Review of Sustainability Measures and Other Management Controls for 1 October 2008

Volume 2: Initial Position Papers and Summary of Submissions

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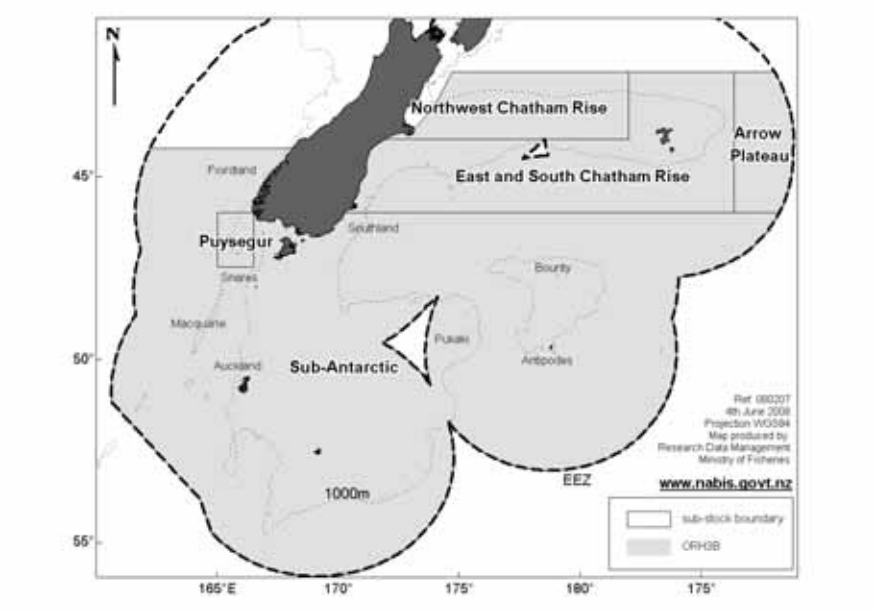
ORANGE ROUGHY (ORH 3B) – INITIAL POSITION PAPER

Figure 1: Quota Management Area (QMA) for ORH 3B



Executive Summary

1 ORH 3B is a large and spatially complex fishery, comprised of several biological stocks.[1] A range of sub-Quota Management Area (QMA) catch limits are managed under a voluntary agreement by the Deepwater Group (DWG) which represents 97.95% of the ORH 3B quota owners. Monthly reports on catch by sub-stock and sub-area are provided to MFish.

2 The status of the individual sub-stocks that make up ORH 3B are evaluated independently, with the results compiled to determine the status of ORH 3B as a whole. No new stock assessment information was available for the Northwest Chatham Rise, Puysegur or the Sub-Antarctic portion of ORH 3B in 2008.[2] The most recent (2006) assessment of the Northwest Chatham Rise estimated that the biomass was likely to be below the biomass that can produce the maximum sustainable yield (B_{MSY}); Puysegur remains voluntarily closed in recognition that it is likely to be below B_{MSY}; and there is no information on the status of the remainder of the Sub-Antarctic portion of ORH 3B.

3 The 2008 Plenary agreed that the 2004 and 2006 model-based stock assessments for the East and the South Chatham Rise are not reliable. These assessments were set

[1] To avoid confusion, unless otherwise clarified in the text 'stock' refers to the QMA management unit; 'sub-stock' or 'biological stock' refers to a biologically or geographically distinct orange roughy population; and the term 'sub-area component' is used where it is necessary to consider areas within sub-stock boundaries.
[2] The Arrow Plateau is closed to bottom trawling by regulation under the BPA initiative.

aside and existing survey and fishery information was assembled and analysed to evaluate the stock structure and status of the East and South Chatham Rise portion of ORH 3B.

4 The Plenary concluded that for the East and South Chatham Rise;

- The orange roughy found on this part of the Chatham Rise comprise a single biological stock;
- The unfished biomass (B_0) was estimated to be 300,000 t - 450,000 t;
- B_{MSY} is estimated to be 30% B_0 which equates to 90,000 t - 135,000 t ;
- Current mature biomass ($B_{current}$) is between 15 and 30% B_0;
- The best estimate of $B_{current}$ is 98,000 tonnes.

5 Based on the best available information the ORH 3B stock as a whole is likely to be below B_{MSY}. As no new stock assessment information is available for the Northwest Rise or the Sub-Antarctic portion of the QMA, the Ministry of Fisheries (MFish) is not proposing to change the management of these parts of ORH 3B at this time. However a new management strategy is proposed for the East and South Chatham Rise.

6 The strategy is based on setting a catch limit based on the fishing mortality (F) that will result in the stock fluctuating around the biomass that will support the maximum sustainable yield (F_{MSY}). A research programme is a key component of the management strategy to better inform the estimate of current biomass which is the key input for deriving the F_{MSY}-based yield. Once established, and fully implemented, the strategy is likely to result in relatively small annual variations to the catch limit on the East and South Chatham Rise. However, on the basis of the best available information, the F_{MSY}-based yield is 4,410 t. This represents a 3,240 t reduction from the current catch.

7 In making his determination on the TAC for ORH 3B, the Minister of Fisheries (the Minister) will be required to consider the way and rate that the ORH 3B stock is rebuilt. As only the East and South Chatham Rise catch limit is being considered at this time the way and rate decision relates to the timeframe over which the East and South Chatham Rise catch limit is reduced to the F_{MSY}-based yield estimate to initiate a rebuild of this part of the ORH 3B stock.

8 MFish does not consider that retaining the status quo is appropriate. Given the low productivity of orange roughy stocks the biomass of the stock is likely to continue to decline further below B_{MSY} under the existing management settings.

9 The Ministry of Fisheries (MFish) considers it appropriate to consider a staged implementation of the new strategy whereby successive annual catch limit reductions would be taken until the F_{MSY}-based yield is reached. Such a staged approach recognises that the F_{MSY}-based yield estimate will be refined over time. The two options proposed are based on reaching a target catch limit of 4,410 tonnes by:

i) Reducing the catch limit by 1,080 tonnes for each of three years

ii) Reducing the catch limit by 1,620 tonnes for each of two years

As new information better defines the estimate of current biomass each year, the target catch limit for the East and South Chatham Rise will change. The size of the catch limit reductions in the second and third year of option 1, and the second year of option two, will be altered to accommodate these changes ensuring that the refined catch limit is reached within the specified timeframes.

10 MFish does not support an option of reducing the catch limit to 4,410 t in one year. This would impose a significant economic cost to the Industry over a short timeframe. It would also limit the flexibility to incorporate better information used to define the F_{MSY}-based yield estimate.

11 MFish considers it prudent to continue to ensure that the amount of fish taken from the main spawning plume (the Plume)[3] is limited to ensure that fishing pressure does not have a negative impact on spawning success. A catch limit for the Plume set at 50% of the East and South Chatham Rise catch limit is included under all options.

Background

12 The MFish Chief Scientist briefed the Minister in September 2007 on the status of Chatham Rise orange roughy. This briefing described the 2004 and 2006 model-based stock assessments for the East and the South Chatham Rise as "not credible" and concluded that:

> *"The Chief Scientist, along with many other members of the FAWG [Deepwater Fisheries Assessment Working Group], believes it is time to abandon the [previous] models for the East Chatham Rise and the South Chatham Rise as the key assessment and management tools, and to instead focus on model-independent analyses of the data at hand".*

13 The Minister, in his decision letter on sustainability measures introduced on 1 October 2007, requested that existing survey and fishery information be assembled and analysed to "provide a more credible evaluation of the status of the East and South Chatham Rise orange roughy stocks". This work was undertaken and presented to the 2008 Plenary.

Science Review

Sub-stock structure

14 Prior to reviewing stock status, the sub-stock structure of orange roughy on the Chatham Rise was comprehensively reviewed. The approach evaluated all available data including: catch distribution and catch per unit effort (CPUE) patterns; location

[3] While smaller spawning aggregations may occur in a number of localities across the East and South Rise, the Plume is accepted to be the main spawning aggregation. It is located in the area to the north of the Chatham Islands.

of spawning and nursery areas; inferred migrations; size, maturity and condition data; genetic studies; and habitat and natural boundaries.

15 The Plenary agreed that it is most likely that the Northwest Chatham Rise is a separate biological stock, and that the East and South Chatham Rise is a single biological stock. The previous stock assessment boundaries partitioned the East and South Chatham Rise into four sub-area components: the Spawning Box and Eastern Flats, the Northeast Hills, the Andes, and the South Chatham Rise.

Stock status

16 The status of the Northwest Chatham Rise, Puysegur and Sub-Antarctic components of the ORH 3B stock was not reviewed by either the FAWG or the Plenary in 2008.

17 The Plenary Report states that the previous stock assessments for the East and South Chatham Rise are no longer considered reliable for two reasons. First, the accepted stock structure for this part of the Chatham Rise has changed and second, that the rebuild predicted by those assessments was largely driven by model assumptions about incoming recruitment, rather than actual data.

18 Analyses of the main observational data were reviewed by the Plenary to draw conclusions on likely stock status. The data considered included: research trawl surveys; acoustic surveys of the Plume and background areas; catch patterns; and standardised CPUE. The main conclusions of the 2008 Plenary regarding the East and South Chatham Rise are:

a. The unfished biomass (B_0) is estimated to have been between 300,000 t and 450,000 t;

b. The spawning stock was likely to have been reduced to 30% of this level by the early 1990s. There is no clear evidence of the stock rebuilding after the early 1990s; instead, there are indications that it may have continued to be reduced in size due to fishing;

c. The current total mature biomass ($B_{current}$) is thought to be between 15% and 30% B_0;

d. The current estimate of the stock status is most likely below the management target (30% B_0);

e. The best estimate of $B_{current}$ is 98,000 tonnes.

19 The Plenary Report concludes that the East and South Chatham Rise stock has likely been fished to below B_{MSY} and that the current fishing mortality rate (F) is continuing to fish down the stock. With the rejection of the existing stock assessment models for the East and South Chatham Rise, a new strategy for managing this fishery is required.

Proposed management strategy for the East and South Chatham Rise

20 The proposed new management strategy is based on setting a catch limit based on the fishing mortality (F) that, if applied constantly, would result in the maximum sustainable yield (F_{MSY}). Under an F_{MSY}-based management strategy, the same proportion of the biomass will be taken from the East and South Chatham Rise stock each year. If the stock is above B_{MSY}, the amount taken will be higher than if the stock was below B_{MSY}, resulting in the stock being fished down towards the target level. Conversely, if the stock is below B_{MSY} the amount taken will be lower, allowing the stock to rebuild.[4]

21 The strategy will embed the method of calculating the recommended annual catch limit for the East and South Chatham Rise. This catch limit will be determined by multiplying F_{MSY} by the best available estimate of $B_{current}$.

22 The F_{MSY}-based approach has been discussed with fisheries scientists, Industry and environmental NGO representatives. Feedback to date suggests a broad level of support.

23 There are three key components to the F_{MSY} strategy:

i) An estimate of F_{MSY};

ii) An annual estimate of current biomass ($B_{current}$);

iii) A research programme to better inform the $B_{current}$ estimate.

Estimating F_{MSY}

24 An estimate of F_{MSY} equal to the level of natural mortality (M) has been used for the implementing the strategy for the East and South Chatham Rise. This approach accords with international best practice and is consistent with the draft Harvest Strategy Standard, which has been consulted on with stakeholders. The level of natural mortality for orange roughy is estimated to be 0.045 (that is, 4.5% of the vulnerable biomass dies naturally every year).

25 Therefore, an F_{MSY} strategy for orange roughy would set a catch limit of 4.5 % of the current biomass.

Estimating $B_{current}$

26 Annual estimates of $B_{current}$ will be determined by the FAWG and presented at the Plenary.

27 The best estimate of $B_{current}$ available is derived by scaling up the estimated spawning biomass (B_{spawn}) by the proportion of the mature biomass that joins the spawning aggregations each year (the multiplier).

[4] This is the case provided that the stock has not been reduced to a level where 'depensatory effects' are evident. Depensatory effects occur when a population level becomes very low, and may include fundamental changes in the biology or behaviour of the species, such as the inability to spawn or the inability of individuals to find mates. This effect inhibits a population from rebuilding back to former levels.

28 Spawning is known to occur primarily in the Plume with additional smaller spawning aggregations forming in other localities across the East and South Chatham Rise. An acoustic survey of the Plume is undertaken annually to provide an estimate of spawning biomass on this part of the Chatham Rise. Estimates of spawning biomass in other areas (the Northeast Flats, the Northeast Hills, Mt Muck, the Andes complex and the South Chatham Rise) have been derived from existing survey data. These data have been collected sporadically and the estimates are less well defined at this time.

29 There have been a number of studies, both in New Zealand and elsewhere, that have considered the percentage of mature orange roughy that spawn each year. A range for the multiplier has been derived from a review of the available studies.

Research programme to better define $B_{current}$

30 While there is an accepted estimate of spawning biomass in the Plume, there remains considerable uncertainty surrounding the spawning biomass in other parts of the East and South Chatham Rise. There is also uncertainty as to the proportion of mature orange roughy that spawn each year. A research plan designed to reduce key areas of uncertainty in the estimates of spawning biomass and the multiplier is a key component of the management strategy.

31 Research proposals will be evaluated and approved by the deepwater Research Planning Group and Research Coordinating Committee.

The management strategy

32 In summary it is now time to put in place a long-term, sustainable management strategy for the East and South Chatham Rise orange roughy fishery. The best estimate of $B_{current}$ is 98,000 t which is below B_{MSY}; and the current fishing mortality rate ($F_{current}$) is above F_{MSY}. The proposed strategy will progressively reduce $F_{current}$ to F_{MSY} over two or three years (dependent on the option chosen).

Summary of Options

33 The existing management arrangements are summarised in the table below.

ORH 3B Sub-Areas	Existing catch limits (t)
Northwest Chatham Rise	**750**
East and South Chatham Rise	**7650**
East Chatham Rise	(Maximum) 6500
Spawning Box (Jun-Aug)	*3200*
Northeast Chatham Rise	*1650*
Southeast Chatham Rise	*1650*
South Chatham Rise	(Maximum) 1750
Puysegur	**0**
Arrow Plateau (BPA)	**0**
Sub-Antarctic	**1850**
Feature limit	500
Research survey allowance	**250**
TACC	**10500**
Other sources of fishing related mortality	**525**
TAC	**11025**

34 Proposed management options to implement an F_{MSY}-based strategy are summarised in the table below.

ORH 3B Sub-Areas	Catch limits under option 1 (t)	Catch limits under option 2 (t)
Northwest Chatham Rise	**750**	**750**
East and South Chatham Rise	**6570**	**6030**
The Plume	*3285 (max.)*	*3015 (max.)*
Puysegur	**0**	**0**
Arrow Plateau (BPA)	**0**	**0**
Sub-Antarctic	**1850**	**1850**
Feature limit	500	500
Research survey allowance	**250**	**250**
TACC	**9420**	**8880**
Other sources of fishing related mortality	**470**	**445**
TAC	**9890**	**9325**

Option 1 – Implementation of an F_{MSY} strategy for the East and South Chatham Rise by 2010

35 Under this option the catch limit for the East and South Chatham Rise would be reduced by 14%, or 1,080 t. Arrangements under this proposal would be to:

a) Reduce the TAC for ORH 3B by 10% to 9,890 t for the 2008-09 fishing year, and within the TAC:

i) Set an allowance of 470 t for other sources of fishing related mortality;

ii) Retain zero allowances within the TAC for customary Maori and recreational fishing interests;

iii) Set the TACC at 9,420 t;

b) Request that Industry implement the following sub-stock catch limits within the TACC:

i) East and South Chatham Rise be reduced to 6,570 t;

ii) A maximum of 3,285 t be taken from the Plume between 1 June and 31 August;

iii) Catch limits for the Northwest Chatham Rise, Arrow Plateau, Puysegur and Sub-Antarctic sub-areas remain unchanged and the 500 t feature limits in the Sub-Antarctic sub-area remain in place;

iv) Retain a catch limit of 250 t for Industry research surveys;

c) Request that Industry continue to spread catch across ORH 3B and continue to monitor catch against voluntary catch limits.

Option 2 – Implementation of an F_{MSY} strategy for the East and South Chatham Rise by 2009

36 Under this option the catch limit for the East and South Chatham Rise would be reduced by 21%, or 1,620 t. Arrangements under this proposal would be to:

a) Reduce the TAC for ORH 3B by 15% to 9,325 t for the 2008-09 fishing year, and within the TAC:

i) Set an allowance of 445 t for other sources of fishing related mortality;

ii) Retain zero allowances within the TAC for customary Maori and recreational fishing interests;

iii) Set the TACC at 8,880 t;

b) Request that Industry implement the following sub-stock catch limits within the TACC:

i) East and South Chatham Rise be reduced to 6,030 t;

ii) A maximum of 3,015 t be taken from the Plume between 1 June and 31 August;

iii) Catch limits for the Northwest Chatham Rise, Arrow Plateau, Puysegur and Sub-Antarctic sub-areas remain unchanged and the 500 t feature limits in the Sub-Antarctic sub-area remain in place;

iv) Retain a catch limit of 250 t for Industry research surveys;

c) Request that Industry continue to spread catch across ORH 3B and continue to monitor catch against voluntary catch limits.

Additional considerations common to both options

37 Request that Industry confirm the voluntary agreement on catch limits within ORH 3B and;

i) continue to submit annual updates and specific DWG annual agreements that pertain to the ORH 3B fishery to MFish;

ii) continue to submit monthly monitoring reports pertaining to catch levels by both sub-stock and sub-area to MFish;

iii) continue to notify MFish when catch reaches 80% of the sub-stock and sub-area limits, and also notify MFish when any limit has been reached.

38 Unless future estimates of $B_{current}$ increase substantially, further TAC reductions will be necessary to reduce the catch limit for the East and South Chatham Rise to the F_{MSY}-based yield over 3 years under option 1 and 2 years under option 2. The quantum of the necessary catch limit reductions will be informed by new research considered by the FAWG and Plenary processes.

Rationale for Management Options

39 The Plenary concluded that the East and South Chatham Rise sub-stock is likely to be below the management target of 30% B_0, and therefore needs to be rebuilt. Setting the catch limit through the application of an F_{MSY} approach (by setting the catch limit equal to F_{MSY} multiplied by the current biomass) will effect this rebuild.

40 The Plenary agreed that it was appropriate to estimate current biomass ($B_{current}$) by collating the best available information on the size of the current spawning biomass across the East and South Chatham Rise and scaling this figure up by the ratio of total mature biomass to spawning biomass (the multiplier) considered typical of orange roughy stocks. An appropriate range for the multiplier was derived from a literature search. Although acknowledging uncertainty in both the estimates of current spawning biomass and the multiplier, the Plenary agreed that, based on the best available information, $B_{current}$ was likely to be in the range 15 to 30% B_0 with a best estimate of 98,000 t.

41 Applying F_{MSY} of 0.045 to the best $B_{current}$ estimate provides a yield of 4,410 t.

42 A research and monitoring programme is being developed to improve estimates of $B_{current}$ by reducing uncertainty in both the estimates of spawning biomass and the multiplier. As the results of this programme become available they will be reviewed by the FAWG and the Plenary, enabling better estimation of $B_{current}$, and F_{MSY}-based yield in future years. While there remains uncertainty surrounding the level of sustainable catch that this process will ultimately settle on, it will change as new information comes to hand.

43 MFish proposes that an appropriate way and rate to move the sub-stock to at or above the level that can produce MSY is to embark on a series of reductions until the F_{MSY} level is reached. Under option 1 the catch limit will equal the F_{MSY}–based yield estimate by 1 October 2010 (i.e. the catch limit will be reduced to the F_{MSY}–based yield estimate in three steps). Option 2 will result in the catch limit equalling the F_{MSY}–based yield estimate by 1 October 2009 (i.e. the catch limit will be reduced to the F_{MSY}–based yield estimate in two steps).

44 The proposed reductions in the catch limit under both options are predicated on the F_{MSY}-based yield remaining at 4,410 t. The yield estimate is likely to change as new information from the research programme comes to hand. The adjustments to the catch limit on the East and South Chatham Rise in years two and three (under the three year option) and year two (under the two year option) will be revised each year to ensure that the catch limit equals the updated F_{MSY}-based yield at the end of the implementation timeframe.

45 MFish does not consider that retaining the status quo is appropriate. Given the low productivity of orange roughy stocks the biomass of the stock is likely to continue to decline further below B_{MSY} under the existing management settings.

46 The catch limit will remain above the F_{MSY}-based yield until 1 October 2010 under option 1 and until 1 October 2009 under option 2, and the East and South Chatham Rise stock is likely to continue to decline until the F_{MSY}-based yield is met. MFish does not however support an option of reducing the catch limit to 4,410 t in one year. This would impose a significant economic cost to the Industry over a short timeframe. As the estimate of current biomass is refined, the target catch limit for the East and South Chatham Rise will change. The size of the catch limit reductions in the second and third year of option 1, and the second year of option two, will be altered such that the catch limit equals the refined F_{MSY}-based yield estimate within the specified timeframe of each option.

47 MFish propose that the $B_{current}$ estimate used in calculating the appropriate catch limit should generally be the average of the three most recent $B_{current}$ estimates. This will smooth out annual fluctuations and is likely to result in smaller year to year variations to the recommended catch limit on the East and South Chatham Rise.

48 Under existing arrangements, there is a voluntary catch limit for the spawning box from June to August. This is the primary spawning area for the East and South Chatham Rise and is estimated to account for 80% of the spawning biomass. MFish proposes removing the definition of the spawning box but retaining a limit for the Plume on the basis that fishing disturbs spawning fish, and may adversely affect spawning success. A catch limit for the Plume set at 50% of the East and South Chatham Rise catch limit is included under all options.

Assessment of Management Options

Considerations at the stock (QMA) level

Total allowable catch

Section 13 (2)

49 The ORH 3B stock is managed under section 13 of the Act which requires that the Minister sets a TAC that moves the stock to or above, or maintains the stock at or above, a biomass level that can produce the maximum sustainable yield (B_{MSY}[5]).

50 Stock assessment information reported in the Plenary considers ORH 3B by sub-stock – specifically the Northwest Chatham Rise, the East and South Chatham Rise, and the Sub-Antarctic (Puysegur, Pukaki South and the remaining southern areas). The status of the Northwest Chatham Rise is based on the assessment conducted in 2006. The Plenary noted that this assessment is uncertain because the estimated status of the Northwest Chatham Rise was strongly dependent on the CPUE data for the flat areas and the extent to which these data index the entire sub-stock is unknown. Model runs that included all data estimated that the biomass was below B_{MSY} at 11% (range 8-16%) B_0. On the basis of the assessment the catch limit was reduced from 1,500 t to 750 t in 2006 to initiate a rebuild of the sub-stock.

51 While no new assessments were available in 2008 the Plenary evaluated the status of the East and South Chatham Rise sub-stock using available data sources. The Plenary concluded that the sub-stock was likely to be below B_{MSY} and in the range 15-30% B_0. Puysegur remains voluntarily closed in recognition that it is likely to be below B_{MSY}. There is no information on the status of the remainder of the Sub-Antarctic portion of ORH 3B.

52 Although there is incomplete information as to the status of the sub-stocks that make up ORH 3B, the Chatham Rise is likely to contain the majority of the ORH 3B biomass. As both the Northwest and the East and South Chatham Rise are considered is likely to be below B_{MSY} it follows that ORH 3B as a whole is likely to be below B_{MSY}.

53 MFish therefore proposes to advise the Minister to set the TAC for ORH 3B under section 13(2)(b) of the Act. Section 13(2)(b) is appropriate in cases where the stock biomass is likely to be below B_{MSY} and requires a TAC that restores a stock biomass towards a level that is at or above a level that can produce the maximum sustainable yield, having regard to the interdependence of stocks, biological characteristics and environmental conditions.

54 MFish does not consider that retaining the status quo is appropriate. Given the low productivity of orange roughy stocks the biomass of the stock is likely to continue to decline further below B_{MSY} under the existing management settings.

[5] B_{MSY} for orange roughy stocks is estimated to be 30% B_0.

55 Both options propose a reduction to the TAC, to be implemented by a reduction in the catch limit on the East and South Chatham Rise stock. The proposed catch limits are the first step in a staged reduction to the current F_{MSY} yield estimate of 4,410 t. Option 1 would reduce the TAC for ORH 3B by 3,400 t over 3 years while option 2 would achieve this reduction over 2 years.

56 As a result of new research the F_{MSY}-based catch limit for the East and South Chatham Rise will change. MFish proposes that the timeframe for reducing the TAC to incorporate revised F_{MSY}-based catch limits under each option will remain the same. Ensuring that the appropriate TAC is reached within the stated timeframe will likely necessitate a change to the quantum of TAC reduction in the following years of each option.

Section 13 (3)

57 Section 13 (3) requires that, in considering the way and the rate that the stock may be moved towards a level that can produce MSY under s 13(2)(b), the Minister shall have regard to such social, cultural and economic factors as he or she considers relevant.

58 Option 1 proposes a reduction in the TACC of 1,080 t. A conservative estimate of the landed value of 1,080 t of orange roughy derived from the 2006-07 port price in ORH 3B equates to a value of $3.2 million. The majority of orange roughy is exported so a better estimation of value may be derived from export earnings. On the basis of the export value of the most common product state exported[6], 1,080 t of orange roughy is worth approximately $3.9 million.

59 Option 2 proposes a reduction in the TACC of 1,620 t. A conservative estimate of the landed value of 1,620 t of orange roughy derived from the 2006-07 port price in ORH 3B equates to a value of $4.9 million. The majority of orange roughy is exported so a better estimation of value may be derived from export earnings. On the basis of the export value of the most common product state exported[7], 1,620 t of orange roughy is worth approximately $5.8 million.

60 Without a clear understanding of recruitment it is not possible to determine the rebuild rate of orange roughy stocks, although lower catch limits will initiate a rebuild faster than higher catch limits. The research programme will incorporate annual plume surveys plus additional work to better define the mature orange roughy biomass on the East and South Chatham Rise. The quantum of further reductions to the TAC will be determined annually when the methods for determining current mature biomass have been better developed. MFish considers that a staged approach to reducing the TAC, given uncertainty in available information at the present time, is appropriate having regard to relevant economic factors.

61 MFish requests that Industry, through the submission process, provide any additional information on social, cultural and economic factors relevant to this decision.

[6] Based on final FOB export figures for December 2007
[7] Based on final FOB export figures for December 2007

TACC and Allowances

62 The TAC must be apportioned between the relevant sectors and interests set out under the provisions of s 20 and 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. In determining these allowances, the Minster should consider how the allowances will enable people to provide for their social, economic and cultural wellbeing (as provided for in the purpose of the Act).

63 There are no known Maori customary or recreational fisheries for orange roughy. MFish proposes that the Minister sets allowances of zero tonnes for recreational and Mäori customary fishing under both options. This is consistent with the approach that has been adopted since orange roughy became a QMS species in 1986.

64 Other sources of fishing-related mortality has been previously set at 5% of the TACC to account for lost fish, discards etc. There is no information to support a variation to this figure at this time.

Sub-QMA catch spreading arrangements

65 Proposed sub-stock and sub-area voluntary catch limits for the 2008-09 fishing year are discussed below. MFish recommends that these catch limits and reporting requirements continue to be managed by DWG. Under both options MFish will monitor DWG reports and operators' fishing patterns to evaluate the effectiveness of these voluntary catch limits. MFish will ensure that, through joint MFish-DWG communications, operators are fully informed as to the progress of catch taken against sub-stock and sub-area limits.

Considerations at the sub-stock level

Stock boundaries

66 The sub-stock boundaries are defined in Appendix 2.

Sub-stock catch limits

Northwest Chatham Rise

67 The catch limit for the Northwest Chatham Rise was decreased in response to sustainability concerns identified in the 2006 stock assessment. MFish considers that the 2006 decisions were appropriate and in the absence of new stock assessment information, does not propose varying the current management arrangements for this sub-stock at this time.

68 Both options retain the existing catch limit for the Northwest Chatham Rise.

East and South Chatham Rise

69 The Plenary has considered the location of stock assessment and management boundaries on the Chatham Rise and has agreed that the East and South Chatham Rise should be considered as a single sub-stock.

70 Both options reflect the revised stock structure and no distinction is made between the East Chatham Rise and the South Chatham Rise.

Arrow Plateau

71 The Arrow Plateau has been closed to bottom trawling by regulation under the Benthic Protected Areas (BPA) initiative and the catch limit for this portion of the stock will remain at zero.

72 Both options retain a zero tonne catch limit for the Arrow Plateau.

Puysegur

73 The fishery has been voluntarily closed since 1997-98.

74 Both options retain a zero tonne catch limit for Puysegur.

Sub-Antarctic

75 The catch limit for the Sub-Antarctic was increased in 2006 to 1,850 t. MFish considers that the 2006 decisions were appropriate and in the absence of new stock assessment information, does not propose varying the current management arrangements at this time.

76 Both options retain a catch limit of 1,850 t for the Sub-Antarctic.

Considerations at the sub-area component level

77 The sub-area component boundaries are defined in Appendix 3.

Catch spreading by sub-area component

Sub-Antarctic sub-area limits

78 MFish considers that the 2006 decisions were appropriate and that the voluntary catch spreading and reporting arrangements are working well. In the absence of new stock assessment information MFish does not propose varying the current management arrangements at this time.

79 MFish will monitor DWG reports and operators' fishing patterns to evaluate the effectiveness of these voluntary catch limits. MFish will also ensure that, through joint MFish-DWG communications, operators are fully informed as to the progress of catch taken against the Sub-Antarctic feature limits.

East and South Chatham Rise

80 Both options include a limit of 50% of the East and South Chatham Rise catch limit that can be taken from the Plume during the period 1 June to 31 August.

Environmental considerations

81 MFish is in the process of developing environmental standards – including a seabird standard and a benthic impact standard - to ensure that statutory obligations to avoid remedy or mitigate the adverse effects of fishing are met. These standards will ultimately be used to inform fisheries plan development.

82 Key environmental issues in relation to the ORH 3B fishery and the options proposed in this paper are discussed below.

Finfish bycatch

83 While a number of deepwater species that share similar habitat to orange roughy are taken in the ORH 3B fishery (including black, smooth and spiky oreo, black cardinal fish and alfonsino) targeted orange roughy fishing historically captures over 90% orange roughy (by greenweight).[8] No increase in the orange roughy TAC is contemplated and consequently there should be no additional adverse implications for fish bycatch.

Shark bycatch

84 Some concern has been raised regarding highly vulnerable deepwater sharks, although sharks account for approximately 3% (by greenweight) of the bycatch in target orange roughy fisheries.[8] A specific national plan of action for the conservation and management of sharks is in preparation by MFish.

85 MFish considers that the management proposals will have no additional adverse implications for sharks as none of the options should result in an increase in fishing effort.

Marine mammals

86 MFish considers that the management proposal will have no additional adverse implications for fur seals and other marine mammals as none of the options should result in an increase in fishing effort.

Seabirds

87 While trawl fisheries for orange roughy are known to interact with seabirds, and fishing-related mortalities of seabird species are known to occur, orange roughy fisheries are considered to pose relatively low risk to seabirds compared to other fisheries. The few vessels that dominate the catch in ORH 3B apply mitigation measures ranging from on-board meal plants (one vessel), batch discarding (all vessels) and back of the boat mitigation measures (all vessels). Consequently the level of interaction and fishing related mortality is considered to be low for the vessels that fish in ORH 3B.

88 It is difficult to quantify the overall impact as knowledge of the population characteristics of seabird species is typically limited. It is known however that the Chatham Rise and Sub-Antarctic regions are areas of vulnerable and threatened sea bird species such as the Chatham Island Albatross and the Chatham Petrel (the International Union for the Conservation of Nature (IUCN) status is critically endangered); the Northern and Southern Royal Albatross (IUCN status is endangered and vulnerable respectively); and the Salvin's Albatross (IUCN status is vulnerable).

89 The number of observed seabird captures from the deepwater trawl fisheries generally has been decreasing since 2004-05 with only three recorded in the 2006-07 fishing year. The management proposal should have no additional adverse implications for seabirds as no increase in orange roughy catch entitlements is proposed.

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[8] Anderson, O.F.; Gilbert, D.J.; Clark, M.R.(200 1). Fish discards and non-target catch in the trawl fisheries for orange roughy and hoki in New Zealand waters for the fishing years 1990-91 to 1998-99. *New Zealand Fisheries Assessment Report 2001/16.57* p.

Benthic impacts and coral bycatch

90 Bottom trawling can affect fragile benthic invertebrate communities but adverse effects may be reduced if vessels repeatedly trawl along the same towlines in a fishery. There are cost implications for Industry in terms of lost or damaged gear when fishing in new areas. As a consequence Industry generally follows known trawl tracks on the Chatham Rise.

91 Two initiatives are in place to address benthic impacts. In 2001 the Minister regulated a trawl closure covering a selection of 19 seamounts of varying size and depth within New Zealand. Ten of these are within the ORH 3B QMA. In addition 17 further areas have recently been closed to bottom trawling by regulation under the BPA initiative. Twelve of these, including the Arrow Plateau, are within the ORH 3B QMA.

Compliance implications

92 Key offences that may occur in ORH 3B include misreporting of QMA, species and weights and fishing in closed areas. MFish considers that the proposed management options resulting in a significant reduction in the TAC over time may increase the incentive to offend.

93 The ORH 3B fishery is closely managed from an Industry perspective with few boats operating in the fishery and 97.95% of the ORH 3B quota owners represented by the Deepwater Group (DWG). DWG currently monitor adherence to voluntary catch spreading arrangements and provide monthly reports to MFish. DWG notifies MFish when catch reaches 80% of the sub-stock and sub-area limits, and also notifies MFish when any limit has been reached.

94 MFish considers that the monitoring arrangements are robust and appropriate. DWG and MFish will continue to closely monitor this fishery to ensure compliance with management arrangements.

APPENDIX 1

Statutory Considerations

95 When setting or varying the TAC and TACC under the Act, the Minister is required to consider a series of principles and factors:

a) **Section 13(2)** MFish recommends that the TAC is varied pursuant to s 13(2)(b) to enable ORH 3B to be restored to a level at or above B_{MSY}. Of the sub-stocks that make up ORH 3B: the most recent (2006) assessment of the Northwest Chatham Rise estimated that the biomass was below B_{MSY} at 11% (range 8-16%) B_0; evaluation of the status of the East and South Chatham Rise stock in 2008 concluded that the stock was likely to be below B_{MSY} and in the range 15-30% B_0; and Puysegur remains voluntarily closed in recognition that the stock is likely to be below B_{MSY}. While there is no information on the stock status of the remainder of the Sub-Antarctic portion of ORH 3B, the Chatham Rise is likely to contain the majority of the ORH 3B biomass. As both the Northwest and the East and South Chatham Rise are considered to be below B_{MSY} it follows that ORH 3B as a whole is below B_{MSY}.

The proposed TAC reduction under both options will be implemented by reducing the catch limit on the East and South Chatham Rise. The reduction will reduce the catch limit for this sub-stock towards the yield estimates derived from an F_{MSY} strategy. Catch limits derived from an F_{MSY} strategy by definition will rebuild a stock that is below B_{MSY}. Further research is planned to refine yield estimates and further TAC reductions may be contemplated in future.

The specific considerations set out in s 13(2)(b) include having regard to the interdependence of stocks, the biological characteristics of the stock and any environmental conditions affecting the stock. As such, in considering the proposed TAC options and corresponding proposed periods of rebuild, the Minister must take into account:

i) The interdependence of stocks for ORH 3B (as required by s 13(2)(b)(i)). There is no information to suggest the interdependence of stocks should affect the level of the TAC for ORH 3B at this time. Given that the fishery primarily targets aggregations of orange roughy, it is relatively clean, and bycatch proportions are low.

ii) Environmental factors affecting ORH3B (as required under s 13(2)(b)(ii)). No specific environmental conditions affecting the ORH 3B stock have been identified.

iii) The biological characteristics of ORH3B (as required under s 13(2)(b)(ii)). It is known that orange roughy are very long-lived and late maturing, which are biological characteristics that render them slow to recover from overfishing.

b) **Section 13(3)** requires that the Minister, in considering the way and rate at which a stock is moved towards B_{MSY}, have regard to such social, cultural, and

economic factors as he considers being relevant when determining the way and rate at which to move the stock biomass toward or above the B_{MSY} level.

MFish has considered the economic impact of reducing the TAC to the F_{MSY} yield estimates for the East and South Chatham Rise. MFish proposes a staged approach to reducing the TAC to allow Industry time to rationalise their operations as the TAC decreases. This staged reduction will occur in concert with a research programme to update0 the yield estimates.

Industry has consolidated the fleet deployed in the ORH 3B fishery and thereby significantly reduced the number of personnel involved in this fishery. While reduction in the TAC will likely reduce the number of days vessels expend in this fishery, the proposed cuts are not anticipated to have a significant social impact.

MFish is not aware of any recreational or customary Mäori interest in the fishery and no other cultural factors that MFish considers are relevant to a determination under section 13(3).

c) **Sections 5(a) and (b)** require the Act to be interpreted consistently with New Zealand's international obligations with respect to fishing and with the provisions of the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992. Provisions of general international instruments such as the United Nations Convention on the Law of the Sea (UNCLOS) and the Fish Stocks Agreement have been implemented through the provisions of the Fisheries Act 1996 and given effect here. MFish considers that the options are consistent with both New Zealand's international obligations relating to fishing and the provisions of the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992.

d) **Section 8** of the Act describes the purpose of the Act as being to provide for the utilisation of fisheries resources while ensuring sustainability, and defines the meanings of utilisation and sustainability. The management options presented seek to achieve the purpose of the Act. The proposals ensure sustainability under the respective catch limits via sub-stock management and monitoring measures that address risk as appropriate to the different levels of catch, and take into account the respective costs of management versus the utilisation benefits.

e) **Sections 9(a) and (b)** require the Minister to take into account that associated or dependent species (those that are not harvested) be maintained at or above a level that ensures their long-term viability, and that the biological diversity of the aquatic environment should be maintained. The specific nature and extent of effects of fishing on any particular sub-stock in ORH 3B and the environment are generally understood to be localised and specific to aggregations of orange roughy at 850-1,200 metre depths. While some bycatch of non-harvested species is known, the impact that fishing for ORH 3B has on the long term viability and biological diversity of the aquatic environment is of greater concern in regions of steep sloping and highly diverse topographic features. Some features within ORH 3B have been set aside from all trawling, including ten seamounts and the Arrow Plateau, to mitigate the benthic effects of fishing.

The main prey species for orange roughy include mesopelagic and benthopelagic prawns, fish and squid, with other organisms such as mysids,

amphipods and euphausiids occasionally being important. MFish has considered the effects on associated and dependent species and biodiversity that would affect the setting of the TAC and determined the impact is addressed under the catch spreading arrangements.

f) **Section 9(c)** requires the Minister to take into account the principle that habitat of particular importance for fisheries management should be protected.

While trawling can adversely affect fragile benthic invertebrate communities, the commercial bycatch of benthic invertebrates is seldom recorded or examined. Research has revealed marked differences in the bottom fauna of fished and unfished seamounts off New Zealand and Tasmania, and those differences have been ascribed to the impact of bottom trawling. Researchers have reported anecdotal evidence of bycatch of coral species in developing orange roughy fisheries in New Zealand.

Nineteen seamounts of varying size and depth within New Zealand waters have been closed to trawling, and ten of these are within ORH 3B. In addition, 12 BPAs are within ORH 3B. These closures should therefore protect faunas in a variety of habitats from the effects of fishing.

g) **Section 10** of the Act sets out the information principles, which require that decisions be based on the best available information, taking into account any uncertainty in that information, and applying caution when information is uncertain, unreliable, or inadequate. In accordance with s 10, the absence of information should not be used as a reason to postpone, or fail to take, any measure to achieve the purpose of the Act, including providing for utilisation at levels considered to be sustainable. A thorough review of available information has been undertaken in 2008 and the best available information has been used to derive management options. MFish has endeavoured to set out the relevant uncertainty in, and inadequacy of, that information so that the appropriate caution can be applied in assessing the proposed management options.

h) **Section 11(1)(a):** Before varying the TAC for ORH 3B, the Minister must take into account any effects of fishing on any stock and the aquatic environment. No information about any effects of fishing on any stock or on the aquatic environment additional to that discussed elsewhere in the paper is considered relevant to the consideration of sustainability measures for ORH 3B at this time.

i) **Section 11(1)(b):** Before varying the TAC for ORH 3B, the Minister must take into account of any existing controls under the Act that apply to the stock or area concerned. For ORH 3B, the measures that apply currently are a TAC, TACC and an allowance for incidental fishing-related mortality. No other controls under the Act apply specifically to ORH 3B. Specific seamount closures are located within ORH 3B.

j) **Section 11(1)(c):** Before varying the TAC for ORH3B, the Minister must take into account the natural variability of the stock. Orange roughy year-to-year biomass is not known to be highly variable, and therefore the natural variability of orange roughy is not a concern in setting the TAC for ORH 3B.

k) **Sections 11(2)(a) and (b):** Before varying the TAC for ORH3B, the Minister must have regard to any provisions of any regional policy or plan under the Resource Management Act 1991 and any management strategy or plan under the Conservation Act 1997 that apply to the coastal marine area and you consider relevant. MFish is not aware of any such provisions that should be taken into account for ORH 3B.

l) **Section 11(2)(c):** Before varying the TAC for ORH3B, the Minister must have regard to sections 7 and 8 of the Hauraki Gulf Marine Park Act 2000 that apply to the coastal marine area and you consider relevant.. The distribution of orange roughy in the ORH 3B QMA does not intersect with the Park boundaries.

m) **Section 11(2A)(b):** Before varying the TAC for ORH3B, the Minister must take account of any relevant and approved fisheries plans. There is no approved fisheries plan in place for ORH 3B.

n) **Sections 11(2A)(a) and (c):** Before varying the TAC for ORH3B, the Minister must take into account any conservation or fisheries service, or any decision not to require such services. MFish does not consider that existing or proposed services materially affect the proposals for the ORH 3B stock. No decision has been made to not require a service in this fishery at this time.

o) **Section 20 and 21** specify a number of matters that must be taken into account when setting or varying a TACC. Section 21 requires the Minister to allow for non-commercial Mäori and recreational fishing interests, and other sources of fishing-related mortality when setting or varying the TACC. The nature of the ORH 3B fishery and the interests of recreational and customary fishers have been considered in proposing the TACCs.

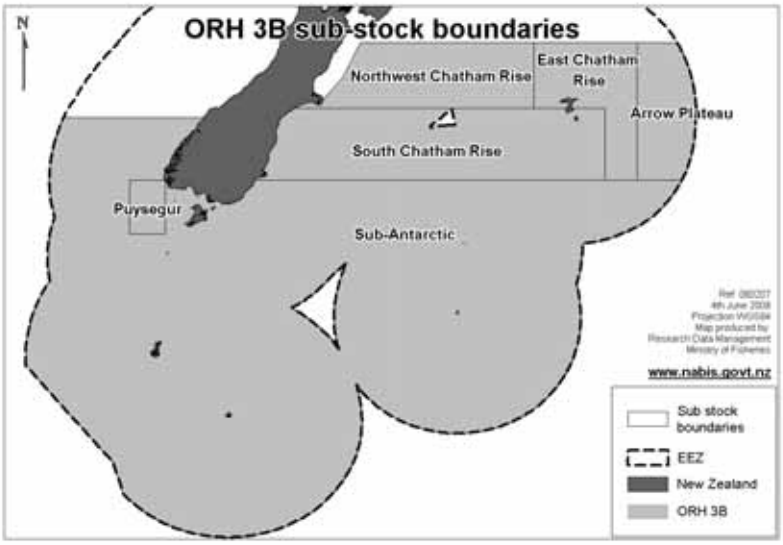
p) **Section 21(4)** also requires that any mätaitai reserve or closure/restriction under s 186A to facilitate customary fishing be taken into account. There is one mätaitai reserve in ORH 3B generally (Te Whaka a Te Wera Maitaitai – located in Patterson Inlet, Stewart Island), but this does not intersect with the ORH 3B fishery. No area has been closed or fishing method restricted (that affects the fishery within ORH 3B) under the customary fishing provisions of the Act.

q) **Section 21(5)** also requires that any regulations to prohibit fishing made under s 311 be taken into account when setting allowances for recreational interests. No restrictions under s 311 have been placed on fishing in any area within ORH 3B.

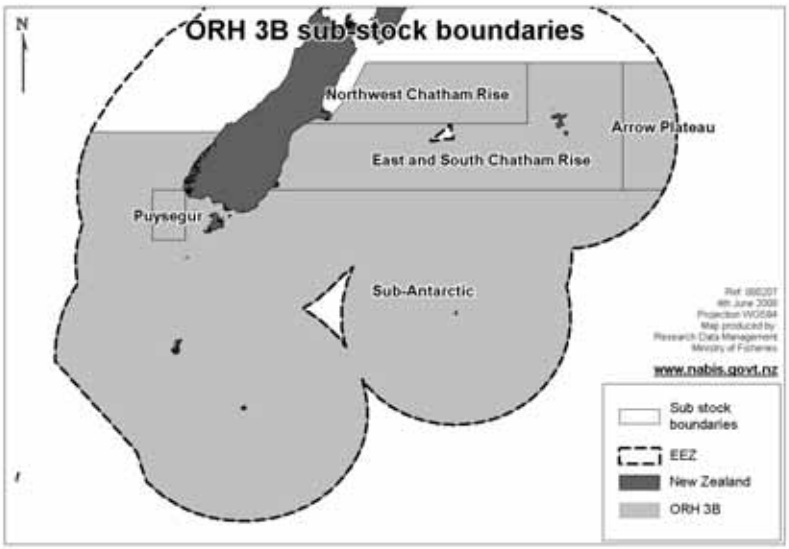
APPENDIX 2

Definition of ORH 3B sub-stock boundaries

Note: All positions are given in degrees, minutes and decimal minutes format. Figures in brackets are decimal degrees with western longitudes given as a progression of eastern longitude (for example 179º W is given as 181).



Existing sub-stock boundaries



Sub-stock boundaries under proposed options

Northwest Chatham Rise (unchanged)

The area within the box defined by the points:

42º10.0’ S, 174 º42’ E	(-42.166667, 174.700000)
42º10.0’ S, 178 º00’ W	(-42.166667, 182.000000)
44º00.0’ S, 178 º00’ W	(-44.000000, 182.000000)
44º00.0’ S, Coastline	(-44.000000, coastline)
43º44.3’ S, 173 º07.5’ E	(-43.738333, 173.125000)
43º08’ S, 173 º57’ E	(-43.133333, 173.950000)

Existing South Chatham Rise

The area defined by the points:

44º00’ S, 171 º55.8’ E	(-44.000000, 171.930000)
44º00’ S, 175 º00’ W	(-44.000000, 185.000000)
46º00’ S, 175 º00’ W	(-46.000000, 185.000000)
46º00’ S, 170 º15.6’ E	(-46.000000, 170.260000)

Note that for the area defined above, points 1 and 4 are linked by the coastline. For reporting purposes the following rectangular box that overlaps with the South Island may be used:

44º00’ S, 170 º15’ E	(-44.000000, 170. 256977)
44º00’ S, 175 º00’ W	(-44.000000, 185.000000)
46º00’ S, 175 º00’ W	(-46.000000, 185.000000)
46º00’ S, 170 º15.6’ E	(-46.000000, 170. 260000)

Existing East Chatham Rise

The area within the box defined by the points below:

42º10’ S, 178 º00’ W	(-42.166667, 182.000000)
42º10’ S, 173 º40’ W	(-42.166667, 186.333333)
46º00’ S, 173 º40’ W	(-46.000000, 186.333333)
46º00’ S, 175 º00’ W	(-46.000000, 185.000000)
44º00’ S, 175 º00’ W	(-44.000000, 185.000000)
44º00’ S, 178 º00’ W	(-44.000000, 182.000000)

Proposed East and South Chatham Rise

The East Chatham Rise and the South Chatham Rise areas defined above combined.

Arrow Plateau (unchanged)

The area within the box defined by the points:

42º10’ S, 173 º40’ W	(-42.166667, 186.333333)
42º10’ S, 171º00.07’W	(-42.166667, 188.998833)
46º00’ S, 171º46.68’W	(-46.000000, 188.222000)
46º00’ S, 173 º40’ W	(-46.000000, 186.333333)

Note that for the area defined above, points 2 and 3 are linked by the boundary of the EEZ.

Puysegur (unchanged)

The area within the rectangular box defined by the points:

46º00’ S, 165 º00’ E	(-46.000000, 165.000000)
46º00’ S, 166 º30’ E	(-46.000000, 166.500000)
47º30’ S, 166 º30’ E	(-47.500000, 166.500000)
47º30’ S, 165 º00’ E	(-47.500000, 165.000000)

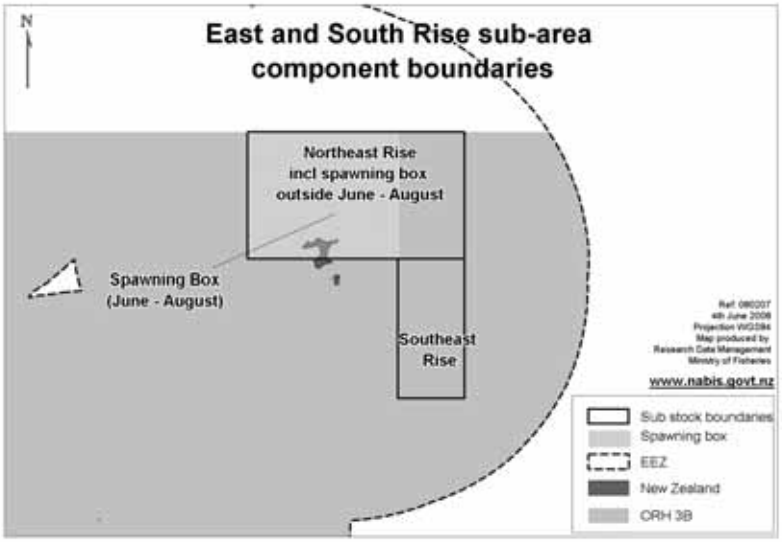
Sub-Antarctic (unchanged)

The remaining area within ORH 3B. Specifically the area (excluding Puysegur) within the EEZ and below 46º00’ S on the East Coast and 44º15.6’ S on the West Coast.

APPENDIX 3

Definition of ORH 3B sub-area component boundaries

Note: All positions are given in degrees, minutes and decimal minutes format. Figures in brackets are decimal degrees with western longitudes given as a progression of eastern longitude (for example 179º W is given as 181).



Existing East and South Chatham Rise sub-area component boundaries

which are all removed under proposed options

Spawning Box (existing)

The area within the rectangular box defined by the points:

42º10’ S, 178 º00’ W	(-42.166667, 182.000000)
42º10’ S, 175 º00’ W	(-42.166667, 185.000000)
44º00’ S, 175 º00’ W	(-44.000000, 185.000000)
44º00’ S, 178 º00’ W	(-44.000000, 182.000000)

During the period June 1 to 31 August.

Northeast Chatham Rise (existing)

The area within the rectangular box defined by the points:

42º10’ S, 178 º00’ W	(-42.166667, 182.000000)
42º10’ S, 173 º40’ W	(-42.166667, 186.333333)
44º00’ S, 173 º40’ W	(-44.000000, 186.333333)
44º00’ S, 178 º00’ W	(-44.000000, 182.000000)

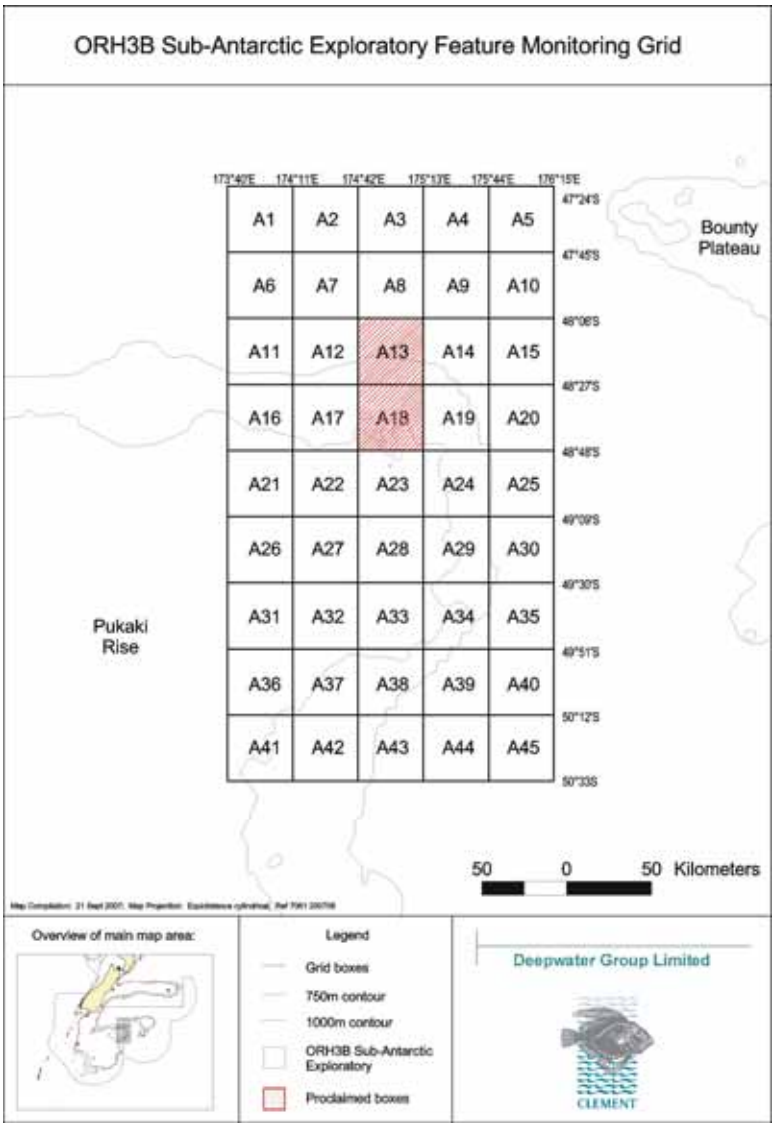
Southeast Chatham Rise (existing)

The area within the rectangular box defined by the points:

44º00’ S, 175 º00’ W	(-44.000000, 185.000000)
44º00’ S, 173 º40’ W	(-44.000000, 186.333333)
46º00’ S, 173 º40’ W	(-46.000000, 186.333333)
46º00’ S, 175 º00’ W	(-46.000000, 185.000000)

Sub-Antarctic feature monitoring (unchanged)

DWG monitors catch on the northern and eastern Pukaki Rise using the 'Feature Monitoring Grid' below. Each grid box is approximately 10nm by 10nm and each can have no more than 500 t of ORH taken from it. Grid cell A13 roughly aligns with the previous Priceless Box and grid cell A18 is the previous 'SE Box'. Catches are also monitored throughout the Sub-Antarctic sub-area. GIS analyses are performed to identify any feature or 10nm x 10nm area where accumulated catches approach the 500 t feature limit.



ORANGE ROUGHY (ORH 3B) – SUMMARY OF SUBMISSIONS

Submissions Received

1 Submissions regarding this proposal were received from:

- Deepwater Group Ltd. (DWG);
- Environment and Conservation Organisations of NZ Inc. (ECO);
- New Zealand Seafood Industry Council Ltd. (SeaFIC);
- Royal Forest and Bird Protection Society of New Zealand Inc (Forest & Bird);
- Sanford Ltd. (Sanford).

General comments

2 Submissions from Industry were received from Sanford (which owns 34.7% of ORH 3B quota), DWG (representing the owners of 97.95% of the quota in ORH 3B) and SeaFIC. DWG stated that its submission should be read in conjunction with the SeaFIC submission which it supported. Submissions from environmental non-government organisations (ENGOs) were received from ECO and & Bird.

3 Both the SeaFIC and ECO submissions welcomed the review of management measures for the East and South Chatham Rise and acknowledgement in the IPP of problems with previous assessments. SeaFIC in particular noted that although deliberations of both the deepwater fisheries assessment working group and the Plenary were at times contentious, in its view the final report of the Plenary is reasoned and fair, reflecting a considered evaluation of available data by a wide range of scientists. Working group and Plenary meetings in 2008 included participants from Industry (primarily DWG and SeaFIC) and ENGOs (primarily ECO).

4 Forest & Bird requested that a review of the two management options outlined in the IPP should also be added into the FAP to ensure that you are aware of both the need for urgent stock recovery and environmental impact minimisation.

Support for IPP options

5 While little new information was provided through the submission process, clear positions were established as to the appropriateness or otherwise of the proposed options. The views expressed by submitters fall into two broad categories – those taken by Industry and those taken by ENGOs.

6 All three Industry submissions supported the TAC reduction under IPP option 1. While SeaFIC supports the introduction of an F_{MSY}-based strategy, it agrees with

statements in the IPP that reducing the fishing mortality (F) to F_{MSY} in a single step is not a sensible approach to providing for utilisation whilst ensuring sustainability, particularly given that estimates of current biomass are likely to change. DWG supports IPP option 1 on the basis that there are uncertainties associated with the estimates of spawning biomass – particularly for the Northeast Hills, Mt Muck, Andes and the South Chatham Rise. Implicit in its submission is that the longer phased introduction of an F_{MSY}-based harvest strategy under IPP option 1 will allow time for some of this uncertainty to be resolved.

7 Of the environmental groups, Forest & Bird supports IPP option 2 and ECO support a TAC reduction greater than that proposed in this option. Both Forest & Bird and ECO support a faster reduction than Industry on the basis that orange roughy are vulnerable to overfishing, recruitment concerns and the view that there are no known spawning aggregations on the South Chatham Rise. The ECO submission referred extensively to the Plenary report, adopting a position generally consistent with the most precautionary interpretation of sustainable catch levels presented in that document. The ECO position for areas other than the East and South Chatham Rise is largely consistent with that taken in their submissions on the 2006 and 2007 IPPs. This is appropriate given no new stock assessment information for these areas were presented in the 2007 or 2008 Plenary reports. ECO also states that it considers further cuts are likely to be needed for both the Chatham Rise and Sub-Antarctic portions of ORH 3B although no detail or specific rationale is provided to support this statement.

Stock status

8 Three submitters commented on the status of the East and South Chatham Rise stock. SeaFIC agrees that the stock is likely to be within the range of 15-30% B_0. ECO agrees with this range but consider it more likely that the stock is around 20% B_0. Sanford, while not explicitly stating what it considers the stock status to be, considers that the reduction of the TAC is required to ensure the long term sustainability of the ORH 3B fishery.

F_{MSY}-based harvest strategy

9 SeaFIC sees an F_{MSY} policy as compatible with statutory requirements and good management principles. However SeaFIC notes that although an F_{MSY}-based strategy will result in achieving B_{MSY} on average, there is no explicit estimation of B_{MSY} or of determining where the stock lies in relation to B_{MSY} at any point in time. SeaFIC suggests that this may be problematic under existing law but should not be problematic under the proposed section 13 amendment.

10 SeaFIC also notes that while the new strategy obviates the requirement for contentious stock assessments, it will not reduce the difficulties associated with estimating orange roughy biomass.

11 DWG is pleased to note that the harvest strategy used in the IPP is based on the F_{MSY}-based strategy described in the draft fisheries plan. DWG considers that this approach is appropriate and supports its phased introduction to the management of the East and South Chatham Rise stock.

Fisheries plan

12 SeaFIC notes that the proposed F_{MSY}-based harvest strategy is not fully formulated in the IPP and submits that it is unclear how this approach will actually be implemented. SeaFIC considers it important that this is clarified as part of the developing fisheries plan and SeaFIC's support for an F_{MSY}-based strategy is dependent on these details. SeaFIC notes that clarifying these issues is critical if stakeholder expectations as to the likely tradeoffs between stability and certainty and TACC reductions are not to be undermined.

13 Sanford supports the development of future research and management requirements under a fisheries plan – the development of which Sanford believes is making good progress.

14 Through the fisheries plan process, DWG, Sanford and SeaFIC all express support for, and seek agreement with MFish on :

- the adoption of M as a proxy for F_{MSY} (DWG, Sanford and SeaFIC);
- a value of M = 0.045 (DWG, Sanford and SeaFIC);
- the retention of F_{MSY} = M = 0.045 for 5 years to allow science processes to concentrate on the delivery of robust biomass estimates (DWG, Sanford and SeaFIC), and ensure stability of management (SeaFIC);
- development of a protocol for the annual revision of the $B_{current}$ estimate for the East and South Chatham Rise (DWG and SeaFIC);
- implementation of a cost-effective and best-practice science programme to support estimation of $B_{current}$ (DWG);
- retention of the current multiplier (i.e. 1.49) to scale the estimate of spawning biomass to mature biomass for a period of not less than three years (DWG);
- collection of fishery-related information to enable review of the multiplier (DWG and SeaFIC);
- The relationship of B_{MSY} to B_0 under an F_{MSY}-based harvest strategy (DWG and SeaFIC);
- how the F_{MSY}-based strategy aligns with the harvest strategy (DWG and SeaFIC);
- how frequently the TACC will be varied (SeaFIC).

Catch spreading

15 DWG confirms that Industry will continue to report sub-stock and sub-area catches to MFish and will advise when 80% of any of these limits has been reached. Sanford notes its commitment to ORH 3B management arrangements co-ordinated by DWG.

16 Both DWG and SeaFIC commented specifically on the proposed catch limit for the main spawning plume (the Plume) and neither support its implementation. SeaFIC sees no rationale for constraining removals from the Plume. The basis for their position is that fleet rationalisation and market requirements mean that in practice catch will be spread throughout the year making a specific spawning plume limit superfluous. DWG agrees, in the absence of a prescribed limit, to deliver catch outcomes that will result in less than 50% of the East and South Chatham Rise catch limit being taken from the spawning plume.

Environmental considerations

17 More generally, both ENGOs submitted on the need to consider the environmental effects of orange roughy fisheries and that the IPP was deficient in this regard. Both ECO and Forest & Bird consider that you must be provided not only with socio-economic impacts of the different management options but also the environmental impacts of each option. ECO considers that economic considerations should consider the annual loss on natural capital as well as losses to the Industry.

18 Specific environmental concerns raised by these submitters include:

Bycatch
Forest & Bird requests that the number and species (including IUCN threat status) of non-target catch should be specified for sharks, marine mammals, seabirds, corals and other benthic fauna.

Benthic habitats and species assemblages
Both ECO and Forest & Bird argue that the BPAs and seamount closures do not meet requirements to avoid, remedy or mitigate the impacts of current fishing practice. Forest & Bird requests that the FAP specify the detail of the BPAs relative to the ORH 3B fishery and also specify the rationale for how they meet the requirements of the Act.

MFish response

19 The FAP addresses concerns raised by submitters. Where appropriate specific issues raised by submitters are included and discussed directly in the text. Issues relating to fisheries plans are not considered in the FAP. They will be more appropriately dealt with through the fisheries plan development process.

DEEMED VALUE RATES FOR SELECTED FISHSTOCKS – INITIAL POSITION PAPER

Purpose

1 This Initial Position Paper (IPP) proposes some changes to the deemed value rates for selected fishstocks for the October 2008 sustainability round. MFish has undertaken this review using the Deemed Value Standard. A summary of this standard can be found in Appendix 1.

Executive summary

2 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) that is not less than the total catch of that stock taken by the commercial fisher. Section 75 (2)(b) sets out the factors the Minister may have regard to when setting deemed values. These factors form the basis of the analysis spreadsheet that has been produced for all the stocks under review.

3 MFish developed a Deemed Value Standard in 2007 ("Deemed Value Standard") to set out a process for managing the setting, reviewing and amendment of deemed value rates. This standard has been used to review the deemed value rates as part of this sustainability round.

4 The Deemed Value Standard details a set of criteria that determine if a fishstock should be considered for a deemed value review. Table 1 details the stocks that meet one or more of these criteria and therefore are eligible for a review.

Table 1: Stocks that met the review criteria set out in the Deemed Value Standard

		Summary of Recommended deemed value changes		
Species Name	**Fish Stock Reviewed**	**Annual**	**Interim**	**Differential**
Barracouta	BAR5	No change	No change	No change
Blue cod	BCO3	Increased to $3.75 per kg	Increased to $2.50 per kg	Adjusted to match annual rate
Blue shark	BWS1	No change	No change	No change
Elephant fish	ELE3	No change	No change	No change
Frostfish	FRO8	No change	No change	No change
Garfish	GAR1	No change	No change	No change
Grey mullet	GMU1 (GMU2, GMU3 & GMU7)	No change	No change	No change
Gurnard	GUR3	No change	No change	Alter differential deemed values
Hake	HAK1	No change	No change	No change
Hapuka/Bass	All HPB stocks	No change	No change	No change
John dory	JDO2 & JDO7	No change	No change	No change
Kingfish	KIN7 (KIN8)	Increased to $10.00 per kg	Increased to $5.00 per kg	Adjusted to match annual rate
Ling	All LIN stocks	No change	No change	No change
Moki	MOK1	No change	No change	No change
Parore	PAR1 & PAR9 (All other PAR stocks)	Decreased to $0.31 per kg	Decreased to $0.16 per kg	Apply differential deemed values
Paua	All PAU stocks	Increased to $90.00 per kg	Increased to $70.00 per kg	Adjusted to match annual rate
Pilchard	PIL1	No change	No change	No change
Porae	POR2 (All other POR stocks)	Increased to $1.35 per kg	Increased to $0.68 per kg	Apply differential deemed values
Ruby fish	RBY3 & RBY4	No change	No change	No change
Ribaldo	RIB7 (RIB3, RIB4, RIB5 & RIB6)	Increased to $0.80 per kg	Increased to $0.40 per kg	Higher differential deemed values applied
Rough skate	RSK1 & RSK3	Increased to $0.44 per kg	No change	No change
Gemfish	SKI2 (SKI1)	Decreased to $1.29 per kg	Decreased to $0.65 per kg	Adjusted to match annual rate
Sea perch	SPE2	No change	No change	No change
Sea perch	SPE8	Increased to $0.43 per kg	Increased to $0.23 per kg	No change
Rig	SPO2	Decreased to $2.00 per kg	Decreased to $1.00 per kg	Adjusted to match annual rate
Rig	SPO7	No change	No change	No change
Arrow squid	SQU1T	No change	No change	No change
Smooth skate	SSK1 (all other SSK stocks)	No change	No change	No change
Kina	SUR1A & SUR7A	No change	No change	No change
Swordfish	SWO1	Decreased to $3.00 per kg	Decreased to $1.50 per kg	No change
Tarakihi	TAR1 & TAR8	No change	No change	No change
Trumpter	TRU4	No change	No change	No change
White warehou	WWA4	No change	No change	No change

5 In addition stocks that are being considered for a total allowable catch (TAC) review as part of the October 2008 sustainability round are also included in this review process. These stocks are listed in Table 2 below.

Table 2: Stocks that are being considered for a TAC adjustment and therefore will also require a review of their deemed value rates

		Summary of Recommended deemed value changes		
Species Name	**Fish Stock Reviewed**	**Annual**	**Interim**	**Differential**
Bluenose	All BNS stocks	Increased to $3.00 per kg	Increased to $1.50 per kg	Higher differential deemed values applied
Orange roughy	ORH3B	No change	No change	No change

6 All stocks in Tables 1 & 2 were considered at the deemed value review group meeting held Monday 5 May 2008. If the review group considered that a deemed value adjustment was appropriate, a range of information sources (see Appendix 2) was then used to propose a new deemed value rate. The individual assessments for each stock can be found in this paper.

7 In a number of cases, stocks associated with the stock under review were also considered for a deemed value adjustment. These associated stocks include neighbouring stocks of the same species (for example, SSK3 is included in the review of SSK1). These associated stocks are included in Tables 1 & 2 in brackets.

Background

8 The purpose of the deemed value framework is to provide an incentive for fishers to acquire sufficient ACE to balance against catch. The objectives of the catch balancing framework are to ensure that:

a) Catch is harvested, landed and balanced with ACE;

b) There are no significant deemed value payments when ACE is left unused at the end of the fishing year; and

c) Individual fishers are not able to use deemed values to undermine the QMS.

9 The balancing regime is also a key fisheries management tool contributing to both sustainability and utilisation objectives. The sustainability objectives are achieved when deemed value rates encourage fishers to balance catch with available ACE and in so doing constrain harvesting to the total allowable commercial catch (TACC). Incorrectly set deemed values have led to catches in excess of TACC in some fisheries in recent years, which may have sustainability implications.

10 Utilisation objectives are achieved by providing flexibility for operators to manage unexpected and small overruns in ACE holdings by allowing periodic rather than continuous balancing. Low deemed value rates can reduce the value of quota as fishers may choose to pay deemed values rather than purchasing ACE. In the long term, the sustainability implications that may result from overfishing could result in TACC reductions, which also impact on utilisation objectives.

11 MFish developed the Deemed Value Standard in 2007 to ensure that deemed value rates are set so as to best meet the purpose of the Act. The Deemed Value Standard provides greater flexibility in how deemed values are set and attempts to ensure that the right incentives are in place to encourage fishers to balance their catch with ACE instead of deemed values.

12 The Deemed Value Standard is intended to ensure that effective deemed values are set for all stocks. The Deemed Value Standard:

a) Allows a more flexible, robust and consistent approach to setting deemed values;

b) Sets deemed values following the analysis of a range of information sources;

c) Maintains interim deemed values but allows for interim deemed values to be set at a higher rate, if appropriate; and

d) Maintains differential deemed values but allows their application to be varied on a stock by stock basis.

13 Adopting a more flexible approach means fisheries managers are able to use deemed values as a management tool to promote appropriate behaviour in the fishery.

14 As part of the review of the stocks listed in Tables 1 & 2, the associated stocks of these key review stocks are also included in the review process. Associated stocks include neighbouring stocks within the same species, e.g., SSK3 is included in the review of SSK1.

Rationale for management options

15 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 ACE that is not less than the total catch of that stock taken by the commercial fisher.

16 The Act requires both annual and interim deemed value rates to be set for all stocks which will take effect on the first day of each fishing year. In the past, interim deemed value rates have been set at 50% of the annual rate. There is a risk that low interim deemed value rates will delay the balancing of catch until the end of the fishing season, when there is a race for ACE and insufficient ACE to cover all catch, therefore leading to the TACC being exceeded.

17 While the interim deemed value rates will remain at 50% of the annual rates for most stocks, MFish is recommending higher interim deemed value rates for some of the stocks under review. Details of what percentage of the annual deemed value the interim deemed values have been set can be found in the analysis of each stock. In some instances it may be appropriate to set the interim rate closer to the annual rate. If fishers were required to pay a higher interim deemed value rate, it may encourage them to obtain ACE to balance their catch more regularly instead of delaying this until the end of the fishing year. MFish proposes that, in situations where more regular balancing is warranted to ensure catch levels do not exceed available ACE, the interim deemed value should be set closer to the annual rate.

18 The Act also permits the Minister to set differential deemed value rates. The purpose of differential deemed values is to create greater incentives at the individual level to balance catch with ACE.

19 Unlike both the annual and interim deemed value rates, differential deemed value rates apply at the individual fisher level only. MFish considers differential deemed value rates to be an important tool in addressing situations where fishers take excess catch with the intention of paying deemed values instead of balancing with ACE.

20 As part of the flexible approach to setting deemed values, MFish is recommending that differential deemed values are set at a level that will provide a strong incentive for fishers to balance catch with ACE. For some stocks this may mean applying differential deemed values at small percentages of overcatch such as 5% to discourage any fishing on deemed values; for others it may mean applying differential deemed value rates at 20% overcatch to allow some minor over catch.

21 Flexibility in setting the incremental increase in differential deemed value rates is also available under the Deemed Value Standard. Differential rates depend on the stock and the behaviours that MFish is trying to use deemed values to manage. The actual rates at which the differentials are set are flexible and are not necessarily based on the annual rate. Instead, they can be set at any financial amount that MFish considers is necessary to provide the maximum disincentive for fishers to take fish without ACE.

22 For each stock in this review interim, annual and differential deemed value rates are proposed at a level that MFish considers will ensure every incentive is provided to fishers to balance catch with ACE.

Process

23 The Deemed Value Standard sets out a process for reviewing and adjusting deemed value rates. This process is being followed for the October 2008 sustainability round.

24 All quota management system (QMS) stocks with a fishing year beginning 1 October were assessed against the following deemed value criteria as set out in the Deemed Value Standard:

a) Catch in excess of a TACC.

b) Catch in excess of an individual's ACE holdings and deemed values have been invoiced but ACE has remained unused.

c) Changes to the port price of a stock.

d) Direct request from the Seafood Industry Council (SeaFIC) on behalf of quota owners.

e) Recent changes to a stock's TACC or the TACC of key bycatch stocks.

f) Stock has recently entered the QMS and the initial deemed value rate was set using limited information.

25 Following an assessment of the stock's performance against the criteria described above an analysis spreadsheet ("analysis spreadsheet") was prepared. This analysis spreadsheet details the stock's performance against the criteria described above.

26 This information was analysed to determine why deemed value rates for some stocks may not be effective. The analysis spreadsheet described above was used to answer the following questions:

a) Likely reasons for the TACC over catch/ACE breaches.

b) An assessment of the bycatch fisheries associated with the stocks under review.

c) If there has been significant changes in the structure of quota/ACE holdings for the stocks.

d) Likely risk that the deemed value may not provide the appropriate incentive to balance catch with ACE.

e) Impact of changes in market price and/or structure for the fish product/species under review.

27 Information relevant to a deemed value adjustment is summarised in the analysis section for each stock. The information sheets can be found in Appendix 2.

28 All stocks included on the list were reviewed by the deemed value review group at a meeting, held on Monday 5 May 2008. This review group consisted of a representative from SeaFIC and MFish officials. At this meeting, each stock was assessed using the information and analysis described above. This assessment determined if a deemed value adjustment was appropriate.

29 If a deemed value adjustment was considered appropriate, the following information sources were used to determine how the proposed new deemed value rate should be set. This information was available to participants at the deemed value review group meeting:

a) Port price;

b) ACE trading price;

c) Export prices as a proxy for market values (where appropriate);

d) Bycatch ratios (where appropriate);

e) Cost recovery levy rates; and

f) Past deemed value payments.

30 MFish is presenting the following proposed deemed value adjustments for consultation only. This IPP is not final advice to the Minister but provides stakeholders with the opportunity to comment on, and provide supplemental information to draft advice.

Analysis

31 This section sets out a summary of the analysis for each stock and an assessment of the proposed deemed value adjustment.

32 Not all stocks included on the review list require a deemed value adjustment. Details of such stocks are presented at the end of the analysis section.

33 The analysis for each stock follows.

Blue cod: BCO3

34 Blue cod (BCO3) is a key bycatch species in the southern inshore fin fishery. BCO3 is included in the review because:

a) It has been consistently over caught in recent fishing seasons (106% of available ACE in the 2006-07 fishing season).

b) Deemed value invoices of $49,779 were issued at the end of the 2006-07 fishing season.

c) The port price for BCO3 has increased from $2.94 per kg to $3.81 per kg (an increase of $0.87 per kg).

35 The current port price ($3.81 per kg) is higher than the annual deemed value rate ($3.25 per kg) suggesting fishers can fish, pay the deemed value and still realise a profit.

36 MFish proposes to increase the annual deemed value rate for BCO3 so that it better reflects the landed price suggested by export price and other information in this fishery.

37 MFish also proposed to set the interim deemed value rate at 66.66% of the annual deemed value rate to encourage fishers to balance their catch with ACE regularly instead of paying interim deemed values.

38 The differential deemed value rates for BCO3 will also change so they are in line with the proposed annual deemed value rate.

39 The proposed deemed value rates for BCO3 for the 2008-09 fishing season is as follows:

a) Annual deemed value rate to increase from $2.65 per kg to $3.75 per kg

b) Interim deemed value rate to increase from $1.32 per kg to $2.50 per kg

c) Differential deemed value rates adjusted to reflect the proposed new annual deemed value rate, outlined in the table below.

Table 3: Proposed differential deemed value rates for BCO3

Current differential rates		Proposed differential rates	
Catch in excess of ACE holdings (%)	Current deemed value rate for BCO3 ($)	Catch in excess of ACE holdings (%)	Proposed deemed value rate for BCO3 ($)
20	3.90 per kg	20	4.50 per kg
40	4.55 per kg	40	5.25 per kg
60	5.20 per kg	60	6.00 per kg
80	5.85 per kg	80	6.75 per kg
100	6.50 per kg	100	7.50 per kg

Bluenose: All BNS stocks

40 BNS is caught both as a target and bycatch species. BNS is targeted by using longlines but it also caught as bycatch in other longline fisheries and some trawl

fisheries. These fisheries are being reviewed in the October sustainability round as there are concerns that the TACC has been set too high and that this is leading to falling catches and sustainability concerns.

41 MFish considers that if the TACC is reduced then deemed value rates should increase so that they adequately protect the new TACC. The current annual deemed value rates in each BNS stock are currently set below both the port price for that stock and the greenweight value implied by the average export price for BNS ($7.37 per kg). MFish proposes to increase the annual deemed value rate so that it better reflects the current port price.

42 MFish considers it appropriate to adjust the differential deemed value rates for all BNS stocks so that lower rates apply to smaller amounts of catch in excess of ACE holdings and rise steeply as fishers report greater quantities of catch in excess of ACE.

43 These proposed deemed value adjustments are dependant on a TACC decrease, if this is not approved by the Minister then MFish considers the deemed value rates should remain unchanged.

44 The proposed deemed value rates for all BNS stocks for the 2008-09 fishing season are as follow:

a) Annual deemed value rate to:

   i) BNS1: increase from $2.37 per kg to $3.00 per kg;

   ii) BNS2: remain at $3.00 per kg;

   iii) BNS3: increase from $2.38 per kg to $3.00 per kg;

   iv) BNS7: increase from $1.64 per kg to $3.00 per kg;

   v) BNS8: increase from $2.06 per kg to $3.00 per kg;

   vi) BNS10: increase from $1.73 per kg to $3.00 per kg;

b) Interim deemed value rate to:

   vii) BNS1: increase from $1.19 per kg to $1.50 per kg;

   viii) BNS2: remain at $1.50 per kg;

   ix) BNS3: increase from $1.19 per kg to $1.50 per kg;

   x) BNS7: increase from $0.82 per kg to $1.50 per kg;

   xi) BNS8: increase from $1.03 per kg to $1.50 per kg;

   xii) BNS10: increase from $0.87 per kg to $1.50 per kg;

c) Differential deemed value rates adjusted to reflect the proposed new annual deemed value rate, outlined in the table below.

Table 4: Proposed differential deemed value rates for all BNS stocks

Current differential rates					
Catch in excess of ACE holdings (%)	Current deemed value rate for BNS1 ($)	Current deemed value rate for BNS3 ($)	Current deemed value rate for BNS7 ($)	Current deemed value rate for BNS8 ($)	Current deemed value rate for BNS10 ($)
20	2.844 per kg	2.856 per kg	1.968 per kg	2.472 per kg	2.076 per kg
40	3.318 per kg	3.332 per kg	2.296 per kg	2.884 per kg	2.422 per kg
60	3.792 per kg	3.808 per kg	2.624 per kg	3.296 per kg	2.768 per kg
80	4.266 per kg	4.284 per kg	2.952 per kg	3.708 per kg	3.114 per kg
100	4.740 per kg	4.760 per kg	3.280 per kg	4.120 per kg	3.460 per kg

Current differential rates		Proposed differential rates	
Catch in excess of ACE holdings (%)	Current deemed value rate for BNS2 ($)	Catch in excess of ACE holdings (%)	Proposed deemed value rate for all BNS stocks ($)
5	4.00 per kg	5	4.00 per kg
10	5.00 per kg	10	5.00 per kg
20	6.00 per kg	20	6.00 per kg
30	7.00 per kg	30	7.00 per kg
40	8.00 per kg	40	8.00 per kg
50	9.00 per kg	50	9.00 per kg
60	10.00 per kg	60	10.00 per kg

Gurnard: GUR3

45 GUR3 is a bycatch of the ELE3, FLA3, RCO3 and TAR3 target fisheries. Recent research purchased by MFish shows that the GUR3 populations are in the best shape in the past 20 years. It has been reported by the MFish Dunedin office that the high abundance of GUR is creating problems in the South East finfishery. GUR3 has also breached several of the criteria for review:

a) In the last three fishing seasons GUR3 has been over caught (124% of available ACE in the 2006-07 fishing season).

b) Deemed value invoices of $216,356 were issued at the end of the 2006-07 fishing season.

46 The deemed value rates for GUR3 were changed in the October 2007 review to try to better protect the TACC. However, this change has created incentives to dump or high grade due to the high abundance and price differentials for different size fish.

47 Analysis of the deemed value invoices incurred so far to date (1 October 2007 to 14 April 2008) of $7,219 show a significant decrease in the amount of deeming when compared to the same time period last year ($30,023).

48 Given the high abundance of GUR3 and the reports that fishers cannot avoid catching it as a bycatch, MFish believes that the deemed value structure implemented at the start of the 2007-08 fishing year has not created an incentive to balance with ACE but may have exacerbated any existing high grading or dumping issues associated with GUR3.

49 This situation has put MFish in a difficult position. MFish recognises that the deemed value structure as it currently stands has not encouraged fishers to balance their catch

ACE. MFish also does not want to reward illegal behaviour such as high grading and dumping by lowering deemed values to create in effect an open access fishery and undermine the rights of quota owners.

50 After carefully considering the situation, MFish has decided that action is required to ensure the all GUR3 caught is landed/reported and that incentives are left in place to encourage fishers to balance their catch with ACE.

51 The proposed deemed value rates for GUR3 for the 2008-09 fishing season is as follows:

a) Retain the existing annual deemed value rate of $1.60 per kg.

b) Retain the existing interim deemed value rate of $0.80 per kg.

c) Differential deemed value rates adjusted as outlined in the table below

Table 5: Proposed differential deemed value rates for GUR3

Current differential rates		Proposed differential rates	
Catch in excess of ACE holdings (%)	Current deemed value rate for GUR3 ($)	Catch in excess of ACE holdings (%)	Proposed deemed value rate for GUR3 ($)
20	1.92 per kg	50	2.08 per kg
40	2.24 per kg	60	2.56 per kg
60	2.56 per kg	80	2.88 per kg
80	2.88 per kg	100	3.20 per kg
100	3.20 per kg		

Kingfish: KIN7 & KIN8

52 KIN7 is caught as a bycatch in the jack mackerel fisheries and is an important recreational fish stock. This was reflected in the TACC allocation that was set when the stock entered the QMS, a 21 tonne TAC was set but just 7 tonnes was allocated for commercial use.

53 The KIN7 stock is believed to be on the margins of the distribution of kingfish and, while there is incomplete information about the status of the stock, it is important that catches are constrained to the TACC.

54 Kingfish is listed on the 6th Schedule of the Act and therefore it can be returned to the sea, provided it is likely to survive. While this option is available to fisher's who catch KIN7 as a bycatch in the jack mackerel trawl fishery the likelihood of a kingfish surviving if returned to the sea is uncertain.

55 The current deemed value regime is not constraining catch (178% of ACE was caught during the 2006-07 fishing year) and this would suggest that current deemed value rates are not providing the appropriate incentive to fishers to balance their catch with ACE.

56 Vessels targeting jack mackerel operate in both KIN7 and KIN8. To discourage any incentive to misreport between QMAs, MFish proposes to change the deemed value rates in KIN8 to match those proposed in KIN7.

57 The proposed deemed value rates for KIN7 & KIN8 for the 2008-09 fishing season are as follow:

a) Annual deemed value rate to increase:

i) KIN7: from $8.90 per kg to $10.00 per kg;

ii) KIN8: from $8.90 per kg to $10.00 per kg;

b) Interim deemed value rate to increase:

iii) KIN7: from $4.45 per kg to $5.00 per kg;

iv) KIN8: from $4.45 per kg to $5.00 per kg;

c) Differential deemed value rates adjusted to reflect the proposed new annual deemed value rate, outlined in the table below.

Table 6: Proposed differential deemed value rates for KIN7 & KIN8

Current differential rates		Proposed differential rates	
Catch in excess of ACE holdings (%)	Current deemed value rate for KIN7 & KIN8 ($)	Catch in excess of ACE holdings (%)	Proposed deemed value rate for KIN7 & KIN8 ($)
20	10.80 per kg	20	12.00 per kg
40	12.60 per kg	40	14.00 per kg
60	14.40 per kg	60	16.00 per kg
80	16.20 per kg	80	18.00 per kg
100	18.00 per kg	100	20.00 per kg

Parore: All PAR stocks

58 Parore is principally caught as a bycatch in the grey mullet, flatfish and trevally setnet fisheries in northern New Zealand. Most of the catch comes from eastern Northland and the Firth of Thames (PAR1) and the Kaipara and Manukau Harbours (PAR9).

59 Parore (PAR1) was included in this review because there has been deemed value payments when 19% of ACE remained unused during the 2006-07 fishing year. There has also been a slight increase in the port price from $1.53 per kg to $1.78 per kg.

60 PAR9 has been included in this review because the deemed value rates for this fishery are out of line with the other PAR stocks.

61 MFish believes that current deemed value rates are not providing the appropriate incentive to fishers to balance their catch with ACE. Therefore, MFish proposes to set the same annual and interim deemed value rates for all the PAR stocks and introduce differential deemed values into all the PAR stocks.

62 This approach will also remove any incentive to misreport PAR to take advantage of a lower deemed value rate in a neighbouring PAR fishery.

63 The proposed deemed value rates for all PAR stocks for the 2008-09 fishing season are as follow:

a) Annual deemed value rate to:

i) PAR1: remain at $0.31 per kg;

ii) PAR2: remain at $0.31 per kg;

iii) PAR9: decrease from $0.34 per kg to $0.31 per kg;

iv) PAR10: remain at $0.31 per kg;

b) Interim deemed value rate to:

v) PAR1: remain at $0.16 per kg;

vi) PAR2: remain at $0.16 per kg;

vii) PAR9: decrease from $0.17 per kg to $0.16 per kg;

viii) PAR10: remain at $0.16 per kg.

c) Introduce differential deemed value rates into these fisheries at the rates outlined in the table below.

Table 7: Proposed differential deemed value rates for all PAR stocks

Current differential rates		Proposed differential rates	
Catch in excess of ACE holdings (%)	**Current deemed value rate for all PAR stocks ($)**	**Catch in excess of ACE holdings (%)**	**Proposed deemed value rate for all PAR stocks ($)**
20	Differential deemed values currently do not apply	20	0.372 per kg
40		40	0.434 per kg
60		60	0.496 per kg
80		80	0.558 per kg
100		100	0.620 per kg

Paua: All PAU Stocks

64 Paua is an important species to both commercial and non-commercial fishers.

65 It is a high value species to commercial fishers, and there has been an increase in the port price for all PAU stocks except PAU10 to $44.39 per kg (an increase of $7.38 per kg).

66 MFish believes it is important to continue the strategy of setting the annual deemed value rate at least twice the port price for high value species. In the IPP, MFish proposed to shift the annual deemed value rate for all PAU stocks to $90.00 per kg to account for the increase in port price. This is approximately twice the current port price.

67 MFish also proposed to set the interim deemed value rate at 77.77% of the annual deemed value rate to encourage fishers to balance their catch with ACE regularly instead of paying interim deemed values.

68 The differential deemed value rates for all PAU stocks would then be adjusted to match the proposed annual deemed value rate.

69 The proposed deemed value rates for all PAU stocks for the 2008-09 fishing season are as follow:

a) Annual deemed value rate to increase:

i) PAU1: from $60.00 per kg to $90.00 per kg;

ii) PAU2: from $60.00 per kg to $90.00 per kg;

iii) PAU3: from $60.00 per kg to $90.00 per kg;

iv) PAU4: from $60.00 per kg to $90.00 per kg;

v) PAU5A: from $60.00 per kg to $90.00 per kg;

vi) PAU5B: from $60.00 per kg to $90.00 per kg;

vii) PAU5D: from $60.00 per kg to $90.00 per kg;

viii) PAU6: from $60.00 per kg to $90.00 per kg;

ix) PAU7: from $60.00 per kg to $90.00 per kg;

x) PAU10: from $60.00 per kg to $90.00 per kg;

b) Interim deemed value rate to increase:

xi) PAU1: from $30.00 per kg to $70.00 per kg;

xii) PAU2: from $30.00 per kg to $70.00 per kg;

xiii) PAU3: from $30.00 per kg to $70.00 per kg;

xiv) PAU4: from $30.00 per kg to $70.00 per kg;

xv) PAU5A: from $30.00 per kg to $70.00 per kg;

xvi) PAU5B: from $30.00 per kg to $70.00 per kg;

xvii) PAU5D: from $30.00 per kg to $70.00 per kg;

xviii) PAU6: from $30.00 per kg to $70.00 per kg;

xix) PAU7: from $30.00 per kg to $70.00 per kg;

xx) PAU10: from $30.00 per kg to $70.00 per kg;

c) Differential deemed value rates adjusted to reflect the proposed new annual deemed value rate, outlined in the table below.

Table 8: Proposed differential deemed value rates for all PAU stocks

Current differential rates		Proposed differential rates	
Catch in excess of ACE holdings (%)	Current deemed value rate for all PAU stocks ($)	Catch in excess of ACE holdings (%)	Proposed deemed value rate for all PAU stocks ($)
20	72.00 per kg	20	108.00 per kg
40	84.00 per kg	40	126.00 per kg
60	96.00 per kg	60	144.00 per kg
80	108.00 per kg	80	162.00 per kg
100	120.00 per kg	100	180.00 per kg

Porae: All POR stocks

70 Porae is principally caught as a bycatch in inshore setnet fisheries in northern New Zealand. It is generally taken in association with snapper and trevally in east Northland and Coromandel, and tarakihi and blue moki around Gisborne.

71 Porae (POR2) was included in this review because 135% of ACE was caught in the 2006-07 fishing year. There has also been an increase in the port price from $1.83 per kg to $2.15 per kg. The deemed value rates for POR2 are also out of line with deemed value rates of the other POR stocks.

72 MFish believes that current deemed value rates are not providing the appropriate

incentive to fishers to balance their catch with ACE. Therefore, MFish proposes to set the same annual and interim deemed value rates for all the POR stocks and introduce differential deemed values into all the POR stocks.

73 This approach will also remove any incentive to misreport POR to take advantage of a lower deemed value rate in a neighbouring POR fishery.

74 The proposed deemed value rates for all POR stocks for the 2008-09 fishing season are as follow:

a) Annual deemed value rate to:

i) POR1: remain at $1.35 per kg;

ii) POR2: increase from $0.69 per kg to $1.35 per kg;

iii) POR3: remain at $1.35 per kg;

iv) POR10: remain at $1.35 per kg;

b) Interim deemed value rate to:

v) POR1: remain at $0.68 per kg;

vi) POR2: increase from $0.35 per kg to $0.68 per kg;

vii) POR3: remain at $0.68 per kg;

viii) POR10: remain at $0.68 per kg;

c) Introduce differential deemed value rates into these fisheries at the rates outlined in the table below.

Table 9: Proposed differential deemed value rates for all POR stocks

Current differential rates		Proposed differential rates	
Catch in excess of ACE holdings (%)	Current deemed value rate for all POR stocks ($)	Catch in excess of ACE holdings (%)	Proposed deemed value rate for all POR stocks ($)
20	Differential deemed values currently do not apply	20	1.62 per kg
40		40	1.89 per kg
60		60	2.16 per kg
80		80	2.43 per kg
100		100	2.70 per kg

Ribaldo: RIB3, RIB4, RIB5, RIB6 & RIB7

75 Ribaldo was classified as a low knowledge stock when it was brought into the QMS in 1998. The TACC for RIB7 was reviewed during the October 2006 sustainability round and was substantially increased from 55 tonnes to 330 tonnes. The deemed value rates were also increased at the same time from an annual rate of $0.07 per kg to $0.80 per kg and from an interim rate of $0.04 per kg to $0.40 per kg. However, the TACC was overfished during the 2006-07 fishing year which would suggest the deemed value rates were not set at an appropriate level when last reviewed by MFish.

76 During the 2006-07 fishing year $67,350 in deemed value payments were incurred in RIB7. Three companies were responsible for 93% of these payments. The key issue is that there are no differential deemed value rates set for RIB7 and there is an incentive for fishers to fish extensively without ACE.

77 MFish also considers it appropriate to set consistent deemed value rates for stocks that are routinely fished as part of the same fishing trip so as to avoid any incentive for fishers to misreport catch by taking advantage of a lower deemed value rate in a neighbouring stock. For this reason, MFish considers it appropriate to have the same deemed value regime across all 5 ribaldo stocks since vessels can fish in more than one ribaldo fishery during the same trip.

78 The proposed deemed value rates for RIB3, RIB4, RIB5, RIB6 & RIB7 for the 2008-09 fishing season are as follow:

a) Annual deemed value rate to:

i) RIB3: increase from $0.30 per kg to $0.80 per kg;

ii) RIB4: increase from $0.30 per kg to $0.80 per kg;

iii) RIB5: increase from $0.06 per kg to $0.80 per kg;

iv) RIB6: remain at $0.80 per kg;

v) RIB7: remain at $0.80 per kg;

b) Interim deemed value rate to:

vi) RIB3: increase from $0.15 per kg to $0.40 per kg;

vii) RIB4: increase from $0.15 per kg to $0.40 per kg;

viii) RIB5: increase from $0.03 per kg to $0.40 per kg;

ix) RIB6: remain at $0.40 per kg;

x) RIB7: remain at $0.40 per kg;

c) Introduce differential deemed value rates into these fisheries at the rates outlined in the table below.

Table 10: Proposed differential deemed value rates for RIB3, RIB4, RIB5, RIB6 & RIB7

Current differential rates		Proposed differential rates	
Catch in excess of ACE holdings (%)	**Current deemed value rate for RIB3, RIB4, RIB5, RIB6 & RIB7 ($)**	**Catch in excess of ACE holdings (%)**	**Proposed deemed value rate for RIB3, RIB4, RIB5, RIB6 & RIB7 ($)**
10	Differential deemed values currently do not apply	10	1.20 per kg
20		20	2.00 per kg

Rough skate: RSK1 and RSK3

79 Rough skate occur throughout New Zealand, but are most abundant around the South Island in depths down to 500m. Most of the catch is taken as bycatch by bottom trawlers, but skates are also taken by longliners.

80 RSK1 and RSK3 have been included in this review because the deemed value rates for these fisheries are out of line with the other RSK stocks.

81 By removing this difference in the deemed value rates there should not be any incentive to misreport RSK to take advantage of a lower deemed value rate in a neighbouring RSK fishery. This also brings the deemed value rates for rough skate in

line with the deemed value rates for smooth skate (SSK). MFish is aware that it can be difficult to identify each species of skate so the matching deemed value rates should remove any incentive to misreport the species of skate caught to take advantage of a lower deemed value rate.

82 Rough skate is listed on the 6th Schedule of the Fisheries Act and therefore it can be returned to the sea provided it is likely to survive

83 The proposed deemed value rates for RSK1 and RSK3 for the 2008-09 fishing season are as follow:

a) Annual deemed value rate to increase:

i) RSK1: from $0.23 per kg to $0.44 per kg;

ii) RSK3: from $0.30 per kg to $0.44 per kg;

b) Interim deemed value rate to:

iii) RSK1: remain at $0.22 per kg;

iv) RSK3: remain at $0.22 per kg;

c) Continue to have no differential deemed value rates in these fisheries.

Gemfish: SKI1 & SKI2

84 SKI2 is both a target fishery and a bycatch of the TAR2 trawl fishery. In five out of the last six fishing seasons SKI2 has been over caught (123% of available ACE in the 2006-07 fishing season).

85 The deemed value rates for SKI2 were changed in the October 2007 review to try to better protect the TACC. However, the port price for SKI2 has dropped from $3.14 per kg to $1.54 per kg (a decrease of $1.60 per kg). This means that the annual deemed value is now above the port price. This suggests that fishers have an incentive to dump fish since the deemed value is greater than the price they receive for it.

86 MFish considers a decrease to the annual deemed value rate is appropriate at this time so that it better reflects current market prices.

87 To remove any incentive for fishers to misreport SKI2 as coming from any other SKI stock, MFish proposes that the deemed value rates for SKI1 is adjusted so it is in line with SKI2.

88 The proposed deemed value rates for SKI1 and SKI2 for the 2008-09 fishing season is as follows:

a) Annual deemed value rate to decrease from $3.00 per kg to $1.29 per kg.

b) Interim deemed value rate to decrease from $1.50 per kg to $0.65 per kg.

c) Differential deemed value rates adjusted to reflect the proposed new annual deemed value rate, outlined in the table below.

Table 11: Proposed differential deemed value rates for SKI1 & SKI2

Current differential rates				Proposed differential rates	
Catch in excess of ACE holdings (%)	Current deemed value rate for SKI1 ($)	Catch in excess of ACE holdings (%)	Current deemed value rate for SKI2 ($)	Catch in excess of ACE holdings (%)	Proposed deemed value rate for SKI1 & SKI2 ($)
20	3.168 per kg	20	3.60 per kg	20	1.548 per kg
40	3.696 per kg	40	4.20 per kg	40	1.806 per kg
60	4.224 per kg	60	4.80 per kg	60	2.064 per kg
80	4.752 per kg	80	5.40 per kg	80	2.322 per kg
100	5.280 per kg			100	2.580 per kg

Sea perch: SPE8

89 Sea perch (SPE8) is a bycatch species of the deepwater fishery in QMA8. SPE8 is included in the review because the port price has increased from $0.60 per kg to $1.76 per kg (an increase of $1.16 per kg).

90 The current port price ($1.76 per kg) is higher than the annual deemed value rate ($0.24 per kg) suggesting fishers can fish, pay the deemed value and still realise a profit.

91 The port price for the other SPE fisheries has increased slightly (increases range from $0.01 per kg to $0.03 per kg). MFish plans on carrying out further analysis of the SPE8 to see why the port price for this fishery has increased significantly when compared to the other SPE fisheries.

92 However, MFish proposes to increase the annual deemed value rate for SPE8 so that it better reflects the port price in this fishery.

93 The proposed deemed value rates for SPE8 for the 2008-09 fishing season is as follows:

a) Annual deemed value rate to increase from $0.24 per kg to $0.45 per kg

b) Interim deemed value rate to increase from $0.12 per kg to $0.23 per kg

c) Continue to have no differential deemed value rates in this fishery.

Rig: SPO2

94 Rig (SPO) is caught as bycatch in most inshore trawl fisheries. SPO2 has been included in this review because:

a) It has been consistently over caught in the last twelve fishing seasons (113% of available ACE in the 2006-07 fishing season).

b) Deemed value invoices of $36,241 were issued at the end of the 2006-07 fishing season.

95 The deemed value rates for SPO2 were changed in the October 2007 review to try to better protect the TACC because of the persistent over fishing. The port price for SPO2 ($2.82 per kg) has since decreased, suggesting that the market value of rig has decreased. This may encourage fishers to discard fish since the annual deemed value rate is now above the port price.

96 The differential value rates for SPO2 were altered to set a lower over catch level to encourage fishers to balance with ACE as the majority of the deeming was being carried out by two companies. Although one company has since left the fishery. MFish considers the decrease in port and market price make the unique differential deemed value rates introduced for SPO2 no longer appropriate.

97 MFish considers a decrease to the annual deemed value rate closer in line with port price is appropriate at this time. Differential deemed value rates will also change to reflect the proposed annual deemed value rate and revert to the standard ramping system.

98 The proposed deemed value rates for SPO2 for the 2008-09 fishing season is as follows:

a) Annual deemed value rate to decrease from $3.00 per kg to $2.00 per kg

b) Interim deemed value rate to decrease from $1.50 per kg to $1.00 per kg

c) Differential deemed value rates adjusted as outlined in the table below

Table 12: Proposed differential deemed value rates for SPO2

Current differential rates		Proposed differential rates	
Catch in excess of ACE holdings (%)	Current deemed value rate for SPO2 ($)	Catch in excess of ACE holdings (%)	Proposed deemed value rate for SPO2 ($)
10	6.00 per kg	10	5.00 per kg
25	8.00 per kg	25	7.00 per kg
50	11.00 per kg	50	10.00 per kg

Broadbill swordfish: SWO1

99 Broadbill swordfish (SWO1) is a both bycatch in the bigeye and southern bluefin tuna fisheries and a target fishery. SWO 1 is included in this review because initial deemed value rates were set with limited information in the absence of an active ACE market.

100 MFish is concerned that the current level of the deemed value is very close to port price.

101 The 90 percentile of ACE trades reported between 2004 and 2008 is $1.18 (excluding $0 and nominal trades of $1 a transaction). Port price for SWO 1 ranges between $4.00-$5.60 on the basis of greenweight. The current annual deemed value is $4.25 (the interim deemed value is $2.13).

102 MFish proposes basing a revised annual deemed value on the mid point between the average port price ($4.80) and the ACE price ($1.18), which is $3.00.

103 The proposed deemed value rates for SWO1 for the 2008-09 fishing season is as follows:

a) Annual deemed value rate to decrease from $4.25 per kg to $3.00 per kg.

b) Interim deemed value to decrease from $2.13 per kg to $1.50 per kg

c) Continue to have no differential deemed value rates in this fishery.

Stocks reviewed but no deemed value adjustment proposed

104 The remaining stocks listed in Tables 1 & 2 were also reviewed. Following their assessment at the deemed value review meeting, MFish does not consider an adjustment is warranted at this time. However, MFish invites submitters to comment on if a deemed value review is appropriate for these stocks. A discussion on the rationale behind MFish's decisions follows.

Barracouta: BAR5

105 Barracouta (BAR5) was included in this review because there has been deemed value payments when 16% of ACE remained unused during the 2006-07 fishing year. There has also been an increase in the port price from $0.19 per kg to $0.25 per kg.

106 Upon further investigation, one company incurred 100% of the total deemed value payments ($46,165) during the 2006-07 fishing year. This company has now gone into liquidation. When removing this company from the analysis all other catch of BAR5 during the 2006-07 fishing season was balanced with ACE, so the current deemed value rates are appropriate. Therefore, MFish does not propose an adjustment at this time.

Blue shark: BWS1

107 Blue shark (BWS1) was included in this review because there has been deemed value payments when 62% of ACE remained unused during the 2006-07 fishing year. There has also been an increase in the port price from $0.17 per kg to $3.84 per kg.

108 MFish considers that, since only 42% of the TACC for BWS1 was caught during the 2006-07 fishing season and that it is also on the 6th Schedule of the Fisheries Act, the current deemed value rates are appropriate. Therefore, MFish does not propose an adjustment at this time.

Elephant fish: ELE3

109 Elephant fish (ELE3) was included in this review because it is has been over caught the last four years. There has also been a slight increase in the port price from $1.80 per kg to $1.90 per kg.

110 MFish considers that, since the over catch has been relatively small (2% to 8% of the TACC) and the change in port price is minimal, the current deemed value rates are appropriate. Therefore, MFish does not propose an adjustment at this time.

Frostfish: FRO8

111 Frostfish (FRO8) was included in this review because 111% of ACE was caught in the 2006-07 fishing year. It was also over caught the previous two years.

112 MFish has decided due to a lack of information on this stock, it will monitor the situation in this fishery. This stock will be revisited next year, so the current deemed value rates are appropriate for the time being. Therefore, MFish does not propose an adjustment at this time.

Garfish: GAR1

113 Garfish (GAR1) was included in this review because there has been an increase in the port price from $5.76 per kg to $8.41 per kg.

114 MFish considers that, since the TACC has never been breached and no deemed value payments were incurred in GAR1 during the 2006-07 fishing year, the current deemed value rates are appropriate. However, due to the large increase in port price, MFish will monitor the situation in this fishery and revisit this stock next year. Therefore, MFish does not propose an adjustment at this time.

Grey mullet: GMU1

115 Grey mullet (GMU1) was included in this review because there has been deemed value payments when 14% of ACE remained unused during the 2006-07 fishing year. There has also been an increase in the port price from $2.55 per kg to $3.09 per kg.

116 MFish considers that, since the TACC was not breached, the current deemed value rates are appropriate. Therefore, MFish does not propose an adjustment at this time.

Hake: HAK1

117 Hake (HAK1) was included in this review because it is the major bycatch species in the hoki fishery and is susceptible to over fishing as its shadow price is higher than its port price.

118 MFish considers that, since only 55% of the TACC for HAK1 was caught during the 2006-07 fishing season, the current deemed value rates are appropriate. Therefore, MFish does not propose an adjustment at this time.

Hapuka/Bass: All HPB stocks

119 Hapuka/Bass (All HPB stocks) was included in this review because the port price for all HPB stocks fell during the 2006-07 fishing year. The fall in the port prices for the HPB stocks ranged from $0.23 per kg to $1.15 per kg.

120 MFish considers that, since only one of the TACCs for HPB (HPB3) was over caught during the 2006-07 fishing season and there was minimal deemed value payments when ACE remained unused in the remaining HPB stocks, the current deemed value rates are appropriate. Therefore, MFish does not propose an adjustment at this time.

John dory: JDO2 & JDO7

121 John dory (JDO2 & JDO7) was included in this review because when MFish decided when it changed the deemed value rates for these stocks in October 2007 it would revisit these stocks to ensure the new deemed value rates were set at the correct level.

122 MFish considers that the changes made in October 2007 for the 2007-08 fishing year are providing the correct incentives in these fisheries. Therefore, MFish does not propose an adjustment at this time.

Ling: All LIN stocks

123 Ling (LIN1, LIN2, LIN3, LIN4, LIN5, LIN6 & LIN7) was included in this review because there has been deemed value payments when ACE remains unused during the 2006-07 fishing year in all the LIN stocks except for LIN7 which was slightly over caught. There has also been a significant increase in the port price from $1.36 per kg to $3.07 per kg.

124 MFish considers that the changes made in October 2007 for the 2007-08 fishing year are providing the correct incentives in these fisheries. Therefore, MFish does not propose an adjustment at this time.

Moki: MOK1

125 Moki (MOK1) was included in this review because there has been deemed value payments when 3% of ACE remained unused during the 2006-07 fishing year. There has also been a slight increase in the port price from $0.73 per kg to $0.91 per kg.

126 MFish considers that, since the TACC was not breached, the current deemed value rates are appropriate. Therefore, MFish does not propose an adjustment at this time.

Orange roughy: ORH3B

127 Orange roughy (ORH3B) was included in this review because MFish is reviewing its TACC as part of the October 2008 sustainability round. It was also reviewed as part of the October 2007 deemed value review.

128 MFish considers that the changes made in October 2007 for the 2007-08 fishing year are providing the correct incentives in this fishery. Therefore, MFish does not propose an adjustment at this time.

Pilchard: PIL1 & PIL8

129 Pilchard (PIL1 & PIL8) was included in this review because when MFish thought the port price was significantly above the current deemed value rate. Upon further analysis, it was discovered that a clerical error explained the issue.

130 MFish considers that the current deemed value rates are providing the correct incentives in these fisheries. Therefore, MFish does not propose an adjustment at this time.

Ruby fish: RBY3 & RBY4

131 Ruby fish (RBY3 & RBY4) was included in this review because 617% of ACE was caught in RBY4 and 118% of ACE was caught in RBY3 in the 2006-07 fishing year.

132 MFish considers that, since this is the first time RBY3 has ever been over caught, it will monitor the situation to see if this is an anomaly or deliberate over fishing. RBY4 has been over fished in the past three fishing seasons but this stock has a low TACC (6 tonnes). MFish has decided that further investigation is required into these stocks to determine what is causing the over catch. Therefore, MFish does not propose an adjustment at this time.

Sea perch: SPE2

133 Sea perch (SPE2) was included in this review because 118% of ACE was caught in the 2006-07 fishing year. There has also been a slight increase in the port price from $0.60 per kg to $0.63 per kg.

134 MFish considers that, since SPE2 shows significant variation in the level of catch (under and over caught) on a year to year basis, it will continue to monitor this stock to see why catch is so variable. This stock will be revisited next year, so MFish has decided that the current deemed value rates are appropriate for the time being. Therefore, MFish does not propose an adjustment at this time.

Rig: SPO7

135 Rig (SPO7) was included in this review because 120% of ACE was caught in the 2006-07 fishing year. There has also been a slight decrease in the port price from $3.19 per kg to $2.82 per kg.

136 MFish considers that, since this is the first time this stock has been over caught in the past ten years, it will monitor the situation to see if this is an anomaly or deliberate over fishing. This stock will be revisited next year, so MFish has decided that the current deemed value rates are appropriate for the time being. Therefore, MFish does not propose an adjustment at this time.

Arrow squid: SQU1T

137 Arrow squid (SQU1T) was included in this review because 101% of ACE was caught and deemed value payments of $1,562,068 were incurred in the 2006-07 fishing year.

138 Upon further investigation, one company incurred 99.8% of the total deemed value payments ($1,558,641) during the 2006-07 fishing year. This company has now gone into liquidation. When removing this company from the analysis the remaining amount of deeming is within acceptable levels, so the current deemed value rates are appropriate. Therefore, MFish does not propose an adjustment at this time.

Smooth skate: SSK1

139 Smooth skate (SSK1) was included in this review because 157% of ACE was caught in the 2006-07 fishing year. There has also been a slight decrease in the port price from $0.39 per kg to $0.36 per kg.

140 MFish has decided due to a lack of information on this stock, it will monitor the situation in this fishery. This stock will be revisited next year, so the current deemed value rates are appropriate for the time being. Therefore, MFish does not propose an adjustment at this time.

Kina: SUR1A & SUR7A

141 Kina (SUR1A & SUR7A) was included in this review because there has been an increase in the port price of $0.40 per kg in SUR1A and SUR7A. Also there were discussion around whether kina should be managed as a high value single stock species under the deemed value review standard.

142 MFish considers that, the current port price is not sufficient enough to warrant kina being managed under the high value single stock species section of the deemed value review standard. MFish believes the current deemed value rates provide an incentive for fishers to balance their catch with ACE. Therefore, MFish does not propose an adjustment at this time.

Tarakihi: TAR1 & TAR8

143 Tarakihi (TAR1 & TAR8) was included in this review because when MFish decided when it changed the deemed value rates for these stocks in October 2007 it would revisit these stocks to ensure the new deemed value rates were set at the correct level.

144 MFish considers that the changes made in October 2007 for the 2007-08 fishing year are providing the correct incentives in these fisheries. Therefore, MFish does not propose an adjustment at this time.

Trumpeter: TRU4

145 Trumpeter (TRU4) was included in this review because 107% of ACE was caught; the port price increased by $0.29 per kg and deemed value payments of $8,139 were incurred in the 2006-07 fishing year.

146 MFish considers that the current deemed value rates are providing the correct incentives in this fishery. Therefore, MFish does not propose an adjustment at this time.

White warehou: WWA4

147 White warehou (WWA4) was included in this review because there has been deemed value payments when 9% of ACE remained unused during the 2006-07 fishing year.

148 MFish considers that the changes made in October 2007 for the 2007-08 fishing year are providing the correct incentives in this fishery. Therefore, MFish does not propose an adjustment at this time.

Stocks not reviewed

149 The remaining 1 October stocks were not reviewed at the deemed value review group meeting. Prior to the meeting, MFish carried out a preliminary review of the data for all 1 October stocks. No other stocks appeared to meet the criteria for a review. However, MFish invites submissions from stakeholders on any 1 October stocks they believe should be part of this review.

Compliance implications

150 The proposed changes to the deemed value rates could provide an incentive for commercial fishers to dump or misreport their catch rather than pay the higher deemed value rates. There are indicators that suggest that such offending is occurring in GUR3 covered in this review.

151 Dumping and misreporting are serious offences and will be investigated and prosecuted wherever possible. MFish will continue to monitor fishing activities to detect and deter potential dumping. These efforts will be supported by the increased surveillance capability at sea through Project Protector and upgraded aircraft. Likewise, MFish Compliance's activities will continue to include inspections of vessels, landings and transfers, and analysis of returns to detect and deter potential misreporting.

Statutory consideration

152 **Section 8** – Section 8 of the Act describes the purpose of the Act as being to provide for the utilisation of fisheries resources while ensuring sustainability. The proposed rates presented will continue to provide for utilisation and will ensure that possible TACC breaches do not occur which could undermine sustainability.

153 **Section 9** – Section 9 sets out the environmental principles that should be taken into account when exercising or performing functions, duties or powers under the Act. These principles have been taken into account and MFish is of the view that the proposed rates are consistent with the environmental principles of the Act.

154 **Section 10 –** Section 10 sets out the information principles that should be taken into account when exercising or performing functions, duties or powers under the Act. The Minister must when considering his decision regarding the proposed rates, also take into account the principles set out in s. 10.

155 **Section 75 -** Section 75 of the Act sets out the requirements of when and how deemed value rates should be set. MFish considers that the proposed adjustments to the deemed value rates best meet the requirements under this section of the Act.

156 **Section 75 (2)(a)** – Section 75 (2) (a) requires the Minister to take into account the need to provide an incentive for every commercial fisher to acquire or maintain sufficient ACE that is not less than the total of that stock taken by the commercial fisher. MFish considers that the Deemed Value Standard satisfies the requirements under this section of the Act.

157 **Section 75 (2)(b)** – Section 75 (2) (b) sets out the matters the Minister may have regard to when setting deemed values. These factors have formed the basis of the content of the information sheets (see Appendix 2). These matters have been considered in the assessment of proposed deemed value adjustments for each stock as set out in the *"Analysis"* section of this IPP.

158 **Section 75 (4)** – Section 75 (4) permits the Minister to set different deemed value rates in respect of the same stock which apply to different levels of catch in excess of annual catch entitlement. This is the authority under which differential deemed value rates have been proposed for the some stocks.

159 **Section 75 (6)** – Section 75 (6) details the constraints on the Minister when setting deemed value rates. MFish believes these constraints have been duly considered in developing the deemed value rates proposed in this paper.

160 **Section 75 (7)** – Section 75 (7) gives the Minister the authority to amend deemed value rates. This is the authority under which the proposed amendments to the deemed value rates are being made for some stocks

162 **Section 75A** – The Minister is required when practicable, to conduct consultation prior to setting any interim or annual deemed value rates. MFish will to consult on the proposed deemed values, on behalf of the Minister with persons or organisations that are representative of classes of persons who have an interest in these stocks.

Appendix 1 - Summary of the Guidelines for Setting Deemed Values (2007)

Aim	To set a deemed value rate above the ACE price to encourage fishers to balance catch through the purchase of ACE rather than the payment of deemed values. For high value single species stocks, the deemed value rate will be considerably above the ACE price.
When is a deemed value reviewed?	(1) When a fish stock enters the QMS. (2) If one of the following indicators listed below is met: • Catch is in excess of a TACC • Deemed value payments invoiced in the previous fishing year but ACE remained unused • Changes to the port price of the stock • Direct request from SeaFIC on behalf of quota owners • Recent changes to a stock's TACC or the TACC of key bycatch stocks • Stock has recently entered the QMS and the deemed value rate was set using limited information.
How are deemed values set?	Deemed values will be set on a stock by stock basis for all fish stocks apart from those categorised as high value fishstocks.
High value fishstocks	These are high value single species stocks: paua, rock lobster, scallops, oysters and eels.
Information sources used	Deemed values set following analysis of the following information sources: 1. Port price 2. ACE trading price 3. Export prices as a proxy for market value (where appropriate) 4. Bycatch information (ratios and shadow values) 5. Review of previous deemed value payments 6. Cost recovery levy rates
Annual deemed values	Set at 200% of the highest port price.
Interim deemed values	Greater flexibility in setting interim deemed value rates. Interim deemed values will continue to be set at 50% of the annual deemed value as standard, but higher interim values may be used to ensure regular balancing
Differential deemed values	Differential deemed values maintained but flexibility in when and how they are applied.

All other Fish stocks	The goal is to set the deemed values set on a stock by stock basis using the best available information for that stock. The goal will be to set the deemed value rate at some level above the marginal price of ACE.
Information sources used	Deemed values set following analysis of the following information sources 1. Port price 2. ACE trading price 3. Export prices as a proxy for market value (where appropriate) 4. Bycatch information (ratios and shadow values) 5. Review of previous deemed value payments 6. Cost recovery levy rates
Annual deemed values	Annual deemed value set above the ACE price.
Interim deemed values	Greater flexibility in setting interim deemed value rates. Interim deemed values will not automatically be set at 50% of the annual deemed value as standard.
Differential deemed values	Differential deemed values maintained but flexibility in when and how they are applied.

Appendix 2 – Information sheets

Deemed Value Review 2008: BCO3

Blue cod is predominantly an inshore domestic fishery with very little deepwater catch. The BCO3 commercial catch is dominated by the target pot fishery, although blue cod is also taken as a small bycatch of the inshore trawl fisheries operating within BCO3. Most of the catch from BCO3 is taken in the southern area of the fishstock (statistical area 024).

A. Overview:

Current deemed value rates:
Interim: $1.63kg
Annual: $3.25kg
Differential deemed values apply.

Key bycatch stocks: N/A

B. Criteria for determining if a review is appropriate:

BCO3:

Criteria	BCO3
a) Catch in excess of ACE	Yes – 106% of ACE was caught during the 2006/2007 fishing year
b) Deemed value payments in previous years	Yes – Deemed value invoices of $49,779 were issued at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	Yes – port price has increased from $2.94 to $3.81 (an increase of $0.87)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

BCO3 fulfils criteria a), b) and c) above and therefore is considered appropriate for a review.

C. Assessment of the fishery:

C.1 Relationship with associated species[9]

BCO3 is a target fisheries and therefore at this stage a full review of associated species is required, particularly if we consider it likely that fishers will switch fishing effort to an associated stock and these associated stocks are already being fished at or above the limit of the TACC or have had significant quantities of fish deemed in the past. Since potting for blue cod does not have any bycatch issues no review of associated species is necessary.

[9] See notes on 'Relationship between target and bycatch stocks – implications for deemed value setting'.

C.2 Assessment and analysis of information sources:

Information source	BCO3	
Port price 06/07	BCO3	$2.94
Port price 07/08	BCO3	$3.81
ACE trading price (most recent fishing year)	BCO3	$1.3823/kg
Export price data*	BCO	$3.03
Bycatch: ratios	Not applicable	
Bycatch: shadow values	Not applicable	
Previous deemed value invoices**	BCO3	$49,779
Cost recovery levies	BCO3	$0.0710/kg

* Export price data for year ending December 2007
** Deemed value invoices issue for fishing in excess of ACE holdings for 2006-07 fishing season.

Key points:

- BCO3 is both a target fishery and a bycatch of the mixed inshore trawl fishery in QMA3. It was over fished in the 2006/2007 fishing year and has been over fished in the last five fishing seasons.

- The port price for BCO3 has increased from $2.94 per kg to $3.81 per kg pushing port price above the current annual deemed value.

- Two companies were responsible for 72% of the total deemed value invoices in BCO3 for the 2006/2007 fishing year.

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Monday 5 May 2008.

Deemed Value Review 2008: Bluenose (BNS1, BNS2, BNS3, BNS7, BNS8 & BNS10)

The most important domestic bluenose trawl fisheries occur off the Wairarapa Coast (BNS2), where bluenose is a major bycatch in the alfonsino and gemfish target trawl fisheries, and a lesser component in other trawl fisheries. There is substantial targeting of bluenose by the line fishery in the Bay of Plenty and off Northland (BNS1). Line fisheries for bluenose also exist in BNS2 north and east of East Cape and to the west of Cook Strait in BNS7 and BNS8. About half of the BNS2 catch is taken by longline and the remainder by bottom trawl. There is a developing fishery for bluenose on the Chatham Rise using both trawl and line gear. About two thirds of BNS3 landings are taken as a bycatch in the hoki bottom trawl and ling longline fisheries. Bluenose supports a small target line fishery off the Wairarapa Coast and a small amount of target setnet fishing for bluenose occurs in the Bay of Plenty and off the east and south coasts of the South Island.

A. Overview:

Current deemed value rates:

Stock	Interim ($/kg)	Annual ($/kg)
BNS1	1.19	2.37
BNS2	1.50	3.00
BNS3	1.19	2.38
BNS7	0.82	1.64
BNS8	1.03	2.06
BNS10	0.87	1.73

Differential deemed values apply.

Key bycatch stocks: N/A

B. Criteria for determining if a review is appropriate:

BNS1:

Criteria	BNS1
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of $96 were issued when 33% of ACE was unused at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	Yes – port price has increased from $4.15 to $4.70 (an increase of $0.55)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

BNS2:

Criteria	BNS2
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of $1,600 were issued when 11% of ACE was unused at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	Yes – port price has increased from $3.57 to $3.74 (an increase of $0.17)
d) Request from quota owners	No
e) Recent changes to the stocks TACC	No

or the TACC of key bycatch stocks	
f) Stock has recently entered the QMS	No

BNS3:

Criteria	BNS3
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of $13 were issued when 50% of ACE was unused at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	Yes – port price has decreased from $3.76 to $3.74 (a decrease of $0.02)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

BNS7:

Criteria	BNS7
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of $11,093 were issued when 1% of ACE was unused at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	Yes – port price has decreased from $2.78 to $2.52 (a decrease of $0.26)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

BNS8:

Criteria	BNS8
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of $119 were issued when 54% of ACE was unused at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	Yes – port price has decreased from $4.10 to $3.74 (an increase of $0.36)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

BNS10:

Criteria	BNS10
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	No
c) Changes to the port price of the stock	No

d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

C. Assessment of the fishery:

C.1 Assessment and analysis of information sources:

Information source	BNS1		BNS2		BNS3	
Port price 06/07	BNS1	$4.15	BNS2	$3.57	BNS3	$3.76
Port price 07/08	BNS1	$4.70	BNS2	$3.74	BNS3	$3.74
ACE trading price (most recent fishing year)	BNS1	$1.4098/kg	BNS2	$1.9018/kg	BNS3	$0.7026/kg
Export price data*	BNS	$7.37	BNS	$7.37	BNS	$7.37
Bycatch: ratios	Not applicable		Not applicable		Not applicable	
Bycatch: shadow values	Not applicable		Not applicable		Not applicable	
Previous deemed value invoices***	BNS1	$96	BNS2	$1,600	BNS3	$12
Cost recovery levies	BNS1	$0.1161/kg	BNS2	$0.0849/kg	BNS3	$0.0871/kg

Information source	BNS7		BNS8		BNS10	
Port price 06/07	BNS7	$2.78	BNS8	$4.10	BNS10	N/A
Port price 07/08	BNS7	$2.52	BNS8	$3.74	BNS10	N/A
ACE trading price (most recent fishing year)	BNS7	$0.7160/kg	BNS8	$1.1540/kg	BNS10	No valid trades
Export price data*	BNS	$7.37	BNS	$7.37	BNS	$7.37
Bycatch: ratios	Not applicable		Not applicable		Not applicable	
Bycatch: shadow values	Not applicable		Not applicable		Not applicable	
Previous deemed value invoices**	BNS7	$11,903	BNS8	$119	BNS10	N/A

Cost recovery levies	BNS7	$0.0588/kg	BNS8	$0.0869/kg	BNS10	N/A

* Export price data for year ending December 2007
** Deemed value invoices issue for fishing in excess of ACE holdings for 2006-07 fishing season.

Key points:

- Bluenose (BNS) is an important commercial species and is caught in significant quantities in all regions of New Zealand.
- New scientific information and advice has suggested that the current level of exploitation of BNS stocks is unsustainable.
- The proposed TACC adjustment (if the Minister agrees) is to decrease the TACC for all BNS stocks.
- These are the main drivers for considering if a deemed value review is appropriate. If the TACC is reduced then a deemed value adjustment is likely necessary so that the new TACC is protected.

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Monday 5 May 2008.

Deemed Value Review 2008: GUR3

Red gurnard are a major bycatch of inshore trawl fisheries in most areas of New Zealand, including fisheries for red cod in the southern regions, and flatfish on the west coast of the South Island and in Tasman Bay. They are also directly targeted in some areas.

A. Overview:

Current deemed value rates:
Interim: $0.80kg
Annual: $1.60kg
Differential deemed values apply.

Key bycatch stocks: N/A

B. Criteria for determining if a review is appropriate:

GUR3:

Criteria	GUR3
a) Catch in excess of ACE	Yes – 124% of ACE was caught during the 2006/2007 fishing year
b) Deemed value payments in previous years	Yes – Deemed value invoices of $216,356 were issued at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	Yes – port price has increased from $1.09 to $1.71 (an increase of $0.62)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

GUR3 fulfils criteria a), b) and c) above and therefore is considered appropriate for a review.

C. Assessment of the fishery:

C.1 Relationship with associated species[10]

GUR3 is predominantly a bycatch fishery and therefore at this stage a full review of associated species is not required. However, the implications of a deemed value change in GUR3 on other QMA3 stocks will need to be monitored.

C.2 Assessment and analysis of information sources:

Information source	GUR3	
Port price 06/07	GUR3	$1.09
Port price 07/08	GUR3	$1.71

[10] See notes on 'Relationship between target and bycatch stocks – implications for deemed value setting'.

ACE trading price (most recent fishing year)	GUR3	$0.5028/kg
Export price data*	GUR	$9.33
Bycatch: ratios	Not applicable	
Bycatch: shadow values	Not applicable	
Previous deemed value invoices**	GUR3	$216,356
Cost recovery levies	GUR3	$0.0321/kg

* Export price data for year ending December 2007
** Deemed value invoices issue for fishing in excess of ACE holdings for 2006-07 fishing season.

Key points:

- There is strong evidence of dumping occurring in GUR3. Fishers are choosing to dump gurnard because of the differential prices being paid to fishers for different sizes of gurnard.
- This is the main driver for including GUR3 on the review list – it is still unclear if a deemed value adjustment is the most appropriate management intervention given the incentives operating in the fishery.
- The highest deemed value invoice for one company was $32,983 which is 15% of the total deemed value invoices for the 2006/2007 fishing year.

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Monday 5 May 2008.

Deemed Value Review 2008: KIN7 & KIN8

Kingfish are reported largely as non-target catch of inshore setnet, trawl, purse seine and longline fisheries.

A. Overview:

Current deemed value rates:
Interim: $4.45kg
Annual: $8.90kg
Differential deemed values apply.

Key bycatch stocks: N/A

B. Criteria for determining if a review is appropriate:

KIN7:

Criteria	KIN7
a) Catch in excess of ACE	Yes – 178% of ACE was caught during the 2006/2007 fishing year
b) Deemed value payments in previous years	Yes – Deemed value invoices of $71,292 were issued at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	Yes – port price has increased from $1.88 to $5.33 (an increase of $3.45)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

KIN7 fulfils criteria a), b) and c) above and therefore is considered appropriate for a review.

KIN8:

Criteria	KIN8
a) Catch in excess of ACE	Yes – 104% of ACE was caught during the 2006/2007 fishing year
b) Deemed value payments in previous years	Yes – Deemed value invoices of $30,809 were issued at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	Yes – port price has increased from $4.31 to $5.33 (an increase of $1.02)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

KIN8 fulfils criteria a), b) and c) above and therefore is considered appropriate for a review.

C. Assessment of the fishery:

C.1 Relationship with associated species[11]

[11] See notes on 'Relationship between target and bycatch stocks – implications for deemed value setting'.

KIN7 and KIN8 are predominantly bycatch fisheries and therefore at this stage a full review of associated species is not required. However, the implications of a deemed value change in KIN7 and KIN8 on other QMA7 and QMA8 stocks will need to be monitored.

C.2 Assessment and analysis of information sources:

Information source	KIN7		KIN8	
Port price 06/07	KIN7	$1.88	KIN8	$4.31
Port price 07/08	KIN7	$5.33	KIN8	$5.33
ACE trading price (most recent fishing year)	KIN7	$3.9324/kg	KIN8	$4.8703/kg
Export price data*	KIN	$10.62	KIN	$10.62
Bycatch: ratios	Not applicable		Not applicable	
Bycatch: shadow values	Not applicable		Not applicable	
Previous deemed value invoices* **	KIN7	$71,292	KIN8	$30,809
Cost recovery levies	KIN7	$0.0955/kg	KIN8	$0.2262/kg

* Export price data for year ending December 2007
** Deemed value invoices issue for fishing in excess of ACE holdings for 2006-07 fishing season.

Key points:

- KIN7 is a bycatch of the mixed inshore trawl, setnet, longline and purse seine fishery in QMA7. It was over fished in the 2006/2007 fishing year and has been over fished in the last three fishing seasons.
- The port price for KIN7 has increased significantly from $1.88 per kg to $5.33 per kg.
- Two companies were responsible for 86% of the total deemed value invoices in KIN7 for the 2006/2007 fishing year.

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Monday 5 May 2008.

Deemed Value Review 2008: Parore (PAR1, PAR2, PAR9 & PAR10)

Parore is principally caught as a bycatch in the grey mullet, flatfish and trevally setnet fisheries in northern New Zealand. Most of the catch comes from eastern Northland and the Firth of Thames (PAR1) and the Kaipara and Manukau Harbours (PAR9).

A. Overview:

Current deemed value rates:

Stock	Interim ($/kg)	Annual ($/kg)
PAR1	0.16	0.31
PAR2	0.16	0.31
PAR9	0.16	0.31
PAR10	0.17	0.34

Differential deemed values do not apply.

Key bycatch stocks: N/A

B. Criteria for determining if a review is appropriate:

PAR1:

Criteria	PAR1
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of $1,894 were issued when 19% of ACE was unused at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	Yes – port price has increased from $1.53 to $1.78 (an increase of $0.25)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

PAR2:

Criteria	PAR2
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of $10 were issued when 98% of ACE was unused at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	Yes – port price has increased from $0.69 to $1.82 (an increase of $1.13)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

PAR9:

Criteria	PAR9
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of $301 were issued when 57% of ACE was unused at the end of the 2006/2007 fishing season

c) Changes to the port price of the stock	Yes – port price has increased from $1.45 to $1.82 (an increase of $0.37)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

PAR10:

Criteria	PAR10
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	No
c) Changes to the port price of the stock	No
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

C. Assessment of the fishery:

C.1 Assessment and analysis of information sources:

Information source	PAR1		PAR2		PAR9	
Port price 06/07	PAR1	$1.53	PAR2	$0.69	PAR9	$1.45
Port price 07/08	PAR1	$1.78	PAR2	$1.82	PAR9	$1.82
ACE trading price (most recent fishing year)	PAR1	$0.2372/kg	PAR2	No valid trades	PAR9	$0.2546/kg
Export price data*	PAR	N/A	PAR	N/A	PAR	N/A
Bycatch: ratios	Not applicable		Not applicable		Not applicable	
Bycatch: shadow values	Not applicable		Not applicable		Not applicable	
Previous deemed value invoices* **	PAR1	$1,894	PAR2	$10	PAR9	$301
Cost recovery levies	PAR1	$0.0318/kg	PAR2	N/A	PAR9	$0.0325/kg

Information source	PAR10	
Port price 06/07	PAR10	N/A
Port price 07/08	PAR10	N/A

ACE trading price (most recent fishing year)	PAR10	N/A
Export price data*	PAR	N/A
Bycatch: ratios	Not applicable	
Bycatch: shadow values	Not applicable	
Previous deemed value invoices**	PAR10	$0
Cost recovery levies	PAR10	N/A

* Export price data for year ending December 2007
** Deemed value invoices issue for fishing in excess of ACE holdings for 2006-07 fishing season.

Key points:

- The port price for PAR1, PAR2 and PAR9 have all increased pushing them further above the annual deemed value rate.

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Monday 5 May 2008.

Deemed Value Review 2008: Paua (PAU1, PAU2, PAU3, PAU4, PAU5A, PAU5B, PAU5D, PAU6, PAU7 & PAU10)

Paua inhabit shallow waters (generally less than 6m) off the coastline of New Zealand. Fishers gather paua by hand while free diving (use of underwater breathing apparatus is not permitted). Virtually the entire commercial fishery is for the black-footed paua, *Haliotis iris*, with a minimum legal size for harvesting of 125 mm shell length. There is also a large recreational fishery for paua.

A. Overview:

Current deemed value rates:

Stock	Interim ($/kg)	Annual ($/kg)
PAU1	30.00	60.00
PAU2	30.00	60.00
PAU3	30.00	60.00
PAU4	30.00	60.00
PAU5A	30.00	60.00
PAU5B	30.00	60.00
PAU5D	30.00	60.00
PAU6	30.00	60.00
PAU7	30.00	60.00
PAU10	30.00	60.00

Differential deemed values apply.

Key bycatch stocks: N/A

B. Criteria for determining if a review is appropriate:

PAU1:

Criteria	PAU1
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of $1,200 were issued when 61% of ACE was unused at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	Yes – port price has increased from $37.01 to $44.39 (an increase of $7.38)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

PAU2:

Criteria	PAU2
a) Catch in excess of ACE	Yes – 100.01% of ACE was caught during the 2006/2007 fishing year
b) Deemed value payments in previous years	Yes – Deemed value invoices of $900 were issued at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	Yes – port price has increased from $37.01 to $44.39 (an increase of $7.38)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

PAU3:

Criteria	PAU3
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	No
c) Changes to the port price of the stock	Yes – port price has increased from $37.01 to $44.39 (an increase of $7.38)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

PAU4:

Criteria	PAU4
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of $3,900 were issued when 1% of ACE was unused at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	Yes – port price has increased from $37.01 to $44.39 (an increase of $7.38)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

PAU5A:

Criteria	PAU5A
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of $960 were issued when 30% of ACE was unused at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	Yes – port price has increased from $37.01 to $44.39 (an increase of $7.38)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

PAU5B:

Criteria	PAU5B
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of $20,460 were issued when 1% of ACE was unused at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	Yes – port price has increased from $37.01 to $44.39 (an increase of $7.38)
d) Request from quota owners	No
e) Recent changes to the stocks TACC	No

or the TACC of key bycatch stocks	
f) Stock has recently entered the QMS	No

PAU5D:

Criteria	PAU5D
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	No
c) Changes to the port price of the stock	Yes – port price has increased from $37.01 to $44.39 (an increase of $7.38)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

PAU6:

Criteria	PAU6
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	No
c) Changes to the port price of the stock	Yes – port price has increased from $37.01 to $44.39 (an increase of $7.38)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

PAU7:

Criteria	PAU7
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of $300 were issued when 6% of ACE was unused at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	Yes – port price has increased from $37.01 to $44.39 (an increase of $7.38)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

PAU10:

Criteria	PAU10
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	No
c) Changes to the port price of the stock	Yes – port price has increased from $37.01 to $44.39 (an increase of $7.38)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

C. Assessment of the fishery:

C.1 Assessment and analysis of information sources:

Information source	PAU1		PAU2		PAU3	
Port price 06/07	PAU1	$37.01	PAU2	$37.01	PAU3	$37.01
Port price 07/08	PAU1	$44.39	PAU2	$44.39	PAU3	$44.39
ACE trading price (most recent fishing year)	PAU1	No valid trades	PAU2	$28.044/kg	PAU3	No valid trades
Export price data*	PAU	$64.84	PAU	$64.84	PAU	$64.84
Bycatch: ratios	Not applicable		Not applicable		Not applicable	
Bycatch: shadow values	Not applicable		Not applicable		Not applicable	
Previous deemed value invoices* **	PAU1	$1,200	PAU2	$900	PAU3	$0
Cost recovery levies	PAU1	$0.8174/kg	PAU2	$1.0857/kg	PAU3	$1.0857/kg

Information source	PAU4		PAU5A		PAU5B	
Port price 06/07	PAU4	$37.01	PAU5A	$37.01	PAU5B	$37.01
Port price 07/08	PAU4	$44.39	PAU5A	$44.39	PAU5B	$44.39
ACE trading price (most recent fishing year)	PAU4	$29.207/kg	PAU5A	$28.161/kg	PAU5B	$28.087/kg
Export price data*	PAU	$64.84	PAU	$64.84	PAU	$64.84
Bycatch: ratios	Not applicable		Not applicable		Not applicable	
Bycatch: shadow values	Not applicable		Not applicable		Not applicable	
Previous deemed value invoices**	PAU4	$3900	PAU5A	$960	PAU5B	$20,460
Cost recovery levies	PAU4	$0.8741/kg	PAU5A	$2.0125/kg	PAU5B	$0.9127/kg

Information source	PAU5D		PAU6		PAU7	
Port price 06/07	PAU5D	$37.01	PAU6	$37.01	PAU7	$37.01

Port price 07/08	PAU5D	$44.39	PAU6	$44.39	PAU7	$44.39
ACE trading price (most recent fishing year)	PAU5D	$28.769/kg	PAU6	No valid trades	PAU7	$33.073/kg
Export price data*	PAU	$64.84	PAU	$64.84	PAU	$64.84
Bycatch: ratios	Not applicable		Not applicable		Not applicable	
Bycatch: shadow values	Not applicable		Not applicable		Not applicable	
Previous deemed value invoices**	PAU5D	$0	PAU6	$0	PAU7	$300
Cost recovery levies	PAU5D	$0.8990/kg	PAU6	$0.8174/kg	PAU7	$1.1656/kg

Information source	PAU10	
Port price 06/07	PAU10	N/A
Port price 07/08	PAU10	N/A
ACE trading price (most recent fishing year)	PAU10	No valid trades
Export price data*	PAU	$64.84
Bycatch: ratios	Not applicable	
Bycatch: shadow values	Not applicable	
Previous deemed value invoices**	PAU10	$0
Cost recovery levies	PAU10	$0.7980/kg

* Export price data for year ending December 2007
** Deemed value invoices issue for fishing in excess of ACE holdings for 2006-07 fishing season.

Key points:

- The deemed value rates for paua have historically been set using the strategy for a high value single stock species. This strategy sets the annual deemed value rate at twice the port price of this species to discourage fishing on deemed values and to balance catch with ACE.

- The port price for all paua stocks has increased from $37.01 per kg to $44.39 per kg. Therefore, MFish considers it necessary to review the deemed value for all paua stocks to take into account this increase in port price.

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Monday 5 May 2008.

Deemed Value Review 2008: Porae (POR1, POR2, POR3 & POR10)

Porae is principally caught as a bycatch in inshore setnet fisheries in northern New Zealand. It is generally taken in association with snapper and trevally in east Northland and Coromandel, and tarakihi and blue moki around Gisborne.

A. Overview:

Current deemed value rates:

Stock	Interim ($/kg)	Annual ($/kg)
POR1	0.68	1.35
POR2	0.35	0.69
POR3	0.68	1.35
POR10	0.68	1.35

Differential deemed values do not apply.

Key bycatch stocks: N/A

B. Criteria for determining if a review is appropriate:

POR1:

Criteria	POR1
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of $3,140 were issued when 4% of ACE was unused at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	Yes – port price has increased from $1.99 to $2.14 (an increase of $0.15)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

POR2:

Criteria	POR2
a) Catch in excess of ACE	Yes – 135% of ACE was caught during the 2006/2007 fishing year
b) Deemed value payments in previous years	Yes – Deemed value invoices of $2,108 were issued at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	Yes – port price has increased from $1.83 to $2.15 (an increase of $0.32)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

POR3:

Criteria	POR3
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of $1 were issued when 99% of ACE was unused at the end of the 2006/2007 fishing season

c) Changes to the port price of the stock	Yes – port price has increased from $1.99 to $2.15 (an increase of $0.16)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

POR10:

Criteria	POR10
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	No
c) Changes to the port price of the stock	No
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

C. Assessment of the fishery:

C.1 Assessment and analysis of information sources:

Information source	POR1		POR2		POR3	
Port price 06/07	POR1	$1.99	POR2	$1.83	POR3	$1.99
Port price 07/08	POR1	$2.14	POR2	$2.15	POR3	$2.15
ACE trading price (most recent fishing year)	POR1	$0.4204/kg	POR2	No valid trades	POR3	No valid trades
Export price data*	POR	N/A	POR	N/A	POR	N/A
Bycatch: ratios	Not applicable		Not applicable		Not applicable	
Bycatch: shadow values	Not applicable		Not applicable		Not applicable	
Previous deemed value invoices***	POR1	$3,140	POR2	$2,108	POR3	$1
Cost recovery levies	POR1	$0.0390/kg	POR2	N/A	POR3	N/A

Information source	POR10	
Port price 06/07	POR10	N/A
Port price 07/08	POR10	N/A

ACE trading price (most recent fishing year)	POR10	$0.3076/kg
Export price data*	POR	N/A
Bycatch: ratios	Not applicable	
Bycatch: shadow values	Not applicable	
Previous deemed value invoices**	POR10	$0
Cost recovery levies	POR10	N/A

* Export price data for year ending December 2007
** Deemed value invoices issue for fishing in excess of ACE holdings for 2006-07 fishing season.

Key points:

- POR2 was over fished for the first time during the 2006/2007 fishing year.
- One company was responsible for 70.6% of the total deemed value invoices in POR2 for the 2006/2007 fishing year.

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Monday 5 May 2008.

Deemed Value Review 2008: Ribaldo (RIB3, RIB4, RIB5, RIB6 & RIB7)

In New Zealand ribaldo is caught on bottom longlines and as a bycatch to trawling.

A. Overview:

Current deemed value rates:

Stock	Interim ($/kg)	Annual ($/kg)
RIB3	0.15	0.30
RIB4	0.15	0.30
RIB5	0.03	0.06
RIB6	0.40	0.80
RIB7	0.40	0.80

Differential deemed values do not apply.

Key bycatch stocks: N/A

B. Criteria for determining if a review is appropriate:

RIB3:

Criteria	RIB3
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of $5 were issued when 65% of ACE was unused at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	No
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

RIB4:

Criteria	RIB4
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of $40 were issued when 18% of ACE was unused at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	No
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

RIB5:

Criteria	RIB5
a) Catch in excess of ACE	No
b) Deemed value payments in previous	No

years	
c) Changes to the port price of the stock	No
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

RIB6:

Criteria	RIB6
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	No
c) Changes to the port price of the stock	No
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

RIB7:

Criteria	RIB7
a) Catch in excess of ACE	Yes – 122% of ACE was caught during the 2006/2007 fishing year
b) Deemed value payments in previous years	Yes – Deemed value invoices of $67,350 were issued at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	No
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

C. Assessment of the fishery:

C.1 Assessment and analysis of information sources:

Information source	RIB3		RIB4		RIB5	
Port price 06/07	RIB3	$1.00	RIB4	$1.06	RIB5	$1.06
Port price 07/08	RIB3	$1.00	RIB4	$1.06	RIB5	$1.06
ACE trading price (most recent fishing year)	RIB3	$0.1199/kg	RIB4	$0.1293/kg	RIB5	$0.0362/kg
Export price data*	RIB	N/A	RIB	N/A	RIB	N/A
Bycatch: ratios	Not applicable		Not applicable		Not applicable	
Bycatch: shadow values	Not applicable		Not applicable		Not applicable	

Previous deemed value invoices* **	RIB3	$5	RIB4	$40	RIB5	$0
Cost recovery levies	RIB3	$0.0392/kg	RIB4	$0.0392/kg	RIB5	$0.0392/kg

Information source	**RIB6**		**RIB7**	
Port price 06/07	RIB6	$1.06	RIB7	$1.06
Port price 07/08	RIB6	$1.06	RIB7	$1.06
ACE trading price (most recent fishing year)	RIB6	$0.4572/kg	RIB7	$0.1851/kg
Export price data*	RIB	N/A	RIB	N/A
Bycatch: ratios	Not applicable		Not applicable	
Bycatch: shadow values	Not applicable		Not applicable	
Previous deemed value invoices**	RIB6	$0	RIB7	$67,350
Cost recovery levies	RIB6	$0.0389/kg	RIB7	$0.0387/kg

* Export price data for year ending December 2007
** Deemed value invoices issue for fishing in excess of ACE holdings for 2006-07 fishing season.

Key points:

- RIB7 was over fished in the 2006/2007 fishing year and has been over fished in the last eight fishing seasons.

- Three companies were responsible for 93% of the total deemed value invoices in RIB7 for the 2006/2007 fishing year. One of those companies has now gone into liquidation.

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Monday 5 May 2008.

Deemed Value Review 2008: Rough skate (RSK1, RSK3, RSK7, RSK8 & RSK10)

Rough skate occur throughout New Zealand, but are most abundant around the South Island in depths down to 500 m. Most of the catch is taken as bycatch by bottom trawlers, but skates are also taken by longliners.

A. Overview:

Current deemed value rates:

Stock	Interim ($/kg)	Annual ($/kg)
RSK1	0.22	0.23
RSK3	0.22	0.30
RSK7	0.22	0.44
RSK8	0.22	0.44
RSK10	0.22	0.44

Differential deemed values do not apply.

Key bycatch stocks: N/A

B. Criteria for determining if a review is appropriate:

RSK1:

Criteria	RSK1
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of $564 were issued at the end of the 2005/2006 fishing season when 17% of ACE remained unused
c) Changes to the port price of the stock	Yes – port price has decreased from $0.30 to $0.37 (a decrease of $0.07)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

RSK3:

Criteria	RSK3
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of $1,520 were issued at the end of the 2006/2007 fishing season when 17% of ACE remained unused
c) Changes to the port price of the stock	Yes – port price has decreased from $0.38 to $0.37 (a decrease of $0.01)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

RSK7:

Criteria	RSK7
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of $2,095 were issued at the end of the 2006/2007 fishing season when 44% of ACE remained unused
c) Changes to the port price of the stock	Yes – port price has decreased from $0.38 to $0.37 (a decrease of $0.01)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

RSK8:

Criteria	RSK8
a) Catch in excess of ACE	Yes – 164% of ACE was caught during the 2006/2007 fishing year
b) Deemed value payments in previous years	Yes – Deemed value invoices of $7,156 were issued at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	Yes – port price has decreased from $0.38 to $0.33 (a decrease of $0.05)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

RSK10:

Criteria	RSK10
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	No
c) Changes to the port price of the stock	No
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

C. Assessment of the fishery:

C.1 Assessment and analysis of information sources:

Information source	RSK1		RSK3		RSK7	
Port price 06/07	RSK1	$0.30	RSK3	$0.38	RSK7	$0.38
Port price 07/08	RSK1	$0.37	RSK3	$0.37	RSK7	$0.37
ACE trading price (most recent fishing year)	RSK1	0.0899/kg	RSK3	$0.1292/kg	RSK7	$0.1638/kg
Export price data*	RSK	N/A	RSK	N/A	RSK	N/A

Bycatch: ratios	Not applicable		Not applicable		Not applicable	
Bycatch: shadow values	Not applicable		Not applicable		Not applicable	
Previous deemed value invoices* **	RSK1	$564	RSK3	$1,520	RSK7	$2,095
Cost recovery levies	RSK1	$0.0067/kg	RSK3	$0.0068/kg	RSK7	$0.0068/kg

Information source	**RSK8**		**RSK10**	
Port price 06/07	RSK8	$0.38	RSK10	N/A
Port price 07/08	RSK8	$0.33	RSK10	N/A
ACE trading price (most recent fishing year)	RSK8	$0.1451/kg	RSK10	N/A
Export price data*	RSK	N/A	RSK	N/A
Bycatch: ratios	Not applicable		Not applicable	
Bycatch: shadow values	Not applicable		Not applicable	
Previous deemed value invoices**	RSK8	$7,156	RSK10	$0
Cost recovery levies	RSK8	N/A	RSK10	N/A

* Export price data for year ending December 2007
** Deemed value invoices issue for fishing in excess of ACE holdings for 2006-07 fishing season.

Key points:

- Three companies were invoiced 70.5% ($5,045) of the total $7,156 deemed value payments for RSK8 in the 2006/2007 fishing year. The largest single deemed value invoice was for $2,325 (32.5% of the total deemed value invoices).

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Monday 5 May 2008.

Deemed Value Review 2008: SKI1 and SKI2

Gemfish are caught in coastal waters around mainland New Zealand down to about 550m. Most of the recorded catch is taken by trawlers. Target fisheries have continued off the eastern and northern coasts of the North Island.

A. Overview:

Current deemed value rates:

Stock	Interim ($/kg)	Annual ($/kg)
SKI1	1.32	2.64
SKI2	0.88	1.75

Differential deemed values apply.

Key bycatch stocks: N/A

B. Criteria for determining if a review is appropriate:

Criteria	SKI1
a) Catch in excess of ACE	Yes – 102% of ACE was caught during the 2006/2007 fishing year
b) Deemed value payments in previous years	Yes – Deemed value invoices of $31,082 were issued at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	Yes – the port price for SKI1 has decreased from $2.42 to $1.54 (a decrease of $0.88)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

SKI1 fulfils criteria a), b) and c) above and therefore is considered appropriate for a review.

Criteria	SKI2
a) Catch in excess of ACE	Yes – 123% of ACE was caught during the 2006/2007 fishing year
b) Deemed value payments in previous years	Yes – Deemed value invoices of $113,697 were issued at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	Yes – the port price for SKI2 has decreased from $3.14 to $1.54 (a decrease of $1.60)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

SKI2 fulfils criteria a), b) and c) above and therefore is considered appropriate for a review.

C. Assessment of the fishery:

C.1 Relationship with associated species[12]

SKI2 is a target fisheries and therefore at this stage a full review of associated species is required, particularly if we consider it likely that fishers will switch fishing effort to an associated stock and these

[12] See notes on 'Relationship between target and bycatch stocks – implications for deemed value setting'.

associated stocks are already being fished at or above the limit of the TACC or have had significant quantities of fish deemed in the past.

BNS2:

Current deemed value rates:

Stock	Interim ($/kg)	Annual ($/kg)
BNS2	1.50	3.00

Differential deemed values apply.

Criteria	BNS2
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes - Deemed value invoices for $1,600 were issued at the end of the 2006/2007 fishing season when 11% of ACE remained unused
c) Changes to the port price of the stock	Yes – port price has increased from $3.57 to $3.74 (an increase of $0.17)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	Yes - In the 2004/2005 fishing year the TACC was increased by 175 tonnes
f) Stock has recently entered the QMS	No

BNS2 is undergoing its own review with the other BNS stocks. See relevant section for more details.

C.2 Assessment and analysis of information sources:

Information source	SKI1		SKI2		BNS2	
Port price 06/07	SKI1	$2.42	SKI2	$3.14	BNS2	$3.57
Port price 07/08	SKI1	$1.54	SKI2	$1.54	BNS2	$3.74
ACE trading price (most recent fishing year)	SKI1	$1.1217/kg	SKI2	$0.6065/kg	BNS2	$1.9081/kg
Export price data*	SKI	$3.94	SKI	$3.94	BNS	$7.37
Bycatch: ratios	Not applicable		Not applicable		Not applicable	
Bycatch: shadow values	Not applicable		Not applicable		Not applicable	
Previous deemed value invoices**	SKI1	$31,082	SKI2	$113,697	BNS2	$1,600
Cost recovery levies	SKI1	$0.1935/kg	SKI2	$0.2386/kg	BNS2	$0.0849/kg

* Export price data for year ending December 2007
** Deemed value invoices issue for fishing in excess of ACE holdings for 2006-07 fishing season.

Key points:

- SKI2 is both a target fishery and a bycatch of the TAR2 trawl fishery. It was over fished in the

2006/2007 fishing year and has been over fished in five of the last six fishing seasons. Over catch has ranged from 8% to 30%.

- However, the port price has decreased from $3.14 to $1.54. This has pushed the annual deemed value rate above the current port price. If the annual deemed value is greater than port price this may create an incentive to misreport or dump fish.

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Monday 5 May 2008.

Deemed Value Review 2008: Sea perch (SPE1, SPE2, SPE3, SPE4, SPE5, SPE6, SPE7, SPE8, SPE9 & SPE10)

Sea perch are widely distributed around most of New Zealand, but are rare on the Campbell Plateau. They inhabit waters ranging from the shoreline to 1200 m, but are most common between 150 and 500 m.

A. Overview:

Current deemed value rates:

Stock	Interim ($/kg)	Annual ($/kg)
SPE1	0.23	0.45
SPE2	0.04	0.07
SPE3	0.03	0.06
SPE4	0.04	0.08
SPE5	0.12	0.24
SPE6	0.12	0.24
SPE7	0.04	0.08
SPE8	0.12	0.24
SPE9	0.12	0.24
SPE10	0.12	0.24

Differential deemed values do not apply.

Key bycatch stocks: N/A

B. Criteria for determining if a review is appropriate:

SPE1:

Criteria	SPE1
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of $347 were issued when 11% of ACE was unused at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	Yes – port price has increased from $0.60 to $0.63 (an increase of $0.03)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

SPE2:

Criteria	SPE2
a) Catch in excess of ACE	Yes – 118% of ACE was caught during the 2006/2007 fishing year
b) Deemed value payments in previous years	Yes – Deemed value invoices of $1,176 were issued at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	Yes – port price has increased from $0.60 to $0.63 (an increase of $0.03)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

SPE3:

Criteria	SPE3
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of $698 were issued when 53% of ACE was unused at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	Yes – port price has increased from $0.58 to $0.61 (an increase of $0.03)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

SPE4:

Criteria	SPE4
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of $34 were issued when 41% of ACE was unused at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	Yes – port price has increased from $0.60 to $0.63 (an increase of $0.03)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

SPE5:

Criteria	SPE5
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of $100 were issued when 26% of ACE was unused at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	Yes – port price has increased from $0.60 to $0.63 (an increase of $0.03)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

SPE6:

Criteria	SPE6
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	No
c) Changes to the port price of the stock	Yes – port price has increased from $0.60 to $0.63 (an increase of $0.03)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No

f) Stock has recently entered the QMS	No

SPE7:

Criteria	SPE7
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of $446 were issued when 23% of ACE was unused at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	Yes – port price has increased from $0.60 to $0.61 (an increase of $0.01)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

SPE8:

Criteria	SPE8
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of $3 were issued when 85% of ACE was unused at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	Yes – port price has increased from $0.60 to $1.76 (an increase of $1.16)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

SPE9:

Criteria	SPE9
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of $2 were issued when 66% of ACE was unused at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	Yes – port price has increased from $0.60 to $0.63 (an increase of $0.03)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

SPE10:

Criteria	SPE10
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	No
c) Changes to the port price of the stock	No
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

C. Assessment of the fishery:

C.1 Assessment and analysis of information sources:

Information source	SPE1		SPE2		SPE3	
Port price 06/07	SPE1	$0.60	SPE2	$0.60	SPE3	$0.58
Port price 07/08	SPE1	$0.63	SPE2	$0.63	SPE3	$0.61
ACE trading price (most recent fishing year)	SPE1	$0.1509/kg	SPE2	$0.0345/kg	SPE3	$0.0437/kg
Export price data*	SPE	N/A	SPE	N/A	SPE	N/A
Bycatch: ratios	Not applicable		Not applicable		Not applicable	
Bycatch: shadow values	Not applicable		Not applicable		Not applicable	
Previous deemed value invoices* **	SPE1	$347	SPE2	$1,176	SPE3	$698
Cost recovery levies	SPE1	N/A	SPE2	N/A	SPE3	$0.0360/kg

Information source	SPE4		SPE5		SPE6	
Port price 06/07	SPE4	$0.60	SPE5	$0.60	SPE6	$0.60
Port price 07/08	SPE4	$0.63	SPE5	$0.63	SPE6	$0.63
ACE trading price (most recent fishing year)	SPE4	$0.0512/kg	SPE5	$0.0946/kg	SPE6	$0.0743/kg
Export price data*	SPE	N/A	SPE	N/A	SPE	N/A
Bycatch: ratios	Not applicable		Not applicable		Not applicable	
Bycatch: shadow values	Not applicable		Not applicable		Not applicable	
Previous deemed value invoices**	SPE4	$35	SPE5	$100	SPE6	N/A
Cost recovery levies	SPE4	$0.0117/kg	SPE5	N/A	SPE6	N/A

Information source	SPE7	SPE8	SPE9

Port price 06/07	SPE7	$0.60	SPE8	$0.60	SPE9	$0.60
Port price 07/08	SPE7	$0.61	SPE8	$1.76	SPE9	$0.63
ACE trading price (most recent fishing year)	SPE7	$0.0499/kg	SPE8	$0.0852/kg	SPE9	$0.0759/kg
Export price data*	SPE	N/A	SPE	N/A	SPE	N/A
Bycatch: ratios	Not applicable		Not applicable		Not applicable	
Bycatch: shadow values	Not applicable		Not applicable		Not applicable	
Previous deemed value invoices**	SPE7	$446	SPE8	$3	SPE9	$2
Cost recovery levies	SPE7	N/A	SPE8	N/A	SPE9	N/A

Information source	**SPE10**	
Port price 06/07	SPE10	N/A
Port price 07/08	SPE10	N/A
ACE trading price (most recent fishing year)	SPE10	No valid trades
Export price data*	SPE	N/A
Bycatch: ratios	Not applicable	
Bycatch: shadow values	Not applicable	
Previous deemed value invoices**	SPE10	$0
Cost recovery levies	SPE10	N/A

* Export price data for year ending December 2007
** Deemed value invoices issue for fishing in excess of ACE holdings for 2006-07 fishing season.

Key points:

- The port price for SPE8 has increased from $0.60 per kg to $1.76 per kg. Therefore, MFish considers it necessary to review the deemed value for all paua stocks to take into account this increase in port price.

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Monday 5 May 2008.

Deemed Value Review 2008: SPO2

Rig is caught in coastal waters throughout New Zealand. Most of the catch is taken from water less than 50 m deep during spring and summer, when rig aggregate inshore.

A. Overview:

Current deemed value rates:
Interim: $1.35kg
Annual: $2.70kg
Differential deemed values do not apply.

Key target stocks: Elephant Fish, School Shark & Spiny Dogfish.

B. Criteria for determining if a review is appropriate:

Criteria	SPO2
a) Catch in excess of ACE	Yes – SPO2 was over caught by 114% during the 2006/2007 fishing year
b) Deemed value payments in previous years	Yes - Deemed value invoices for SPO2 of $36,241 were issued at the end of the 2006/2007 fishing season
c) Changes to the port price of the stock	Yes – the port price for SPO2 has decreased from $3.19 to $2.82 (a decrease of $0.37)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

Rig fulfils criteria a), b) and c) above and therefore is considered appropriate for a review.

C. Assessment of the fishery:

C.1 Relationship with associated species[13]

SPO2 is predominantly a bycatch fishery and therefore at this stage a full review of associated species is not required. However, the implications of a deemed value change in SPO2 on other SPO stocks will need to be monitored.

C.2 Assessment and analysis of information sources:

Information source	SPO2	
Port price 06/07	SPO2	$3.19
Port price 07/08	SPO2	$2.82
ACE trading price (most recent fishing year)	SPO2	$1.1431/kg

[13] See notes on 'Relationship between target and bycatch stocks – implications for deemed value setting'.

Export price data*	SPO	$4.94
Bycatch: ratios	Not applicable	
Bycatch: shadow values	Not applicable	
Previous deemed value invoices**	SPO2	$36,241
Cost recovery levies	SPO2	$0.0845/kg

* Export price data for year ending December 2007
** Deemed value invoices issue for fishing in excess of ACE holdings for 2006-07 fishing season.

Key points:

- Two companies were invoiced 83.5% ($30,254) of the total $36,241 deemed value payments for the 2006/2007 fishing year. The largest single deemed value invoice was for $17,057 (47% of the total deemed value invoices).

- A decrease in the port price ($2.82) of SPO2 means it is just above the annual deemed value rate ($2.70). This means it is not profitable for fishers to catch SPO2 and pay the deemed values rather than balancing with ACE. This coupled with the differential deemed values means that it is not economic to fish beyond ACE holdings. This may be providing an incentive to fishers to dump excess SPO2 than landing it.

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Monday 5 May 2008.

Deemed Value Review 2008: SWO1

Swordfish (SWO) are primarily caught in the tuna longline fishery as a bycatch when targeting bigeye and to a lesser extent when targeting southern bluefin tunas. Since the introduction of SWO into the QMS some fishers have been trying to establish a target fishery.

A. Overview:

Current deemed value rates:
Interim: $2.13kg
Annual: $4.25kg
Differential deemed values do not apply.

Key bycatch stocks: N/A

B. Criteria for determining if a review is appropriate:

Criteria	SWO1
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes - Deemed value invoices for $1,156 were issued at the end of the 2006/2007 fishing season when 42% of ACE remained unused
c) Changes to the port price of the stock	Yes – port price has increased from $6.11 to $6.51 (an increase of $0.40)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	Yes – Introduced into the QMS on 1 October 2004

Swordfish fulfils criteria b), c) and f) above and therefore is considered appropriate for a review.

C. Assessment of the fishery:

C.1 Relationship with associated species[14]

SWO1 is predominantly a bycatch fishery and therefore at this stage a full review of associated species is not required. Since the swordfish fishery consists of only one stock there are no issues for neighbouring stocks.

C.2 Assessment and analysis of information sources:

Information source	Swordfish	
Port price 06/07	SWO1	$6.11
Port price 07/08	SWO1	$6.51
ACE trading price (most recent fishing year)	SWO1	$1.0571/kg
Export price data*	SWO	$2.39

[14] See notes on 'Relationship between target and bycatch stocks – implications for deemed value setting'.

Bycatch: ratios	SWO	N/A
Bycatch: shadow values	SWO	N/A
Previous deemed value invoices**	SWO1	$1,156
Cost recovery levies	SWO1	$0.3328/kg

* Export price data for year ending December 2007
** Deemed value invoices issue for fishing in excess of ACE holdings for 2006-07 fishing season.

Key points:

- The amount of swordfish deemed at the end of the last years fishing season is relatively low but is unexpected give that 42% of ACE was left unused at the end of the fishing season

- SWO quota shares were tendered by the crown in February 2006. Two fishers managed to secure the bulk of these quota shares meaning that many small tuna fishers were not able to purchase quota for their bycatch species. It is these two fishers who are currently developing the target fishery for swordfish. This has led to competition for quota and ACE between the target fishers and the tuna fishers who require ACE to cover the swordfish they take as a bycatch when they are targeting bigeye tuna or southern bluefin tuna. This in turn has resulted in changes to fishing behaviour that were not anticipated when SWO was introduced in the QMS on 1 October 2004.

- The issue with SWO1 is ultimately one of utilisation – bycatch fishers who missed out on quota when it was tendered cannot source ACE and the cost of paying deemed values are, in their opinion, prohibitive. This means that SWO is not being landed and the value from the fishery is not being realised. However, SWO fishers should be aware that dumping is an offence.

- There is a concern that the overall value of the fishery will decrease if SWO1 ACE is not available to cover the bycatch of SWO. It is likely that the high deemed value rates are distorting the ACE market by driving ACE prices up so that they are at a level with deemed values. This is the main driver for considering if a deemed value review is appropriate.

- There is a perception that lowering the deemed value rate will help rationalise the fishery and provide opportunities for value maximisation at the same time. The issue is if this is an appropriate role for government.

- Swordfish (SWO) are on the 6th Schedule of the Fisheries Act. A commercial fisher may return any swordfish to the waters from which it was taken if –
  (a) that swordfish is likely to survive on return; and
  (b) the return takes place as soon as practicable after the swordfish is taken; and
  (c) that swordfish has a lower jaw to fork length of less than 1.25m.

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Monday 5 May 2008.

DEEMED VALUE RATES FOR SELECTED FISHSTOCKS – SUMMARY OF SUBMISSIONS

Submissions received

a) Aotearoa Fisheries Ltd **(AFL)**

b) Area 2 Inshore Finfish Management Company Ltd **(Area 2 Inshore)**

c) Challenger Finfisheries Management Company Ltd **(Challenger)**

d) Egmont Seafood Limited **(ESL)**

e) Environment and Conservation Organisations of NZ Inc. **(ECO)**

f) Independent Fisheries Ltd **(Independent)**

g) Sanford Limited **(Sanford)**

h) Seafood Industry Council **(SeaFIC)**

Summary of position

1 **AFL** submits that inefficiencies and overcatch in many of the bycatch stocks has to do with the inappropriate setting of the current TACCs and not where the deemed value rates are set. AFL has commented on most of the proposed changes to the deemed value rates and provided a set of alternative deemed value rates. AFL proposes for all stocks that the interim deemed value should be removed or set at the annual deemed value rate.

2 **Area 2 Inshore** does not support the proposed changes to the deemed value rates for POR2 and SPO2. Area 2 Inshore submits that the TACC for SPO2 should be reviewed before the deemed value rates are reviewed. Area 2 Inshore submits that misreporting has caused the over catch in POR2 and that this is a compliance issue not a deemed value issue. Area 2 Inshore does support the proposed changes to the deemed value rates for SKI2.

3 **Challenger** does not support the proposed changes to the deemed values for the area 7 and 8 fish stocks (BNS7, BNS8, KIN7 and SPE8). Challenger supports maintaining the existing deemed value rates for FRO8, HPB7, HPB8, PIL8, SPO7 and TAR8.

4 **ESL** submits that TACCs need to be set correctly if the deemed value regime is to work correctly. ESL submits that ITQ and ACE owners have to act responsibly for the deemed value regime to work. ESL submits that some ITQ or ACE owners are using the deemed value review process to drive up deemed values so they can charge high ACE prices. ESL submits that annual deemed value rates should be set slightly below the port price for that fish stock.

5 ESL submits that it is concerned with the use of differential deemed value rates in bycatch fisheries. ESL submits that differential deemed values should only be used when there is inappropriate behaviour in the fishery and differential deemed value

rates should not be used for a mixed fishery species until a TACC review has occurred.

6 ESL is also in favour of greater industry participation in the deemed value review process.

7 **ECO** supports adjusting deemed values to reduce the incentive to over fish catches for stocks that meet the review criteria and stocks under review.

8 **Independent** submits that the current punitive deemed value regime has increased ACE price to uneconomic levels, it has forced fishers into criminal behaviour by dumping fish, created an incentive to dump large amounts of fish resulting in inaccurate catch information being reported to fishery managers. Independent does not support the proposed changes to KIN7 and KIN8 deemed value rates.

9 **Sanford** submits that the present deemed value rates are too low, and in some cases, woefully so. Sanford submit that some fishers are using the deemed value system as a way of fishing without ACE and with no regard for the sustainability of fish stocks. Sanford does not support any submission or proposal seeking a reduction to the current deemed value rates. Sanford submits the practice of setting deemed values close to the port price alone where catches are significantly over ACE holdings is clearly not providing the correct economic incentives to balance excess catches with ACE.

10 **SeaFIC** submits that TACCs should be regularly reviewed if the Ministry of Fisheries is to defend them stringently with the deemed value system. SeaFIC submits that the use of high annual deemed values and differential deemed values compromise the integrity of wider fisheries management objectives. In its view:

a) high deemed values relative to port prices provide an incentive to discard, high-grade or mis-report catches;

b) high deemed values relative to ACE prices introduce distortions into the ACE market.

11 SeaFIC submits that the 2008-09 port prices should have been used in the analysis not the 2007-08 port prices.

Blue Cod: BCO3

12 **AFL** submits that the current TACC is too low and is constraining catch in the southern inshore fin fishery. AFL submits that the current annual deemed value rate of $3.50 per kg is already above the marginal price of ACE and is acting as a disincentive to targeting the stock. AFL submits that increasing the annual deemed value rate to $3.75 per kg will not decrease catch but lead to an increase in discarding.

13 AFL proposes that until a TACC review has occurred that differential deemed values should not apply to this fishery.

14 **ECO** supports the deemed value rates for BCO3 set out in the IPP.

15 **Sanford** supports the deemed value rates for BCO3 set out in the IPP.

16 **SeaFIC** does not support the deemed value rates set out in the IPP and submits that the TACC for BCO3 should be reviewed urgently.

Bluenose: All BNS stocks

17 **AFL** supports increasing the annual deemed value rates for BNS1, BNS3, BNS7, BNS8 and BNS10 to $3.00 per kg. AFL submits that the annual deemed value for BNS2 should be increased to $3.25 per kg. AFL recommends that the differential deemed value rates should be set in .50 increments starting at $3.50 per kg.

18 **Challenger** submits that it is not acceptable to review the deemed value rates for all BNS stocks in conjunction with:

a) the proposed TACC reduction;

b) the reduction in port price;

c) unavailability of ACE to some fishers.

19 **ECO** supports the deemed value rates for all BNS stocks set out in the IPP.

20 **Sanford** supports the deemed value rates all BNS stocks set out in the IPP.

21 **SeaFIC** supports the deemed value rates all BNS stocks set out in the IPP.

Gurnard: GUR3

22 **AFL** proposes increasing the annual deemed value rate for GUR3 to $2.00 per kg and removing the differential deemed value rates.

23 **ECO** supports the deemed value rates for GUR3 set out in the IPP.

24 **SeaFIC** supports the deemed value rates for GUR3 set out in the IPP but also submits that the TACC for GUR3 should be reviewed urgently.

Kingfish: KIN7 & KIN8

25 **AFL** submits that the proposed high differential deemed value rates for KIN7 and KIN8 may encourage discarding or may resulting kingfish being returned to the sea (as per the 6th Schedule) when it has little chance of survival.

26 **Challenger** submits that the problem underlying the KIN7 stock is the level of the TAC and TACC. Challenger submits that the current TACC is set too low. Challenger submits that proposing increased deemed values on a poorly set TACC for KIN7, which is a bycatch species to the JMA fishery, will restrict the utilisation of the target JMA7 stock.

27 **ECO** supports the deemed value rates for KIN7 and KIN8 set out in the IPP.

28 **ESL** does not support the deemed value rates for KIN7 and KIN8 set out in the IPP. ESL submits that the TACC was not set at historical catch levels. ESL disputes the

export figure of $10.00 per kg. ESL proposes that the annual deemed value rate be set between $5.50 - $6.00 per kg.

29 **Independent** submits that they only receive $2.20 per kg for frozen-at-sea dressed kingfish. Independent disputes the export figure of $10.00 per kg. Independent submits that at a landed value of $2.20 per kg and a maximum differential deemed value rate of $20.00 per kg leave fishers no option but to dump kingfish.

30 **Sanford** supports the deemed value rates for KIN7 and KIN8 set out in the IPP.

31 **SeaFIC** does not support the deemed value rates for KIN7 and KIN8 set out in the IPP and submits that the TACC for KIN7 should be reviewed urgently.

Parore: All PAR stocks

32 **AFL** proposes increasing the annual deemed value rate for all PAR stocks to $0.35 per kg as they believe the current annual deemed value rate is acting as a cap on ACE prices. AFL submits that introducing differential deemed value rates into the fisheries is unnecessary.

33 **ECO** supports the deemed value rates for all PAR stocks set out in the IPP.

34 **Sanford** does not support the deemed value rates for all PAR stocks set out in the IPP.

35 **SeaFIC** does not support the deemed value rates for all PAR stocks set out in the IPP. SaeFIC submits there is no reason to set a uniform deemed value rate for this low knowledge species.

Paua: All PAU stocks

36 **AFL** supports the submission made by SeaFIC.

37 **ECO** supports the deemed value rates for all PAU stocks set out in the IPP.

38 **SeaFIC** supports increasing the deemed value rates for all PAU stocks but submits the increase should be based upon the 2008-09 port price of $33.15.

Porae: All POR stocks

39 **AFL** submits that the low TACC in POR2 is constraining catch in the inshore setnet fishery. AFL submits that increasing the annual deemed value rate to $1.35 per kg will not decrease catch but lead to an increase in dumping.

40 AFL recommends that until a TACC for each POR stock has been reviewed that differential deemed value rates should not apply in these fisheries.

41 **Area 2 Inshore** does not support the deemed value rates for all POR stocks set out in the IPP. Area 2 Inshore states that the over fishing of the TACC during the 2006-07 fishing year was due to one fisher misreporting POR1 as POR2. Area 2 Inshore

submits that action should be taken against the one fisher rather than change the deemed value rates which will affect all fishers.

42 **ECO** supports the deemed value rates for all POR stocks set out in the IPP.

43 **Sanford** supports the deemed value rates all POR stocks set out in the IPP.

44 **SeaFIC** does not support the deemed value rates all POR stocks set out in the IPP. SeaFIC cites the same reasons as Area 2 Inshore for not supporting the proposed deemed value rates.

Ribaldo: RIB3, RIB4, RIB5, RIB6 & RIB7

45 **AFL** proposes setting the differential deemed value rates for all RIB stocks at $0.20 increments, starting at $1.00 per kg, with catch in excess of ACE holding at 5% increments.

46 **ECO** supports the deemed value rates set out for RIB3, RIB4, RIB5, RIB6 and RIB7 in the IPP.

47 **Sanford** supports the deemed value rates for RIB3, RIB4, RIB5, RIB6 and RIB7 set out in the IPP.

48 **SeaFIC** supports the deemed value rates set out in the IPP for RIB7 but submits that the deemed value rates for RIB3, RIB4, RIB5 and RIB6 should not be changed.

Rough skate: RSK1 & RSK3

49 **ECO** supports the deemed value rates for RSK1 and RSK3 set out in the IPP.

50 **SeaFIC** supports the deemed value rates for RSK1 and RSK3 set out in the IPP.

Gemfish: SKI1 & SKI2

51 **AFL** does not support the deemed value rates set out in the IPP. AFL submits that reducing the annual deemed value rates in SKI1 and SKI2 will continue to cause the deemed value rates to act as a cap on the ACE price. AFL proposes either removing or setting the interim deemed value rate at the annual deemed value rate.

52 **Area 2 Inshore** supports the deemed value rates for SKI1 and SKI2 set out in the IPP.

53 **ECO** supports the deemed value rates for SKI1 and SKI2 set out in the IPP.

54 **Sanford** does not support the deemed value rates for SKI1 and SKI2 set out in the IPP.

55 **SeaFIC** supports the deemed value rates for SKI1 and SKI2 set out in the IPP and submits that the TACC for SKI2 should be reviewed urgently.

Sea perch: SPE8

56 **AFL** does not support the deemed value rates for SPE8 set out in the IPP. AFL submits that given the low ACE price it is unnecessary to adjust the deemed value rates at this stage.

57 **Challenger** requests that Ministry of Fisheries review the port price of SPE8 before considering an increase to the deemed value. Challenger submits that the more likely port price is $0.63 per kg rather than $1.76 per kg.

58 **ECO** supports the deemed value rates set out for SPE8 in the IPP.

59 **Sanford** supports the deemed value rates for SPE8 set out in the IPP.

60 **SeaFIC** does not support the deemed value rates for SPE8 set out in the IPP. SeaFIC submits that the more likely port price is $0.63 per kg rather than $1.76 per kg.

Rig: SPO2

61 **AFL** submits that the current annual deemed value rate is acting as a cap on the SPO2 ACE price and that reducing the deemed value rates will only reduce the ACE price further.

62 **Area 2 Inshore** does not support the deemed value rates for SPO2 set out in the IPP. Area 2 inshore submits that until the TACC for SPO2 is reviewed, it cannot support any changes to the deemed value rates.

63 **ECO** supports the deemed value rates for SPO2 set out in the IPP.

64 **Sanford** does not support the deemed value rates for SPO2 set out in the IPP.

65 **SeaFIC** supports the deemed value rates for SPO2 set out in the IPP.

Broadbill swordfish: SWO1

66 **AFL** supports the deemed value rates for SWO1 set out in the IPP.

67 **ECO** supports the deemed value rates for SWO1 set out in the IPP.

68 **Sanford** does not support the deemed value rates for SWO1 set out in the IPP.

69 **SeaFIC** supports the deemed value rates for SWO1 set out in the IPP.

Stocks reviewed but no deemed value adjustment proposed

Frostfish: FRO8

70 **Challenger** supports retaining the current deemed value rates for FRO8.

Grey mullet: GMU1

71 **AFL** submits that the current annual deemed value rate is acting as a cap on the GMU1 ACE price. AFL proposes that the annual deemed value rate be increased to $1.50 per kg.

Hake: HAK1

72 **AFL** submits that the current annual deemed value rate is acting as a cap on the HAK1 ACE price. AFL proposes that the annual deemed value rate be increased to $1.50 per kg.

Hapuka/Bass: All HPB stocks

73 **Challenger** supports retaining the current deemed value rates for all HPB stocks.

Moki: MOK1

74 **AFL** submits that the current annual deemed value rate is acting as a cap on the MOK1 ACE price. AFL proposes that the annual deemed value rate be increased to $1.20 per kg.

Orange roughy: ORH3B

75 **ECO** supports retaining the current deemed value rates for ORH3B.

Pilchard: PIL1 & PIL8

76 **Challenger** supports retaining the current deemed value rates for PIL1 and PIL8.

Sea perch: SPE2

77 **AFL** submits that the current annual deemed value rate is acting as a cap on the SPE2 ACE price. AFL proposes that the annual deemed value rate be increased to $0.80 per kg.

Rig: SPO7

78 **Challenger** supports retaining the current deemed value rates for SPO7.

Tarakihi: TAR1 & TAR8

79 **Challenger** supports retaining the current deemed value rates TAR1 and TAR8.

White warehou: WWA4

80 **AFL** submits that the current annual deemed value rate is acting as a cap on the WWA4 ACE price. AFL proposes that the annual deemed value rate be increased to $1.20 per kg.