



Fisheries New Zealand

Tini a Tangaroa

Temporary Closure of Southern Scallop Fishery

Discussion Document

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Southern Scallops (SCA 7)

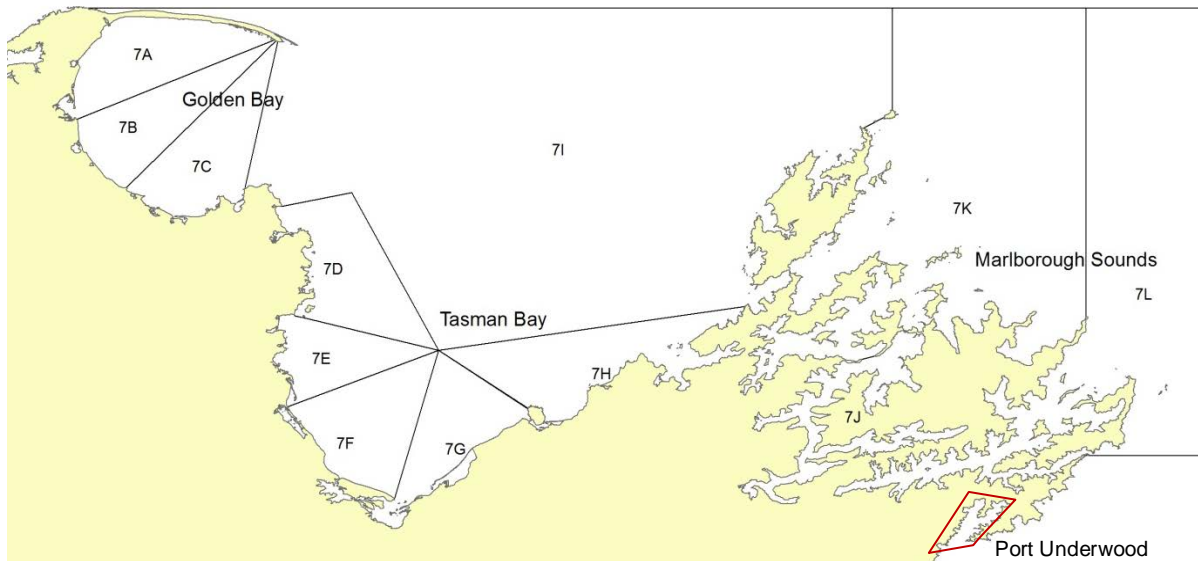


Figure 1: Map of the Southern Scallop fishery (SCA 7) showing reporting areas. Port Underwood is outlined in red.

1 Executive Summary

Fisheries New Zealand is seeking information and views from tangata whenua and stakeholders on whether a further closure of the Southern Scallop fishery (SCA 7, Figure 1) is appropriate.

Scientific surveys have shown a significant decline in scallop abundance over the past 10 years. Scallop biomass in Golden and Tasman Bays collapsed in the 2000s and has remained at negligible levels since then. Biomass in the Marlborough Sounds followed a declining trend from 2009 to 2015. As a result SCA 7 has been closed to commercial and recreational scallop fishing for the past two seasons (2016 and 2017)

A survey in January 2017 suggested biomass in the Marlborough Sounds had stabilised, and a new survey in January 2018 indicated an increasing trend in biomass in some scallop beds in the outer Marlborough Sounds. However, the overall biomass of scallops remains low and the difference is not statistically significant from previous surveys. High densities of scallops remain confined to relatively few beds in the outer Marlborough Sounds. Overall, the SCA 7 stock is still likely to be below the hard limit, the biological reference point at which it is Fisheries New Zealand policy that a closure should be considered¹.

It is likely that fishing is not the primary factor contributing to the low biomass of scallops in SCA 7. A comprehensive research programme was commissioned in 2017 to investigate the wider drivers of decline in the fishery. As the initial results of this research become available in late 2018, Fisheries New Zealand will be seeking feedback on wider management options for the fishery. A new multisector group is also being established to help form these options and develop an agreed opening regime for the fishery that would allow for utilisation without compromising the rebuild of the remaining scallop beds in the Marlborough Sounds. The current regime was developed when the fishery was at its peak and, if the fishery were to

¹ The Harvest Strategy Standard can be found at: <https://www.mpi.govt.nz/document-vault/728>

reopen, is unlikely to constrain fishing to sustainable levels given the collapse of the majority of the fishery.

1.1 SUBMISSION INFORMATION

Fisheries New Zealand welcomes written submissions to inform the review and the proposals contained in this Discussion Document. All written submissions must be received by Fisheries New Zealand no later than 5pm on 25 June 2018.

Written submissions should be sent directly to:
Inshore Fisheries Management
Fisheries New Zealand
P O Box 2526
Wellington 6011

or emailed to FMSubmissions@mpi.govt.nz

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. Fisheries New Zealand will consider those reasons when making any assessment for the release of submissions if requested under the Official Information Act.

2 Purpose

The purpose of this document is to initiate consultation on behalf of the Minister of Fisheries (the Minister) on whether the current closure should be continued or the fishery allowed to open. The options are set out below.

Fishery Closure	
Option 1 (Preferred)	Continue a total closure of the SCA 7 fishery, including Port Underwood.
Option 2	No closure. The fishery, including Port Underwood, would be open to fishing when the season opens on 15 July.

Option 1 would require a new *Gazette* Notice under section 11 of the Fisheries Act 1996. Because the current *Gazette* Notice closing the SCA 7 fishery has now ended, no action is required for Option 2.

Tangata whenua, and stakeholders are encouraged to provide their views and any additional information relevant to these proposals. Submitters' views will be included in the final advice provided to the Minister of Fisheries.

3 Problem Definition

Surveys carried out in November 2015 and January 2017 showed the biomass of scallops in SCA 7 to be at its lowest recorded level, despite measures taken to halt its decline including reduced commercial fishing. To protect remaining scallop beds from fishing impacts, the Minister closed parts of the fishery for the 2016 season, and the whole fishery as well as Port Underwood for the 2017-18 season. This closure expired on 15 February 2018. Therefore, unless further management action is taken the fishery season will open on 15 July 2018.

A survey of the Marlborough Sounds was completed in January 2018 (the survey of Golden and Tasman Bay was not repeated this year due to the very low densities of scallops in these areas). Results show a small increase in biomass in some beds, with Ships Cove in Queen Charlotte Sound showing the best response². Encouragingly, this increase is projected to continue, with the survey indicating an increase in juvenile scallops in some areas, and survey divers recording good settlement of 3 – 20 mm spat in some beds during the survey.

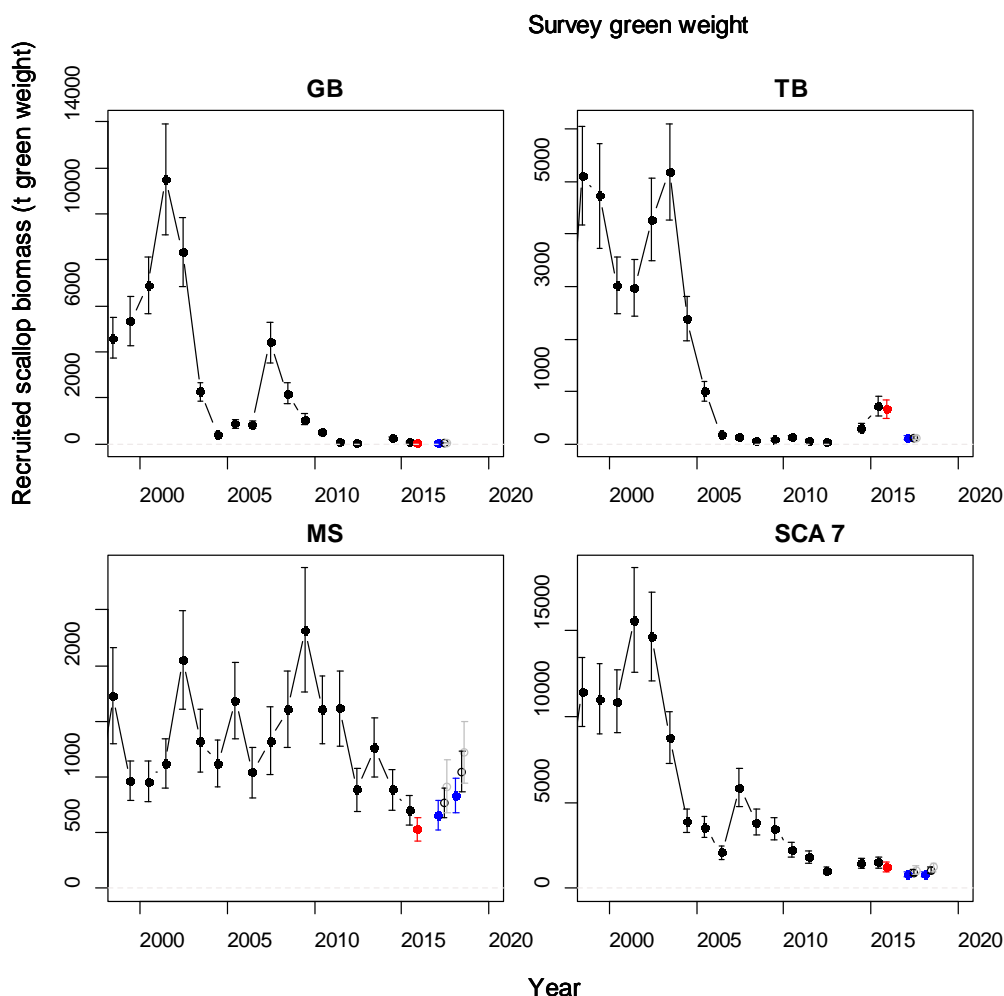


Figure 2: Trends in survey biomass (tonnes green weight) of recruited scallops (90 mm or larger) by substock Golden Bay (GB), Tasman Bay (TB), Marlborough Sounds (MS) and for the total SCA 7 stock, 1998–2018 (May surveys - black symbols, November 2015 survey - red symbol, and January 2017 and 2018 surveys - blue symbols). Two projected estimates for 2017 and 2018 are also shown (grey), derived from two different projection approaches.

While the results indicate an improving trend in biomass between 2015 and 2018, overall the biomass is not statistically different from the 2015 and 2018 results. **High densities of scallops, which may be critical to the reproductive success across the wider fishery, remain limited to a few key areas within the Marlborough Sounds.**

Overall, the SCA 7 stock is still likely to be below the hard limit. The hard limit is defined in Fisheries New Zealand's Harvest Strategy Standard as the biological reference point at which closure should be considered³. Although the policy is only a guide, it suggests that at this low biomass level, fishing poses a risk to recovery of the stock.

² Copies of the results of the biomass survey are available on request from FMsubmissions@mpi.govt.nz

³ The Harvest Strategy Standard can be found at: <https://www.mpi.govt.nz/document-vault/728>

In the case of SCA 7 this is particularly so, given that the current regulatory settings for the fishery were developed when the fishery was at its peak, when it was primarily an enhanced fishery. Given the collapse of the majority of the fishery, these settings are unlikely to constrain catch to avoid overfishing of remaining scallop beds.

4 Objective

The purpose of the Fisheries Act 1996 is to provide for utilisation while ensuring sustainability. Fisheries New Zealand considers that the options proposed in this review are consistent with this purpose.

SCA 7 is a “Group 2” fishery under Fisheries New Zealand’s Draft National Fisheries Plan for Inshore Shellfish. Such fisheries are considered to be important to all sectors, and the species 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 of scallops in SCA 7.

5 Background Information

SCA 7 is important to all sectors. Since 1994, aspects of management have been undertaken by the Challenger Scallop Enhancement Company Limited under a formal Enhancement Programme pursuant to section 310 of the Fisheries Act 1996⁴. The fishery at that time was primarily an enhanced fishery based on the artificial reseedling of scallop spat in Golden and Tasman Bays.

Commercial catch declined in the 10 years prior to the fishery’s closure in 2016. In the last commercial scallop season in 2015-16, commercial fishers harvested 22 tonnes (meatweight), primarily from the Marlborough Sounds. At a port price of \$17/kg meat weight, the landed value of this catch was around \$350,000.

Up until the fishery’s closure, scallop fishing also supported local businesses servicing the fishery especially diving, chartering, equipment and accommodation.

Best available recreational catch information is from the National Panel Survey, which estimated recreational catch in the 2011/12 fishing year to be 11 tonnes (meatweight) with 6.6 tonnes caught in the Marlborough Sounds. There is uncertainty around these estimates.

Preferred recreational methods are small dredges (less than a metre wide) and hand gathering by diving. The daily recreational bag limit is set at 50 scallops per person per day. This is higher than elsewhere in New Zealand, where the limit is 20 scallops per day or less. This and other regulatory settings for the fishery were set when the fishery was being successfully enhanced, and reflected the high abundance of scallops in SCA 7 at that time.

Declining abundance resulted in a reduction to the Total Allowable Catch in 2014. A subsequent biomass survey in November 2015 was the most comprehensive undertaken, but still recorded the lowest biomass since surveys began in 1994. Both Tasman and Golden Bays were estimated likely (>60%) to be below the hard limit, the point at which it is Fisheries New Zealand policy to consider closure. Given this, parts of the fishery were temporarily closed in 2016.

⁴ A Memorandum of Understanding between the Company and Fisheries New Zealand also prescribes the information and data quality criteria under which the Company gathers and uses information in management recommendations for the Minister.

A survey in January 2017 showed further decline, especially in Tasman Bay, however, the biomass had started to stabilise in the Marlborough Sounds. The fishery, including Port Underwood, was also temporarily closed in 2017.

The results of a new survey in January 2018 are now available. These indicate that biomass is starting to increase in the Marlborough Sounds, from 638 t (greenweight) in January 2017 to 803 t in January 2018. While encouraging, this difference is not statistically significant to the 2015 or 2017 biomass estimates. Given that scallops may take three years to grow to harvestable size, a larger increase may not be expected within the two seasons that the fishery has been closed. An increase in juvenile scallops was also found, with survey divers reporting large numbers of 3 – 20 mm spat in some beds.

Projected estimates have been made of the expected scallop biomass for September 2018. Of the 118 t (meat weight) of recruited biomass at potentially fishable densities, 99% is projected to be held within just seven scallop beds: Chetwode Islands, Ketu Bay, Wynens Bank, Guards Bank, Ships Cove/Motuara, Bay of Many Coves and Dieffenbach Point.

Previously, significant beds within Pelorus Sound (eg. Northeast Bay, Horseshoe Bay, Richmond Bay, Waitata Bay) allowed for rotational commercial fishing (for example Ketu Bay was only fished every three years) and the entire Sounds were often fished very lightly, effectively resting the beds and allowing recovery. From 2010-11 until its closure in 2016, however, all beds with fishable densities were fished.

It is unlikely that fishing is now the primary factor driving the decline in abundance of scallops, with sedimentation and disease also implicated. To better understand the factors involved, last year Fisheries New Zealand commissioned a new \$400k research programme. The programme includes an investigation into what is limiting the survival of scallops across the gradient of environmental conditions found in SCA 7. The results of this programme will become available later in 2018.

Additional background information and stock assessment information for the SCA 7 can be found in Fisheries New Zealand's 2016 Plenary Report

http://fs.fish.govt.nz/Doc/24145/77A_SCA%207_2016_FINAL.pdf.ashx

6 Input and Participation of Tangata Whenua

The latest survey results have been discussed with the Te Waka a Māui me ōna Toka Forum. The Forum covers the South Island as well as the Te Tau Ihu Forum across the “Top of the South”. Their input has been incorporated into the proposals for consultation. The forums had previously requested a more integrated research and management approach for the fishery, which was adopted in 2017 with the commissioning of the new research programme. This included improved surveys and the assessment of environmental factors referred to above. The initial results of this research will become available later this year, but complete results will not be available until late 2019.

In the interim, Fisheries New Zealand understands that forum members are concerned about the sustainability of fishing should the fishery re-open, and the majority of the forum support a further closure.

7 Pre-Consultation Feedback

The results have also been discussed with recreational fishers and commercial fishers represented by Challenger Scallop Enhancement Company (CSEC). Recreational fishers note the encouraging trend in biomass, but acknowledge the difficulty in managing the amount of scallop harvest should the fishery re-open. For example, the recreational bag limit for scallops in most of New Zealand is 20 or less, whereas in this fishery it is 50, and a longer open season applies than elsewhere. This reflects the previously enhanced nature of the fishery prior to its collapse, and creates a risk of overfishing were the fishery to re-open.

CSEC supports an interim closure, with the expectation that it might be lifted later this year. They note that the biomass is projected to increase by September and, in general, consider that decisions on fishing for the season should be taken later in the year. They consider that commercial fishers are able to self-manage a limited season to ensure any commercial harvest from the beds is sustainable. They also believe that, in some circumstances, fishing can enhance productivity and utilise scallops before they senesce.

8 PROPOSED OPTIONS

8.1 OPTION 1 – TEMPORARY CLOSURE

Under Option 1 the SCA 7 fishery, including Port Underwood, would continue to be closed, until an opening regime for the fishery is developed and agreed that supports utilisation without compromising the rebuild of the remaining scallop beds. The closure would be by Gazette Notice under section 11 of the Fisheries Act 1996.

8.1.1 Impacts and benefits

This option provides the greatest protection to the remaining spawning potential of SCA 7, as large scallops will be left unfished and small scallops will be protected from incidental fishing mortality to grow through and spawn.

Overall, the SCA 7 stock is likely to be still below the hard limit, which is the Fisheries New Zealand biological reference point at which closure should be considered⁵. Although the policy is only a guide, this suggests that the low biomass levels mean that fishing, if allowed to occur, could pose significant risk to a recovery of SCA 7.

While the biomass in the Marlborough Sounds is projected to continue to increase, it is expected to remain relatively low this year. In addition, the area of productive scallop beds is very small relative to its historical extent.

Should information become available suggesting biomass has increased more rapidly than expected, and/or an agreed opening regime has been developed that is able to limit catch to levels that do not pose a risk to the rebuild of the Marlborough Sounds beds, then the closure could be reviewed. In this case further consultation would occur prior to any decisions by the Minister of Fisheries.

Closing all or significant parts of a scallop fishery has proven to be a successful approach in rebuilding scallop numbers both in SCA 7, and overseas. Overseas examples, where large scale closures and/or substantial reductions in fishing mortality have been successful in

⁵ The Harvest Strategy Standard can be found at: <https://www.mpi.govt.nz/document-vault/728>

rebuilding scallop biomass include Georges Bank, several UK scallop fisheries, and Bass Strait, Australia.

Both commercial and recreational fishing would be significantly impacted under this option and it would prevent wider access to the benefits that could have been available from the fishery. This includes tourism benefits such as accommodation and charter income, and income associated with the sale of fishing gear and expertise. In the last commercial scallop season in 2015-16 the landed value of the catch was \$350,000.

8.2 OPTION 2 – (*STATUS QUO*) NO TEMPORARY CLOSURE

Option 2 is the *status quo*. The fishery would be open to commercial and recreational fishing from 15 July 2018 under this option.

8.2.1 Impacts and benefits

Under this option, recover and sustainability of the fishery SCA 7 would rely on the current regulatory management settings⁶.

This option allows utilisation in the short term, but does not address the risk that use beyond the current season is compromised if no action is taken. The existing management settings were developed when the fishery was at its peak, and are unlikely to constrain fishing to sustainable levels given the stock biomass is below the hard limit, with only a small remaining area of productive scallop beds.

Overall, this option presents a risk that the recovering scallop beds in Marlborough Sounds are overfished, and that longer term utilisation (beyond the current season) is compromised.

9 FUTURE MANAGEMENT

As fishing is unlikely to be the only driver of decline in this fishery, a comprehensive research programme is underway to investigate wider causes. As the initial results of this research start to become available in late 2018, Fisheries New Zealand will be seeking feedback on wider management options for the fishery.

To support this, a multisector group is being established to help form options and develop an agreed opening regime for the fishery that would allow for utilisation without compromising the rebuild of the remaining scallop beds in the Marlborough Sound. The current regime was developed when the fishery was at its peak and, if the fishery were to reopen, is unlikely to constrain fishing to sustainable levels given the collapse of the majority of the fishery.

Proposals that have been supported in discussions to-date include:

- increasing the minimum legal scallop size for commercial and recreational scallop fishing;
- changing the season opening day from 15 July to 1 September;
- lowering the daily bag limit from 50 per person to the bag limit in the national amateur fishing regulations of 20 per person;
- changing the width, ring size and design of commercial and recreational scallop dredges; and

⁶ Total Allowable Catch and other settings may only be reduced at the beginning of the fishing year, which is 1 April for SCA 7.

- dive only areas.

While not part of this formal consultation process, Fisheries New Zealand invites suggestions and information on what actions might be required to sustainably manage the fishery in the longer-term. These will be considered further by the multi-sector group being formed for the fishery, and a further consultation and assessment process would be carried out before any decisions on these proposals are made.

9.1 IMPLEMENTATION, MONITORING, AND REVIEW

Following consultation Fisheries New Zealand will develop a Decision Document for the Minister. Any closure would be implemented under s11 of the Fisheries Act 1996 and would come into place before the start of the next season on 15 July 2018. Monitoring of the fishery will continue through further scientific surveys and the integrated research programme currently underway.

10 CONCLUSION

Fisheries New Zealand is seeking stakeholder feedback on whether a further period of closure is required to rebuild the fishery.

A closure would provide a further period for recovery without fishing pressure or disturbance from dredging. Option 2 would allow access to the benefits that can be derived from the fishery, but carries a risk to the recovery of the fishery.