

REVIEW OF DEEMED VALUE RATES FOR SELECTED FISHSTOCKS

Purpose

- 1 The purpose of this paper is to set out the Ministry of Fisheries (MFish) review of the deemed value rates for selected fish stocks for the October 2007 sustainability round. The review has been undertaken using the new deemed value standard. A summary of this standard can be found in Appendix 1.

Executive summary

- 2 Under s. 75 (1) of the Fisheries Act 1996 (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 must have regard to when setting deemed values. These factors form the basis of the information sheets that have been produced for each stock under review.
- 3 MFish recently developed a 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 new deemed value standard details a set of criteria which determine if a fish stock should be considered for a deemed value review. Table 1 details the stocks that met one or more of these criteria and therefore were eligible for a review.

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

Species Name	Fish Stock for review
Barracouta	BAR5 (BAR1, BAR4 & BAR7)
Blue Cod	BCO3 (BCO4 & BCO5)
Bluenose	BNS2
Red Gurnard	GUR7 & GUR8
Hoki	HOK1
Hapuka Bass	HPB3
John Dory	JDO7 (JDO2)
Ling	LIN7 (LIN1, LIN2, LIN3, LIN4, LIN5 & LIN6)
Gemfish	SKI2
Snapper	SNA1, SNA2, SNA8 (SNA7)
Spiny Dogfish	All stocks
Rig	SPO2
Silver Warehou	SWA3 & SWA4 (SWA1)
Swordfish	SWO1
Trevally	TRE2
Blue (or Common) Warehou	WAR3 & WAR7
White Warehou	WWA3, WWA4 & WWA7

- 5 In addition stocks that are being considered for a total allowable catch (TAC) review as part of the October 2007 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

Species Name	Fish Stock for review
Flatfish	FLA3
Longfin & Shortfin Eels	LFE20, 21, 22 23 & SFE20, 21, 22, 23
Dredge Oysters	OYS7C
Oreo	OEO1
Orange Roughy	ORH1, ORH3B, ORH7B
Red Cod	RCO3 (GUR3)
School Shark	SCH1
Arrow Squid	SQU1T
Tarakihi	TAR1 (TAR2, TAR7 & TAR8)

- 6 All stocks on the review list were considered at the deemed value review group meeting held Tuesday 15 May 2007. If the review group considered a deemed value adjustment was appropriate a range of information sources were used to propose the new deemed value rates. 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, e.g., BAR4 is included in the review of BAR5, or the bycatch stocks of a target stock under review, e.g., GUR3 is included because it is a bycatch of RCO3. These associated stocks are included in Table 1 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:
- 9 Catch is harvested, landed and balanced with ACE.
- 10 There are no significant deemed value payments when ACE is left unused at the end of the fishing year.
- 11 Individual fishers are not able to use deemed values to undermine the QMS.
- 12 In every instance, MFish strives to identify the optimal point that balances these objectives.
- 13 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 lead to TACC breaches in recent years which may have sustainability implications, e.g., hoki (HOK1) and white warehou (WWA7).

- 14 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.
- 15 MFish developed the new deemed value standard to ensure that deemed value rates are set so as to best meet the purpose of the Act. This new deemed value standard provides greater flexibility in how deemed values are set and will ensure that the right incentives are in place to encourage fishers to balance catch with ACE instead of deemed values.
- 16 As a result the new deemed value standard should ensure effective deemed values are set for all stocks. The new 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.
 - d) Maintains differential deemed values but allows their application to be varied on a stock by stock basis.
- 17 Adopting a more flexible approach means fisheries managers are able to use deemed values as a management tool to achieve appropriate behaviour in the fishery.
- 18 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:
- a) Neighbouring stocks within the same species, e.g., BAR4 is included in the review of BAR5; or
 - b) Key bycatch stocks of the target stock that is under review when altering the deemed value of the target stock may impact on fishing activity in the bycatch fishery, e.g., GUR3 is included because it is a bycatch of RCO3

Rationale for management options

- 19 Under s.75(1) of the Fisheries Act 1996 (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.
- 20 The Act requires both annual and interim deemed value rates to be set for all stocks in time for the start of the fishing season. 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 there is insufficient ACE to cover all catch, therefore leading to the TACC being exceeded.

- 21 MFish considers that in some instances it may be appropriate to set the interim rate closer to the annual rate so as to encourage more regular balancing throughout the year. MFish proposes that in situations where more regular balancing is warranted to ensure catch levels do not exceed available ACE the interim should be set closer to the annual rate- if this is necessary it is discussed in the analysis for the stock. Otherwise the interim will remain at 50% of the annual. As part of this process MFish is recommending higher interim deemed value rates for some of the stocks under review and details of these stocks can be found in the analysis section.
- 22 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. In the past differential rates have applied to an individual when specified thresholds of catch in excess of ACE are reached. Currently differential deemed value rates apply at set percentages of over catch above ACE holdings as described in Table 3 below.

Table 3: Differential deemed value trigger points

Percentage over-catch	Differential deemed values
100-120% of ACE	Basic deemed value
121 – 140% of ACE	120% of basic deemed value
141 – 160% of ACE	140% of basic deemed value
161 – 180% of ACE	160% of basic deemed value
>180% of ACE	180% of basic deemed value

- 23 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 are an important tool in addressing individual misbehaviour.
- 24 As part of the flexible approach to setting deemed values set out in the standard MFish is recommending that differential deemed values are set at a level that will provide every incentive for fishers to balance catch with ACE. For some stocks this may mean applying deemed values at small percentages of overcatch such as 5%, for others it may mean applying differential deemed value rates at 20% over catch.
- 25 Flexibility in setting the incremental increase in differential deemed value rates is also available under the new deemed value standard and differential rates continue to apply at any level of overcatch depending on the stock and the behaviours that we are trying to use deemed values to manage. The actual rates at which the differentials are set are also flexible and are no longer based on the annual rate. Instead they can be set at any financial amount that MFish considers is necessary to provide the maximum disincentive to fishers thinking of fishing without ACE.
- 26 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

- 27 The deemed value standard also sets out a process for reviewing and adjusting deemed value rates. This process is being followed for the October 2007 sustainability round.
- 28 All quota management system (QMS) stocks were assessed against the following deemed value criteria:
 - a) Catch is in excess of a TACC
 - b) Catch is in excess of an individual's ACE holdings and deemed values have been invoiced but ACE has remained unused
 - c) The port price of a stock changed
 - d) Thee Seafood Industry Council (SeaFIC) made a direct request on behalf of quota owners
 - e) A stock's TACC or the TACC of key bycatch stocks was recently changed
 - f) The stock recently entered the QMS and the deemed value rate was set using limited information.
- 29 A significant proportion of QMS stocks met one or more criteria but due to resource constraints and timing issues it was not possible to review all eligible stocks in this review round. Stocks were prioritised based on industry requests and the relevant fishery manager's perception of the risks of leaving the deemed values unchanged. All fishstocks detailed in Table 1 above were prioritised for inclusion in this review.
- 30 Following an assessment of the stock's performance against the criteria described above information sheets were prepared for each stock. These information sheets include:
 - a) Quantitative information detailing the stock's performance against the criteria described above
 - b) Qualitative and anecdotal information on the fishery including an assessment of the types of behaviour that the deemed value is required to manage.
- 31 This information was analysed to determine why deemed value rates for some stocks may not be effective. The information sheets described above form the basis of the following analysis:
 - 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 requirements set out in the Fisheries Act 1996 may not be met
 - e) Impact of changes in market price and/or structure for the fish product/species under review.

- 32 Information relevant to a deemed value adjustment is also summarised in the analysis section for each stock. Information sheets can be found in Appendix Two.
- 33 Also included in this review are the deemed values for fish stocks that are subject to a TAC and TACC review as part of the October 2007 sustainability round. This is to ensure that, in situations when a TACC is adjusted, the deemed value is also adjusted to a level that will protect the TACC.
- 34 All stocks included on the list were reviewed by the deemed value review group at a meeting, held Tuesday 15 May 2007. This review group consisted of a representative from SeaFIC and MFish officials representing inshore and deepwater fisheries, Compliance and the Socio-Economic team. At this meeting each stock was assessed using the information and analysis described above. This assessment determined if a deemed value adjustment was appropriate.
- 35 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.
- 36 MFish is presenting the following proposed deemed value adjustments for consultation only. This Initial Position Paper (IPP) is not final advice to the Minister but provides stakeholders with the opportunity to comment on, and provide supplemental information to draft advice.
- 37 The Minister is not limited to choosing the deemed value rates proposed in this paper; rather he can set the deemed value rates at any level that he considers will best meet his obligations under the Act. Therefore he can also choose to leave the deemed value rates unchanged provided he is satisfied that in doing so he is meeting statutory obligations.

Analysis

- 38 This section sets out a summary of the analysis for each stock and an assessment of why a deemed value adjustment is appropriate. The proposed deemed value rates are also presented.
- 39 Not all stocks included on the review list required a deemed value adjustment. Details of these stocks are presented at the end of the analysis section.
- 40 The analysis for each stock follows:

Barracouta: BAR1, BAR4, BAR5 & BAR7

- 41 Barracouta is caught as a target species and a bycatch species in the west coast North Island jack mackerel squid fisheries. BAR5 is included in the review because:
- a) In the last two fishing seasons BAR5 has been over caught (126% above available ACE in the 2005-06 fishing season).
 - b) Deemed value invoices of \$490,975 were issued at the end of the 2005-06 fishing season.
 - c) A direct request for a deemed value review was received from quota owners.
- 42 Three companies are responsible for 73% of the total \$490,975 deemed value bill. This suggests that certain fishers are deliberately choosing to fish in excess of available ACE and that an adjustment to the differential deemed value rates may be the most appropriate tool to use.
- 43 Therefore MFish proposes that the differential deemed value rates should be adjusted so that at the end of the fishing season any reported catch that is 10% in excess of available ACE is levied at a higher deemed value rate. This higher levied rate will also rise if fishers choose to continue fishing in excess of ACE. MFish considers the proposed amendments to the differential rates should act as a deterrent to those fishers who are considering fishing in excess of ACE.
- 44 The deemed value rates for the remaining BAR stocks have also been reviewed and a deemed value adjustment in line with BAR5 is considered appropriate. This is to ensure that there is no incentive for fishers to misreport fish between BAR5 and the other BAR fisheries in an attempt to exploit lower deemed value rates in neighbouring stocks.
- 45 The proposed deemed value rates for the 2007-08 fishing season are as follows:

BAR1, BAR4, BAR5 & BAR7

- a) Annual deemed value rate to remain unchanged at \$0.19 per kg.
- b) Interim deemed value rate to remain unchanged at \$0.10 per kg, which is 50% of the annual deemed value rate.
- c) Differential deemed value rates adjusted as outlined in the table below.

Table 4: Proposed differential deemed value rates for BAR1, BAR4, BAR5 & BAR7

Current differential rates		Proposed differential rates	
Catch in excess of ACE holdings (%)	Current deemed value rate (\$)	Catch in excess of ACE holdings (%)	Proposed deemed value rate (\$)
120	0.228 per kg	110	0.50 per kg
		120	1.50 per kg
140	0.266 per kg	130	2.50 per kg
		140	3.50 per kg
160	0.304 per kg		4.50 per kg
			4.50 per kg
180	0.342 per kg	150 and over	4.50 per kg
			4.50 per kg
200	0.380 per kg		4.50 per kg
			4.50 per kg

Blue cod: BCO3, BCO4 & BCO5

- 46 Blue cod (BCO3) is a key bycatch species in the southern inshore fin fishery. MFish believes that the high TACC in both RCO3 and FLA3 is encouraging fishers to enter these fisheries and over fish associated stocks such as blue cod.
- 47 BCO3 is included in the review because:
- It has been consistently over caught in recent fishing seasons (109% of available ACE in the 2005-06 fishing season).
 - Deemed value invoices of \$53,147 were issued at the end of the 2005-06 fishing season.
- 48 The current average port price (\$2.94 per kg) is higher than the annual deemed value rate (\$1.92 per kg) suggesting fishers can fish, pay the deemed value and still realise a profit.
- 49 MFish proposes to increase the annual deemed value rate for BCO3 so that it better reflects the average port price in this fishery. BCO4 and BCO5 have also been reviewed, and it is proposed that their deemed value rates are adjusted in line with BCO3, to ensure there are no incentives for fishers to misreport fish between areas so as to exploit lower deemed value rates.
- 50 Differential deemed value rates will also change across all three blue cod stocks in line with the proposed alteration to the annual rate.
- 51 The proposed deemed value rates for the 2007-08 fishing season are as follows:

BCO3, BCO4 & BCO5

- Annual deemed value rate to increase:
 - BCO3: from \$1.92 per kg to \$2.65 per kg
 - BCO4: from \$1.34 per kg to \$2.65 per kg

- iii) BCO5: from \$1.50 per kg to \$2.65 per kg
- b) Interim deemed value rate to increase to 50% of the proposed new annual rate:
 - i) BCO3: from \$0.96 per kg to \$1.32 per kg
 - ii) BCO4: from \$0.67 per kg to \$1.32 per kg
 - iii) BCO5: from \$0.75 per kg to \$1.32 per kg
- c) Differential deemed value rates adjusted to reflect the proposed new annual deemed value rate, outlined in the table below.

Table 5: Proposed differential deemed value rates for BCO3, BCO4 & BCO5

Current differential rates				Proposed differential rates	
Catch in excess of ACE holdings (%)	Current deemed value rate BCO3 (\$)	Current deemed value rate BCO4 (\$)	Current deemed value rate BCO5 (\$)	Catch in excess of ACE holdings (%)	Proposed deemed value rate (\$)
120	2.304 per kg	1.608 per kg	1.800 per kg	120	3.18 per kg
140	2.688 per kg	1.876 per kg	2.100 per kg	140	3.71 per kg
160	3.072 per kg	2.144 per kg	2.400 per kg	160	4.24 per kg
180	3.456 per kg	2.412 per kg	2.700 per kg	180	4.77 per kg
200	3.840 per kg	2.680 per kg	3.000 per kg	200	5.30 per kg

Bluenose: BNS2

- 52 BNS2 is traditionally caught as a bycatch in the alfonsino and gemfish trawl fisheries but is increasingly becoming a target fishery. BNS2 is included in the review because:
 - a) BNS2 has been continuously over fished in the past twelve fishing seasons.
 - b) Deemed value invoices of \$196,539 were issued at the end of the 2005-06 fishing season.
 - c) Average port price has increased from \$2.58 per kg to \$3.57 per kg.
- 53 MFish considers the low annual deemed value rate compared to both port price and average export price (\$8.94 per kg) may encourage fishers to fish in excess of ACE holdings. In the last fishing season one company was responsible for 66% of the total deemed value bill for the fishery which suggests that this company's operating costs are sufficiently low so as to enable it to deliberately fish in excess of ACE, pay the deemed value and realise a profit. This suggests that amending the differential deemed values may be the most appropriate tool to manage this type of behaviour.
- 54 MFish proposes that the annual deemed value rate is increased to better reflect the market value of the fish. MFish also considers it appropriate to adjust differential deemed values 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.
- 55 The proposed deemed value rates for the 2007-08 fishing season are as follows:

BNS2

- a) Annual deemed value rate to increase from \$2.18 per kg to \$3.00 per kg.
- b) Interim deemed value rate to increase from \$1.09 per kg to \$1.50 per kg, which is 50% of the new annual deemed value rate.
- c) Differential deemed value rates adjusted as outlined in the table below.

Table 6: Proposed differential deemed value rates for BNS2

Current differential rates		Proposed differential rates	
Catch in excess of ACE holdings (%)	Current deemed value rate (\$)	Catch in excess of ACE holdings (%)	Proposed deemed value rate (\$)
120	2.616 per kg	105	4.00 per kg
		110	5.00 per kg
140	3.052 per kg	120	6.00 per kg
		130	7.00 per kg
160	3.488 per kg	140	8.00 per kg
		150	9.00 per kg
180	3.924 per kg		
		160 and over	10.00 per kg
200	4.360 per kg		

Flatfish: FLA3

- 56 Flatfish is one of the major target species in the southern inshore fin fishery. This fishery is being reviewed in the October sustainability round as there are concerns that the TAC has been set too high and this is impacting on bycatch species as fishers try to harvest the full TACC.
- 57 FLA3 is included in this review to ensure the deemed value rates are appropriately set so as to ensure the TACC is not breached. The deemed value rates for the associated bycatch species have also been reviewed and are discussed separately in this paper.
- 58 MFish considers if the TAC and the TACC for FLA3 are reduced then deemed value rates should be increased so that they adequately protect the new TACC. The current annual deemed value rate is below both the port price (\$2.96 per kg) and average export price (\$5.49 per kg). MFish proposes to increase the annual deemed value rate so that it better reflects the current port price. Differential deemed value rates will also change as the new annual rate alters the baseline.
- 59 These proposed deemed value adjustments are dependant on a TAC and a TACC decrease. If this is not approved by the Minister then MFish considers the deemed value rates should remain unchanged.
- 60 The proposed deemed value rates for the 2007-08 fishing season are as follows:

FLA3

- a) Annual deemed value rate to increase from \$1.50 per kg to \$2.80 per kg.
- b) Interim deemed value rate to increase from \$0.75 per kg to \$1.40 per kg, which is 50% of the new annual deemed value rate.
- c) Differential deemed value rates adjusted to reflect the proposed new annual deemed value rate, outlined in the table below.

Table 7: Proposed differential deemed value rates for FLA3

Current differential rates		Proposed differential rates	
Catch in excess of ACE holdings (%)	Current deemed value rate (\$)	Catch in excess of ACE holdings (%)	Proposed deemed value rate (\$)
120	1.80 per kg	120	3.36 per kg
140	2.10 per kg	140	3.92 per kg
160	2.40 per kg	160	4.48 per kg
180	2.70 per kg	180	5.04 per kg
200	3.00 per kg	200	5.60 per kg

Gurnard: GUR3, GUR7 & GUR8

- 61 Gurnard is a major bycatch of inshore trawl fisheries across most of New Zealand. The following gurnard stocks are being considered for a review – GUR3, GUR7 and GUR8

GUR3¹

- 62 GUR3 is a bycatch of the RCO3 and FLA3 fisheries which are both being considered for a TACC review as part of the October sustainability round. GUR3 is included in this review because:
- a) In the last two fishing seasons GUR3 has been over caught (113% of available ACE in the 2005-06 fishing season).
 - b) Deemed value invoices of \$142,677 were issued at the end of the 2005-06 fishing season.
 - c) There is a risk that fishing effort may shift to GUR3 if the RCO3 and FLA3 TACC is reduced and MFish considers it necessary to ensure appropriate incentives are in place to prevent over fishing.
- 63 The annual deemed value rate is currently set below current port price (\$1.09 per kg). MFish is concerned that fishers are choosing to deliberately catch in excess of available ACE because there is a potential profit margin available above the deemed value rate.
- 64 MFish proposes to increase the annual deemed value rate so that it is closer to the port price for the stock. This sets the annual rate at almost three times the average ACE

¹ The information relevant to this stock can be found in the RCO3 and FLA3 information sheet.

price. The proposed change to the annual rate also means the differential deemed value rates will be adjusted.

GUR7 & GUR8

- 65 Recent compliance operations in the GUR7 and GUR8 fisheries have found evidence that significant quantities of gurnard are being high graded and dumped. The incentive to high grade gurnard occurs because the price fishers receive is dependant on the length of gurnard landed – small gurnard, under 28cm in size, attract only \$0.07 per kg compared to gurnard greater than 33cm which can attract a price of \$1.75 per kg. This provides a significant financial incentive for fishers to high grade the smaller gurnard. Catches from both fisheries are within the limits of available ACE suggesting that fishers are choosing to dump rather than pay deemed values.
- 66 MFish proposes to lower both the interim and annual deemed value rates in both stocks to encourage fishers to report and land all gurnard. This is to try and reduce the amount of high grading and dumping occurring in the fishery, to improve reporting and ultimately to improve the quality of management information available to MFish. MFish also considers differential deemed value rates should increase so that they provide a backstop to fishers considering fishing in excess of ACE because the deemed value penalty has been lowered.
- 67 The proposed deemed value rates for the 2007-08 fishing season are as follows:

GUR3

- a) Annual deemed value rate to increase from \$0.85 per kg to \$1.05 per kg.
- b) Interim deemed value rate to increase from \$0.43 per kg to \$0.52 per kg, which is 50% of the new annual deemed value rate.
- 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 GUR3

Current differential rates		Proposed differential rates	
Catch in excess of ACE holdings (%)	Current deemed value rate (\$)	Catch in excess of ACE holdings (%)	Proposed deemed value rate (\$)
120	1.02 per kg	120	1.26 per kg
140	1.19 per kg	140	1.47 per kg
160	1.36 per kg	160	1.68 per kg
180	1.53 per kg	180	1.89 per kg
200	1.70 per kg	200	2.10 per kg

GUR7 & GUR8

- a) Annual deemed value rate to decrease:
 - i) GUR7: from \$0.85 per kg to \$0.75 per kg.
 - ii) GUR8: from \$1.13 per kg to \$0.75 per kg.
- b) Interim deemed value rate to decrease to 50% of the proposed new annual rate:

- i) GUR7: from \$0.43 per kg to \$0.37 per kg.
- ii) GUR8: from \$0.57 per kg to \$0.37 per kg.
- c) Differential deemed value rates adjusted as outlined in the table below.

Table 9: Proposed differential deemed value rates for GUR7 & GUR8

Current differential rates			Proposed differential rates	
Catch in excess of ACE holdings (%)	Current deemed value rate GUR7 (\$)	Current deemed value rate GUR8 (\$)	Catch in excess of ACE holdings (%)	Proposed deemed value rate (\$)
120	1.02 per kg	1.356 per kg	120	3.00 per kg
140	1.19 per kg	1.582 per kg	130	4.00 per kg
			140	5.00 per kg
160	1.36 per kg	1.808 per kg	150	6.00 per kg
			160	7.00 per kg
180	1.53 per kg	2.034 per kg	170	8.00 per kg
			180	9.00 per kg
200	1.70 per kg	2.260 per kg	190	10.00 per kg
			200	11.00 per kg

Hoki: HOK1

- 68 The hoki fishery is one of the most important commercial fisheries in New Zealand and is a significant export earner. In 2004 the TACC was reduced from 180,000 tonnes to 100,000 tonnes but the deemed value rates were left unchanged. In the last two fishing seasons the fishery was over fished to 104% of ACE and there are concerns that this level of over catch may undermine attempts to protect stock sustainability. This suggests the current deemed value rates are too low and are not constraining over fishing.
- 69 In the last fishing season \$2.7 million worth of deemed values were invoiced and six companies received invoices each in excess of \$200,000. This would suggest that operating cost structures within these companies are sufficiently low so as to enable operators to incur high deemed value invoices while continuing to fish.
- 70 To address these issues MFish considers that an adjustment to the deemed value rates is appropriate at this time. MFish considers the annual rate should remain unchanged to enable fishers to manage small ACE overruns but that the interim rate is set closer to the annual rate so as to encourage more regular ACE balancing throughout the fishing year. This should help avoid situations of a 'race' to balance ACE at the end of the fishing year.
- 71 Differential deemed values are adjusted so that they apply at 5% of catch in excess of ACE and the differential rate will rapidly increase with increasing amounts of catch in excess of ACE.
- 72 HOK1 is also subject to a TAC and TACC review as part of the October 2007 sustainability round.
- 73 The proposed deemed value rates for the 2007-08 fishing season are as follows:

HOK1

- a) Annual deemed value rate to remain unchanged at \$0.59 per kg.
- b) Interim deemed value rate to increase from \$0.30 per kg to \$0.55 per kg, which is 94% of the annual deemed value rate.
- c) Differential deemed value rates adjusted as outlined in the table below.

Table 10: Proposed differential deemed value rates for HOK1

Current differential rates		Proposed differential rates	
Catch in excess of ACE holdings (%)	Current deemed value rate (\$)	Catch in excess of ACE holdings (%)	Proposed deemed value rate (\$)
120	0.708 per kg	105	1.00 per kg
		110	2.00 per kg
140	0.826 per kg	115	3.00 per kg
		125	4.00 per kg
160	0.944 per kg		
180	1.062 per kg	150 and over	5.00 per kg
200	1.180 per kg		

Hapuka/Bass: HPB3²

- 74 HPB3 is a target fishery in its own right and is also a bycatch in the southern inshore fin fishery, caught alongside RCO3 and FLA3. HPB3 is included in this review because:
- a) In the last three fishing seasons HPB3 has been over caught (118% of available ACE in the 2005-06 fishing season).
 - b) Deemed value invoices of \$138,631 were issued at the end of the 2005-06 fishing season.
 - c) Current port price has increased from \$2.22 per kg to \$4.56 per kg.
- 75 The increase in the current average port price suggests that fishers have an opportunity to fish in excess of ACE holdings, pay deemed values and still realise a profit. MFish proposes that the annual deemed value rate should be increased to better reflect the high port price and export prices available for HPB3 – in 2006 the average export price was \$8.92 per kg compared to an annual deemed value rate of \$1.50 per kg.
- 76 MFish is also concerned that the current deemed value rates may not adequately protect the HPB3 TACC particularly if fishing effort increases as fishers choose to target HPB3 to compensate for possible TACC reductions in RCO3 and FLA3. MFish

² The information relevant to this stock can be found in the RCO3 and FLA3 information sheet.

considers it is appropriate to increase the annual deemed value rate so that it better reflects port price.

77 Differential deemed value rates will also change in line with the proposed alteration to the annual rate.

78 The proposed deemed value rates for the 2007-08 fishing season are as follows:

HPB3

- a) Annual deemed value rate to increase from \$1.50 per kg to \$2.30 per kg.
- b) Interim deemed value rate to increase from \$0.90 per kg to \$1.15 per kg, which is 50% of the new annual deemed value rate.
- 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 HPB3

Current differential rates		Proposed differential rates	
Catch in excess of ACE holdings (%)	Current deemed value rate (\$)	Catch in excess of ACE holdings (%)	Proposed deemed value rate (\$)
120	1.80 per kg	120	2.76 per kg
140	2.10 per kg	140	3.22 per kg
160	2.40 per kg	160	3.68 per kg
180	2.70 per kg	180	4.14 per kg
200	3.00 per kg	200	4.60 per kg

John dory: JDO2 & JDO7

79 John dory are mainly taken as a bycatch in the inshore trawl and danish seine fisheries. JDO7 is included in this review because:

- a) It has been consistently over caught in recent fishing seasons (106% of available ACE in the 2005-06 fishing season).
- b) The current average port price has increased from \$3.89 per to \$4.64 per kg.

80 The recent increase in port price reflects the current high export price for john dory – in 2006 the average export price was \$10.05 per kg. This suggests there may be an incentive for fishers to deliberately fish in excess of ACE because they can pay the annual deemed value rate (\$3.17 per kg) and still realise a profit. This overfishing is also occurring because differential deemed values do not apply in JDO7.

81 MFish proposes the JDO7 annual deemed value rate should increase so that it is set closer to the port price. MFish considers applying differential deemed values in this fishery at the standard rate is appropriate at this time– this means that for any catch 20% in excess of a fisher's ACE holdings a higher deemed value rate will be levied. This levy will continue to increase as the level of catch in excess of available ACE increases.

82 JDO2 is being reviewed to ensure that there is no incentive for fishers to truck fish from JDO7 to JDO2. This could occur if there is a discrepancy in the deemed value

rates between the two stocks. The JDO2 annual deemed value rate is adjusted in line with the proposed JDO7 rate. The differential rates for JDO2 have also been adjusted to reflect the proposed change to the annual deemed value rate.

83 The proposed deemed value rates for the 2007-08 fishing season are as follows:

JDO2 & JDO7

- a) Annual deemed value rates to increase:
 - i) JDO2 from \$2.65 per kg to \$4.00 per kg.
 - ii) JDO7 from \$3.17 per kg to \$4.00 per kg.
- b) Interim deemed value rates to increase:
 - i) JDO2 from \$1.33 per kg to \$2.00 per kg.
 - ii) JDO7 from \$1.57 per kg to \$2.00 per kg.
- c) Differential deemed value rates adjusted as outlined in the table below.

Table 12: Proposed differential deemed value rates for JDO2 & JDO7

Current differential rates			Proposed differential rates	
Catch in excess of ACE holdings (%)	Current deemed value rate JDO2 (\$)	Current deemed value rate JDO7 (\$)	Catch in excess of ACE holdings (%)	Proposed deemed value rate (\$)
120	3.18 per kg	Differential deemed values currently do not apply	120	6.00 per kg
140	3.71 per kg		130	8.00 per kg
160	4.24 per kg		140	10.00 per kg
180	4.77 per kg		150 and over	12.00 per kg
200	5.30 per kg			

Ling: LIN1, LIN2, LIN3, LIN4, LIN5, LIN6 & LIN7

- 84 Ling is a major bycatch in the hoki trawl fishery as well as a being a target species in its own right. LIN7 is included in this review because:
- a) It has been consistently over caught in recent fishing seasons (111% of available ACE in the 2005-06 fishing season).
 - b) Deemed value invoices of \$768,000 were issued at the end of the 2005-06 fishing season.
- 85 An assessment of recent deemed value invoices from this fishery indicate that there are certain operators consistently catching LIN7 in excess of available ACE. These are the same companies that are deeming large quantities of hoki. This behaviour suggests amending the differential deemed value rates, to ensure they act as an effective deterrent, is the most appropriate management response at this time.
- 86 MFish also considers the deemed value rates for all ling stocks should be considered for a review for the following reasons:

- a) To ensure there are no incentives for fishers to misreport fish between LIN7 and the other LIN fisheries in an attempt to exploit lower deemed value rates in neighbouring stocks.
- b) To mitigate the risk that the proposed adjustments to the hoki deemed value rates may encourage fishers to shift fishing effort into the ling fishery – across all LIN stocks.

87 Therefore, MFish proposes that the differential deemed value rates for all LIN stocks are adjusted as outlined in Table 12 below. MFish does not consider amending either the interim or annual deemed value rates is required at this time.

Table 13: Proposed differential deemed value rates for LIN1, LIN2, LIN3, LIN4, LIN5, LIN6 & LIN7

Current differential rates					
Catch in excess of ACE holdings (%)	Current deemed value rate LIN1 (\$)	Current deemed value rate LIN2 (\$)	Current deemed value rate LIN3 (\$)	Current deemed value rate LIN4 (\$)	Current deemed value rate LIN5 (\$)
120	2.028 per kg	1.788 per kg	2.10 per kg	1.524 per kg	2.172 per kg
140	2.366 per kg	2.086 per kg	2.45 per kg	1.778 per kg	2.534 per kg
160	2.704 per kg	2.384 per kg	2.80 per kg	2.032 per kg	2.896 per kg
180	3.042 per kg	2.682 per kg	3.15 per kg	2.286 per kg	3.258 per kg
200	3.380 per kg	2.980 per kg	3.50 per kg	2.540 per kg	3.620 per kg

Current differential rates		Proposed differential rates	
Current deemed value rate LIN6 (\$)	Current deemed value rate LIN7 (\$)	Catch in excess of ACE holdings (%)	Proposed deemed value rate (\$)
2.004 per kg	2.652 per kg	120	5.00 per kg
2.338 per kg	3.094 per kg	130	8.00 per kg
		140	10.00 per kg
2.672 per kg	3.536 per kg	150	12.00 per kg
		160	15.00 per kg
3.006 per kg	3.978 per kg	170	18.00 per kg
		180	20.00 per kg
3.340 per kg	4.420 per kg	190	22.00 per kg
		200	24.00 per kg

Orange roughy: ORH1, ORH3B & ORH7B

88 The following orange roughy stocks – ORH1, ORH3B and ORH7B – are included in the deemed value review because these stocks are subject to a TAC and TACC review as part of the October 2007 sustainability round.

89 An assessment of the current deemed value rates in these fisheries indicate that:

- a) They are set higher than average ACE prices
- b) The TACCs have not been exceeded in recent years
- c) With the exception of ORH1, the annual deemed value rates are set close to or above average port price.

- 90 MFish considers that the deemed values are set appropriately. However, should the Minister choose to reduce the TACCs for these stocks then MFish believes the deemed value rates for ORH1 and ORH3B should be adjusted. This is to ensure the deemed value rates can continue to protect the TACC from being exceeded. MFish proposes to increase the annual deemed value rate for ORH1 to \$3.40 per kg. MFish considers the annual rate for ORH3B is adequate but considers the differential deemed value rate should be adjusted so they apply at 10% catch in excess of ACE.
- 91 MFish does not consider a deemed value adjustment for ORH7B is required if the Minister decides to either leave the TACC unchanged or if he decides to close the fishery. However, if the Minister considers a TACC reduction is appropriate then MFish believes the annual deemed value rate should be increased to \$4.00 per kg.
- 92 The proposed deemed value rates for the 2007-08 fishing season, should the Minister consider reducing the TACCs for ORH stocks, are as follows:
- a) Annual deemed value rates:
 - i) ORH1 to increase from \$2.97 per kg to \$3.40 per kg.
 - ii) ORH3B to remain unchanged at \$4.00 per kg.
 - iii) ORH7B to increase from \$3.20 per kg to \$4.00 per kg.
 - b) Interim deemed value rates:
 - i) ORH1 to increase from \$1.49 per kg to \$1.70 per kg.
 - ii) ORH3B to remain unchanged at \$2.00 per kg.
 - iii) ORH7B to increase from \$1.60 per kg to \$2.00 per kg.
 - c) Differential deemed values adjusted for ORH3B and ORH7B as outlined in the table below – differential deemed value rates will remain unchanged for ORH1:

Table 14: Proposed differential deemed value rates for ORH3B

Current differential rates			Proposed differential rates			
Catch in excess of ACE holdings (%)	Current deemed value rate ORH3B (\$)	Current deemed value rate ORH7B (\$)	Catch in excess of ACE holdings (%)	Proposed deemed value rate ORH3B(\$)	Catch in excess of ACE holdings (%)	Proposed deemed value rate ORH7B(\$)
120	4.80 per kg	3.84 per kg	110	4.80 per kg	120	4.80 per kg
			120	5.20 per kg		
140	5.60 per kg	4.48 per kg	130	5.60 per kg	140	5.60 per kg
			140	6.00 per kg		
160	6.40 per kg	5.12 per kg	150	6.40 per kg	160	6.40 per kg
			160	6.80 per kg		
180	7.20 per kg	5.76 per kg	170	7.20 per kg	180	7.20 per kg
			180	7.60 per kg		
200	8.00 per kg	6.40 per kg	190	8.00 per kg	200	8.00 per kg
			200	8.40 per kg		

Red cod: RCO3

- 93 Red cod is one of the major target species in the southern inshore fin fishery. This fishery is being reviewed in the October sustainability round as there are concerns that the TAC and TACC have been set too high and this is impacting on bycatch species as fishers try to harvest the full TACC.
- 94 The deemed value rates for the associated bycatch species are also being reviewed and are discussed separately in this paper.
- 95 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 rate (\$0.32 per kg) is set below both the port price (\$0.54 per kg) and average export price (\$3.58 per kg). MFish proposes to increase the annual deemed value rate so that it better reflects the current port price. Differential deemed value rates will also change in line with the proposed annual deemed value rate.
- 96 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.
- 97 The proposed deemed value rates for the 2007-08 fishing season are as follows:

RCO3

- a) Annual deemed value rate to increase from \$0.32 per kg to \$0.50 per kg.
- b) Interim deemed value rate to increase from \$0.16 per kg to \$0.25 per kg, which is 50% of the new annual deemed value rate.
- c) Differential deemed value rates adjusted to reflect the proposed new annual deemed value rate, outlined in the table below.

Table 15: Proposed differential deemed value rates for RCO3

Current differential rates		Proposed differential rates	
Catch in excess of ACE holdings (%)	Current deemed value rate (\$)	Catch in excess of ACE holdings (%)	Proposed deemed value rate (\$)
120	0.384 per kg	120	0.60 per kg
140	0.448 per kg	140	0.70 per kg
160	0.512 per kg	160	0.80 per kg
180	0.576 per kg	180	0.90 per kg
200	0.640 per kg	200	1.00 per kg

School shark: SCH1

- 98 A TAC for SCH 1 is being set as part of the October 2007 sustainability round, and the current TAC is also being reviewed. The outcome of this review will determine if a deemed value adjustment is warranted. If catch limits are increased, MFish considers the deemed value rates for the stock should remain unchanged in the interim.
- 99 If catch limits remain at current levels, MFish considers the deemed value rates should be increased to ensure catch stays within the limits of the TACC and available ACE.

SCH1 has been consistently fished in excess of available ACE since the 1994-1995 fishing season - the only exception being the most recent fishing season when reported catch declined to 92% of available ACE.

100 MFish considers the annual rate should be increased marginally to reflect the recent increase in port price – from \$1.06 per kg to \$1.77 per kg. Differential deemed value rates will also be adjusted to reflect the proposed change in the annual deemed value rate.

101 The proposed deemed value rates for the 2007-08 fishing season are as follows:

SCH1 (if the TACC remains unchanged)

- a) Annual deemed value rate to increase from \$1.61 per kg to \$1.75 per kg.
- b) Interim deemed value rate to increase from \$0.81 per kg to \$0.87 per kg.
- c) Differential deemed value rates adjusted to reflect the proposed new annual deemed value rate, outlined in the table below.

Table 16: Proposed differential deemed value rates for SCH1

Current differential rates		Proposed differential rates	
Catch in excess of ACE holdings (%)	Current deemed value rate (\$)	Catch in excess of ACE holdings (%)	Proposed deemed value rate (\$)
120	1.932 per kg	120	2.10 per kg
140	2.254 per kg	140	2.45 per kg
160	2.576 per kg	160	2.80 per kg
180	2.898 per kg	180	3.15 per kg
200	3.220 per kg	200	3.50 per kg

Gemfish: SKI2

102 SKI2 is both a target fishery and a bycatch of the TAR2 trawl fishery. Although not over fished in 2005-06, SKI2 has been over fished in four of the last five fishing seasons. Over catch has ranged from 8% to 30%. In the current fishing year, the SKI2 ACE has already been fished and over fishing is likely as a significant portion (approximately 50%) of the TAR2 TACC is still to be taken. Therefore SKI2 is being reviewed to assess if the current deemed value rates adequately protect the TACC.

103 The current annual deemed value rate of \$1.50 per kg is lower than both the port price (\$3.14 per kg) and the average export price – in 2006 the average export price for gemfish was \$5.69 per kg. This suggests that fishers have an incentive to catch in excess of ACE holdings because they can pay the deemed value and still achieve a profit.

104 MFish considers an increase to the annual deemed value rate is appropriate at this time so that it better reflects current market prices.

105 The proposed deemed value rates for the 2007-08 fishing season are as follows:

SK12

- a) Annual deemed value rate to increase from \$1.50 per kg to \$3.00 per kg.
- b) Interim deemed value rate to increase from \$0.75 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 17: Proposed differential deemed value rates for SK12

Current differential rates		Proposed differential rates	
Catch in excess of ACE holdings (%)	Current deemed value rate (\$)	Catch in excess of ACE holdings (%)	Proposed deemed value rate (\$)
120	1.80 per kg	120	3.60 per kg
140	2.10 per kg	140	4.20 per kg
160	2.40 per kg	160	4.80 per kg
180	2.70 per kg	180	5.40 per kg
200	3.00 per kg	200	6.00 per kg

Snapper: SNA2, SNA7 & SNA8

- 106 Snapper is an important species to both commercial and non-commercial fishers.
- 107 SNA2 and SNA8 have been consistently over fished in recent seasons and at the end of the 2005-06 season deemed value invoices to the value of \$238,268 (SNA2) and \$617,540 (SNA8) were issued. This suggests that it is not small overruns of bycatch that are being deemed but that fishers are choosing to target snapper without ACE.
- 108 In both fisheries, a handful of companies are responsible for the majority of deemed values invoiced and this behaviour suggests that fishers are still able to fish in excess of ACE, pay the deemed value and realise a profit. In each stock the annual deemed value rate is set below the stock's port price (\$4.67 per kg) further indicating that there is a profit margin available to fishers who wish to over fish using deemed values.
- 109 Given the relative success of the high annual deemed value rate in SNA1 (currently set at \$13.00 per kg) in constraining reported catch to available ACE, MFish considers that a deemed value adjustment is appropriate in both SNA2 and SNA8. MFish considers the annual deemed value rate should increase and that differential deemed values should be reset so that they apply to all catch that is 10% in excess of ACE.
- 110 The deemed value rates for SNA7 were also reviewed and MFish considers they should be adjusted in line with SNA2 and SNA8. This is to ensure that there is no incentive for fishers to misreport either SNA2 or SNA8 fish as SNA7 fish in an attempt to exploit lower deemed value rates in a neighbouring stock.
- 111 The proposed deemed value rates for the 2007-08 fishing season are as follows:

SNA2, SNA7 & SNA8

- a) Annual deemed value rates to increase
 - i) SNA2: from \$3.00 per kg to \$8.00 per kg.

- ii) SNA7: from \$2.01 per kg to \$8.00 per kg.
 - iii) SNA8: from \$4.25 per kg to \$8.00 per kg.
- b) Interim deemed value rates to increase to 50% of the proposed new annual deemed value rate
 - i) SNA2: from \$1.50 per kg to \$4.00 per kg.
 - ii) SNA7: from \$1.01 per kg to \$4.00 per kg.
 - iii) SNA8: from \$1.30 per kg to \$4.00 per kg .
- c) Differential deemed value rates adjusted as outlined in the table below.

Table 18: Proposed differential deemed value rates for SNA2, SNA7 & SNA8

Current differential rates				Proposed differential rates	
Catch in excess of ACE holdings (%)	Current deemed value rate SNA2 (\$)	Current deemed value rate SNA7 (\$)	Current deemed value rate SNA8 (\$)	Catch in excess of ACE holdings (%)	Proposed deemed value rate (\$)
120	3.60 per kg	2.412 per kg	5.10 per kg	110	9.00 per kg
				120	10.00 per kg
140	4.20 per kg	2.814 per kg	5.95 per kg	130	11.00 per kg
				140	12.00 per kg
160	4.80 per kg	3.216 per kg	6.80 per kg	150	13.00 per kg
				160	14.00 per kg
180	5.40 per kg	3.618 per kg	7.65 per kg	170	15.00 per kg
				180 and over	16.00 per kg
200	6.00 per kg	4.020 per kg	8.50 per kg		

Spiny dog fish: SPD1, SPD3, SPD4, SPD5, SPD7 & SPD8

- 112 Spiny dogfish (SPD) was brought into the QMS in 2004 with an annual deemed value of \$0.05 per kg. This low deemed value took into account the difficulty of establishing the value of ACE, or the true port price in a fishery where a substantial proportion of the catch is discarded³. Instead the deemed value was based on the cost recovery and transaction charges associated with acquiring spiny dogfish ACE. It was made clear that this was to be treated as an initial decision, to be reviewed in the future.
- 113 Cost recovery charges have increased since then, as have port prices for the landed proportion of the catch. Quota holders note that the value of the ACE (which is driven by the low deemed value) is now similar to the cost recovery charges (\$0.0336 per kg and \$0.0292 per kg respectively), so there is no value in holding spiny dogfish quota.
- 114 At a minimum they request the deemed value be based on the value of fins, submitting that even where spiny dogfish is discarded fins can be utilised. They submit the value of spiny dogfish fins is \$9 per kg or \$0.30 per kg greenweight fish⁴. MFish has little reliable information on the value of spiny dogfish fins, but notes that their small size

³ Unwanted spiny dogfish can be discarded within the QMS, but all discarded catch is subject to ACE or deemed values. This is the only fishery with such a regime.

⁴ Using a conversion factor for fins of 30:1

and low needle content means they are lower in value than pelagic sharks⁵. Other anecdotal information suggests prices may be as low as \$3 per kg (\$0.10 per kg greenweight).

115 There is also the concern amongst processors of SPD3 that the low deemed value rate, combined with the stock's presence on the Sixth Schedule of the Act (permitting fishers to return the species to the sea), means there is limited SPD3 available to process. Raising the deemed value rate may encourage less discarding and provide for greater utilisation of this stock.

116 MFish proposes to increase the annual deemed value rate for all SPD stocks to \$0.20 per kg.

117 The proposed deemed value rates for the 2007-08 fishing season are as follows:

SPD1, SPD3, SPD4, SPD5, SPD7 & SPD8

- a) Annual deemed value rate to increase from \$0.05 per kg to \$0.20 per kg.
- b) Interim deemed value rate to increase from \$0.03 per kg to \$0.10 per kg.
- c) Differential deemed value rates do not apply in these fisheries.

Rig: SPO2

118 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 ten fishing seasons (126% of available ACE in the current fishing season).
- b) Deemed value invoices of \$59,362 were issued at the end of the 2005-06 fishing season.

119 An analysis of the deemed value invoices from last season indicates that two companies are responsible for 79% of the total deemed value bill. This suggests operating costs of these companies are sufficiently low as to enable them to pay deemed values and still turn a profit. Amending the differential deemed values may therefore be the most appropriate tool to manage this type of behaviour.

120 The average port price for SPO2 (\$3.19 per kg) has also increased, suggesting that the market value of rig has increased since the deemed value rates were last reviewed. This may encourage fishers to continue to fish in excess of ACE as there is a potential profit margin available to fishers above the deemed value payment.

121 MFish considers an increase to the annual deemed value rate so that it is 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.

122 The proposed deemed value rates for the 2007-08 fishing season are as follows:

⁵ Review of Shark Finning in Australian Waters. Report to Fisheries Resources Research Fund by Bureau of Rural Sciences. 2001

SPO2

- a) Annual deemed value rate to increase from \$2.25 per kg to \$3.00 per kg
- b) Interim deemed value rate to increase from \$1.13 per kg to \$1.50 per kg, which is 50% of the new annual deemed value rate.
- c) Differential deemed value rates adjusted as outlined in the table below

Table 19: Proposed differential deemed value rates for SPO2

Current differential rates		Proposed differential rates	
Catch in excess of ACE holdings (%)	Current deemed value rate (\$)	Catch in excess of ACE holdings (%)	Proposed deemed value rate (\$)
Differential deemed values currently do not apply	Differential deemed values currently do not apply	110	6.00 per kg
		125	8.00 per kg
		150 and over	11.00 per kg

Silver warehou: SWA1, SWA3 & SWA4

- 123 Silver warehou is traditionally caught as a bycatch in the hoki, squid, barracouta and jack mackerel trawl fisheries but in recent years it has also become a target species in its own right. Both SWA3 and SWA4 have been continuously over caught in recent fishing seasons. In the 2005-06 fishing season SWA3 was over caught by 137% of available ACE and SWA4 was over caught by 134% of available ACE. The combined deemed value bill for these two stocks in 2005-06 was \$2.86m and a handful of companies are responsible for most of this payment.
- 124 Both stocks have an annual deemed value rate set above port price (\$0.77 per kg in SWA3 and \$0.80 per kg in SWA4) and above ACE trading prices. The average export price (\$3.24 per kg) is well in excess of the deemed value rate.
- 125 Given the extent of deeming occurring in the fishery this would suggest that for some fishers it is still cost effective to continue to fish in excess of ACE holdings. This also suggests that the true value of SWA when caught as a bycatch is greater than its market value because it is constraining the target catch.
- 126 MFish considers the critical factor in this fishery is the absence of differential deemed values. MFish considers it appropriate to introduce differential deemed value rates into both fisheries as per the details in Table 20 below.
- 127 Given that SWA can be a significant bycatch in the hoki fishery MFish considers the interim rate should be set so that fishers have every incentive to balance catch regularly with ACE during the fishing year. Therefore MFish proposes an interim deemed value rate of \$0.87 per kg which is 90% of the annual rate.

- 128 MFish also considers the annual rates should be standard across both stocks and therefore proposes that the annual deemed value rate for SWA3 should increase so that it matches SWA4.
- 129 To remove any incentive for fishers to misreport SWA3 and SWA4 as SWA1, MFish proposes that the deemed value rates for SWA1 are adjusted in line with SWA3 and SWA4.
- 130 The proposed deemed value rates for the 2007-08 fishing season are as follows:

SWA1, SWA3 & SWA4

- a) Annual deemed value rates as follows:
- i) SWA1: to increase from \$0.87 per kg to \$0.98 per kg.
 - ii) SWA3: to increase from \$0.97 per kg to \$0.98 per kg.
 - iii) SWA4: to remain unchanged at \$0.98 per kg.
- b) Interim deemed value rates as follows
- i) SWA3 and SWA4: to increase from \$0.49 per kg to \$0.87 per kg, which is 90% of the annual rate.
 - ii) SWA1: to increase from \$0.44 per kg, which is 50% of the annual deemed value rate.
- c) Differential deemed value rates have been adjusted to the new rates as outlined in the table below.

Table 20: Proposed differential deemed value rates for SWA1, SWA3 & SWA4

Current differential rates			Proposed differential rates	
Catch in excess of ACE holdings (%)	Current deemed value rate SWA1 (\$)	Current deemed value rate SWA3 and SWA4 (\$)	Catch in excess of ACE holdings (%)	Proposed deemed value rate (\$)
120	1.044 per kg	Differential deemed values currently do not apply	110	1.50 per kg
140	1.218 per kg		125	5.00 per kg
160	1.392 per kg			
180	1.566 per kg		150 and over	7.50 per kg
200	1.740 per kg			

Swordfish: SWO1

- 131 Traditionally swordfish has been a bycatch in the bigeye and southern bluefin tuna fisheries. However, since the species entered the QMS in 2004 there has been considerable effort by some industry members to successfully develop a target fishery. SWO1 is included in this review because the stock recently entered the QMS and the original deemed value rates were set with limited information.
- 132 MFish and stakeholders are concerned that the recent changes in the fishery outlined above are impacting on the efficient operation of the ACE market. Many stakeholders

have complained that they have difficulty in sourcing the necessary ACE to balance their SWO1 bycatch. The key issue in the SWO1 fishery is that, given the size of a typical swordfish, differential deemed value rates (at 200% of annual rate) can apply to individual fish if the fisher is unable to source ACE. This means that fishers are facing high deemed value bills and are simultaneously having difficulty sourcing the necessary ACE. The difficulties with the ACE market are expected to be temporary as it adjusts to accommodate both the target and bycatch swordfish fisheries.

- 133 MFish considers that there may be benefit in amending the deemed value rates, in the short term, to see if this can assist the ACE market to operate more efficiently. MFish proposes that differential deemed value rates should be removed in the short term. Both annual and interim deemed value rates will be left unchanged. MFish believes this will provide fishers, who are legitimately trying to source ACE, some relief from high differential deemed value rates without undermining the rights of quota holders. The proposed adjustment should stimulate the ACE market and result in more trading of SWO1 ACE. This should eliminate any incentive for bycatch fishers to misreport swordfish.
- 134 MFish advises that this proposal is an interim measure and the SWO1 fishery will be reviewed annually to ensure fishers are not choosing to exploit the absence of differential deemed value rates by choosing to fish without sourcing ACE.
- 135 The proposed deemed value rates for the 2007-08 fishing season are as follows:
- a) Annual deemed value rate to remain unchanged at \$4.25 per kg.
 - b) Interim deemed value rate to remain unchanged at \$2.13 per kg, which is 50% of the annual deemed value rate.
 - c) Differential deemed value rates will be removed from this fishery.

Tarakihi: TAR1, TAR2, TAR7 & TAR8

- 136 Tarakihi is predominantly a target fishery but can also be caught as a bycatch in the snapper fishery. TAR1 is being considered for a TAC increase as part of the upcoming sustainability round and the deemed value rates are being reviewed to ensure the TAC, irrespective of whether it is increased or not, is adequately protected by the deemed value rates.
- 137 TAR1 has been fished in excess of ACE in all but one of the last ten fishing years – the exception being the 1999/2000 fishing season. In the last fishing season deemed value invoices to a value of \$80,287 were issued. One company is responsible for over half of this amount but this is the same company responsible for the majority of the SNA1 deemed value bill and it has now gone into liquidation.
- 138 The current annual deemed value rate is set above the port price (\$2.00 per kg) but MFish considers the high average export return (of \$5.61 per kg) suggests that there is still a profit margin available to those fishers who choose to deliberately over fish using deemed values.

139 TAR2, TAR7 & TAR8 are also considered as part of this review for two reasons:

- a) To ensure the deemed value rates adequately protect the TACCs of these stocks should the proposed changes to the deemed value rates for the key snapper stocks shift fishing effort from snapper to tarakihi.
- b) To ensure there are no incentives for fishers to misreport catch between areas because of lower deemed values in one stock compared to another.

140 MFish proposes increasing the annual rate to \$3.00 per kg and applying higher differential deemed value rates at 10% catch in excess of ACE.

141 The proposed deemed value rates for the 2007-08 fishing season are as follows:

TAR1, TAR2, TAR7 & TAR8

- a) Annual deemed value rates to increase:
 - i) TAR1: from \$2.09 per kg to \$3.00 per kg.
 - ii) TAR2: from \$1.58 per kg to \$3.00 per kg.
 - iii) TAR7: from \$0.83 per kg to \$3.00 per kg.
 - iv) TAR8: from \$1.43 per kg to \$3.00 per kg.
- b) Interim deemed value rates to increase to 50% of the proposed new annual deemed value rate:
 - i) TAR1: from \$1.05 per kg to \$1.50 per kg.
 - ii) TAR2: from \$0.79 per kg to \$1.50 per kg.
 - iii) TAR7: from \$0.42 per kg to \$1.50 per kg.
 - iv) TAR8: from \$0.72 per kg to \$1.50 per kg.
- c) Differential deemed value rates adjusted as outlined in the table below.

Table 21: Proposed differential deemed value rates for TAR1, TAR2, TAR7 & TAR8

Current differential rates					Proposed differential rates	
Catch in excess of ACE holdings (%)	Current deemed value rate TAR1 (\$)	Current deemed value rate TAR2 (\$)	Current deemed value rate TAR7 (\$)	Current deemed value rate TAR8 (\$)	Catch in excess of ACE holdings (%)	Proposed deemed value rate (\$)
120	2.508 per kg	1.896 per kg	0.996 per kg	1.716 per kg	110	6.00 per kg
					120	8.00 per kg
140	2.926 per kg	2.212 per kg	1.162 per kg	2.002 per kg	130	10.00 per kg
					140	12.00 per kg
160	3.344 per kg	2.528 per kg	1.328 per kg	2.288 per kg		
180	3.762 per kg	2.844 per kg	1.494 per kg	2.574 per kg	150 and over	14.00 per kg
200	4.180 per kg	3.160 per kg	1.660 per kg	2.860 per kg		

Trevally: TRE2

- 142 Trevally is caught as bycatch when targeting snapper but is also a target stock in its own right. TRE2 is included in the review because:
- a) It has been consistently over fished in recent seasons (167% of available ACE in the 2005-06 fishing season).
 - b) Deemed value invoices of \$161,721 were issued at the end of the 2005-06 fishing season.
- 143 MFish considers the critical factor contributing to over catch in this fishery is the absence of differential deemed values. This means fishers continue to pay \$0.92 per kg irrespective of whether they catch 10% in excess of ACE or 100% in excess of ACE. Given that the port price for TRE2 is \$1.50 and the average export price for trevally is \$1.93 per kg, fishers have an incentive to catch in excess of ACE holdings and pay deemed values since there is still a profit margin available.
- 144 The value of TRE2 to fishers targeting SNA2, particularly if TRE2 is limiting fishers' ability to harvest their SNA2 ACE, means that fishers are willing to pay a higher price to continue catching TRE2 in excess of the true market price. This should influence where the deemed value rates of TRE2 are set.
- 145 MFish proposes to leave the interim and annual deemed value rates unchanged for this stock but to apply differential deemed value rates. The proposed differential rates will apply at 105% catch in excess of ACE and the rates will ramp up quickly so that any opportunity for financial gain is quickly removed. These proposed adjustments will also support the proposed adjustments in the SNA2 fishery.
- 146 TRE1 was also assessed as part of this review to determine if there are any risks of increasing the deemed value rates of one species stock while leaving the deemed value rates in a neighbouring stock unchanged. Since differential deemed value rates already apply in TRE1 and given this stock has a higher annual deemed value rate than TRE2, MFish does not consider it necessary to adjust the deemed value rates for this stock at this time.
- 147 The proposed deemed value rates for the 2007-08 fishing season are as follows:

TRE2

- a) Annual deemed value rate to remain unchanged at \$0.92 per kg.
- b) Interim deemed value rate to remain unchanged at \$0.46 per kg.
- c) Differential deemed value rates adjusted as outlined in the table below.

Table 22: Proposed differential deemed value rates for TRE2

Current differential rates		Proposed differential rates	
Catch in excess of ACE holdings (%)	Current deemed value rate (\$)	Catch in excess of ACE holdings (%)	Proposed deemed value rate (\$)
Differential deemed values currently do not apply	Differential deemed values currently do not apply	105	2.00 per kg
		110	3.00 per kg
		120	3.50 per kg
		130	4.00 per kg
		140	4.50 per kg
		150	5.00 per kg
		160	5.50 per kg
		170	6.00 per kg
		180	6.50 per kg
		190	7.00 per kg
		200	7.50 per kg

Blue warehou: WAR3 & WAR7

- 148 Blue (or common) warehou is caught as bycatch in the major deepwater trawl fisheries. WAR3 is included in the review because:
- a) It has been consistently over caught in recent fishing seasons (129% of available ACE in the 2005-06 fishing season).
 - b) Deemed value invoices of \$451,961 were issued at the end of the 2005-06 fishing season.
 - c) A direct request for a deemed value review was received from quota owners.
- 149 Both industry and MFish are concerned that the unusually low annual deemed value rate for WAR3 of \$0.25 per kg, in comparison to the other WAR stocks, is providing an incentive for fishers to deliberately fish in excess of available ACE. Annual rates for the other blue warehou stocks range from \$0.75 per kg to \$1.09 per kg.
- 150 One company was responsible for 87% of the total deemed value bill suggesting that, in addition to amending the annual deemed value rate, the differential deemed value rates should also be adjusted.
- 151 WAR7 is also being reviewed to ensure there are no incentives for fishers to misreport fish taken from WAR3 as WAR7 because they can take advantage of lower deemed value rates. The annual deemed value rate in WAR7 is the same as the proposed rate for WAR3 so no further adjustment is necessary. However, MFish considers it appropriate to set the differential deemed value rates for WAR7 in line with the proposed changes to WAR3.
- 152 The proposed deemed value rates for the 2007-08 fishing season are as follows:

WAR3 & WAR7

- a) Annual deemed value rates:
- i) WAR3: to increase from \$0.25 per kg to \$0.90 per kg.
 - ii) WAR7: to remain unchanged at \$0.90 per kg.
- b) Interim deemed value rates:
- i) WAR3: to increase from \$0.13 per kg to \$0.45 per kg, which is 50% of the proposed new annual deemed value rate.
 - ii) WAR7: to remain unchanged at \$0.45 per kg.
- c) Differential deemed value rates adjusted as outlined in the table below.

Table 23: Proposed differential deemed value rates for WAR3 & WAR7

Current differential rates			Proposed differential rates	
Catch in excess of ACE holdings (%)	Current deemed value rate WAR3 (\$)	Current deemed value rate WAR7 (\$)	Catch in excess of ACE holdings (%)	Proposed deemed value rate (\$)
120	0.30 per kg	1.08 per kg	110	2.00 per kg
140	0.35 per kg	1.26 per kg	120	3.00 per kg
160	0.40 per kg	1.44 per kg		
180	0.45 per kg	1.62 per kg	150 and over	6.00 per kg
200	0.50 per kg	1.80 per kg		

Stocks reviewed but no deemed value adjustment proposed

- 153 The remaining stocks listed in Tables 1 and 2 were also reviewed but following their assessment at the deemed value review meeting, MFish does not consider an adjustment is warranted at this time. A discussion on the rationale behind this decision follows.

Longfin & shortfin eels: LFE & SFE

- 154 Longfin (LFE) and shortfin (SFE) eels were included in the review process as these fishstocks are being considered for a TAC review as part of the October sustainability round.
- 155 The deemed value standard specifies deemed values should be set at 200% of port price for high value stocks – eels are classed as a high value stocks for the purpose of the deemed value standard. The current annual deemed value rate for all LFE and SFE stocks are set at this rate. Therefore the review group did not consider any further adjustments to the deemed value rates is necessary at this time.

Oyster: OYS7C

- 156 OYS7C was included in the review process as these fishstocks are being considered for a TAC review as part of the October sustainability round.

- 157 The deemed value standard specifies deemed values should be set at 200% of port price for high value stocks – oysters are classed as a high value stocks for the purpose of the deemed value standard. The current port price for OYS7C is \$4.00 per kg and the current annual rate of \$8.00 is set at 200% of the port price. Therefore the review group did not consider any further adjustments to the deemed value rate of this stock are necessary at this time.

Oreo: OEO1

- 158 ORE1 was included in the review list because it is subject to a TACC review as part of the October 2007 sustainability round.
- 159 The current annual deemed value rate is set close to port price and there has been no catch in excess of the available ACE in recent seasons. MFish considers that given the TACC is not close to being reached the current deemed value rates are appropriate. Therefore MFish does not propose an adjustment at this time.

Snapper: SNA1

- 160 SNA1 was included on the review list because of the quantity of SNA1 deemed at the end of the 2005-06 fishing season – invoices amounting to \$326,825 were issued.
- 161 However, one company was responsible for 99.6% of this amount and this company has since gone into liquidation. This would suggest that the annual rate of \$13.00 per kg is delivering the required behaviour from fishers and is permitting small overruns of ACE holdings rather than excessive deeming.
- 162 Therefore MFish considers an adjustment to deemed value rates is inappropriate at this time.

Arrow Squid: SQU1T

- 163 SQU1T was included in the review list because it is being considered for a TACC increase as part of the October 2007 sustainability round.
- 164 SQU1T is managed under section 14 of the Act which means that fishers can seek an in-season TAC increase in seasons of high abundance. The biological nature of squid means that they live for one year, spawn once and then die. This means that if an abundant squid stock is not present in any one season, fishers will shift their effort into other deepwater fisheries rather than continue trying to catch the TAC. If, during seasons of strong squid abundance, stakeholders are successful in securing an in-season TAC increase there is little likelihood, based on past performance, that catch will be in excess of available ACE.
- 165 MFish is proposing a permanent increase to the TAC which would enable fishers to harvest squid during abundant seasons without breaching the TACC. Therefore, MFish does not consider a deemed value adjustment is required at this time.

White warehou: WWA3, WWA4 & WWA7

- 166 White warehou is caught as a bycatch in the hoki and silver warehou target trawl fisheries. During the 2005-06 fishing season, WWA3 was over caught by 136% of ACE, WWA4 was over caught by 139% of ACE and WWA7 was over caught by 221% of ACE. However, both the TACC and the annual deemed value rates were increased for each of these stocks as part of the management measures for low knowledge stocks in the October 2006 sustainability round. These new deemed value rates were only applied at the start of the 2006-07 fishing season and therefore it is too early to assess their effectiveness in constraining catch to the TACC.
- 167 MFish considers that the combination of an increase in the TACC and an increase in the annual deemed value rates will constrain over fishing in the short to medium term. MFish considers that an assessment of the success of the recently amended annual deemed value rates should take place before further adjustments are made. Therefore, MFish does not consider a deemed value adjustment is required at this time.

Compliance implications

- 168 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.
- 169 Dumping is an offence and will be prosecuted. MFish Compliance will continue to monitor activity on the water to ensure levels of dumping do not increase as a result of the proposed adjustment to the deemed value rates. Compliance efforts will be supported by the increased surveillance capability at sea through Project Protector and increased aerial surveillance.

Statutory consideration

- 170 **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 options presented will continue to provide for utilisation and will ensure that possible TACC breaches do not occur which could undermine sustainability.
- 171 **Section 9** – Section 9 sets out the environmental principles that should be considered when performing functions, duties or powers under this Act. These principles have been taken into consideration and MFish is of the view that they do not impact on this proposal.
- 172 **Section 10** – The proposed amendments to the deemed value rates fulfil the requirements under s. 10 of the Fisheries Act in that the deemed value rates will be set using best available information.
- 173 **Section 75** - Section 75 of the Act sets out the purpose of the catch balancing regime including 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.
- 174 **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 proposed amendments to the guidelines satisfy the requirements under this section of the Act.

- 175 **Section 75 (2)(b)** – Section 75 (2) (b) sets out the matters the Minister may have regard to when setting deemed value rates. These factors have formed the basis of the content of the information sheets. They have also been used to propose the deemed value adjustments as set out in the “Analysis” section of this IPP.
- 176 **Section 75A** – The Minister is consulting with representative persons or organisations, on these proposed deemed value changes as required under section 75A.

Summary of Proposed Guidelines for Setting Deemed Values (2007)

Aim	<p>To set a deemed value rate above the ACE price where the TACC is constraining catch, to encourage fishers to balance catch through the purchase of ACE rather than the payment of deemed values.</p> <p>For high value stocks the deemed value rate will be considerably above the ACE price.</p>
When is a deemed value reviewed?	<p>(1) When a fish stock enters the QMS.</p>
	<p>(2) If one of the following indicators listed below is met:</p> <ul style="list-style-type: none"> • 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. <p>And</p> <p>Following a review of the fishery to analyse and assess:</p> <ul style="list-style-type: none"> • Likely reasons for the TACC over catch/ACE breaches • Performance of bycatch fisheries associated with the stock under review • Changes in the structure of quota/ACE holdings • Changes in the market price/market structure for the fish product/species under review. • Risk that the deemed value requirements set out in s. 75 of the Fisheries Act 1996 may not be met
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	<p>Deemed values set following analysis of the following information sources:</p> <ol style="list-style-type: none"> 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	High value to the commercial sector - 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.
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 where the TACC is constraining catch.
Information sources used	Deemed values set following analysis of the following information sources <ol style="list-style-type: none"> 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 that would exist if the TACC was constraining catch.
Interim deemed values	Greater flexibility in setting interim deemed value rates. Interim deemed values will not 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.

Deemed Value Review 2007: BAR5

Over 99% of the recorded catch is taken by trawlers. Major target fisheries have been developed on spring spawning aggregations (Chatham Islands, Stewart Island, west coast South Island and northern and central east coast South Island) as well as on summer feeding aggregations, particularly around The Snares and on the east coast of the South Island. Barracouta also comprise a significant proportion of the bycatch in the west coast North Island jack mackerel and The Snares squid fisheries.

A. Overview:

Current deemed value rates:

Interim: \$0.10/kg

Annual: \$0.19/kg

Differential deemed values apply.

Key target stocks: Arrow Squid and Jack Mackerel

B. Criteria for determining if a review is appropriate:

Criteria	BAR5
a) Catch in excess of ACE	Yes – BAR5 was over caught by 126% during the 2005/2006 fishing year
b) Deemed value payments in previous years	Yes – Deemed value invoices for BAR5 of \$490,975 were issued at the end of the 2005/2006 fishing season
c) Changes to the port price of the stock	Yes – port price for BAR5 has decreased from \$0.29 to \$0.19 (a decrease of \$0.10)
d) Request from quota owners	Yes – Eric Barratt (Sanford Limited)
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

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

C. Assessment of the fishery:

C.1 Relationship with associated species

BAR5 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 BAR5 on other BAR stocks will need to be monitored.

BAR1:

Current deemed value rates:

Stock	Interim (\$/kg)	Annual (\$/kg)
BAR1	0.10	0.19

Differential deemed values apply.

Criteria	BAR1
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes - Deemed value invoices for \$1,302 when 42% of ACE remained unused were issued at the end of the 2005/2006 fishing season
c) Changes to the port price of the stock	Yes – port price has decreased from \$0.28 to \$0.18 (a decrease of \$0.10)
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

BAR4:

Current deemed value rates:

Stock	Interim (\$/kg)	Annual (\$/kg)
BAR4	0.10	0.19

Differential deemed values apply.

Criteria	BAR4
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 decreased from \$0.29 to \$0.19 (a decrease of \$0.10)
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

BAR7:

Current deemed value rates:

Stock	Interim (\$/kg)	Annual (\$/kg)
BAR7	0.10	0.19

Differential deemed values apply.

Criteria	BAR7
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes - Deemed value invoices for \$3,237 when 5% of ACE remained unused were issued at the end of the 2005/2006 fishing season
c) Changes to the port price of the stock	Yes – port price has decreased from \$0.29 to \$0.19 (a decrease of \$0.10)
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

BAR10:

Current deemed value rates:

Stock	Interim (\$/kg)	Annual (\$/kg)
BAR10	0.10	0.19

Differential deemed values apply.

Criteria	BAR10
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

Following this assessment it is apparent that BAR1, BAR4, BAR7 & BAR10 are potentially candidates for a review.

C.2 Assessment and analysis of information sources:

Information source	BAR5		BAR1		BAR4	
Port price	BAR5	\$0.19	BAR1	\$0.18	BAR4	\$0.19
ACE trading price (most recent fishing year)	BAR5	\$0.1352/kg	BAR1	\$0.0653/kg	BAR4	\$0.0313/kg
Export price data*	BAR	\$1.17	BAR	\$1.17	BAR	\$1.17
Bycatch: ratios	BAR		BAR		BAR	
Bycatch: shadow values	BAR		BAR		BAR	
Previous deemed value invoices**	BAR5	\$490,975	BAR1	\$1,302	BAR4	\$0
Cost recovery levies	BAR5	\$0.0041/kg	BAR1	\$0.0044/kg	BAR4	\$0.0041/kg

Information source	BAR7		BAR10	
Port price	BAR7	\$0.19	BAR10	N/A
ACE trading price (most recent fishing year)	BAR7	\$0.1061/kg	BAR10	No valid trades
Export price data*	BAR	\$1.17	BAR	\$1.17
Bycatch: ratios	BAR		BAR	
Bycatch: shadow values	BAR		BAR	
Previous deemed value invoices**	BAR7	\$3,237	BAR10	\$0
Cost recovery levies	BAR7	\$0.0046/kg	BAR10	N/A

* Export price data for year ending December 2006

** Deemed value invoices issue for fishing in excess of ACE holdings for 2005-06 fishing season.

Key points:

- In the 2005-06 fishing season deemed values were paid on 2,584 tonnes of BAR5 which equates to 34.6% of the TACC (7,470 tonnes).
- At the end of the 2005-06 fishing season three companies were invoiced 73.3% of the total \$490,975 deemed value bill. The largest single deemed value invoice was for \$186,019 (37.9% of the total deemed value invoices). This behaviour suggests that amending the differential deemed value rates may be an appropriate tool to use.
- The recent decrease in the port price of BAR5 means that the port price and annual deemed value rate are now the same (\$0.19). However the average export price from 2006 suggests that fishers still have the opportunity to realise a profit if they choose to catch and deem BAR5.

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Tuesday 15 May 2007.

Deemed Value Review 2007: BNS2

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. The bluenose is starting to be targeted in BNS2 by some fishers.

A. Overview:

Current deemed value rates:

Interim: \$1.09/kg

Annual: \$2.18/kg

Differential deemed values apply.

Key bycatch stocks: N/A

B. Criteria for determining if a review is appropriate:

Criteria	BNS2
a) Catch in excess of ACE	Yes – 106% during previous fishing year
b) Deemed value payments in previous years	Yes - Deemed value invoices for \$196,539 were issued at the end of the 2005/2006 fishing season
c) Changes to the port price of the stock	Yes – port price has increased from \$2.58 to \$3.57 (an increase of \$0.99)
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

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

C. Assessment of the fishery:

C.1 Relationship with associated species⁶

BNS2 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 BNS2 on other BNS stocks will need to be monitored.

⁶ See notes on 'Relationship between target and bycatch stocks – implications for deemed value setting'.

C.2 Assessment and analysis of information sources:

Information source	Bluenose	
	BNS2	
Port price	BNS2	\$3.57
ACE trading price (most recent fishing year)	BNS2	\$1.4436/kg
Export price data*	BNS	\$8.94
Bycatch: ratios	BNS	
Bycatch: shadow values	BNS	
Previous deemed value invoices**	BNS2	\$196,539
Cost recovery levies	BNS2	\$0.1001/kg

* Export price data for year ending December 2006

** Deemed value invoices issue for fishing in excess of ACE holdings for 2005-06 fishing season.

Key points:

- An analysis of deemed value payments from the most recent fishing season indicates that one company was responsible for 66.2% of the total deemed value bill - \$130,193 out of the total \$196,539. This behaviour suggests that amending the differential deemed value rates may be an appropriate tool to use.
- A significant increase in the port price (\$3.57) of BNS2 has pushed it well above the annual deemed value rate (\$2.18). This means it may now be profitable for fishers catch BNS2 and pay the deemed values. An increase in the annual deemed value rate may address this issue.

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Tuesday 15 May 2007.

Deemed Value Review 2007: RCO3 & FLA3

Red Cod

Red cod are targeted primarily by domestic trawlers in the depth range between 30 and 200m and are also a bycatch of deepwater fisheries off the southeast and southwest coasts of the South Island. Bycatch problems while targeting red cod are therefore common for stargazer, red gurnard, elephant fish, rig, school shark, blue cod, groper and tarakihi.

A. Overview:

Current deemed value rates:

Interim: \$0.16/kg

Annual: \$0.32/kg

Differential deemed values apply.

Key bycatch stocks: Elephant Fish, Gurnard, School Shark, Blue Cod, Stargazer, Groper & Tarakihi.

Flatfish

Flatfish ITQ provides for the landing of eight species of flatfish. These are: the yellow-belly flounder, *Rhombosolea leporina*; sand flounder, *Rhombosolea plebeia*; black flounder, *Rhombosolea retiaria*; greenback flounder, *Rhombosolea tapirina*; lemon sole, *Pelotretis flavilatus*; New Zealand sole, *Peltorhamphus novaezeelandiae*; brill, *Colistium guntheri*; and turbot, *Colistium nudipinnis*. For management purposes landings of these species are combined.

A. Overview:

Current deemed value rates:

Interim: \$0.75/kg

Annual: \$1.50/kg

Differential deemed values apply.

Key bycatch stocks: Elephant Fish, Gurnard, School Shark, Rig & Stargazer.

B. Reason for Review:

RCO3 is being reviewed as there is a proposed TACC adjustment for 1 October 2007. However, an assessment of RCO3 against the review criteria is detailed below:

FLA3 is being reviewed as there is a proposed TACC adjustment for 1 October 2007. However, an assessment of FLA3 against the review criteria is detailed below:

Criteria	FLA3
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes - Deemed value invoices for \$582 were issued at the end of the 2005/2006 fishing season when 60% of ACE remained unused
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	Yes – Current proposal to review the TACC for the 2007/2008 fishing year
f) Stock has recently entered the QMS	No

C. Assessment of the fishery:

C.1 Relationship with associated species⁷

Both RCO3 and FLA3 are target fisheries and therefore at this stage a full review of associated species is required, particularly if we consider it likely 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.

Elephant Fish:

Current deemed value rate:

Stock	Interim (\$/kg)	Annual (\$/kg)
ELE3	1.21	1.41
ELE5	0.79	0.99

Differential deemed value rates do not apply

Criteria	ELE3 & ELE5
a) Catch in excess of ACE	Yes – ELE3 (107%) and ELE5 (117%) were both over caught during the 2005/2006 fishing year
b) Deemed value payments in previous years	Yes – Deemed value invoices for ELE3 (\$120,575) and ELE5 (\$24,436) were issued at the end of the 2005/2006 fishing season
c) Changes to the port price of the stock	Yes – port price for ELE 3 has increased from \$1.58 to \$1.80 (an increase of \$0.22) and the port price for ELE5 has decreased from \$1.41 to \$1.31 (a decrease of \$0.10)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	Yes – The TACC for ELE5 was increased by 20 tonne for the 2004/2005 fishing year
f) Stock has recently entered the QMS	No

Gurnard:

Current deemed value rate:

Stock	Interim (\$/kg)	Annual (\$/kg)
GUR3	0.43	0.85

Differential deemed value rates apply

⁷ See notes on 'Relationship between target and bycatch stocks – implications for deemed value setting'.

Criteria	GUR3
a) Catch in excess of ACE	Yes – GUR3 was over caught by 113% during the 2005/2006 fishing year
b) Deemed value payments in previous years	Yes – Deemed value invoices for GUR3 of \$142,677 were issued at the end of the 2005/2006 fishing season
c) Changes to the port price of the stock	Yes – the port price for GUR3 has decreased from \$1.27 to \$1.09 (a decrease of \$0.19)
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

School Shark:

Current deemed value rate:

Stock	Interim (\$/kg)	Annual (\$/kg)
SCH3	0.53	1.05
SCH4	0.53	1.05
SCH5	0.53	1.05

Differential deemed value rates apply

Criteria	SCH3, SCH4 & SCH5
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	SCH3: Negligible SCH4: Negligible SCH5: Negligible
c) Changes to the port price of the stock	Yes – the port price for SCH4 has increased from \$1.58 to \$1.77 (an increase of \$0.19), the port price for SCH5 has increased from \$1.74 to \$1.77 (an increase of \$0.03) and the port price for SCH3 has decreased from \$2.06 to \$1.75 (a decrease of \$0.31)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	Yes – SCH3 (increase of 65 tonnes) and SCH5 (increase of 35 tonnes) for the 2004/2005 fishing year
f) Stock has recently entered the QMS	No

Blue Cod:

Current deemed value rate:

Stock	Interim (\$/kg)	Annual (\$/kg)
BCO3	0.96	1.92
BCO4	0.67	1.34
BCO5	0.75	1.50

Differential deemed value rates apply

Criteria	BCO3, BCO4 & BCO5
a) Catch in excess of ACE	Yes – BCO3 was over caught by 109% during the 2005/2006 fishing year
b) Deemed value payments in previous years	BCO3: \$53,147 BCO4: \$7,517 while 26% of ACE was unused BCO5: Negligible
c) Changes to the port price of the stock	Yes – the port price for BCO3 has decreased from \$3.12 to \$2.94 (a decrease of \$0.18), the port price for BCO4 has increased from \$1.90 to \$4.21 (an increase of \$2.31) and the port price for BCO5 has increased from \$2.86 to \$4.21 (an increase of \$1.35)
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

Stargazer:

Current deemed value rate:

Stock	Interim (\$/kg)	Annual (\$/kg)
STA3	0.45	0.90
STA4	0.51	1.01
STA5	0.51	1.01

Differential deemed value rates apply

Criteria	STA3, STA4 & STA5
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	STA3: Negligible STA4: Negligible STA5: Not applicable
c) Changes to the port price of the stock	Yes – the port price for STA4 has decreased from \$1.13 to \$0.95 (a decrease of \$0.18), the port price for STA5 has decreased from \$1.24 to \$0.92 (a decrease of \$0.32) and the port price for STA3 has decreased from \$1.33 to \$0.83 (a decrease of \$0.50)
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

Groper (Hapuku & Bass):

Current deemed value rate:

Stock	Interim (\$/kg)	Annual (\$/kg)
HPB3	0.90	1.50
HPB4	0.90	1.80
HPB5	0.90	1.80

Differential deemed value rates apply

Criteria	HPB3, HPB4 & HPB5
a) Catch in excess of ACE	Yes – HPB3 was over caught by 118% during the 2005/2006 fishing year
b) Deemed value payments in previous years	HPB3: \$138,631 HPB4: Negligible HPB5: Negligible
c) Changes to the port price of the stock	Yes – the port price for HPB3 has increased from \$2.22 to \$4.56 (an increase of \$2.34), the port price for HPB4 has increased from \$3.57 to \$4.56 (an increase of \$0.99) and the port price for HPB5 has increased from \$3.03 to \$4.56 (an increase of \$1.53)
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:

Current deemed value rate:

Stock	Interim (\$/kg)	Annual (\$/kg)
SPO3	0.85	1.70

Differential deemed value rates apply

Criteria	SPO3
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Negligible
c) Changes to the port price of the stock	Yes – the port price for SPO3 has decreased from \$3.02 to \$2.69 (a decrease of \$0.39)
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

Tarakihi:

Current deemed value rate:

Stock	Interim (\$/kg)	Annual (\$/kg)
TAR3	0.55	1.09
TAR4	0.83	0.84
TAR5	0.42	0.83

Differential deemed value rates apply

Criteria	TAR3, TAR4 & TAR5
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	TAR3: Negligible TAR4: Negligible TAR5: Not applicable
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	Yes – The TACC for TAR3 was increased by 234 tonnes for the 2004/2005 fishing year
f) Stock has recently entered the QMS	No

Following this assessment it is apparent that the deemed value rates for ELE3, ELE5,

GUR3, SCH3, SCH4, SCH5, BCO3, BCO4, BCO5, HPB3, HPB4, HPB5 & TAR3 are possible candidates for a review. The performance of STA3, STA4, STA5, TAR4 & TAR5 against the criteria suggest that a review is not necessary at this time.

C.2 Assessment and analysis of information sources:

Information source	Red Cod		Flatfish		Gurnard	
Port price	RCO3	\$0.54	FLA3	\$2.96	GUR3	\$1.09
ACE trading price (most recent fishing year)	RCO3	\$0.0738/kg	FLA3	\$0.6327/kg	GUR3	\$0.3387/kg
Export price data*	RCO	\$3.58	FLA	\$5.49	GUR	\$7.69
Bycatch: ratios	RCO	44%	FLA	14%	GUR	5%
Bycatch: shadow values	Not applicable		FLA	\$0.52	GUR	\$1.48
Previous deemed value invoices**	RCO3	\$1,426	FLA3	\$582	GUR3	\$142,677
Cost recovery levies	RCO3	\$0.0107/kg	FLA3	\$0.0616/kg	GUR3	\$0.00/kg

Information source	School Shark		Blue Cod		Stargazer	
Port price	SCH3	\$1.75	BCO3	\$2.94	STA3	\$0.83
	SCH4	\$1.77	BCO4	\$4.21	STA4	\$0.95
	SCH5	\$1.77	BCO5	\$4.21	STA5	\$0.92
ACE trading price (most recent fishing year)	SCH3	\$0.769/kg	BCO3	\$0.8908/kg	STA3	\$0.2868/kg
	SCH4	\$0.3664/kg	BCO4	\$0.3566/kg	STA4	\$0.6774/kg
	SCH5	\$0.661/kg	BCO5	\$0.7901/kg	STA5	\$0.4039/kg
Export price data*	SCH	\$8.84	BCO	\$13.41	STA	\$4.93
Bycatch: ratios	SCH	1%	BCO	1%	STA	3%
Bycatch: shadow values	SCH	\$7.83	BCO	\$7.83	STA	\$2.46
Previous deemed value invoices**	SCH3	\$332	BCO3	\$53,147	STA3	\$767
	SCH4	\$2,536	BCO4	\$7,517	STA4	\$5
	SCH5	\$1,205	BCO5	\$125	STA5	\$0
Cost recovery levies	SCH3	\$0.0466/kg	BCO3	\$0.0574/kg	STA3	\$0.0228/kg
	SCH4	\$0.0344/kg	BCO4	\$0.0889/kg	STA4	\$0.0199/kg
	SCH5	\$0.0473/kg	BCO5	\$0.082/kg	STA5	\$0.0195/kg

Information source	Groper (Hapuku & Bass)		Rig		Tarakihi	
Port price	HPB3	\$4.56	SPO3	\$2.69	TAR3	\$1.42
	HPB4	\$4.56			TAR4	\$2.47
	HPB5	\$4.56			TAR5	\$1.19
ACE trading price (most recent fishing year)	HPB3	\$0.885/kg	SPO3	\$0.7683/kg	TAR3	\$0.7169
	HPB4	\$0.4207/kg			TAR4	\$0.3297
	HPB5	\$0.6832/kg			TAR5	\$0.2559
Export price data*	HPB	\$8.92	SPO	\$11.08	TAR	\$5.61
Bycatch: ratios	HPB	1%	SPO	1%	TAR	3%
Bycatch: shadow values	HPB	\$7.83	SPO	\$7.83	TAR	\$2.46
Previous deemed value invoices**	HPB3	\$138,631	SPO3	\$412	TAR3	\$249
	HPB4	\$1,927			TAR4	\$388
	HPB5	\$184			TAR5	\$0
Cost recovery levies	HPB3	\$0.1034/kg	SPO3	\$0.0716/kg	TAR3	\$0.0656/kg
	HPB4	\$0.1034/kg			TAR4	\$0.0477/kg
	HPB5	\$0.1034/kg			TAR5	\$0.0236/kg

Information source	Elephant Fish	
Port price	ELE3	\$1.80
	ELE5	\$1.31
ACE trading price (most recent fishing year)	ELE3	\$0.8511/kg
	ELE5	\$0.7842/kg
Export price data*	ELE	\$6.55
Bycatch: ratios	ELE	5%
Bycatch: shadow values	ELE	\$1.48
Previous deemed value invoices**	ELE3	\$120,575
	ELE5	\$24,436
Cost recovery levies	ELE3	\$0.0212/kg
	ELE5	\$0.0349/kg

* Export price data for year ending December 2006

** Deemed value invoices issue for fishing in excess of ACE holdings for 2005-06 fishing season.

Key points:

- The Southern Inshore Fin-fishery is based upon a fluctuating target fishery for red cod and flatfish. The nature of these fisheries means that in targeting red cod and flatfish fishers catch considerable amounts of vulnerable bycatch species (elephant fish, school shark and rig).
- The proposed TACC adjustment (if the Minister agrees) is to decrease the TACC for FLA3 and RCO3.
- There are concerns that fishers are purchasing RCO3 ACE to catch (target) the bycatch species and then pay the deemed values on them. Essentially the availability of RCO3 ACE is providing an entry point for fishers into the bycatch fishery.
- Licensed Fish Receivers are also not purchasing any red cod under 45cm length (legal limit is 25cm). There are concerns that this is leading to high grading and dumping of red cod.
- In FLA3, the total deemed value payments were \$582 in the 2005/2006 fishing year while 60% of ACE was unused.

- An assessment of port prices for RCO3 and the associated species indicates that they are well above the annual deemed value rate. This means it may now be profitable for fishers catch these species and pay the deemed values.
 - The port price for RCO3 (\$0.54/kg) is above the annual deemed value rate (\$0.32/kg).
 - An increase in the port price for ELE3 (\$1.80/kg) has pushed it further above the annual deemed value rate (\$1.41/kg).
 - Despite a fall in the port price for GUR3 (\$1.09/kg) it is still above the annual deemed value rate (\$0.85/kg).
 - Despite a fall in the port price for BCO3 (\$2.94/kg) it is still above the annual deemed value rate (\$1.92/kg).
 - A significant increase in the port price for HPB3 (\$4.56/kg) has pushed it well above the annual deemed value rate (\$1.50/kg).
- In FLA3, the total deemed value payments were \$582 in the 2005/2006 fishing year while 60% of ACE was unused.
- An analysis of deemed value payments from the most recent fishing seasons suggest that a handful of companies are responsible for the bulk of the deemed value payments. This behaviour suggests that amending the differential deemed value rates may be an appropriate tool to use.
 - In ELE3, two companies were invoiced 58.8% of the total \$120,575 in deemed value payments for the 2005/2006 fishing year. The largest single deemed value invoice was for \$44,865 (37% of the total deemed value invoices).
 - In GUR3, four companies were invoiced 47.8% of the total \$142,677 in deemed value payments for the 2005/2006 fishing year. The largest single deemed value invoice was for \$24,803 (17.4% of the total deemed value invoices).
 - In BCO3, two companies were invoiced 62.4% of the total \$53,147 in deemed value payments for the 2005/2006 fishing year. The largest single deemed value invoice was for \$24,504 (46% of the total deemed value invoices).
 - In HPB3, three companies were invoiced 54.1% of the total \$138,631 in deemed value payments for the 2005/2006 fishing year. The largest single deemed value invoice was for \$27,733 (20% of the total deemed value invoices).
- A deemed value adjustment may be necessary for RCO3 to ensure the new TACC is appropriately protected. As some fishers are already choosing to deem catches of their bycatch species it is likely that a deemed value adjustment of these stocks is also required.

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Tuesday 15 May 2007.

Deemed Value Review 2007: GUR7 & GUR8

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. Some minor target fisheries for red gurnard are known in Pegasus Bay, off Mahia and off the west coast South Island. Red gurnard is also a minor bycatch in the jack mackerel trawl fishery in the South Taranaki Bight. Up to 15% of the total red gurnard catch is taken by longline and set net.

A. Overview:

Current deemed value rates:

Stock	Interim (\$/kg)	Annual (\$/kg)
GUR7	0.43	0.85
GUR8	0.57	1.13

Differential deemed values apply.

Key bycatch stocks: N/A

B. Criteria for determining if a review is appropriate:

GUR7:

Criteria	GUR7
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of \$820 were issued when 13% of ACE was unused at the end of the 2005/2006 fishing season
c) Changes to the port price of the stock	Yes – port price has increased from \$1.40 to \$1.62 (an increase of \$0.22)
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

GUR7 fulfils criteria b) and c) above and therefore is considered appropriate for a review.

GUR8:

Criteria	GUR8
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of \$891 were issued when 37% of ACE was unused at the end of the 2005/2006 fishing season
c) Changes to the port price of the stock	Yes – port price has increased from \$1.40 to \$1.62 (an increase of \$0.22)
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

GUR8 fulfils criteria b) and c) above and therefore is considered appropriate for a review.

C. Assessment of the fishery:

C.1 Relationship with associated species⁸

GUR7 and GUR8 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 changes in GUR7 and GUR8 on other GUR stocks will need to be monitored.

C.2 Assessment and analysis of information sources:

Information source	Gurnard	
Port price	GUR7	\$1.62
	GUR8	\$1.62
ACE trading price (most recent fishing year)	GUR7	\$0.8237/kg
	GUR8	\$0.5638/kg
Export price data*	GUR	\$7.69
Bycatch: ratios	GUR	
Bycatch: shadow values	GUR	
Previous deemed value invoices**	GUR7	\$820
	GUR8	\$891
Cost recovery levies	GUR7	\$0.1328/kg
	GUR8	\$0.0374/kg

* Export price data for year ending December 2006

** Deemed value invoices issue for fishing in excess of ACE holdings for 2005-06 fishing season.

Key points:

- There is strong evidence of dumping occurring in GUR7 & GUR8. In a recent compliance investigation in the fishery two out of the three fishers investigated pleaded guilty to indicative charges of dumping.
- Fishers are choosing to dump gurnard because of two key reasons. First, differential prices are being paid to fishers for different sizes of gurnard – particularly by one LFR. For example:

⁸ See notes on 'Relationship between target and bycatch stocks – implications for deemed value setting'.

- \$0.07/kg for fish < 28cm
- \$1.00/kg for fish between 28cm – 33cm
- \$1.75/kg for fish >33cm

This is creating a real incentive for fishers to highgrade small gurnard.

- Secondly, this same LFR provides gurnard fishers with the necessary ACE to enable them to go fishing but also charges any deemed value payments back to the fisher, thus creating further incentives to dump or high grade. Therefore contracted fishers are paid based on the value of the catch landed, which is heavily influenced by the size of gurnard landed, minus the deemed values charges.
- These are the main drivers for including GUR7 and GUR8 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.

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Tuesday 15 May 2007.

Deem Value Review 2007: HOK1

Hoki are widely distributed throughout New Zealand waters from 34° S to 54° S, from depths of 10 m to over 900 m, with greatest abundance between 200 and 600 m. Large adult fish are generally found deeper than 400 m, while juveniles are more abundant in shallower water.

A. Overview:

Current deemed value rates:

Interim: \$0.30/kg

Annual: \$0.59/kg

Differential deemed values apply.

Key bycatch stocks: Hake/Ling

B. Reason for Review:

Criteria	HOK1
a) Catch in excess of ACE	Yes – 104% during previous fishing year
b) Deemed value payments in previous years	Yes - Deemed value invoices for \$2.7m were issued at the end of the 2005-06 fishing season
c) Changes to the port price of the stock	No
d) Request from quota owners	Yes – Request from Eric Barratt of Sanfords and Tom McClurg of AFL
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	<p>Yes – HOK1 TACC was reduced in 2004 from 180,000 tonnes to 100,000. The deemed value rates were not amended at the same time.</p> <p>HAK4: TACC reduced from 3,500 tonnes to 1800 tonnes at the start of the 2004-05 fishing season.</p> <p>HAK7: TACC increased from 6855 tonnes to 7700 tonnes at the start of the 2005-06 fishing season.</p> <p>LIN5: TACC increased from 3001 tonnes to 3595 tonnes at the start of the 2004-05 fishing season.</p> <p>LIN6: TACC increased from 7100 tonnes to 8505 tonnes at the start of the 2004-05 fishing season.</p>
f) Stock has recently entered the QMS	No

HOK1 fulfils criteria a), d) and e) above and therefore is considered appropriate for a review.

C. Assessment of the fishery:

C.1 relationship with associated species⁹

Hoki is a target fishery and therefore a full review of associated species is required particularly if it is 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

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

or have had significant quantities of fish deemed in the past.

Hake:

Current deemed value rate:

Stock	Interim (\$/kg)	Annual (\$/kg)
HAK1	.59	1.17
HAK4	.63	1.25
HAK7	.69	1.38

Differential deemed value rates apply

Criteria	HAK
a) Catch in excess of ACE	No overcatch in the most recent fishing season recorded. There has been overcatch in the previous fishing seasons but this has been mitigated by the recent increases to the TACCs of some hake stocks and the reduction in the HOK1 TACC in 2004.
b) Deemed value payments in previous years	HAK1: nominal HAK4: nominal HAK7: nominal
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	Some recent TACC changes recorded. HAK4: TACC reduced from 3,500 tonnes to 1800 tonnes at the start of the 2004-05 fishing season. HAK7: TACC increased from 6855 tonnes to 7700 tonnes at the start of the 2005-06 fishing season.
f) Stock has recently entered the QMS	No

Ling:

Current deemed value rate:

Stock	Interim (\$/kg)	Annual (\$/kg)
LIN1	.85	1.69
LIN2	.75	1.49
LIN3	.88	1.75
LIN4	.64	1.27
LIN5	.91	1.81
LIN6	.84	1.67
LIN7	1.11	2.21

Differential deemed value rates apply

Criteria	LIN
a) Catch in excess of ACE	Yes: LIN7 overcaught by 111% in the most recent fishing season.
b) Deemed value payments in previous years	Yes: Relatively small amounts apart from LIN7 where deemed value invoices for \$768,000 were invoiced for the 2005-06 fishing season.
c) Changes to the port price of the stock	Yes – Reduction in port price rates across all ling stocks.
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	Yes - see hake and hoki above
f) Stock has recently entered the QMS	No

Following this assessment it is apparent that the deemed value rate for LIN7 is a candidate for review.

C.2 Assessment and analysis of information sources:

Information source	Hoki		Hake		Ling	
Port price	HOK1	\$0.61/kg	HAK1	\$1.00/kg	LIN1	\$1.40/kg
			HAK4		LIN2	\$1.36/kg
			HAK7		LIN3	
					LIN4	
					LIN5	
					LIN6	
					LIN7	
ACE trading price (most recent fishing year)	HOK1	\$0.5246/kg	HAK1	\$0.8663	LIN1	\$0.7372
			HAK4	\$0.7089	LIN2	\$0.9943
			HAK7	\$1.1490	LIN3	\$0.9976
					LIN4	\$0.4658
					LIN5	\$1.0641
					LIN6	\$0.6422
					LIN7	\$1.4704
Export price data*	Hoki	\$3.82	Hake	\$6.47	Ling	\$6.61
Bycatch: ratios ¹	Hoki	83% ²	Hake	3.5%	Ling	2.7%
Bycatch: shadow values ³	Not applicable		Hake	\$15	Ling	\$26
Previous deemed value invoices**	HOK1	\$2.7m	HAK1	nominal	LIN1	\$1.317
			HAK4		LIN2	\$0
			HAK7		LIN3	\$4,667
					LIN4	nominal
					LIN5	nominal
					LIN6	\$0
					LIN7	\$768,081
Cost recovery levies	HOK1	\$0.06228/kg	HAK1	\$0.081/kg	LIN1	\$0.042/kg
			HAK4	\$0.093/kg	LIN2	\$0.053/kg
			HAK7	\$0.028/kg	LIN3	\$0.054/kg
					LIN4	\$0.043/kg
					LIN5	\$0.067/kg
					LIN6	\$0.050/kg
					LIN7	\$0.086/kg

* Export price data for year ending September 2006

** Deemed value invoices issue for fishing in excess of ACE holdings for 2005-06 fishing season.

¹: In a study of fish discards and non-target fish catch in the New Zealand hoki trawl fishery, 1999-2000 to 2002-03 hoki accounted for 83% of the total estimated catch from all observed trawls targeting hoki between 1 October 1999 and 30 September 2003, hake accounted for 3.5% and ling 2.7%. However there is variation within these figures depending on the area being fished and the time of year the fishing takes place.

²: Hoki as the target species

³: The maximum shadow value is calculated by dividing the value of the ACE of the target stock by the bycatch-to-target proportional catch rate.

Key points:

- The current HOK1 annual deemed value rate is set above the average ACE trading price but even at this level it is not constraining catch.
- Port price is marginally higher than the current annual deemed value rate but the average export price from 2006 is well above the deemed value rate suggesting that there is still a profit to be realised from fishing and covering

catch through deemed value payments rather than ACE.

- Of the total deemed value invoices issued for hoki at the end of the 2005-06 season, six were to companies who had incurred deemed value penalties in excess of \$200,000. This behaviour suggests that amending the differential deemed value rates may be an appropriate tool to use.
- An assessment of the port prices for LIN indicates that across all stocks (excluding LIN4) the port price is above the annual deemed value rates. This means it may be profitable for fishers to catch these species and pay the deemed values. An increase in the annual deemed value rate may address this issue.

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Tuesday 15 May 2007.

Deemed Value Review 2007: JDO2 & JDO7

John dory are taken mainly as a bycatch of the trawl and danish seine fisheries. Landings from JDO 2 are considered to be approximately equally split between QMA 2 and 8. Substantial proportions of John dory landings are taken as bycatch in target trawl fisheries for jack mackerels in QMA 8, and as tarakihi and red gurnard bycatch in QMA 2. The JDO 7 catch has exceeded the TACC during the last five fishing years. Substantial increases in landings from this fish stock since 1999 are attributed to increased abundance in response to environmental influences on recruitment and stock displacement. JDO7 is taken largely as a bycatch by FMA 7 trawl fisheries.

A. Overview:

Current deemed value rates:

Stock	Interim (\$/kg)	Annual (\$/kg)
JDO2	1.33	2.65
JDO7	1.59	3.17*

*Differential deemed values do not apply.

Key target stocks: Snapper, Gurnard, Trevally, Tarakihi, & Jack Mackerel.

B. Criteria for determining if a review is appropriate:

Criteria	JDO2
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes - Deemed value invoices for \$31,576 were issued at the end of the 2005/2006 fishing season
c) Changes to the port price of the stock	Yes – the port price for JDO7 has increased from \$4.06 to \$5.38 (an increase of \$1.32)
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

JDO2 fulfils criteria b) and c) above and therefore is considered appropriate for a review.

Criteria	JDO7
a) Catch in excess of ACE	Yes – JDO7 was over caught by 106% during the 2005/2006 fishing year
b) Deemed value payments in previous years	Yes - Deemed value invoices for \$102 when 46% of ACE remained unused were issued at the end of the 2005/2006 fishing season
c) Changes to the port price of the stock	Yes – the port price for JDO7 has increased from \$3.89 to \$4.64 (an increase of \$0.75)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	Yes – TACC was increased by 23 tonnes for the 2004/2005 fishing year
f) Stock has recently entered the QMS	No

JDO7 fulfils criteria a), b), c) and e) above and therefore is considered appropriate for a review.

C. Assessment of the fishery:

C.1 Relationship with associated species¹⁰

JDO7 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 JDO7 on other JDO stocks will need to be monitored.

C.2 Assessment and analysis of information sources:

Information source	John Dory	
Port price	JDO2	\$5.38
	JDO7	\$4.64
ACE trading price (most recent fishing year)	JDO2	\$0.8416/kg
	JDO7	\$1.2305/kg
Export price data*	JDO	\$10.05
Bycatch: ratios	JDO	
Bycatch: shadow values	JDO	
Previous deemed value invoices**	JDO2	\$102
	JDO7	\$31,576
Cost recovery levies	JDO2	\$0.1104/kg
	JDO7	\$0.1049/kg

* Export price data for year ending December 2006

** Deemed value invoices issue for fishing in excess of ACE holdings for 2005-06 fishing season.

Key points:

- In the 2005-06 fishing season 10 tonnes of JDO7 was deemed.
- There is strong evidence of dumping occurring in JDO7. In a recent compliance investigation in the fishery two out of the three fishers investigated pleaded guilty to indicative charges of dumping. Dumping is probably encouraged by the fact that contract fishers, fishing ACE on behalf on one of the major LFRs in the area, are required to pay the deemed value charges out of their earnings.
- In JDO7, one company was invoiced for 53.5% (\$16,899) of the total \$31,576 deemed value payments for the 2005/2006 fishing year. This would suggest

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

that differential deemed values may be an appropriate tool to use in this fishery.

- A significant increase in the port price (\$4.64) of JDO7 has pushed it well above the annual deemed value rate (\$3.17) meaning that it may now be profitable for fishers to fish using deemed values rather than ACE. This suggests that the annual rate should also be adjusted.
- JDO2 has been reviewed to ensure there is no incentive for fishers to truck fish from JDO7 to JDO2.

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Tuesday 15 May 2007.

Deemed Value Review 2007: ORH1, ORH3B, & ORH7B

The ORH1 region extends northwards from west of Wellington around to Cape Runaway. Prior to 1993–94 there was no established fishery, and reported landings were generally small. A new fishery developed in winter 1994, when aggregations were fished on two hill complexes in the western Bay of Plenty. Orange roughy are found in waters deeper than 750 m throughout ORH3B. Historically, the main fishery has been concentrated on the Chatham Rise. The ORH7B fishery centres on an area near the Cook Canyon in fishery statistical areas 033, 034 and 705. Most of the catch is taken in winter, when the fish form aggregations for spawning.

A. Overview:

Current deemed value rates:

Stock	Interim (\$/kg)	Annual (\$/kg)
ORH1	1.49	2.97
ORH3B	2.00	4.00
ORH7B	1.60	3.20

Differential deemed values apply.

Key bycatch stocks: N/A

B. Reason for Review:

ORH1, ORH3B and ORH7B are being reviewed as there is a proposed TACC adjustment for 1 October 2007. However, an assessment of these stocks against the review criteria is detailed below:

ORH1:

Criteria	ORH1
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	Yes – Current proposal to review the TACC for the 2007/2008 fishing year
f) Stock has recently entered the QMS	No

ORH1 fulfils criteria e) above and therefore is considered appropriate for a review.

ORH3B:

Criteria	ORH3B
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	Yes – Current proposal to review the TACC for the 2007/2008 fishing year
f) Stock has recently entered the QMS	No

ORH3B fulfils criteria e) above and therefore is considered appropriate for a review.

ORH7B:

Criteria	ORH7B
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	Yes – Current proposal to review the TACC for the 2007/2008 fishing year
f) Stock has recently entered the QMS	No

ORH7B fulfils criteria e) above and therefore is considered appropriate for a review.

C. Assessment of the fishery:***C.1 Relationship with associated species¹¹***

ORH1, ORH3B & ORH7B are 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.

C.1 Assessment and analysis of information sources:

Information source	ORH1		ORH3B		ORH7B	
Port price	ORH1	\$3.67	ORH3B	\$3.67	ORH7B	\$3.35
ACE trading price (most recent fishing year)	ORH1	\$0.6459/kg	ORH3B	\$1.5979/kg	ORH7B	\$0.9947/kg
Export price data*	ORH	\$12.48	ORH	\$12.48	ORH	\$12.48
Bycatch: ratios	Not applicable		Not applicable		Not applicable	
Bycatch: shadow values	Not applicable		Not applicable		Not applicable	
Previous deemed value invoices**	ORH1	\$0	ORH3B	\$0	ORH7B	\$0
Cost recovery levies	ORH1	\$0.1047/kg	ORH3B	\$0.1130/kg	ORH7B	\$0.3961/kg

* Export price data for year ending December 2006

** Deemed value invoices issue for fishing in excess of ACE holdings for 2005-06 fishing season.

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

Key points:

- These ORH stocks have been reviewed as they are high value stocks.

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Tuesday 15 May 2007.

Deemed Value Review 2007: SCH1

School shark are widely distributed across the shelf, generally being inshore in summer and offshore in winter. They extend in smaller numbers near the seafloor down the upper continental slope, to at least 600 m. The capture of school sharks by tuna longliners shows that their distribution extends well offshore, up to 180 nm off the South Island, and 400 nm off northern New Zealand towards the Kermadec Islands.

A. Overview:

Current deemed value rates:

Interim: \$0.81/kg

Annual: \$1.61/kg

Differential deemed values apply.

Key target stocks: Gurnard, Hapuka/Bass, Rig, Snapper & Tarakihi.

B. Reason for Review:

SCH1 is being reviewed as there is a proposed TACC adjustment for 1 October 2007. However, an assessment of SCH1 against the review criteria is detailed below:

Criteria	SCH1
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes - Deemed value invoices for \$9,735 were issued at the end of the 2005/2006 fishing season when 8% of ACE remained unused
c) Changes to the port price of the stock	Yes – the port price for SCH1 has increased from \$1.06 to \$1.77 (a increase of \$0.61)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	Yes – Current proposal to review the TACC for the 2007/2008 fishing year
f) Stock has recently entered the QMS	No

C. Assessment of the fishery:

C.1 Relationship with associated species¹²

SCH1 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 SCH1 on other SCH stocks will need to be monitored.

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

C.2 Assessment and analysis of information sources:

Information source	School Shark	
Port price	SCH1	\$1.77
ACE trading price (most recent fishing year)	SCH1	\$1.4064/kg
Export price data*	SCH	\$8.84
Bycatch: ratios	SCH	
Bycatch: shadow values	SCH	
Previous deemed value invoices**	SCH1	\$9,735
Cost recovery levies	SCH1	\$0.065/kg

* Export price data for year ending December 2006

** Deemed value invoices issue for fishing in excess of ACE holdings for 2005-06 fishing season.

Key points:

- On the face of it, increasing the TACC for SCH1 is unlikely to result in any need to review the deemed value rate for SCH1. However this stock has experienced overfishing in recent years and if the TACC increase is still lower than previous overfished levels then a deemed value adjustment is probably necessary to defend the TACC.
- The impact of a TACC increase on the interactions between SCH1 and the target species is also worth considering. If the TACC increase is simply going to enable fishers to catch their target species without having to deem their SCH1 catch then there is little for concern. However if the TACC is increased, it might result in increased targeting for SCH1 and impacts on associated stocks will need to be considered.
- Catches have consistently been above TACC since the 1994/1995 fishing year (the exception is the 2005/2006 fishing year where landing were lower due to a reduction in SNA8 TACC).
- The recent increase in port price has moved it above the deemed value for SCH1

- Deemed value payments for the 2005/2006 fishing year were \$9,735. This figure is well below the previous 4 years deemed value payments (average payment over the past 4 fishing years was \$123,617). The reduction in the TACC in SNA8 may have resulted in this lower figure.

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Tuesday 15 May 2007.

Deemed Value Review 2007: 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:

Interim: \$0.75/kg

Annual: \$1.50/kg

Differential deemed values apply.

Key bycatch stocks: Bluenose

B. Criteria for determining if a review is appropriate:

Criteria	SKI2
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of \$8,795 were issued at the end of the 2005/2006 fishing season when 25% of ACE remained unused
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

Bluenose fulfils criteria b) above and therefore is considered appropriate for a review.

C. Assessment of the fishery:

C.1 Relationship with associated species¹³

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 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	1.09	2.18

Differential deemed values apply.

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

Criteria	BNS2
a) Catch in excess of ACE	Yes – 106% during previous fishing year
b) Deemed value payments in previous years	Yes - Deemed value invoices for \$196,539 were issued at the end of the 2005/2006 fishing season
c) Changes to the port price of the stock	Yes – port price has increased from \$2.58 to \$3.57 (an increase of \$0.99)
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 being reviewed in its own deemed value review.

C.2 Assessment and analysis of information sources:

Information source	Gemfish		Bluenose	
Port price	SKI2	\$3.14	BNS2	\$3.57
ACE trading price (most recent fishing year)	SKI2	\$0.8155/kg	BNS2	\$1.4436/kg
Export price data*	SKI	\$5.69	BNS	\$8.94
Bycatch: ratios	Not applicable		BNS	
Bycatch: shadow values	Not applicable		BNS	
Previous deemed value invoices**	SKI2	\$8,795	BNS2	\$196,539
Cost recovery levies	SKI2	\$0.1254/kg	BNS2	\$0.1001/kg

* Export price data for year ending December 2006

** Deemed value invoices issue for fishing in excess of ACE holdings for 2005-06 fishing season.

Key points:

- SKI2 is both a target fishery and a bycatch of the TAR2 trawl fishery. Although not over fished in 2005-06, SKI2 has been over fished in four of the last five fishing seasons. Over catch has ranged from 8% to 30%.
- In the current fishing year, the SKI2 ACE has already been fished and over fishing is likely as a significant portion (approximately 50%) of the TAR2 TACC is still to be taken. Therefore SKI2 is being reviewed to assess if the current deemed value rates adequately protect the TACC.

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Tuesday 15 May 2007.

Deemed Value Review 2007: SNA1, SNA2, SNA7 & SNA8

The snapper fishery is one of the largest and most valuable coastal fisheries in New Zealand. Snapper are demersal fish found down to depths of about 200 m, but are most abundant in 15–60 m.

They are the dominant fish in northern inshore communities and occupy a wide range of habitats, including rocky reefs and areas of sand and mud bottom. They are widely distributed in the warmer waters of New Zealand, being most abundant in the Hauraki Gulf. The snapper fishery is also an important recreational fishery.

A. Overview:

Current deemed value rates:

Stock	Interim (\$/kg)	Annual (\$/kg)
SNA1	6.50	13.00
SNA2	1.50	3.00
SNA7	1.01	2.01
SNA8	1.30	4.25

Differential deemed values apply.

Key bycatch stocks: Gurnard & Tarakihi

B. Criteria for determining if a review is appropriate:

SNA1:

Criteria	SNA1
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of \$326,825 were issued at the end of the 2005/2006 fishing season but only 1% of ACE remained unused (within the 10% carry forward limit)
c) Changes to the port price of the stock	Yes – port price has increased from \$3.92 to \$4.98 (an increase of \$1.06)
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

SNA1 fulfils criteria b) and c) above and therefore is considered appropriate for a review.

SNA2:

Criteria	SNA2
a) Catch in excess of ACE	Yes – 122% of the TACC was caught during 2005/2006 fishing year
b) Deemed value payments in previous years	Yes – Deemed value invoices for \$238,268 were issued at the end of the 2005/2006 fishing season
c) Changes to the port price of the stock	Yes – port price has increased from \$3.73 to \$4.67 (an increase of \$0.94)
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

SNA2 fulfils criteria a), b) and c) above and therefore is considered appropriate for a review.

SNA7:

Criteria	SNA7
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices for \$290 when 23% of ACE remained unused were issued at the end of the 2005/2006 fishing season
c) Changes to the port price of the stock	Yes – port price has increased from \$3.19 to \$4.67 (an increase of \$1.48)
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

SNA7 fulfils criteria b) and c) above and therefore is considered appropriate for a review.

SNA8:

Criteria	SNA8
a) Catch in excess of ACE	Yes – 110% of the TACC was caught during 2005/2006 fishing year
b) Deemed value payments in previous years	Yes – Deemed value invoices for \$617,540 were issued at the end of the 2005/2006 fishing season
c) Changes to the port price of the stock	Yes – port price has increased from \$3.92 to \$4.67 (an increase of \$0.75)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	Yes – The TACC for SNA8 was reduced by 200 tonnes before the 2005/2006 fishing year
f) Stock has recently entered the QMS	No

SNA8 fulfils criteria a), b), c) and e) above and therefore is considered appropriate for a review.

C. Assessment of the fishery:

C.1 Relationship with associated species¹⁴

SNA1, SNA2 & SNA8 are 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.

Gurnard:

Current deemed value rate:

Stock	Interim (\$/kg)	Annual (\$/kg)
GUR1	0.62	1.24
GUR2	0.62	1.24
GUR7	0.43	0.85
GUR8	0.57	1.13

Differential deemed value rates apply

Criteria	GUR1, GUR2, GUR7 & GUR8
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	GUR1: Negligible GUR2: Negligible GUR7: Negligible GUR8: Negligible
c) Changes to the port price of the stock	Yes – the port price for GUR1 has decreased from \$1.74 to \$1.62 (a decrease of \$0.12), the port price for GUR2 has decrease from \$2.00 to \$1.62 (a decrease of \$0.38), port price for GUR7 has increased from \$1.40 to \$1.62 (an increase of \$0.22) & the port price for GUR8 has increased from \$1.40 to \$1.62 (an increase of \$0.22)
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

Tarakihi:

Current deemed value rate:

Stock	Interim (\$/kg)	Annual (\$/kg)
TAR1	1.05	2.09
TAR2	0.79	1.58
TAR7	0.42	0.83
TAR8	0.72	1.43

Differential deemed value rates apply

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

Criteria	TAR1, TAR2, TAR7 & TAR8
a) Catch in excess of ACE	Yes – TAR2 (101%) and TAR8 (115%) of the TACC was caught during 2005/2006 fishing year
b) Deemed value payments in previous years	TAR1: \$80,287 TAR2: \$142,207 TAR7: \$2,999 TAR8: \$59,007
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	Yes – Current proposal to review the TACC of TAR1 for the 2007/2008 fishing year. The TACC or TAR2 was increased by 163 tonnes for the 2004/2005 fishing year
f) Stock has recently entered the QMS	No

Following this assessment it is apparent that the deemed value rates GUR1 and GUR2 are potentially candidates for a review but the number are insufficient to warrant one. GUR7, GUR8, TAR1, TAR2, TAR7 & TAR8 are being reviewed in their own deemed value review.

C.1 Assessment and analysis of information sources:

Information source	SNA1		SNA2		SNA7	
Port price	SNA1	\$4.98	SNA2	\$4.67	SNA7	\$4.67
ACE trading price (most recent fishing year)	SNA1	\$3.1319/kg	SNA2	\$2.5583/kg	SNA7	\$1.0413/kg
Export price data*	SNA	\$7.04	SNA	\$7.04	SNA	\$7.04
Bycatch: ratios	Not applicable		Not applicable		Not applicable	
Bycatch: shadow values	Not applicable		Not applicable		Not applicable	
Previous deemed value invoices**	SNA1	\$326,825	SNA2	\$238,268	SNA7	\$290
Cost recovery levies	SNA1	\$0.134/kg	SNA2	\$0.0972/kg	SNA7	\$0.4533/kg

Information source	SNA8		Gurnard		Tarakihi	
Port price	SNA8	\$4.67	GUR1	\$1.62	TAR1	\$2.00
			GUR2	\$1.62	TAR2	\$2.26
			GUR7	\$1.62	TAR7	\$1.53
			GUR8	\$1.62	TAR8	\$2.42
ACE trading price (most recent fishing year)	SNA8	\$2.6741/kg	GUR1	\$0.3268/kg	TAR1	\$1.3296/kg
			GUR2	\$0.3711/kg	TAR2	\$1.1175/kg
			GUR7	\$0.8237/kg	TAR7	\$0.5121/kg
			GUR8	\$0.5638/kg	TAR8	\$0.7466/kg
Export price data*	SNA	\$7.04	GUR	\$7.69	TAR	\$5.61
Bycatch: ratios	Not applicable		GUR		TAR	
Bycatch: shadow values	Not applicable		GUR		TAR	
Previous deemed value invoices**	SNA8	\$617,540	GUR1	\$5,166	TAR1	\$80,287
			GUR2	\$1,085	TAR2	\$142,207
			GUR7	\$821	TAR7	\$2,999
			GUR8	\$891	TAR8	\$59,007
Cost recovery levies	SNA8	\$0.1665/kg	GUR1	\$0.0499/kg	TAR1	\$0.0547/kg
			GUR2	\$0.0324/kg	TAR2	\$0.0451/kg
			GUR7	\$0.1328/kg	TAR7	\$0.1644/kg
			GUR8	\$0.0374/kg	TAR8	\$0.0557/kg

* Export price data for year ending December 2006

** Deemed value invoices issue for fishing in excess of ACE holdings for 2005-06 fishing season.

Key points:

- The deemed value for SNA8 was reviewed before the 2005/2006 fishing year and was doubled to \$4.25. This coincided with a reduction in the TACC and was part of a rebuild strategy implemented by the Minister. However, the TACC was still over caught in the 2005/2006 fishing year and \$617,540 worth of deemed values were paid.
- An assessment of port prices for SNA and the associated species indicates that they are above the annual deemed value rates. This means it may now be profitable for fishers catch these species and pay the deemed values. An increase in the annual deemed value rate may address this issue.
 - The port price for SNA1 has increased from \$3.92 to \$4.98. This would suggest that it is likely to be profitable for fishers to continue catching SNA1 in excess of ACE and to pay the deemed value charge – an increase to the annual deemed value rate may address this issue.
 - An increase in the SNA8 port price (\$4.67) means it is now higher than the annual deemed value rate (\$4.25).
 - Both the gurnard and tarakihi port prices are above the annual deemed value rate for the three associated gurnard and tarakihi stocks.
- An analysis of deemed value payments from the most recent fishing seasons suggest that a handful of companies are responsible for the bulk of the deemed value payments in the SNA and TAR fisheries. This behaviour suggests that amending the differential deemed value rates may be an appropriate tool to use.
 - In SNA1, one company was invoiced for 99.6% (\$325,697) of the total \$326,825 deemed value bill for the 2005/2006 fishing year. However, this company has now gone into receivership.
 - In SNA2, six companies were invoiced 86% of the total \$238,268 in deemed value payments for the 2005/2006 fishing year. The largest single deemed value invoice was for \$72,255 (30% of the total deemed value invoices).
 - In SNA8, five companies were invoiced 66.67% of the total \$617,540 in deemed value payments for the 2005/2006 fishing year. The largest single deemed value invoice was for \$119,758 (19% of the total deemed value invoices).
 - In TAR1, one company was invoiced for 53% (\$42,475) out of the total \$80,287 in deemed value payments for the 2005/2006 fishing year. This company has now gone into receivership. The next largest deemed value invoice was for \$10,398.
 - In TAR2, five companies were invoiced 87.5% of the total \$142,207 in deemed value payments for the 2005/2006 fishing year. The largest

single deemed value invoice was for \$55,377 (39% of the total deemed value invoices).

- In TAR8, three companies were invoiced 65% of the total \$59,007 in deemed value payments for the 2005/2006 fishing year. The largest single deemed value invoice was for \$14,181 (24% of the total deemed value invoices).

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Tuesday 15 May 2007.

Deemed Value Review 2007: SPD3

Spiny dogfish are found throughout the southern half of New Zealand, extending to East Cape and

Manakau Harbour on the east and west coasts of the North Island respectively. Most of the spiny dogfish caught by the deepwater fleet are taken as a bycatch in the jack mackerel, barracouta, hoki, red cod, and arrow squid fisheries. Spiny dogfish are also taken as bycatch by inshore trawlers, set netters and longliners targeting flatfish, snapper, tarakihi and gurnard.

A. Overview:

Current deemed value rates:

Interim: \$0.03/kg

Annual: \$0.05/kg

Differential deemed values do not apply.

Key target stocks: Flatfish, Gurnard, Snapper, Tarakihi, Red Cod, Barracouta, Arrow Squid & Jack Mackerel.

B. Criteria for determining if a review is appropriate:

Criteria	SPD3
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes - Deemed value invoices for SPD3 of \$2,726 while 26% of ACE remained unused were issued at the end of the 2005/2006 fishing. 1.14% of the TACC was caught and deemed.
c) Changes to the port price of the stock	No
d) Request from quota owners	Yes
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

Spiny Dogfish fulfils criteria b), d) and f) above and therefore is considered appropriate for a review.

C. Assessment of the fishery:

C.1 Relationship with associated stocks¹⁵

SPD3 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 SPD3 on other SPD stocks will need to be monitored.

SPD1:

Current deemed value rates:

Stock	Interim (\$/kg)	Annual (\$/kg)
SPD1	0.03	0.05

¹⁵ See notes on 'Relationship between target and bycatch stocks – implications for deemed value setting'.

Differential deemed values do not apply.

Criteria	SPD1
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes - Deemed value invoices for \$2,034 when 46% of ACE remained unused were issued at the end of the 2005/2006 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	Yes – Introduced into the QMS on 1 October 2004

SPD4:

Current deemed value rates:

Stock	Interim (\$/kg)	Annual (\$/kg)
SPD4	0.03	0.05

Differential deemed values do not apply.

Criteria	SPD4
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes - Deemed value invoices for \$5,568 when 40% of ACE remained unused were issued at the end of the 2005/2006 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	Yes – Introduced into the QMS on 1 October 2004

SPD5:

Current deemed value rates:

Stock	Interim (\$/kg)	Annual (\$/kg)
SPD5	0.03	0.05

Differential deemed values do not apply.

Criteria	SPD5
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes - Deemed value invoices for \$308 when 43% of ACE remained unused were issued at the end of the 2005/2006 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	Yes – Introduced into the QMS on 1 October 2004

SPD7:

Current deemed value rates:

Stock	Interim (\$/kg)	Annual (\$/kg)
SPD7	0.03	0.05

Differential deemed values do not apply.

Criteria	SPD7
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes - Deemed value invoices for \$1,600 when 59% of ACE remained unused were issued at the end of the 2005/2006 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	Yes – Introduced into the QMS on 1 October 2004

SPD8:

Current deemed value rates:

Stock	Interim (\$/kg)	Annual (\$/kg)
SPD8	0.03	0.05

Differential deemed values do not apply.

Criteria	SPD8
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes - Deemed value invoices for \$273 when 67% of ACE remained unused were issued at the end of the 2005/2006 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	Yes – Introduced into the QMS on 1 October 2004

SPD10:

Current deemed value rates:

Stock	Interim (\$/kg)	Annual (\$/kg)
SPD10	0.03	0.05

Differential deemed values do not apply.

Criteria	SPD10
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	Yes – Introduced into the QMS on 1 October 2004

Following this assessment it is apparent that SPD1, SPD4, SPD5, SPD7, SPD8 & SPD10 are potentially candidates for a review.

C.2 Assessment and analysis of information sources:

Information source	SPD3		SPD1		SPD4	
Port price	SPD3	\$0.53	SPD1	\$0.47	SPD4	\$0.47
ACE trading price (most recent fishing year)	SPD3	\$0.0336/kg	SPD1	\$0.0288/kg	SPD4	\$0.0279/kg
Export price data*	SPD	\$1.39	SPD	\$1.39	SPD	\$1.39
Bycatch: ratios	SPD		SPD		SPD	
Bycatch: shadow values	SPD		SPD		SPD	
Previous deemed value invoices**	SPD3	\$2,726	SPD1	\$2,034	SPD4	\$5,568
Cost recovery levies	SPD3	\$0.0292/kg	SPD1	\$0.0121/kg	SPD4	\$0.0089/kg

Information source	SPD5		SPD7		SPD8	
Port price	SPD5	\$0.47	SPD7	\$0.47	SPD8	\$0.47
ACE trading price (most recent fishing year)	SPD5	\$0.0229/kg	SPD7	\$0.0346/kg	SPD8	\$0.0284/kg
Export price data*	SPD	\$1.39	SPD	\$1.39	SPD	\$1.39
Bycatch: ratios	SPD		SPD		SPD	
Bycatch: shadow values	SPD		SPD		SPD	
Previous deemed value invoices**	SPD5	\$308	SPD7	\$1,600	SPD8	\$273
Cost recovery levies	SPD5	\$0.0138/kg	SPD7	\$0.0373/kg	SPD8	\$0.0092/kg

Information source	SPD10	
Port price	SPD10	\$0
ACE trading price (most recent fishing year)	SPD10	No valid trades
Export price data*	SPD	\$1.39
Bycatch: ratios	SPD	
Bycatch: shadow values	SPD	
Previous deemed value invoices**	SPD10	\$0
Cost recovery levies	SPD10	N/A

* Export price data for year ending December 2006

** Deemed value invoices issue for fishing in excess of ACE holdings for 2005-06 fishing season.

Key points:

- In SPD3, the amount of the deemed values being paid is small (\$2,726) but when figuring in the low annual deemed value (\$0.05) further analysis shows that deemed values were paid for 54.5 tonnes (54,520kg) of SPD3 in the 2005/2006 fishing year. This is 1.14% of the TACC (4,794 tonnes) for SPD3.
- The issue with SPD3 is one of utilisation – quota owners are concerned that the low deemed values are undermining their property right. This problem seems to have arisen because of the difficulties encountered in setting the deemed value rates at the time spiny dog fish entered the QMS in 2004. This is the key driver for considering if a deemed value review is appropriate. The low deemed value means that the ACE price has been driven down to a level where it is currently similar to the cost recovery levies charged to SPD3 quota holders. Quota holders argue this is eroding the value of their quota and provides no incentive to fishers to acquire ACE to cover catch.
- When SPD was introduced into the QMS (it was also included on the 6th schedule which permits fishers to return the species to the sea provided certain conditions – in the case of SPD the condition is that fishers still are required to record what has been returned to the sea and this had to be covered by ACE (or if no ACE was held through deemed values).
- Around 50% of SPD caught is landed (mostly by the inshore fishers). Most of the non-landing occurs in the deepwater fleet where storing SPD caught takes up freezer space where higher value species could be stored so it is returned to the water (although some fins are taken).

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Tuesday 15 May 2007.

Deemed Value Review 2007: 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: \$1.13kg

Annual: \$2.25kg

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 126% during the 2005/2006 fishing year
b) Deemed value payments in previous years	Yes - Deemed value invoices for SPO2 of \$59,362 were issued at the end of the 2005/2006 fishing season
c) Changes to the port price of the stock	Yes – the port price for SPO2 has increased from \$2.18 to \$3.19 (an increase of \$1.01)
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

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 species¹⁶

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.

¹⁶ See notes on 'Relationship between target and bycatch stocks – implications for deemed value setting'.

C.2 Assessment and analysis of information sources:

Information source	Rig	
Port price	SPO2	\$3.19
ACE trading price (most recent fishing year)	SPO2	\$1.1875/kg
Export price data*	SPO	\$11.08
Bycatch: ratios	SPO	
Bycatch: shadow values	SPO	
Previous deemed value invoices**	SPO2	\$59,362
Cost recovery levies	SPO2	\$0.0821/kg

* Export price data for year ending December 2006

** Deemed value invoices issue for fishing in excess of ACE holdings for 2005-06 fishing season.

Key points:

- At the end of the 2005-06 fishing season, deemed values were paid on 26.4 tonnes of SPO2. This equates to 31% of the TACC.
- Two companies were invoiced 78.6% (\$46,672) of the total \$59,632 deemed value payments for the 2005/2006 fishing year. The largest single deemed value invoice was for \$27,959 (47% of the total deemed value invoices). This behaviour suggests that amending the differential deemed value rates may be an appropriate tool to use.
- A significant increase in the port price (\$3.19) of SPO2 has pushed it well above the annual deemed value rate (\$2.25). This means it probably profitable for fishers to catch SPO2 and pay the deemed values rather than balancing with ACE. An increase in the annual deemed value rate may address this issue.

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Tuesday 15 May 2007.

Deemed Value Review 2007: SWA3 & SWA4

Silver warehou are common around the South Island and on the Chatham Rise in depths of 200 – 800 m. The majority of the commercial catch is taken from the Chatham Rise, Canterbury Bight, southeast of Stewart Island and the west coast of the South Island. In recent years, most of the silver warehou catch has been taken as a by-catch of the hoki, squid, barracouta and jack mackerel trawl fisheries.

A. Overview:

Current deemed value rate:

Stock	Interim (\$/kg)	Annual (\$/kg)
SWA3	0.49	0.97
SWA4	0.49	0.98

Differential deemed values do not apply.

Key bycatch stocks: N/A

B. Criteria for determining if a review is appropriate:

Criteria	SWA3 & SWA4
a) Catch in excess of ACE	Yes – SWA3 (137%) and SWA4 (134%) were both over caught during the 2005/2006 fishing year
b) Deemed value payments in previous years	Yes – Deemed value invoices for SWA3 (\$1,322,516) and SWA4 (\$1,539,977) were issued at the end of the 2005-06 fishing season
c) Changes to the port price of the stock	No
d) Request from quota owners	Yes – Request from Eric Barratt (Sanford)
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

Silver warehou fulfils criteria a), b) and d) above and therefore is considered appropriate for a review.

C. Assessment of the fishery:

C.1 Relationship with associated species¹⁷

SWA3 and SWA4 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 SWA3 and SWA4 on other SWA stocks will need to be monitored.

¹⁷ See notes on 'Relationship between target and bycatch stocks – implications for deemed value setting'.

C.2 Assessment and analysis of information sources:

Information source	Silver Warehou	
Port price	SWA3	\$0.77
	SWA4	\$0.80
ACE trading price (most recent fishing year)	SWA3	\$0.6163/kg
	SWA4	\$0.5682/kg
Export price data*	SWA	\$3.24
Bycatch: ratios	SWA	
Bycatch: shadow values	SWA	
Previous deemed value invoices**	SWA3	\$1,322,516
	SWA4	\$1,539,977
Cost recovery levies	SWA3	\$0.0165/kg
	SWA4	\$0.0172/kg

* Export price data for year ending December 2006

** Deemed value invoices issue for fishing in excess of ACE holdings for 2005-06 fishing season.

Key points:

- In SWA3, five companies were invoiced 77.5% of the total \$1,322,516 in deemed value payments for the 2005/2006 fishing year. The largest single deemed value invoice was for \$382,635 (29% of the total deemed value invoices).
- In SWA4, four companies were invoiced 85% of the total \$1,539,977 in deemed value payments for the 2005/2006 fishing year. The largest single deemed value invoice was for \$767,899 (49.8% of the total deemed value invoices).
- This would suggest that applying differential deemed values may be the most appropriate tool in these fisheries.
- The port price in both SWA3 (\$0.77) & SWA4 (\$0.80) are below the annual deemed value rate (\$0.97 & \$0.98).
- The export price for SWA is considerably higher than either the port price and annual deemed value rate.

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Tuesday 15 May 2007.

Deemed Value Review 2007: 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: \$2.13/kg

Annual: \$4.25/kg

Differential deemed values 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 \$12,529 were issued at the end of the 2005/2006 fishing season when 43% of ACE remained unused
c) Changes to the port price of the stock	Yes – port price has increased from \$5.07 to \$6.11 (an increase of \$1.04)
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 species¹⁸

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.

¹⁸ See notes on 'Relationship between target and bycatch stocks – implications for deemed value setting'.

C.2 Assessment and analysis of information sources:

Information source	Swordfish	
Port price	SWO1	\$6.11
ACE trading price (most recent fishing year)	SWO1	\$0.6633/kg
Export price data*	SWO	Not available
Bycatch: ratios	SWO	
Bycatch: shadow values	SWO	
Previous deemed value invoices**	SWO1	\$12,529
Cost recovery levies	SWO1	\$0.00/kg

* Export price data for year ending December 2006

** Deemed value invoices issue for fishing in excess of ACE holdings for 2005-06 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 43% 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 Tuesday 15 May 2007.

Deemed Value Review 2007: TAR1

Tarakihi are caught in coastal waters around both the North and South Islands, Stewart Island and the Chatham Islands, down to depths of about 250 m. The major fishing grounds are west and east Northland (QMA 1), the western Bay of Plenty to Cape Turnagain (QMAs 1 and 2), Cook Strait to the Canterbury Bight (mainly QMA 3), and Jackson Head to Cape Foulwind (QMA 7). Around the North Island 70–80% of the tarakihi catch is targeted.

A. Overview:

Current deemed value rates:

Interim: \$1.05/kg

Annual: \$2.09/kg

Differential deemed values apply.

Key bycatch stocks: N/A

B. Reason for Review:

TAR1 is being reviewed as there is a proposed TACC adjustment for 1 October 2007. However, an assessment of TAR1 against the review criteria is detailed below:

Criteria	TAR1
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes - Deemed value invoices for \$80,287 were issued at the end of the 2005/2006 fishing season but only 1% of ACE remained unused
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	Yes – Current proposal to review the TACC for the 2007/2008 fishing year
f) Stock has recently entered the QMS	No

C. Assessment of the fishery:

C.1 Relationship with associated species¹⁹

TAR1 is a target fishery and therefore at this stage a full review of associated species is required if we think it is possible that fishers will switch fishing effort to an associated stock. Also, the implications of a deemed value change in SPD3 on other SPD stocks will need to be monitored.

TAR2:

Current deemed value rate:

Stock	Interim (\$/kg)	Annual (\$/kg)
TAR2	0.79	1.58

Differential deemed value rates apply

¹⁹ See notes on 'Relationship between target and bycatch stocks – implications for deemed value setting'.

Criteria	TAR2
a) Catch in excess of ACE	Yes – 101% of the TACC was caught during 2005/2006 fishing year
b) Deemed value payments in previous years	Yes – Deemed value invoices for \$80,287 were issued at the end of the 2005/2006 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	Yes – the TACC of TAR2 was increased by 163 tonnes for the 2004/2005 fishing year
f) Stock has recently entered the QMS	No

TAR7:

Current deemed value rate:

Stock	Interim (\$/kg)	Annual (\$/kg)
TAR7	0.42	0.83

Differential deemed value rates apply

Criteria	TAR7
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices for \$2,999 were issued at the end of the 2005/2006 fishing season but only 2% of ACE remained unused
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

TAR8:

Current deemed value rate:

Stock	Interim (\$/kg)	Annual (\$/kg)
TAR8	0.72	1.43

Differential deemed value rates apply

Criteria	TAR8
a) Catch in excess of ACE	Yes – 115% of the TACC was caught during 2005/2006 fishing year
b) Deemed value payments in previous years	Yes – Deemed value invoices for \$59,007 were issued at the end of the 2005/2006 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

Snapper:

Current deemed value rate:

Stock	Interim (\$/kg)	Annual (\$/kg)
SNA1	6.50	13.00
SNA2	1.50	3.00
SNA7	1.01	2.01
SNA8	1.30	4.25

Differential deemed value rates apply.

Criteria	SNA1, SNA2, SNA7 & SNA8
a) Catch in excess of ACE	Yes – SNA2 (122%) and SNA8 (110%) of the TACC was caught during 2005/2006 fishing year
b) Deemed value payments in previous years	SNA1: \$326,825 SNA2: \$238,268 SNA7: \$290 SNA8: \$617,540
c) Changes to the port price of the stock	Yes – the port price for SNA1 has increased from \$3.92 to \$4.98 (an increase of \$1.06), the port price for SNA2 has increased from \$3.73 to \$4.67 (an increase of \$0.94), the port price for SNA7 has increased from \$3.19 to \$4.67 (an increase of \$1.48) and the port price for SNA8 has increased from \$3.92 to \$4.67 (an increase of \$0.75)
d) Request from quota owners	No
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	Yes – The TACC for SNA8 was reduced by 200 tonnes before the 2005/2006 fishing year
f) Stock has recently entered the QMS	No

Following this assessment it is apparent that the deemed value rate for TAR2, TAR7 and TAR8 are possible candidates for a review. SNA1, SNA2, SNA7 & SNA8 are being reviewed in their own deemed value review.

C.2 Assessment and analysis of information sources:

Information source	Tarakihi		Snapper	
Port price	TAR1	\$2.00	SNA1	\$4.98
	TAR2	\$2.26	SNA2	\$4.67
	TAR7	\$1.53	SNA7	\$4.67
	TAR8	\$2.42	SNA8	\$4.67
ACE trading price (most recent fishing year)	TAR1	\$1.3296/kg	SNA1	\$3.1319/kg
	TAR2	\$1.1175/kg	SNA2	\$2.5583/kg
	TAR7	\$0.5121/kg	SNA7	\$1.0413/kg
	TAR8	\$0.7466/kg	SNA8	\$2.6741/kg
Export price data*	TAR	\$5.61	SNA	\$7.04
Bycatch: ratios	TAR		SNA	
Bycatch: shadow values	TAR		SNA	
Previous deemed value invoices**	TAR1	\$80,287	SNA1	\$326,825
	TAR2	\$142,207	SNA2	\$238,268
	TAR7	\$2,999	SNA7	\$290
	TAR8	\$59,007	SNA8	\$617,540
Cost recovery levies	TAR1	\$0.0547/kg	SNA1	\$0.134/kg
	TAR2	\$0.0451/kg	SNA2	\$0.0972/kg
	TAR7	\$0.1644/kg	SNA7	\$0.4533/kg
	TAR8	\$0.0557/kg	SNA8	\$0.1665/kg

* Export price data for year ending December 2006

** Deemed value invoices issue for fishing in excess of ACE holdings for 2005-06 fishing season.

Key points:

- The proposed management intervention (if the Minister agrees) is to increase the TACC for TAR1.
- Industry has asked three times since 2002 for TAR1 to become part on an Adaptive Management Programme (AMP)
- Landings of TAR1 have exceeded the TACC in all but one (1999/2000 fishing year) of the last ten fishing years.
- Port price (\$2.00/kg) is currently just under the annual deemed value rate (\$2.10/kg).
- 80% of the catch of TAR1 is targeted so any increase in TACC should not have a significant impact on the catch of bycatch species.
- In TAR1, one company was invoiced for 53% (\$42,475) out of the total \$80,287 in deemed value payments for the 2005/2006 fishing year. This company has now gone into receivership. The next largest deemed value invoice was for \$10,398.
- On the face of it, increasing the TACC for TAR1 is unlikely to result in any need to review the deemed value rate for TAR1. However this stock has experienced overfishing in recent years and if the TACC increase is still lower than previous overfished levels then a deemed value adjustment is probably necessary to defend the TACC.
- The impact of a TACC increase on the interactions between TAR1 and the associated species (SNA1) is also worth monitoring particularly if there has already been overfishing of this stock – SNA1 is already on the review list but the implications of the changes to the TAR1 TACC will also be considered.

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Tuesday 15 May 2007.

Deemed Value Review 2007: TRE2

Trevally is part of a mixed trawl fishery also targeting snapper, red gurnard and john dory.

A. Overview:

Current deemed value rates:

Interim: \$0.46/kg

Annual: \$0.92/kg

Differential deemed values do not apply.

Key target & bycatch stocks: Snapper, Gurnard & John Dory.

B. Criteria for determining if a review is appropriate:

Criteria	TRE2
a) Catch in excess of ACE	Yes – 167% of the TACC was caught during 2005/2006 fishing year
b) Deemed value payments in previous years	Yes - Deemed value invoices for \$161,721 were issued at the end of the 2005/2006 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

Trevally fulfils criteria a) and b) above and therefore is considered appropriate for a review.

C. Assessment of the fishery:

C.1 Relationship with associated species²⁰

TRE2 is part of a mixed trawl fishery 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.

Snapper:

SNA2 is already on the review list

Current deemed value rate:

Stock	Interim (\$/kg)	Annual (\$/kg)
SNA2	1.50	3.00

Differential deemed value rates apply

²⁰ See notes on 'Relationship between target and bycatch stocks – implications for deemed value setting'.

Criteria	SNA2
a) Catch in excess of ACE	Yes – 122% of the TACC was caught during 2005/2006 fishing year
b) Deemed value payments in previous years	Yes – Deemed value invoices for \$238,268 were issued at the end of the 2005/2006 fishing season
c) Changes to the port price of the stock	Yes – port price has increased from \$3.73 to \$4.67 (an increase of \$0.94)
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

Gurnard:

Current deemed value rate:

Stock	Interim (\$/kg)	Annual (\$/kg)
GUR2	0.62	1.24

Differential deemed value rates apply

Criteria	GUR2
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Negligible
c) Changes to the port price of the stock	Yes – the port price for GUR2 has decreased from \$2.00 to \$1.62 (a decrease of \$0.38)
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

John Dory:

Current deemed value rate:

Stock	Interim (\$/kg)	Annual (\$/kg)
JDO2	1.33	2.65

Differential deemed value rates apply

Criteria	JDO2
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Negligible
c) Changes to the port price of the stock	Yes – port price has increased from \$4.06 to \$5.38 (an increase of \$1.32)
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

Following this assessment it is apparent that the deemed value rates for GUR2 & JDO2 are possible candidates for review. SNA2 is being reviewed as part of another deemed value review.

C.2 Assessment and analysis of information sources:

Information source	Trevally		Snapper		Gurnard	
Port price	TRE2	\$1.50	SNA2	\$4.67	GUR2	\$1.62
ACE trading price (most recent fishing year)	TRE2	\$0.5037/kg	SNA2	\$2.5583/kg	GUR2	\$0.3711/kg
Export price data*	TRE	\$1.93	SNA	\$7.04	GUR	\$7.69
Bycatch: ratios	TRE		SNA		GUR	
Bycatch: shadow values	TRE		Not applicable		GUR	
Previous deemed value invoices**	TRE2	\$161,721	SNA2	\$238,268	GUR2	\$1,085
Cost recovery levies	TRE2	\$0.0296/kg	SNA2	\$0.0972/kg	GUR2	\$0.0324/kg

Information source	John Dory	
Port price	JDO2	\$5.38
ACE trading price (most recent fishing year)	JDO2	\$0.8416/kg
Export price data*	JDO	\$10.05
Bycatch: ratios	JDO	
Bycatch: shadow values	JDO	
Previous deemed value invoices**	JDO2	\$102
Cost recovery levies	JDO2	\$0.1102/kg

* Export price data for year ending December 2006

** Deemed value invoices issue for fishing in excess of ACE holdings for 2005-06 fishing season.

Key points:

- At the end of the 2005-06 fishing season, deemed values were paid on 176 tonnes of TRE2. This equates to 73% of the TACC.
- Three companies were invoiced 89.3% of the total deemed value bill (\$161,721). The largest single deemed value invoice was for \$51,439 (31.8% of the total deemed value bill). This behaviour suggests that amending the differential deemed value rates may be an appropriate tool to use.
- An assessment of port prices for TRE2 and the associated species indicates that they are above the annual deemed value rates. This means it may now be profitable for fishers to catch these species and pay the deemed values. An increase in the annual deemed value rate may address this issue.
 - The TRE2 port price (\$1.50) is above the annual deemed value rate (\$0.92).
 - The JDO2 port price (\$5.38) is above the annual deemed value (\$2.65) rate.
- There are concerns that the over fishing of TRE2 is contributing to SNA2 also being over fished (being caught as bycatch of targeting trevally).

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Tuesday 15 May 2007.

Deemed Value Review 2007: WAR3

Blue (or common) warehou are caught in coastal waters of the South Island and lower North Island down to depths of about 400 m. Until the mid 1980s, the main domestic fishing method used to catch blue warehou was gill-netting. There has been a reduction in the numbers of commercial gillnetters since the introduction of the QMS, and the majority of the landings are now taken as a bycatch from deepwater trawling.

A. Overview:

Current deemed value rates:

Interim: \$0.13/kg

Annual: \$0.25/kg

Differential deemed values apply.

Key target stocks: N/A

B. Criteria for determining if a review is appropriate:

Criteria	WAR3
a) Catch in excess of ACE	Yes – WAR3 was over caught by 129% during the 2005/2006 fishing year
b) Deemed value payments in previous years	Yes – Deemed value invoices for WAR3 of \$415,961 were issued at the end of the 2005/2006 fishing season
c) Changes to the port price of the stock	No
d) Request from quota owners	Yes – Eric Barratt (Sanford Limited)
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

Blue (common) warehou fulfils criteria a), b) and d) above and therefore is considered appropriate for a review.

C. Assessment of the fishery:

C.1 Relationship with associated species

WAR3 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 WAR3 on other WAR stocks will need to be monitored.

WAR7:

Current deemed value rate:

Stock	Interim (\$/kg)	Annual (\$/kg)
WAR7	0.45	0.90

Differential deemed value rates apply

Criteria	WAR7
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices for \$57 when 44% of ACE remained unused were issued at the end of the 2005/2006 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

Following this assessment it is apparent that the deemed value rate for WAR7 is a possible candidate for a review.

C.2 Assessment and analysis of information sources:

Information source	Blue (common) warehou	
Port price	WAR3	\$0.92
	WAR7	\$0.97
ACE trading price (most recent fishing year)	WAR3	\$0.2161/kg
	WAR7	\$0.2601/kg
Export price data*	WAR	\$3.00
Bycatch: ratios	WAR	
Bycatch: shadow values	WAR	
Previous deemed value invoices**	WAR3	\$415,961
	WAR7	\$57
Cost recovery levies	WAR3	\$0.0254/kg
	WAR7	\$0.0228/kg

* Export price data for year ending December 2006

** Deemed value invoices issue for fishing in excess of ACE holdings for 2005-06 fishing season.

Key points:

- In the 2005-06 fishing season deemed values were paid on 1,664 tonnes of BAR5 which equates to 65.7% of the TACC (2530.8 tonnes).
- At the end of the 2005-06 fishing season one company was invoiced 87% of the total \$415,961 deemed value bill. This behaviour suggests that amending the differential deemed value rates may be an appropriate tool to use.
- The port price (\$0.92) of WAR3 is well above the annual deemed value rate (\$0.25) which suggests that it is likely to be profitable for fishers to continue catching WAR3 in excess of ACE and to pay the deemed value charge. This suggests that the annual deemed value rate should also be adjusted.

- WAR7 is being reviewed to ensure that there is no incentive for fishers to truck fish from WAR3 to WAR7.

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Tuesday 15 May 2007.

Deemed Value Review 2007: North Island Eels (LFE20, LFE21, LFE22, LFE23, SFE20, SFE21, SFE22 & SFE23)

The North Island eel was introduced into the QMS on 1 October 2004 as fishstocks SFE 20 – 23 and LFE 20 – 23.

A. Overview:

Current deemed value rates:

Stock	Interim (\$/kg)	Annual (\$/kg)
LFE20	4.00	8.00
LFE21	4.00	8.00
LFE22	4.00	8.00
LFE23	4.00	8.00
SFE20	4.00	8.00
SFE21	4.00	8.00
SFE22	4.00	8.00
SFE23	4.00	8.00

Differential deemed values apply.

Key bycatch stocks: N/A

B. Reason for Review:

The North Island eel fishery is being reviewed as there is a proposed TACC adjustment for 1 October 2007. However, an assessment of the North Island eel fishery against the review criteria is detailed below:

LFE20:

Criteria	LFE20
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of \$2,755 were issued when 53% of ACE was unused at the end of the 2005/2006 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	Yes – Current proposal to review the TACC for the 2007/2008 fishing year
f) Stock has recently entered the QMS	Yes – Introduced into the QMS on 1 October 2004

LFE21:

Criteria	LFE21
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	Yes – Current proposal to review the TACC for the 2007/2008 fishing year
f) Stock has recently entered the QMS	Yes – Introduced into the QMS on 1 October 2004

LFE22:

Criteria	LFE22
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of \$32 were issued when 27% of ACE was unused at the end of the 2005/2006 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	Yes – Current proposal to review the TACC for the 2007/2008 fishing year
f) Stock has recently entered the QMS	Yes – Introduced into the QMS on 1 October 2004

LFE23:

Criteria	LFE23
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	Yes – Current proposal to review the TACC for the 2007/2008 fishing year
f) Stock has recently entered the QMS	Yes – Introduced into the QMS on 1 October 2004

SFE20:

Criteria	SFE20
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of \$491 were issued when 42% of ACE was unused at the end of the 2005/2006 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	Yes – Current proposal to review the TACC for the 2007/2008 fishing year
f) Stock has recently entered the QMS	Yes – Introduced into the QMS on 1 October 2004

SFE21:

Criteria	SFE21
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	Yes – Current proposal to review the TACC for the 2007/2008 fishing year
f) Stock has recently entered the QMS	Yes – Introduced into the QMS on 1 October 2004

SFE22:

Criteria	SFE22
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of \$8 were issued when 6% of ACE was unused at the end of the 2005/2006 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	Yes – Current proposal to review the TACC for the 2007/2008 fishing year
f) Stock has recently entered the QMS	Yes – Introduced into the QMS on 1 October 2004

SFE23:

Criteria	SFE23
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	Yes – Current proposal to review the TACC for the 2007/2008 fishing year
f) Stock has recently entered the QMS	Yes – Introduced into the QMS on 1 October 2004

C. Assessment of the fishery:**C.1 Assessment and analysis of information sources:**

Information source	LFE20		LFE21		LFE22	
Port price	LFE20	\$3.88	LFE21	\$3.88	LFE22	\$3.88
ACE trading price (most recent fishing year)	LFE20	No valid trades	LFE21	\$1.0097/kg	LFE22	\$1.0000/kg
Export price data*	EEL**	\$8.37	EEL**	\$8.37	EEL**	\$8.37
Bycatch: ratios	Not applicable		Not applicable		Not applicable	
Bycatch: shadow values	Not applicable		Not applicable		Not applicable	
Previous deemed value invoices***	LFE20	\$2,755	LFE21	\$0	LFE22	\$32
Cost recovery levies	LFE20	\$0.1858/kg	LFE21	\$0.1858/kg	LFE22	\$0.1858/kg

Information source	LFE23		SFE20		SFE21	
Port price	LFE23	\$3.88	SFE20	\$3.87	SFE21	\$3.87
ACE trading price (most recent fishing year)	LFE23	No valid trades	SFE20	\$1.0000/kg	SFE21	\$1.0000/kg
Export price data*	EEL**	\$8.37	EEL**	\$8.37	EEL**	\$8.37
Bycatch: ratios	Not applicable		Not applicable		Not applicable	
Bycatch: shadow values	Not applicable		Not applicable		Not applicable	
Previous deemed value invoices**	LFE23	\$0	SFE20	\$491	SFE21	\$0
Cost recovery levies	LFE23	\$0.1858/kg	SFE20	\$0.1853/kg	SFE21	\$0.1853/kg

Information source	SFE22		SFE23	
Port price	SFE22	\$3.87	SFE23	\$3.87
ACE trading price (most recent fishing year)	SFE22	\$0.9696/kg	SFE23	No valid trades
Export price data*	EEL**	\$8.37	EEL**	\$8.37
Bycatch: ratios	Not applicable		Not applicable	
Bycatch: shadow values	Not applicable		Not applicable	
Previous deemed value invoices***	SFE22	\$8	SFE23	\$0
Cost recovery levies	SFE22	\$0.1853/kg	SFE23	\$0.1853/kg

* Export price data for year ending December 2006

** Export data is for Eels (Longfin Eels and Shortfin Eels)

*** Deemed value invoices issue for fishing in excess of ACE holdings for 2005-06 fishing season.

Key points:

- The North Island eel fishery was introduced in to the QMS on 1 October 2004. At the time it was introduced into the QMS there were concerns about the state of the fishery. The Minister decided to set the TACs for all eel FMAs at such a level so that the size structure and abundance of eels would likely improve over the medium term (10 years).
- New scientific information and advice has suggested that the current level of exploitation is unsustainable and the size structure and abundance of eels has not improved.
- The proposed TACC adjustment (if the Minister agrees) is to decrease the TAC/TACC for all North Island LFE fisheries and possibly decrease the TAC/TACC for all North Island SFE fisheries too.
- 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 Tuesday 15 May 2007.

Deemed Value Review 2007: OEO1

Black and smooth oreo occurs from 600 to 1300 m depth. The geographical distribution south of about 45° S is not well known. It is a southern species and is abundant on the south Chatham Rise, along the east coast of the South Island, the north and east slope of Pukaki Rise, the Bounty Platform, the Snares slope, Puysegur Bank and the northern end of the Macquarie Ridge. They probably occur right round the slope of the Campbell Plateau.

A. Overview:

Current deemed value rates:

Interim: \$0.39kg

Annual: \$0.78kg

Differential deemed values apply.

Key bycatch stocks: N/A

B. Reason for Review:

OEO1 is being reviewed as there is a proposed TACC adjustment for 1 October 2007. However, an assessment of OEO1 against the review criteria is detailed below:

Criteria	OEO1
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of \$22 were issued at the end of the 2005/2006 fishing season when 85% of ACE remained unused
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

OEO1 fulfils criteria b) above and therefore is considered appropriate for a review.

C. Assessment of the fishery:

C.1 Relationship with associated species²¹

OEO1 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.

²¹ See notes on 'Relationship between target and bycatch stocks – implications for deemed value setting'.

C.2 Assessment and analysis of information sources:

Information source	Black and Smooth Oreo	
Port price	OEO1	\$0.80
ACE trading price (most recent fishing year)	OEO1	0.2318/kg
Export price data*	OEO	\$3.57
Bycatch: ratios	Not Applicable	
Bycatch: shadow values	Not Applicable	
Previous deemed value invoices**	OEO1	\$22
Cost recovery levies	OEO1	\$0.0308/kg

* Export price data for year ending December 2006

** Deemed value invoices issue for fishing in excess of ACE holdings for 2005-06 fishing season.

Key points:

- There has been minimal deemed value payments and fishing has been covered by ACE for most fishing years.

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Tuesday 15 May 2007.

Deemed Value Review 2007: OYS7C

The dredge oyster *Tiostrea chilensis* is widespread throughout New Zealand and is the target of commercial fisheries in Foveaux Strait and (in the past) the Nelson/Marlborough (Challenger) fishery area. Dredge oysters are landed as a bycatch of the Chatham Islands scallop fishery.

A. Overview:

Current deemed value rates:

Interim: \$4.00/kg

Annual: \$8.00/kg

Differential deemed values apply.

Key bycatch stocks: N/A

B. Reason for Review:

OYS7C is being reviewed as there is a proposed TACC adjustment for 1 October 2007. However, an assessment of OYS7C against the review criteria is detailed below:

Criteria	OYS7C
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes – Deemed value invoices of \$8 were issued at the end of the 2005/2006 fishing season when 66% of ACE remained unused
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	Yes - In the 2005/2006 fishing year the TACC was increased by 2 tonnes
f) Stock has recently entered the QMS	No

OYS7C fulfils criteria b) and e) above and therefore is considered appropriate for a review.

C. Assessment of the fishery:

C.1 Relationship with associated species²²

OYS7C 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.

²² See notes on 'Relationship between target and bycatch stocks – implications for deemed value setting'.

C.2 Assessment and analysis of information sources:

Information source	Dredge Oysters	
Port price	OYS7C	\$4.00
ACE trading price (most recent fishing year)	OYS7C	No valid trades
Export price data*	OYS	\$7.20
Bycatch: ratios	Not Applicable	
Bycatch: shadow values	Not Applicable	
Previous deemed value invoices**	OYS7C	\$8
Cost recovery levies	OYS7C	\$0.00/kg

* Export price data for year ending December 2006

** Deemed value invoices issue for fishing in excess of ACE holdings for 2005-06 fishing season.

Key points:

- This is a high value stock and deemed values rates have been set at 200% of the port price.

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Tuesday 15 May 2007.

Deemed Value Review 2007: SQU1T

The New Zealand arrow squid fishery is based on two related species. *Nototodarus gouldi* is found around mainland New Zealand north of the Subtropical Convergence, whereas *N. sloanii* is found in and to the south of the convergence zone. In the SQU1T fishery, catch has been taken from the Snares shelf on the south coast of the South Island right through to the Mernoo Bank (east coast), but statistical area 28 (Snares shelf and Snares Island region) has accounted for over 77% of the total in recent years. Based on observer data, squid accounts for 67% of the total catch in the target trawl fishery, with bycatch principally of barracouta, jack mackerel, silver warehou and spiny dogfish.

A. Overview:

Current deemed value rates:

Interim: \$0.44/kg

Annual: \$0.88/kg

Differential deemed values apply.

Key bycatch stocks: Barracouta, Jack Mackerel, Silver Warehou and Spiny Dogfish

B. Reason for Review:

SQU1T is being reviewed as there is a proposed TACC adjustment for 1 October 2007. However, an assessment of SQU1T against the review criteria is detailed below:

Criteria	SQU1T
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	Yes - Deemed value invoices for \$1,234 were issued at the end of the 2005/2006 fishing season when 9% of ACE remained unused
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	Yes – changes have been made during the fishing year in the past 3 fishing years
f) Stock has recently entered the QMS	No

SQU1T fulfils criteria b) and e) above and therefore is considered appropriate for a review.

C. Assessment of the fishery:

C.1 relationship with associated species²³

SQU1T is a target fishery and therefore a full review of associated species is required particularly if it is 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.

²³ See notes on 'Relationship between target and bycatch stocks – implications for deemed value setting'

Barracouta:

Current deemed value rate:

Stock	Interim (\$/kg)	Annual (\$/kg)
BAR1	0.10	0.19
BAR4	0.10	0.19
BAR7	0.10	0.19
BAR10	0.10	0.19

Differential deemed value rates apply

Criteria	BAR1, BAR4, BAR7 & BAR10
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	BAR1: Negligible BAR4: Not applicable BAR7: Negligible BAR10: Not applicable
c) Changes to the port price of the stock	Yes – port price for BAR1 has decreased from \$0.28 to \$0.18 (a decrease of \$0.10), the port price for BAR4 has decreased from \$0.29 to \$0.19 (a decrease of \$0.10) and the port price for BAR7 has decreased from \$0.29 to \$0.19 (a decrease of \$0.10)
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

Jack Mackerel:

Current deemed value rate:

Stock	Interim (\$/kg)	Annual (\$/kg)
JMA1	0.08	0.15
JMA3	0.08	0.15
JMA7	0.08	0.09
JMA10	0.08	0.15

Differential deemed value rates apply

Criteria	JMA1, JMA3, JMA7 & JMA10
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	JMA1: Negligible JMA4: Negligible JMA7: Negligible JMA10: Not applicable
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

Silver Warehouse:

Current deemed value rate:

Stock	Interim (\$/kg)	Annual (\$/kg)
SWA1	0.44	0.87
SWA3	0.44	0.97*
SWA4	0.49	0.98*
SWA10	0.44	0.88

*Differential deemed value rates do not apply

Criteria	SWA1, SWA3, SWA4 & SWA10
a) Catch in excess of ACE	Yes – SWA3 (137%) and SWA4 (134%) were both over caught during the 2005/2006 fishing year
b) Deemed value payments in previous years	SWA1: Negligible SWA3: \$1,322,516 SWA4: \$1,539,977 SWA10: Not applicable
c) Changes to the port price of the stock	No
d) Request from quota owners	Yes – In SWA3 & SWA4
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

Spiny Dogfish:

Current deemed value rate:

Stock	Interim (\$/kg)	Annual (\$/kg)
SPD1	0.03	0.05
SPD3	0.03	0.05
SPD4	0.03	0.05
SPD7	0.03	0.05
SPD8	0.03	0.05
SPD10	0.03	0.05

Differential deemed value rates do not apply

Criteria	SPD1, SPD3, SPD4, SPD7, SPD8 & SPD10
a) Catch in excess of ACE	No
b) Deemed value payments in previous years	SPD1: Negligible SPD3: Negligible SPD4: Negligible SPD7: Negligible SPD8: Negligible SPD10: Not applicable
c) Changes to the port price of the stock	No
d) Request from quota owners	Yes – In SPD3
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

Following this assessment it is apparent that BAR1, BAR4, BAR7, BAR10, JMA1, JMA3, JMA7, JMA10, SWA1, SWA10, SPD1 SPD4, SPD7, SPD8 & SPD10 are potentially candidates for a review but the numbers are insufficient to warrant a review. SWA3, SWA4 & SPD3 are being reviewed in their own deemed value review.

C.2 Assessment and analysis of information sources:

Information source	Squid		Barracouta		Jack Mackerel	
Port price	SQU1T	\$0.77	BAR1	\$0.18	JMA1	\$0.16
			BAR4	\$0.19	JMA3	\$0.17
			BAR7	\$0.19	JMA7	\$0.16
			BAR10	N/A	JMA10	N/A
ACE trading price (most recent fishing year)	SQU1T	\$0.1889/kg	BAR1	\$0.0653/kg	JMA1	\$0.0233/kg
			BAR4	\$0.0313/kg	JMA3	\$0.0206/kg
			BAR7	\$0.1061/kg	JMA7	\$0.056/kg
			BAR10	No valid trades	JMA10	No valid trades
Export price data*	SQU	\$2.08	BAR	\$1.17	JMA	\$1.32
Bycatch ratios:	SQU		BAR		JMA	
Bycatch: shadow values	Not applicable		BAR		JMA	
Previous deemed value invoices**	SQU1T	\$1,234	BAR1	\$1,302	JMA1	\$349
			BAR4	\$0	JMA3	\$1
			BAR7	\$3,237	JMA7	\$639
			BAR10	\$0	JMA10	\$0
Cost recovery levies	SQU1T	\$0.0215/kg	BAR1	\$0.0044/kg	JMA1	\$0.0127/kg
			BAR4	\$0.0041/kg	JMA3	\$0.0139/kg
			BAR7	\$0.0046/kg	JMA7	\$0.0133/kg
			BAR10	N/A	JMA10	N/A

Information source	Silver Warehou		Spiny Dogfish	
Port price	SWA1	\$0.79	SPD1	\$0.47
	SWA3	\$0.77	SPD3	\$0.53
	SWA4	\$0.80	SPD4	\$0.47
	SWA10	N/A	SPD7	\$0.47
			SPD8	\$0.47
			SPD10	N/A
ACE trading price (most recent fishing year)	SWA1	\$0.4334/kg	SPD1	\$0.0288/kg
	SWA3	\$0.6163/kg	SPD3	\$0.0336/kg
	SWA4	\$0.5682/kg	SPD4	\$0.0279/kg
	SWA10	No valid trades	SPD7	\$0.0346/kg
			SPD8	\$0.0284/kg
			SPD10	No valid trades
Export price data*	SWA	\$3.24	SPD	\$1.39
Bycatch ratios:	SWA		SPD	
Bycatch: shadow values	SWA		SPD	
Previous deemed value invoices**	SWA1	\$336	SPD1	\$2,034
	SWA3	\$1,322,516	SPD3	\$2,726
	SWA4	\$1,539,977	SPD4	\$5,568
	SWA10	\$0	SPD7	\$1,599
			SPD8	\$273
			SPD10	\$0
Cost recovery levies	SWA1	\$0.0166/kg	SPD1	\$0.0121/kg
	SWA3	\$0.0165/kg	SPD3	\$0.0292/kg
	SWA4	\$0.0172/kg	SPD4	\$0.0089/kg
	SWA10	N/A	SPD7	\$0.0373/kg
			SPD8	\$0.0092/kg
			SPD10	N/A

* Export price data for year ending September 2006

** Deemed value invoices issue for fishing in excess of ACE holdings for 2005-06 fishing season.

Key points:

- The current SQU1T annual deemed value rate is set above the average ACE trading price.
- Port price is lower than the current annual deemed value rate but the average export price from 2006 is well above the deemed value rate suggesting that there is still a profit to be realised from fishing and covering catch through deemed value payments rather than ACE.

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Tuesday 15 May 2007.

Deemed Value Review 2007: WWA3, WWA4 & WWA7

White warehou are predominantly taken as bycatch from target trawl fisheries on hoki and silver warehou, and to a lesser extent, hake, ling and scampi. WWA is mostly caught in 150 to 800 m depth.

A. Overview:

Current deemed value rates:

Interim: \$0.52/kg

Annual: \$1.03/kg

Differential deemed values do not apply.

Key bycatch stocks: N/A

B. Criteria for determining if a review is appropriate:

Criteria	WWA3, WWA4 & WWA7
a) Catch in excess of ACE	Yes – WWA3 (136.1%), WWA4 (139%) and WWA7 (221%) were all over caught during the 2005/2006 fishing year
b) Deemed value payments in previous years	Yes - Deemed value invoices for WWA3 (\$27,045), WWA4 (\$25,697) and WWA7 (\$15,432) were issued at the end of the 2005/2006 fishing season
c) Changes to the port price of the stock	No
d) Request from quota owners	Yes
e) Recent changes to the stocks TACC or the TACC of key bycatch stocks	No
f) Stock has recently entered the QMS	No

White warehou fulfils criteria a), b) and d) above and therefore is considered appropriate for a review.

C. Assessment of the fishery:

C.1 Relationship with associated species²⁴

WWA3, WWA4 and WWA7 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 WWA3, WWA4 and WWA7 on other WWA stocks will need to be monitored.

²⁴ See notes on 'Relationship between target and bycatch stocks – implications for deemed value setting'.

C.2 Assessment and analysis of information sources:

Information source	White Warehou	
Port price	WWA3	1.37
	WWA4	1.37
	WWA7	1.37
ACE trading price (most recent fishing year)	WWA3	\$0.1154/kg
	WWA4	\$0.186/kg
	WWA7	\$0.1513/kg
Export price data*	WWA	\$0.19**
Bycatch: ratios	WWA	
	WWA	
Bycatch: shadow values	WWA	
	WWA	
Previous deemed value invoices**	WWA3	\$27,045
	WWA4	\$25,697
	WWA7	\$15,432
Cost recovery levies	WWA3	\$0.028/kg
	WWA4	\$0.028/kg
	WWA7	\$0.028/kg

* Export price data for year ending December 2006.

** Export statistics show a very low volume of White Warehou is being export but large volumes of Other Warehou. We are investigating if White Warehou is accidentally being recorded as Other Warehou by Customs.

*** Deemed value invoices issue for fishing in excess of ACE holdings for 2005-06 fishing season.

Key points:

- All three WAA stocks (WWA3, WWA4 & WWA7) have had their TACCs exceeded during the 2005/2006 fishing year.
- The port price (\$1.37) is higher than the annual deemed value rate (\$1.03)
- Problems with the export statistics provided by Customs and SeaFIC mean we can't get an accurate picture of the volume and value of WWA being exported.
- In WWA3, one company was invoiced for 87.8% (\$23,758) out of the total \$27,045 in deemed value payments for the 2005/2006 fishing year.
- In WWA4, two companies were invoiced 99.8% of the total \$25,697 in deemed value payments for the 2005/2006 fishing year. The largest single deemed value invoice was for \$15,633 (60.8% of the total deemed value invoices).
- In WWA7, two companies were invoiced 80.4% of the total \$15,432 in deemed value payments for the 2005/2006 fishing year. The largest single deemed value invoice was for \$7,759 (50.3% of the total deemed value invoices).

- This would suggest that applying differential deemed values may be the most appropriate tool in these fisheries.

C.3 Recommended deemed value amendments

To be considered at the Deemed Value Review Group meeting on Tuesday 15 May 2007.