



# Temporary Closure of the Southern Scallop (SCA 7) Fishery

## Discussion Document

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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 Wednesday 31 May 2017.

Written submissions should be sent directly to:

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

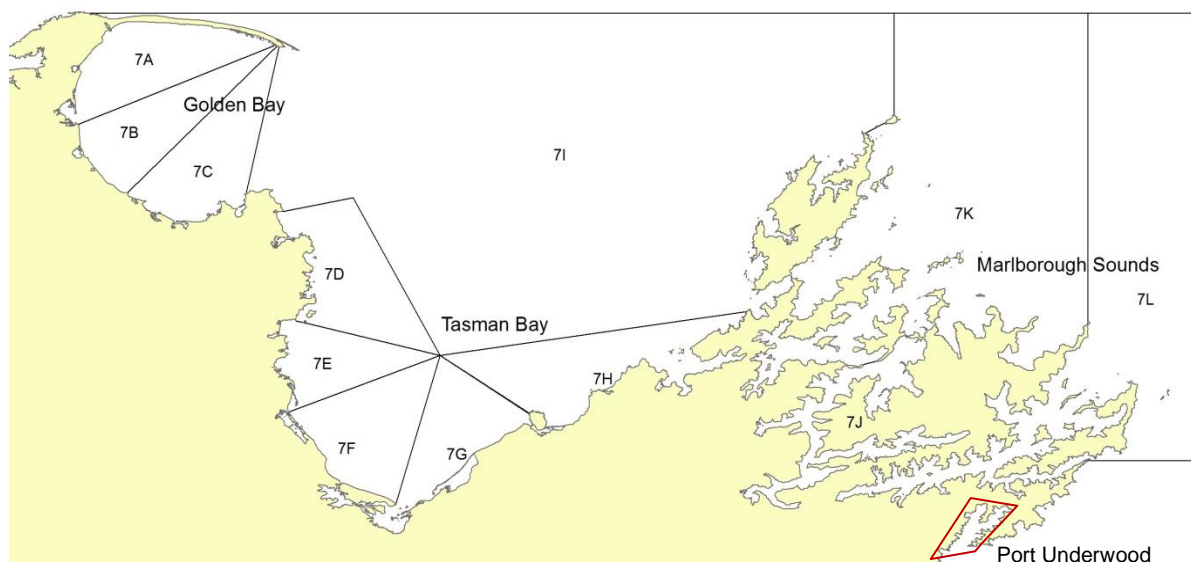
or emailed to [FMSubmissions@mpi.govt.nz](mailto:FMSubmissions@mpi.govt.nz)

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



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

Annual surveys show SCA 7 has been in decline since 2002 when the biomass of adult scallops was at a peak of almost 2,000 tonnes (meatweight). This is despite measures to reverse the decline including a reduced total allowable catch (TAC), reduced commercial catch limits for Marlborough Sounds, and reseedling of juvenile scallops in Tasman Bay. A survey in November 2015 showed SCA 7 biomass to be 153 t meatweight (Figure 2), its lowest recorded level, with the remaining dense beds of scallops limited to the Marlborough Sounds and part of Tasman Bay (Figure 1). Following the survey, the Minister for Primary Industries closed these parts of the fishery in July 2016 for a season to protect the beds from any further decline due to fishing. This closure expired on 15 February 2017.

A new biomass survey was carried out during January and February 2017. It shows a further decrease in SCA 7 biomass, when comparing the same survey areas, from 153 tonnes in November 2015 to 109 tonnes meatweight in January 2017. There has been no recovery in the areas where the majority of scallops have historically been found; in Tasman Bay the biomass has decreased from 75 tonnes to 15 tonnes (meatweight) since the last survey in 2015, while biomass in Golden Bay has dropped from 8 to 3 tonnes (meatweight). Both these parts of the fishery are very likely to be below the ‘hard limit’, the point at which it is MPI policy to close a fishery<sup>1</sup>. Golden Bay and Tasman Bay are likely to remain at very low biomass levels for the foreseeable future.

Scallop biomass in the Marlborough Sounds has increased slightly in the absence of fishing from 69 tonnes to 89 tonnes (meatweight), but remains close to its lowest recorded level. It is about a third of the 2003-2009 biomass (approximately 300 tonnes); a target period when some stakeholders consider the Marlborough Sounds scallop beds were in a more healthy

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

state, and has relatively few areas at fishable density. These are also likely to be crucial areas for scallop reproduction.

Overall, it is likely that the SCA 7 stock is below the hard limit, and the area of productive scallop beds remains small relative to its historical extent. Given these sustainability concerns, MPI is consulting on whether a further temporary closure of the fishery, under section 11 of the Fisheries Act 1996, is appropriate. MPI is also consulting on whether Port Underwood should be included in the closure given its proximity to SCA 7, and the potential for transfer of fishing effort.

MPI is consulting on the following closure options:

1. Temporarily close all of SCA 7 to commercial and recreational scallop fishing for the 2017-18 scallop season.
2. Temporarily close all of SCA 7 and Port Underwood to commercial and recreational scallop fishing for the 2017-18 scallop season.
3. No temporary closure to SCA7 (status quo).

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

MPI's preliminary view is that temporary closure of all of SCA 7 for a further season (Option 1) is appropriate given the biomass is likely to be below the hard limit, with only a small area of productive scallop beds remaining, and invites submissions on whether Port Underwood should also be included in this closure (Option 2). Fishing is unlikely to be the only driver of decline in the fishery, however, MPI is concerned that any future recovery would be jeopardised by direct and indirect fishing mortality this coming season.

This option protects all remaining adult scallops and the juvenile scallops that are present in some areas, allowing them to grow and spawn for a further season without direct or indirect fishing mortality and disturbance. Closures have previously proven to be successful at rebuilding depleted scallop biomass, for example in the 1980s when SCA 7 was closed for two years. Closures are widely used to manage scallop fisheries internationally.

Commercial and recreational fishers targeting scallops would be directly impacted under this option. In addition, wider benefits from harvesting the stock, including accommodation and charter boat income, and income associated with the sale of fishing gear and expertise would be reduced for the season.

Under Option 3 (*status quo*), no further closure would be implemented and the fishery would be open this coming season. The sustainability of the fishery would, therefore, rely on the current management settings. MPI is concerned that these settings have not, to date, reversed the decline of the scallop stock and that this option does not respond to the scientific information suggesting the stock is below the hard limit, with only a small remaining area of productive scallop beds. While this option allows utilisation in the short term, it does not provide for long term use, and a future recovery of SCA 7 would be compromised by fishing this season.

More broadly, SCA 7 is no longer a large enhanced fishery but is now small in scale and based on the harvest of wild scallops in the Marlborough Sounds. The enhanced parts of the fishery, Golden Bay and Tasman Bay, are likely to remain at very low biomass levels for the foreseeable future. Current settings for the fishery were developed over 20 years ago and do not take this and the increased pressures on the fishery into account. MPI is convening

scientific workshops to coordinate research on the factors affecting scallops in SCA 7, and a review of the overall management approach is also underway with the support of a multisector working group. This will incorporate suggestions put forward during the public engagement on the fishery that occurred in 2016, and will focus on ensuring catch in the wild fishery in the Marlborough Sounds can be managed sustainably to allow biomass to rebuild over time.

### 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 the SCA 7 fishery to commercial and recreational fishing for the coming 2017-18 scallop season. MPI is consulting and seeking submissions on the following closure options.

<b>Option 1</b>	Temporarily close all of the Southern Scallop fishery (SCA 7) to commercial and recreational scallop fishing for the 2017-18 scallop season.
<b>Option 2</b>	Temporarily close all of the Southern Scallop fishery (SCA 7) and Port Underwood to commercial and recreational scallop fishing for the 2017-18 scallop season.
<b>Option 3</b>	No temporary closure and the fishery opens this coming season.

#### 3.1 NEED FOR ACTION

A new biomass survey completed in January 2017 shows the biomass of adult<sup>2</sup> scallops in SCA 7 remains very low. The biomass is considered likely to be below the hard limit<sup>3</sup> and the area of productive, dense, scallop beds is confined to relatively few areas in the Marlborough Sounds. Modelling projections of the biomass in the Marlborough Sounds estimate that the decline in parts of the Sounds may be reversing or levelling off.

Fishing is unlikely to be the only driver of the decline in biomass, however, MPI is concerned that any future recovery would be jeopardised by direct and indirect fishing mortality this coming season.

#### 3.2 MANAGEMENT APPROACH

The purpose of the Fisheries Act 1996 is to provide for utilisation while ensuring sustainability. SCA 7 is a “Group 2” fishery under MPI’s Draft Fisheries Plan for Shellfish Fisheries<sup>4</sup>. 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. Option 1 presented in this paper is consistent with this management approach, as it responds to the sustainability risk from current low biomass levels in SCA 7.

<sup>2</sup> The minimum take-able (‘adult’) size for SCA 7 is 90mm

<sup>3</sup> MPI’s 2016 Fisheries Assessment Plenary states that scallop (SCA 7) biomass is likely to be below the hard limit of 10% B0 for both Golden Bay and Tasman Bay and given that:

- the productive capacity of each of these areas is several fold greater than that for Marlborough Sounds,
- the Plenary also concludes that overfishing was occurring in the Marlborough Sounds
- the Marlborough Sounds component of the stock is at its lowest ever surveyed level

it can be concluded that the stock as a whole is likely to be below the hard limit.

<sup>4</sup> The Draft Fisheries Plan Inshore Shellfish Fisheries can be found at [https://fs.fish.govt.nz/NR/rdonlyres/B2AE6016-729C-4DCF-B698-CAA6FAFAFC7D/0/draft\\_fisheries\\_plan\\_shellfish.pdf](https://fs.fish.govt.nz/NR/rdonlyres/B2AE6016-729C-4DCF-B698-CAA6FAFAFC7D/0/draft_fisheries_plan_shellfish.pdf)

Annual management of SCA 7 is also underpinned by the Challenger Scallop Enhancement Company (CSEC) Enhancement Plan and a memorandum of understanding between CSEC and MPI. These and the regulatory settings for the fishery were developed over 20 years ago, when the fishery was primarily an enhanced fishery operating in Golden and Tasman Bay. A review is underway to ensure future management takes into account the increased pressures on the fishery and the very poor status of Golden Bay and Tasman Bay. These parts of SCA 7 appear likely to remain at low biomass levels for some time. It is important to ensure catch in the wild fishery in the Marlborough Sounds can be managed sustainably to allow biomass in this part of SCA 7 to rebuild over time. The review will focus on a range of options including separate management areas to give the greatest opportunity to better reflect their different status and manage the different areas using different future approaches to provide for utilisation.

## 4 Pre-Consultation

Throughout 2016 MPI met with a multi-sector group including recreational and commercial scallop fishers and with CSEC and tangata whenua representatives to discuss issues and options for the fishery. MPI met again with these parties in February 2017 to discuss the results of the survey, and to seek initial views on whether a further temporary closure of the fishery should be considered for the coming season.

Feedback from this engagement shows a range of views on temporary closures. Recreational fishers on the multisector group, as well as many recreational fishers who made submissions during last year's engagement process, support a further temporary closure for 2017-18 covering the whole of SCA 7. In their view, a one year closure was insufficient to protect the beds and stimulate any rebuild. They are also concerned that leaving parts of the stock (as well as Port Underwood which is immediately adjacent to SCA 7) open to harvest, as occurred last season, means that any remaining small pockets of scallops are exposed to excessive harvest effort and may be over harvested.

Commercial fishers, through CSEC, do not support temporary closures in relation to commercial fishing at this time. The company considers that the annual process it undertakes to survey the stock in May for use in the harvest plan submitted to the Minister in July, will ensure sustainability and meet the needs of all sectors. The company does not agree that the most recent survey provides an accurate picture of the fishery or with some of MPI's conclusions regarding the current status of the stock. In particular, CSEC considers a survey in January is not comparable to the historic time-series of surveys which usually occurs in May-July. The company is concerned that a biomass survey in January does not give an accurate assessment of the biomass seven months later in September, when the commercial fishery traditionally opens.

In response to this feedback, MPI notes that the previous survey, upon which the Minister based his decision to close the fishery for a season, was carried out in November 2015 (rather than May- July), and that biomass in most areas has declined further since then. If a further closure is required this season, then consultation now ensures it can be implemented prior to the start of the next season, and that greater certainty is provided for fishers and businesses associated with the fishery.

In addition, MPI has commissioned NIWA to scientifically model likely future scallop biomass through to May and September 2017. Two methods were employed, growth tag and recapture data and length frequency data. The two different methods suggest a range of biomass levels for SCA 7 of between 134 tonnes and 139 tonnes and, for the Marlborough Sounds of between 115 tonnes and 120 tonnes. Both these estimates are uncertain but are



within the biomass range in which the stock has previously declined. Therefore, at least in the short term, the sustainability concerns for SCA 7 remain.

Tangata whenua (through the Te Tau Ihu Iwi Forum) are concerned for the health and wellbeing of the fishery, but also want to ensure the integrity of their Treaty of Waitangi fishing rights. Iwi supported the previous closure by choosing not to issue customary authorisations. However, iwi wish to see consideration of a further closure accompanied by a unified research programme into the causes of the decline in the stock.

In response to this feedback, MPI is hosting workshops in April and May, with regional researchers and stakeholders. The workshops will focus on identifying the wider causes of decline in SCA 7 and on ensuring a coordinated research programme.

## 5 Background Information

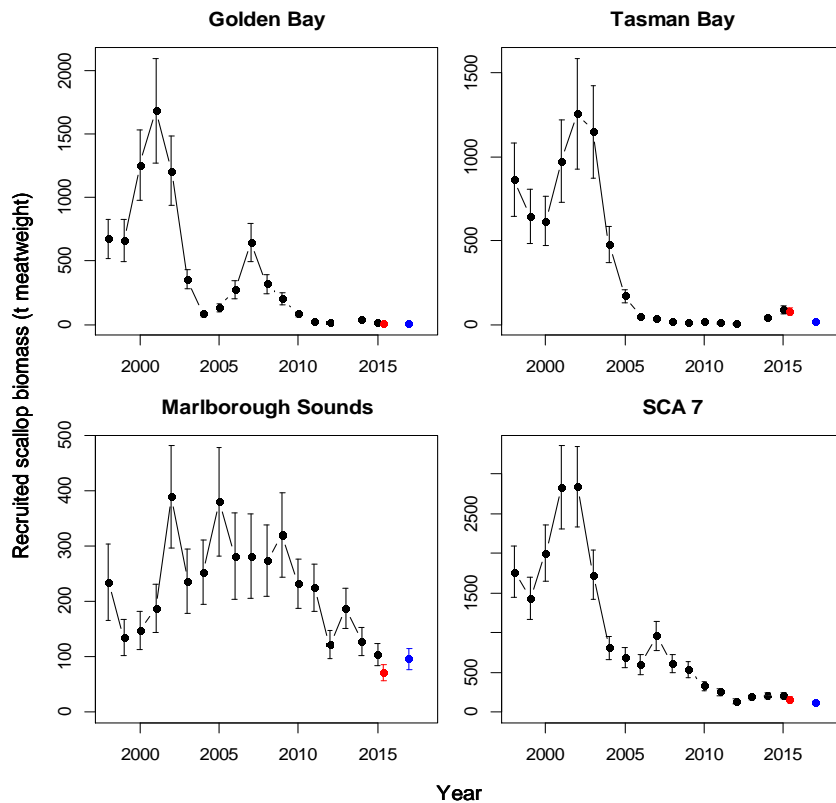
### 5.1 INTRODUCTION

SCA 7 is important to all sectors. Best available information suggests that recreational harvest, prior to last season's temporary closure, was approximately 11 tonnes (meatweight) per annum, but there is uncertainty around this estimate. In the season prior to the closure (the 2015 scallop season), commercial fishers harvested 22 tonnes (meatweight), primarily from the Marlborough Sounds.

The results of a new survey of SCA 7 were presented to MPI in February 2017 and are summarised below in Figure 2. The full survey report can be found at <http://www.mpi.govt.nz/document-vault/17665>. The results show that the fishery biomass, overall, remains at its lowest recorded level, despite last season's closure and measures introduced in 2014 to help rebuild the fishery. These measures included reducing the total allowable catch (TAC), total allowable commercial catch (TACC), and significantly reducing commercial catch limits for Marlborough Sounds through implementation by CSEC of a maximum commercial harvest rate for the Marlborough Sounds of 22% of recruited biomass<sup>5</sup>. In addition, CSEC has continued to reseed some areas (primarily Tasman Bay), albeit at reduced levels and with few reseeded scallops surviving.

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<sup>5</sup> 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.



**Figure 2.** Graphs showing scallop biomass in SCA 7. Red dots show the estimates of scallop abundance (90mm or larger) in the November 2015 survey. Blue dots show the estimates of scallop abundance (90mm or larger) in the January 2017 survey.

The latest survey shows that there are unlikely to be any areas of significant scallop biomass in SCA 7 other than a relatively few beds in the outer Marlborough Sounds. For comparison between the most recent three surveys, total SCA 7 biomass (90mm or above) has declined as follows; May 2015 - 203 tonnes, November 2015 - 153 tonnes, and January 2017 - 109 tonnes. The observed decline is largely driven by a loss of the biomass in Area 7H in Tasman Bay (refer Figure 1) and a small reduction in Golden Bay.

There has been a slight recovery/ stabilisation in biomass in the Marlborough Sounds over the past three surveys as follows; September 2015 - 102 tonnes, November 2015 - 69 tonnes, and January 2017 - 87 tonnes. However, biomass remains close to its lowest recorded level and is only about a third of the 2003-2009 biomass (around 300 tonnes); a potential 'target' period when some stakeholders consider the Marlborough Sounds scallop beds were in a more 'healthy' state. Of particular concern is the decline in the number and extent of scallop beds of fishable density, especially in Pelorus Sound.

There are signs of what appear to be improving numbers of pre-recruit scallops coming through in some areas in the outer Marlborough Sounds, possibly as a result of measures implemented from 2014, but the number of pre-recruits that will actually recruit into the fishery is uncertain. It is too soon to determine if the closure that was in place last season has resulted in increased numbers of juvenile scallops.

Overall, the estimates of recruited scallop abundance across SCA 7 are the lowest that have been observed since surveys began in 1998. MPI's 2016 Plenary states that scallop biomass is very likely to be below the hard limit for both Golden Bay and Tasman Bay, and given that:

- the productive capacity of each of these areas is several fold greater than that for Marlborough Sounds
- the Plenary also concludes that overfishing was occurring in the Marlborough Sounds
- and the Marlborough Sounds component of the stock, while stabilised, remains at its lowest ever surveyed level,

it can be concluded that the stock as a whole is likely to be below the hard limit.

The Minister's decision to temporarily close the Marlborough Sounds and part of Tasman Bay for the 2016-17 scallop season aimed to support a rebuild by protecting the remaining spawning biomass. It was based on survey information suggesting the fishery biomass was below the hard limit (refer to the consultation section of MPI's website [www.mpi.govt.nz](http://www.mpi.govt.nz) for more information on this engagement process). During consultation on this closure, and on wider management options for the fishery, some stakeholders were of the view that the closure was not of sufficient duration to successfully achieve the desired result and that a closure for at least two years was necessary. There was also considerable support from submissions for all of SCA 7 to be closed, rather than just the Marlborough Sounds and part of Tasman Bay.

Other suggestions put forward regarding wider management of the fishery included amending commercial and recreational rules, 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 6 - 12 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**

Legal considerations relevant to the options presented in this paper are set in Appendix 1.

# **6 Proposed 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 scallop biomass from 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 scallop stocks.

## **6.1 OPTION 1 - CLOSE ALL OF SCA 7 TO SCALLOP FISHING FOR THE 2017-18 SEASON**

Under Option 1 all of the Southern Scallop fishery (see Figure 1) would be closed to scallop fishing until 15 February 2018. The closures would be implemented under section 11 of the Fisheries Act 1996.

### **6.1.1 Impacts and benefits**

This option offers the greatest protection to the scallop biomass given the continued decline. The remaining spawning potential of the stock is safeguarded and small scallops are protected from incidental fishing mortality under this option. Relative to Option 3, Option 1 has less risk to the stock from fishing related mortality. Closing all of SCA 7, along with the small recreational fishery in Port Underwood, would have the most positive long term impact,

providing an opportunity for scallops to spawn, settle and grow without fishing mortality and disturbance.

MPI considers this option is appropriate given scallop biomass is very likely to be below the hard limit for both Golden Bay and Tasman Bay. Biomass in the Marlborough Sounds appears to have stabilised, and is projected to increase slightly between now and November. However, it will remain close to its lowest surveyed level and within the biomass range in which the stock has previously declined.

Overall, the SCA 7 stock is at its lowest recorded level and likely to be below the hard limit. The hard limit is defined in MPI's Harvest Strategy Standard as the biological reference point at which closure should be considered<sup>6</sup>. Although the policy is only a guide, MPI considers the low biomass levels pose significant risk to ongoing sustainability of the resource. In addition, the area of productive scallop beds is very small relative to its historical extent.

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. The entire SCA 7 fishery was closed for two years in 1981-83 and recovered rapidly. Overseas examples, where large scale closures and/or substantial reductions in fishing mortality have been successful in 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 boat income, and income associated with the sale of fishing gear and expertise.

In the Marlborough Sounds, the biomass of scallops at fishable density is limited to only a few areas; in particular Wynen's Bank (11 tonnes), Guards Bank (15 tonnes), and Ship's Cove (16 tonnes). Biomass in the Sounds remains close to its lowest recorded level, and is about a third of the 2003-2009 biomass (around 300 tonnes), a 'target' period when some stakeholders consider the Marlborough Sounds scallop beds were in a more 'healthy' state.

Scallops in the inner parts of Pelorus Sound have been in poor condition over the past few years, with MPI testing showing the presence of a bacterial disease (*Rickettsia*) and the presence of a parasitic protozoan *Perkinsus olseni*. A closure would allow diseased scallops to recover without disturbance from fishing.

Overall, Option 1 would have an immediate impact on fishing this season, but would have the most positive effect of the two options on the long term sustainability and potential for rebuilding of SCA 7. MPI's initial view is that this option is appropriate, given the sustainability concerns for the stock.

## **6.2 OPTION 2 - CLOSE ALL OF SCA 7 AND PORT UNDERWOOD TO SCALLOP FISHING FOR THE 2017-18 SEASON**

Under Option 2 all of the Southern Scallop fishery (see Figure 1), as well as Port Underwood (immediately south of reporting area 7L), would be closed to scallop fishing until 15 February 2018. The closures would be implemented under section 11 of the Fisheries Act 1996.

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

### 6.2.1 Impacts and benefits

Port Underwood is immediately adjacent to, but not within SCA 7. Some recreational fishers have raised concern that this small recreational-only fishery will be subject to increased harvest pressure under Option 1.

There is no quantitative information on the level of harvest or the status of the scallop beds in Port Underwood, or on the likely level of displaced harvest. MPI seeks views and information on these matters from submitters.

In addition to the impacts and benefits outlined for Option 1 above, Option 2 would impact on harvesting in the small recreational scallop fishery that exists within Port Underwood. The benefit of this option is that it protects scallops within Port Underwood from any increased harvesting effort that may be transferred as a consequence of the closure to the Marlborough Sounds.

MPI invites submissions on whether this area should also be included in the closure.

## 6.3 OPTION 3 – STATUS QUO

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

### 6.3.1 Impacts and benefits

Under this option, the fishery would be open and the sustainability of SCA 7 would rely on the regulatory management settings for the fishery. The scallop beds would be available for commercial and recreational fishing this season and there would be benefits from the tourism and retail operations associated with the fishery.

This option allows utilisation in the short term, but does not address the risk that long term use is compromised if no action is taken. MPI believes that the existing management settings have not, to date, reversed the decline in scallop biomass. MPI also believes that this option will not adequately take account of scientific information suggesting the stock biomass is below the hard limit, with only a small remaining area of productive scallop beds.

Overall, while this option has the least impact on fishing in the short term, it presents a high risk that the remaining scallop beds will not recover and will continue to decline. MPI's preliminary view is that the *status quo* option is not a responsible approach given the changes in scallop biomass that have occurred over the last few years.

## 7 Other Matters

### 7.1 SUPPORTING MEASURES

Other supporting measures in place for the fishery include the catch limits and regulations that apply to commercial and recreational fishing. A set harvest rate for commercial fishing of available<sup>7</sup> biomass for the Marlborough Sounds, as well as having some non-commercially fished areas have been implemented by the CSEC in previous seasons.

### 7.2 LONGER TERM PACKAGE

Fishing is unlikely to be the only driver of decline in the stock. Therefore, MPI recently convened scientific workshops that bring together Te Tau Ihu representatives, CSEC, the SCA 7 multisector group that has been established for the fishery, along with NIWA,

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<sup>7</sup> In the 2015-16 season this rate was set at 22% of the biomass above a density of 1 scallop per 25 square metres, which is considered by some to be a minimum biomass for recreational / commercial fishing.

Cawthron, MPI and other scientists. There are a number of research projects underway led by these organisations that provide useful information on the factors driving the decline of SCA 7. The purpose of the workshops were to develop a unified programme that brings the various research components together, and to determine whether further research to support a recovery of the scallops should be commissioned. This unified research plan is currently in development.

Longer-term regulatory and management changes are being developed by MPI with the support of a multisector working group from suggestions put forward during the public engagement on the fishery that occurred in 2016. These will take into account the increased pressures on the fishery and the very poor status of Golden Bay and Tasman Bay, which mean these parts of SCA 7 are likely to remain at low biomass levels for some time. The review will focus on ensuring catch in the wild fishery in the Marlborough Sounds can be managed sustainably to allow biomass in this part of SCA 7 to rebuild over time.

Given the breadth of potential changes these measures will take time to test and implement, and will require ongoing engagement with CSEC, the community, tangata whenua and stakeholders. A further formal consultation process will be carried out before any decisions are made.

### **7.3 IMPLEMENTATION, MONITORING, AND REVIEW**

Following consultation, MPI will develop final advice for the Minister who will make a decision on any further temporary closures to the scallop fishery for the 2017-18 season. Closures would be implemented under s11 of the Act (Ministerial gazette notice) and would be in place before the scallop season commences on 15 July 2017.

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 CSEC or by MPI), will be used to assess the effectiveness of the temporary closures. The results of these surveys, the performance of the SCA 7 fishery, and the regulations applying to the fishery will be discussed with all sectors and with tangata whenua, as part of the ongoing development of longer term measures to manage the fishery.

## **8 Conclusion**

Overall, it is likely that the stock is below the ‘hard limit’, the point at which it is MPI policy to close a fishery to ensure sustainability. The area of productive scallop beds remains very small relative to its historical extent. MPI considers it is appropriate to consult on whether a further temporary closure of the fishery for the 2017-18 season is required to ensure the sustainability of the scallop stock. This Discussion Document presents three options; temporarily closing all of SCA 7 (Option 1), temporarily closing all of SCA 7 as well as Port Underwood (Option 2), and no further closure (Option 2).

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

## 9 Appendix 1. Legal Considerations

### 9.1 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 closures proposed in this discussion paper is 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 closures proposed in this discussion paper are likely to reduce impacts on biological diversity, by limiting the spatial extent of dredging through implementation of closed areas.

**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 such as sedimentation from a range of terrestrial activities. It is not known which specific habitats are important for the recruitment of scallops within the SCA7 fishery, or the long term impacts of scallop dredging on such habitats, but the closure proposed in this discussion paper is likely to reduce impacts on such habitats, by limiting the spatial extent of dredging through implementation of closed areas.

### 9.2 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 in 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.

### **9.3 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 SCA 7 to harvesting seeks 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 SCA 7 is guided by the objectives that are found in the draft National Fisheries Plan for Inshore Shellfish. Key relevant fisheries services are the biomass surveys of SCA 7, such as that carried out in November 2015 and January-February 2017.

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 a measure for the 2017-18 season to address the observed declines in SCA 7.

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.



## 9.4 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 4 of this paper).

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