



Review of Sustainability Measures for the Southern Scallop Fishery (SCA 7) in 2016

Discussion Document

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by the Ministry for Primary Industries

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1 Submission Information

The Ministry for Primary Industries (MPI) welcomes written submissions on any or all of the proposals contained in the Discussion Document. All written submissions must be received by MPI no later than 5pm on Friday 1 July 2016.

Written submissions should be sent directly to:

Inshore Fisheries Management
Ministry for Primary Industries
P O Box 2526
Wellington 6011

or emailed to FMSubmissions@mpi.govt.nz

1.1 OFFICIAL INFORMATION ACT 1982

All submissions are subject to the Official Information Act and can be released (along with personal details of the submitter) under the Act. If you have specific reasons for wanting to have your submission or personal details withheld, please set out your reasons in the submission. MPI will consider those reasons when making any assessment for the release of submissions if requested under the Official Information Act.

2 Executive Summary

The Ministry for Primary Industries (MPI) is proposing measures aimed at rebuilding the Southern Scallop Fishery (SCA7, refer Figure 1).

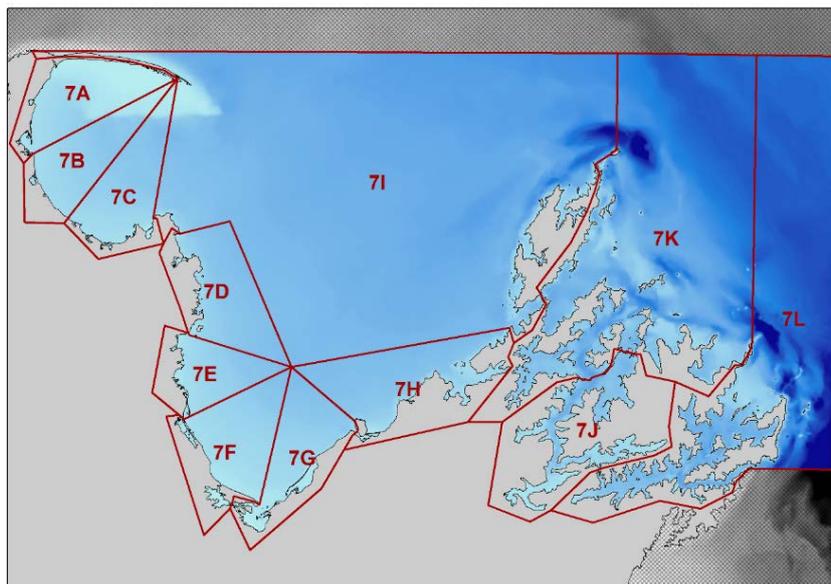


Figure 1: The SCA7 reporting areas showing location of area 7H in Tasman Bay, and the Marlborough Sounds (areas 7J, 7K and 7L)

A survey carried out in November 2015 shows the biomass of scallops in the SCA7 fishery is at its lowest recorded level, despite measures to rebuild the fishery implemented in 2014. These included reducing the total allowable catch, significantly reduced commercial catch limits for Marlborough Sounds, and continued reseedling of parts of the fishery by commercial fishers.

MPI wishes to provide more certainty that a rebuild of this important fishery will occur, and to ensure that the management regime is transparent and engages all users as effectively as possible. MPI's strategy is to stimulate a rebuild of the fishery by resting parts of the fishery over the coming 2016-17 scallop season, while longer-term management options are worked through.

Measures for the 2016-17 scallop season

MPI proposes that parts of the fishery be temporarily closed under s11 of the Fisheries Act 1996 to both commercial and recreational fishing for the 2016-17 scallop season. Spatial closures are an effective management tool that have been used previously in SCA7 and in other scallop fisheries to help rebuild the abundance of scallops. Closures would help safeguard mature and juvenile scallops from direct fishing mortality or incidental fishing mortality. They would give the beds an opportunity to rest and help rebuild the fishery. The closures would reduce utilisation opportunities in the short term, however, this would be balanced by improved fishery productivity in the future.

MPI is consulting on the following closure options:

1. Temporarily close all of area 7H in Tasman Bay and some parts of the Marlborough Sounds to scallop fishing for the 2016-17 scallop season.
2. Temporarily close all of the Marlborough Sounds and area 7H in Tasman Bay to scallop fishing for the 2016-17 scallop season.

3. Status quo (no new closures are implemented for the 2016-17 SCA7 season).

MPI seeks submissions and supporting information on these options. MPI's preliminary view, based on best available information regarding the characteristics of the beds, is that the parts of the Marlborough Sounds that could be considered for closure under Option 1 include Wynens Bank, Guards Bank, Ships Cove, Pelorus Sound and Dieffenbach Point.

Alternatively, MPI considers Option 2, temporarily closing all of the Marlborough Sounds and area 7H in Tasman Bay may be appropriate, given parts of the fishery are likely to be below the 'hard limit' (the point at which closure of the fishery should be considered)¹. Large scale closures have proven successful at rebuilding depleted scallop biomass in SCA7 in the 1980s, as well as in other scallop fisheries internationally.

MPI seeks feedback and information from submitters on the benefits and impacts of these options.

Preliminary consultation on longer term management measures

In addition to temporary closures, MPI seeks submissions and information on longer term measures to support a rebuild of the fishery. Suggestions put forward to-date by various groups and individuals include reviewing the annual decision-making process to ensure it is transparent and engages all users, and amending commercial and recreational rules, for example catch limits, the timing of the scallop season, and gear restrictions.

A multisector working group is developing proposals to help rebuild the fishery. The group will consider public feedback on both the short term measures for this season and longer term measures submitted as a result of this discussion document. These will be subject to wider engagement and consultation to gauge stakeholder and public views before any decisions are made.

3 Purpose

The purpose of this document is to initiate consultation on behalf of the Minister for Primary Industries (the Minister) on whether to temporarily close parts of the SCA7 fishery to commercial and recreational fishing for the coming 2016-17 scallop season. MPI is consulting and seeking submissions on the following three closure options.

Option 1	Temporarily close all of area 7H in Tasman Bay, and some or all of the following parts of the Marlborough Sounds to scallop fishing for the 2016-17 season (until 15 February 2017): <i>Wynens Bank, Guards Bank, Ships Cove, Pelorus Sound and Dieffenbach Point (refer Figure 2)</i> .
Option 2	Temporarily close all of the Marlborough Sounds and area 7H in Tasman Bay to scallop fishing for the 2016-17 scallop season.
Option 3 (Status quo)	No new scallop fishing closures are implemented for the 2016-17 scallop season.

In addition, MPI is seeking tangata whenua and stakeholders' views and information (*i.e.*, the potential benefits and impacts) on wider management measures to support a rebuild of the scallop fishery. Feedback on these, or receipt of other proposed measures, would be used to

¹ MPI's draft plenary report states that biomass in Golden and Tasman Bays is likely to be below the hard limit and that it is not known whether the biomass in the Marlborough Sounds is below the hard limit.

develop and further consult on a secondary package of measures that, if approved, would not be implemented until 2017.

3.1 PROBLEM DEFINITION

Abundance of scallops in the SCA7 fishery is at its lowest recorded level, despite management measures implemented in 2014 to help rebuild the fishery.

Fishing is unlikely to be the only driver of decline in the fishery, and a number of areas in the Marlborough Sounds retain high densities of scallops. However, MPI considers action is required to ensure these remaining areas are not overfished, that fishing activity does not exacerbate any decline, and that the fishery is given an opportunity to rebuild.

3.2 OBJECTIVE

The purpose of the Fisheries Act 1996 is to provide for utilisation while ensuring sustainability. SCA7 is a “Group 2” fishery under MPI’s Draft Fisheries Plan for Shellfish Fisheries. Such fisheries are considered to be important to all sectors, and are fast growing with variable abundance. The management approach for this group enables responsiveness to changing abundance levels. The options proposed in this paper are consistent with this management approach as they respond to the low abundance levels in SCA7.

4 Pre-Consultation

MPI convened a multi-sector group in January 2016 and has met with tangata whenua through the Te Tau Ihu Iwi Forum to discuss the fishery. With support from the multi-sector group and tangata whenua MPI will undertake community engagement during the period of consultation on this discussion document. This will include publicly advertised drop-in information sessions at venues across the Nelson- Marlborough Region. Please refer to the consultation section of MPI’s website www.mpi.govt.nz for information on these sessions.

5 Background Information

5.1 INTRODUCTION

The results of a new survey of SCA7 were presented to MPI in November 2015 and are summarised in Appendix 1. The full survey report can be found at www.mpi.govt.nz/document-vault/10760. The results show that the fishery, overall, is at its lowest recorded biomass level, despite measures introduced to help rebuild the fishery in 2014. These included reducing the total allowable catch (TAC), total allowable commercial catch (TACC), and significantly reducing commercial catch limits for Marlborough Sounds through implementation by the Challenger Scallop Enhancement Company of a maximum commercial harvest rate for the Marlborough Sounds of 22% of recruited biomass². In addition, the Challenger Scallop Enhancement Company has continued to reseed parts of the fishery (primarily Tasman Bay), albeit at reduced levels.

SCA7 is important to all sectors. Best available information suggests that recreational harvest is approximately 11 tonnes (meatweight), but there is uncertainty around this estimate. In the 2015-16 scallop season, commercial fishers harvested 22 tonnes (meatweight), primarily from

² This is considered to be a rate at which there has been an observed increase in scallop abundance in the Marlborough Sounds in the past and which, over time, should result in future increases in biomass.

the Marlborough Sounds. MPI has been developing a package of measures in consultation with a multi-sector stakeholder group. Quota holders, through the Challenger Scallop Enhancement Company, also have a specific role in management of this fishery. MPI has been working with the company on management options for the fishery.

MPI's strategy is to support a rebuild of the fishery by ensuring that measures are in place to protect and stimulate a recovery of the fishery over the coming 2016-17 scallop season, while longer-term management options are worked through. This paper, therefore, seeks feedback and submissions on proposed temporary closures that would be implemented for this scallop season (15 July to 14 February).

In addition, initial views are sought on longer term options which appear to have some support from discussions to-date. In particular, MPI proposes to review the annual decision-making process to ensure it is transparent and engages all users as effectively as possible in management. This will include a full review of the functioning of the annual decision-making process.

Other suggestions proposed by individuals and groups include amending commercial and recreational rules for this fishery, for example catch limits, the timing of the scallop season, and gear restrictions. These measures are primarily set in regulation and will take time to develop and test over the next 12-18 months with input from tangata whenua and stakeholders, as well as wider engagement with the community before any decisions are made.

5.2 LEGAL CONSIDERATIONS

Additional legal considerations are set in Appendix 2. Submissions are sought on the matters set out there.

6 2016-17 Season: Proposed Spatial Management Options

Along with the regulatory and non-regulatory measures already in place, the following options aim to protect the scallop stock over the next season and ensure that fishing does not prevent the fishery rebuilding. They take into account that the beds that would be the most attractive for fishing this coming season are also likely to be the beds that contribute most to the overall reproductive potential of the fishery.

6.1 OPTION 1 – CLOSE PARTS OF THE MARLBOROUGH SOUNDS AND TASMAN BAY TO COMMERCIAL AND RECREATIONAL SCALLOP FISHING

Under Option 1 some parts of the Marlborough Sounds and all of area 7H in Tasman Bay would be temporarily closed to both commercial and recreational scallop fishing for the 2016-17 scallop season. The closures would end on 14 February 2017. The closures would be implemented under s11 of the Fisheries Act 1996.

MPI's preliminary view is that areas that could be considered for closure under Option 1 include Area 7H in Tasman Bay and/or one or more of the following areas in the Marlborough Sounds; Wynens Bank, Guards Bank and environs, Ship's Cove, Pelorus

Sound³ and Dieffenbach Point (see Figure 2 below). This view is based on best available information on the characteristics of these beds, including that they are likely to be areas with high densities of scallops that are important for the reproductive potential of the fishery, and that they contain large numbers of juvenile scallops that may be damaged by intensive dredging (commercial or non-commercial). MPI seeks feedback and information from submitters on the characteristics of these beds and/or on other beds that meet these criteria.

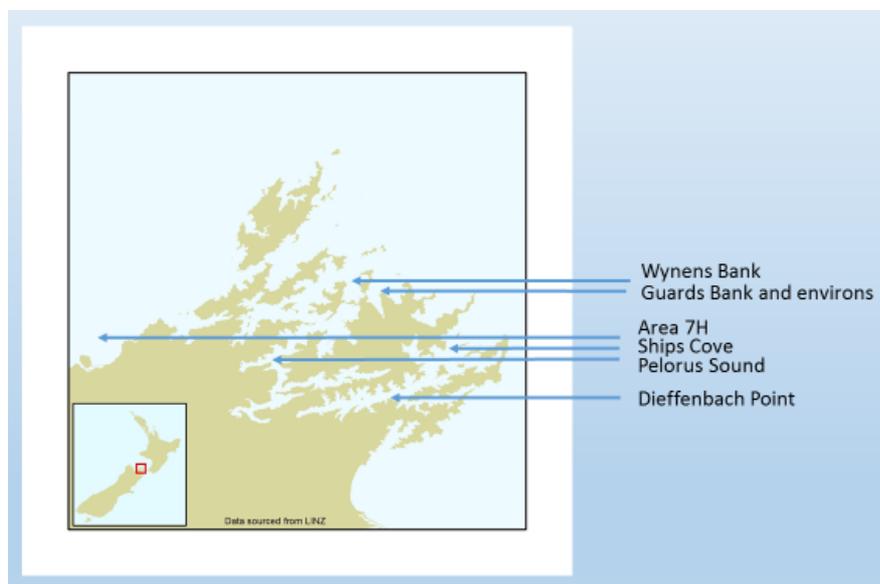


Figure 2 Map showing approximate areas that could be considered for temporary closure under Option 1

6.1.1 Impacts and benefits

Closing specific beds would help safeguard both mature and juvenile scallops in these beds from direct fishing mortality in the case of mature scallops, or incidental fishing mortality in the case of juvenile scallops. It would give these beds an opportunity to rest and contribute to the spawning potential of the fishery. Spatial closures are an effective management tool that have been used previously in SCA7 and in other scallop fisheries to help rebuild the abundance of scallops⁴.

Relative to Options 2 and 3, this option entails an intermediate level of risk (depending on the areas closed) that the remaining populations of scallops in the Marlborough Sounds may not recover or that recovery is delayed.

Based on the November survey and discussions within the multisector working group, Wynens Bank is considered to have higher numbers of juvenile scallops than in recent years and some dense aggregations of spawning scallops that may be a valuable source of spat for the wider Pelorus Sound. Similarly, Dieffenbach Point and Ships Cove contain dense aggregations of spawning scallops that may be a valuable source of spat for inner and outer (respectively) Queen Charlotte Sound. Guards Bay and environs contains the largest remaining biomass and densities of scallops in the fishery, which are likely to provide a source of spat across a wide part of the outer Marlborough Sounds.

³ For the purpose of closure Pelorus Sound is defined as those waters inside of a straight line between Te Akaroa Point and Kaitiraea Point.

⁴ The use of rotational fishing strategies have been shown to be beneficial in overseas scallop fisheries (United States and Canada for example) and were once part of the Tasman and Golden Bay fisheries. The programmes have shown the benefits derived can vary depending on the length of the closures (eg. 1, 3 or 6 years).

Scallops in the inner parts of Pelorus Sound have been in poor condition over the past few years, with MPI testing showing they are affected by bacterial disease. Closing the whole of Pelorus Sound may assist scallops in the sound to recover without disturbance by fishing.

Over the past two years there have been signs of recovery in parts of Area 7H in Tasman Bay, with aggregations of both juvenile and spawning-size scallops being found. This area is also a primary area for reseeded by the Challenger Scallop Enhancement Company. Closing this area would protect the mature scallops (which may be important to ensure a source of spat across the wider Tasman Bay) and juvenile and reseeded scallops from disturbance and incidental fishing mortality. Historically, Tasman and Golden Bays have contained the largest scallop beds in the fishery and contributed most of the commercial catch. Discussion with the multisector group, tangata whenua and feedback from public sessions has identified that bringing these beds back into production is a key long term goal.

Both commercial and recreational fishing over the coming season would be impacted by the closures. The extent of the impact depends on how many, and which, beds are closed under this option. If the beds containing the highest biomass (for example Guard's Bay or Ships Cove) are closed, then commercial fishing will be significantly reduced as catch would be based on the set harvest rate (22%) applied only to the estimated scallop biomass in the remaining open areas. The level of reduction in catch may make it uneconomic to fish. Similarly, if wider areas of the fishery are closed (for example the whole of Pelorus Sound), then the opportunities for recreational fishers to fish for scallops will become increasingly limited.

While protecting the identified beds, the closures are likely to result in recreational fishing effort shifting to other beds, increasing the fishing pressure there. The extent of this impact will depend on which beds are closed. For example, less recreational fishing is believed to occur at Guards Bay than some other areas due to the distance and marine conditions in the area. Shift of effort is likely to be less of an issue for commercial fishing as catch would be capped by the Challenger Scallop Enhancement Company in-line with the biomass in the remaining open areas. MPI seeks information on these issues.

Closing some beds within the sounds presents practical difficulties for fishers and for MPI, which need to be taken into account in selecting the areas for closure under this option. Larger, geographically distinct areas are likely to be easier to communicate, direct and enforce, but will still require additional effort to ensure compliance.

Pre-consultation discussions within the multisector group, the Challenger Scallop Enhancement Company, input from tangata whenua, and other feedback show a range of preferences. Recreational fishers generally support wider closures. Tangata whenua (through the Te Tau Ihu Iwi Forum) are more likely to support more limited closures as part of a rotational fishing strategy that is adjusted annually.

Commercial fishers, through the Challenger Scallop Enhancement Company, do not object to the need for sustainability measures but do not support temporary closures in relation to commercial fishing at this time. The company considers that the annual process it undertakes to develop a harvest plan for submission to the Minister in August will ensure sustainability and meet the needs of all sectors. The company does not agree with MPI's conclusions that the fishery has continued to decline and is at its lowest recorded levels, and is considering carrying out a further survey of the beds later in the year (possibly July). It believes no action should be taken until the results of this survey are available (likely to be in August).

MPI's conclusions on the poor status of the fishery are based on a rigorous scientific review process, as well as commentary from an independent panel of overseas scientists. MPI agrees that updated information through a further survey would be valuable, but considers steps are required to protect the fishery early in the season based on best current available information. Deferring decisions until after August means that closures under s11 of the Fisheries Act could not be implemented until well after the start of the scallop season (15 July). Their effectiveness is likely to be significantly reduced as a result. Deferring the start of the recreational season (suggested by the Challenger Scallop Enhancement Company) could be considered over a longer timeframe, but is not feasible for this season.

MPI notes that the beds that would be most attractive for fishing (supporting high catch rates and a high proportion of legal-sized scallops) this coming season are also likely to be the beds that contribute most to the overall reproductive potential of the fishery. Under these circumstances it may be difficult to find a 'compromise position' between use and protection of the beds given the poor status of the fishery.

MPI does not have a preferred set of specific area closures under Option 1, but seeks submissions and supporting information on the benefits and impacts of closing the various beds for the coming season under this option.

6.2 OPTION 2 - CLOSE ALL OF THE MARLBOROUGH SOUNDS AND PART OF TASMAN BAY TO COMMERCIAL AND RECREATIONAL FISHING

Under Option 2 the whole of the Marlborough Sounds and area 7H in Tasman Bay would be closed to both commercial and recreational scallop fishing for the 2016-17 scallop season. The closures would end on 14 February 2017 and would be implemented under s11 of the Fisheries Act 1996. It is proposed that "Marlborough Sounds" be defined as the same area specified under the recent decisions relating to Marlborough Sounds Blue Cod <http://www.mpi.govt.nz/news-and-resources/consultations/2015-review-of-the-fishing-rules-for-marlborough-sounds-blue-cod/>.

6.2.1 Impacts and benefits

This option entails the least risk, relative to Options 1 and 3, that the remaining populations of scallops in the Marlborough Sounds will not recover or that recovery is delayed. Closing the entire Marlborough Sounds to fishing would provide an opportunity for all scallops in the sounds to spawn, settle and grow without fishing mortality and disturbance.

MPI considers this option may be appropriate given the fishery is at its lowest recorded level. MPI's draft plenary report concludes that biomass in parts of the fishery are considered likely to be below the hard limit⁵. The hard limit is defined in MPI's Harvest Strategy Standard as the biological reference point at which closure should be considered⁶.

Closing all or significant parts of a scallop fishery has proven to be a successful approach in rebuilding scallop numbers both in SCA7, and in overseas scallop fisheries. The entire SCA7 fishery was closed for two years in 1981-83 and recovered rapidly. Overseas examples where large scale closures have been successful in rebuilding scallop biomass include Georges Bank, several UK scallop fisheries, and Bass Strait, Australia.

⁵ Golden and Tasman Bays are likely to be below the hard limit and it is not known whether the biomass in the Marlborough Sounds is below the hard limit, as this limit is uncertain.

⁶ The Harvest Strategy Standard can be found at: <https://www.mpi.govt.nz/document-vault/728>

MPI does not consider closure of the whole fishery (*i.e.*, including Golden Bay and the remainder of Tasman Bay) is required. More targeted closures (as proposed under this option and Option 1) should support a rebuild of the fishery by protecting the key areas of spawning and juvenile scallops. Scallops are found at only low densities in the remaining parts of the fishery, and there is some opportunistic harvesting of these scallops (for example beach cast scallops in Golden Bay) that provides for limited utilisation. MPI does not propose to curtail this activity.

Fishing effort (both commercial and recreational) could be displaced to Golden and Tasman Bays under this option. Therefore, it may be particularly important to also close Area 7H in Tasman Bay where there have been signs of recovery, and where scallop spat has been reseeded by the Challenger Scallop Enhancement Company over the past two seasons.

Both commercial and recreational fishing would be significantly impacted under this option. It is unlikely there would be any significant commercial catch under this option, and there would be limited recreational fishing opportunity in remaining open areas.

Pre-consultation discussion within the multisector group, the Challenger Scallop Enhancement Company, input from tangata whenua through the Te Tau Ihu Iwi Forum, and other feedback show different views on this option. There is recreational fishing support within the multisector group for this option. Tangata whenua are likely to prefer more limited closures as set out in Option 1, however, further discussion is required to confirm tangata whenua views.

As described for Option 1 above, commercial fishers, through the Challenger Scallop Enhancement Company, do not support temporary closures in relation to commercial fishing at this time.

Overall, this option has the most impact on fishing, but has the least sustainability risk of the three options. MPI's initial view is that this option may be appropriate, given the fishery is at its lowest recorded state with only a few beds at fishable density. Parts of the fishery are likely to be below the hard limit; the point at which closure of the fishery should be considered. In addition, closing only some discrete areas, as would occur under Option 1, may be difficult to enforce and risks delaying any rebuild as effort could shift to the remaining open beds creating a risk of overfishing those beds.

MPI seeks submissions and supporting information on the benefits and impacts of this option.

6.3 OPTION 3 – STATUS QUO

Option 3 is the *status quo*. No closures would be implemented under this option.

6.3.1 Impacts and benefits

Under this option, more beds would be available for commercial fishing this season, with potentially greater catch, and there would be greater opportunities for recreational fishers to catch scallops across a wider extent of the fishery. There may be an opportunity to implement measures part way through the season, and these may be informed by updated information should the Challenger Scallop Enhancement Company decide to undertake a further survey of the beds. The set commercial harvest rate (22%) that has been implemented by the Challenger Scallop Enhancement Company for the past two years, would also still apply.

The survey carried out in November 2015, however, shows the biomass of scallops in the SCA7 fishery is at its lowest ever recorded level. It is possible that, without additional measures, the fishery may not recover or that recovery will be delayed, either because the reproductive potential of the fishery is reduced, or because juvenile scallops in the beds are affected by fishing. Under these circumstances, future fishing benefits are likely to be curtailed through reduced abundance of scallops and, potentially, removal of remaining scallop spawning beds.

Overall, this option has the least impact on fishing but has the highest risk that the remaining scallop beds will not recover or that recovery is delayed. MPI's preliminary view is that the status quo option is not a responsive approach to the changes in scallop abundance that have occurred over the last few years. MPI seeks feedback and information from submitters on this preliminary view.

7 Other Matters

7.1 SUPPORTING MEASURES

Supporting measures already in place for the 2016-17 season to help ensure a rebuild the fishery include the catch limits and regulations that apply to commercial and recreational fishing. A set harvest rate for commercial fishing of no more than 22% of available⁷ biomass for the Marlborough Sounds has also been implemented by the Challenger Scallop Company for the past two seasons.

7.2 LONGER TERM PACKAGE

MPI and a multisector working group is developing a longer term package of measures to help rebuild the fishery. This will include a full review of the functioning of the annual decision-making process with a particular focus on the enhancement plan and associated memorandum of understanding between MPI and the Challenger Scallop Enhancement Company. The review will also review the commercial and recreational rules for this fishery. Various management measures have been proposed in previous submissions on the SCA7 fishery, and/or have been put forward in pre-consultation discussions with stakeholder groups, including:

- Amending the start date for the SCA7 season from 15 July to 1 September (for both commercial and recreational) to ensure scallops are harvested when in best condition.
- Amending commercial and recreational dredge requirements to reduce incidental mortality and the impacts of dredging.
- Adjusting recreational bag limits and/or boat limits.
- Establishing 'dive-only' areas in some parts of the Marlborough Sounds.

MPI considers some of these longer term measures may be more effective than others, and would require additional engagement with the community and stakeholders. A further consultation and assessment process would be carried out before any decisions are made. MPI invites tangata whenua and stakeholders to provide preliminary comment on these measures, their potential benefits and impacts, and whether there are other tools not discussed that MPI should consider. MPI and the multisector group will consider this feedback, which will be

⁷ Available biomass is the biomass of scallops above a density of 1 scallop per 25 square metres, which is considered by some to be a minimum biomass for recreational / commercial fishing.

used to develop a second phase of public consultation on longer term measures, with potential implementation in 2017.

7.3 IMPLEMENTATION, MONITORING, AND REVIEW

Following consultation, MPI will develop final advice for the Minister for Primary Industries who will make a decision on any short term closures for this season. Any closures required would be implemented under s11 of the Act (Ministerial gazette notice) and would be in place early in the scallop season.

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 nature of scallop biology means there is uncertainty in terms of the effectiveness of the measures being considered. Recruitment and survival can be affected by environmental changes as well as direct effects from fishing. Further biomass surveys (either by the Challenger Scallop Enhancement Company or by MPI), will be used to assess the effectiveness of the temporary closures. The results of these surveys, the performance of the SCA7 fishery, and the performance of the regulations applying to this fishery will be discussed with all sectors and with tangata whenua, as part of the ongoing development of longer term measures to help rebuild the fishery. Based on the information that becomes available, MPI will consider whether a further review of the regulations is warranted in the future.

8 Conclusion

MPI wishes to provide more certainty that a rebuild of this important fishery will occur, and to ensure that the management regime is transparent and engages all users as effectively as possible in management of the fishery. MPI's strategy is to support a rebuild of the fishery by ensuring that measures are in place to protect and stimulate a recovery of the scallop fishery over the coming 2016-17 scallop season, while longer-term management options are worked through.

Spatial closures are an effective management tool that have been used previously in SCA7 and in other scallop fisheries to help rebuild the abundance of scallops. Three closure options are put forward for consideration.

Option 1, temporarily closing some scallop beds in Marlborough Sounds and part of Tasman Bay, would safeguard both mature and juvenile scallops in those areas from direct and incidental fishing. This option has an intermediate level of sustainability risk (depending on the areas closed).

Option 2, temporarily closing all of the Marlborough Sounds and part of Tasman Bay has the most impact on fishing, but carries the least sustainability risk of the three options. MPI's preliminary view is that this option may be appropriate, given the fishery is at its lowest recorded state with only a limited number of beds at fishable density.

Option 3, the status quo, has the least impact on fishing but has the highest sustainability risk of the three options. MPI's preliminary view is that the status quo option may not be a responsive approach to the status of the fishery.

In addition to these three temporary closure options, MPI also seeks submissions and information on longer term measures that may support a rebuild of the scallop fishery. The feedback received will be used to develop a second phase plan for public consultation later this year with any approved measures likely to be in place in 2017.

9 Appendix 1

A survey of the southern scallop fishery (SCA7) was carried out in early November and the results presented to MPI on 26 November. The survey was commissioned by MPI to provide a stock-wide picture of the state of the fishery. Other surveys, carried out earlier this year in May and in October, have provided information only on parts of the fishery.

The survey shows that in SCA 7 there are unlikely to be any areas of significant scallop biomass outside of the areas already known and previously surveyed. The primary area of the fishery where scallops are available is in the Marlborough Sounds.

The survey of core commercial areas that took place in May 2015 projected recruited scallop abundance to be ~203 tonnes meatweight (50% of which was in the Marlborough Sounds). The November 2015 survey, which covered much broader areas across the whole of SCA7, estimated recruited scallop abundance to be 211 tonnes meatweight (50% of which was in the Marlborough Sounds).

The estimates of recruited scallop abundance across SCA7 (at or above the minimum legal size - MLS) are the lowest that have been observed since surveys began in 1998 (refer to Figure 1). The estimates of scallop abundance in the Marlborough Sounds (at or above MLS) are the lowest that have been observed since surveys began in 1998.

There are signs of what appear to be improved numbers of pre-recruits in the fishery coming through in some areas, possibly as a result of measures implemented in 2014, but the number of pre-recruits that actually recruit into the fishery is uncertain.

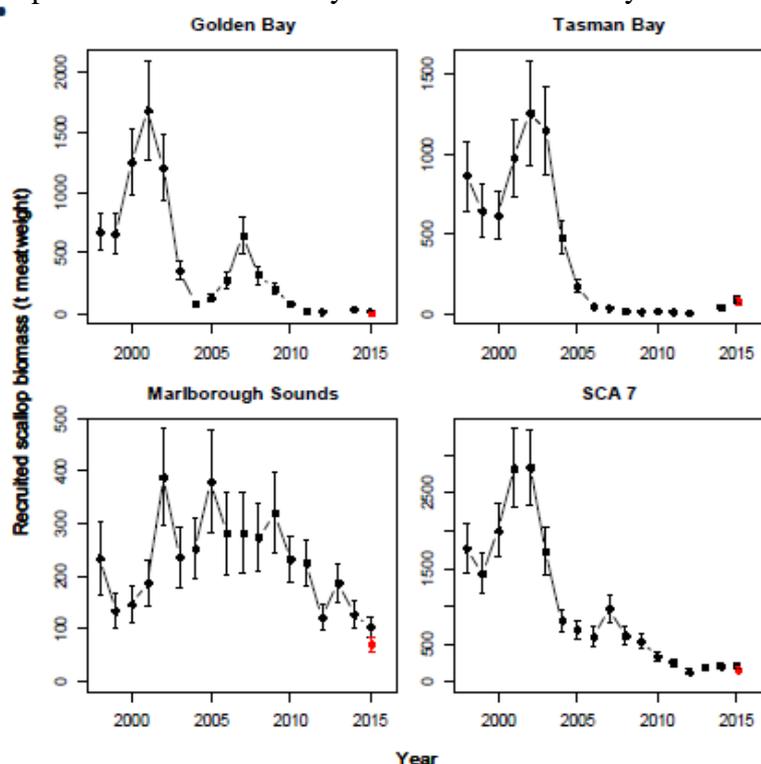


Figure 1. The red dots show the estimates of scallop abundance at or above minimum legal size (90mm) in the November 2015 survey. The graph for Marlborough Sounds relates only to survey strata that are comparable across the entire time series.

10 Appendix 2. Legal Considerations

10.1 SECTION 9- ENVIRONMENTAL PRINCIPLES

The Act prescribes three environmental principles that the Minister must take into account when exercising powers in relation to utilising fisheries resources and ensuring sustainability.

Principle 1: Associated or dependent species should be maintained above a level that ensures their long-term viability.

The Act defines “associated or dependent species” as any non-harvested species taken or otherwise affected by the taking of a harvested species. “Harvested species” means any fish, aquatic life, or seaweed that may for the time being be taken with lawful authority. Taken together, these definitions mean that only protected species constitute associated or dependent species. MPI considers that scallop fishing has little impact on associated or dependent species, and that the measures proposed in this discussion paper are likely to reduce any such impacts.

Principle 2: Biological diversity of the aquatic environment should be maintained.

“Biological diversity” means the variability among living organisms, including diversity within species, between species, and of ecosystems. There has been no formal assessment of the extent to which dredging for scallops reduces biological diversity as defined in the Act, although dredge and trawl fisheries in general are known to affect benthic communities, including often reducing some measures of species diversity. The measures proposed in this discussion paper are likely to reduce impacts on biological diversity, especially in any area that might be closed.

Principle 3: Habitat of particular significance for fisheries management should be protected.

“Habitat of particular significance for fisheries management” is not defined in the Act but MPI considers that the maintenance of healthy scallop stocks requires the mitigation of any major threats to habitat important for scallop spawning and recruitment. The activity of dredging could affect such habitats and could also exacerbate other impacts like sedimentation from a range of terrestrial activities. It is not known precisely what habitats are important for the recruitment of scallops within the SCA7 fishery, or the impacts of scallop dredging on such habitats, but measures proposed in this discussion paper are likely to reduce impacts on habitats important for scallops, especially in any area that might be closed.

10.2 SECTION 10- INFORMATION PRINCIPLES

The nature of the data and assumptions used to monitor fisheries and the results produced contain inherent variation and uncertainty. The Act specifies the information principles that must be taken into account:

- Decisions should be based on the best available information – that is the best information that, in the particular circumstances, is available without incurring unreasonable cost, effort, or time;
- Decision makers should consider any uncertainty in the information available in any case;

- Decision makers should be cautious when information is uncertain, unreliable, or inadequate; and.
- 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.

These information principles have been taken into account in preparing this discussion document.

10.3 SECTION 11- SUSTAINABILITY MEASURES

Section 11(1) of the Act allows the Minister to set or vary any sustainability measure for one or more stocks or areas, after taking into account any effects of fishing on any stock and the aquatic environment, any existing controls that apply to the stock or area concerned (for example the bag limits referred to earlier in this paper), and the natural variability of the stock concerned. Scallop populations are known to vary over time and in response to environmental changes, and can also be affected by fishing pressures. The proposals to close some scallop beds to harvesting seek to address the risk that fishing will further exacerbate conditions that have led to declining populations.

Section 11(2) states that before setting or varying any sustainability measure, the Minister shall have regard to any provisions of: any regional policy statements, regional plans, or proposed regional plans under the Resource Management Act 1991; any management strategy or plan under the Conservation Act 1987; sections 7 and 8 of the Hauraki Gulf Marine Park Act 2000; any regulations under the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012; and any planning documents lodged with the Minister of Fisheries (Minister for Primary Industries) by a customary marine title group under section 91 of the Marine and Coastal Area (Takutai Moana) Act 2011. MPI is not aware of any specific matters under the above provisions that are relevant to this proposal.

Section 11(2A) states that before setting or varying any sustainability measure the Minister must take into account any relevant fisheries plan, fisheries services or conservation services. There are no relevant approved fisheries plans or conservation services. The management of the SCA7 fishery is guided by the objectives that are found in the draft National Fisheries Plan for Inshore Shellfish. Key relevant fisheries services are the regular biomass surveys of SCA7, such as that carried out in November 2015.

Section 11(3) outlines a non-exhaustive list of sustainability measures that the Minister may set for a stock. Sustainability measures may relate to the areas from which any fish, aquatic life, or seaweed of any stock may be taken. The Minister may implement any sustainability measures by notice in the Gazette (as proposed in this paper) or by the making of regulations under section 298 of the Act. MPI is proposing temporary area closures as one measure for the 2016-17 season to address the observed declines in the SCA7 population.

Section 11(4) allows sustainability measures to be set or varied by Gazette Notice or by recommending the making of regulations. MPI proposes that the sustainability measures be set by notice in the Gazette.

10.4 SECTION 12- CONSULTATION

Before implementing any section 11 sustainability measure, section 12 of the Act specifies the Minister shall consult with persons or organisations that the Minister considers have an interest in the stock or the effects of fishing on the aquatic environment in the area concerned,

including Maori, environmental, commercial, and recreational interests. This paper forms part of that consultation process.

The Minister must also provide for the input and participation of tangata whenua having a non-commercial interest in the stock concerned or an interest in the effects of fishing on the aquatic environment in the area concerned. The Minister must also have particular regard to kaitiakitanga. MPI has undertaken pre-consultation (as discussed above in section 3).

MPI is now seeking further views and input on the options presented in this paper.