



# Review of Blue Cod (BCO5) Pot Mesh Size

Decision Document

MPI Decision Paper No: 2017/19

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## Blue cod (BCO5)

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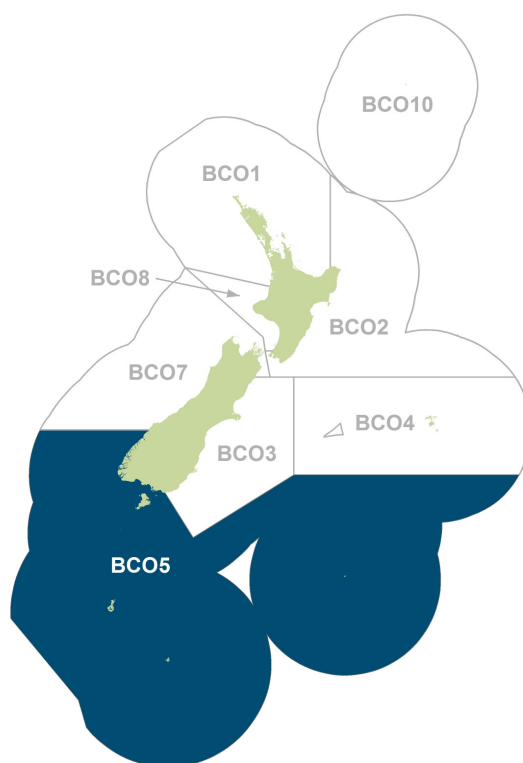


Figure 1. Quota Management Area's (QMAs) for blue cod. BCO5 is highlighted in blue.

### 1 Executive Summary

The Ministry for Primary Industries (MPI) is seeking your approval to increase the minimum commercial cod pot mesh size from the current regulated minimum of 48 mm to 54 mm in BCO5 (Figure 1). The proposal is supported by industry through the Blue Cod 5 Management Group, and by the majority of submissions received during consultation.

In 2012, the Total Allowable Commercial Catch (TACC) of BCO5 was reduced by 309 t due to sustainability concerns. However, there are continuing anecdotal concerns from industry that localised depletion of blue cod is occurring in commercially important areas in BCO5. This has led industry to investigate the effect of pot mesh size on the capture rate of undersized (< 33 cm) blue cod.

An industry-commissioned trial from Saltwater Science Limited has found an increase in mesh size from 50 mm to 54 mm significantly reduces the capture of undersized blue cod, while causing minimal change to legal catch rates. Additionally, the research suggested there was a high level of undersized blue cod mortality associated with commercial pot fishing as a result of exposure during sorting of the catch and predation by mollymawk aggregations as the fish are returned to the water. The project concluded that providing all commercial cod pot fishermen in BCO5 implement 54 mm pot mesh, the catch rate of undersized blue cod will decrease, which in turn will decrease undersize mortality and aid the productivity of the fishery.

MPI undertook consultation on whether or not to increase the minimum commercial cod pot mesh size from 48 mm to 54 mm between 17 January 2017 and 15 February 2017. The options that were consulted on are the same options presented in this decision document:

- Option 1 (*MPI preferred*): Increase the minimum cod pot mesh size to 54 mm in BCO5; and,
- Option 2 (*Status quo*): Retain the current minimum cod pot mesh size of 48 mm in BCO5.

MPI recommends that you agree to increase the minimum commercial cod pot mesh size from 48 mm to 54 mm in BCO5 (Option 1). An increase in minimum mesh size to 54 mm will reduce undersized blue cod mortality and aid recruitment, promoting productivity and helping to ensure the sustainability of BCO5.

## 2 Purpose

### 2.1 BACKGROUND INFORMATION

Blue cod (*Parapercis colias*) are an endemic bottom-dwelling finfish found throughout New Zealand waters at depths of up to 150 metres. They are commercially important, recreationally iconic and are considered taonga by tangata whenua.

Blue cod are susceptible to the effects of fishing and are vulnerable to localised depletion because they are relatively slow growing and are highly localised, with individuals generally moving only within a 1 km home range. This leads to multiple distinct populations existing in a single management area. Additionally, blue cod take bait easily and females are capable of changing sex into males when large dominant males are removed from a population. This can cause a shift in sex ratio leading to reduced spawning success.

BCO5 is the largest commercial blue cod fishery in New Zealand, making up 54% of national landings (fish caught and landed by commercial fishers) between the 2011-12 and 2015-16 fishing years. The commercial catch in this area is almost exclusively taken by the target cod pot fishery operating out of Southland within Foveaux Strait and around Stewart Island.

In 2012, the BCO5 TACC was reviewed and reduced by 20% from 1,548 t to 1,239 t, to address sustainability concerns and a steady decline in annual commercial landings. However, licensed fish receivers and BCO5 commercial fishers have continued to raise concerns regarding a reduction in the average size of blue cod being caught and landed; a potential sign of over-exploitation in the fishery. In response the Blue Cod 5 Management Group (BCO5MG) developed a BCO5 resource protection plan and initiated a research investigation, designed and carried out by Saltwater Science Limited, into the use of mesh size to increase the recruitment and productivity of the fishery. The results of this investigation were reviewed by MPI's Southern Inshore Working Group.

### 2.2 RATIONALE FOR MANAGEMENT INTERVENTION

Commercial cod pot fishers operating in BCO5 use a variety of mesh sizes above the current regulatory 48 mm minimum. The 'standard' size is between 50 and 52 mm. The research investigation commissioned by industry in 2015 suggested there was a high level of undersized blue cod mortality associated with commercial pot fishing as a result of exposure during sorting of the catch and predation by mollymawk aggregations as the fish are returned to the water.

The investigation showed that an increase in pot mesh size from 52 mm to 54 mm significantly reduced the capture of undersized blue cod (< 33 cm), while causing minimal change to overall capture rates of legal sized blue cod.

On this basis increasing the minimum commercial cod-pot mesh size from 48 mm to 54 mm should significantly reduce the amount of undersized blue cod captured and therefore reduce the associated mortality. This in turn would promote recruitment and aid productivity of the fishery. However, in order to achieve the predicted positive increase in recruitment the results of the research suggest that a high level of compliance with the new mesh size is required. Given the large number (approximately 60) of commercial cod pot fishers operating in the BCO5 area, the likelihood of achieving this by voluntary means is low.

## **3 Consultation**

### **3.1 PRE-CONSULTATION**

Between September and October 2016, MPI contacted BCO5 quota holders and Annual Catch Entitlement fishers to discuss the proposed minimum commercial pot mesh size increase from 48 mm to 54 mm. The majority of fishers and quota holders (77%) who were contacted supported the proposed increase. Those who did not support the proposal considered other measures were also required or that the change would increase fishing effort.

MPI also conducted extensive pre-consultation with tangata whenua and stakeholders through discussions at the Te Waka a Maui forum, through regulatory round updates and through discussions at FMA 3 & 5 Recreational Forum meetings. Tangata whenua and the recreational sector supported the proposed increase.

### **3.2 STATUTORY CONSULTATION**

MPI released a discussion document on 17 January 2016 for four weeks of public consultation. The document was released on MPI's external website, and persons or organisations with an interest in and/or affected by the proposals were notified of the consultation by email or letter and directed to the consultation webpage.

During public consultation, submitters were encouraged to provide feedback on the proposed options and provide any other additional information that could be helpful to inform the review.

### **3.3 SUBMISSIONS RECEIVED**

MPI received submissions from Southern Fresh Blue Cod and Seafoods Limited (SBCSL), BCO5 Association Incorporated, Southern Inshore Fisheries Management Company Limited (SIFMC), and five individuals (Appendix 1).

### **3.4 SUMMARY OF SUBMISSIONS**

Two individuals and SBCSL support an increased minimum cod pot mesh size to 54 mm (Option 1).

The BCO5 Association Incorporated supports Option 1, stating that together with voluntary quota shelving it will reduce pressure on the fishery and aid recruitment into larger size classes. Additionally, the association noted voluntary re-meshing of commercial cod pots with 54 mm mesh has taken place since 01 October 2016 and therefore, they do not support a staged implementation approach (suggested by some industry stakeholders during pre-

consultation and consultation), instead urging an immediate implementation of the new 54 mm minimum to support current voluntary quota shelving efforts. The association suggested the effectiveness of an increased mesh size could be effectively monitored through the existing CPUE monitoring regime and that catch at age sampling and potting surveys were not necessary monitoring tools.

SIFMC supports Option 1, however they suggested a staged implementation approach should be timed to align with the next stock assessment in 2019. This would allow useful insight into the effectiveness of the increased mesh size in promoting the productivity in the fishery. SIFMC also noted that providing a short implementation time of the new mesh may be cost prohibitive for some fishers, especially those that may have recently re-meshed their pots. SIFMC also noted that a five year research strategy and management framework needs to be developed for the fishery and that the associated cost to industry be outlined in a transparent matter. In doing so, there may be less resistance from fishers to implement the new mesh if they are aware of the potential yield to outweigh the associated costs of refitting. The costs and benefits of both options are assessed later in this paper.

One submitter supports Option 1, but only if it was introduced with a combination of other measures including; 1) a further Total Allowable Catch (TAC) reduction, 2) the re-introduction of log books and diaries to commercial potting vessels to accurately capture spatial allocation data, and; 3) independent research programmes.

One individual stated that an increase in minimum mesh size is not necessary as small fish will still be caught in the pot during the lift and that the focus should be on developing an efficient re-entry device to reduce the predation rate of undersized blue cod at the surface.

One submission did not identify which option they agreed with but stated that the problem with the fishery lies with the catch effort as opposed to the minimum pot mesh size or current TACC.

## **4 Legal Considerations**

The minimum inside mesh dimensions of a commercial blue cod pot are specified in regulation 79A(1) of the Fisheries (Commercial Fishing) Regulations 2001. Under the proposal, this regulation would be amended to specify a new minimum mesh size for the BCO5 quota management area of 54 mm.

### **4.1 SECTION 8 – PURPOSE OF THE ACT**

The purpose of the Fisheries Act 1996 (the Act) is to provide for the utilisation of fisheries resources while ensuring sustainability. The regulatory options proposed are consistent with this purpose. MPI considers Option 1 best achieves the purpose of the Act.

### **4.2 SECTION 9 – ENVIRONMENTAL PRINCIPLES**

Section 9 of the Act requires that you take the following environmental principles into account when exercising or performing functions, duties, or powers under the Act in relation to the utilisation of fisheries resources or ensuring sustainability:

- a) associated or dependent species should be maintained above a level that ensures their long-term viability;
- b) biological diversity of the aquatic environment should be maintained; and,
- c) habitat of particular significance for fisheries management should be protected.

MPI considers that all options presented in this paper satisfy your obligations under section 9 of the Act.

### **4.3 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 the best available information has been used as the basis for the recommendations in this document, however there is uncertainty in some of that information including the validity of the methodology used for the trial as it was not reviewed by MPI's Southern Inshore Working Group. Additionally, potting trials are limited in their statistical reliability due to the catchability of blue cod fluctuating naturally, however it is the best method currently available to conduct research of this nature. All science information and results from the mesh trial on which the management options are based, has been peer-reviewed by MPI's Southern Inshore Working Group.

### **4.4 SECTION 11 – SUSTAINABILITY MEASURES**

Section 11, in particular section 11(1) of the Act, requires the Minister to take into account the following when varying a sustainability measure:

- a) any effects of fishing on any stock and the aquatic environment; and
- b) any existing controls under the Act that apply to the stock or area concerned; and
- c) the natural variability of the stock concerned.

MPI considers the information presented for both options in this paper satisfies the above requirements and all other obligations stated under section 11 of the Act.

## **5 Management Options**

MPI consulted on your behalf on the following two options:

- 1) increase the minimum commercial cod pot mesh size to 54 mm in BCO5; or,
- 2) status quo.

There are no additional options being considered in this document.

### **5.1 OPTION 1 – INCREASE THE MINIMUM MESH SIZE (RECOMMENDED OPTION)**

Under Option 1, regulation 79A(1) of the Fisheries (Commercial Fishing) Regulations 2001 would be amended to increase the minimum inside mesh dimensions of a commercial blue cod pot from 48 mm to 54 mm.

#### **5.1.1 Benefits**

Based on research undertaken, an increased mesh size is predicted to decrease the amount of commercially caught undersized blue cod, which will reduce undersized mortality caused from handling, exposure and predation from mollymawks. A decrease in undersize mortality

is predicted to increase recruitment in the fishery, probably within around two years, thereby increasing the productivity of the BCO5 stock. Catches of legal sized blue cod are predicted to remain relatively unaffected with an increased mesh size of 54 mm.

### **5.1.2 Impacts**

Under option 1, commercial operators will need to re-fit cod pots with 54 mm mesh. Costs associated with re-fitting a pot are estimated to lie between \$150 and \$200 per pot based on information collected by MPI during pre-consultation. Assuming an average commercial blue cod fisher has 15 pots, the total cost to re-fit is estimated to lie between \$2250 and \$3000 per fisher. Commercial cod potters generally re-fit their pots with new mesh every one to two years due to damage and corrosion.

SIFMC noted that adequate time was required if a staged implementation of the new minimum mesh size was to be used in order to minimise the financial impact to fishers. However, the BCO5 Association Incorporated stated that all re-mesh operations they are aware of since 01 October 2016 have been carried out using 54 mm mesh, on the expectation that the regulations may change, and therefore a staged implementation approach is not required. Additionally, the association urged an immediate implementation of the 54 mm minimum mesh size in order to support current voluntary quota shelving efforts (> 75% compliance) in promoting productivity of the fishery.

If you agree to implement Option 1, commercial fishers will be made aware of the proposed change in June 2017 which will provide the remaining commercial cod potters with approximately three months to implement the new minimum mesh size before the regulation takes effect in (expected implementation date is September 2017).

## **5.2 OPTION 2 – MAINTAIN THE CURRENT MINIMUM MESH SIZE (STATUS QUO)**

Under Option 2, the current minimum commercial cod pot mesh size of 48 mm will remain unchanged.

No submitters stated support for retaining status quo.

### **5.2.1 Benefits**

This option avoids the costs to commercial fishers associated with changing mesh (see Option 1 for more detail on these costs).

### **5.2.2 Impacts**

The predicted decrease in blue cod mortality together with the predicted increase in blue cod recruitment over a two year timeframe will not be realised under this option.

## **6 Other Matters**

### **6.1 IMPLEMENTATION, MONITORING AND REVIEW**

Following your approval, any changes would likely take effect in September 2017.

Stakeholders would be made aware of any changes through publication of the Decision Document and the Decision Letter on the MPI website in June 2017. Additionally, MPI would develop and distribute information material to affected stakeholders prior to the implementation date. Fishers would be made aware that they had three months to re-fit their pots with the required mesh size before regulatory change takes effect.

MPI monitors and reviews the effectiveness of regulations through an annual fisheries planning process. This involves assessing performance measures across all stocks to ensure they are meeting objectives. The performance of BCO5 and the regulations applying to this fishery would be discussed with stakeholders as part of the annual fisheries planning process.

Review of catch landing returns, together with catch at age sampling projects will be carried out over 2017 and 2018. A full stock assessment for BCO5 is scheduled for 2019 where yield and stock biomass will be reviewed. If implemented, the effectiveness of the proposed 54 mm minimum cod pot mesh size would be determined in 2019 through information obtained from the agreed catch at age projects and the scheduled stock assessment.

## **6.2 NATIONAL BLUE COD STRATEGY**

MPI is currently developing a National Blue Cod Strategy. If you decide to implement an increased mesh size in the BCO5 fishery, the effectiveness of an increased mesh size will be used to encourage discussions around wider introduction across other blue cod fisheries with tangata whenua and blue cod stakeholders as part of the strategy.

## **7 Conclusion**

Concern regarding a decreasing average fish landing size in BCO5 has led to the investigation of an increased mesh size to aid recruitment in the fishery. Findings from industry commissioned research, supported by the BCO5MG and reviewed by MPI's Southern Inshore Working Group, suggest an increased pot mesh size would decrease undersize blue cod captures and increase the productivity of the fishery. Consequently, MPI's preferred option is Option 1, increase the minimum commercial cod pot mesh size in BCO5 from 48 mm to 54 mm to help ensure the sustainability of this important fishery.

## 8 Appendix 1 – Submissions Received

- 1) Southern Fresh Blue Cod and Seafoods Limited
- 2) BCO5 Association Incorporated
- 3) Southern Inshore Fisheries Management Company Limited
- 4) Bill Hartley
- 5) Carey McIvor
- 6) Xxxx Xxxx
- 7) Druce Nilsen
- 8) Owen and Marcia Beaton Carey McIvor

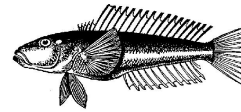
1) Southern Fresh Blue Cod and Seafoods Limited

I support option 1, to raise the pot mesh from 48mm to 54mm, and to be implemented by July 2017 in conjunction with the BCO5 management committee submission.

Your sincerely

William David Smellie  
Southern Fresh Blue Cod & Seafoods Ltd

## ***BCO5 ASSOCIATION INC***



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Inshore Fisheries Management  
Ministry for Primary Industries  
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14<sup>th</sup> February 2016

Dear Sir/Madam

**Re: Submission from the BCO5 Management Group (BCO5) Incorporated on the Blue Cod 5 (BCO5) pot mesh size review. MPI Discussion Paper No: 2017/01**

The BCO5 Association Inc (BCO5) represents all commercial fishermen who utilise the blue cod resource in Fisheries Management Area 5 (FMA5). The objectives of BCO5 are to promote sustainable management of Fisheries Management Area (FMA) 5 blue cod stocks, protect harvest and access rights and protect/enhance quota value.

**The address for service for this submission is: Attn: Bill Chisholm, 67 Selwyn Street, Leeston, Canterbury. Ph (027) 2214739, email [bill@chisholm.co.nz](mailto:bill@chisholm.co.nz)**

**Should a hearing be called, BCO5 would like to be heard in support of this submission.**

**BCO5** has carefully considered MPI Discussion Paper No: 2017/01 (the Discussion Document) and **supports Option 1:** Increase the minimum cod pot mesh size to 54 mm in BCO5. BCO5 notes that this is also the Ministry's preferred option.

**Reasons for support of Option 1**

As outlined in the Discussion Document, BCO5 commissioned research from Saltwater Science Ltd on the effects of increasing the commercial blue cod pot mesh size for FMA5. This research was peer reviewed by the MPI Southern Inshore Working Group in 2016. It concluded that an increased mesh size of 54 mm would reduce the proportions of undersized blue cod caught, while causing only a minimal change to legal sized catch rates. It was estimated that the catch rates of legal fish could reduce by up to 8% as a result of the mesh size change.

However, this reduction would only be temporary, while fish recruited into the larger mesh size. The potential reduction in catch rates could pose a problem, as this might mean more pressure being put on the larger fish in the BCO5 fishery. This effect could last for up to two years, while the fish were recruiting into the new mesh size. To compensate for this, and reduce the pressure on the fishery, BCO5 has implemented a voluntary quota shelving of 100T amongst its members. The current compliance with this voluntary shelving is > 75%.

Furthermore, BCO5 has asked that the new mesh size be implemented immediately by its members, rather than wait until a regulation is put in place. To our knowledge, since 1<sup>st</sup> October 2016, all re-mesh operations have been done using the new 54mm mesh. The costs of re-meshing pots, mentioned in the Discussion Document, is significantly reduced because of this extra lead-in time. BCO5 does not support the suggested staged lead-in time. This has already occurred with the voluntary measures implemented on 1<sup>st</sup> October 2016.

As mentioned in the Discussion Document, a reduction in catching undersized fish would improve recruitment of blue cod over the first two years of using the 54 mm mesh. The Saltwater Science study stressed that 100% compliance is required for the predicted positive effects of this measure to occur. Accordingly, despite the good uptake of BCO5's voluntary measures, there is clearly a need to make the new mesh size compulsory, to ensure the predicted beneficial effects actually occur.

The likely benefits of implementing Option 1 are well-described in the Discussion Document. It should be noted that the second-largest commercial blue cod fishery, (BCO4 Chatham Islands) has also recommended a voluntary change to the 54mm mesh size, on the basis of these likely benefits to the fishery.

Option 2 (the status quo) is therefore not preferred.

### **Implementation, Monitoring And Review**

BCO5 would like the regulatory change to take effect in April 2017. Fishers would then have a further three months to re-fit their pots with the required mesh. This will make the new regulation fully operative by July 2017. This captures the high point of the 2016-17 fishing season, which BCO5 has already accounted for through its voluntary shelving programme. Given that this voluntary shelving is currently in place, this timing is critical, as 100% compliance with the new pot mesh size will ensure that the benefits of the current voluntary shelving are realised. BCO5 does not support any further delays in the implementation of this Regulation.

With regard to monitoring the effectiveness of this Regulation, BCO5 suggests that this can be done through continuing with the existing CPUE analyses regime. Our scientific advice is that the effects of this measure on the BCO5 fishery can be readily assessed through the existing CPUE monitoring regime. BCO5 does not agree that catch-at-age sampling and/or potting surveys are necessary to monitor the effects of this Regulation. However, BCO5 is happy to discuss this in more detail as part of the proposed National Blue Cod Strategy development.


Yours faithfully



pp: Bill Smellie

Chairman – BCO5 Management Group Inc.

### 3) Southern Inshore Fisheries Management Company Limited



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#### Discussion Document – Blue cod 5 (BCO5) pot mesh size review

1. Thank you for this opportunity to provide our response on the proposed review of the BCO5 pot mesh size.
2. Southern Inshore Fisheries Management Co. (SIF) represents 104 inshore fishstocks throughout the Fisheries Management Areas 3,5,7 & 8. In addition to representation and advocacy for shareholders the Company also invests in annual research projects and analyses that are presented to the MPI Southern Inshore Working Group for peer review.
3. SIF is a member of Fisheries Inshore New Zealand (FINZ) which is our sector representative entity to Seafood New Zealand (SNZ).

#### SUSTAINABILITY AND REPORTING

4. We commend the commercial fishers that have taken the initiative to respond to a sustainability concern in their BCO5 fishery and it would appear that Option 1 has merit provided it can be implemented cost effectively and regular research to inform management is undertaken.
5. The proposal is to increase the regulatory mesh size from 48mm to 54mm. Consideration needs to be given to the wording of the regulatory clause so that the mesh size can be standardised for analysis. That is, in the previous clause descriptor for the 48mm regulation includes the words “no less than 48mm in width” which obviously allows for variable mesh sizes above that limit. In the past, as the consultation paper notes, this has left the option open for larger mesh sizes to be used with little standardisation. If the wording was changed to make the 54mm width absolute with no variance for target species blue cod then standardisation would be offered for modelling if required. It is unfortunate that the catch effort reporting form does not have a field to enter the mesh size of the pot since there has been varying mesh sizes over and above the regulatory 48mm.
6. The staged strategy for implementation to mitigate costs needs to be timed with the next research analyses update. The next stock assessment is planned for 2019 and some degree of standardisation I presume needs to be in place before that. The Figure 3 in the consultation document shows the degree of variance in mesh sizes and how that can influence the length range of fish captured.

[www.southerninshore.co.nz](http://www.southerninshore.co.nz)

7. If the changes to the regulations can be made by mid-2017 then it could be proposed that uptake of the new mesh size of 54mm needs to be made as early as possible in 2018 to ensure that the 2019 stock assessment maximises the available data to the end of the 2017/18 fishing year. However, as mesh size has not been a requirement of the catch effort reporting form it may not necessarily impact the stock assessment in 2019 and further time may be allowed for re-fit up to the end of the 2018 fishing year. We would need some clarity on the necessity of mesh size impacts for a stock assessment.
8. The proposal to provide only three months to re-fit pots may be cost prohibitive for some fishers, especially if they have just changed the current mesh that does not fit the new proposed mesh size.
9. Since BC05 is a Group 1 stock under the National Inshore Fish Plan, a research strategy and management framework needs to be provided that shows a clear understanding of what the information needs and timeframe required for the next 5 years and on a rolling basis. Added to this should be the projected estimated costs. The fishers and quota owners need to ensure they understand the costs involved in all levels of the analyses, be it catch sampling to stock assessment to annual reviews. The cost of changing to new mesh size will not be cheap for some fishers but knowing the upcoming costs and the potential yield may outweigh their concerns if all costs are relatively transparent.
10. We support the Option 1 for the change of pot mesh size from 48mm to 54mm provided the fishery is continued to be monitored cost effectively.

Contact: Carol Scott

[www.southerninshore.co.nz](http://www.southerninshore.co.nz)

4) Bill Hartley

We support the preferred option(one),to increase the codpot mesh size to 54mm.Thanks,Bill.

5) Carey McIvor

I would like to submit my opinion about changing the cod pot mesh sizes.

I am in favor of increasing the mesh size. Not only does this method release more small fish at sea floor level, but also makes less bird catch of undersized returned fish on the surface.

Carey McIvor

Riverton, Cod Fisherman

6) Xxxx Xxxxx – [has requested that his submission not be released under the Official Information Act 1982]

## 7) Druce Nilsen

Regarding the smaller mesh size, personally i don't think is necessary ,first of all you will still catch smaller cod in the bigger mesh pots because of the G force of pots being hauled to the surface , a friend has the new 54mm mesh & said the same thing happens.go figure...We need to come up with a better solution, maybe opening up area bco3 or combining both of them maybe.! & concentrate on a device or system to return the smaller cod back to the deep water before the birds devour them, because that is a major problem that I'm seeing at the moment,also in the recreational sector..The bigger mesh size is not going to make any difference to the fishery, especially coming from an independent committee who do not have enough data or evidence to enforce this proposal,i think the bco5 fishery is quite healthy..

Cheers

8) Owen and Marcia Beaton

To: Fisheries Management MPI

15<sup>th</sup> February 2017

We have been stakeholders in the BCO5 fisheries for 24 years and we are disappointed in the consultation process between owners and fishermen. Most of the owners do not fish their quota, therefore have no clear understanding of the fisheries.

There has been 2 voluntary pot mesh size increases over the years. We believe that the problem lies with the catch effort, as the boat and pot numbers increase, this creates more stress on areas.

The legal measuring size is 33cm, our measuring size is 35cm, this then allows a bigger percentage of mainly breeding stock to escape or be released. This method along with an escape gap down the side of the pot (which has yet to be tried and tested) would make a far better sustainable fishery as all juvenile fish are females. The Managers-Owners need to look at other alternatives other than pot mesh size, which hasn't worked. Quota cuts haven't done much because of catch effort and pot numbers.

There needs to be more consultation about our methods and practices regarding small fish and how we release them.

We would also like to express our disappointment with the time frame for the above submissions.

Yours faithfully,

Owen and Marcia Beaton  
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