



Final advice on deemed value rates for giant spider crab stocks

Decision Document

MPI Information Paper No: 2015/02

Prepared for Minister for Primary Industries
By the Ministry for Primary Industries

ISBN No: 978-0-477-10574-3 (online)
ISSN No: 2253-394X (online)

March 2015

1	Executive Summary	1
2	Purpose	1
2.1	Background	1
2.2	Fishery description	2
2.3	Rationale for management intervention	3
3	Consultation	3
3.1	Submissions received	4
3.2	Summary of submissions	4
4	Legal Considerations	4
4.1	Section 10 – Information principles	4
4.2	Section 75 – Deemed value rates	4
5	Management Options	5
5.1	Analysis of Options	5
6	Other Matters	6
7	Conclusion	7
8	Recommendations	7
	Appendix 1: Submissions	8

1 Executive Summary

This paper addresses the deemed value rates that apply to all giant spider crab (GSC) stocks. MPI has consulted on two options, which are set out in Table 1 below. The first option was the status quo, retaining the deemed value rates that currently apply. The second option was to reduce the deemed value rates for the fishing year commencing 1 April 2015.

The primary rationale for proposing to reduce deemed value rates is the significant reduction in port price for GSC stocks from \$3.60 per kg during 2013/14 to \$0.20 per kg for 2014/15. The decrease reflects that the port price had, until 2014/15, been based on the expectation of a target fishery developing. However, a decade after GSC stocks were introduced into the quota management system (QMS), no target fishery has eventuated and is unlikely to in the foreseeable future.

GSC is solely taken as bycatch and has no value to the operators of the vessels that catch it. The port price of \$0.20 reflects the current market value of the fishery. In response to the decrease in port price, MPI recommends that you implement Option 2, to decrease deemed value rates commensurately. Option 2 was supported by the three submissions that were received in response to the Consultation Document.

Table 1. Options consulted on for deemed value rates applying to GSC stocks

	Stocks	Interim	Annual (including differential rates based on % in excess of ACE holding)					
			0-20%	20-40%	40-60%	60-80%	80-100%	>100%
Option 1 (status quo)	GSC1							
	GSC3							
	GSC5							
	GSC6A	\$1.62	\$1.80	\$2.16	\$2.52	\$2.88	\$3.24	\$3.60
	GSC6B							
	GSC10							
Option 2 (recommended)	GSC1							
	GSC3							
	GSC5							
	GSC6A	\$0.09	\$0.10	\$0.12	\$0.14	\$0.16	\$0.18	\$0.20
	GSC6B							
	GSC10							

2 Purpose

2.1 BACKGROUND

The GSC stocks were introduced to the quota management system (QMS) on 1 April 2004. At that time the annual deemed value rate for all GSC stocks was set at \$1.80 per kg, which was 60% of the estimated port price of \$3.00 per kg.

Port price is used as an indicator of the market value of a stock. For the GSC stocks, limited data on market value was available prior to QMS introduction, so the port price was estimated using data on the ex-vessel price achieved in target crab fisheries overseas. This rationale reflected the expected interest in a target fishery being developed in New Zealand once GSC was within the QMS.

Prior to the 2007/08 April fishing year, the Minister of Fisheries agreed to amend the deemed value rates for GSC stocks. The annual deemed value rate remained at \$1.80 per kg but the Minister decided to set differential deemed value rates for the first time, which increase the rates applied to catch further in excess of annual catch entitlement (ACE) holdings. These rates started at \$8.00 per kg for catch between 10% and 20% of ACE holdings and reached \$26.00 per kg for catch in excess of 100% of ACE holdings.

The Minister's rationale for setting these high differential deemed value rates was to respond to indications from quota holders that a domestic deep water crab potting fishery would be developed, targeting the live crab market.

Overseas examples of deep water crab potting fisheries produce a very high value live product. It was considered that if such a high value potting fishery were to develop in New Zealand, the annual deemed value rate would not have provided sufficient incentive for fishers to catch within their annual catch entitlement (ACE) holdings. The high differential deemed value rates were designed to provide that incentive.

Quota owners have shown interest in developing a target potting fishery for crabs, including GSC. Progress has been slow however, potentially due to requirements for specialist vessels and gear, the difficulty gaining certainty of supply and ensuring product quality at the level required for live markets.

Prior to the 2010/11 April fishing year, the Minister agreed to further amend deemed value rates for GSC stocks. It was recognised that as a targeted (i.e. potting) fishery had not developed, it was not appropriate to continue basing the deemed value rates on the market value of crabs taken in a fishery that did not exist. The annual deemed value rate remained at \$1.80 per kg but differential deemed value rates were reduced back to a maximum of \$3.60 per kg for catch in excess of 100% of ACE holdings based on the 2010/11 port price. It was noted that if a potting fishery were to develop, the deemed value rates would be reviewed

Between QMS introduction in 2004 and 2013/14, the port price for GSC stocks varied between \$3.00 and \$3.63 per kg. As noted above, the first estimate of port price was based on the expectation of a target fishery developing. In the intervening decade, port price has continued to be based on that initial expectation.

2.2 FISHERY DESCRIPTION

In comparison to the high value product that can be supplied from a target fishery, trawl-caught GSC that is taken as bycatch has no value. Despite the intermittent interest from quota owners in the development of a target fishery, none currently exist for GSC. All catch is currently taken as bycatch in offshore trawl fisheries targeting species such as squid and scampi. The majority of this bycatch is taken in the subAntarctic, to the south of New Zealand.

The trawl vessels that currently take GSC are not set up to be able to process this species on board, or hold any live product. This results in most of the catch being either mealed, discarded under the authority of an MPI observer or reported as eaten on board the vessel. Only around 10% of reported catch taken during the last five years has actually been landed. This means that in most instances when GSC is taken, it has no value to the operator of the vessel that takes it.

There have been instances in recent years when the collective catch of GSC in certain stocks has exceeded both the TACC as well as the sum of available ACE. One of the reasons why this has occurred is that fishers have been encountering aggregations of GSC, particularly when targeting squid south of Stewart Island. Catches of between 2 and 14 tonnes of GSC per individual tow have been reported, which represent between 14% and 74% respectively of the 19 tonne TACC for that stock. Encountering such aggregations has only been reported during the last four or five years. The location of catches suggests that several vessels have encountered the same aggregation and MPI is working with industry to increase their ability to avoid these encounters.

Total deemed values of over \$100,000 were incurred for the GSC5 stock during the 2012/13 and 2013/14 April fishing years. The 2014/15 year will end on 30 March 2015 and deemed values of a similar magnitude will be incurred.

MPI has commissioned research to investigate whether the increase in catch in recent years is consistent with an increase in abundance of this species. Work is not yet finalised and there is no concurrent proposal to review catch limits for GSC stocks.

2.3 RATIONALE FOR MANAGEMENT INTERVENTION

Until the 2014/15 fishing year, very little new information was submitted by industry on the current value of GSC in the absence of a target fishery. As a result of information provided during the 2014/15 port price survey process, the port price (a proxy for market value) for GSC stocks decreased from \$3.60 per kg to a nominal figure of \$0.20 per kg.

The decrease reflects the fact that GSC is taken solely as bycatch and has no value to the operators of the vessels that take this species. The nominal value of \$0.20 per kg will however, ensure that quota holders still make a contribution to the overall costs of fisheries registry and compliance.

The reduction in port price from \$3.60 per kg during 2013/14 to \$0.20 per kg for 2014/15 reflects the fact that GSC is taken solely as bycatch and has no value to operators when taken in this manner. In the continued absence of a target fishery, despite intermittent interest from quota owners, MPI considers it is appropriate that the deemed value rates are set at a level that reflects the true value of the current fishery.

Under the Act, you are able to have regard to the value of the fishery when setting deemed value rates. The large decrease in market value suggests that deemed value rates should be decreased commensurately. To not do so would increase the risk of catch not being reported accurately.

3 Consultation

Decisions to set deemed value rates are made under section 75 of the Act, which means the consultation requirements of section 75A apply. This provision requires consultation with such persons or organisations that you consider represent classes of persons having an interest in the stocks, including Maori, recreational, commercial, and environmental interests.

MPI consulted on your behalf between 20 January and 17 February 2015. MPI followed its standard consultation process of posting Consultation Documents on the MPI website and alerting stakeholders to this through a letter sent to approximately 140 companies, organisations and individuals.

3.1 SUBMISSIONS RECEIVED

Submissions were received from:

- a) South East Resources (2001) Ltd (SERL);
- b) Te Ohu Kaimoana (TOKM);
- c) Sanford Ltd (Sanford).

3.2 SUMMARY OF SUBMISSIONS

All submissions supported Option 2, the proposed reduction in deemed value rates for all GSC stocks.

SERL is a vessel operator and concurs that this species has no commercial value. They state that it is very difficult to secure ACE for the relevant GSC stocks and that the company has incurred significant deemed value costs arising from unwanted GSC catch.

TOKM did not provide rationale for its support for Option 2.

Sanford is a vessel operator and also owns quota across all GSC stocks. They state that their vessels, and others in the squid fishery, are experiencing high rates of GSC bycatch. Sanford also states that GSC has no commercial value. Sanford views reducing deemed value rates as an interim measure while consideration is given to allowing crabs taken by methods other than potting to be lawfully returned to the sea under Schedule 6 of the Act. MPI notes that observers are currently gathering information on survivability of trawl-caught GSC to inform a review of the current management measure, which only permits GSC taken by the method of potting to be lawfully returned to the sea.

Note that copies of submissions are available in Appendix 1.

4 Legal Considerations

4.1 SECTION 10 – INFORMATION PRINCIPLES

Section 10 of the Act requires that you take the following information principles into account:

- a) Decisions should be based on the best available information;
- b) Decision makers should take into account any uncertainty in the available information;
- c) Decision makers should be cautious when information is uncertain, unreliable, or inadequate; and
- d) The absence of, or any uncertainty in, any information should not be used as a reason for postponing or failing to take any measure to achieve the purpose of the Act.

MPI considers that the best available information has been used as the basis for the recommendations herein. This includes recently submitted information on the current value of GSC to vessel operators.

4.2 SECTION 75 – DEEMED VALUE RATES

Section 75(1) of the Act requires that you set interim and annual deemed value rates for every stock in the QMS. When setting these rates, you are required under section 75(2)(a) to take into account the need to provide an incentive for every commercial fisher to acquire or maintain sufficient ACE each fishing year that is not less than the total catch limit of the stock taken by that commercial fisher.

Section 75(2)(b) specifies the matters you may have regard to when setting deemed value rates for a stock. These are:

- The desirability of commercial fishers landing catch for which they do not have ACE;
- The market value of ACE for the stock;
- The market value of the stock;
- The economic benefits obtained by the most efficient commercial fisher, licensed fish receiver, retailer, or any other person from the taking, processing, or sale of fish, aquatic life or seaweed;
- The extent to which catch of that stock has exceeded or is likely to exceed the TACC for the stock in any year; and
- Any other matters you consider relevant

Section 75(3) specifies that the annual deemed value rate must be greater than the interim deemed value rate. Furthermore, you may choose to set, under section 75(4), differential deemed value rates. Section 75(5) allows you to set different deemed value rates for fish landed in the Chatham Islands, reflecting the unique marketing conditions of those landings. Section 75(6) requires that you should not have regard to personal circumstances or set separate deemed value rates in individual cases. Under section 75(7) you may vary deemed value rates to take effect at the start of the next fishing year. Before setting deemed value rates you must consult with stakeholders and tangata whenua that have an interest in the stock, as required by section 75A.

5 Management Options

The options presented in this decision document are the same as those consulted on and are set out in Table 1 in the Executive Summary.

5.1 ANALYSIS OF OPTIONS

5.1.1 Option 1

Under Option 1, the status quo would remain and there would be no change to the deemed value rates for GSC stocks. This option was not supported by any submission and is not recommended by MPI.

Retaining current deemed value rates would continue to provide the incentive for fishers to balance catch with ACE, required under section 75(2)(a). However, it does not take into account the current market value for GSC (provided for under section 75(2)(b)) as reflected by the recent change in port price. In addition, continuing to set the deemed value rates at a level so much higher than the market value of the stock may be providing incentives for fishers to avoid accurate reporting of catch due to the associated costs.

Retaining current rates would also continue to distort the ACE market. As noted in SERL's submission, ACE prices reflect what fishers are prepared to pay to avoid paying deemed values rather than reflecting the value of the catch.

5.1.2 Option 2 (recommended)

Under Option 2 the deemed value rates for all GSC stocks would be reduced. All submissions supported this option.

This option would continue to provide a financial incentive for fishers to balance catch with ACE but would also have regard to the current market value for GSC. Implementing this option would reduce the distortions in the GSC ACE market that are associated with the current deemed value rates.

GSC is a species for which there is little information on abundance. Fisher-reported catch is the primary source of information upon which any assessment of abundance can be made. MPI considers that reducing deemed value rates will contribute to catch being reported accurately, which is a matter you can have regard to under section 75(2)(b)(vi) of the Act (any other matters you consider relevant).

Option 2 is MPI's recommended option.

6 Other Matters

The Deemed Value Guidelines set out eight principles for setting deemed value rates as part of an operational policy to inform the advice that MPI provides to you on setting deemed value rates. These eight principles are:

1. Deemed value rates must generally be set between the ACE price and the landed price
2. Deemed value rates must generally exceed the ACE price by transaction costs
3. Deemed value rates must avoid creating incentives to misreport
4. Deemed value rates for constraining bycatch species may be higher
5. Deemed value rates must generally be set at twice the landed price for high value single species subject to international catch limits
6. Deemed value rates for Chatham Island landings may be lower
7. Interim deemed value rates must generally be set at 90% of the annual deemed value rate
8. Differential deemed value rates must generally be set

Reducing the deemed value rates as recommended is consistent with the principles set out in the Guidelines. In particular, an annual deemed value rate of \$0.10 per kg is less than the landed price (principle 1) bearing in mind that information on ACE prices will not become available until after 1 April 2015. The reduction in deemed value rates will also avoid incentives to misreport (principle 3).

MPI will continue to monitor GSC catch. In the event of a potting fishery developing the deemed value rates would be reviewed.

As noted earlier, GSC generally has no value to the operators of the vessels that catch it. Rather than catching and discarding this species, it is desirable for both operators and MPI that vessels avoid catching GSC in the first place. One initiative addressing this has commenced during the 2015 squid season. The initiative is led by the Deepwater Group Ltd (DWG), which is the industry organisation that represents owners of quota in the deepwater stocks. DWG is encouraging better communication between vessels to ensure skippers are made aware of the presence of crab aggregations and can avoid a specific location if an aggregation has been reported. This will reduce the likelihood of multiple vessels fishing the same aggregation, which is believed to have occurred in the past.

The submission from SERL requested that the reduction in deemed value rates for GSC stocks take effect from 1 April 2014, rather than 1 April 2015 as proposed. This request falls outside the scope of measures that can be considered. Section 75(7) of the Act requires any variation in deemed value rates to take effect on the first day of the next fishing year for the stock concerned. Legislation does not provide for variations in deemed value rates to take effect retrospectively.

7 Conclusion

The port price for GSC stocks decreased from \$3.60 per kg during the 2013/14 financial year to \$0.20 per kg for 2014/15. The decrease reflected the fact that port prices had, until 2014/15, been based on the expectation of a target fishery developing. However, a decade after GSC stocks were introduced into the QMS, a target fishery has not eventuated. GSC is solely taken as bycatch and has no value to the operators of the vessels that catch it. The port price of \$0.20 reflects the current situation.

In response to the >90% reduction in port price, MPI proposes that the deemed value rates for all GSC stocks be decreased. Specifically, MPI proposes that the basic annual deemed value rate be reduced from \$1.80 to \$0.10 per kg for the fishing year commencing 1 April 2015. MPI's full recommendations concerning this Decision Document are set out in the Cover Briefing document.

8 Recommendations

MPI recommends that you:

- a) **Note** the contents of this Decision Document when making your decisions set out in Cover Briefing B14-377.

Noted

Scott Gallacher
Deputy Director-General
Regulation & Assurance
for Director-General

Hon Nathan Guy
Minister for Primary Industries

/ / 2015

Appendix 1: Submissions

- South East Resources (2001) Ltd
- Te Ohu Kaimoana
- Sanford Ltd

From: Murray Williamson [<mailto:murray@serl.co.nz>]
Sent: Wednesday, 21 January 2015 10:25 a.m.
To: FMSubmissions
Subject: Review of deemed value rates for giant spider crab stocks

Dear Sir / Madam

Congratulations on your initiative to review the D/V rates for GSC.

Attached is a letter sent 3rd April 2014 outlining the situation my company suffered re the current extreme GSC D/V rates. The attached letter is for your background information only and requested that it not release under the OIA as it contains private / personal catch information

We support the proposed recommendations and suggest that there is justification for them to be further lowered to an annual rate of \$0.10

There is NO commercial fishery and these GSC have NO commercial value caught and frozen. Our vessels record a minimal amount "Eaten" on board and the balance discarded under the authority of MPI Observer.

It is extremely difficult to secure GSC ACE pre catch or fishing and once in the deemed value situation the market forces provides unreasonable rates by the quota share holder / ace owner. Our attached letter records that we secured 32% of the GSC5 TACC and yet suffered in excess of \$90,000-00 D/V costs.

As GSC5 is a by catch of the Squid fishery **is it at all possible this review could be effective 1st April 2014** as the situation may be worse this season. The squid season is yet to start and GSC5 ACE is unable to be secured and we are already in deemed value.

Quota Share holders are able to leverage extreme and unrealistic values for GSC5 ACE under the present D/V rates of GSC

Regards

Murray Williamson
Director
South East Resources (2001) Limited

17 February 2015

To Ministry Primary Industries

Tena koe,

RE: REVIEW OF SUSTAINABILITY CONTROLS FOR THE BOUNTY PLATFORM SOUTHERN BLUE WHITING FISHERY (SBW6B) AND REVIEW OF DEEMED VALUE RATES FOR GIANT SPIDER CRAB STOCKS

Introduction

This paper sets out the views of Te Ohu Kaimoana (Te Ohu) on Ministry of Primary Industry (MPI) proposals relating to Southern Blue Whiting (SBW6B) and Giant Spider Crab (GSC) stocks. In preparing this submission we have sought and received feedback from Iwi Mandated Organisations. We have also taken into account the Deep Water Group submission on SBW6B. We support their submission and acknowledge the efforts they have made in consulting with quota owners and Iwi Asset Holding Companies.

REVIEW OF SUSTAINABILITY CONTROLS FOR THE BOUNTY PLATFORM SOUTHERN BLUE WHITING FISHERY (SBW6B)

Background

The 2014 acoustic survey indicates that biomass has continued to decline and is below the management target of 40% B0, and below the level that can support the maximum sustainable yield. The 2014 survey also indicated that there has been a very low recruitment to the fishery since 2007. Accordingly, MPI considers it is necessary to reduce the TAC to ensure harvest levels remain sustainable given the lower stock biomass. MPI believe a reduction will return the TAC closer to the level that it was set prior to the very large biomass increase in 2007. This increase was a result of recruitment of a single very strong year class.

Proposals

All of the options proposed by MPI result in decreased fishing effort and reduced earnings. See Table 1 below. According to MPI estimates which are based on 2012 export prices option 1 will result in a loss of export earnings of approximately \$4.1m, option 2 \$5.6m, and option 3 \$7.0m.

TE OHU KAI MOANA TRUSTEE LIMITED
Trustee for the Maori Fisheries Trust
Protecting Maori fisheries assets for future generations

Level 1 | Revera House
48 Mulgrave Street
PO Box 3277
Wellington | New Zealand
Phone: 64 4 931 9500
Fax: 64 4 931 9518
Email: tari@teohu.maori.nz
Web: www.teohu.maori.nz

Table 1: Proposed TAC, TACC and allowance options for SBW6B

Allowances					
	TAC(t)	TACC(t)	Customary (t)	Recreation (t)	Other sources mortality
Current settings	7,000	6,860	0	0	140
Proposed Options					
Option 1	4,000	3,920	0	0	80
Option 2	3,000	2,940	0	0	60
Option 3	2,000	1,960	0	0	40

Te Ohu’s position on SBW6B stocks

In relation to the setting of a TAC and TACC Te Ohu supports option 2 to reduce the TAC to 3,000t, reduce the TACC to 2,940t, reduce other mortality to 60t, and retain the non-commercial allowances at 0. In relation to deemed values, we support retaining them at current levels.

REVIEW OF DEEMED VALUE RATES FOR GIANT SPIDER CRAB STOCKS (GSC)

Background

MPI is proposing a reduction in deemed values for GSC stocks. When GSC was brought into the QMS in 2004 the deemed values were based upon 60% of the estimated port price of \$3.00/kg. At the time the Minister considered the fishery would be developed so the deemed value was set high to incentivise quota owners to catch within their ACE holdings.

The reality however is GSC has never developed as a target fishery and the only stocks that have been landed have been as bycatch. Furthermore, the \$3.00/kg port price was never realistic because of the poor condition of GSC stocks – essentially there is little meat inside the crabs and they are worth very little. Crab quota owners have instead focused their attention on developing king crab fisheries because it is considered to have greater commercial potential.

The existing annual deemed value rate of \$1.80/kg is 50% of the 2013/14 port price of \$3.60/kg.

Proposals

MPI proposes that the annual deemed value rate for all GSC stocks for the fishing year commencing 1 April 2015 be set at \$0.10 per kg, which is 50% of the 2014/15 port price of \$0.20 per kg. The current and proposed deemed value rates for all GSC are set out in Table 1 below.

Table 1: Current and proposed deemed value rates for all GSC stocks

Annual (including differential rates based on % in excess of ACE holding)								
	Stocks	Interim	% in excess of ACE holding					
			0-20%	20-40%	40-60%	60-80%	80-100%	>100%
	GSC1							
	GSC3							
	GSC5							

	GSC6A	\$1.62	\$1.80	\$2.16	\$2.52	\$2.88	\$3.24	\$3.60
	GSC6B							
	GSC10							
	GSC1							
	GSC3							
	GSC5							
	GSC6A	\$0.09	\$0.10	\$0.12	\$0.14	\$0.16	\$0.18	\$0.20
	GSC6B							
	GSC10							

Te Ohu's position on GSC deemed values

Te Ohu support the proposal to set the deemed value rate for all GSC stocks for the fishing year commencing 1 April 2015 at \$0.10 per kg. We also support differential annual deemed value rates continuing to be based upon the standard schedule (i.e. increasing to a maximum of \$0.20 per kg for catch more than 100% in excess of ACE Holdings).

Please feel free to contact the writer on any matters concerning this submission.

Nāho ora mai



Alan Riwaka
Senior Fisheries Management Advisor



Sent electronically to: FSubmissions@mpi.govt.nz

February 2014

REVIEW OF DEEMED VALUE RATES FOR GIANT SPIDER CRAB (GSC) – ALL STOCKS

Submission by Sanford Limited

Thank you for accepting this submission by Sanford Limited.

Sanford supports reducing the deemed value to \$0.10 per kilo.

Sanford holds quota across GSC 1, 3, 5, 6A, and 6B. Our most significant holding is in 6A where we hold more than 40% of the quota share. Sanford supports the reduction of deemed value penalties across all FMAs.

Giant spider crab has no commercial value.

The crab is a bycatch of the squid fishery. In our experience stock biomass swings are cyclic, we and others in the fishery are currently occurring very high numbers.

Sanford supports reducing the deemed value to \$0.10 per kilo from 1 April 2015, while acknowledging that this is an interim measure while the Schedule 6 returns to the sea for cabs taken by methods other than potting can be considered.

We hope that you view our application favourably and we respectfully await your decision.

Sincerely

Alison Undorf-Lay
Sanford Industry Liaison Manager
On behalf of the Directors of the Deepwater Group

22 JELLCOE ST, AUCKLAND 1010, NEW ZEALAND.
PO BOX 443, AUCKLAND 1040. EMAIL info@sanford.co.nz
TEL +64 (9) 379 4720. FAX +64 (9) 309 1190.
www.sanford.co.nz