



PUBLIC CONSULTATION PAPER:

Reform options for the spanner crab component of the NSW Ocean Trap and Line Fishery



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Public consultation paper: Reform options for the spanner crab component of the NSW Ocean Trap and Line Fishery

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More information

www.dpi.nsw.gov.au/fisheries/commercial/reform

Acknowledgments

Cover photo: spanner crabs taken by Miriam Vandenberg

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Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (March 2014). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of the Department of Primary Industries or the user's independent adviser.

Readers guide

This paper includes reform options for comment that are specific to the spanner crab component of the NSW Ocean Trap and Line Fishery (OTLF).

Anyone with an interest in the spanner crab share classes should read the options presented in this paper and, where possible, provide feedback.

The following provides an overview of the documents available:

General information paper	Provides general information about the reform program and issues applicable to all reform fisheries. A ‘must read’ for everyone to understand the background. The paper is titled “ <i>General information relating to the reform program and reform options for the NSW commercial fisheries</i> ”
Fisheries options papers	These contain information about the options that have been shortlisted for specific fisheries or share classes. They include possible linkages, total catch/effort levels and potential changes to existing restrictions, along with the advantages and disadvantages of each option. A ‘must read’ if you hold shares in, or have an interest in, these fisheries.
This paper you are reading	
Technical paper	A separate paper has been prepared detailing how the proposed total catch/effort levels have been calculated. The paper is titled “ <i>Setting the Interim Total Commercial Access Level (ITCALs)</i> ”.
Submission forms	Submission forms are available for each of the fisheries options papers. Relevant forms will be mailed to all shareholders and will also be available on the reform webpage: www.dpi.nsw.gov.au/fisheries/commercial/reform

A short summary document is also available summarising the main points contained in this paper. It is important, however, to include the level of detail in this paper to ensure transparency and to allow shareholders to understand the rationale behind the various proposals.

NOTE:

This spanner crab paper provides specific issues that DPI is seeking feedback on. These are detailed in red boxes throughout this paper and are included in the Ocean Trap and Line submissions form. It is important to note however, that this should not limit any feedback on the overall options; comments are welcome on all aspects of the reform options.

The Ocean Trap and Line Fishery submission form should be used by those wishing to comment on the spanner crab component of the fishery.

Have your say

A key part of the Reform Program is getting valuable feedback and ideas from industry and interested stakeholders. Constructive feedback to help work out the best overall approach will assist in shaping future management arrangements.

The complexity of the options laid out in this paper are acknowledged, as is the difficulty some fishers may have in working through the issues covered. If you require assistance in understanding the options presented or in developing a submission please contact the relevant Fisheries Manager, or the Industry Liaison Manager on the contact details provided below.

DPI staff will be visiting regional ports over the consultation period, during which time commercial fishers will have one-on-one opportunities to discuss questions and issues.

A submission form is available to provide comments. Alternatively, you may submit your comments in another form, such as a letter or summary of your views on each of the reform packages presented in this paper.

Note that submissions may suggest variations to the options presented in the fisheries options papers, provided they are within the broad scope of what the NSW Government approved and announced in November 2012¹ and are consistent with the reform program objectives described above.

However you choose to provide comment, it is important to note that subsequent decisions will be based on merit, rather than numbers for and against particular options.

The closing time for comments is 8am Monday 19th May, 2014.

Send your response to:

Mail: PO Box 4291, Coffs Harbour, NSW, 2450

Fax: (02) 6391 4726

Email: commfish.wg@dpi.nsw.gov.au

Following the closing date, a summary of the submissions will be prepared and made available on the DPI website. In arriving at decisions, the Minister will consider the issues raised in submissions, the views of key stakeholder groups, DPI's advice and final recommendations from the independent Structural Adjustment Review Committee (SARC).

For more information on the NSW Commercial Fisheries Reform Program visit www.dpi.nsw.gov.au/fisheries/commercial/reform

Or contact Commercial Fisheries Management on (02) 6691 9684.

¹ See www.dpi.nsw.gov.au/__data/assets/pdf_file/0005/448187/Govt-response-to-independent-comm-fisheries-review.pdf

Foreword

The spanner crab component of the Ocean Trap and Line Fishery (OTLF) currently contains two separate share classes that allow the taking of spanner crabs between the NSW/Queensland border and Korogoro Point (Hat Head) on the mid-north coast of NSW.

The reform options presented in this paper focus on two important components of the broader reform program:

1. creating a stronger link to resource access; and
2. adjusting existing restrictions which have built up over many years and constrain efficiency.

The key objectives of the reform program are to:

- improve the long-term viability of the NSW commercial fishing industry;
- improve the strength and value of shareholders' access rights (i.e. shares); and
- provide shareholders with improved opportunities and flexibility to tailor their access.

The reform options in this paper have been developed by DPI having regard to:

- the Commercial Fisheries Reform Program as approved by the NSW Government in 2012 (after consideration of the *Independent Review of NSW Commercial Fisheries Policy, Management and Administration*);
- ideas submitted by shareholders in writing and through discussions with fisheries managers;
- views from Spanner Crab Share Linkage Working Group (SCSLWG) put forward at several face-to-face meetings; and
- advice and recommendations of the Structural Adjustment Review Committee (SARC).

The outcomes of meetings of the SCSLWG and the SARC throughout 2013 and early 2014 provide insight into the many options and issues considered in the lead-up to developing the reform options in this paper and are available on the NSW DPI website at:

Share linkage working groups (including spanner crab shareholders) webpage:

www.dpi.nsw.gov.au/fisheries/commercial/consultation/commercial-fisheries-working-groups/spanner-crab-share-linkage-working-group

SARC webpage: www.dpi.nsw.gov.au/fisheries/commercial/reform/sarc

Acronyms

DPI	NSW Department of Primary Industries
GVP	Gross Value of Production ²
ITCAL	Interim Total Commercial Access Level
ITQ	Individual Transferable Quota
OTLF	Ocean Trap and Line Share Management Fishery
SCSLWG	Spanner crab Share Linkage Working Group
SARC	Structural Adjustment Review Committee
TACC	Total Allowable Commercial Catch

² Calculated at first point of sale only and using Sydney Fish Market average prices.

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Introduction

The NSW Ocean Trap and Line Fishery (OTLF) includes six share classes, however, this options paper covers only two of these: the spanner crab (northern zone) share class and spanner crab (southern zone) share class.

This paper seeks your feedback on two primary reform options for these share classes:

- **Option 1:** a state-wide catch quota (ITQ) system;
- **Option 2:** a catch quota for the northern zone share class, and a mixed management control approach for the southern zone.

Changing management restrictions to improve business and operational efficiency is a key aspect of the broader reform program. In this document, the potential changes to current management restrictions for each linkage option are also presented for consideration.

The ability to implement the potential changes to current restrictions generally increases with the strength of the linkage option, with minimum shareholdings being the weakest form of linkage and catch quota being the strongest (see the general information paper for further information).

To assist in considering the options and providing feedback, a number of advantages and disadvantages have been identified for each option, and these are contained at the back of this paper.

Please note: It is important that the reform options are considered within the overall structure of the fishery. Those unfamiliar with this fishery, including shareholders unfamiliar with current numbers of shareholders and endorsements and the distribution of shares in each share class, are encouraged to read the 'Overview of the NSW Ocean Trap and Line Fishery' in Appendix 1.

Option 1: Catch quota for spanner crabs

This option outlines the process for, and possible outcomes of, having a single state-wide spanner crab share class which would be managed by a catch quota (or individual transferable quota – ITQ). This would involve setting an Interim Total Commercial Access Level (ITCAL) which would be converted to a Total Allowable Commercial Catch (TACC) in over three years' time.

This option requires a standardisation of the existing shares to make them equivalent.

It is designed to provide the strongest link between shares held and resource access and provide the most efficient approach to management and administration of this fishery sector.

Proposed ITCAL

Like a TACC, an ITCAL would be the maximum amount of catch that can be landed by all spanner crab endorsement holders over a given fishing period. The ITCAL would stay in place for three years, unless sustainability concerns arise that cannot be foreshadowed at this point.

For additional information about ITCALs and how they have been set, refer to the general information paper and the separate technical paper titled “*Setting the Interim Total Commercial Access Levels (ITCALs)*” which is available on DPIs reform webpage.

The proposed state-wide ITCAL for spanner crabs is **169.2 tonnes** (whole wet weight).

Justification

- The ITCAL has been calculated using the 15 year average of total spanner crab catches from 1997/98 to 2011/12, thereby taking into account inter-annual variability of catches.
- There are no sustainability concerns for the stock. The stock is shared with Queensland and it is likely that most of the recruitment comes from Queensland waters.
- This ITCAL, being above more recent catch levels, will help to provide time for fishers to adjust their shareholdings to reflect their desired level of access.
- The ITCAL does not act to reduce levels of production compared with recent year's catches.
- The SCSLWG noted that a range of market driven influences have affected their ability to catch more spanner crabs, such as needing to get their product to co-ops earlier (meaning less opportunity to pull more dillies) and market share being reduced due to Queensland product. While these circumstances are unlikely to change, the proposed ITCAL provides the industry with additional flexibility should new opportunities arise.

Determining the spanner crab quota available to shareholders

Firstly, the spanner crab ITCAL needs to be divided between the currently separately managed zones. From 1997/98 to 2011/12 the southern zone has averaged nearly 3% of the total NSW spanner crab catch. Under this option, the southern zone would be allocated 3% of the ITCAL.

Table 1. Calculation of spanner crab quota per share for each fishing zone

Sector	ITCAL	Total shares	Quota per share
Northern zone	164,124 kg	1,760	93.25 kg per share
Southern zone	5,076 kg	345	14.71 kg per share

The spanner crab ITCAL available to each of the zones would then need to be allocated amongst shareholders, proportional to the number of shares held, as set out in the “*potential quota*” columns in Table 2.

Table 2. Calculation of spanner crab quota per current shareholding for each fishing zone

Shareholding	Northern zone		Southern zone	
	Potential quota (kg)	Quota as a % of the ITCAL	Potential quota (kg)	Quota as a % of the ITCAL
5	466.25	0.276		
10	932.50	0.551		
15	1398.75	0.827		
20	1865.00	1.102		
25			367.75	0.217
35	3263.75	1.929		
40	3730.00	2.204	588.40	0.348
45	4196.25	2.480		
50	4662.50	2.756		
55	5128.75	3.031		
65	6061.25	3.582		
85	7926.25	4.685		
95	8858.75	5.236		
100	9325.00	5.511		
130	12122.50	7.165		
160	14920.00	8.818		
180	16785.00	9.920		
240	22380.00	13.227		

So that spanner crabs can be taken by all shareholders in all NSW coastal waters, a new share class would need to be created and new shares issued. It is proposed to base the allocation of the new shares on the existing spanner crab shares (but using a method to standardise those shares so they are equivalent).

The following three steps would be used to calculate the new shareholdings:

1. Calculate the percentage that each existing shareholders quota would be as a proportion of the 169.2 t ITCAL – as set out in the “*Quota as a % of the ITCAL*” column in Table 2;
2. Assign an arbitrary number of new shares to be allocated – e.g. 100,000 shares in total.
3. For each individual shareholding, apply the “*Quota as a % of the ITCAL*” to the total number of new shares.

For example, in the northern zone, a shareholder with 5 shares is allocated 466.25 kg. This quota represents 0.276% of the 169.2 t ITCAL. In the new ‘spanner crab’ share class, 0.276% of the 100,000 shares is 276 shares so that would be that shareholder’s allocation of new shares.

When the new management regime for the ‘spanner crab’ share class is ready to commence, the existing spanner crab (northern zone) and spanner crab (southern zone) share classes could, subject to legislative amendments proceeding, be removed as they would become redundant.

Table 3. New spanner crab share class – share allocation

Existing Shareholding Nthn zone	Potential quota (kgs)	Allocation of new shares
5	466.3	276
10	932.5	551
15	1398.8	827
20	1865.0	1102
35	3263.8	1929
40	3730.0	2204
45	4196.3	2480
50	4662.5	2756
55	5128.8	3031
65	6061.3	3582
85	7926.3	4685
95	8858.8	5236
100	9325.0	5511
130	12122.5	7165
160	14920.0	8818
180	16785.0	9920
240	22380.0	13227
Sthn zone		New
25	367.8	217
40	588.4	348

If any existing spanner crab shares are surrendered for cancellation prior to implementing the quota system, for example during the exit grant process, the amount of quota per share available to those that remain would be greater than that estimated above.

Minimum shareholdings in conjunction with reform packages

The SCCLWG supported a 40-share minimum shareholding (under the current shareholdings) for new shareholders to be able to operate in the fishery. This 40-share minimum also currently applies to original shareholders who dispose of, or forfeit, shares.

The SCCLWG also supported a 5-share minimum in the northern zone and a 25-share minimum in the southern zone for original shareholders (as currently applies). Given that Option 1 comprises one share class, **feedback is sought** on:

1. Should minimum shareholdings continue to apply under this option, and
2. if so, what should the minimum level(s) be given that 40 existing northern zone shares would equal 2204 of the new shares and 25 southern zone shares would equal 217 of the new shares (assuming 100,000 new shares were allocated).

One option, consistent with the SCCLWG advice and current transfer rules, is for new entrants and any original shareholders who dispose of, or forfeit, shares after the implementation of this system to be required to hold a minimum of 2204 shares to be eligible for an endorsement. Original shareholders (those allocated new shares at the commencement of the new share system) could be required to have a minimum shareholding of 217 shares.

Fishing period

A fishing period is the period during which a shareholder may use his or her quota. The SCSLWG supported implementing an annual fishing period that is set for each year of two years, particularly if this was a cheaper option. That is, TAC Committee would meet every second year to recommend an annual TACC that would apply for each the subsequent two years. This was seen as a practical step that is generally consistent with the approach taken in Queensland, although Queensland does have a mid-cycle review (after one year) and it is contingent on the stock being stable (i.e. not highly fluctuating from year-to-year).

Feedback requested (in addition to comments on the broad options)

The SCSLWG requested that a number of options for the starting date of each fishing period should be provided to stakeholders for comment. The starting date options for any given year include:

1. 1 July,
2. 1 August, or
3. 1 February.

When providing feedback on the starting date options in your submission, please consider when the optimal time to commence a TACC cycle would be. Is it best to have the fishing period start at the onset of the peak spanner crab season, or during the low season (e.g. when the female closure is in place)?

How shareholders could use their quota and acquire additional quota

Information on the use of quota and how to acquire additional quota, along with how quota use will be monitored is provided in the general information paper "*General information relating to the reform program and reform options for the NSW commercial fisheries*".

Note that the SCSLWG supported having no restrictions on spanner crab quota transfers (i.e. no limits on how much quota can be acquired during a fishing period).

Managing spanner crab catches in other fisheries

Spanner crabs are also caught in the NSW Ocean Trawl Fishery and the Recreational Fishery.

Ocean Trawl endorsement holders take less than 0.1% of the total spanner crab catch. Daily limits currently apply for Ocean Trawl endorsement holders.

The current bag limit for recreational fishers is 10 spanner crabs.

Any adjustment to the above will need to be done in consultation with the relevant stakeholders and will likely involve the independent TAC Setting & Review Committee. It is not proposed to adjust these rules now. However, just because another fishery that catches spanner crabs doesn't implement a quota system, doesn't mean that catches in those fisheries will be unconstrained. DPI's performance monitoring framework will be used to monitor catches in other fisheries with a view to ensuring those levels do not unduly increase and undermine the value of the shares subject to a catch quota.

Spanner crabs are also quota managed in the main part of the Queensland spanner crab fishery.

Option 2: Catch quota for the northern zone and mixed controls for the southern zone

Option 2 involves implementing an ITQ scheme for spanner crabs in the northern zone (as in Option 1 but without creating a new share class), while implementing a mix of different input and output controls in the southern zone. The following package of increased or adjusted controls is proposed as an option for the management of spanner crabs in the southern zone:

1. decrease the dilly size from 1.6 m² to 1 m²;
2. apply a spanner crab fishing closure from the Sandon River to Yamba;
3. apply a daily spanner crab catch limit of 150 kg;
4. apply, in addition to the daily limit, an annual cap per shareholder of 1 tonne per 20 shares (1 share = 50 kg) that is to be reviewed at the same time as the quota review;
5. move the southern zone fishery boundary from Hat Head to the Victorian border; and an
6. apply an increased minimum size of spanner crabs from 93 mm to 100 mm.

Under Option 1, the ITCAL has been proposed at 169.2 tonnes. If each southern zone 40-share shareholder was to be allocated a 2 tonne cap, and the 25-share southern zone shareholders allocated a 1.25 tonne cap, that would leave 151.95 tonnes available to be allocated to northern zone shareholders (see Table 4).

Table 4. Allocation of ITCAL between zones

Sector	ITCAL	Total shares	Allocation
Northern zone	151,950 kg	1,760	86.34 kg per share
Southern zone	17,250 kg	345	2 tonne cap for 40 shares, 1.25 tonne cap for 25 shares

Any adjustment to the abovementioned caps in the southern zone would impact on the northern zone quota allocations under the ITCAL regime. Equally, any adjustment in the ITCAL level (or TACC level in future) would impact on the southern zone cap (i.e. cap would not be pegged at 50 kg per share).

Fishing period

The considerations over the fishing period for Option 2 are the same as for Option 1 above.

How shareholders could use their quota and acquire additional quota

Information on the use of quota and how to acquire additional quota, along with how quota use will be monitored is provided in the general information paper “*General information relating to the reform program and reform options for the NSW commercial fisheries*”. However, the trading of shares and quota would be restricted to the zones the shares are relevant to. That is, a northern zone shareholder could not transfer quota to the southern zone, and vice versa.

Feedback requested (in addition to comments on the broad options)

The SCSLWG supported removal of boat length restrictions for the spanner crab component of the Ocean Trap and Line Fishery (OTLF) only. This is theoretically possible since the fishery will be managed by quota. However, most spanner crab shareholders also hold endorsements in other share classes within the OTLF. If boat length restrictions are maintained in the OTLF, it may not be practical to remove them for spanner crab fishing only.

Potential changes to current restrictions

Each of the reform options presented above is coupled with potential changes to current restrictions or controls, forming the overall reform packages for consideration. Once share linkages are in place, a number of controls can be removed to potentially improve operational efficiency and profitability, and to reduce red tape and associated costs.

Table 5 identifies the potential changes associated with each of the reform options (indicated by ticks). Stronger linkage options (catch quota) include more controls for potential removal than weaker options (minimum shareholdings). A tick associated with a proposal indicates a higher likelihood that the proposal could be implemented. Absence of a tick indicates a lower likelihood that the proposal could be implemented with the reform option indicated.

Table 5. Potential changes to current management arrangements

Potential changes to current management arrangements for consideration with relevant Reform Options	Option 1	Option 2	
		Northern	Southern
Number of dillies: Remove the restrictions on the number of dillies that can be used under each spanner crab endorsement without crew. Currently 20, to be increase to 30 (same as for those that use crew) ³ .	✓	✓	✓
Boat size limit: Remove the restrictions of the size of the boat (length) required to be endorsed to fish for spanner crabs. Note that fishers with other OTLF endorsements may not be able to take advantage of this relaxation of restrictions if the same restrictions are not removed from all the share classes they may hold.	✓	✓	
Fishery boundary: Remove internal fishery boundary and open the fishery to state-wide access.	✓		

³ Shifting to ITQs under Option 1 rather than input controls (number of endorsements and gear limits) means there is theoretical justification for removing dilly limits all together. However, previous research has demonstrated that limb damage to spanner crabs can significantly reduce their survivability when discarded. There is a potential risk that, if dilly limits were removed completely at this stage, some operators would use many more dillies than are currently permitted and this might lead to reduced care in untangling crabs from the nets, causing increased limb damage. The relaxation of gear limits to allow all endorsement holders to use 30 dillies is seen as a first step towards increasing fisher efficiency while still maintaining a suitable level of precaution. The need for dilly limits can be reviewed in the future.

Comparison of reform options presented

To assist in considering the options and providing feedback, a number of advantages and disadvantages have been identified by DPI and the SLWGs (including the SCSLWG). These are outlined in the tables below (Table 6 and 7).

State-wide catch quota (ITQ) system for spanner crabs

Table 6. Advantages and disadvantages associated with Option 1

Advantages	Disadvantages
<p>Strongest form of linkage since ITQs directly secure a share of a relevant stock. Enhanced security of access means:</p> <ul style="list-style-type: none"> Competing shareholders cannot simply increase effort by working more – they must invest in shares to acquire additional quota. Shareholders have a direct link between their shares and their access – the more shares you hold, the more quota you have. 	<p>Costs more to implement than the current minimum shareholding scheme – because of the creation of a new class of share, quota allocation, monitoring and compliance processes.</p>
<p>Shareholders invest autonomously.</p>	<p>May result in the discarding of marketable crabs (including through high-grading, grading males/females), however, allowing the transfer of quota, as proposed above, is one way to minimise the risk of excessive dumping.</p>
<p>Shareholders can tailor their shareholdings (subject to any minimum shareholdings that may apply) to suite their preferred access levels and fee liability – this will be particularly important for diversified fishers with diverse shareholdings.</p>	<p>Does not address the view of southern zone fishers who believe that their shares should provide them with the equivalent quota allocated to northern zone fishers.</p>
<p>Contributes towards higher (potentially optimum) asset (i.e. share) values – because of the above, whether direct or indirect.</p>	
<p>Enhanced opportunity to remove or relax input controls.</p>	
<p>Eliminates the issue of latent effort impacting shareholders who rely heavily on access spanner crabs.</p>	
<p>Simplified management regime (and cost) as there would be only one spanner crab share class managed through the extent of the state and removes unnecessary 'lines on the water'</p>	
<p>Consistent with the original intent of issuing shares in direct proportion to spanner crab catch.</p>	
<p>Provides industry with the ability to fish potential new grounds by removal of the southern boundary at Hat Head.</p>	
<p>Improved community confidence that the fishery is operating at sustainable levels and that catch can be managed if a sustainability issue were to arise. This may lead to greater community and government support (i.e. a stronger 'social licence') for proposed changes/streamlining to benefit fishers.</p>	

Catch quota for northern zone, mixed controls in the southern zone

For the northern zone, the same benefits as listed under Option 1 would apply (Table 6).

Table 7. Advantages and disadvantages associated with Option 2

Advantages	Disadvantages
Maintains the current share classes without the need to create a new share class and issue new shares.	Maintains the current management complexity of having two different management regimes for a single species where the same species is taken and gear is used.
Realises the intent of an ITQ system in the northern zone with minimal disruption to the southern zone.	Having different management regimes will increase management, administration and compliance costs.
Southern zone operators receive a higher quota allocation than under Option 1. However, this comes at the expense of northern zone operators.	The additional area south of Hat Head would be available to all endorsement holders. Potential for compliance difficulties noting they would be used to operating under different arrangements.
	There may not be any consolidation of shares in the southern zone. The proposed annual catch cap per shareholder has not been caught by fishers in this zone for many years.
	Reduces share trading potential since shares cannot be freely traded between the two zones

Management costs

The costs associated with each of the options are difficult to determine given that a large number of factors will influence them. An indication has been provided of the relative costs of the options in the advantages and disadvantages tables above. Refer to the general information paper for further information about estimating management costs.

Appendix 1: Overview of the NSW Ocean Trap and Line Fishery

The Ocean Trap and Line Fishery (OTLF) operates in NSW ocean waters between the Queensland and Victorian borders. The fishery extends east to the 4,000 m depth contour (approx. 60 - 80 nautical miles from the coastline).

The fishery, like many others, is subject to a vast array of closures to trap and/or line activities, some of which are as a result of the comprehensive network of State Marine Parks and Aquatic Reserves and Commonwealth Marine Reserves off NSW.

There are three primary sectors to the OTLF: the trap sector, line sector, and spanner crab sector:

The trap sector (discussed in a separate paper) uses traps in ocean waters that are designed to catch fish and minimise bycatch.

The line sector is divided into three sectors – line fishing western zone (discussed in this paper), line fishing eastern zone (discussed in this paper), and school and gummy shark sector (discussed in a separate paper) – and uses lines (multiple types in many configurations) to catch a wide variety of species.

The spanner crab sector (northern and southern zones) (discussed in this paper) uses nets specifically designed to target spanner crabs in waters north of Hat Head.

The major species taken in the OTLF include snapper, yellowtail kingfish, leatherjackets, bonito, silver trevally, blue-eye trevalla, pink ling, yellowfin bream, sharks, and spanner crabs. These species may be important because they are taken in large volumes or because they are of high market value.

The OTLF produces around 1,700 tonnes of high quality seafood annually valued at around \$12M at the point of first sale.

Since 2007 the fishery has been actively restructured by applying new minimum shareholding requirements – which are used to determine shareholders' eligibility to endorsements in the fishery. Despite this there remains significant overcapacity (i.e. inactive endorsements or shares), partially because of increasing input costs (e.g. fuel) and because many of the operations are specialised in nature that require a high level of expertise to remain profitable.

Table 1 shows the current number of shareholders and endorsements in each OTLF share class. Figures 1 & 2 show the numbers of shares held by in each spanner crab share class.

Table 1 Current numbers of shareholders

Share class	Number of shareholders	Number of endorsements
Demersal fish trap	205	187
Line fishing western zone	334	303
Line fishing eastern zone	79	77
School gummy shark	20	17
Spanner crab (northern zone)	30	29
Spanner crab (southern zone)	9	9

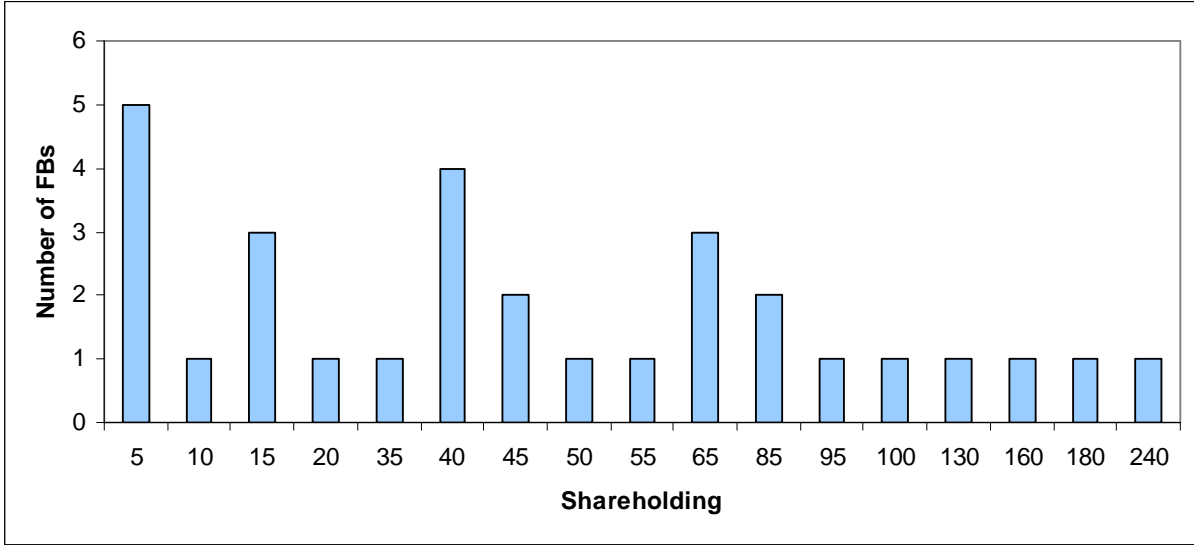


Figure 5 Spanner crab (northern zone) shareholding distribution

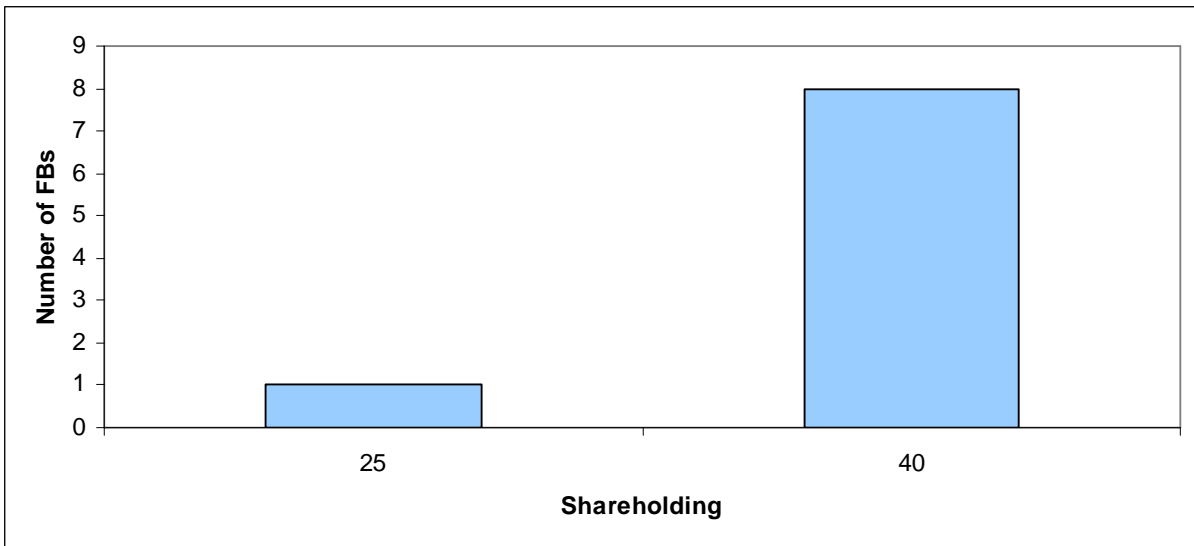


Figure 6 Spanner crab (southern zone) shareholding distribution

Appendix 2: Other share linkage options considered by SCSLWG

While developing Option1, DPI and the SCSLWG explored a variation where the current share classes would be maintained. The ITCAL would be split between the two zones as in Option 1 but without issuing a new share class. As such, share classes would be maintained for their current zones of operation and there would be issues with share and quota trading between share classes.

Furthermore, an alternative proposal for the southern zone that comprised a 200 kg daily limit and the ability to use 32 dillies, as well as an additional area closure, was discussed and not progressed.

The full proposal and the outcome of the SCSLWG's discussions (Meeting 2) are available here:

www.dpi.nsw.gov.au/fisheries/commercial/consultation/commercial-fisheries-working-groups/spanner-crab-share-linkage-working-group.