocks

#### RBT3

- 1 Until 1 October 2004 it was not possible to target redbait due to the permit moratorium. All redbait catch reported up to that point was therefore taken as bycatch to other fisheries. Despite the moratorium being lifted there has only been a small number of instances of redbait being targeted in RBT3; 4 tows were reported in 2007 with an estimated catch of 59 tonnes and 3 tows were reported in 2008 with an estimated catch of 79 tonnes.
- 2 Table 1 shows the estimated catch of redbait taken in RBT3 by target species for the most recent 5 years only.

**Table 1: Estimated RBT3 catch (tonnes) by target species for the 5 most recent fishing years (from MFish catch effort database).**

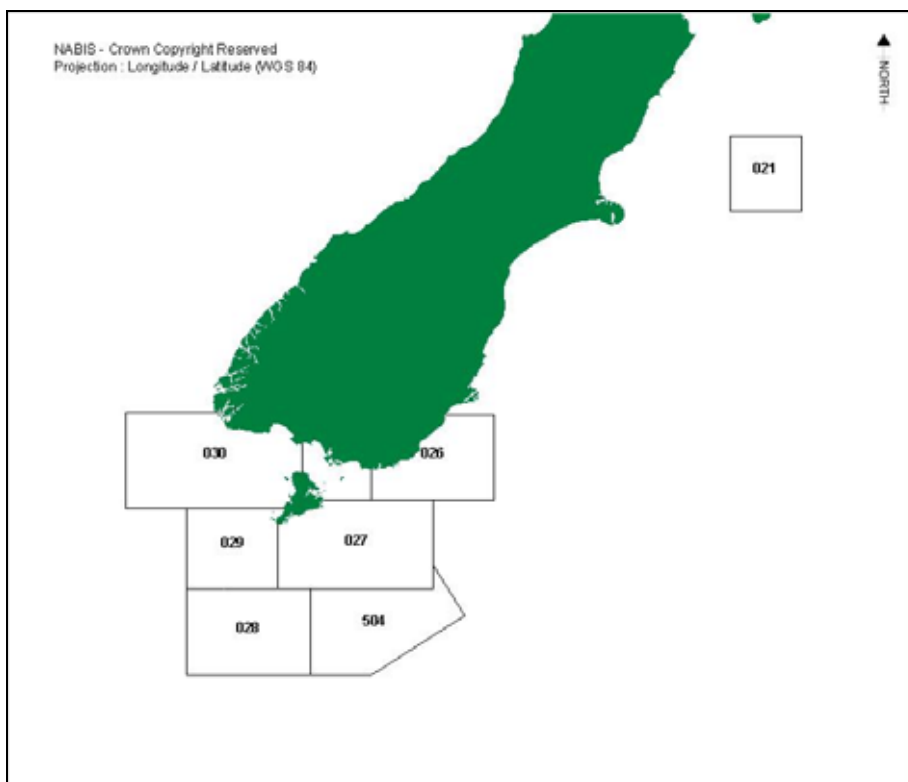
Year	Total Estimated RBT3 catch (tonnes)	Target species					
		JMA	SQU	BAR	HOK	RBT	Others
2003/04	1,569	129	1,247	183	3	0	6
2004/05	713	36	446	202	0	0	29
2005/06	1,920	999	297	613	0	0	11
2006/07	1,075	366	256	380	0	59	14
2007/08	550	259	69	135	0	79	6

- 3 In most of the past 5 years a significant amount of RBT3 is taken as a bycatch to the JMA fishery (up to 999 tonnes in 2005/06). MFish notes that historically, JMA3 catches peaked during the 1990s (10,000 - 20,000 tonnes caught annually) and have been considerably lower since 2000/01 (700 - 5,000 tonnes caught annually). However the reduced JMA3 catches do not always appear to result in RBT3 catches reducing in proportion.
- 4 The amount of RBT3 taken as bycatch to the SQU1T fishery also varies considerably (69 tonnes in 2007/08 to 1,247 tonnes in 2003/04). SQU1T abundance varies considerably, which affects landings (over the past 15 years annual landings have ranged between 13,000 - 49,000 tonnes). Like JMA, there does not appear to be a direct relationship between squid abundance and redbait landings. For example, landings of RBT3 recorded during 2004/05 were one of the lowest on record yet SQU1T landings that year were the highest on record.
- 5 Barracouta is the other primary target species that results in significant redbait bycatch. Again, the amount of redbait reported as bycatch to the barracouta fisheries over the past 5 years has varied considerably (135 tonnes in 2007/08 to 613 tonnes in 2005/06).
- 6 Analysis of spatial distribution of RBT catches also shows considerable variation. Over the past 5 years 97% of estimated catches of RBT3 was reported as being taken from

just 7 statistical areas. This information is summarised in the table below while the statistical areas are shown in Figure 2.

**Table 2: Estimated RBT3 catch (tonnes) from statistical areas where 97% of estimated RBT3 catch has been reported over the past 5 fishing years (from MFish catch effort database).**

Year	Statistical area							Total
	28	21	29	27	30	504	26	
2003/04	1,213	0	163	60	18	38	32	1,525
2004/05	572	0	36	18	38	4	2	671
2005/06	848	698	227	93	10	11	9	1,896
2006/07	521	301	216	10	0	8	0.3	1,055
2007/08	198	316	13	1	0.1	0.2	1	529
Totals	3,352	1,315	655	182	67	62	44	



**Figure 1: Diagram showing location of the 7 statistical areas where 97% of estimated catch of RBT3 has been reported as being taken over the period 2003/04 – 2007/08.**

- 7 Table 2 shows that catches from the 7 main statistical areas can vary considerably from year to year. Overall, most catch was reported from statistical area 28. Yet catches from that area vary from 1,213 tonnes in 2003/04 to 198 tonnes in 2007/08. Similarly, there was no catch reported from statistical area 21 for the first two years but 698 tonnes was reported during 2005/06.
- 8 In summary, analysis of RBT3 catches does not indicate distinct relationships between redbait catches and abundance of, or effort directed at, the particular target fisheries where it is taken as bycatch. However, MFish believes that the primary factors influencing RBT3 catches are likely to be a combination of the annual variability in

abundance of target species such as SQU and JMA together with variability in effort directed at the BAR fishery.

### RBT7

- 9 Historically, landings prior to 2001/02 were less than 1,000 tonnes per years but have been more than 1,000 tonnes per year since then.
- 10 In RBT7 the species is primarily taken as bycatch to the JMA fishery. Lesser quantities are taken in the BAR and HOK fisheries and some targeting has occurred since 2004/05. This information is summarised in Table 8 for the 5 most recent fishing years only.

**Table 3: Estimated RBT7 catch (tonnes) by target species for the 5 most recent fishing years only (from MFish catch effort database).**

Year	Total Estimated RBT7 catch (tonnes)	Target species				
		JMA	BAR	HOK	RBT	Others
2003/04	2,615	2,518	74	23	-	-
2004/05	1,450	938	436	24	35	17
2005/06	2,071	1,745	2	54	211	60
2006/07	1,211	1,129	69	8	-	5
2007/08	2,305	1,568	399	32	275	31

- 11 As stated above the JMA fishery is where most RBT7 is taken as bycatch. Catches of JMA7 prior to 2001/02 averaged around 14,000 tonnes per year. From 2001/02 onwards JMA7 catches increased and have ranged between 22,000 and 37,000 tonnes since then. This period of increased JMA7 catches coincides with the jump in reported RBT7 catches. MFish considers that the increase in fishing effort directed at JMA7 has resulted in increased RBT7 catches.

## **PART 2: INITIAL POSITION PAPER - MANAGEMENT MEASURES RELATING TO INTRODUCTION OF REDBAIT (RBT) INTO QMS ON 1 OCTOBER 2009 –**

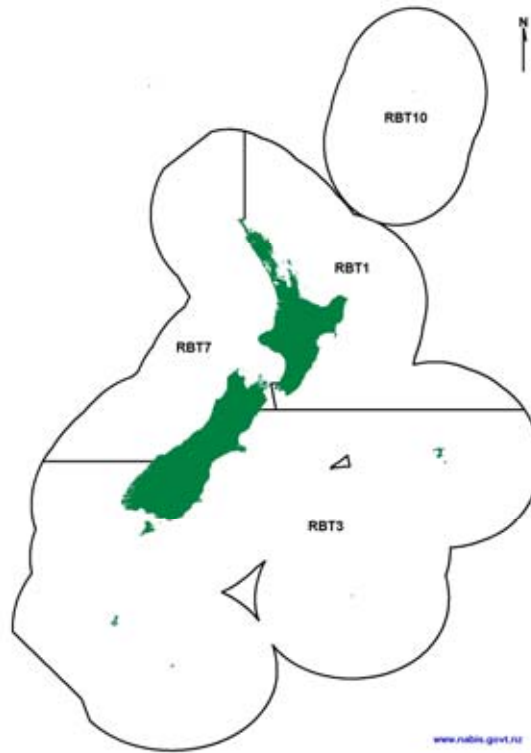
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### **Purpose of consultation**

- 1 The purpose of this paper is to set out the Ministry of Fisheries' initial position on management measures for redbait (*Emmelichthys nitidus*) for when it comes into the Quota Management System (QMS) on 1 October 2009. Specifically MFish seeks stakeholder views on:
  - a) The proposed total allowable catches (TACs) and total allowable commercial catches (TACCs);
  - b) MFish's proposal to not include recreational or customary Maori allowances;
  - c) The proposed deemed value rates for each redbait stock;
  - d) The proposal to add redbait to Schedule 5 of the Fisheries Act 1996 (the "Act") to allow a person to own quota up to the equivalent of 45% of the combined TACCs for every redbait stock;
  - e) Amending the Fisheries (Reporting Regulations) 2001 to include reporting codes for redbait stocks.

### **Executive summary**

- 2 Redbait stocks will enter the QMS on 1 October 2009. The Quota Management Areas (QMAs) for redbait are shown in Figure 1.
- 3 The Ministry of Fisheries (MFish) proposes two approaches upon which to base the initial setting of Total Allowable Catches (TACs), Total Allowable Commercial Catches (TACCs), allowances for customary and recreational fishers and other sources of fishing-related mortality for redbait stocks:
  - a) Under Option 1 the proposed TACs are based on the average of commercial catches reported over the past 5 fishing years (2003/04 – 2007/08). A five year period was chosen in order to reflect recent fishing activity and, presumably, current interest in the fishery.
  - b) Under Option 2 the proposed TACs are based on a figure around 10% higher than the highest reported annual commercial catch taken during the past 5 fishing years (2003/04 – 2007/08). This approach recognises that redbait catches are variable and that redbait may have been relatively lightly exploited to date. Setting TACs using this approach may provide some scope for developing the fishery as well as covering redbait taken as bycatch to other fisheries. Additionally, the biological characteristics of redbait (relatively fast-growing and short-lived) may support greater harvest levels.



**Figure 1. Map showing redbait (RBT) QMAs.**

- 4 For the RBT1 stock only MFish proposes a third option to set a TAC of 20 tonnes. The comparatively low TACs under options 1 and 2 could potentially result in a vessel taking the entire TAC in one trawl. Setting a comparatively high TAC of 20 tonnes would reduce the likelihood of this eventuality.
- 5 Options for the proposed TACs, TACCs and allowances for recreational and customary fishers, and other sources of fishing-related mortality for redbait stocks are listed in Tables 1 – 3 below.

**Table 1. Option 1 - Proposed TACs (tonnes), TACCs (tonnes), and allowances (tonnes) for redbait stocks based on average of commercial catches over the past 5 years.**

Stock	TAC	Customary allowance	Recreational allowance	Other sources of fishing-related mortality	TACC
RBT 1	2.8	0	0	0.1	2.7
RBT 3	1,233	0	0	62	1,171
RBT 7	2,078	0	0	104	1,974
RBT 10	0	0	0	0	0

**Table 2. Option 2 - Proposed TACs (tonnes), TACCs (tonnes), and allowances (tonnes) for redbait stocks based on highest reported commercial catch plus 10% from the past 5 years.**

Stock	TAC	Customary allowance	Recreational allowance	Other sources of fishing-related mortality	TACC
RBT 1	6.4	0	0	0.3	6.1
RBT 3	2,305	0	0	115	2,190
RBT 7	2,991	0	0	150	2,841
RBT 10	0	0	0	0	0

**Table 3. Option 3 - Proposed TAC (tonnes), TACC (tonnes), and allowances (tonnes) for RBT1 only.**

Stock	TAC	Customary allowance	Recreational allowance	Other sources of fishing-related mortality	TACC
RBT 1	20	0	0	1	19

6 Additionally, MFish proposes the following management measures:

- a) That the Fisheries (Reporting) Regulations 2001 be amended to include the following reporting codes for redbait that should be used when completing returns required by those regulations: RBT1, RBT3, RBT7 and RBT10;
- b) That redbait be added to Schedule 5 of the Act to allow a person to own up to 45% of the combined TACCs for redbait stocks;
- c) That the interim and annual deemed value rates for redbait stocks are set as follows:
  - o Interim deemed value rate - \$0.36 per kg (excluding GST)
  - o Annual deemed value rate \$0.71 per kg (excluding GST)
  - o Differential deemed value rates as shown in Table 4 below

**Table 4. Proposed differential deemed value rates for all redbait stocks**

Catch in excess of ACE holdings (%)	Proposed differential deemed value rate (\$ per kg)
20	0.852
40	0.994
60	1.136
80	1.278
100	1.420

## Regulatory impact analysis requirements

- 7 This Initial Position Paper (IPP) required a Regulatory Impact Statement (RIS), which was reviewed internally within MFish. The RIS is attached at the end of this paper.
- 8 A RIS is a summary of the key information that decision-makers need to know in order to make an informed decision as to which option is best by assessing the likely impact from making regulatory changes. MFish is not seeking stakeholder views on the attached RIS.
- 9 For more information on the Regulatory Impact Analysis Requirements please refer to the Treasury website, [www.Treasury.govt.nz](http://www.Treasury.govt.nz).

## The issue

- 10 On 5 March 2009 the Minister of Fisheries, by notice in the *New Zealand Gazette*, declared that redbait stocks would be subject to the QMS on and from 1 October 2009. Concurrently, the Minister also defined the QMAs (as shown in Figure 1 above), agreed that redbait would be subject to the 1 October fishing year and agreed that TACCs and annual catch entitlement be expressed in greenweight.
- 11 The Minister must now set a TAC, TACC and deemed value rates for all redbait stocks. He must also agree to any other management controls necessary to support the introduction of redbait stocks into the QMS on 1 October 2009.
- 12 MFish considers that the key issues affecting the setting of sustainability measures and other management controls for redbait stocks are as follows:
  - a) There are no estimates of current biomass, sustainable yield, or of stock status for any redbait stock. Stock status can either refer to the stock size in relation to the unfished biomass or to the biomass that can produce the maximum sustainable yield. While past and recent levels of reported catch have not given rise to known sustainability concerns, there is a degree of uncertainty and inadequacy in the best available information.
  - b) Redbait is a significant bycatch to a number of target species, principally jack mackerel and squid. A target fishery for redbait is also developing in New Zealand and some markets do exist for the species. Setting appropriate sustainability measures will be necessary to ensure the sustainable utilisation of the fishery while avoiding constraining the target fisheries.
  - c) The majority of redbait catch is taken using midwater trawls. Catch to date has not given rise to known adverse environmental impacts.
  - d) Almost all available information comes from catch reported by the fishing industry. However, MFish believes that reported catch figures may not be accurate in some cases. It is possible that reported landings may underestimate catches due to discarded fish not being reported or, alternatively, may overestimate catches due to other species being misreported as redbait.
  - e) Redbait is believed to be a relatively fast-growing and short-lived species.

## Proposed TACs, TACCs and allowances

### *Basis for setting TACs*

- 13 MFish proposes that TACs for redbait stocks be set under section 13 of the Act. Section 13(2) requires the Minister to set a TAC at a level that:
- a) maintains the stock at or above a level that can produce the maximum sustainable yield ( $B_{MSY}$ ), having regard to the interdependence of stocks; or
  - b) enables the level of any stock whose current level is below that which can produce the maximum sustainable yield to be altered –
    - i) in a way and at a rate that will result in the stock being restored to or above a level that can produce the maximum sustainable yield, having regard to the interdependence of stocks; and
    - ii) within a period appropriate to the stock, having regard to the biological characteristics of the stock and any environmental conditions affecting the stock; or
  - c) enables the level of any stock whose current level is above that which can produce the maximum sustainable yield to be altered in a way and at a rate that will result in the stock moving towards or above a level that can produce the maximum sustainable yield, having regard to the interdependence of stocks.
- 14 The current status of redbait stocks in relation to  $B_{MSY}$  is unknown. However, section 13(2A) enables TACs to be set under section 13 even where the current biomass of a stock and the biomass that produce a MSY are not able to be estimated reliably.
- 15 Given the absence of a target fishery for redbait prior to 2004, together with the limited targeting since then and the relatively consistent catch levels, MFish considers that redbait stocks are likely to be at a level that is at, or above,  $B_{MSY}$ . MFish considers, therefore, that it is appropriate to set the TACs under s 13(2)(a) of the Act.
- 16 Alternative options for setting the TACs are available:
- b) The Act allows TACs to be set under section 14 if the quota management stock is listed in Schedule 3. A stock can be added to Schedule 3 (stocks managed with an alternative total allowable catch) provided that it satisfies one of four criteria specified in section 14(8). MFish considers none of the criteria, which are detailed below, are applicable to redbait.
    - i) *It is not possible, because of the biological characteristics of the species, to estimate maximum sustainable yield (MSY).* MFish considers that MSY could be estimated for redbait stocks.
    - ii) *A national allocation for New Zealand has been determined as part of an international agreement.* There are no international agreements regarding redbait.
    - iii) *The stock is managed on a rotational or enhanced basis.* Redbait is not managed on this basis.

- iv) *The stock comprises 1 or more highly migratory species. Redbait is not a highly migratory species.*
- c) Section 14B of the Act enables the Minister to set a TAC that maintains a stock at a level below  $B_{MSY}$ , but above a level that ensures its long-term viability. The intention of section 14B is to ensure the harvest of a target stock is not constrained by the TAC of an associated bycatch species. Use of section 14B depends on owners of at least 95% of the quota shares for a stock proposing that it be used. As quota will not be allocated until 1 October 2009 this section cannot be used for the initial setting of TACs for redbait stocks.

17 Annex One provides additional information on statutory considerations.

### ***Basis for setting TACCs and other allowances***

- 18 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 prescribes that the Minister shall make allowances for Maori customary non-commercial interests, recreational fishing interests, and for any other sources of fishing-related mortality, before setting the TACC.
- 19 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, the Minister has the discretion to make allowances for various sectors based on the best available information.

### ***Recreational allowances***

- 20 MFish proposes no allowance be made for recreational fishing interests for any of the redbait stocks. MFish does not have information on the quantities (if any) of redbait that might be harvested by recreational fishers, but believes the current recreational catch to be zero. Redbait is unlikely to be accessible to non-commercial fishers given the depths where the species occurs.

### ***Customary Maori allowances***

- 21 MFish proposes no allowance for customary fishing interests for any of the redbait stocks. MFish does not have information on the quantities (if any) of redbait that might be harvested by customary fishers, and is unaware of any information indicating the existence of a customary take of redbait. MFish believes the current customary catch to be zero, for the reasons noted above.

### ***Allowances for other sources of fishing-related mortality***

- 22 Some level of fishing-related mortality is likely given the species is taken by trawling.
- 23 MFish proposes that an allowance of around 5% of the TAC for fishing-related mortality be made for the RBT1, RBT3 and RBT7 stocks. This is similar to the mechanism used in other fisheries to account for other sources of fishing-related mortality.

## Summary of MFish proposals

- 24 Options for the proposed TACs, TACCs and allowances for recreational and customary fishers, and other sources of fishing-related mortality for redbait stocks are listed in Tables 5 - 7.

**Table 5. Option 1 - Proposed TACs (tonnes), TACCs (tonnes), and allowances (tonnes) for redbait stocks based on average commercial catches over the 2003/04 – 2007/08 fishing years.**

Stock	TAC	Customary allowance	Recreational allowance	Other sources of fishing-related mortality	TACC
RBT 1	2.8	0	0	0.1	2.7
RBT 3	1,233	0	0	62	1,171
RBT 7	2,078	0	0	104	1,974
RBT 10	0	0	0	0	0

**Table 6. Option 2 - Proposed TACs (tonnes), TACCs (tonnes), and allowances (tonnes) for redbait stocks based on highest reported commercial catch plus 10% from the 2003/04 – 2007/08 fishing years.**

Stock	TAC	Customary allowance	Recreational allowance	Other sources of fishing-related mortality	TACC
RBT 1	6.4	0	0	0.3	6.1
RBT 3	2,305	0	0	115	2,190
RBT 7	2,991	0	0	150	2,841
RBT 10	0	0	0	0	0

**Table 7. Option 3 - Proposed TAC (tonnes), TACC (tonnes), and allowances (tonnes) for RBT1 only.**

Stock	TAC	Customary allowance	Recreational allowance	Other sources of fishing-related mortality	TACC
RBT 1	20	0	0	1	19

## Rationale for proposed TACs

- 25 The only available information upon which to base the initial TACs for redbait stocks is commercial catch data together with some limited biological information. The guidelines for determining TACs for new species introduced into the QMS provide that TACs may be set at levels based on consideration of known or estimated levels of catch (including catch by all sectors, and also other sources of fishing-related mortality). RBT3 and RBT7 catches best fit the criteria for a 'stable' fishery, where catches have been reported for an extended period, although varying considerably between years.
- 26 As detailed earlier there is no known level of redbait catch for customary Maori purposes or by recreational fishers.
- 27 NIWA was contracted by MFish to compile and summarise known fishery and biological information on redbait. In the report NIWA presents information indicating

that redbait is thought to be a relatively fast-growing and short-lived species. Information from Australian redbait indicates that:

- d) redbait grow rapidly in the first few years;
- e) redbait typically mature at 2-3 years; and
- f) maximum age ranges from 7 years to 10 years.

28 Taking account of the available information MFish proposes two approaches to setting redbait TACs:

- a) The approach used for **Option 1** is to set TACs based on the average of commercial catches from the past 5 years (2003/04 – 2007/08).
- b) The approach used for **Option 2** is to set TACs at a level that is 10% higher than the highest reported catch over the past 5 years (2003/04 – 2007/08).

29 Rationale for the Option 1 approach is that:

- a) it reflects recent fishing activity and current levels of interest in this species;
- b) it covers the period when redbait became an open access species; and
- c) it should be sufficient to cover redbait catches taken as bycatch to other fisheries.

30 MFish considers that Option 1 would pose the least risk to the sustainability of redbait stocks.

31 Rationale for Option 2 is that this approach recognises the variability of redbait catches and that redbait may have been relatively lightly exploited to date. Setting TACs using this approach may provide some scope for developing the fishery as well as covering redbait taken as bycatch to other fisheries. Additionally, the biological characteristics of redbait (relatively fast-growing and short-lived) may support greater harvest levels.

32 MFish considers that Option 2 may pose a higher risk than Option 1 to the sustainability of redbait stocks but that it will provide for greater utilisation opportunities.

33 For the RBT1 stock only MFish proposes a third option whereby the TAC is set at 20 tonnes. The rationale for this is that the comparatively low TACs under options 1 and 2 could potentially result in a vessel taking the entire TAC in one trawl. Setting a comparatively high TAC of 20 tonnes would reduce the likelihood of this eventuality.

34 Bringing redbait into the QMS and the subsequent allocation of rights should provide a more secure basis for investment in the utilisation and development of the fishery. A likely improvement in catch reporting, together with additional biological data and other information from the fishery, could provide a basis upon which a future review of the TAC for each redbait stock could be undertaken.

35 MFish considers that the proposed TACs under both options take into account the best available information on past catches and redbait biology and will ensure sustainability at least in the short term. Despite the limited available information, MFish considers that all proposed TACs should enable redbait stocks to be managed at, or above, a level

that can produce the MSY. Both options also provide for utilisation, although setting TACs based on Option 2 is likely to provide for additional utilisation opportunities i.e. some target fishing rather than just covering bycatch.

### *Reported commercial catches*

36 Reported RBT commercial landings for the fishing years 1993/94 – 2007/08 are summarised in Table 8. Landings data from each fishery management area has been grouped into the QMAs that will become effective on 1 October 2009.

**Table 8: Reported landings (greenweight tonnes) of redbait (from MFish catch effort database).**

Year	RBT 1	RBT 3	RBT 7	RBT10	Total
1993/94	0.5	1,676	297	-	1,974
1994/95	0.8	1,967	550	-	2,517
1995/96	0.4	1,532	474	-	2,007
1996/97	0.7	1,194	611	-	1,805
1997/98	3.5	1,497	525	-	2,025
1998/99	0.6	1,823	693	-	2,516
1999/00	1.1	2,392*	580	-	2,973
2000/01	0.3	938	745	-	1,684
2001/02	0.6	1,640	1,630	-	3,271
2002/03	0.6	1,218	2,092	-	3,311
2003/04	2.1	1,697	2,719*	-	4,419
2004/05	1.0	802	1,729	-	2,532
2005/06	2.3	2,095	1,934	-	4,031
2006/07	3.1	939	1,507	-	2,449
2007/08	5.8*	633	2,503	-	3,142

\* highest reported catch

37 Catches are most abundant from stocks RBT3 and RBT7. In all stocks except RBT10 there is considerable variability between years, the cause of which is not well understood. It is also possible that the reported landings may underestimate catches due to discarded fish not being reported or, alternatively, may overestimate catches due to other species being misreported as redbait. However MFish has no information on the extent to which reported catches may not reflect actual catches.

38 Small catches have been reported from RBT1 while no catch has been reported from RBT10.

39 When considered in conjunction with the statutory obligations regarding sustainability versus utilisation, environmental issues, and the biological characteristics of redbait, the catch data provides general guidance in setting the introductory TACs for redbait stocks.

### *RBT1*

40 As shown in Table 8, reported commercial landings of redbait in RBT1 are small compared to RBT3 or RBT7. Landings were greatest in 2007/08 at 5.8 tonnes, while landings in other years varied between 0.3 and 3.5 tonnes.

- 41 To date all redbait catches from RBT1 have been reported as bycatch in target fisheries such as rubyfish and cardinalfish. Reasons for the relatively small catches may include:
- c) RBT1 may be at the limit of redbait's distribution in New Zealand waters.
  - d) The jack mackerel fishery, which is the source of the greatest redbait bycatch nationwide, is a purse seine fishery in RBT1 but is a mid-water trawl fishery in all other parts of the country. Because purse seining takes place at the top of the water column this may mean that little fishing has been done in RBT1 over the depth range where redbait is most likely to be found.

#### *Option 1*

- 42 MFish proposes that the initial TAC for RBT1 under Option 1 be set at 2.8 tonnes with a corresponding TACC of 2.7 tonnes.
- 43 The average reported catch from RBT1 over the past 5 fishing years is 2.8 tonnes. MFish proposes to allocate 5% of the TAC to other sources of fishing-related mortality (0.1 tonnes). Under Option 1 the TACC for RBT1 would be 2.7 tonnes.
- 44 MFish notes that reported catches of RBT1 have exceeded the proposed Option 1 TACC (2.7 tonnes) twice during the past 5 years.

#### *Option 2*

- 45 MFish proposes that the initial TAC for RBT1 under Option 2 be set at 6.4 tonnes with a corresponding TACC of 6.1 tonnes.
- 46 The highest reported catch during the past 5 fishing years was 5.8 tonnes, which was taken during the 2007/08 fishing year. The reason for the elevated catch during this year is thought to be due to redbait being taken as bycatch because of additional fishing effort directed at rubyfish in fisheries management area 2 during that year.
- 47 Using the approach of adding 10% to the highest reported catch over the past 5 years gives an initial TAC of 6.4 tonnes. MFish proposes that 0.3 tonnes (5% of the TAC) be allocated to other sources of fishing-related mortality. Under Option 2 the TACC for RBT1 would be 6.1 tonnes.

#### *Option 3*

- 48 For this stock only MFish proposes a third option of setting the TAC at 20 tonnes with 1 tonne (5% of the TAC) allocated to other sources of fishing-related mortality and a corresponding TACC of 19 tonnes.
- 49 An analysis of trawl information indicates that it is not uncommon for more than 5 tonnes of redbait to be caught in a single tow. Despite the absence of large bags of redbait being reported in RBT1 to date MFish proposes this option to avoid the hypothetical situation where the entire TACC is taken in a single trawl. Setting a comparatively high TAC of 20 tonnes would reduce the likelihood of this eventuality.

## RBT3

- 50 Reported commercial landings of redbait in RBT3 have varied considerably over the past 5 fishing years. Landings were greatest in 2005/06 at 2,095 tonnes but have been as low as 633 tonnes in 2007/08, the most recent fishing year.
- 51 The reasons for such variability in landings are not well understood although a contributing factor is likely to be the relative abundance of, as well as the amount of fishing effort directed at, specific target species. RBT3 is mostly taken as a bycatch in several fisheries including jack mackerel (JMA), squid (SQU) and barracouta (BAR).
- 52 MFish notes that until 1 October 2004 it was not possible to target redbait due to the permit moratorium. All redbait catch reported up to that point was therefore taken as bycatch to other fisheries. Despite the moratorium being lifted there has only been a small number of instances of redbait being targeted in RBT3; 4 tows were reported in 2007 with an estimated catch of 59 tonnes and 3 tows were reported in 2008 with an estimated catch of 79 tonnes.
- 53 Table 9 shows the estimated catch of redbait taken in RBT3 by target species for the most recent 5 years only.

**Table 9: Estimated RBT3 catch (tonnes) by target species for the 5 most recent fishing years (from MFish catch effort database).**

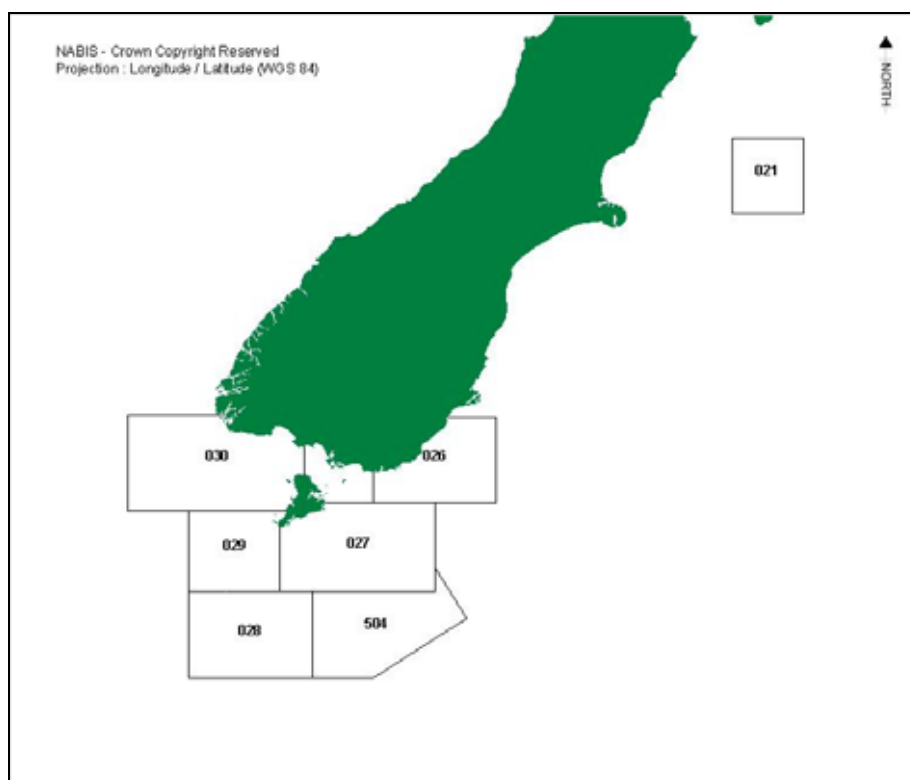
Year	Total Estimated RBT3 catch (tonnes)	Target species					
		JMA	SQU	BAR	HOK	RBT	Others
2003/04	1,569	129	1,247	183	3	0	6
2004/05	713	36	446	202	0	0	29
2005/06	1,920	999	297	613	0	0	11
2006/07	1,075	366	256	380	0	59	14
2007/08	550	259	69	135	0	79	6

- 54 In most of the past 5 years a significant amount of RBT3 is taken as a bycatch to the JMA fishery (up to 999 tonnes in 2005/06). MFish notes that historically, JMA3 catches peaked during the 1990s (10,000 - 20,000 tonnes caught annually) and have been considerably lower since 2000/01 (700 - 5,000 tonnes caught annually). However the reduced JMA3 catches do not always appear to result in RBT3 catches reducing in proportion.
- 55 The amount of RBT3 taken as bycatch to the SQU1T fishery also varies considerably (69 tonnes in 2007/08 to 1,247 tonnes in 2003/04). SQU1T abundance varies considerably, which affects landings (over the past 15 years annual landings have ranged between 13,000 - 49,000 tonnes). Like JMA, there does not appear to be a direct relationship between squid abundance and redbait landings. For example, landings of RBT3 recorded during 2004/05 were one of the lowest on record yet SQU1T landings that year were the highest on record.
- 56 Barracouta is the other primary target species that results in significant redbait bycatch. Again, the amount of redbait reported as bycatch to the barracouta fisheries over the past 5 years has varied considerably (135 tonnes in 2007/08 to 613 tonnes in 2005/06).

57 Analysis of spatial distribution of RBT catches also shows considerable variation. Over the past 5 years 97% of estimated catches of RBT3 was reported as being taken from just 7 statistical areas. This information is summarised in the table below while the statistical areas are shown in Figure 2.

**Table 10: Estimated RBT3 catch (tonnes) from statistical areas where 97% of estimated RBT3 catch has been reported over the past 5 fishing years (from MFish catch effort database).**

Year	Statistical area							Total
	28	21	29	27	30	504	26	
2003/04	1,213	0	163	60	18	38	32	1,525
2004/05	572	0	36	18	38	4	2	671
2005/06	848	698	227	93	10	11	9	1,896
2006/07	521	301	216	10	0	8	0.3	1,055
2007/08	198	316	13	1	0.1	0.2	1	529
Totals	3,352	1,315	655	182	67	62	44	



**Figure 2: Diagram showing location of the 7 statistical areas where 97% of estimated catch of RBT3 has been reported as being taken over the period 2003/04 – 2007/08.**

58 Table 10 shows that catches from the 7 main statistical areas can vary considerably from year to year. Overall, most catch was reported from statistical area 28. Yet catches from that area vary from 1,213 tonnes in 2003/04 to 198 tonnes in 2007/08. Similarly, there was no catch reported from statistical area 21 for the first two years but 698 tonnes was reported during 2005/06.

59 In summary, analysis of RBT3 catches does not indicate distinct relationships between redbait catches and abundance of, or effort directed at, the particular target fisheries

where it is taken as bycatch. However, MFish believes that the primary factors influencing RBT3 catches are likely to be a combination of the annual variability in abundance of target species such as SQU and JMA together with variability in effort directed at the BAR fishery.

#### *Option 1*

- 60 MFish proposes that the initial TAC for RBT3 under Option 1 be set at 1,233 tonnes with a corresponding TACC of 1,171 tonnes.
- 61 The average catch of RBT3 for the past 5 years is 1,233 tonnes. MFish proposes to allocate 5% of the TAC to other sources of fishing-related mortality (62 tonnes). Under Option 1 the TACC for RBT3 would be 1,171 tonnes.
- 62 MFish notes that reported catches of RBT3 have exceeded the proposed Option 1 TACC (1,171 tonnes) for 2 out of the past 5 years. A TACC set using this approach may be expected to constrain catches of target species during some years.

#### *Option 2*

- 63 MFish proposes that the initial TAC for RBT3 under Option 2 be set at 2,305 tonnes with a corresponding TACC of 2,190 tonnes.
- 64 The highest RBT3 catch reported during the past 5 years was 2,095 tonnes in 2005/06. Using the approach of adding 10% to the highest reported catch over the past 5 years gives an initial TAC of 2,305 tonnes. MFish proposes that 115 tonnes (5% of the TAC) be allocated to other sources of fishing-related mortality. Under Option 2 the TACC for RBT3 would be 2,190 tonnes.
- 65 As reported catches of RBT3 have not exceeded 2,190 tonnes during the past 5 years a TACC set using this approach may encourage development of the fishery.
- 66 Rationale for the Option 2 TAC includes the biology of the species (relatively fast-growing and short-lived) and the fact that because catches to date have varied considerably by both location and target species the stock is likely to have been relatively lightly exploited. It is therefore likely that the biomass of the stock is above that which can support the maximum sustainable yield and can sustain additional fishing effort.

#### *RBT7*

- 67 Reported commercial landings of redbait in RBT7 have shown some variation over the past 5 years. Landings were greatest in 2003/04 at 2,719 tonnes but only 1,507 tonnes was reported during 2006/07.
- 68 Historically, landings prior to 2001/02 were less than 1,000 tonnes per years but have been more than 1,000 tonnes per year since then.
- 69 In RBT7 the species is primarily taken as bycatch to the JMA fishery. Lesser quantities are taken in the BAR and HOK fisheries and some targeting has occurred since 2004/05. This information is summarised in Table 11 for the 5 most recent fishing years only.

**Table 11: Estimated RBT7 catch (tonnes) by target species for the 5 most recent fishing years only (from MFish catch effort database).**

Year	Total Estimated RBT7 catch (tonnes)	Target species				
		JMA	BAR	HOK	RBT	Others
2003/04	2,615	2,518	74	23	-	-
2004/05	1,450	938	436	24	35	17
2005/06	2,071	1,745	2	54	211	60
2006/07	1,211	1,129	69	8	-	5
2007/08	2,305	1,568	399	32	275	31

70 As stated above the JMA fishery is where most RBT7 is taken as bycatch. Catches of JMA7 prior to 2001/02 averaged around 14,000 tonnes per year. From 2001/02 onwards JMA7 catches increased and have ranged between 22,000 and 37,000 tonnes since then. This period of increased JMA7 catches coincides with the jump in reported RBT7 catches. MFish considers that the increase in fishing effort directed at JMA7 has resulted in increased RBT7 catches.

#### *Option 1*

- 71 MFish proposes that the initial TAC for RBT7 under Option 1 be set at 2,078 tonnes with a corresponding TACC of 1,974 tonnes.
- 72 The average catch of RBT7 for the past 5 years is 2,078 tonnes. MFish proposes to allocate 5% of the TAC to other sources of fishing-related mortality (104 tonnes). Under Option 1 the TACC for RBT7 would be 1,974 tonnes.
- 73 MFish notes that reported catches of RBT7 have exceeded the proposed Option 1 TACC (1,974 tonnes) for 2 of the past 5 fishing years. A TACC set using this approach may be expected to constrain catches of target species during some years.

#### *Option 2*

- 74 MFish proposes that the initial TAC for RBT7 under Option 2 be set at 2,991 tonnes with a corresponding TACC of 2,841 tonnes.
- 75 The highest RBT7 catch reported to date was 2,719 tonnes in 2003/04. Using the approach of adding 10% to the highest reported catch over the past 5 years gives an initial TAC of 2,991 tonnes. MFish proposes that 150 tonnes (5% of the TAC) be allocated to other sources of fishing-related mortality. Under Option 2 the TACC for RBT7 would be 2,841 tonnes.
- 76 Rationale for the Option 2 TAC includes the biology of the species (relatively fast-growing and short-lived) and the fact that because catches to date have varied considerably by both location and target species the stock is likely to have been relatively lightly exploited. It is therefore likely that the biomass of the stock is above that which can support the maximum sustainable yield and can sustain additional fishing effort.

## RBT10

- 77 MFish proposes a TAC and a TACC of 0 tonnes for RBT10.
- 78 Redbait has not been reported from QMA10 and most of the area is deeper than 1,000m, which is outside the depth range where redbait occurs. Additionally QMA10 is subject to the Fisheries (Benthic Protection Areas) Regulations 2007, which means that bottom trawling is prohibited and restrictions are placed on mid-water trawling.

## Other management measures

### *Amendments to reporting regulations*

- 79 The introduction of redbait into the QMS requires an amendment to the Fisheries (Reporting) Regulations 2001 to prescribe reporting codes for redbait stocks that commercial fishers must use when completing their statutory catch returns. Specifically, MFish proposes to amend Table 1 of Part 1 of Schedule 3 of those regulations to incorporate the following reporting codes in line with the QMAs for redbait: RBT1, RBT3, RBT7 and RBT10.

### *Addition to Schedule 5 of Fisheries Act 1996 (aggregation limits)*

- 80 MFish proposes that redbait be added to Schedule 5 of the Act to allow a person to own up to 45% of the combined TACCs for redbait stocks.
- 81 The default restriction on quota aggregation is that no person may own quota for a species that is equivalent to more than 35% of the combined TACCs for that species. The only exceptions are for rock lobster, paua and bluenose (where stricter restrictions apply) as well as the species listed on Schedule 5 of the Act, for which the aggregation limit is 45%.
- 82 In 2006 the Minister of Fisheries agreed to add several additional species to Schedule 5. The Minister also agreed to an analytical process to be used in future assessments of a species' suitability for addition to Schedule 5. A diagram of that process is presented in Annex Two while the application of the process to redbait is presented below.
- 83 The process involves determining whether a species fits into one of three categories (Steps 1, 2 or 3) and then further examination to ensure that unwanted consequences are unlikely (Steps 4, 5 and 6).

### *Application of analytical process to redbait*

#### *Step 1 – Does species require substantial investment to harvest or process?*

- 84 Most redbait is taken by the factory trawler fleet. For this reason MFish considers that redbait does require substantial investment to harvest or process and therefore fits into this category.

#### *Step 2 – Does species require substantial investment for science?*

85 Records of redbait catches extend back a number of years. MFish considers that redbait does not fit into this criteria as it is an existing fishery.

*Step 3 – Would quota aggregation benefit international competitiveness?*

86 MFish considers this criteria does apply to redbait, which is a bulk product where New Zealand producers may be competing with enterprises operating overseas that have access to subsidies, lower labour costs, reduced transportation costs or other advantages that reduce the per unit cost of production. Additionally, some New Zealand operators are attempting to develop a market for redbait overseas. Access to greater quantities of product may be advantageous for this process. The ability to harvest a greater proportion of a species may be required to cover these investment costs.

*Step 4 – Would increased aggregation limit availability of bycatch ACE?*

87 The process states that no species should be listed in Schedule 5 if it is considered to be a significant bycatch species only, or is one target species in a multi-species target fishery, unless in either instance all major species in the catch mix are included on the Schedule.

88 Redbait is a significant bycatch species although there is a minor target fishery. However all species in the catch mix associated with redbait (BAR, JMA, SQU and HOK) are already included in the Schedule. Redbait therefore meets the “unless all major species in the catch mix are included in the Schedule” rule associated with this criteria; it would be inconsistent to not include redbait in the Schedule.

*Step 5 – Is the species a ‘nursery’ or ‘stepping stone’ species?*

89 MFish does not consider redbait to be a ‘nursery’ or ‘stepping stone’ species as it is not a species that requires a relatively low initial investment.

*Step 6 – Would increased aggregation markedly reduce the pool of willing purchasers of quota?*

90 MFish does not consider this criteria is relevant to redbait.

**Conclusion**

91 MFish considers that redbait fits the categories detailed in Steps 1 and 3 and that the unwanted consequences detailed in Steps 5 and 6 are not relevant. Additionally, all other major species in the catch mix associated with redbait are already listed on Schedule 5 (Step 4). For these reasons MFish concludes that redbait is suitable for addition to Schedule 5 of the Act.

## *Deemed Values*

- 92 Under s 75 (1) of the Act, the Minister of Fisheries is required to set interim and annual deemed value rates for each quota management stock. 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 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.
- 93 Redbait (RBT) falls under the “all other” fish stock category as set out in the deemed value review standard, which is available to view on the MFish website. Fishstocks in this category are to have their annual deemed value rate set above ACE price and below landed price to encourage fishers to balance their catch with ACE rather than pay deemed values. Currently redbait is not in the QMS, meaning that there is no ACE price information available that can be used to set deemed value rates.
- 94 Therefore, annual deemed value rates for species in this category will be set based on a proportion of the estimated landed price in the previous year. The estimated landed price used for redbait for this analysis is \$1.42 per kg, which is based on the reported market value for redbait at the Auckland Fish Market.
- 95 Rates will be adjusted, as required, when information about ACE price becomes available. Currently deemed values for all species are reviewed on an annual basis. When information becomes available on the ACE price for the redbait stocks, this will be fed into the annual deemed value review process to ensure the correct deemed value rates are set for all redbait stocks.
- 96 The proposed annual deemed value for the 2009/10 fishing year will be set at 50% of the estimated landed price (\$1.42 per kg). In adopting this approach, MFish proposes setting an interim deemed value of \$0.36 per kg (excluding GST) and an annual deemed value of \$0.71 per kg (excluding GST) for all redbait stocks for the 2009/10 fishing year.
- 97 MFish is also proposing to apply the differential annual deemed values set out below to all redbait stocks for the 2009/10 fishing year.

**Table 12: Proposed differential deemed value rates for RBT1, RBT3, RBT7 and RBT10**

Proposed differential rates	
Catch in excess of ACE holdings (%)	Proposed deemed value rates for RBT1, RBT3, RBT7 and RBT10 (\$/kg)
20	0.852
40	0.994
60	1.136
80	1.278
100	1.420

## *Environmental effects of harvesting methods for redbait*

- 98 MFish does not propose to introduce any additional measures to address specifically the environmental effects of the harvesting methods used to take redbait. Over 90% redbait is taken as bycatch in mid-water trawls, which is a method that does not significantly affect the benthic environment. At this stage, there are no known habitats of particular

significance for fisheries management that are likely to require protection from fishing for redbait.

- 99 Most redbait is taken by large factory trawlers, all of which are required to deploy mandatory seabirds scaring devices and to follow Vessel Management Plans (VMPs). The purpose of VMPs is to detail the specific measures a vessel should take to avoid interactions with seabirds. Because of existing measures there is no need for additional seabird mitigation measures to be created specifically for the redbait fishery.
- 100 The vessels that take redbait are also subject to the Marine Mammal Operational Procedure (MMOP), the purpose of which is to reduce the risk of incidental captures of marine mammals during deepwater fishing operations.
- 101 MFish notes that capture of common dolphins by vessels targeting jack mackerel off the North Island west coast is sometimes a problem. Redbait is likely to be taken in that region as well. The MMOP contains specific measures that address common dolphin captures in the North Island west coast JMA fishery and MFish considers those measures are equally applicable to vessels targeting redbait. The MMOP will be updated to ensure vessels targeting redbait also adopt the measures that apply to the jack mackerel fishery. No additional measures in relation to marine mammals are proposed.
- 102 MFish notes that although there has been a limited amount of target fishing for redbait there appears to be little associated bycatch. Redbait aggregate, and operators appear to be able to take large “clean” bags of redbait. There may be small amounts of bycatch of QMS species such as BAR, JMA and EMA. The QMS provides mechanisms for ensuring sustainability of such bycatch.

## Preliminary recommendations

103 MFish proposes that the Minister of Fisheries:

EITHER

### Option 1

- a) **Agrees** to set a TAC of 2.8 tonnes for RBT1 and within this set:
  - i) a customary allowance of 0 tonnes;
  - ii) a recreational allowance of 0 tonnes;
  - iii) an allowance for other fishing-related mortality of 0.1 tonnes; and
  - iv) a TACC of 2.7 tonnes.
- b) **Agrees** to set a TAC of 1,233 tonnes for RBT3 and within this set:
  - i) a customary allowance of 0 tonnes;
  - ii) a recreational allowance of 0 tonnes;
  - iii) an allowance for other fishing-related mortality of 62 tonnes; and
  - iv) a TACC of 1,171 tonnes.
- c) **Agrees** to set a TAC of 2,078 tonnes for RBT7 and within this set:
  - i) a customary allowance of 0 tonnes;
  - ii) a recreational allowance of 0 tonnes;
  - iii) an allowance for other fishing-related mortality of 104 tonnes; and
  - iv) a TACC of 1,974 tonnes.
- d) **Agrees** to set a TAC of 0 tonnes for RBT10 and within this set:
  - i) a customary allowance of 0 tonnes;
  - ii) a recreational allowance of 0 tonnes;
  - iii) an allowance for other fishing-related mortality of 0 tonnes; and
  - iv) a TACC of 0 tonnes.

OR

### Option 2

- a) **Agrees** to set a TAC of 6.4 tonnes for RBT1 and within this set:
  - v) a customary allowance of 0 tonnes;
  - vi) a recreational allowance of 0 tonnes;
  - vii) an allowance for other fishing-related mortality of 0.3 tonnes; and
  - viii) a TACC of 6.1 tonnes.

- e) **Agrees** to set a TAC of 2,305 tonnes for RBT3 and within this set:
  - i) a customary allowance of 0 tonnes;
  - ii) a recreational allowance of 0 tonnes;
  - iii) an allowance for other fishing-related mortality of 115 tonnes; and
  - iv) a TACC of 2,190 tonnes.
- f) **Agrees** to set a TAC of 2,991 tonnes for RBT7 and within this set:
  - i) a customary allowance of 0 tonnes;
  - ii) a recreational allowance of 0 tonnes;
  - iii) an allowance for other fishing-related mortality of 150 tonnes; and
  - iv) a TACC of 2,841 tonnes.
- g) **Agrees** to set a TAC of 0 tonnes for RBT10 and within this set:
  - i) a customary allowance of 0 tonnes;
  - ii) a recreational allowance of 0 tonnes;
  - iii) an allowance for other fishing-related mortality of 0 tonnes; and
  - iv) a TACC of 0 tonnes.

OR

**Option 3 (RBT1 only)**

- b) **Agrees** to set a TAC of 20 tonnes for RBT1 and within this set:
  - v) a customary allowance of 0 tonnes;
  - vi) a recreational allowance of 0 tonnes;
  - vii) an allowance for other fishing-related mortality of 1 tonne; and
  - viii) a TACC of 19 tonnes.

AND

- h) **Agrees** to amend the Fisheries (Reporting) Regulations 2001 to include the redbait reporting codes to be used by commercial fishers when completing their statutory catch returns: RBT1, RBT3, RBT7 and RBT10;
- i) **Agrees** to add redbait to Schedule 5 of the Fisheries Act 1996 to enable a person to own quota equivalent to 45% of the combined total allowable commercial catches for redbait; and
- j) **Agrees** to set an annual deemed value rate of \$0.71/kg (excluding GST), an interim deemed value rate of \$0.36/kg (excluding GST), and the differential deemed value rates detailed in the table below for all redbait stocks from 1 October 2009.

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Proposed differential rates	
Catch in excess of ACE holdings (%)	Proposed deemed value rates for RBT1, RBT3, RBT7 and RBT10 (\$/kg)
20	0.852
40	0.994
60	1.136
80	1.278
100	1.420

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# **REGULATORY IMPACT STATEMENT**

## **Regulatory amendments to support introduction of redbait into the Quota Management System**

### **Executive summary**

Redbait stocks will be introduced into the Quota Management System (QMS) on 1 October 2009. MFish proposes two consequential regulatory amendments in order to support the introduction of redbait into the QMS. First, the Fisheries (Reporting) Regulations 2001 need to be amended to incorporate the reporting codes to be used by commercial fishers when redbait comes into the QMS. This is an administrative regulation that applies to all other stocks in the QMS. Secondly, MFish is proposing that redbait be added to Schedule 5 of the Fisheries Act 1996 (the "Act"), which will allow a person to own quota equivalent to 45% of the combined total allowable commercial catches (TACC) for redbait stocks. Many of the species that are associated with redbait are already in this Schedule. Addition of redbait is consistent with the policy relating to addition of further species to this Schedule.

### **Adequacy statement**

This Regulatory Impact Statement has been reviewed by MFish's Regulatory Impact Analysis Review Committee and is considered adequate according to the criteria agreed by Cabinet.

### **Status quo and Problem**

Redbait stocks will enter the QMS on 1 October 2009. The reporting codes to be used by commercial fishers from that date will be different from those currently in use. Reporting codes are specified in the Fisheries (Reporting) Regulations 2001 and it is necessary to update these regulations. Reporting codes for all QMS species are specified in the regulations.

Unless a species is added to Schedule 5 of the Act the default is that a person will only be allowed to own quota equivalent to 35% of the combined TACCs. Many of the species that are associated with the redbait fishery are already listed in Schedule 5. It would be inconsistent with the policy guiding the addition of additional species to Schedule 5 if redbait were not also added to this Schedule.

### **Objectives**

The objective is to ensure that the regulatory framework in place when redbait stocks enter the QMS on 1 October 2009 is consistent with all other QMS species.

### **Alternative options**

There are no alternative options.

### **Preferred option**

With regard to reporting codes, MFish's preferred option is that the codes for redbait are specified in the Fisheries (Reporting) Regulations 2001. The reporting codes for all other QMS species are specified in those regulations and it would be inconsistent if redbait reporting codes were not added.

With regard to quota aggregation, MFish's preferred option is that redbait is added to Schedule 5 of the Act. This option is preferred because redbait meets the policy criteria

developed by MFish and agreed to by the Minister of Fisheries in 2006 relating to addition of species to this Schedule.

There are no compliance costs associated with either of these proposals and no existing rules that become redundant.

### **Implementation and review**

Review of the Fisheries (Reporting) Regulations 2001 in relation to reporting codes for redbait will only be necessary if the quota management areas for redbait change at some point in the future.

Once listed on Schedule 5 of the Act it is possible to review whether retaining a species on that Schedule is appropriate. A review would likely be initiated by stakeholders.

MFish proposes that both regulatory amendments come into effect at the same time as redbait stocks enter the QMS i.e. 1 October 2009. Stakeholders will be informed on the outcome of these proposals once decisions have been made by Cabinet.

### **Consultation**

Stakeholders are aware of the Minister's decision to introduce redbait stocks into the QMS. However no specific preliminary consultation on these proposals has been undertaken.

This IPP will be available for comment on MFish's website. Notification of its release will also be sent to MFish's wider stakeholder list.

# ANNEX ONE

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## Statutory Considerations

The following statutory considerations have been taken into account in evaluating the management options as proposed in this document.

- c) The purpose of the Act (s 8) is to provide for the utilisation of fisheries resources while ensuring sustainability. The management proposals seek to ensure sustainability of the stocks by setting for each a TAC and other appropriate measures. Utilisation is provided for by way of setting appropriate allowances for commercial, recreational and customary fishers. Section 8 also requires that social and economic effects be considered. This document proposes setting TACs to provide for utilisation of the redbait resource, while taking an approach that reflects the absence of information on stock status and yield and the uncertainty in the available commercial catch data.
  - k) Section 10 sets out information principles that are to be taken into account when setting a sustainability or utilisation measure, such as TACs and TACCs for redbait. Section 10 states that all persons exercising or performing duties, or powers under this Act, in relation to the utilisation of fisheries resources or ensuring sustainability, shall take into account the following information principles:
    - i) Decisions should be based on the best available information.
    - ii) Decision makers should consider any uncertainty in the information available in any case.
    - iii) Decision makers should be cautious when information is uncertain, unreliable, or inadequate.
    - iv) The absence of, or any uncertainty in, any information should not be used as a reason for postponing or failing to take any measure to achieve the purpose of this Act.

The information principles are particularly important in relation to redbait stocks considered in this document as the status of these stocks remains unknown. MFish has adopted the best available information and adhered to the principles of caution in the face of uncertain or inadequate data in considering the management options for these stocks.

- l) The Act prescribes three possible harvest strategies in setting a TAC. MFish considers it appropriate to manage redbait stocks under s 13(2)(a). This requires the TAC to be set at a level that maintains stock biomass, or moves it towards, a level that is at or above the level that can produce the maximum sustainable yield (MSY), having regard to the interdependence of stocks. There is currently no stock assessment information to indicate whether or not redbait stocks are at, above, or below a level that can produce MSY. However, given the species' biology and catches to date, MFish considers that redbait stocks are likely to be at a level that is at or above the level that can produce the MSY. Given the limited information available, MFish considers

that the proposed TACs reflect the appropriate level of catch to maintain redbait stocks at or above the  $B_{MSY}$  level.

- m) In regard to the interdependence of stocks (s 13(2)), redbait are no doubt associated with other species within the benthic ecosystem. However, MFish is not aware of any particular species inter-relationships that affect the setting of TACs at this time.
- n) Section 11(1)(c) requires that the natural variability of the stock concerned is taken into account when setting or varying a sustainability measure such as a TAC. Apart from catch information, MFish does not have information on the natural variability of redbait stocks. However, MFish has proposed two approaches to setting TACs that are both likely to be cautious, as described previously. Both approaches should ensure harvesting levels will not contribute to a sustainability risk if there is high natural variability of redbait stocks due to natural fluctuations and environmental conditions.
- o) Section 9 requires the Minister to take into account the following environmental principles:
  - i) Associated or dependent species should be maintained above a level that ensures their long-term viability (s 9(a)).
  - ii) Biological diversity in the aquatic environment should be maintained (s 9(b)).
  - iii) Habitat of particular significance for fisheries management should be protected.

The available information does not suggest that past fishing or future fishing at the proposed TAC levels is likely to pose risks to the viability of any associated or dependent species, or to the maintenance of biodiversity of the aquatic environment. Habitats of particular significance for fisheries management have not been identified within the areas and depths where fishing for redbait is considered likely.

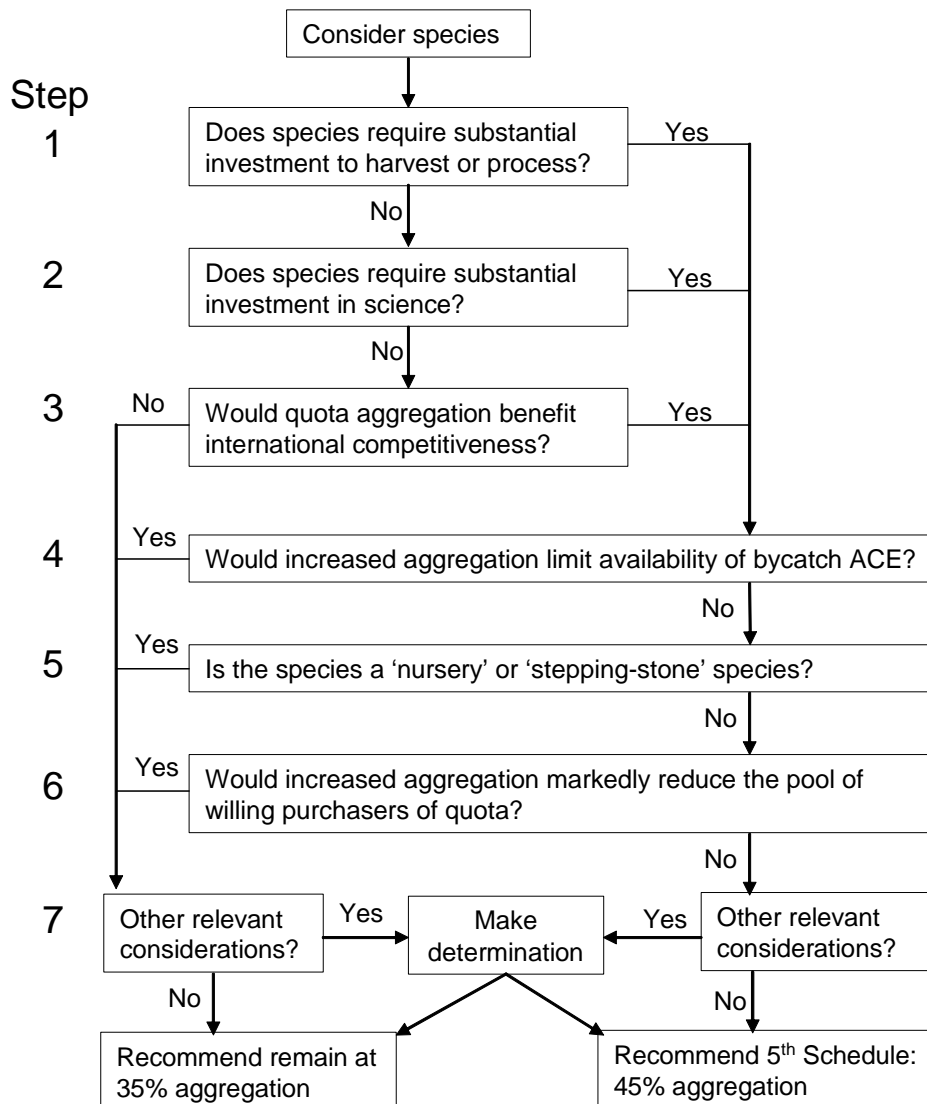
- p) There is a wide range of international obligations relating to fishing (including sustainability and utilisation of fishstocks and maintaining biodiversity). MFish considers the s 5 considerations arising from New Zealand's international obligations and the provisions of the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992 are adequately addressed by the management proposals for redbait stocks, particularly with the introduction of TACs to ensure sustainable use of the resource. MFish is not aware of any issues concerning international obligations and the provisions of the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992 that will result from the proposed TACs and TACCs for redbait.
- q) Section 11(1)(b) requires that existing controls be taken into account when setting or varying a sustainability measure such as a TAC. There are no existing controls that are relevant to setting the TACs for redbait stocks (no size limits, bag limits, catch limits, or other controls).
- r) Section 11(2) requires the consideration of various other matters relating mainly to planning documents. MFish is not aware of any considerations in any regional policy statement, regional plan or proposed regional plan under the Resource Management Act 1991 or any management strategy or

management plan under the Conservation Act 1987 that are specifically relevant to setting TACs for redbait stocks. Similarly, in terms of section 11(2A), MFish is not aware of any fisheries or conservation services, relevant fisheries plans, or any decisions not to require conservation or fisheries services, that are relevant to setting TACs for redbait stocks.

- s) As required under s 11(2)(c), MFish considers that the proposals for redbait meet the requirements of ss 7 and 8 of the Hauraki Gulf Marine Park Act 2000. Implementation of catch limits and associated measures for redbait stocks on entry into the QMS will allow for the sustainable utilisation of the species.
- t) Sections 21(1)(a) & (b), 21(4)(a) & (b) and 21(5) require the Minister to allow for non-commercial fishing interests (recreational and customary), and other mortality to the stock caused by fishing. The proposed TACs reflect the likelihood that there is no customary and recreational fishing for redbait, and certainly there is no information to suggest otherwise.
- u) Section 21(4) requires that when considering the proposed allowances for customary non-commercial interests, the Minister must take into account any mātaimai reserve or s186A closure in the relevant QMA. The proposed zero allowances for customary non-commercial fishing reflect the absence of any knowledge of customary fishing for redbait. MFish does not consider the zero allowances proposed for customary harvest will detract from the intent of any mātaimai or s 186A closures presently in place.
- v) Section 21(5) requires that when considering the proposed allowances for recreational interests, the Minister must take into account any regulations that prohibit or restrict fishing under s 311 (area closures). Closures under s 311 have not been implemented to date.

## ANNEX TWO

### Analytical process to assess species' suitability for addition to Schedule 5 of Fisheries Act 1996.



## PART 3: SUBMISSIONS

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- 1 MFish received submissions on the IPP entitled “Management measures relating to introduction of redbait (RBT) into QMS on 1 October 2009” from:
  - Graham Metzger
  - The New Zealand Seafood Industry Council Ltd (SeaFIC)
  - Sanford Limited
  - Te Ohu Kai Moana Trustee Limited (TOKMTL)
  - United Fisheries Limited (UFL)
- 2 Submissions are attached below.

## SUBMISSIONS RECEIVED

---

43 Henderson St  
Bluff 12-5-2009,

Tracey Steel,  
Ministry of Fisheries,  
P.O.Box 1020,  
Wellington 6140.



Dear Tracey,

Regarding the proposed introduction of Redbait into the Quota Management System, We would like to draw your attention to the fact that part of the Settlement with Ngai Tahu, known as the Sealord Deal, states that ALL species to be introduced into the quota system will have 20 % set aside for Ngai Tahu, To our knowledge the legislation made no exceptions,

If this is a fact it would seem that what is proposed is another new injustice being added to that legislation - the legislation that was put in place to mitigate old past injustices.

Using your reasoning that there is no History of our people harvesting Redbait as a base, we did a study of paua and could find no History of a traditional pakeha harvest of paua so would suggest that there may be a way forward by doing a swap of what should be the Ngai Tahu quota of Redbait in exchange for paua quota.

Whatever takes place we hope it is by agreement in the true sense of partnership that we thought we had agreed on at the time when all Courts ruled that all fish were Customary Fish.

Yours Faithfully,  
Graham Metzger.

A handwritten signature in cursive script that reads 'Graham Metzger'.



**SEAFOOD INDUSTRY  
COUNCIL**

The New Zealand Seafood Industry Council Ltd

## **Submission**

**Management measures relating to  
introduction of redbait into the QMS on  
1 October 2009**

**May 2009**

Thank you for the opportunity to make comment on the proposed management measures relating to introduction of redbait into the QMS on 1 October 2009. This submission has been prepared by the New Zealand Seafood Industry Council on behalf of the seafood industry. This submission has been compiled by SeaFIC staff in consultation with our shareholders.

SeaFIC welcomes the pragmatic approach to the setting of TACs and TACCs for these stocks which acknowledges that introduction into the QMS was based on the need to better provide for utilisation in the light of the increasing proportion of processed state of redbait and developing offshore markets.

SeaFIC supports:

- Option 2 and for the setting of TACs and option 3 for the setting of TAC for RBT 1
- The proposal not to include recreational or customary allowances and the use of around 5% of the TAC for fishing related mortality.
- The proposal to add redbait to Schedule 5 of the Fisheries Act to allow a person to own quota up to the equivalent of 45% of the combined TACCs for every redbait stock
- Amending the Fisheries (Reporting) Regulations 2001 to include reporting codes for redbait.

With regard to the setting of deemed values SeaFIC is aware that some industry members are concerned that the Auckland fish market price may not reflect the price received for the majority of redbait caught and processed in New Zealand. We recommend that the Ministry approach a range of companies directly for the FOB price for redbait and other market information in their assessment of deemed values.



21 May 2009

Ministry of Fisheries  
P O Box 1020  
WELLINGTON

Attention: Tracey Steel ([tracey.steel@fish.govt.nz](mailto:tracey.steel@fish.govt.nz))

Dear Tracey

**Introduction of New Species into the Quota Management System 1 October 2009,  
Redbait – TAC and other management controls**

**Redbait** (*Emmelichthys nitidus*) RBT

1. Sanford support the introduction of redbait (RBT) into the Quota Management System (QMS) on 1 October 2009.
2. We believe that moving to a rights-based regime under the QMS for redbait will enable the best opportunity for the fishery to develop and provide for economic well-being whilst ensuring sustainability.

*TAC and TACC setting*

3. Sanford support option 2 of the IPP for RBT3 and RBT7, and option 3 for RBT1 (Table 1. below). Recognising that the TACs for RBT3 and RBT7 are based on a figure approximately 10% higher than the highest reported annual catch in the past 5 fishing years (option 3 for RBT1 setting the TAC even higher). We agree that to date this fishery has been lightly exploited, and that this approach provides for scope to develop a fishery whilst providing for bycatch in non-target fisheries. We note that the biological characteristics of redbait (relatively fast-growing and short lived) may support even greater harvest yields in the future.

Table 1.

Stock	TACC (tonnes)
RBT1	6.1
RBT3	2,190
RBT7	2,841
RBT10	0

*Schedule 5 – Aggregation Limits*

4. Sanford support the inclusion of RBT to Schedule 5 of the Fisheries Act 1996, to enable RBT quota share ownership to be up to 45% of combined TACCs for redbait stocks.

22 JELlicoe ST, AUCKLAND 1001, NEW ZEALAND.  
PO BOX 443, AUCKLAND 1015. EMAIL [info@sanford.co.nz](mailto:info@sanford.co.nz)  
TEL +64 (9) 379 4720, FAX +64 (9) 300 3175.



*Interim and Annual Deems Values*

- Sanford note that the annual deemed value rate proposed in the IPP is 50% of the estimated landed price (\$1.42/kg) obtained from the domestic market. Sanford add that there are significant volumes of RBT exported annually which are obtaining equivalent FOB export values between US\$700 – \$750 per tonne (NZ\$/kg\$1.23-\$1.32).

Please do not hesitate to contact the undersigned should you wish to discuss this submission further.

Kind Regards  
**SANFORD LIMITED**

Andrew Bond  
Industry Liaison Manager

3 June 2009

Tracey Steel  
Ministry of Fisheries  
PO Box 1020  
Wellington 6140

Email: [tracey.steel@fish.govt.nz](mailto:tracey.steel@fish.govt.nz)

Tena koe Tracey

### Management measures for redbait

This submission from Te Ohu Kaimoana responds to MFish's Initial Position Paper: "*Management measures relating to the introduction of redbait into the quota management system on 1 October 2009*".

Redbait is to be introduced into the quota management system (QMS) on 1 October 2009. The MFish paper contains options and recommendations relating to its management including:

- Total Allowable Catches for the four quota management areas (QMAs)
- reporting codes
- aggregation limits
- deemed values.

We note that MFish does not propose to introduce any additional measures to address environmental effects, given that 90% of redbait is taken in mid-water trawls.

### Recommendations

Te Ohu Kaimoana:

1. supports option 3 for establishing the TAC for RBT1 as 20 tonnes, consisting of:
  - a. a customary allowance of 0 tonnes
  - b. a recreational allowance of 0 tonnes
  - c. an allowance for other fishing-related mortality of 1 tonne; and
  - d. a TACC of 19 tonnes.
2. supports option 2 for establishing the TAC in RBT 3 as 2,305 tonnes, consisting of:
  - a. a customary allowance of 0 tonnes
  - b. a recreational allowance of 0 tonnes
  - c. an allowance for other fishing-related mortality of 115 tonnes; and
  - d. a TACC of 2,190 tonnes.

3. supports option 2 for establishing the TAC in RBT 7 as 2,991 tonnes, consisting of:
  - a. a customary allowance of 0 tonnes
  - b. a recreational allowance of 0 tonnes
  - c. an allowance for other fishing-related mortality of 150 tonnes; and
  - d. a TACC of 2,841 tonnes.
4. supports a TAC of 0 tonnes in RBT 10.
5. notes that we would revise our position on recreational and customary allowances if we were to receive information from iwi that suggests that higher allowances should be made.
6. supports amending the Fisheries (Reporting) Regulations 2001 to include the redbait reporting codes to be used by commercial fishers when completing their statutory catch returns: RBT 1, RBT3, RBT7 and RBT10.
7. supports redbait being added to Schedule 5 of the Fisheries Act 1996 to enable a person to own quota equivalent to 45% of the combined total allowable commercial catches for redbait.
8. opposes an annual deemed value rate of \$0.71/kg (excl GST) on the basis that the assumed port price on which it is based is too high and instead, recommends a deemed value rate of no more than \$0.50/kg, with an appropriate interim deemed value rate and differential deemed value rates from 1 October 2009.

Our more detailed comments on each of the proposed measures are set out below.

#### **Total Allowable Catch/Total Allowable Commercial Catch (TAC/TACC)**

Four QMAs have been gazetted for redbait: RBT 1, 3, 7 and 10. MFish's proposals and our comments are summarised below.

##### *RBT 1, 3 and 7*

Two options that could guide TAC/TACC setting for RBT 1, 3 and 7 are provided. The first involves setting the TAC/TACC based on the average of commercial catches reported over the last 5 fishing years (2003/04 – 2007/08). MFish comment that a five year period was chosen in order to reflect recent fishing activity and presumably current interest in the fishery.

The second involves setting the TAC/TACC based on a figure around 10% higher than the highest reported annual commercial catch taken during the past 5 fishing years (2003/04 – 2007/08). MFish comments that this approach recognises that redbait catches are variable and that redbait may have been relatively lightly exploited to date. In addition, they comment that the second approach may provide some scope for developing the fishery as well as covering redbait taken as by-catch to other fisheries. The biological characteristics of redbait (relatively fast-growing and short-lived) may support greater harvest levels.

As far as RBT 3 and 7 are concerned, we believe it would be appropriate to set an initial TAC in line with option 2. This would provide more appropriately for utilisation while still providing for sustainability taking into account the biological characteristics of redbait. We note that it would better provide for the development of the fishery as a target fishery – one of the main reasons for its introduction into the QMS.

#### *RBT 1 – alternative option*

MFish proposes an alternative option for RBT 1. Given that recent catch is low compared to that in RBT 3 and 7, MFish points out that under either option 1 or 2, the amount that would be set for RBT1 (2.7 or 6.1 t respectively) could still be taken in a single trawl. They propose a TAC of 20t with a TACC of 19t. Te Ohu supports this approach – acknowledging that there is scope to further increase the TAC/TACC as we gain more knowledge of this stock.

#### *RBT 10*

We note that catches of redbait have not been reported from RBT 10 and that most of the area is deeper than 1,000m, which is outside the depth range for redbait. In addition, the Fisheries (Benthic Protection Areas) Regulations 2007 prohibit bottom trawling and places restrictions on mid-water trawling.

#### *Recreational and customary allowances*

Information provided by MFish describes redbait as a "schooling, bathypelagic species (near-bottom to mid-water). It is found over favoured feeding sites – typically submarine rises and seamounts. It has been reported from depths of between 86m to 500m with juveniles occurring near the surface and adults near the bottom in deeper water, including seamounts...no New Zealand-based research has been undertaken on the reproduction or recruitment of this species".<sup>1</sup> MFish comments that redbait is unlikely to be accessible to non-commercial fishers given the depths where the species occurs. For this reason, they propose that no recreational or customary allowances be made. They note also that they have no information on the quantities (if any) that might be harvested by customary fishers and are unaware of any information indicating the existence of a customary take.

Te Ohu notes that no allowances have been made for other species found at similar depths. For example, jack mackerel, with which redbait is caught as by-catch, has no such allowance for the same reasons.

Given the above, Te Ohu supports recreational and customary allowances of 0 tonnes. However if there is information to suggest that such harvesting is carried out, then it should be accounted for in the setting of the TAC. We would revise our view if we were to receive information from iwi that suggests that a higher allowance should be made.

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<sup>1</sup> (30 January 2009) *Introduction of redbait into the Quota Management System on 1 October 2009: Initial Position Paper*; p13

### Aggregation limits

MFish propose to add redbait to the 5<sup>th</sup> Schedule of the Fisheries Act 1996. This would enable quota holders to hold up to 45% of the combined TACCs for redbait stocks. If not placed on the Schedule, the aggregation limit would amount to 35% of the combined TACCs. Given that the species normally associated with redbait catch are squid, jack mackerel and barracouta – which are all subject to an aggregation limit of 45%, we believe it is logical that redbait be treated in the same way.

### Deemed Values

Deemed values are to be paid when fishers catch is not covered by ACE. MFish state that for redbait, the deemed value would be set higher than the ACE price but lower than the landed price to provide an incentive for fishers to cover their catch with ACE rather than by paying deemed values. MFish comment that as a non-QMS species, there is as yet no information on ACE prices. They therefore propose to set the deemed value based on a proportion of the landed price at the Auckland fish market. They propose a deemed value of \$0.70/kg based on a price around \$1.42/kg at the Auckland fish market. This is to be backed up by an interim deemed value and differential deemed values (which increase depending on how much of a fisher's catch is not covered by ACE).

It is our understanding that the price of \$1.42/kg is too high. According to companies involved in this fishery, prices of \$0.50 - \$0.60/kg at the Auckland fish market are more the norm. In addition a large share of redbait catch is exported in frozen form, and sells for around \$950 NZ per tonne (at an exchange rate of \$0.60NZ). Given these prices, we believe a deemed value of around \$0.45 - \$0.50 would be more appropriate, with interim and differential rates adjusted accordingly. These rates could be adjusted and information on ACE prices is obtained.

Thank you for the opportunity to comment on these proposals.

Naku noa, na



Kirsty Woods  
Manager, Policy and Fisheries Development

# UNITED FISHERIES LTD

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Website: www.unitedfisheries.co.nz

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2 June 2009

The Chief Executive  
C/- Tracey Steel  
Ministry of Fisheries  
PO Box 1020  
WELLINGTON 6140

Dear Sir

## INTRODUCTION OF REDBAIT INTO THE QMS 1 OCTOBER 2009

Following is our submission on the Ministry's IPP on management measures relating to the introduction of redbait into the quota management system.

### TACs / TACCs

We prefer option 2 in the IPP, which would base TACs on a figure around 10% higher than the highest reported annual commercial catch taken during the last five fishing years.

We have no catch history in the entitlement years, but in more recent years have taken increasing quantities of redbait as bycatch in the JMA7 / BAR7 fisheries, and some as bycatch in the SQU1T / BAR 5 fisheries.

The industry will require that there be sufficient and affordable ACE available in the marketplace to allow us to cover our bycatches so that they do not constrain our fishing for important target species.

As the IPP suggests, we also see opportunities for further development of the redbait fisheries with the possibility of higher catches than in past years. As there are no sustainability concerns for redbait stocks, the TACCs need to allow for this development.

### Deemed Values

The suggested deemed values are too high.

The estimated landed price of \$1.42 per kg which the IPP mentions, being based on market value for redbait at the Auckland Fish Market, is considerably higher than the prices deepwater fishers receive for redbait.

Redbait annual deemed values should be set at relatively low rates to start with, at least until a clearer picture of a commercial fishery inside the QMS is established. They should be no higher than those for JMA7 or FRO7. Deemed value rates clearly flow on to ACE prices and these

could become unreasonably high in relationship to the value of the fish, particularly if the majority of the quota shares end up in only a few hands.

Thank you for your attention.

Yours faithfully  
UNITED FISHERIES LTD

A handwritten signature in blue ink, appearing to read 'Sylvia Brown', with a large initial 'S' and a checkmark-like flourish at the end.

Sylvia Brown  
Administration Officer