#### Southern Scallop Working Group



Fisheries New Zealand

## Southern Scallop Strategy Marlborough Sounds

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## **Minister's Foreword**

The scallop fishery at the top of the South Island has historically been New Zealand's largest. But the number of scallops has declined dramatically over the last two decades, resulting in the closure of the fishery over the last few years.

Despite the closure, scallop numbers do not appear to be recovering, although there are encouraging reports of some healthy scallop populations in some areas. Fishing may be only one of the factors involved in the decline of the scallop resource, with factors such as disease and sedimentation potentially also playing a role, meaning a multiagency approach is required.

When scallop numbers do build to a healthy level, it is critical that any fishing is sustainable and considers the impacts of fishing on the environment. This is challenging given the potential for localised overfishing and the dynamic nature of scallop populations.

Therefore, in 2018, I requested that a multi-sector stakeholder group be set up to support Fisheries New Zealand to develop recommendations and integrated research and management plans for the fishery. The Southern Scallop Working Group brings together tangata whenua, commercial, recreational fishing and community interests, as well as scientists and Fisheries New Zealand.

The strategy the Group has developed, the *Southern Scallop Strategy: Marlborough Sounds*, sets out overarching objectives to improve the management of the Marlborough Sounds scallop fishery, and the ecosystem that supports it.

The strategy takes into account information received during extensive engagement with iwi, stakeholders and during a public consultation process. The Group and I are grateful to those who participated in this process, and the ongoing support from iwi, recreational and commercial fishers, other marine users and the public for the work being done to improve scallop abundance and habitat in the Marlborough Sounds.

I am pleased to approve the *Southern Scallop Strategy: Marlborough Sounds* as a Fisheries Plan under section 11A of the Fisheries Act 1996, which gives the strategy formal status under legislation. I look forward to seeing the strategy implemented and the fishery being given the best chance possible to rebuild to a healthy level and provide a sustainable fisheries resource for generations to come.



Nala-

Hon Stuart Nash Minister of Fisheries

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## How did we get here?

## Scallops are a shellfish delicacy precious to many New Zealanders. They are an important kaimoana species for tangata whenua and have long been a sought-after species for commercial and recreational fishers.

The Quota Management Area for SCA 7 encompasses the Marlborough Sounds, Golden Bay and Tasman Bay at the top of the South Island (Te Tau Ihu – see map). Tangata whenua from Te Tau Ihu have long harvested Tipa and hold a store of significant knowledge (Mātauranga Māori) on the fishery. Scallops have been commercially fished in this area since the 1950s, and SCA 7 was introduced into the Quota Management System (QMS) in 1992.

At that time, the Golden and Tasman Bay fisheries were managed as rotationally fished and enhanced, and subsequently established as such under sections 14 and 310 of the Fisheries Act (1996). Enhancement in these areas was carried out by the Challenger Scallop Enhancement Company (CSEC) by reseeding (adding to) scallop populations with scallop spat from collector bags suspended in the water column. Enhancement continues in these bays at a significantly reduced scale, to this day. Recent natural recruitment of scallops on the seabed has been low in Golden Bay and Tasman Bay, probably due to the large amount of unsuitable scallop habitat now evident in these areas.

Historically, the bulk of the commercial harvest was taken from Golden Bay and Tasman Bay. The Marlborough Sounds harvest was a relatively small proportion of the overall commercial catch. However, in the early to mid 2000s the scallop fisheries in Golden and Tasman Bays declined dramatically. Commercial fishing effectively ceased in Tasman Bay and Golden Bay in 2006 and 2011, respectively.

The commercial catch from the Marlborough Sounds peaked in 2009 and thereafter followed a declining trend.

In 2016, a temporary partial area closure was put in place over the Marlborough Sounds Area, which was then extended to all of SCA 7 in 2017. The SCA 7 fishery is now closed until such a time that the Minister deems it recovered enough to support fishing activity.

The status of the stock is assessed using fisheryindependent surveys. Based on results of the recent biomass surveys, there is little evidence to suggest the SCA 7 resource is recovering. We need a refreshed management approach to address this.

We have developed this strategy to outline a renewed management approach for this fishery. The strategy assesses several risks to the sustainability of the Marlborough Sounds scallop fishery, and takes into consideration the feedback that was received during engagement on the draft strategy. For more information on this feedback and the risk assessment, visit: **www. fisheries.govt.nz/protection-and-response/sustainablefisheries/the-southern-scallop-fishery-sca-7** 

The strategy has been developed by the Southern Scallop Working Group (SSWG). The SSWG was set up by the Minister of Fisheries in 2018, and brings together Iwi, commercial and recreational sectors of the fishery, scientists and fisheries managers, and provides a platform for fishing sectors and community interests to have input.

The overarching aim of the strategy is to ensure the scallop stock rebuilds to a healthy level, and future customary, recreational and commercial fishing activity is sustainable.



## What we've heard about SCA 7

Over the last few years, Fisheries New Zealand has run a number of consultation processes and public information sessions on the SCA 7 fishery.

We've heard concerns about:

- the impacts of scallop dredging on the environment (and on scallop abundance);
- the rules and regulations surrounding the fishery (such as daily bag limits, season length, and size limits); and
- the impacts of non-fishing activities on scallops, particularly sedimentation.

The Southern Scallop Working Group has taken these concerns into consideration when developing the strategy, in such a way that it also meets the purpose of the Fisheries Act 1996; to provide for the utilisation of fisheries resources while ensuring sustainability.



310 people completed the online survey on the strategy 58 submissions were received by email.

## Why do we need a strategy?

#### The fishery has changed

The overall SCA 7 stock has failed to recover to healthy biomass levels, and the fishery is currently closed. We need to be cautious about how we conduct any future fishing activity, to ensure fishing is sustainable, allowing scallop populations to rebuild to healthy levels.

Current management settings for the fishery were put in place when the Tasman Bay and Golden Bay fisheries were rotationally fished, and supported by enhancement. While a few scallop beds remain persistent, many others have undergone substantial declines, such as those in large, formerly highly productive areas of Golden and Tasman Bays, and parts of the Marlborough Sounds. The benthic environment in these areas appears to have changed over the last 30 years and is no longer able to support healthy scallop beds. For example, the photos below illustrate the difference between suitable and unsuitable scallop habitat. There is some evidence that, as for many overseas scallop fisheries, the drivers of this change include a range of human-induced impacts, including fishing and land-based impacts.

The few remaining unenhanced viable beds are concentrated in the Marlborough Sounds, and the current fisheries management settings may no longer be appropriate for a small fishery which has been closed for several years due to sustainability reasons.

Figure 1: Photos taken in SCA 7 in 2018. The photo on the left displays healthy, complex habitat which supports scallops. The photo on the right displays habitat that no longer supports healthy scallop populations.





## What are we proposing?

We want to rebuild scallop populations in Te Tau Ihu, with an immediate focus on the Marlborough Sounds.

**Aim:** to ensure the scallop stock rebuilds to a healthy level and that future customary, recreational and commercial fishing activity is sustainable.

#### Key objectives for the Marlborough Sounds:

Set an appropriate biomass threshold for reopening that ensures there are sufficient scallops to support fishing activity



Manage scallop catch based on a sustainable target

- 3 Minimise the fishing impacts on scallop habitat and populations through refugia (closed areas) and limiting fishing methods (such as dredging)
- 4 Address the non-fishing impacts on scallops (e.g. land-based impacts, alternative uses of marine space and disease)
- 5 Improve scallop habitat quality and quantity in the Marlborough Sounds
- **6** Get better information and use it to improve fisheries management



ENGAGEMENTPRO

## **In more detail:** the objectives, risks and actions, and how we plan to address them

The Southern Scallop Working Group identified the key risks to the sustainability of the Marlborough Sounds fishery should it be reopened.

Set an appropriate biomass threshold for reopening that ensures there are sufficient scallops to support fishing activity

### **Risk:** Threshold biomass for reopening is set too low (i.e. the fishery is opened before scallop populations have recovered enough).

It is proposed that the threshold biomass for reopening, in other words, the point at which the abundance of scallops is considered sufficient to support fishing activity, be based on a time period when scallop populations were considered to be healthy in the past. Taking into acccount environmental changes and the desirability of managing scallops at a finer scale, biomass-based limits<sup>\*</sup> and an analysis of the risks to sustainability will be used to set the threshold biomass for reopening, and to continually monitor the fishery.

\* Under Fisheries New Zealand's Harvest Strategy Standard, the hard limit describes the point below which the fishery should be considered for closure and the soft limit describes the point below which a formal rebuilding plan needs to be developed. The soft limit is also normally thought of as the minimum biomass that must be achieved before a closed fishery can be re-opened. The Harvest Strategy Standard can be found here: www.mpi.govt.nz/document-vault/728.



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Manage scallop catch based on a sustainable target

#### **Risk:** The target exploitation rate is too high, resulting in too many scallops being harvested.

We are currently researching an appropriate sustainable exploitation rate for the Marlborough Sounds fishery that will also be based on a time period when scallop populations were considered to be healthy in the past. This exploitation rate would need to be set at an appropriate spatial scale. Initially, we propose to set a cautious interim exploitation rate below the target exploitation rate to allow the stock to rebuild further. Rules will be set to prevent scallop harvest exceeding the interim exploitation rate, and monitoring will be conducted by collecting scallop biomass information to see how the stock responds.

The current monitoring plan includes annual biomass surveys of scallops in the Marlborough Sounds. We will see if these could be redesigned to maximise information on the overall status of the scallop population. This could include using non-invasive methods to collect information on the abundance of scallops in areas outside those traditionally included in the annual biomass survey, and collecting habitat information, or using habitat-sensitive methods (instead of dredging) to carry out biomass surveys. Adequate information on how many scallops are taken by each sector (customary, commercial and recreational) each year is also needed.



#### Risk: Fishing will exceed harvest allocations.

Improving all levels of catch information will be important to mitigate this risk. Commercial take is reported and, as of December 2019, all commercial fishing vessels are required to participate in electronic catch and position reporting, and Fisheries New Zealand knows FROM THE ENGAGEMENT PROCESS where commercial fishers are fishing in real-time. Historically, in the Top of the South Island it has not been a requirement for customary catch to be reported. Tangata whenua are working towards solutions to this. The recreational sector is not required to report its catch. Fisheries New Zealand collects information from this sector every 5 or 6 years through a National Panel Survey of Recreational Fishers. The SSWG is aware that there is strong support for improving recreational catch information.

82% supported the actions to address this risk

#### **Risk:** Management measures are no longer fit-for-purpose.

The catch limits for the fishery will be based on a sustainable target exploitation rate.

There are also a number of fisheries management measures currently used to manage the fishery, which may no longer be fit-for-purpose. These include: daily bag limits, season length, size limits, how catch is reported, and fishing methods (i.e. dredging or diving) and gear requirements (such as dredge size and design). These will be assessed to see if they are still appropriate for this fishery.

We want to be able to make management changes over the right timeframes. This will allow management to be adaptive, and to respond within the timeframes necessary for this fishery.

86% supported the actions to address this risk

77% agreed the recreational daily limit should be changed 59% agreed the season length should be changed

56% agreed the size limit should be changed

method should

be changed

64% agreed the type of fishing 74% agreed an accumulation limit should be required for scallops

54% agreed gear requirements (e.g. dredge size or design) should be changed



Minimise the fishing impacts on scallop habitat and populations through refugia (closed areas) and limiting fishing methods (such as dredging)

**Risk:** The impacts of fishing on the aquatic environment and scallop sustainability are too large.

The effects of dredging have been well-studied and it is accepted that the impact of dredging depends on the specific features of the seafloor habitats.

Some scallop habitats recover quickly from dredging, while others are more sensitive and do not. It is clear from the engagement process there is widespread concern about the adverse impacts of dredging on the benthic environment.

The SSWG is proposing to minimise the impacts of fishing on the aquatic environment by categorising the remaining scallop beds in the Marlborough Sounds in three ways:

- resilient to regular rotational harvesting;
- can sustain periodic rotational fishing to allow for longer recovery times; and
- predisposed to dredging impacts and may not be appropriate to dredge.

The SSWG will also consider interactions between other fisheries.

59% supported the actions to address this risk 24% submitted that other mitigations (such as no dredging, or better information on the impacts of dredging) should be considered 17% did not support the actions to address this risk.

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Address the non-fishing impacts on scallops (e.g. land-based impacts, alternative uses of marine space and disease)

#### Risk: Non-fishing impacts cause scallop abundance to decline.

Fishing is not the only factor that can influence scallop abundance and population health. Wider environmental impacts that result in increased sedimentation and turbidity appear to have been important in driving the decline of the fishery. The other factors that may be negatively influencing the fishery will be examined to determine how they can be minimised. FROM THE ENGAGEMENT PROCESS

90% supported the actions to address this risk

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Improve scallop habitat quality and quantity in the Marlborough Sounds

#### Risk: Scallop habitat may not improve without proactive measures.

Measures designed to increase the amount of scallop habitat will be considered to ensure the Marlborough Sounds fishery rebuilds. This could include active habitat restoration. Research is underway to further define how these assessments will be undertaken.

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Get better information and use it to improve fisheries management

#### Risk: The available information is not sufficient to inform decisions.

It is important that the right information is available in order to manage the scallop fishery effectively. This includes the need for better catch information, as well as greater understanding of the wider scallop fishery, including habitat.

To help to achieve this, the SSWG is developing a 5-year research plan, designed to support better management outcomes for the fishery.

#### **Targeted research plan**

We wish to know the cause of the reduced scallop distribution, and decline in scallop abundance. In the short-term, what constitutes good scallop conditions, and what and where interventions (such as habitat restoration) are most likely to be successful may be investigated.

Ongoing research aims to determine whether changes in fishing gear are required, and what role disease and other factors may be having in suppressing the productivity of the scallop beds.

There are a number of research initiatives being undertaken in the Marlborough Sounds by various organisations. Greater collaboration on the outcomes of this research would allow new research to be targeted where it would be most beneficial.

# Next steps and status of the Strategy

This document has been approved under s 11A of the Fisheries Act and will be taken into consideration in regional planning processes.

The Southern Scallop Working Group is developing an implementation plan. This will include:

- establishing revised rules for commencing and controlling fishing activity;
- seeking approval of an enabling, responsive management framework;
- establishing which fishing methods might be appropriate in different parts of the Marlborough Sounds;
- investigating and supporting measures to recover the fishery;
- integrating the southern scallop fishery measures with the Resource Management Act; and
- developing a comprehensive research plan.

The focus of the Southern Scallop Working Group will shift to developing a strategy for managing and restoring the Golden Bay and Tasman Bay scallop fisheries, which includes the Croisilles Harbour. These areas have not been considered as part of this strategy as their biomass remains negligible, and the immediate priority was identified as the Marlborough Sounds.

### **Stay informed**

You can keep up-to-date and find out about our progress at www.fisheries.govt.nz/protectionand-response/sustainable-fisheries/the-southern-scallop-fishery-sca-7

#### **Or follow our recreational fisheries Facebook pages**

#### MPI Fisheries Nelson/Marlborough/Kaikōura

Or sign up to our recreational fishers mailing list by emailing **recreationalfisheries@mpi.govt.nz** to receive the latest information about fisheries issues.

## Glossary

Biomass threshold for reopening	The point at which the biomass is considered sufficient to support scallop fishing.
Challenger Scallop Enhancement Company	The company established and funded by quota owners to provide scallop enhancement and fisheries management activities.
Enhancement	Activities that help maintain or improve scallop productivity and biomass.
Habitat restoration	Activities to encourage scallop spat settlement and to re-establish a healthy scallop ecosystem, which could include the placement of scallop shell and other materials.
Refugia	Areas strategically closed to all scallop fishing to protect scallop spawning stock densities and associated habitats.
Reseeding	Enhancement of natural scallop populations by strategically placing spat or juvenile scallops.
Risk	Effect of uncertainty on objectives.
SCA 7	The scallop fishery in fisheries management area (FMA) 7.
Target exploitation rate	The desired harvest level, expressed as a proportion of the recruited biomass to be caught during a certain period, usually a fishing year.





### **Fisheries New Zealand**

Tini a Tangaroa

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