



Blue cod regulatory review of the Marlborough Sounds and Challenger East areas

Regulatory Impact Statement

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1. Agency Disclosure Statement

This Regulatory Impact Statement has been prepared by the Ministry for Primary Industries (MPI). It provides an analysis of options for ensuring sustainable utilisation of blue cod in the Challenger East area, which includes the Marlborough Sounds Area (MSA).

The analysis in this RIS relies on the best available information. The information used to determine abundance (catch rates), sex ratios and age structure of blue cod in and around the MSA comes from eight peer reviewed research potting surveys that have been carried out approximately every three years since 2001. Other information that has been considered in the analysis includes estimates of blue cod recreational harvest at the top of the South Island from periodic research surveys, and commercial catch, effort and landing information for blue cod from 1986 to present.

There is uncertainty in some of this information, including:

- Limited information to assess the sustainability of the blue cod fishery in the wider Challenger East area outside the MSA;
- No commercial catch and effort information for blue cod at a fine-scale within the MSA to analyse the impacts of seasonal and area closures on commercial fishers;
- Uncertainty in the levels of actual recreational take of blue cod at the top of the South Island, along with no information on the total numbers of recreational fishers that utilise the blue cod fishery on an annual basis. This limits the ability to quantify the impacts of the proposals on blue cod abundance and recreational fishers.
- No quantitative information to determine the level of blue cod mortality relating to handling and predation. The analysis in this regard is based largely on anecdotal information.

The analysis considers these uncertainties and has been factored in to the recommendations as a result.

A preferred package of options for managing the blue cod fishery has been developed by MPI and the Blue Cod Management Group (BCMG). The preferred management approach is considered to strike the best balance between utilisation and ensuring sustainability, while taking into account feedback received from stakeholders and the public. MPI and the BCMG have primarily relied on public feedback and submissions received during formal statutory consultation to assess the impacts that the different proposals could have on recreational fishers.

MPI and the BCMG consider that the proposals presented will not eliminate the need to closely monitor and manage the blue cod fishery in the future. There remains some risk of further depletion, and there is a need to invest in additional research and management to supplement the regulatory packages proposed.

Scott Gallacher

Deputy Director-General, Regulation & Assurance

11 September 2015

2. Executive summary

1. Blue cod is one of the most important recreational fish species in the country, but it is vulnerable to localised depletion and overfishing. The blue cod fishery is iconic in the Challenger East area, which includes the Marlborough Sounds Area (MSA, Figure 1). There is a considerable amount of recreational fishing effort in the area, which tends to be concentrated in Queen Charlotte and Pelorus Sounds, and around D'Urville Island.
2. There have been concerns about localised depletion of blue cod in and around the MSA since the early 1990s. A variety of different management regimes have been introduced to try and reduce the depletion of blue cod.
3. The recreational blue cod fishery was closed in the 'inner' sounds in 2008 to provide for the recovery of the blue cod populations in the area. The Blue Cod Management Group (BCMG) was established in 2008 and tasked with leading a review of the recreational rules, to allow reopening of the recreational fishery earlier than its scheduled date in 2012. The fishery was reopened in April 2011 with recreational fishing controlled by a package of fishing rules designed to restrict catch to sustainable levels in the MSA.
4. Best available information suggests the 2011 package of measures is not working to rebuild blue cod numbers in some areas of the MSA. Latest science information indicates that abundance in Queen Charlotte and Pelorus Sounds has declined to levels similar to those before the 2008 closure, while abundance has been more stable around D'Urville Island. Additionally, strong negative feedback has been received from recreational fishers regarding the potential impacts of some of the rules on the fishery and on their fishing experience.
5. The BCMG was strengthened in 2014 with the addition of a commercial member and an MPI member. At the same time, a number of recreational members were replaced. The BCMG has led the current review of the management measures that apply to the recreational and commercial blue cod fisheries in the Challenger East area, including the MSA.
6. The BCMG, with support from MPI, ran a period of pre-consultation in March 2015 to engage the public on the fishery issues prior to the development of change options and the statutory consultation process. Statutory consultation was undertaken during June 2015.
7. Taking into consideration the feedback received during consultation the BCMG has developed a preferred package of regulatory amendments. However, not all recreational members of the BCMG have reached agreement on the filleting rule, and commercial and recreational members could not reach agreement on the commercial seasonal closure or the Maud Island commercial no-take finfish zone. Overall, the BCMG considers its preferred approach strikes the best balance between utilisation and ensuring sustainability.
8. It is proposed that any changes to regulations would be implemented in December 2015, before the recreational fishery resumes on 20 December following the annual seasonal closure.

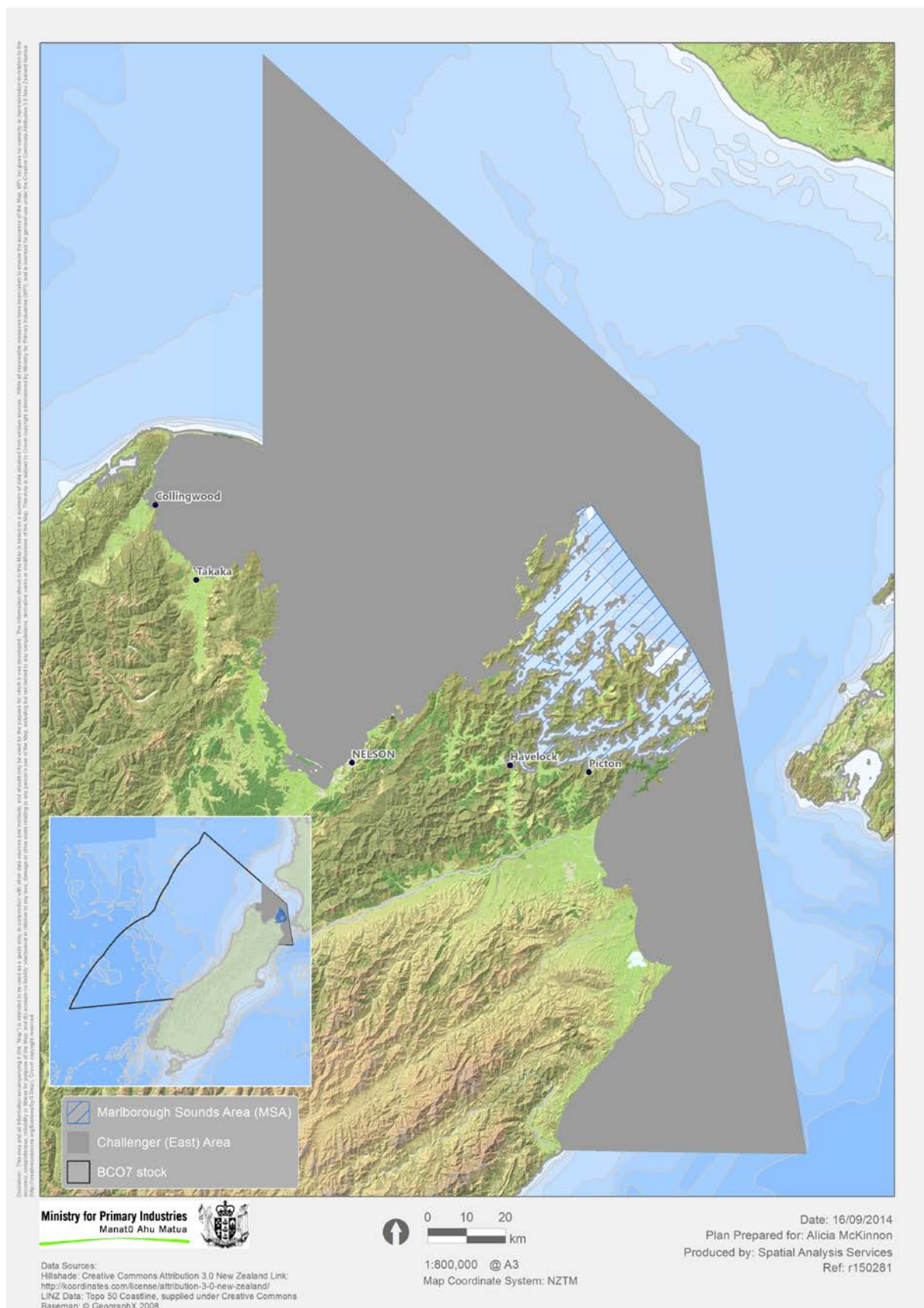


Figure 1: Marlborough Sounds Area (blue diagonal lines), Challenger East area (grey shading and the blue diagonal lines), and the quota management area for BCO 7 (black line in inset image).

3. Status quo

9. Blue cod are one of the most important recreational species in the country. The Challenger East area, which includes the MSA (Figure 1) supports a significant recreational blue cod fishery. Blue cod are also taonga (treasured) to tangata whenua and are an important commercial target species in the area.
10. The biological and ecological traits of blue cod make them vulnerable to localised depletion and overfishing. Blue cod are relatively slow growing and long-lived, they take bait easily and are therefore caught easily, and they tend to move short distances from their home range. Additionally, blue cod can change sex from female to male, which can affect reproductive success if an imbalance forms between sexes in the population.
11. The Challenger East area is part of the BCO 7 quota management area (Figure 1). BCO 7 is managed with a Total Allowable Catch (TAC). The TAC is comprised of a 27 tonne customary allowance, 177 tonne recreational allowance, an allowance of 69 tonnes for other sources of fishing-related mortality and a Total Allowable Commercial Catch (TACC) of 70 tonnes. The current BCO 7 TAC and non-commercial allowances were set in 2003 and have remained unchanged.
12. Commercial catch is constrained within the TACC by the setting of deemed values (a monetary penalty) at a level that discourages commercial fishers from fishing in excess of their annual catch entitlement. Recreational take is managed within the allowance primarily through a combination of a daily bag limit and a minimum legal size. The allowances for customary and other sources of fishing-related mortality are set at levels that reflect best estimates of their removals.
13. Recent harvest estimates from the Recreational National Panel Survey¹ indicate that recreational fishers took approximately 77 tonnes of blue cod from BCO 7 in 2011/12. However, it is not known how many recreational fishers utilise the BCO 7 fishery on an annual basis. Anecdotal information from the local community and observations by MPI compliance indicate that there is a lot of recreational fishing effort in the MSA. This effort tends to be concentrated in Queen Charlotte and Pelorus Sounds and is highest over the summer months when there is an influx of visitors to the area. This effort concentration puts extra pressure on the blue cod fishery.
14. Recreational fishing is also a key driver of tourism in and around the MSA. In the year ending March 2014, domestic tourist expenditure in Marlborough was \$150 million and international tourist expenditure was \$100 million². Anecdotal information from Picton residents suggests that the number of visitors to the MSA has dropped, with between 7500 and 10,000 fishers going out of the region to fish because of the blue cod rules³. There are also local anecdotal reports that suggest this decline in visitor numbers has led to a drop in fishing gear related sales.

¹ Wynne-Jones, J., Heinemann, A., Gray, A., and Hill, L. (2014). National panel survey of marine recreational fishers in 2011–12: harvest estimates. NZ Fisheries Assessment Report 2014/67.

² Ministry of Business, Innovation and Employment. Regional Tourism summary Marlborough RTO.

³ Blue cod rules hurt tourism (2014, July 17). *Marlborough Express*. Retrieved from <http://www.stuff.co.nz/marlborough-express/news/10276543/Blue-cod-rules-hurt-tourism>

15. In comparison to the recreational harvest estimate, commercial blue cod landings were 54 tonnes for the same time period (2011/12) throughout the BCO 7 area. MPI estimates the revenue that could be earned from 54 tonnes of BCO 7 commercial catch is approximately \$234,000 (based on a port price of \$4.33 per kg). The majority of BCO 7 commercial catches are taken from statistical area 017 (which includes the MSA, but is smaller than the Challenger East area). In the 2013/14 fishing year, reported blue cod commercial catches from statistical area 017 were 31 tonnes, with 13 vessels reporting they targeted blue cod in the area.
16. Reported customary harvest for blue cod has been minimal over the last five years. This information is considered incomplete because there is no requirement to report customary fishing across the majority of the top of the South Island.
17. Recreational fisheries such as blue cod suffer from common resource use problems. Where there is free access to them, the quantity of fish available can decrease with use, and some fishers can lack incentives to fish sustainably. In New Zealand, the common resource use problem of recreational fisheries is managed through controlling catch with regulatory measures such as daily bag limits and minimum legal sizes.
18. A series of recreational management measures have been implemented in and around the MSA in an attempt to improve blue cod abundance. Serial reductions in the recreational daily bag limit over time eventually led to a daily bag limit of 3 combined with a minimum legal size of 30 cm being set in 2006. However, research information and experience has shown that changes to the recreational bag limit and minimum legal size on their own have not been sufficient to manage the intense recreational fishing effort and prevent the localised depletion of blue cod in the MSA.
19. The recreational blue cod fishery was closed in the 'inner' sounds for the period October 2008 to April 2011 after results from a time series of relative abundance potting surveys indicated low blue cod abundance and declining catch rates.
20. The BCMG, made up of recreational interests, was established in 2008 and tasked with leading a review of the recreational rules to allow reopening of the recreational fishery earlier than its scheduled date in 2012. In 2011, new recreational rules for blue cod fishing were established for the MSA to restrict recreational catch to sustainable levels and allow blue cod numbers to recover.
21. Up until recently, there have generally been less concerns about blue cod abundance outside the MSA. As a result, the blue cod recreational fishery in the wider Challenger East area has been subject to less stringent measures in comparison to the MSA.
22. The current recreational fishing rules that apply for blue cod in the Challenger East area (including the MSA) are shown in Table 1.

Table 1: Current recreational fishing rules for blue cod in the Challenger East area (including the MSA).

Recreational measure	MSA	Rest of the Challenger East area
Legal size limit	Minimum size 30 cm, Maximum size 35 cm (‘slot rule’)	Minimum size 30 cm, No maximum size
Daily bag limit/person/day	2 blue cod	3 blue cod
Accumulation limit	Accumulation of 1 daily bag limit	Accumulation of 2 daily bag limits
‘Transit rule’	No transporting of blue cod through the MSA that do not meet the rules of the MSA	
Filleting rule	Possess blue cod in a whole or gutted state only, unless fish are for immediate personal consumption	
Seasonal closure	Prohibition on the take and possession of blue cod from 1 September to 19 December	N/A
Maud Island finfish no-take zone	Prohibition on taking finfish from the Maud Island closed area	N/A
Hook limit	Maximum of 2 hooks per rod and reel line, or hand line, when fishing for any species	N/A

23. The BCMG was strengthened in 2014 with a number of recreational members replaced, and a commercial and a MPI representative appointed. The BCMG, with support from MPI, has led the current review of the recreational and commercial regulations that apply to the blue cod fishery in the Challenger East area (including the MSA). The rest of the Challenger East area outside of the MSA was included in the review because the BCMG identified that there is strong connectivity between the fisheries. Also, the ecological and biological factors that make blue cod vulnerable to overfishing are the same in both areas, and recreational fishing pressure appears to be increasing outside of the MSA.
24. Changes to the BCO 7 TAC, allowances, and TACC were outside the scope of this review. On their own, the TAC, allowances and the TACC would not be sufficient to manage local area depletion issues occurring in parts of the wider BCO 7 quota management area.
25. Late in August this year, the Minister for Primary Industries considered advice provided by MPI and the BCMG on a proposed new package of regulations for managing blue cod in the Challenger East area.

4. Problem definition

26. The problem that MPI and the BCMG is trying to address is that:

- The most recent potting survey results suggest that the rules may not be preventing a decline in abundance in some of the locations surveyed;
- There has been strong dissatisfaction from the public about the impact of the current rules on the recreational fishing experience;
- Public feedback suggests that the rules may not be working to ensure the sustainable utilisation of the fishery.

27. While there is limited information to inform an assessment of the sustainability of blue cod in the wider Challenger East area, best available information indicates there are risks to the ongoing sustainability of blue cod populations in a number of areas.

4.1 Decline in abundance

28. Potting surveys have been carried out approximately every three years since 2001. Results from these surveys suggest that the fishery was recovering during the period it was closed to recreational blue cod fishing (2008-2011), but has declined since the fishery was reopened (Figure 2). Particular declines have been evident in parts of the Queen Charlotte and Pelorus Sounds to the extent that abundance in those areas could be similar to those recorded before the recreational fishery was closed in 2008.

29. Recreational catch rates have remained relatively stable around D'Urville Island (Figure 2). However, the Recreational National Panel Survey indicates that effort has increased in west D'Urville Island. It is uncertain if this increased effort will result in a level of take that will continue to be sustainable.

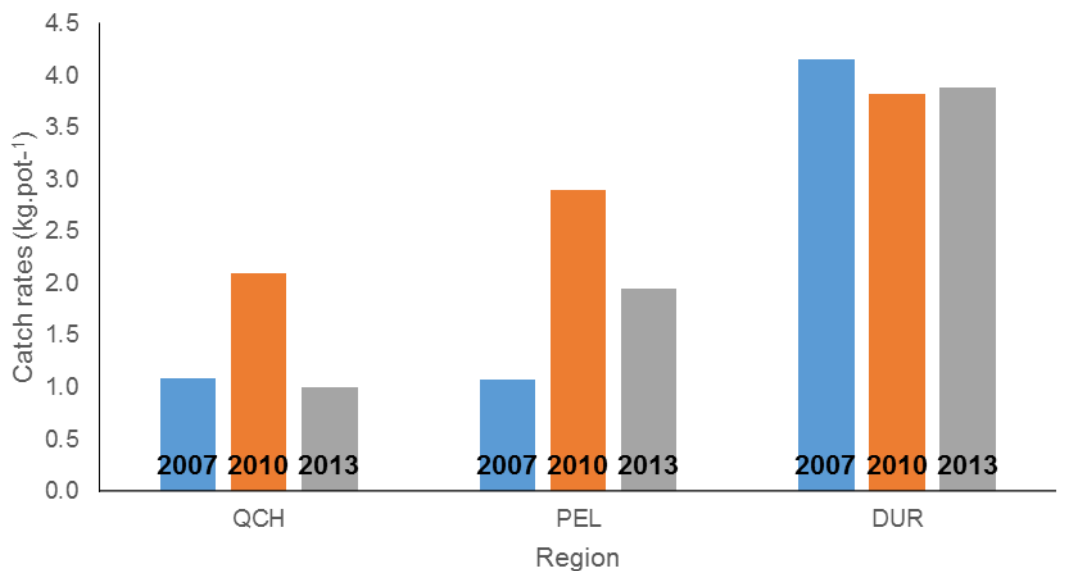


Figure 2: Catch rates (mean kg/pot) in Queen Charlotte Sound (QCH), Pelorus Sound (PEL), and D'Urville (DUR) from the 2007, 2010, and 2013 potting surveys for all size classes of blue cod combined.

30. The 2013 potting survey also shows that blue cod sex ratios are strongly skewed towards males in most parts of the MSA. This sex ratio skew is concerning as it limits reproductive output and potential future recruitment.

31. Potting surveys have not been carried in the wider Challenger East area outside of the MSA (apart from west D'Urville and some parts of Cook Strait). There is limited information available to undertake an assessment of this part of the fishery.

4.2 Public dissatisfaction with the rules

32. In addition to concerns about blue cod abundance in some areas, strong dissatisfaction from the public has been expressed about the negative impacts of some of the current rules on their recreational fishing experience. Anecdotally this has led to reduced levels of voluntary compliance with the current rules and has, therefore, compromised their effectiveness to rebuild blue cod populations. MPI has no quantitative information to support or refute that voluntary compliance levels have reduced.

4.3 Ineffective rules

33. Based on feedback received from public consultation, recreational fisher concerns predominately relate to the 'slot rule' and 'transit rule'. Fishers claim that the 'slot rule' forces them to throw back a large number of fish that are outside the slot (30 – 35 cm), many of which are either critically injured or immediately eaten by other species. MPI, however, does not have information to quantify what the level of survivability of blue cod is when returned to the water and how this may impact on sustainability of the blue cod fishery. A significant number of recreational fishers feel that the 'transit rule' prevents them from accessing better fishing locations outside of the MSA, or from transiting through safe passages in the MSA in bad weather without dumping catch that does not comply with the MSA rules. They also claim that the 'transit rule' concentrates fishing effort in the more fragile and depleted MSA rather than incentivising fishers to fish outside the MSA where abundance is typically higher.

5. Objectives

34. MPI has analysed the options proposed in this RIS against the following objectives:
- Objective 1 – ensure sustainability of blue cod in the Challenger East area, which includes the MSA;
 - Objective 2 – provide for the utilisation of blue cod in the Challenger East area to enable people to provide for their social, economic, and cultural wellbeing;
 - Objective 3 – ensure effective compliance and enforcement, and increase public buy-in to the rules.
35. Objectives 1 and 2 are consistent with the purpose of the Fisheries Act 1996 (the Act) (to provide for the utilisation of fisheries resources while ensuring sustainability).
36. Objective 3 is a secondary objective, which supports Objectives 1 and 2. A key consideration under Objective 3 (and of this review) is whether consistency in the rules across the whole Challenger East area (including the MSA) is achieved.
37. There is no statutory basis for undertaking the review or any time or budget constraints.

6. Options and impact analysis

38. The BCMG have developed a range of options for adjusting the regulatory regime for managing recreational and commercial blue cod fishing in the Challenger East area, which includes the MSA. No changes are proposed for blue cod fishing by customary Maori non-commercial fishing interests.
39. Retention of the existing package of recreational fishing rules is not supported by the BCMG or MPI. Public feedback has highlighted that there is very little support for some of the current rules, which have not encouraged stewardship of the fishery or facilitated an enjoyable fishing experience. Also, the available information suggests the rules are not supporting recovery of blue cod abundance in some areas of the MSA.
40. In summary, the BCMG and MPI is suggesting that the existing package of fishing rules is amended to create consistent and equitable rules that will better manage the blue cod fishery. Amendments are proposed to the:
 - Fisheries (Amateur Fishing) Regulations 2013 to control the minimum legal size, daily bag limit, accumulation limit, and other associated regulations that apply to recreational fishing for blue cod in the Challenger East area (including the MSA);
 - Fisheries (Challenger East Commercial Fishing) Regulations 1986 to control the season and areas in which commercial fishing for blue cod can take place within the MSA.
41. The range of options that have been considered, along with an assessment of their impacts against the objectives, are set out in Table 2 and summarised below.

Table 2: Summary of management measures for blue cod in the Challenger East (CE) area, which includes the Marlborough Sounds Area (MSA), along with an assessment of each option's likely impact on fishery Objectives 1 to 3.⁴

Summary of Options	Objective 1: Ensure sustainability	Objective 2: Provide for utilisation benefits	Objective 3: Effective compliance and enforcement
Recreational legal size limit			
<p><u>Status quo</u></p> <p>MSA: Minimum size 30 cm, Maximum size 35 cm ('slot rule')</p> <p>CE: Minimum size 30 cm, No maximum size</p>	<p>✓ The current 30 cm minimum size in CE and the MSA allows female blue cod to breed before they can be taken (females mature between 21 and 26 cm).</p> <p>✗ The current 'slot rule' was intended to protect fish under 30 cm, prevent the harvest of larger, fecund fish and assist the establishment of a more balanced sex ratio in the MSA. Recreational fishers now claim high rates of mortality are occurring for fish released outside the slot (30-35cm). High mortality reduces the benefits of the 'slot rule' and can negatively impact on a rebuild of blue cod abundance. MPI does not have quantitative information to determine the level of mortality, but based on anecdotal reports it is considered to be relatively high.</p>	<p>✓ Recreational fishers can currently keep any blue cod over 30 cm in CE (no maximum size limit).</p> <p>✗ Recreational fishers worry about mortality associated with the MSA 'slot rule'.</p> <p>✗ The maximum size of 35 cm in the MSA prevents recreational fishers from retaining larger fish for consumption.</p> <p>✗ Recreational fishing experience negatively impacted in the MSA.</p>	<p>✗ Inconsistent size limits between CE and the MSA can create confusion and make it more difficult for recreational fishers to comply with the rules.</p> <p>✗ Negative fishing experiences can reduce the level of voluntary compliance with all rules.</p> <p>✗ Information MPI holds on recreational fishing offences for blue cod in the MSA relate mostly to the 'slot rule'.</p>
<p><u>MPI & BCMG preferred option</u></p> <p>CE & MSA: Minimum size 33 cm, No maximum size</p>	<p>✓ This option provides the best chance of improving the fishery. A 33 cm minimum size (instead of 30 cm) in CE and the MSA would protect more females and give them a greater chance to breed before they can be taken.</p> <p>✓ Risk of high grading and handling mortality with any size limit, but risk with a 33 cm minimum size is considered to be lower than the <i>status quo</i> or a minimum size of 30 cm. Education is proposed to help minimise.</p>	<p>✓ Recreational fishers would be able to keep any blue cod over 33 cm in CE and the MSA (no maximum size).</p> <p>✗ Recreational fishers may struggle in some parts of the MSA with a 33 cm minimum size until the fishery recovers.</p>	<p>✓ Consistent size limit across CE and the MSA means the rule is easy to enforce and comply with.</p>
<p>CE & MSA: Minimum size 30 cm, No maximum size</p>	<p>✓ Setting a consistent 30 cm minimum size across CE and the MSA (without a maximum size limit) allows females to breed before they can be taken, but benefit not as great as a minimum size of 33 cm.</p>	<p>✓ Recreational fishers would be able to keep any blue cod over 30 cm in CE and the MSA (no maximum size limit).</p> <p>✓ May make recreational fishing easier in some locations where fish over 33 cm are less common.</p> <p>✗ Opportunity for improved utilisation benefits in the future is considered not to be as great as the setting of a 33 cm minimum size.</p>	<p>✓ Consistent size limit across CE and the MSA means the rule is easy to enforce and comply with.</p>

⁴ '✓' is where a measure contributes to achieving an objective, '✗' is where a measure does not support, and '?' is where the impact is uncertain.

Summary of Options	Objective 1: Ensure sustainability	Objective 2: Provide for utilisation benefits	Objective 3: Effective compliance and enforcement
Recreational daily bag limit			
<u>Status quo</u> MSA: 2 blue cod CE: 3 blue cod	<p>✓ The current bag limit of 2 for the MSA works in concert with the size limit to manage recreational take and provide an opportunity for abundance to increase.</p> <p>? Uncertain if the current 3 blue cod bag limit is sustainable in CE. Recreational National Panel Survey suggests fishing effort for blue cod is increasing in the CE area, outside of the MSA.</p>	<p>✓ The current bag limits in CE and the MSA provide for reasonable utilisation benefits for recreational fishers.</p>	<p>✗ Inconsistent bag limits between the CE and the MSA can create confusion and make it more difficult for recreational fishers to comply with the rules.</p>
MPI & BCMG preferred option CE & MSA: Total of 2 blue cod	<p>✓ Bag limit of 2 for the MSA would work in concert with the size limit to manage recreational take and support a rebuild of blue cod populations.</p> <p>✓ A reduced bag limit of 2 in CE takes a cautious approach and reduces risk of stricter measures to ensure sustainability in the future.</p>	<p>✓ Bag limit of 2 across CE and the MSA would provide for reasonable utilisation benefits for recreational fishers.</p> <p>✗ Reduces recreational utilisation of blue cod in CE compared to <i>status quo</i> of 3 blue cod.</p>	<p>✓ Consistent bag limits across CE and the MSA means the rule is easy to enforce and comply with.</p> <p>✗ Risk that a lower bag limit for CE could result in lower buy-in to the rules.</p>
Recreational accumulation limit			
<u>Status quo</u> MSA: Accumulation limit of 1 bag limit CE: Accumulation of 2 bag limits	<p>✓ The current accumulation limits work in concert with the bag limits to manage recreational take and support a rebuild of blue cod populations.</p>	<p>✗ Accumulation limits impose a constraint on recreational utilisation, but should be balanced against benefits of reducing recreational take in support of rebuilding blue cod populations.</p>	<p>✗ Inconsistent accumulation limits between CE and the MSA can create confusion and make it more difficult for recreational fishers to comply with the rules.</p> <p>✗ Accumulation limit of 2 in CE can make it more difficult for enforcement of the bag limit.</p>
MPI & BCMG preferred option CE & MSA: Accumulation of 2 bag limits	<p>✓ Accumulation limits work in concert with the bag limits to manage recreational take and support a rebuild of blue cod populations.</p> <p>✓ Increase in the accumulation limit from 1 to 2 in the MSA should not lead to increased take and pose a risk to sustainability.</p>	<p>✓ Increasing the accumulation limit to 2 in the MSA would improve utilisation benefits for some recreational fishers (i.e. where fishing trips are longer than one day).</p> <p>✗ Accumulation limits impose a constraint on recreational utilisation, but should be balanced against associated sustainability benefits from reduced recreational catch.</p>	<p>✓ Consistent accumulation limit across CE and the MSA means the rule is easy to enforce and comply with.</p> <p>✗ Accumulation limit of 2 can make it more difficult for enforcement of daily bag limit.</p>
Recreational 'transit rule'			
<u>Status quo</u> CE & MSA: No transporting of blue cod through the MSA that do not meet the rules of the area	<p>✗ The current 'transit rule' has had the unintended negative consequence of concentrating fishing effort in the more depleted and vulnerable MSA.</p>	<p>✗ 'Transit rule' prevents fishers from accessing locations outside the MSA where blue cod abundance is better, or from transiting through safe passages in the MSA in bad weather without dumping catch that does not comply with MSA rules. This negatively impacts the recreational fishing experience.</p>	<p>✓ The 'transit rule' assists with monitoring and enforcement with the different size and bag limits that currently apply in CE and the MSA.</p> <p>✗ Negative fishing experiences can reduce the level of voluntary compliance with all rules.</p>

Summary of Options	Objective 1: Ensure sustainability	Objective 2: Provide for utilisation benefits	Objective 3: Effective compliance and enforcement
<i>MPI & BCMG preferred option</i> CE & MSA: No transit restrictions	✓ Removing the 'transit rule' provides an incentive for recreational fishers to fish outside the MSA, which helps to support a rebuild of blue cod populations in the 'inner' sounds.	✓ Provides an incentive for recreational fishers to fish outside the MSA where abundance of blue cod has typically been more stable. This provides greater utilisation benefits.	✓ If the preferred approach to consistency in the bag, size and accumulation limits between CE and the MSA is followed, no transit restrictions are necessary for enforcement of the rules.
Recreational filleting rule			
<u>Status quo</u> <i>MPI preferred option & some BCMG recreational member support</i> CE & MSA: Possess blue cod in a whole or gutted state, unless fish are for immediate personal consumption	✓ The current filleting rule complements the size and daily bag limits to support a rebuild of blue cod populations. ✗ Benefit not as great as the <i>status quo</i> . Non-compliance with the size limit could pose a risk to sustainability of the blue cod fishery, particularly in the 'inner' sounds where larger fish are uncommon.	✓ Allowing recreational fishers to consume blue cod immediately (i.e. on a vessel) provides some utilisation benefits. ✗ The current no filleting rule is considered by many recreational fishers and charter operators to create an inconvenience (i.e. storing a whole fish is more difficult than a filleted fish). This negatively impacts the recreational fishing experience.	✓ Fishery officers can quickly establish whether or not blue cod is of legal size by requiring recreational fishers to land blue cod whole. ✓ The rule provides an incentive for recreational fishers to take legal sized fish. ✗ Many recreational fishers do not support this rule, which reduces voluntary compliance.
<i>Some BCMG recreational member support</i> CE & MSA: Possess filleted blue cod with frames kept for proof of length	✓ Filleting with frames kept complements the size and daily bag limits to support a rebuild of blue cod populations. ✗ Benefit not as great as the <i>status quo</i> . Non-compliance with the size limit could pose a risk to sustainability of the blue cod fishery, particularly in the 'inner' sounds where larger fish are uncommon.	✓ Allowing recreational fishers to fillet their fish with frames kept is likely to improve the recreational fishing experience.	✓ Retaining frames for proof of length provides a greater opportunity to enforce the size limit than just allowing filleting on its own. ✓ Allowing filleting with frames kept likely to result in higher voluntary compliance than the <i>status quo</i> . ✗ Allowing filleting may make it easier for recreational fishers not to comply with the size limit (i.e. take sub-legal sized fish).
Recreational and commercial seasonal closure			
<u>Status quo</u> MSA: Recreational blue cod seasonal closure 1 Sep to 19 Dec	✓ Blue cod recreational fishery is currently closed in the MSA over what is assumed to be the peak blue cod spawning period. The closure reduces disruption to spawning behaviour. ✓ Closure helps to reduce recreational take and, therefore, support a rebuild of blue cod populations. ✗ Closure does not apply when recreational take highest over December and January, which reduces the possible benefits to sustainability.	✓ No impact on commercial utilisation (closure does not currently apply to this sector). ✓ During the recreational closure other fish species can be targeted. ✗ Prevents recreational harvest of blue cod in the MSA by 3 ½ months.	✓ Recreational fishers are familiar with the MSA closure area ✗ Since recreational target fishing for other species is allowed during the closure, a level of voluntary compliance is required to ensure effectiveness of the rule. Information MPI holds on recreational fishing offences show that some blue cod are taken during the closure.

Summary of Options	Objective 1: Ensure sustainability	Objective 2: Provide for utilisation benefits	Objective 3: Effective compliance and enforcement
<p>MPI & BCMG recreational member preferred option</p> <p>MSA: Recreational and commercial blue cod seasonal closure 1 Sep to 19 Dec</p>	<ul style="list-style-type: none"> ✓ This option proposes that the MSA closure is introduced for commercial blue cod target fishing to further support a rebuild of abundance. ✓ Recreational and commercial blue cod fishery closed over the assumed peak blue cod spawning period. ✓ Closure helps to reduce recreational take and, therefore, supports a rebuild of blue cod populations. ✗ Closure does not apply when recreational take highest over December and January, which reduces possible benefits to sustainability. 	<ul style="list-style-type: none"> ✓ During the recreational closure other fish species can be targeted within the MSA. ✗ Prevents recreational and commercial harvest of blue cod in the MSA fishery by 3 ½ months. ✗ Risk the commercial closure could displace fishing effort to summer months and increase negative interactions with recreational fishers. ? Could have a negative economic impact on commercial fishing if the blue cod Total Allowable Commercial Catch cannot be taken in other areas or when the fishery is open. The risk of this is assumed to be low. 	<ul style="list-style-type: none"> ✓ Equally applying the recreational and commercial closure should help to improve acceptance of the rules and voluntary compliance. ✓ Recreational fishers are familiar with the MSA closure area. ✓ High levels of compliance with the closure are likely from commercial fishers. ✗ Since recreational target fishing for other species is allowed during the closure, a level of voluntary compliance is required to ensure effectiveness of the rule (some offences have been detected).
<p>BCMG commercial member preferred option</p> <p>'Inner' sounds: Recreational and commercial blue cod seasonal closure 1 Sep to 19 Dec</p>	<ul style="list-style-type: none"> ✓ This option proposes that the 'inner' sounds is closed to recreational and commercial blue cod fishery over the assumed peak blue cod spawning period. ✓ Closure helps to reduce recreational take and, therefore, supports a rebuild of blue cod populations. ✗ Closure does not apply when recreational take highest over December and January, which reduces possible benefits to rebuilding blue cod populations. ? Uncertain impacts on improving blue cod abundance through extending the closure to commercial (i.e. minimal blue cod taken from the 'inner' sounds area). 	<ul style="list-style-type: none"> ✓ Allows greater recreational utilisation of the fishery than the <i>status quo</i>. ✓ Provides incentives for recreational fishers to fish 'outer' sounds areas where abundance has typically being more stable. ✓ During the recreational and commercial closure other fish species can be targeted. ✓ Minimal impact on commercial fishers. Anecdotal reports suggest limited amounts of blue cod are currently taken from the 'inner' sounds. 	<ul style="list-style-type: none"> ✓ Equally applying the recreational and commercial closure may improve acceptance of the rules and voluntary compliance. ✓ 'Inner' sounds area closure area relatively easy to enforce (same boundary that was closed to recreational fishing in 2008). ✓ High levels of compliance with the closure are likely from commercial fishers. ✗ Since recreational target fishing for other species is allowed during the closure, a level of voluntary compliance is required to ensure effectiveness of the rule (some offences have been detected).
Recreational and commercial Maud Island finfish no-take zone			
<p>Status quo</p> <p>BCMG commercial member preferred option</p> <p>Maud Island: Recreational no take of any finfish, no commercial restriction</p>	<ul style="list-style-type: none"> ✓ The current recreational no-take zone helps to protect a localised population of spawning blue cod. ? Commercial finfishing currently allowed in the zone, but there is uncertainty on current levels of commercial take. 	<ul style="list-style-type: none"> ✓ Commercial utilisation of finfish allowed in the zone. ✗ Restricts recreational fishers from accessing and utilising all finfish species around Maud Island, but should be balanced against sustainability benefits. 	<ul style="list-style-type: none"> ✓ No-take zone easy to enforce for recreational fishers with no offences detected since introduction.

Summary of Options	Objective 1: Ensure sustainability	Objective 2: Provide for utilisation benefits	Objective 3: Effective compliance and enforcement
<i>MPI & BCMG</i> <i>recreational member preferred option</i> <i>Maud Island:</i> Recreational and commercial no take of any finfish	✓ Equally applying the recreational and commercial no-take zone helps to protect a localised population of spawning blue cod.	✗ Restricts recreational fishers from accessing and utilising all finfish species around Maud Island, but should be balanced against sustainability benefits. ? Uncertainty in the current levels of commercial finfish take from the zone, but the impact on utilisation benefits is unlikely to be significant.	✓ No-take zone easy to enforce for recreational and commercial fishers. ✓ Equally applying the recreational and commercial no-take zone should help improve acceptance of the rules and voluntary compliance
Recreational hook limit			
<u>Status quo</u> <i>MPI & BCMG</i> <i>preferred option</i> <i>MSA only:</i> Maximum of 2 hooks per line when fishing for any species	✓ The current hook limit assists to reduce the number of blue cod hooked at any open time and, therefore, helps to reduce incidental mortality.	✗ Potential implication on recreational fishing efficiency when targeting other species i.e. snapper. ✗ Prevents some recreational fishing methods.	✗ Non-compliance can be difficult to monitor for this type of measure as the restriction only applies for fishing equipment that is in current use. ✗ A level of voluntary compliance is required to ensure effectiveness of the rule.

6.1 Recreational size limit

42. Currently, there is a minimum legal size (30 cm) and a maximum legal size (35 cm) set for the recreational blue cod fishery in the MSA (known as the 'slot rule'). In the Challenger East area outside of the MSA, there is only a minimum legal size set (30 cm). Two alternative size limit options are proposed.

Objective 1 – ensure sustainability

43. The current minimum legal size of 30 cm in the Challenger East area (including the MSA) contributes to the sustainability of the fishery by allowing female blue cod to breed before they can be taken by fishers (female blue cod mature between 21 and 26 cm).
44. Retaining the 'slot rule' for the MSA is unlikely to contribute to a rebuild of blue cod abundance in some areas due to high levels of mortality that have been experienced with the rule. There is no quantitative information to determine the levels of mortality; however, anecdotal reports from recreational fishers suggest they are high. The 'slot rule' was intended to protect fish under 30 cm (pre-recruits), prevent the harvest of larger, more fecund fish and assist the establishment of a more balanced sex ratio in the MSA. High mortality rates of returned fish, along with lack of voluntary compliance are thought to have reduced the intended benefits of this rule.
45. The option to remove the maximum size limit for the MSA and set a minimum size of 33 cm across the Challenger East area provides the best chance of improving the sustainability of the fishery. A 33 cm minimum size allows blue cod a greater chance to breed before they are able to be taken by fishers, and it provides a greater level of protection to female blue cod.
46. The sustainability benefits of a 33 cm minimum size are likely to be greater than the alternative option to set a 30 cm minimum size only for the whole Challenger East area (with no maximum size limit).

Objective 2 – provide for utilisation benefits

47. The current MSA 'slot rule' is negatively impacting the recreational fishing experience. The 'slot rule' prevents recreational fishers from retaining larger fish above 35 cm and the mortality associated with the rule worries some fishers. In the Challenger East area outside the MSA, recreational fishers can currently retain larger fish and this contributes to their utilisation benefits (there is no maximum size).
48. The option to remove the 35 cm maximum size for the MSA would enable fishers to retain larger fish in this part of the fishery.
49. The option to set a minimum size of 33 cm across the Challenger East area provides the best opportunity for improving utilisation benefits for recreational fishers in the future. Some fishers may struggle to catch a blue cod over 33 cm in some parts of the MSA until the fishery recovers.
50. The alternative option that proposes a 30 cm minimum legal size may make it easier for recreational fishers to catch blue cod in some locations of the MSA and would allow for an increase in recreational catch. However, this catch increase could lead to a decline in BCO numbers over time.

Objective 3 – effective compliance and enforcement

- 51. Retaining the inconsistent size rules between the MSA and the rest of the Challenger East area is likely to continue to create confusion and reduce voluntary compliance.
- 52. Options to set a minimum legal size of either 30 or 33 cm across the whole Challenger East area without a maximum size would provide for consistency in the minimum size limit. This would create a simple, understandable, and an easy to comply with rule, which is likely to increase buy-in and voluntary compliance.

6.2 Recreational daily bag limit

- 53. Currently, the daily bag limit is 2 in the MSA and 3 in the rest of the Challenger East area. One alternative bag limit option is proposed.

Objective 1 – ensure sustainability

- 54. The current daily bag limit of 2 blue cod in the MSA provides an opportunity for blue cod abundance to increase. There is no information to suggest that the MSA could sustain an increased bag limit. The science information from a recent potting survey suggests the fishery is declining in some locations.
- 55. It is uncertain if the current daily bag limit of 3 blue cod in the rest of the Challenger East area is sustainable, particularly due to information suggesting fishing pressure is increasing outside the MSA.
- 56. The option to set a total bag limit of 2 blue cod in the Challenger East area (including the MSA) will help to address risks to ongoing sustainability of blue cod. The biological characteristics of blue cod that make blue cod vulnerable to localised depletion are the same inside and outside the MSA.

Objective 2 – provide for utilisation benefits

- 57. The current bag limits in the MSA and the rest of the Challenger East area provide for reasonable recreational utilisation benefits relative to the need to ensure sustainability of the blue cod population.
- 58. The option to set a bag limit of 2 across the whole Challenger East area is likely to continue to provide for reasonable recreational utilisation benefits. However, in comparison to the *status quo*, this option slightly reduces the current benefits for blue cod fishers that fish outside the MSA in the wider Challenger East area. This reduces the risk of future sustainability concerns and consequently implementation of measures that may impact more significantly on utilisation.

Objective 3 – effective compliance and enforcement

- 59. Retaining the inconsistent bag limits between the MSA and the rest of the Challenger East area is likely to continue to create confusion for recreational fishers and reduce voluntary compliance. This confusion is exacerbated by the fact that many fishers currently fish in and transit across the two areas on any one fishing trip.
- 60. The option to provide for a total bag limit of 2 across the two areas will create a simple, understandable, and an easy to comply with rule, which is likely to increase buy-in and voluntary compliance. However, the proposed lower bag limit for Challenger East may be seen negatively by some fishers and this may reduce their buy-in to the rules.

6.3 Recreational accumulation limit

61. In the MSA the current accumulation limit is 1 daily bag limit and in the rest of the Challenger East area accumulation of 2 daily bag limits is allowed. One alternative accumulation limit option is proposed.

Objective 1 – ensure sustainability

62. The current MSA accumulation limit restricts how many daily bag limits a recreational fisher may possess to 1. This helps to support a rebuild of blue cod populations in association with the bag limit.
63. Given that recreational catch is constrained by the daily bag limit, the option to increase the accumulation limit for the MSA from 1 to 2 daily bag limits should not lead to increased take. This option, therefore, should not pose a risk to the sustainable utilisation of the fishery.
64. It is proposed that the accumulation limit of 2 is retained for the Challenger East area to continue to support sustainability of blue cod populations.

Objective 2 – provide for utilisation benefits

65. The current accumulation limits constrain recreational harvest, but are needed to assist a rebuild of blue cod abundance and support harvest over the long-term.
66. The option to increase the accumulation limit for the MSA from 1 to 2 daily bag limits should provide some increased utilisation benefits for some fishers (i.e. those on trips longer than one day). The utilisation benefits for recreational fishers that fish outside the MSA would not change under the proposals.

Objective 3 – effective compliance and enforcement

67. Retaining inconsistent accumulation limits between the MSA and the rest of the Challenger East area is likely to continue to create confusion and reduce voluntary compliance.
68. The option to change the MSA accumulation limit to ensure consistency with the current accumulation limit for the rest of the Challenger East area is likely to be easier for compliance to enforce and for fishers to comply with.

6.4 Recreational ‘transit rule’

69. The recreational ‘transit rule’ is a regulation that prevents recreational fishers from bringing blue cod into the MSA that do not adhere to the regulations of the MSA during the open recreational blue cod fishing season.

Objective 1 – ensure sustainability

70. The current ‘transit rule’ has had the unintended negative consequence of concentrating fishing effort in the more depleted and vulnerable MSA. This poses risks to the sustainability of blue cod in this area.
71. The option to remove the ‘transit rule’ will provide an incentive for fishers to fish outside the MSA to help support a rebuild of blue cod in the more depleted ‘inner’ sounds.

Objective 2 – provide for utilisation benefits

- 72. The current ‘transit rule’ has negatively impacted recreational fishing experiences and restricted access to some parts of the fishery.
- 73. The option to remove the ‘transit rule’ should provide for increased utilisation benefits by providing recreational fishers with an incentive to fish outside the MSA where blue cod abundance is better.

Objective 3 – effective compliance and enforcement

- 74. The ‘transit rule’ assists with monitoring and enforcement of the different size and bag limits that currently apply between the MSA and the rest of the Challenger East area. A number of recreational fishers have expressed dissatisfaction with the rule, which may contribute to a reduction in voluntary compliance with all the blue cod rules.
- 75. The option to remove the ‘transit rule’ is appropriate if consistent bag, size and accumulation limit are set for the Challenger East area (including the MSA). If this is the case, the ‘transit rule’ will no longer be required to support effective compliance and enforcement.

6.5 Recreational filleting rule

- 76. The recreational filleting rule is a regulation that requires recreational fishers to only possess blue cod in a whole or gutted state, unless fish are for immediate personal consumption. One alternative filleting rule option is proposed.

Objective 1 – ensure sustainability

- 77. The current blue cod filleting restrictions for the Challenger East area (including the MSA) complement the size and bag limits to support a rebuild of blue cod populations. Sustainability risks are high for blue cod at the top of the South Island and it is important that fishers comply with the size limit.
- 78. The option to allow recreational fishers to fillet blue cod with frames kept for proof of length increases the chance of non-compliance with the size limit. This poses a greater risk to sustainability compared to the *status quo* where fish must be kept whole.

Objective 2 – provide for utilisation benefits

- 79. The current no filleting rule is considered by many recreational fishers as an inconvenience and is negatively impacting their fishing benefits.
- 80. Allowing filleting of blue cod with frames kept may improve the recreational fishing experience in comparison to the *status quo* (i.e. storing a whole fish is more difficult than a filleted fish).

Objective 3 – effective compliance and enforcement

- 81. The current no filleting rule enables compliance to quickly check that the blue cod is of legal size. It also provides an incentive for recreational fishers to take a legal sized fish.
- 82. Allowing filleting with frames kept may increase buy-in to the fishing rules overall and positively influence voluntary compliance with the rules. This option, however, would make it easier for fishers not to comply with the size limit compared to the *status quo*. For

example, fishers may have an incentive to try and keep fish below the minimum legal size, or fishers could retain frames from fish other than those from which they have removed the fillets that they have in their possession.

6.6 Recreational and commercial seasonal closure

83. The recreational blue cod fishery seasonal closure prevents recreational fishers from taking blue cod between 1 September and 19 December in the MSA. There is currently no commercial seasonal closure for blue cod. Two alternative seasonal closure options are proposed.

Objective 1 – ensure sustainability

84. The current blue cod recreational seasonal closure for the MSA supports sustainability by reducing disruptions to spawning behaviour and reducing recreational take. Scientific information suggests that this closure should not be eased or lifted as there are still sustainability concerns for the fishery.

The option to apply the MSA closure to commercial fishers as well as recreational fishers may further contribute to increasing blue cod abundance in the fishery. However, there is uncertainty in the benefits of the proposed commercial closure because commercial fishers report at a larger scale than the MSA, which makes it difficult to assess the benefits of the closure. Anecdotal information suggests some blue cod commercial catch comes from within the MSA during the proposed closure period, but it is uncertain if commercial fishers will just increase their effort outside the closure period.

85. The alternative option to change the recreational closure boundary to the 'inner' sounds reduces the benefit this measure could contribute to ensuring sustainability of the fishery compared to the *status quo*. Applying the 'inner' sounds closure to commercial, although information is uncertain, is unlikely to significantly contribute to sustainability because anecdotal information suggests little blue cod commercial fishing occurs in the 'inner' sounds.

Objective 2 – provide for utilisation benefits

86. The current recreational seasonal closure prevents harvest of blue cod in the MSA by 3 ½ months. However, other species can be caught during the closure, which offsets some of the reduced utilisation benefit.
87. The option to extend the MSA closure to commercial blue cod target fishing reduces commercial access to the fishery. It is difficult to estimate the impact that a seasonal closure would have on commercial fishers because finer-scale catch information is not available within the MSA. It is acknowledged that there are likely to be increased catching costs for commercial fishers under this option. However, the costs are unlikely to be significant because commercial fishers would be free to target blue cod outside the MSA during the closure and fish in the MSA during the period when the fishery is open to all users.
88. The alternative option to apply an 'inner' sounds closure to recreational blue cod fishing allows for greater utilisation of the fishery than the *status quo*. It also provides incentives for recreational fishers to fish 'outer' more stable areas. Extending an 'inner' sounds closure to commercial fishers is likely to have a limited economic impact on the industry because it is understood that there is minimal targeting of blue cod in the 'inner' sounds.

Objective 3 – effective compliance and enforcement

89. The current MSA recreational closure boundary has been relatively easy to enforce. However, since target fishing for other species is allowed during the closure, a level of voluntary compliance has been required to ensure effectiveness with the rule (i.e. there have been some recreational offences detected with the closure since it was implemented in 2011). The option to extend the MSA seasonal closure to commercial fishers is unlikely to create any enforcement challenges.
90. The alternative option to implement an ‘inner’ sounds seasonal closure for recreational and commercial fishers should be relatively easy to enforce because these boundaries are already familiar to fishers (it was the boundary that applied when the recreational fishery was shut in 2008).
91. Equal application of a recreational and commercial seasonal closure would create equity and should help improve acceptance of the rules and voluntary compliance.

6.7 Recreational and commercial Maud Island no-take finfish zone

92. The recreational no-take finfish zone around Maud Island in the MSA prevents recreational fishers from fishing for finfish in a defined area around Maud Island (fishing for shellfish is allowed). One alternative no-take finfish zone option is proposed.

Objective 1 – ensure sustainability

93. The current recreational finfish no-take zone around Maud Island helps to protect breeding blue cod and contribute to the sustainability of the fishery.
94. The option to extend the no-take zone to commercial finfish fishing may further contribute to sustainability of blue cod in the zone. The extent of this is uncertain because the amount of finfish taken from the area by commercial is unknown.

Objective 2 – provide for utilisation benefits

95. The current recreational no-take zone restricts recreational fishers from taking all finfish species from the area. This impact should be balanced against the sustainability benefits of the no-take zone.
96. The option to extend the no-take finfish zone to commercial fishers is unlikely to restrict commercial utilisation of finfish, but this is uncertain because it is not known how often commercial fishers take finfish from this area.

Objective 3 – effective compliance and enforcement

97. The current recreational Maud Island no-take zone is relatively easy to enforce. Extending the no-take zone to commercial fishers is unlikely to create any enforcement challenges.
98. The option to introduce a no-take zone for commercial fishers that matches the current recreational no-take zone creates equity, which should help to improve recreational fisher acceptance of the rules and voluntary compliance.

6.8 Recreational hook limit

99. The hook limit is a regulation that restricts the number of hooks that a recreational fisher may have on their hand line or rod and reel line within the MSA. This hook regulation does not apply to the rest of the Challenger East area. MPI and the BCMG do not propose that this rule is changed.

Objective 1 – ensure sustainability

100. The current hook limit of 2 per line when fishing for any species in the MSA contributes to blue cod sustainability by reducing the number of fish hooked at any one time. It also contributes to a reduction of the incidental mortality of blue cod.

Objective 2 – provide for utilisation benefits

101. The hook limit may have negative implications for recreational fishing efficiency when targeting species other than blue cod in the MSA (i.e. snapper).

Objective 3 – effective compliance and enforcement

102. A hook limit can be difficult to enforce. A level of voluntary compliance has been required to ensure the effectiveness of this rule; however, the level of compliance with this rule is uncertain.

6.9 Non regulatory impacts

103. There are few feasible non-regulatory options to consider in place of amendments to recreational or commercial fishing regulations.
104. A code of practice developed by the BCMG recommends best practice with regard to fishing tackle and handling procedures. However, anecdotal information suggests that this hasn't been strongly adopted by recreational fishers. For meaningful change to be created within the fishery it is likely that changes to controversial regulations are necessary to reduce overall mortality of blue cod.
105. Voluntary commercial area and seasonal closures could be explored for the blue cod fishery because voluntary measures can be more effective in commercial fisheries where there are few participants. However, this may be viewed as inequitable by the recreational sector because similar measures that apply to them are regulated. Regulated measures can be directly enforced, while widespread sector buy-in is required for voluntary measures to be effective.

6.10 Other options considered

106. In 2014, the BCMG was asked to lead a review of the blue cod fishery in the MSA. At this time, the BCMG identified that a key aspect of the review should be to ensure consistency in the recreational fishing rules between the MSA and the rest of the Challenger East area. This approach was driven by strong feedback from the public for simple, understandable and easy to comply with rules. The BCMG also considered it appropriate to consider a proactive management approach for blue cod in the rest of the Challenger East area to ensure ongoing sustainable utilisation of the fishery.
107. Some recreational members of the BCMG considered an additional option for the recreational seasonal closure. They thought that extending the seasonal closure over the summer months would be effective for reducing recreational catch in the fishery given that

there is a high level of recreational fishing effort at this time. This option would have significant impacts on the benefits recreational fishers receive from fishing over the Christmas holiday period. Given this impact, the BCMG agreed to support the current recreational closure dates for the time being while other recreational measures are proposed for amendment.

108. The BCMG considers that the regulatory options proposed will not eliminate the need to closely monitor and manage the fishery in the future. There remains some risk of further depletion, and there is a need to invest in additional research and management to supplement the regulatory packages proposed.
109. The BCMG propose that the following actions are progressed to support any new rules and ensure the ongoing sustainable utilisation of the fishery:
 - Development of a plan for future management of the fishery, including recommendations for future scientific surveys, a more comprehensive monitoring programme for assessing the performance of the fishery over the long-term, and implementation of fine-scale reporting for commercial fishers.
 - Analysis of additional small area closures within the MSA to protect habitats of significance for blue cod.
 - Development of an education campaign to encourage fishers to take responsibility for their fishery and voluntarily adopt measures to reduce unwanted mortality.
110. MPI proposes to work with the BCMG on progressing these additional actions. The costs of these actions will be covered within current MPI operating budgets for fisheries services.

7. Consultation

112. A two-stage consultation process was followed for the review of blue cod recreational and commercial fishing rules for the Challenger East area.
113. Prior to the developed of proposed options for the fishery and statutory consultation on those options, the BCMG and MPI carried out a period of pre-consultation in March 2015. Members of the public were invited to drop-in information sessions. This provided an opportunity for the public to put forward ideas for changes they would like for the blue cod fishery at the session and via email afterwards. People that were unable to attend the drop-in sessions were also encouraged to email their feedback on potential solutions for the fishery. Approximately 200 people attended the public drop-in sessions held in Nelson and Picton and a total of 229 people provided written feedback.
114. The feedback received during the drop-in sessions broadly related to the following themes:
 - The 'slot rule' is harming the fishery. The handling mortality associated with returning fish to the water that are outside the minimum and maximum legal sizes is thought to be high due to predation by shags and as a result of poor handling techniques.
 - The 'transit rule' concentrates fishing effort in the most depleted part of the MSA.
 - Rules are complicated and unfair. They should be made consistent across the top of the South Island. The rules should also be made more equitable between commercial and recreational fishers, and between recreational fishers coming from different locations.

115. Input from the pre-consultation phase was considered by the BCMG and MPI when developing the options for consultation. Consultation on two packages of management measures ran from 2 June to 30 June 2015. The consultation document was posted on MPI's website and letters were sent to approximately 500 individuals, organisations, and companies, including all those that expressed an interest in being involved in the process during pre-consultation or other processes, to notify them of the consultation process.
116. During the consultation period, members of the public were invited to launch events on 2 June 2015 in Blenheim and Nelson and drop-in sessions in Nelson, Blenheim, and Wellington later in June. This provided an opportunity for the public to receive copies of the consultation material and ask questions.
117. The BCMG and MPI received 230 submissions during statutory consultation. Of these, 221 were submissions from individuals and nine were from groups or organisations. In summary:
- The majority of submitters supported consistency in rules between the MSA and the rest of the Challenger East area.
 - Of those submitters that commented on the MSA, the majority supported a minimum legal size of 33 cm. Similarly, of those that commented on the rest of the Challenger East area, the majority supported a minimum legal size of 33 cm.
 - The majority of submitters supported a bag limit of 2 in the wider Challenger East area, and a larger majority supported a bag limit of 2 in the MSA.
 - Generally there was support for increasing the accumulation limit in the MSA to 2 daily bag limits.
 - Few submissions commented specifically on the 'transit rule'. Generally, there was widespread support for removing the 'transit rule' either through the support given to options proposed in the consultation document, or from specific comments.
 - The majority of submitters supported allowing filleting with frames retained.
 - Generally, there was widespread support for changing the boundary of the current seasonal closure from the MSA to the 'inner' sounds. There was also widespread support for including commercial fishers in the seasonal closure.
 - There was widespread support for retaining the no-take finfish zone around Maud Island and applying it to commercial fishers.
 - Generally, there was widespread support for retaining the hook limit in the MSA.
118. Relating to the scope of the review, some submitters suggested slight modifications to the consultation options. The main modifications that were requested are listed below along with a brief outline of how MPI and the BCMG addressed them:
- *Minimum legal size*: a small number of submissions suggested minimum legal sizes higher than 33 cm, between 30 and 33 cm, a voluntary minimum legal size, or to have no minimum legal size. MPI and the BCMG considers that setting a minimum legal size of 33 cm will provide the best benefits to the fishery by providing greater protection to breeding female blue cod.
 - *Bag limit*: a joint submission from the New Zealand Sports Fishing Council (NZSFC) and other local and national recreational groups supported setting a bag limit of 3 across the whole Challenger East area (including the MSA). Taking into account the biological characteristics of blue cod and increasing recreational fishing pressure, the BCMG (including MPI) considers it appropriate to set a bag limit of 2 across the

Challenger East area. Taking a proactive and cautious approach to managing the Challenger East blue cod fishery provides the opportunity to try and avoid more severe measures necessary after a stock decline.

- *Filleting rule*: a small number of submissions requested that filleting be allowed without the need for frames to be retained. Given the fragile state of the fishery, it is considered by MPI that some ability is retained to ensure compliance with the size limit (i.e. through no filleting or allowing filleting with frames kept).
- *Seasonal closure*: a number of submitters (including a joint submission from the NZSFC and other local and national recreational groups) considered that a different seasonal closure boundary could be set between the 'inner' sounds and the MSA. Most recreational members of the BCMG and MPI support the current MSA boundary and consider that this 'middle' boundary may be inadequate for ensuring sustainable utilisation. The potting survey results suggest that east D'Urville Island is showing stable catch rates under the current closure boundary and recreational fishers are concerned that the region will not be able to support increased take if this aspect of the fishery was opened year round.
- *No-take finfish zone*: some submitters (including a joint submission from the NZSFC) suggested that the no-take finfish zone boundary be amended to exclude an area of the mainland so as to allow shore-based fishing. Although the impact of the no-take zone is uncertain, MPI and the BCMG considers that the potential benefits are maximised by including a section of the mainland, and that it is important to retain the current boundaries of the zone.

119. Taking into account the submissions and feedback received on the proposed changes presented in the consultation document the BCMG and MPI have not altered the management measure proposals that are available for final consideration. It is considered that the final proposals strike the best balance between utilisation and ensuring sustainability of the blue cod fishery.

8. Conclusions and recommendations

120. The BCMG and MPI has led a review of the recreational and commercial regulations that apply to blue cod fishing in the Challenger East area.

121. Best available information suggests the current package of measures is not working to rebuild blue cod numbers in some areas of the MSA. Additionally, strong negative feedback has been received from recreational fishers regarding the potential impacts of some of the rules on the fishery and on the fishing experience.

122. The BCMG undertook a period of pre-consultation to gather feedback from the public on potential changes for the fishery before formal consultation on a package of management options was carried out. The majority of submitters supported:

- consistency in rules between the MSA and the rest of the Challenger East area;
- a recreational minimum legal size of 33 cm;
- a recreational daily bag limit of 2;
- a recreational accumulation limit of 2 daily bag limits;
- removal of the recreational 'transit rule';
- allowing filleting of blue cod with frames kept for proof of length;

- moving the recreational seasonal closure boundary to the 'inner' sounds and extending this closure to commercial blue cod target fishing;
- retaining the current Maud Island no-take zone and extending it to commercial fishers;
- retaining the current recreational hook limit.

123. The BCMG's recommended regulatory amendments have been selected to ensure the ongoing sustainable utilisation of the blue cod fishery. The BCMG, however, was unable to reach agreement on all options. Agreement was not reached among recreational members on the filleting rule, and not between recreational members and the commercial member on the seasonal closure and the Maud Island no-take finfish zone.

124. In cases where the BCMG's preferences have not been unanimous, MPI has made recommendations that they consider will provide greatest benefits for the fishery. This includes making no change to the filleting rule for recreational fishers, retaining the MSA recreational seasonal closure and extending this closure to commercial fishers, and retaining the recreational Maud Island no-take finfish zone and extending this to commercial fishers.

9. Implementation plan

125. It is intended that any changes to regulations would be implemented in December 2015, before the recreational fishery resumes on 20 December following the annual seasonal closure. It is proposed that amendments are made to the: Fisheries (Amateur Fishing) Regulations 2013 to control the minimum legal size, daily bag limit, accumulation limit, and other associated regulations that apply to recreational fishing for blue cod in the Challenger East area (including the MSA); and, the Fisheries (Challenger East Commercial Fishing) Regulations 1986 to control the season and areas in which commercial fishing for blue cod can take place within the MSA.

126. The BCMG proposes that an educational campaign is initiated later in 2015 to help the public understand and accept the message of fisher responsibility, and either start or continue to reflect this in their fishing habits. Additionally, minimising incidental mortality of blue cod is important for ensuring the ongoing sustainability of the fishery. The BCMG proposes to use the educational campaign to promote greater awareness of best fishing practices. It is proposed that local newspapers, fishing magazines, social media, and posters and leaflets will be utilised during the educational campaign to spread key messages about the rules.

127. MPI also proposes to follow standard processes for implementing any changes to the regulations through updating recreational fishing brochures, boat ramp signs and updating their website. MPI recreational fishing rule brochures are updated annually as part of a standard process. Any changes to the recreational regulations for blue cod will be updated in the relevant process during the next review.

128. In addition, all submitters and those persons that expressed an interest in the review of the blue cod fishing rules will be notified by a letter from the Minister for Primary Industries of his decisions regarding the fishery.

129. MPI Compliance will enforce changes to regulations as part of their standard enforcement and monitoring activities. This includes at sea surveillance and land based monitoring, and catch inspections. A key compliance activity for the recreational sector is to raise awareness of the relevant rules through any interactions Fishery Officers have with fishers.

10. Monitoring, evaluation, and review

130. MPI monitors and reviews the effectiveness of current fisheries regulations in relation to agreed management objectives through an annual fisheries planning process.⁵
131. The performance of blue cod fisheries in the Challenger East area will be monitored and reviewed in discussion with the BCMG, tangata whenua and other stakeholders as part of the Annual Review Report. Through this process, MPI will be able to gather information directly from stakeholders about the impacts of any regulatory changes for blue cod at the top of the South Island.
132. Performance of the regulatory changes will be assessed primarily through research potting surveys which estimate relative abundance, sex ratio and age structure of blue cod. These surveys occur about every three years with the last performed in 2013.
133. Anecdotal information will also be used to assess the effectiveness of the rules regarding the impacts of any changes on blue cod abundance and on the recreational fishing experience. If information suggests that blue cod abundance does not improve in some areas of the MSA or declines in the rest of the Challenger East area then additional changes may be necessary.
134. Compliance rates would also be used to assess the performance of the proposed rules. Compliance rates with the recreational and commercial rules are monitored as part of existing compliance activities occurring within the fishery. These rates can be compared over time. If compliance rates are poor then additional changes may be required. Because monitoring occurs as part of existing compliance activities, no additional monitoring costs are expected.

⁵ MPI's fisheries planning process is the main mechanisms to guide and prioritise fisheries management interventions for deepwater, highly migratory species, inshore finfish, inshore shellfish and freshwater fisheries based on an objectives-based framework. The process is based on National Plans for each of the fishery groupings. The Plans define management objectives and performance measures. Each year an assessment of fishery performance against the management objectives, based on the performance measures, is carried out. Annual Operational Plans for each of the fishery groupings, specifying services and interventions, are developed to address identified gaps in performance or to enable identified opportunities. This is done in close discussion with tangata whenua, the fishing industry and other stakeholders. For more information please refer to the [MPI Fisheries website](#).