



Review of fisheries regulatory controls for 1 October 2013

Final Advice Papers

May 2013

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Review of commercial access restrictions in the Otago/Southland paua fishery (PAU5D)

1 Executive Summary

A significant part of the coastline in Otago/ Southland is closed to commercial paua harvesting. The areas were closed prior to the 1980s for food safety reasons that are no longer relevant for paua. There are now more appropriate regulatory tools in place to address food safety concerns for shellfish.

The paua industry requested a review of closures in a portion of these areas given the redundant regulations. The industry's request noted that these areas have been exclusively non-commercial areas for a number of decades and recognise the importance of some of these areas to the non-commercial sector.

MPI has completed consultation upon industry's request. There has been a high level of public interest throughout the consultation process, with the view of many that this is a commercial versus non-commercial allocation issue. The objective of consultation was to identify areas that could be re-opened without negatively impacting on non-commercial paua fishers. The consultation process has not been successful in terms of this objective.

The majority of the 2,740 submissions received oppose any change to the status quo. However, most submissions either:

- suggested all areas are highly utilised by recreational fishers (which MPI considers is unlikely given the remoteness of many areas), or
- did not provide information at a spatial scale that would allow specific bays to be identified to characterise variation in non-commercial use.

Given the results of consultation, it is recommended MPI undertake further discussion with a targeted group of stakeholders / Treaty partners and come to you with more detailed information later this year - noting the regulations are redundant but recognising some areas hold important non-commercial value.

Alternatively MPI offers the option to retain the status quo given consultation suggest all proposed area are highly utilised by non-commercial fishers, or proceed with removing the closures for only a subset of the areas put forward by industry. Note that MPI considers there would be limited value in proceeding with regulatory changes for only a small subset of the areas.

2 Recommendations

MPI recommends that you:

- a) **Note** that MPI considers the original reasons for the regulations to be redundant as they were put in place for food safety reasons that are no longer relevant for paua, but that the closed areas confer benefits to non-commercial fishers.

Noted

- b) **Note** that the consultation process did not identify areas that met the original criteria of the proposal (no significant impact on non-commercial fishers), however, MPI considers there is opportunity for stakeholders to come together to identify such areas.

Noted

- c) **Agree** (*MPI preferred*) to defer your decision until stakeholders have an opportunity to present an agreed plan to you later this year.

Agreed / Not Agreed

OR

- d) **Agree** to retain the existing commercial paua prohibition as specified in
- regulation 10 in the Fisheries (South-East Area Commercial Fishing) Regulations 1986, and
 - regulation 14 in the Fisheries (Southland and Sub-Antarctic Areas Commercial Fishing) Regulations 1986.

Agreed / Not Agreed

OR

- e) **Agree** to amend:
- regulation 10 in the Fisheries (South-East Area Commercial Fishing) Regulations 1986, and
 - regulation 14 in the Fisheries (Southland and Sub-Antarctic Areas Commercial Fishing) Regulations 1986

to enable commercial paua harvest in all, or some, of the following areas:

- Otago Peninsula from Cape Saunders to Harakeke Point and from Robertson's Creek (Boulder Beach) to Smalls Beach;
- Bluff area from Steep Head to Barracouta Point,
- Clutha River Mouth, and
- Waipapa Point. Option 3.

Agreed / Not Agreed

Andrew Doube
Inshore Fisheries Manager

/ /2013

Hon Nathan Guy
Minister for Primary Industries

/ /2013

3 Introduction

3.1 OBJECTIVES

MPI is committed to maximising benefits from the sustainable use of fisheries resources and reducing any unnecessary regulatory burden.

This review of commercial access restrictions in the PAU5D fishery follows a request from the paua industry. It aims to remove unnecessary utilisation constraints, ensure that food safety issues are dealt with under appropriate management tools, and increase the economic potential from sustainable harvesting of paua.

MPI is supportive of value-adding proposals by stakeholders, such as this industry proposal, and assesses these on the basis of greatest overall benefit across all sectors. Therefore, the approach adopted for this review has been to identify areas in PAU 5D, historically closed to commercial harvest of paua due to water quality concerns that can now be opened without negatively impacting on non-commercial paua fishers. Avoiding such impacts is important as paua is a key recreational and customary fishery in southern New Zealand.

MPI has completed consultation on the review, using a set of potential areas for reopening put forward by the Paua Industry Council and Pauamac5 as the base proposal.

3.2 STATUS QUO

Commercial harvest of shellfish (except rock lobsters, oysters, or crabs), is prohibited in specified areas off the South-East and Southland coasts of the South Island (see Figures 1 and 2). These closures were put in place prior to the 1980s (and carried over into new regulations in 1986), primarily due to food safety concerns. No similar prohibitions were applied to the recreational harvest of shellfish in these areas.

The areas take up a significant part of the PAU 5D quota management area (QMA) coastline. Of the 1000 km of coastline in PAU 5D, around 450 km is closed to commercial paua harvest (around 165 km of open coast if harbours and estuaries are excluded). In addition, a further 53 km of coastline is closed due to Mātaitai Reserves, and 7 km due to voluntary closures by industry. Note these latter closures are not part of this review.

Around 49 people or companies own quota in PAU 5D and approximately 24 people fish it. At least 5 businesses are involved in processing paua from PAU 5D. It is estimated the export value of the PAU 5D fishery is worth NZ\$5.5 million.

Recreational catch across PAU 5D is most recently estimated at approximately 14.5 tonnes. MPI does not hold quantitative information on the number of recreational fishers that harvest in these areas or the level of non-commercial catch at this spatial scale. Recreational fishers do not report catch, and paua fishers are difficult to identify as most do not use vessels or belong to organised fishing clubs. However, some of the closed areas are adjacent to cities and towns, and are known by MPI to be popular with recreational and customary fishers.

Customary fishers do record detailed catches, however, the relevant customary regulations only require to these to be provided in summary form to MPI. Ngai Tahu has not provided MPI with more detailed data to allow MPI to determine the proportion of this taken from the closed areas. Customary catch across PAU 5D over the past five years has averaged 8,554 paua (around 2.8 tonnes).



Figure 1: Map showing the areas along the Otago coast where commercial harvest of shellfish, including paua (but excluding rock lobster, oysters and crabs), is not permitted.



Figure 2: Map showing the areas along the Southland coast where commercial harvest of shellfish, including paua (but excluding rock lobster, oysters and crabs), is not permitted.

3.3 PROBLEM DEFINITION

MPI is committed to actively seeking opportunities to improve benefits and sustainable use as noted in the National Fisheries Plan for Inshore Shellfish and Fisheries 2030 strategy. MPI considers a review of the regulations is appropriate based on the following underlying problems:

- Commercial utilisation is constrained due to regulations that no longer serve the purpose for which they were intended

- The closures make up a large proportion of PAU5D and limit the economic benefits that could be obtained from the commercial fishery.

In reviewing the regulations, however, MPI is mindful that the closures have conferred benefits to non-commercial paua harvesters.

3.3.1 Regulations no longer relevant

The regulations to close areas to commercial fishing were largely a response to historic food safety concerns regarding food contamination from sewage outfalls, meat processing works and land-based contaminant discharge from rivers. At the time of the closures fisheries regulations were the only tool available to give effect to such closures.¹ The Animal Products Act (APA) has since come into effect (1999) and now there are more appropriate tools to provide for food safety.

Since the regulations were introduced some of the sources of food contaminants (e.g. meat works and sewage outfalls) have been removed.² More importantly, paua are no longer subject to the same food safety restrictions as filter feeding shellfish (e.g. shellfish sanitation programmes). Paua do not present the same hazards as bivalve molluscan shellfish and there are targeted systems in place to address food safety issues.

The APA system requires that animals submitted for processing are fit for purpose. The onus to make sure they are safe is on the harvester. MPI considers there are more appropriate mechanisms under the APA that could be utilised (i.e. Restricted Procurement Areas) if there is a need to manage a food safety issue and restrict harvest from a particular area. Under APA requirements, and irrespective of removal of specific controls on commercial harvesting under the Act, the onus remains on industry to ensure their product is safe.

District Health Boards and other local authorities (e.g. Regional Councils) are required to undertake regular testing for water contamination. Any water quality issues that would affect the food safety of a marine species, in particular shellfish, means a closure can be imposed.

3.3.2 Balancing commercial and non-commercial benefits

Opening the closed areas would likely increase the rate of rebuild by allowing commercial catch to be spread across a greater length of coast, ultimately resulting in a more productive fishery. Opening the areas would also improve commercial divers' ability to shift commercial catch effort to more sheltered areas along the southern coastline according to prevailing weather conditions.

Conversely, some of these closed areas have resulted in benefits to non-commercial fishers as higher densities of paua allow greater access to children, recreational and customary

¹ These regulations came into effect in 1986; however, these closures existed under previous legislation from at least the 1970s.

² For example, the Ocean Beach Freezing works in Bluff closed in 1991 and a new sewage treatment plant was established in Bluff in 2000, which prevents any untreated discharge from entering the environment.

gatherers.³ Paua is a key recreational and customary fishery in southern New Zealand and, therefore, it is important to ensure these benefits are retained.

Commercial and/ non-commercial fisheries operate at different densities; commercial fishers generally prefer lower density- higher productivity beds of paua, whereas recreational fishers prefer high-density beds of larger (but slower growing) paua. Recreational fishers often report difficulty catching their daily bag limit in areas fished commercially. Opening areas that are heavily utilised by recreational or customary paua fishers will result in a shift in the productivity of the beds to lower density-high productivity populations. Such a shift means more effort will be required to non-commercial fishers to harvest paua.

3.3.3 Areas proposed by industry

The Paua Industry Council and Pauamac⁵ have put forward the following areas for reopening that they believe increase commercial utilisation benefits without compromising non-commercial benefits (refer Maps 1 – 4 in Appendix 1):

- Otago Peninsula from Cape Saunders to Harakeke Point and from Robertson's Creek (Boulder Beach) to Smails Beach (14.5 km coastline)
- Clutha River Mouth (8.3 km coastline)
- Waipapa Point (5.8 km coastline)
- Bluff area from Steep Head to Barracouta Point (4.4 km coastline).

These areas were selected by industry on the basis of remoteness/ land access difficulty and on-the-water observations of little non-commercial activity.

3.4 CONSULTATION

MPI released an initial position paper (IPP) on 11 March 2013 for six weeks of public consultation. The paper was published on MPI external websites, and stakeholder letters were sent to persons and organisations with an interest in and/or affected by the proposals. The distribution list includes tangata whenua, recreational and commercial stakeholders.

The proposal was tabled at the Te Waka a Maui Fisheries and the FMA 3 & 5 Recreational Fisheries Forum, prior to the IPP being drafted. During consultation on the IPP targeted engagement occurred with various stakeholders and public meetings, which included representatives from tangata whenua, industry and non-commercial fishing interests.

Submitters were asked to provide additional information on the areas proposed for reopening by industry. In particular, information was sought from recreational and customary submitters on whether they harvest paua in the areas put forward by industry. This information is necessary for the review because MPI does not hold robust or fine-scale quantitative information on non-commercial paua catch in PAU 5D. Some conclusions can be drawn from fishery officer interactions and remoteness or difficulty of access. However, MPI has not been provided with fine-scale customary data⁴, and recreational paua gatherers (who

³ Note: Not all the areas closed under the prohibition provide suitable paua habitat or commercial viable densities of paua.

⁴ Such information is held by Ngai Tahu, but has not been provided to MPI. Under customary regulations MPI receives reports on customary harvest only across PAU5D as a whole.

are not required to report volumes or location of catch) did not adequately identify areas in submissions.

3.4.1 Summary of submissions

There was a high level of public interest in the proposals, including coverage in local and national media. 2740 submissions were received.

The overwhelming majority of submissions opposed the opening of any areas (supported the status quo). 2718 of these submissions represented general public opinion based on their recreational harvesting practices. Submissions were received from individual Runanga, the Invercargill and Dunedin City Councils and their Mayors, the New Zealand Recreational Fishing Council, representatives from local dive clubs, and individuals representing a lobby group set up during the consultation period ('Paua to the People').

Twenty-two submissions supported Option 2 in the IPP to open the areas proposed by the paua industry and allow commercial harvest. These submissions were from the Paua Industry Council, Pauamac5 (representing all quota holders in the fishery), Seafood New Zealand, individual commercial fishers, and other industry representatives.

The consultation process was not successful in identifying which of the areas proposed to be reopened are important/less important to non-commercial paua fishers because:

- The submissions indicate almost all areas proposed to be opened are highly fished by recreational fishers. In reality this is unlikely based on the remoteness of some areas and does not tally with MPI staff observations over the years
- Most submissions did not provide information on fishing behaviour at a spatial scale that would allow specific bays to be identified, instead reporting catch at a regional scale (for example, Otago Peninsula, rather than "Smaills Beach")
- The proposal was viewed by many as commercial versus non-commercial allocation and spatial separation issues, rather than about redundant regulations. It also triggered a debate about wider fishery issues unrelated to the proposal.

3.4.2 Issues raised in submissions

Consultation process

Submission comments

A number of submissions raised the following issues with the consultation process:

- A six week consultation period was too short to make a comprehensive submission
- The public notification of the review was insufficient
- A lack of face-to-face meetings or community hui to discuss the proposals, and
- Inaccuracies in the information presented in the consultation paper.

MPI response

MPI considers the six week consultation period to be reasonable and notes that a large number of submissions were received, nearly all by the deadline. MPI also accepted late submissions.

MPI considers there is a need to find a balance between making decisions in a reasonable period and allowing enough time for comment. MPI has taken actions to correct any information errors highlighted by stakeholders and ensure the best available information on the proposal is presented to you.

Rationale for existing commercial prohibition

Submission comments

Some submissions proposed that the original rationale included a need to put in place harvest restrictions due to excessive historical commercial pressure on local stocks rather than just concerns associated with food safety and that this rationale is still valid.

MPI response

Best available information suggests the rationale for these closures primarily related to concerns associated with food safety. Notwithstanding, some submissions indicate there was historical concerns about excessive commercial fishing pressure prior to the implementation of the Quota Management System (QMS). Under the QMS there are controls now in place to limit commercial harvesting that were not available at that time.

Non-commercial benefits from existing closures

Submission comments

Non-commercial sector benefits based on the existing regulatory closures included:

- Ease of access, including the ability to gather paua in shallow waters without the need to dive, and without requiring a high level of fitness or physical ability
- Ability to gather efficiently without searching for extended periods of time (i.e. high density paua beds)
- Greater availability of legal sized (or larger) paua to obtain their daily bag limit
- no or reduced inter-sector conflict
- Better provision for future generations
- Intrinsic value of a near virgin biomass
- Source of sustenance
- Social wellbeing as places to gather with friends and family
- Cultural wellbeing associated with the values of kaitiakitanga, manaakitanga, matauranga and mahinga kai.

These submissions also noted the potential impacts should the status quo change:

- Non-commercial loss of certain paua populations to harvest from
- Increased costs associated with
 - a need to purchase additional gear to fish paua at greater depths or further off the coast, and/or
 - a need to travel further distances by boat or car to harvest paua
- Reduced value obtained through tourism and the ability for visitors to easily explore the coastlines and experience a truly Kiwi experience by harvesting paua from the shore

- Exclusion from the fishery because of the inability to participate under commercial densities
- Impact the ability for tangata tiaki to provide customary authorisations
- Impact the ability of local marae to provide for visitors or large customary gatherings such as tangi and hui.

Several submitters highlighted that, in areas open to commercial operators where once paua were plentiful, there was now effectively none and that this is of significant concern to them.

MPI response

MPI considers the comments from the non-commercial sector provide additional information to characterise non-commercial values. MPI has considered these values when assessing the management options presented in this final advice paper.

Commercial value

Submission comments

Some submissions question the commercial value that can be derived from the proposal, including:

- Questioning the estimated volume of paua that could be commercially harvested from these areas
- Noting there is no increased value if the commercial catch volumes stay the same (as stated)
- Noting that any suggestion of an increased commercial catch limit is contradictory to other statements in the proposal.

MPI response

The proposed volumes of catch that may be obtained in the proposed areas are industry estimates based on their observations. There has been no independent assessment of the abundance or density of paua in the closed areas.

The basis for this review is that the regulations were put in place for reasons no longer relevant to the paua fishery.

The value the commercial industry may obtain from amending the existing closed areas is in providing flexibility to how and where they harvest their catch limits, and to increase the rate of rebuild over time. This does not equate to more catch but can improve harvest efficiency, which does improve profitability. There are no proposed changes to the existing catch limits.

Sustainability of the PAU 5D stock

Submission comments

Submissions noted concerns around the sustainability of the PAU 5D stock and referenced the 2006 PAU 5D stock assessment report. They considered the information in this report suggests the fishery is unsustainable and the proposal is a means to allow for greater commercial harvest and depletion of resources. Many submitters considered that the high density paua beds are 'nursery areas' and as such are vital to the sustainability of the fishery.

MPI response

The fishery is sustainably-managed under the Quota Management System. MPI has just completed an assessment of the PAU 5D stock. A final report will be available at the end of May 2013. Preliminary information shows paua numbers are steadily rebuilding following quota cuts in the early 2000s, and the stock is moving towards its target biomass of 40% of unfished biomass.⁵ The target biomass is above the legislated requirements to maintain the stock at or above the biomass that supports maximum sustainable yield (B_{MSY}). While high densities of mature paua contribute to local spawning, the effect on wider recruitment in the fishery is uncertain.

Should these areas be opened to commercial harvest they will become a part of the PAU 5D areas assessed within the stock assessment process. In future, an assessment may result in a change to the Total Allowable Catch (TAC) and subsequent allowances. While no changes are planned to these limits at this time, if the stock continues to grow and reach or exceed target biomass, catch limits may increase. Similarly, where the stock declines MPI will respond (as it has previously) and reduce catch limits to maintain long-term sustainability of the fishery.

4 Analyses of Management Options

Submissions suggest very few areas could be reopened without impacting on non-commercial fishers. MPI considers there would be limited value in proceeding with trivial changes given the costs of amending regulations. However, MPI has observational information and information from fishery officer interactions that suggests it is unlikely all these areas are as heavily fished by non-commercial paua gatherers as submissions suggest, but no quantitative information to confirm this has been obtained.

The following section discusses each of the options and their potential impact on customary, recreational and commercial fishers. Note there is uncertainty around the costs and benefits and how they may impact on people's social, cultural and economic well-being. This is primarily because there is limited information, other than the submissions, on harvesting effort by non-commercial fishers in the areas concerned.

Statutory considerations

The purpose of the Fisheries Act 1996 is to provide for the utilisation of fisheries resources while ensuring sustainability. The regulatory options proposed below are consistent with this purpose.

Section 9 of the Act prescribes three environmental principles that you must take into account when exercising powers in relation to utilising fisheries resources and ensuring sustainability. These principles are:

- Associated and dependent species should be maintained above a level that ensures their long-term viability
- Biological diversity of the aquatic environment should be maintained

⁵ This is the biomass at which the stock as a whole is considered to be at its most productive, taking into account growth and other biological characteristics of paua.

- Habitat of particular significance for fisheries management should be protected.

MPI considers the proposals are consistent with these principles. There are no changes proposed to the volume of commercial harvest and there is no information to suggest that associated and dependent species abundance or existing biodiversity would be modified. There are no designated habitats of particular significance within the areas being reviewed.

Section 10 of the Act sets out the information principles that you must take into account when exercising powers in relation to utilising fisheries resources or ensuring sustainability. These principles are:

- Decisions must be based on the best available information, taking into account any uncertainty in that information and applying caution when information is uncertain, unreliable, or inadequate
- The absence of information should not be used as a reason to postpone, or fail to take, any measure to achieve the purpose of the Act, including providing for utilisation at levels considered to be sustainable.

The information and options presented reflect these principles. MPI notes that there is a high level of uncertainty in the non-commercial use of the areas under consideration

Section 297 of the Act empowers the Governor-General to make regulations for certain purposes. MPI considers that the proposed changes to regulation 10 in the Fisheries (South-East Area Commercial Fishing) Regulations 1986, and regulation 14 in the Fisheries (Southland and Sub-Antarctic Areas Commercial Fishing) Regulations 1986 fit within the relevant provisions of s 297.

4.1 OPTION 1 – STATUS QUO

Option 1 would retain the existing commercial shellfish harvest prohibitions as described above in section 1.3.2 and shown in Figures 1 and 2.

4.1.1 Impact on fishers

Commercial

Under Option 1 commercial fishers and quota holders will see no change in the availability of marine space where they can harvest their Total Allowable Commercial Catch (TACC). There are approximately 49 quota holders and 24 ACE (annual catch entitlement) fishers that operate in the PAU 5D fishery that are impacted.

As noted in the problem definition and stakeholder comments, the rationale for these closures are no longer applicable (e.g. food safety concerns from the freezing works and sewage outfalls, or unconstrained commercial harvest).

Since paua was brought into the QMS and the PAU 5D QMA established there have been a series of regulated and voluntary closures that have reduced areas available to obtain their commercial catch limits.

Industry argues the effect of these closed areas in addition to the historic closures has been to cumulatively reduce productive fishing areas from the commercial fishery. Industry considers a greater commercial effort is concentrated on the remaining paua populations for commercial fishers to harvest displaced catch.

MPI notes that the voluntary closed areas, negotiated between commercial and recreational fishers in the early 1990s, were put in place because recreational fishers argued they were unable to access paua. These areas include 4 along the Catlins coast and one at Shag Point. Voluntary reserves were not required in the areas where closures already existed. Mataitai reserves are subject to statutory tests to ensure commercial fishers are not prevented from taking their quota entitlements.

Customary and Recreational

Under Option 1 the closed areas provide for the spatial separation of commercial and non-commercial sectors, which results in reduced competition among sectors. Non-commercial submissions support this option and note that this spatial separation is important because they fish differently and want high abundance and large paua. Many of these submitters have adjusted their fishing patterns to avoid competing with commercial harvesters in areas open to commercial.

Conversely, concentrated commercial harvest in the existing areas prevents catch spreading throughout the entire QMA and can result in localised depletion, a common concern among non-commercial harvesters.

4.2 OPTION 2 – AMEND EXISTING COMMERCIAL PAUA HARVEST PROHIBITIONS

Option 2 would amend the existing commercial shellfish harvest prohibitions to allow the commercial harvest of paua in all, or some, of the following areas:

- Otago Peninsula from Cape Saunders to Harakeke Point and from Robertson's Creek (Boulder Beach) to Smails Beach
- Clutha River Mouth
- Waipapa Point
- Bluff area from Steep Head to Barracouta Point.

MPI notes information from submitters suggests recreational use is greatest in the Otago Peninsula areas, followed by Bluff, Waipapa Point and Clutha. The closed areas have resulted in spatial separation of commercial and non-commercial sectors. The introduction of commercial harvesters to those areas may create new localised pressures.

On the basis of the submissions, only a few small areas could be opened without impacting on non-commercial fishers. MPI considers there would be limited value in proceeding with such a regulatory change.

4.2.1 Impact on fishers

Commercial

Commercial fishers and quota holders involved in the PAU 5D fishery may benefit from the removal of these closed areas to enable better utilisation of the stock as follows.

- Better and less regulation where the rationale for the original closures are no longer applicable in those areas
- Better spread of catch throughout the whole QMA to support biomass build for all across the whole fishery
- Wider range of spatial access in different prevailing weather conditions
- Increased economic return by increasing catch rates.

Many of the areas under the commercial shellfish closures are believed to be in a largely unfished state, with industry estimates of approximately 10 to 30 tonnes of paua catch per year could be redistributed and harvested (from within the current 89 tonne TACC). MPI is unable to verify these estimates as there is insufficient information on the biomass of the paua populations in these discrete areas.

Other industry submissions consider:

- These areas were not designed as recreational-only areas, and are not ‘reserves or protected areas’ as commercial harvest of most other species can occur
- Opening only a portion of these areas is inconsistent with the Act and wider utilisation should be provided for
- On principle, given the original rationale of the closures is redundant, the regulations should be removed as a whole.

Customary

Local Runanga have whakapapa rights and fisheries management roles, functions and expertise (such as Tangata Tiaki/Kaitiaki) over the proposed areas. The submissions also represent the views of the Ngāi Tahu tribal collective, currently comprising over 49,000 registered members.

Submissions from iwi received during the consultation process consider these areas:

- have high customary importance and/or
- are easily accessible by foot and that customary harvest occurs under both the amateur and South Island customary regulations and should not be open to commercial harvest because of the negative impact on cultural values such as kaitiakitanga, manaakitanga, matauranga and mahinga kai.

Recreational

Under Option 2 non-commercial fishers may benefit from reduced fishing pressure in areas where commercial harvest is currently concentrated, and a better spreading of catch to reduce/remove some localised depletion concerns.

Recreational fishers have sole access to paua across these large spatial closures. The majority of these areas would be retained as only a small portion of the closed areas under the regulations are proposed for opening under Option 2. However, submissions received from recreational fishers were strongly opposed to allowing commercial harvest in any of the areas proposed and submit the following key points:

- These areas
 - are highly used by recreational fishers,
 - provide easy access of highly abundant and large paua for harvest,
 - provide near virgin biomass that supports scientific research, and
 - the areas should be preserved for future generations.
- Allowing commercial harvest would
 - negatively impact on their ability to fulfil their daily bag limit and catch a feed
 - reduce the availability and mean size of paua available, and
 - reduce their social and cultural wellbeing.

4.3 OPTION 3 (NEW) – DEFER DECISION PENDING STAKEHOLDER PLAN

No consensus emerged between non-commercial and commercial stakeholders, and no opportunities for trade-offs between sectors have been identified during consultation. However, some submissions propose such a consensus is achievable if accurate information can be brought to the table and agreed upon.

For key fisheries, such as the paua fishery, MPI will actively engage with stakeholders who express concerns to get a better understanding of issues, and to work toward ensuring beneficial outcomes and enduring solutions.

MPI has, therefore, included an additional option (Option 3) for you to consider. Option 3 would defer a decision on the industry request until later this year, providing stakeholders with an opportunity to come to you with an agreed plan on areas to be opened.

Under Option 3 you would signal by way of your decision letter that you consider the original rationale for the regulations now no longer applies, but recognise the non-commercial importance of some of these areas. A targeted group of stakeholders would be provided with an opportunity to present a proposal by November 2013. This will allow MPI to undertake further discussions with stakeholders/ Treaty partners, and come to you with better information on the options.

MPI considers Option 3 to be the preferred option for the following reasons:

- The lack of detail on non-commercial harvest behaviour (distribution and volume) makes it difficult to clearly identify areas that meet the original criteria of the review
- The regulations are redundant but industry has indicated support for retaining some of the closed areas given their importance to non-commercial fishers

- There is opportunity to provide more information to stakeholders on the status of the PAU 5D fishery to dispel misinformation on the sustainability of the stock
- The suggestion by some submitters that a compromise may be possible and a willingness to engage in further discussions.

5 Other considerations

Concentration of effort in areas open to both non-commercial and commercial fishers can result in localised depletion. However, reports of localised depletion are largely anecdotal, with little evidence to confirm where they are occurring and why. Localised depletion can mean a greater effort is required to fulfil catches, including in easily accessible non-commercial areas, and may result in overfishing of local spawning populations.

Paumac5 has proposed to harvest any paua in these areas under their voluntary minimum harvest size of 132 mm. Harvesting above the minimum legal size will provide a size differential for recreational fishers that allow them to harvest paua prior to them being large enough for commercial harvest. This may reduce some of the increased spatial competition that could arise.

Some submissions consider the higher minimum size inconsequential and that in the proposed areas the bulk of available paua will still be removed. They consider the majority of paua in these areas are well above the existing minimum legal size (e.g. ≥ 140 mm) and any commercial harvest would mean none available for non-commercial take. Other submissions consider the voluntary size limit is unlikely to be followed because there is no regulatory requirement to leave paua under that size.

MPI consider a voluntary minimum harvest size does provide some separation in commercial versus non-commercial harvest, and where similar measures are in place these seem to be well adhered. MPI notes, however, that in some of these areas there may be a lack of smaller paua closer to the minimum legal size due to low exploitation rates.

Appendix 1 – Proposed areas under Option 2



Map 1: Proposed commercial paua harvest area from Cape Saunders to Harakeke Point and from Robertson's Creek (Boulder Beach) to Smaills Beach (shown in blue) within the existing closed area (red).



Map 2: Proposed commercial paua harvest area around the Clutha River mouth (shown in blue) within the existing closed area (red).



Map 3: Proposed commercial paua harvest area around Waipapa Point (shown in blue) within the existing closed area (red).



Map 4: Proposed commercial paua harvest area from Steep Head to Barracouta Point (shown in blue) within the existing closed area (red).

Review of underwater breathing apparatus (UBA) in selected commercial shellfisheries

1 Executive Summary

In this Final Advice Paper (FAP) you are asked to make decisions on allowing underwater breathing apparatus (UBA) to be used in the kina (SUR), sea cucumber (SCC), horse mussel (HOR) and the Chatham Island's paua (PAU 4) fisheries.

MPI proposes allowing the use of UBA in the SUR, SCC and HOR fisheries to enable the development of these potentially valuable fisheries. Currently, commercial fishers are not permitted to possess or use UBA when harvesting fish or aquatic life. Using UBA would increase accessibility, harvest efficiency and product selectivity for these fisheries, allowing quota holders to maximise use of existing quota allocations and aid market development. The value of uncaught existing quota for these fisheries is currently around \$2 million, and the potential for further development of some of them is considered to be high.

Additionally, divers within the Chatham Island paua (PAU 4) and kina (SUR4) fisheries are concerned about the increased likelihood of great white shark attacks whilst free diving.

MPI supports the Paua Industry Council's request to allow the use of UBA in PAU 4 to enable paua divers to avoid shark attacks. This applies equally to the SUR 4 fishery.

MPI has completed consultation on allowing the use of UBA in these fisheries. There has been a high level of public interest on the proposed regulation changes, with submissions from all sectors. Overall there is general support from both commercial and customary stakeholders for utilising UBA. However, there is concern from customary and recreational sectors regarding depletion of the mainland SUR stocks. Kina is a significant customary fisheries resource and customary stakeholders wish to ensure that allowing UBA as a harvest method will not negatively impact on the ability of iwi to harvest kina.

Taking submissions into consideration, MPI recommends you approve the use of UBA in the SCC and HOR fisheries to promote and develop the utilisation of these potential valuable fisheries. MPI also recommends allowing the use of UBA in the PAU 4 and SUR 4 fisheries to improve diver safety and ensure continuing social, cultural, economic wellbeing.

However, it is recommended further discussion occur with a targeted group of stakeholders / Treaty partners on allowing the use of UBA in mainland SUR fisheries. This will give customary and commercial stakeholders time to establish fisheries management plans to mitigate concerns raised around impacts on customary fishers.

Regulatory changes would come into effect on 1 October 2013 and will be implemented under section 297 (1) (a) of the Fisheries Act 1996 through amendments to the Fisheries (Commercial Fishing) Regulations 2001.

2 Recommendations

MPI recommends that you:

- a) **Note** that this proposal relates to both developing shellfish fisheries and diver safety in the Chatham Islands

Noted

In relation to developing shellfish fisheries, MPI recommends that you:

- b) **Note** that the current restriction preventing the use of underwater breathing apparatus (UBA) to commercially harvest fisheries resources is potentially impeding the development of underutilised shellfish fisheries

Noted

- c) **Agree** (*MPI preferred*) to allow the use of UBA in the sea cucumber and horse mussel fisheries, and defer your decision on mainland kina until later this year

Agreed / Not Agreed

OR

- d) **Agree** to allow the use of UBA in the kina, sea cucumber and horse mussel fisheries

Agreed / Not Agreed

In relation to diver safety in the Chatham Islands, MPI recommends that you:

- e) **Agree** (*MPI preferred*) to allow the use of UBA in the Chatham Islands paua and kina fisheries for reasons of diver safety

Agreed / Not Agreed

Or in relation to both proposals, MPI recommends that you:

- f) **Agree** to retain the existing regulation restricting the use of UBA for the commercial harvest of shellfish species

Agreed / Not Agreed

MPI also recommends that you:

g) **Agree** that if you approve the use of UBA in any of the above options, the following regulatory conditions be put in place;

- commercial fishers using UBA must carry and operate an automatic location communicator
- commercial fishers must not use or be possession of UBA when taking, or in the possession of, any other fish, aquatic life, or seaweed

A new fishing method reporting code to be used by commercial fishers using UBA

Agreed / Not Agreed

Andrew Doube
Inshore Fisheries Manager

Hon Nathan Guy
Minister for Primary Industries

/ /2013

/ /2013

3 Introduction

3.1 OBJECTIVES

MPI is committed to maximising the economic benefits from the sustainable use of fisheries resources while reducing any unnecessary regulatory burden. The purpose of this review is to:

- Remove any unnecessary utilisation constraints
- Allow for commercial harvesting methods that may assist in realising the economic potential for SUR, SCC and HOR
- Ensure diver safety in PAU 4 and SUR 4 and maintain the continued performance of this fishery.

3.2 STATUS QUO

Under regulation 76 of the Fisheries (Commercial Fishing) Regulations 2001, commercial fishers are not permitted to possess or use UBA when harvesting fish or aquatic life. The only exception to this has been the deepwater clam (geoduck) fishery covered under regulation 76A of the Fisheries (Commercial Fishing) Regulations 2001.

The restriction on the use of UBA predates the Quota Management System (QMS) and was originally established to reduce the risk of localised or serial depletion of shellfish stocks by commercial fishing. UBA restrictions can help ensure populations cannot be fished out, for example, kina remain unfished in areas below where free-divers can safely harvest. The restrictions on use of UBA do not apply to non-commercial shellfish fishers, with the exception of paua.

3.3 PROBLEM DEFINITION

MPI considers a review of the use of UBA is appropriate as this restriction pre-dates implementation of the QMS and the setting of total allowable catches (TACs).

The specific issues that have prompted a review of the use of UBA in these fisheries include:

- Consistently low harvest levels in relation to the total allowable commercial catch (TACC)
- Difficulties in proving up the utilisation and economic potential of these fisheries, due to current fishing methods
- Reduced harvesting efficiency based on species distribution and free-diving limitations (i.e. the species are at low densities or are located below safe free-diving depths)
- The vulnerability of these species to alternative fishing methods (e.g. dredging), which can cause damage to the product and/or increase by-catch and wastage
- Diver safety and efficiency in areas where great white shark encounters occur and appear to be increasing.

MPI has received requests from industry to allow use of UBA in the SUR, SCC and HOR fisheries as part of its annual planning process.

The Paua Industry Council has also requested a review of the use of UBA in the Chatham Islands paua fishery (PAU 4)⁶, but for reasons of diver safety. There is anecdotal information that encounters with sharks have increased in the islands, and that the use of UBA is an effective means of allowing paua divers to better avoid shark attacks.

3.3.1 Developing shellfish fisheries

Low harvest levels

In the 2011-12 fishing year, only 2% of the TACC for HOR was harvested, 90% of which was bycatch (non-target) in other trawl and dredge fisheries. Of the annual TACC of SUR, only 74% was harvested, while only 57% of the TACC for SCC was harvested. The TACCs for these fisheries were set at nominal or low levels reflecting the limited information available when they entered the QMS. Allowing use of UBA will provide quota holders increased opportunity to ‘prove-up’ and increase the value of these fisheries. Stocks such as SCC have a high unit value (in excess of \$30 per kg) and could become valuable new fisheries for New Zealand.

Harvest inefficiencies

The commercial harvest of all shellfish (except geoduck) must be by hand, free-diving, potting, trawling or dredging. These methods of collection limit the amount and efficiency of harvest when targeting species found in the sub-tidal environment.

These methods are restrictive for some developing fisheries, preventing the economical harvest of valuable fisheries resources. For example, free diving limits harvest depth to around 10 m, when some subtidal species can be found at depths in excess of 50 m. In some fisheries, like SCC, these greater depths and sometimes low densities make free-diving an inefficient means of harvest.

Product quality and environmental issues

While dredging/trawling can allow access to deeper stocks of shellfish not accessible by free-diving, in practice these methods cause significant damage to SUR, HOR and SCC.

3.3.2 Safety in the Chatham Islands paua fishery (PAU 4)

Paua divers within the PAU 4 fishery are concerned about the likelihood of great white shark attacks whilst free diving. Concentrations of sub-adult and mature great white sharks occur around the Chatham Islands and attacks on paua divers have occurred. Divers are reporting that sharks are congregating closer inshore and are being more frequently encountered.

The Paua Industry Council considers that the use of UBA provides the best means of enabling paua divers to avoid or protect themselves from great white sharks. The use of UBA, as a

⁶ The Paua Industry Council has requested no other commercial paua fisheries be considered for allowing the use of UBA. The paua fisheries are well utilised and their main concern is diver safety and providing a means for improving harvesting efficiency without undue risk to the fishers due to increasing anecdotal reports of great white shark presence.

means of improving diver safety in PAU 4, has recently been trialled under a special permit. The results of those trials have been promising. Divers consider their safety and well-being was improved. Divers have also reported improved utilisation benefits such as:

- Increased catch-per-unit effort and overall efficiency
- Less undersized fish taken to the surface
- Reduction in damaged paua from harvesting
- More selective harvesting to avoid localised overfishing.

Given the high crossover in terms of fishers participating in both the SUR 4 and PAU 4 fisheries on the Chatham Islands, MPI considers the use of UBA in the SUR fishery should also be considered as similar risks are present.

3.4 CONSULTATION

On 11 March 2013, MPI released a consultation paper for 6 weeks of public consultation. The paper was published on MPI websites, and stakeholder letters were sent to persons and organisations with an interest and/or who could be affected by the proposals. The distribution list included tangata whenua, recreational and commercial stakeholders.

Submitters were encouraged to provide additional information of relevance to, and their views on, the proposal. The management options put forward for your consideration reflect the variety of submissions received, including variations to the initial proposals.

3.4.1 Summary of submissions

A total of 93 submissions were received. Approximately 48 of these submissions represented general public opinion. Submissions were also received from 23 organisations, listed below.

- Inns holding, Enchinoderm Diving, Holothurian Int.
- East Otago Taiapure Management Committee
- Fishery Developments Ltd
- Kina Industry Council
- Marlborough Recreational Fisheries Association
- Nga Hapu o Maniapoto
- Ngāi Tahu Māori Law Centre
- Ngāti Apa ki te Rā Tō Trust
- Ngāti Kahungunu Iwi
- Ngāti Mutunga o Wharekauri Asset Holding Company Limited
- Ngāti Porou
- Northern Live Fisheries
- New Zealand Rocks Lobster Industry Council
- Paua Industry Council

- PauaMac5
- PauaMac4
- SUR 2B Quota holders
- SUR 2A quota holders
- Te Atiawa
- Te Ohu Kaimoana
- Te Rūnanga o Ngāi Tahu
- Te Runanga o Toa Rangatira
- Whakataki Marae CT

Submissions indicated widespread support for allowing UBA in the HOR and SCC fisheries throughout New Zealand and in the paua and kina fisheries on the Chatham Islands. There were, however, mixed views on allowing UBA to be used to harvest kina in the mainland. Kina is an important customary fishery, and submissions reflect tangata whenua concerns around negative impact on their ability to harvest this kaimoana.

Key points and MPI's response to each of the issues raised are set out below.

Sustainability of developing stocks:

Submission comments

Submissions from recreational and customary stakeholders raise concerns over the uncertainty and lack of information around biomass and sustainable harvest levels of the stocks under consideration in this proposal.

MPI response

MPI acknowledges that there is limited information on the biomass and abundance of many of the stocks covered in this proposal. The majority of the stocks under consideration within this proposal, however, have nominal quota limits of between 1 and 5 tonnes (22 of the 34 stocks) that reflect the lack of information on stock biomass. MPI considers that commercial harvest within these nominal quota limits poses little risk to stock sustainability. Of the stocks that are more developed and have higher quota limits, e.g. SUR1A, B, and SUR5, there is currently no indication of declining catch rates that may suggest stock decline.

Serial and localised depletion:

Submission comments

Submissions from customary and recreational stakeholders consider that, despite the proposed regulatory conditions, the risk of serial or localised depletion is too great. Most of this concern is centred on SUR stocks.

In contrast, quota holders believe the risk of serial or localised depletion is limited. Many believe the use of UBA will help reduce the risk of serial depletion by spreading effort across a greater area and deeper waters.

Commercial, customary and recreation sectors agree that finer-scale monitoring of catch in the SUR fishery is needed to improve the data available for stock management

MPI response

MPI notes that fishing patterns will change with use of UBA and there is potential increased risk of serial or localised depletion due to the improved efficiency of harvest. However, there are strong incentives now in place under the QMS to avoid localised overfishing. MPI also considers that within the context of the QMS, conservative TACC allowances, and with the proposed regulatory conditions to support the use of UBA, this risk can be mitigated.

The SUR fishery is currently characterised by a small number of quota owners and annual catch entitlement (ACE) holders that control most of the catch. As such, collective strategies can more easily be put in place to avoid serial depletion.

Issues with paua hoarding and other illegal activities:

Submission comments

Customary, recreational submitters, and paua and rock lobster quota holders suggest the use of UBA would increase the temptation for some fishers to conduct illegal activities i.e. stockpiling paua for later collection by free diving.

These submitters suggest that to reduce risks of paua hoarding, no fisher should be allowed to hold PAU ACE in the same fishing year as using UBA to harvest SUR, SCC or HOR. They also support compulsory individual automatic location communicator (ALC) loggers for each diver, similar to technology currently used voluntarily within the paua fishery.

MPI response

The proposed condition to monitor quota holdings and control the leasing of ACE would be difficult to manage in practice and would disadvantage some fishers who rely on the ability to operate in multiple fisheries as part of their fishing portfolio.

While ALC technology that can track individual divers has the potential for use in these fisheries, there is currently no work being undertaken to integrate this data into MPIs current monitoring systems. However, MPI is keen to investigate the practicalities of this into the future both for monitoring and collecting finer scale harvest information.

MPI considers the regulatory conditions described later in this paper manage compliance issues that may arise with the introduction of UBA.

Customary significance of SUR and sector conflict:

Submission comments

Tangata whenua and customary fishers note SUR is taonga, a species of great cultural significance. Many submissions support the use of UBA in principle for developing fisheries, but do not think commercial harvest of mainland SUR fisheries should be allowed because of its taonga status. Submitters are concerned that areas of customary significance for kai moana collection, mahinga kai, will be fished out and communities will have less ability feed their families. Customary stakeholders propose that MPI, in collaboration with local iwi around the

country, establish mahinga kai areas and restrict the use of UBA and commercial harvest of SUR in these areas. Alternatively, some customary submissions and Te Ohu Kai Moana indicate a willingness to participate in and facilitate the development of management strategies for SUR fisheries that may consider the use of UBA.

The commercial sector does not wish to increase sector conflict and supports stock management strategies being put in place should UBA be approved for SUR stocks on the mainland.

Submissions suggest management strategies would need to demonstrate industry capability, capacity and support to manage, control and monitor UBA use to ensure that fisheries resources and/or the fishing opportunities available to non-commercial kina fishers are maintained.

MPI response

MPI notes the high value and importance of SUR to customary stakeholders and acknowledges the need to ensure the availability of SUR for customary harvest. MPI supports the development of management strategies to address customary fishers' concerns while providing industry an opportunity to improve efficiency and access in the SUR fisheries.

MPI has reflected these concerns by adding an additional option in this paper that would defer mainland SUR stocks from the proposed regulatory change, pending development of such strategies.

Stock specific harvest strategies:

Submission comments

Submissions from some stakeholders suggest that management strategies also be established for all SCC and HOR stocks before allowing the use of UBA.

MPI response

MPI considers the establishment of individual management strategies for all SCC and HOR stocks would be onerous and is not necessary given most have nominal TACs of less than 5 tonnes.

MPI considers the management of these stocks within the QMS, combined with the proposed regulatory conditions is sufficient to sustainably manage these stocks at this time. Such strategies will be considered as these fisheries are 'proven up' by participants.

Allowing the use of UBA in other fisheries:

Submissions from customary and commercial stakeholders suggest the addition of other fisheries to be included under any potential regulation to allow the use of UBA. These fisheries include whelk, seaweed, starfish, surf clams and scallops.

MPI response

MPI has not previously received requests from stakeholders to allow use of UBA in these fisheries. A number of these fisheries are managed outside the QMS, are caught mainly as bycatch, are very low value, and have no current target fishing effort or market development.

For many of these fisheries UBA does not represent an efficient means of commercial harvest. Other methods currently employed offer better promise of commercial viability should these fisheries be developed by commercial operators.

MPI is open to considering the inclusion of other species in to the future to help sustainably increase the value of New Zealand's inshore fisheries.

4 Analysis of management options

The analysis of options discusses the potential impact on customary, recreational and commercial fishers. There is uncertainty around the costs and benefits of the status quo and alternative options and the impact on people's social, cultural and economic well-being. This is primarily because there is limited information on harvesting effort by non-commercial fishers in the stocks concerned.

Statutory considerations

The purpose of the Fisheries Act 1996 is to provide for the utilisation of fisheries resources while ensuring sustainability. The regulatory options proposed below are consistent with this purpose.

Section 9 of the Act prescribes three environmental principles that you must take into account when exercising powers in relation to utilising fisheries resources and ensuring sustainability. These principles are:

- Associated and dependent species should be maintained above a level that ensures their long-term viability
- Biological diversity of the aquatic environment should be maintained
- Habitat of particular significance for fisheries management should be protected.

MPI considers the proposals consistent with these principles. There are no changes proposed to current TACC limits and there is no information to suggest that associated and dependent species abundance or existing biodiversity would be modified. There are no changes to designated habitats of particular significance under this proposal

Section 10 of the Act sets out the information principles that you must also take into account. These are:

- Decisions must be based on the best available information, taking into account any uncertainty in that information and applying caution when information is uncertain, unreliable, or inadequate.

- The absence of information should not be used as a reason to postpone, or fail to take, any measure to achieve the purpose of the Act, including providing for utilisation at levels considered to be sustainable.

The information and options presented reflect these principles.

Section 297 of the Act empowers the Governor-General to make regulations for certain purposes. MPI considers that the proposed exemptions from regulation 76 of the Fisheries (Commercial Fishing) Regulations 2001 are empowered by s 297(1)(a)(viii), which refers to regulating or prohibiting the possession or use of any kind of gear, equipment or device used for, or related to, fishing.

4.1 OPTION 1 – STATUS QUO

Option 1 would retain the existing regulation restricting the use of UBA for the commercial harvest of shellfish species.

4.1.1 Impact on fishers

Under the status quo those most affected are the commercial fishers in the SUR, SCC, HOR and PAU 4 fisheries.

4.1.2 Costs

Sustainability/Environmental

Sustainability and environmental concerns are primarily addressed through the TAC for these fisheries. Continued restriction, however, could mean the shellfish beds currently targeted through free-diving would continue to be harvested. If harvesting pressure is high and focused on these shallower areas then the number of shellfish able to reproduce and provide recruitment stock to the local populations may be diminished.

Customary/Recreational

There will be continued overlap among customary, recreational and commercial sectors in some areas. This effort occasionally results in high fishing pressure and concerns about the availability of shellfish in easily accessible areas and areas of customary significance (for example, shallower waters).

Commercial

Commercial fishers would be unable to improve the efficiency, development opportunities and/or safety of their operations through the use of UBA under Option 1. They will be required to identify new ways of improving harvest levels or ensuring their safety.

4.1.3 Benefits

Sustainability/Environmental

Continued restriction would mean at least some portion of these shellfish stocks are left untouched. Those species in deeper waters would remain (unless targeted by other methods, e.g. dredge) to provide valuable recruitment stock.

Customary/Recreational

Customary and recreational fishers are able to use UBA harvest their catch in the SUR, SCC and HOR fisheries and thus are able to shift effort into deeper water without overlapping with commercial effort. This provides them opportunities to enter areas that are currently inaccessible to commercial fishers.

Commercial

There are no apparent benefits to the fishers in these fisheries under Option 1.

4.2 OPTION 2A– EXTENDING THE COMMERCIAL USE OF UBA TO DEVELOPING FISHERIES

Option 2A proposes amending the Fisheries (Commercial Fishing) Regulations 2001 to provide further exemption from regulation 76 to allow the use of UBA for the commercial harvest of SUR, SCC and HOR.

4.2.1 Impacts

Under this option those fishers, quota holders and licensed fish receivers (LFRs) involved in these fisheries would be most impacted. Allowing UBA in these fisheries would affect approximately 46 fishing vessels, a majority of which target SUR (including 8 core vessels). There is a large crossover between SUR and SCC fisheries, with 61% of vessel that target SCC also target SUR throughout the fishing year.

4.2.2 Costs

Sustainability/Environmental

UBA is extensively used in similar overseas shellfish fisheries, usually by “hooka” (surface supplied air) rather than by self-contained underwater breathing apparatus (SCUBA). Some of these overseas fisheries highlight the sustainability risks associated with the introduction of UBA (for example, recruitment failure in the stock due to overfishing).

Unlike these overseas examples, however, the QMS and total allowable catch (TAC) allowances provide an effective means to manage the sustainability of these fisheries. Fish within the QMS will help mitigate the risk of stock collapse, but may not prevent localised or serial depletion⁷ in geographically restricted shellfish populations.

MPI considers the broader issue of localised or serial depletion relevant given the sedentary nature of shellfish species. Anecdotal information from SUR fishers has highlighted that UBA may pose high risk of localised depletion in specific areas of reduced productivity (SUR 2A) and steep topography (SUR 7A). SCC may also be at risk of localised or serial depletion as it is found in lower densities than other species.

⁷ **Localised depletion** is the reduction in shellfish numbers in a small area (e.g. a shellfish bed) to a point where continued fishing will result in recruitment overfishing in that area. Recruitment overfishing is when the shellfish population no longer has the reproductive capacity to replenish itself, that is there are not enough adults to produce offspring

Serial depletion of fishery stocks occurs when a fishery moves from one stock to another as each one declines to levels at which it is no longer economically feasible to fish, or fisheries managers feel it is necessary to close the fishery.

The risk of serial depletion, however, may be mitigated by market demand/ harvesting practises. For example, the market for SCC is highly dependent on product colour. UBA will allow desirable coloured product to be selected while leaving product of undesirable colour undisturbed.

No other environmental impacts (e.g. bycatch issues, habitat destruction) are foreseen, given the highly selective and non-invasive method that fishing with UBA represents.

Commercial

Enabling the use of UBA has several upfront costs for any commercial fisher intending to participate. These costs include the outlay and maintenance of equipment, and compliance of safety requirements. The approximate cost for divers to acquire a limited certificate of competency is \$2,000.

Regulatory conditions put in place to support the use of UBA will also result in additional compliance costs (described below and in section 5). These costs may be prohibitive for smaller vessel operators.

Customary/Recreational

Anecdotal evidence suggests that in some areas where SUR is commercially harvested, customary fishers find the need to dive below the reach of commercial fishers to find plentiful beds to harvest. Allowing commercial use of UBA in the SUR fishery may reduce customary and recreational fishers' ability to gather in areas that were once below commercial divers reach.

Current information suggests there is little customary or recreational catch of SCC. However, utilisation within the Asian community may be underrepresented in recent recreational surveys as anecdotal information suggests their harvest of SCC may be significant.

Compliance

The monitoring of commercial activity may result in increased costs or challenges for compliance operations. For example, there are a high proportion of fishers and vessels in the kina fishery that also fish for paua. The Paua Industry Council has asked that the use of UBA not be considered for use on the mainland paua fishery, because it does not consider the fishery is subject to the same harvesting constraints (as in the developing fisheries) or safety risks (as in the Chatham Islands fishery). Without adequate monitoring or regulatory controls in place MPI considers it could be difficult and costly to monitor vessels that have collected both paua and kina in the same trip.

Another potential compliance risk is the possibility of Use of SCUBA in particular could make it easier for fishers to enter restricted or closed areas undetected. This risk could already exist in the recreational fishery but is not believed to be significant. Regulatory controls to mitigate these risks are discussed in section 5.

4.2.3 Benefits

Sustainability/Environmental

Allowing the commercial use of UBA could potentially alleviate the pressure on stocks that fall within the depth range of free divers by allowing catch to be spread over a greater area.

Customary/Recreational

Enabling commercial fishers to use UBA may reduce the cross-sector pressures on local populations. Commercial fishers could spread their effort to deeper waters, reducing their amount of take in the shallower areas where customary and recreational harvest is more accessible.

Commercial

For stocks that have nominal TACs the ability to harvest from new sources will provide better knowledge on their prevalence, This knowledge can then be used to inform future stock assessments and support increased catch limits, potentially increasing their value to New Zealand's fisheries sector.

The use of UBA may help increase the quality and selectivity of shellfish harvested, reducing damage to product, and causing fewer disturbances to undesirable product (small size or poor condition). This selectivity is important in developing premium markets where more desirable product can be supplied.

The use of UBA will also allow for the exploration for viable fisheries in areas that were previously unavailable or had posed difficulties for free-diving operations, i.e. areas of high current/tidal flow. Areas under mussel farms with high density of sea cucumbers are an area of interest for the SCC fishery, for which the ability to use UBA may result in adding value to mussel farm operations.

These factors may increase the opportunity for these fisheries to increase in value and to fully utilise allocated quota. Full utilisation of current SCC quota represents between \$100,000 and \$450,000 of additional annual product value. For SUR current un-harvested portion of quota is valued between \$1.33 million and \$1.95 million in annual product value.

Although allowing the use of UBA may not help realise all of this harvest potential, it may help in some QMAs. For example, in SUR 2A and 2B industry suggests kina are found at depths greater than they are currently able to be harvested without the use of UBA.

HOR is still an unexplored fishery making it hard to quantify how much this fishery may be worth in the long term. MPI considers that the ability to utilise UBA will open up development opportunities, for high product quality to potentially supply overseas US and Japanese markets that exist for similar species.

4.3 OPTION 2B (MPI PREFERRED) – EXTENDING THE COMMERCIAL USE OF UBA TO DEVELOPING FISHERIES, EXCEPT KINA

Option 2B proposes amending the Fisheries (Commercial Fishing) Regulations 2001 to provide further exemption from regulation 76 to allow the use of UBA for the commercial harvest of, SCC and HOR, but would defer your decision on mainland SUR stocks.

4.3.1 Impacts

The associated impacts with Option 2B are the same as those outlined in Option 2A, but exclude the SUR fisheries.

4.3.2 Costs

The associated costs with Option 2B are the same as those outlined in Option 2A, but exclude the SUR fisheries.

4.3.3 Benefits

The associated benefits with Option 2B are the same as those outlined in Option 2A, but exclude the SUR fisheries.

Option 2B will allow for issues around sector conflict and the management of the SUR fishery to be considered in more detail.

MPI considers management strategies in the mainland SUR stocks will help ensure customary, recreational and commercial interests are protected before the use of UBA is allowed. Organisations such as Te Ohu Kai Moana have offered to support and facilitate such an approach. Under this option, MPI will come back to you with final advice on the SUR fishery later in 2013.

4.4 OPTION 3 (MPI PREFERRED) – ENABLE THE USE OF UBA IN THE CHATHAM ISLAND PAUA AND KINA FISHERIES (PAU4 AND SUR4) TO SUPPORT FISHER SAFETY

Option 3 proposes amending the Fisheries (Commercial Fishing) Regulations 2001 to provide further exemption from regulation 76 to allow the use of UBA to commercially harvest PAU 4 and SUR 4. This option could be progressed in conjunction with Option 2A or 2B or as a standalone option.

4.4.1 Impacts

There are approximately 25 paua divers in PAU 4 that would be impacted by enabling the use of UBA. There is a large crossover of divers between these two fisheries. There is a small, but important customary and recreational paua and kina fishery on the Chatham Islands. MPI is aware of a broad support in the community to the proposed regulatory change.

4.4.2 Costs

Sustainability/Environmental

The use of UBA may increase the possibility of localised or serial depletion (resulting in poor performing areas) if monitoring tools are not in place to adequately manage that possibility.

Customary/Recreational

Allowing commercial access to the paua stock using UBA may affect local iwi and imi, who have a significant interest in customary and recreational take of these species. However, any potential impacts and increased sector conflict should be mitigated by the presence of 13 legislated customary/non commercial fishing areas around the Chatham Islands.

Commercial

Divers undertaking trials involving the use of UBA were required to have certificates of competency. Divers in this trial were required to hold the OSH qualification of “Limited certificate of competency”. This qualification has an operational limit of 20 metres.

The approximate cost for divers to acquire a limited certificate of competency is \$2,000. The total number of divers who have obtained competency certificates over the two special permits trials is nine (~36% of PAU 4 divers). MPI is unaware of any SUR 4 divers that have obtained this competency certificate.

4.4.3 Benefits

The use of UBA in PAU 4 and SUR 4 is aimed at ensuring the current level utilisation can continue in the future given anecdotal reports of increasing encounters with great white sharks. The use of UBA under the special permit trials for PAU 4 has been found by divers to decrease the likelihood of shark-diver interaction, significantly increasing diver safety in this fishery. The main observations in the trials were:

- UBA gave fishers the option to stay down, seek cover and if able to swim staying on the bottom to the shore so they could exit the water
- Fishers were more relaxed in the water (as they felt safer and less stressed from free diving meant they were less likely to trigger shark aggression (i.e. not giving out distress cues))
- Use of UBA minimises the number of up and down trips in the water column and especially less time floating on the surface getting breath when they may appear as prey to a shark
- Allowed divers to float catch up from the seafloor to boat rather than swimming the catch up reducing the number of up and down passages
- For the boat person, the use of UBA enables them to operate further out reduces the risk from waves braking and rocks
- Improves diver ability to equalise properly and not be under any stress.

Additional results included some positive resource implications and minor economic benefits:

- Divers were more capable of measuring paua in the water rather than removing them and measuring at the surface, which can reduce fishing-related mortality or stress on the population
- Shorter harvest time (for the taking of the TACC) allows fishery to rest
- Shorter time to harvest means greater volume over short period through the LFRs

- More efficient harvesting means less time to take ACE (Annual Catch Entitlement) therefore may result in excess labour capacity in the fishery
- Use of UBA reduces barriers to entry (fitness) and may increase competition for ACE.

5 Regulatory framework

Under Options 2A and 2B and 3, the main risks or issues identified from allowing the commercial use of UBA are:

- The sustainability of local populations of these shellfish due to the risk of serial or localised depletion
- Increased sector conflict if areas are ‘fished out’
- Compliance implications:
 - Harvesting of other species where UBA is not allowed and the ability to prove non-compliance
 - Use of UBA to enter into closed areas undetected.

	Regulatory condition	Costs	Benefits
A	No regulatory controls.	No direct financial costs to fishers Difficult to monitor vessel activities and finer-spatial scale information on harvesting levels. Increased compliance effort	No changes needed to current fishing operations or recording
B	Mandatory use of automatic location communicators (ALCs) when commercially fishing for any of those species where the use of UBA is allowed.	Set up cost of ALC equipment ~\$5,000 Ongoing monitoring costs ~\$50-\$100 per month	Monitor vessel activities in relation to habitat type Identify and monitor participating vessels in real time Detailed information on harvesting locations
C	Prohibit the use or possession of UBA when taking, or in the possession of, any other fish, aquatic life, or seaweed.	Limited direct financial cost- However, may reduce economic viability of fishing trips for fishers who utilise multiple fishing methods targeting different species in one trip	Minimises compliance risk of illegal take of other commercial species with the use of UBA
D	Require the method of harvest to be reported as diving using UBA versus free-diving (new method code required),	Increased complexity in reporting system and fishing areas for fishers to navigate	Provides better information on commercial harvest across fish stocks Better information to inform catch-per-unit-effort (CPUE) analysis of commercial harvest. Better information to inform compliance monitoring activities

MPI proposes (in the event you agree to allow the use of UBA in one or more of these fisheries) to mitigate these potential impacts by implementing the following regulatory tools. An analysis of the benefits and costs of these tools and practical issues relating to the implementation and enforcement of these measures is tabled below.

Options B and C are currently used in the existing exemption for geoduck in regulation 76A of the Fisheries (Commercial Fishing) Regulations 2001. Option D is considered necessary to distinguish commercial harvest by different fishing methods. The use of UBA will affect catch rates and harvesting pressures, as such the ability to separate out fishing methods will help inform future management decisions for these stocks.

1 Executive Summary

The recommendations presented in this paper are aimed at increasing the value obtained from the use of eel fisheries while ensuring sustainability and upholding kaitiakitanga.⁸ MPI is committed to maximising benefits from the sustainable use of fisheries and reducing any unnecessary regulatory constraints.

You are being asked to consider changes to:

- a) the minimum Annual Catch Entitlement (ACE) holding requirement for South Island eel stocks; and
- b) the minimum diameter of commercial fyke net escape tubes applicable in the North and Chatham Islands.

South Island commercial eel fishers need to hold at least four tonnes of ACE, derived from quota, to be able to access the fishery. This restriction has been in place since the introduction of South Island eel stocks into the Quota Management System (QMS) in 2000. The purpose of the restriction was to limit the number of fishers by excluding those with marginal interests in the fishery and ensuring fishers had harvesting rights prior to fishing. However, this restriction has become a barrier to entry and is excessively restrictive, limiting the value derived from the fishery, particularly given increasing prices for eels.

All commercial fishers are required to fit escape tubes in their fyke nets to allow undersize eels to escape. Yet, in the Chatham and North Islands, the current regulated minimum size of escape tubes (25mm) does not generally allow for escapement of eels below the minimum legal size (220g). The industry has voluntarily adopted a Code of Practice to use larger escape tubes (31mm), as required in the South Island but is not confident of ongoing adherence on a voluntary basis.

During consultation on these management changes, the Parliamentary Commissioner for the Environment (PCE) released a report on longfin eels. MPI and DOC will brief you and the Minister of Conservation shortly about the recommendations made by the PCE. MPI considers it may be more appropriate to consider management changes on minimum ACE holdings for the South Island once the PCE's recommendations are reviewed and considered in detail as this change could lead to an increased catch of longfin eels. Consequently, MPI has included an option for you to defer your decision on that proposal until the PCE's recommendations have been fully reviewed and considered (*MPI preferred option*).

In terms of the proposal to increase the diameter of commercial fyke net escape tubes, this relates to sustainability of the fishery and kaitiakitanga and would lead to reduced catch of small and undersize eels. Consequently, MPI recommends that you agree to increase the minimum diameter for fyke net escape tubes in the North and Chatham Islands, ahead of considering the PCE's recommendations.

⁸ The main mechanisms to provide for the sustainability of eel fisheries are catch limits set within the Quota Management System. These are reviewed periodically as new scientific information becomes available.

2 Recommendations

MPI recommends that you:

- a) **Note** that this proposal relates to both minimum ACE holding requirements and minimum diameter for fyke net escape tubes.

Noted

In relation to minimum ACE holding requirements, MPI recommends that you:

- b) **Note** that reducing the minimum ACE holding requirement for South Island eel stocks has the potential to increase the value of the eel fishery by between \$0.5 and \$1 million;

Noted

- c) **Note** the Parliamentary Commissioner for the Environment's has recently released a report on longfin eels;

Noted

- d) **Agree** (*MPI preferred*) to defer your decision on minimum ACE holding requirements for South Island eel stocks until the recommendations from this report have been fully considered;

Agreed / Not Agreed

OR

- e) **Agree** to amend Schedule 8 of the Fisheries Act 1996 by Order in Council by reducing the minimum ACE holding requirement for South Island eel stocks from four to one tonnes.

Agreed / Not Agreed

In relation to the minimum diameter for fyke net escape tubes in the North and Chatham Islands, MPI recommends that you;

- f) **Agree** (*MPI preferred*) to amend the Fisheries (Commercial Fishing) Regulations 2001 by aligning the minimum legal diameter of fyke net escape tubes applicable in the North and Chatham Islands with that applicable in the South Island at 31mm; and

Agreed / Not Agreed

AND

- g) **Note** the announcement on your decisions on the above recommendations will be aligned with timing of the announcement on your and the Minister of Conservation's decisions on the Parliamentary Commissioner for the Environment's recommendations on longfin eels.

Noted

Andrew Doube
Inshore Fisheries Manager

Hon Nathan Guy
Minister for Primary Industries

/ /2013

/ /2013

3 Consultation

MPI publicly consulted on these proposals between 11 March and 19 April 2013. Additionally, MPI has been discussing these proposals in recent months with iwi⁹, industry and recreational fishing forums as part of the fisheries planning process. Eighteen submissions were received from:

- A J Mulholland and I B Hansen, commercial fishers (Mr Mulholland & Mr Hansen)
- Catherine Pioletti, Nga Hapu o Maniapoto in Aotea Rohe Potae (Ms Pioletti)
- Commercial fisher who does not want to be identified (Fisher 1)
- Commercial fisher who does not want to be identified (Fisher 2)
- Dave Allen, Aquatic Natural Resources Ltd. (Mr Allen)
- Eel Enhancement Company (EECo)
- Graham William Higginson, commercial fisher (Mr Higginson)
- Lynette Gubb (Ms Gubb)
- Marlborough Recreational Fishers Association (MRFA)
- Mike Holmes, commercial fisher (Mr Holmes)
- New Zealand Recreational Fishing Council (NZRFC)
- Raukawa Charitable Trust & ROTAB Investments (Raukawa)
- Shane Metcalf, commercial fisher (Mr Metcalf)
- Shawn Hollings, commercial fisher (Mr Hollings)
- South Island Eel Industry Association (SIEIA)
- Te Ohu Kaimoana (TOKM)
- Waikato-Tainui Te Kauhanganui Inc. (Waikato-Tainui)
- William J Symons, commercial fisher (Mr Symons)

MPI has also discussed these proposals with the Department of Conservation (DOC). Relevant points raised in submissions, and in discussions with DOC, are summarised within the analysis of management options under each section below.

Since releasing the consultation document, the Parliamentary Commissioner for the Environment released a report on the status and management of longfin eels. MPI is currently drafting advice to you and the Minister of Conservation on that report.

⁹ Te Hiku o Te Ika (Northland), Te Waka a Maui (South Island), Te Taihauauru (Taranaki), Mgaī Nga Kuri (Bay of Plenty) and Chatham Islands Fisheries Forum.

4 Minimum Annual Catch Entitlement holding requirement for South Island eel stocks

4.1 OBJECTIVE

The objective of this review is to increase the commercial value of the South Island eel fishery by reviewing a current barrier to entry into the fishery.

4.2 STATUS QUO

South Island eel stocks are listed in Schedule 8 of the Act; each commercial eel fisher is generally required to hold four tonnes of ACE (derived from quota) before fishing for eels in a given Quota Management Area (QMA).

This requirement has been in place since South Island eel stocks were introduced into the QMS in 2000. The requirement was recommended in the 1996 South Island Eel Management Plan developed by Te Waka a Maui me ona Toka Mahi Tuna¹⁰, when South Island eel stocks were introduced into the QMS. The intent of the requirement was to limit the number of fishers by excluding those who have only a marginal interest in the fishery and ensure that fishers have harvesting rights before going fishing. An equivalent requirement applies to other high value single species fisheries like rock lobster and paua. This requirement does not apply to North Island eel stocks and is not deemed to be necessary.

There are approximately 30 active eel fishers operating in the South Island. Approximately 70% of them do not own any or sufficient quota to meet the four tonne holding to access the fishery and are therefore required to source additional ACE every year.¹¹

ACE is generally provided to fishers by quota-holders/licensed fish receivers (LFRs) at the start of the season and discounted from the price paid for eels once they are landed. If fishers do not catch four tonnes of eels and cannot transfer ACE to another fisher or back to the quota-holder/LFR before the end of the season, they effectively prevent other fishers from using those harvesting rights.

4.3 PROBLEM DEFINITION

In recent years the increasing international demand for eels (and thus increasing price and demand for ACE) has resulted in a shortage of ACE for some South Island eel stocks. The minimum ACE holding has become a barrier to entry into the fishery as every fisher needs to hold at least four tonnes of ACE through the season, even if they fish less than that. The requirement may be constraining value derived from the fishery, particularly in the face of increased demand and price for eels.

¹⁰ A ministerial advisory body for the management of the South Island eel fishery composed of tangata whenua and South Island eel industry representatives.

¹¹ Even if quota was available in the market, the cost of buying enough quota to generate the required amount of ACE every year would be prohibitive (approximately \$80,000 per fisher per QMA). Four tonnes of ACE cost on average \$2,000 per fisher per stock.

4.4 ANALYSIS OF MANAGEMENT OPTIONS

MPI consulted on the following management options:

Option A1 - (status quo)	make no change Schedule 8 of the Act, leaving the current minimum ACE holding requirement for South Island eel stocks at four tonnes; OR
Option A2 –	amend Schedule 8 of the Act to reduce the minimum ACE holding requirement for South Island eel stocks from four tonnes to one tonne; OR
Option A3 -	omit South Island eel stocks from Schedule 8 of the Act, effectively removing the minimum ACE holding requirement for South Island eel stocks altogether.

4.4.1 Option A1 – status quo

The current requirement is excessively restrictive given that:

- introduction into the QMS resulted in a significant rationalisation and reduction in the number of active fishers both in the North Island and in the South Island;
- a minimum ACE holding requirement does not apply, and is not believed to have been necessary, for North and Chatham Islands eel stocks;
- catch is limited to the Total Allowable Commercial Catch (TACC), regardless of how many fishers are involved;
- TACCs for all eel stocks are subject to a significant level of protection through relatively high deemed value rates and overfishing thresholds;¹² and
- the risk of black market activities associated with marginal commercial operations is currently believed to be relatively low for eel fisheries.

The current requirement is constraining the benefit obtained from the commercial use of South Island eel stocks and preventing new part-time fishers from accessing the fishery. During 2011/12 only 80% of the TACC for South Island eel stocks was caught, even though demand and price were higher than in recent years. In contrast, TACCs were effectively fully caught in the North Island. The shortfall in the South Island was, at least in part, due to the minimum ACE holding requirement.

Option A1 would result in some lost revenue (between \$0.5 and \$1 million per year according to industry estimates) as it would continue to restrict entry into the fishery and unnecessarily constrain catch below the TACC. Submitters NZRFC and Mr Metcalf support the status quo (Option A1). Mr Metcalf suggests that new entrants are more likely to use irresponsible fishing practices.

¹² Deemed values are civil financial penalties charged to commercial fishers for all catch in excess of ACE. For eel stocks, the interim deemed value rate (charged every month) is currently \$4.00/kg; the annual rate (charged at the end of the fishing year) is \$10/kg, increasing by 20% for every 20% of catch in excess of ACE holdings up to a maximum of 100%. Over-fishing thresholds prohibit fishers from continuing to operate in a particular QMA if their catch is 5% plus 25 kg in excess of their ACE holdings.

4.4.2 Options A2 and A3 – reduction or removal of minimum ACE holding

Either of these options would reduce costs for South Island commercial fishers and quota-owners/LFRs by eliminating the transaction costs and lost revenue resulting from the current minimum ACE holding requirement.

South Island eel catch has been increasing in recent years; the total catch for the 2011/12 fishing year was 336 tonnes. The industry estimates that either of the proposed changes (under Options A2 or A3) would result in a further increase in catch of between 10% and 20%. Based on these estimations, such an increase would result in a total catch of between 340 and 400 tonnes, still lower than the current TACC (420 tonnes). In turn, based on an average export price of \$15/kg, this increase would result in additional export revenue of between \$0.5 and \$1 million, benefiting South Island commercial fishers and processors. TOKM also submits that a lower minimum holding would provide an opportunity for iwi to participate directly in the fishery rather than leasing their rights to other fishers.

In terms of revenue increase, there is unlikely to be a significant difference between a reduction in the minimum holding (Option A2) and a total removal of the requirement (Option A3). As pointed out by submitter Mr Allen, given the investment and set up costs involved in entering the fishery, it is unlikely that new fishers would have an interest in fishing less than one tonne anyway.

Because the current minimum ACE holding requirement (Option A1) is effectively restricting entry into the fishery, there is some risk that reducing (Option A2) or particularly removing the minimum holding requirement altogether (Option A3) could lead to over investment and overcapitalisation in the fishery (e.g. if reductions to TACCs are necessary in the future). Likewise, by attracting new part-time fishers, there is a risk of creating opportunities for black market activities associated with marginal commercial operations, particularly given the increasing price for eels. Furthermore, removal of the requirement could create opportunities for area misreporting as fishers would no longer be generally restricted to operating in one QMA, as is currently the case. TOKM considers that these risks would be difficult to monitor.

MPI notes that these risks provide rationale for retaining a smaller minimum ACE holding under Option A2. The increasing demand and price for eels may exacerbate these risks in the future. A small minimum holding of one tonne will reduce the current barrier to entry but will continue to exclude fishers with only marginal interests in the fishery and reduce future opportunities for illegal activities associated with such operations. TOKM, Ms Gubb, Mr Mulholland & Mr Hansen and Mr Higginson support this approach.

Conversely, Mr Allen and SIEIA support removing the minimum holding requirement altogether as they consider the risks associated with Option A3 are minimal and able to be monitored and managed.

5 Minimum legal diameter for fyke net escape tubes in the Chatham and North Islands

5.1 OBJECTIVE

The objective of this review is to provide for ongoing effective escapement of undersize eels from commercial fyke nets in the Chatham and North Islands, consistent with kaitiakitanga.

5.2 STATUS QUO

Fyke nets are the most common commercial fishing method used to catch eels. Commercial eel fishers are required to have at least two escape tubes in their fyke nets (as shown in Figure 1) to allow for escapement of undersize eels (less than 220g). In the North and Chatham Islands, the escape tubes are required to have a minimum diameter of 25mm.¹³ This diameter is substantially smaller than that required for escape tubes in the South Island (31mm), even though the minimum weight limit for eels is the same.

A fyke net fitted with 25mm escape tubes would not generally allow escapement of undersize eels; according to industry reports it will hold longfin eels as small as 180g and shortfin eels as small as 200g. According to industry reports and sampling data, fyke nets fitted with 31mm escape tubes (as per the South Island requirement, the North Island voluntary Code of Practice and Option B2) generally hold eels of at least 280g-300g, well within the minimum legal weight.

The industry reports that the majority of North Island commercial eel fishers currently use 31mm diameter escape tubes under a voluntary Code of Practice to increase the escapement of undersize and smaller legal size eels and to increase the yield per recruit (weight for a given number of eels) of their catch. However, the industry is not confident that the voluntary agreement will continue to be effective. There are anecdotal reports from the industry and Fishery Officers about isolated instances of non-compliance with the voluntary measure. However, it is not possible to accurately quantify the extent of these.

Many fishers are relatively close to retirement and in the face of increased demand for and price of eels, it is reasonable to expect that new players (fishers, quota owners, LFRs), will be entering the fishery in the near future. It is the industry's view that ongoing compliance with the voluntary measure cannot necessarily be guaranteed in these circumstances.

There are 44 active commercial eel fishers operating in the North Island. They harvested 417 tonnes of eels during the 2011/12 fishing year; this generated export revenue of approximately \$6 million. Each fisher operates between 20 and 60 fyke nets with at least two escape tubes each.

¹³ The ends of the tubes are also required to have a minimum diameter of 29 mm; the tubes must be at least 35mm in length and must project inside the net by no more than 10mm.



Figure 1: fyke net with escape tubes

5.3 PROBLEM DEFINITION

The current minimum legal diameter for fyke net escape tubes in the North and Chatham Islands (25mm) is not effective to achieve its purpose to allow escapement of eels below the minimum size as it would generally retain undersize eels. The minimum weight limit for eels is the same all over the country (220g).¹⁴ Fyke nets in the South Island are required to have larger escape tubes (31mm) that are effective in achieving their purpose to allow escapement of undersize eels. As a result, the North Island eel industry has had to voluntarily adopt a larger escape tube requirement, equal to the regulated measure applicable in the South Island. Industry is not confident that the existing voluntary agreement is strong enough to ensure compliance and effective enforcement in the long term (e.g. with new entrants).

5.4 ANALYSIS OF MANAGEMENT OPTIONS

MPI consulted on the following management options:

Option B1 - <i>(status quo)</i>	make no change to the Fisheries (Commercial Fishing) Regulations 2001, leaving the current minimum legal diameter for fyke net escape tubes in the North and Chatham Islands at 25mm; OR
Option B2 - <i>(preferred option)</i>	amend the Fisheries (Commercial Fishing) Regulations 2001 to increase the minimum legal diameter for fyke net escape tubes in the North and Chatham Islands from 25mm to 31mm, aligning this with the requirement currently applicable in the South Island.

¹⁴ As required by r 31(4) of the Fisheries (Commercial Fishing) Regulations 2001.

5.4.1 Option B1 – status quo

Under the status quo, the regulated minimum diameter of fyke net escape tubes in the North and Chatham Islands would generally continue to be ineffective to allow escapement of undersize eels. There will continue to be an unjustified discrepancy between weight limits (220g) and the minimum diameter of fyke net escape tubes applicable in different parts of the country.

Ongoing compliance with the industry's voluntary measure would continue to rely on the strength of industry's governance arrangements. Currently this depends on LFR/quota-owner's limited coercion of individual fishers. Industry representatives are not confident of the ongoing strength of this arrangement, as new entrants enter the fishery. Already there are anecdotal reports of occasional non-compliance with the voluntary measure.

Use of the 25mm diameter escape tubes (as per the current minimum requirement and Option B1, in the absence of the industry's voluntary measure) would result in catch of a higher proportion of undersize and smaller legal size eels which would:

- be inefficient as fishers would generally need to sort through their catch thoroughly before landing, and may have to return a greater proportion of their catch back to the water;
- create a risk of fishers failing to comply with the minimum legal weight limit if catch sorting is not thorough;
- be inefficient because smaller legal size eels are worth less than larger eels;¹⁵ and
- may affect the welfare of undersize eels due to unnecessary handling.

Furthermore, take of a higher proportion of smaller legal size eels through the use of the current minimum legal diameter escape tubes would result in a lower yield per recruit and may eventually result in a lower number of migrating eels.¹⁶ This may also affect the future availability of larger eels for other resource users (e.g. customary fishers).

Mr Symons, Mr Hollings, Fisher 1 and Fisher 2 support Option B1. They mention that although larger escape tubes are desirable for public and intensively fished areas, these would not be suitable for private dams and waterways, e.g. in the Hawke's Bay and Northland, where growth rates are slower due to poor habitat conditions. Submitters mention that these areas contain large amounts of stunted shortfin eels which would be lost to the commercial fishery under Option B2. Access to these areas would be maintained under Option B1.

5.4.2 Option B2 – increase in minimum diameter for fyke net escape tube

The actual short term impact of Option B2 on the fishery in general would be marginal given that, for the reasons outlined above, the majority of North Island commercial fishers are

¹⁵ The landed price per kilogram for smaller eels is less than for larger eels (e.g. in July 2012, \$4.10/kg for eels <300g vs. \$7.85/kg for eels >1kg) and the cost of processing smaller eels is greater due to the additional handling required.

¹⁶ If the total catch has a higher proportion of smaller eels, a higher number of individual eels will need to be caught for a given amount of catch, than if it had a higher proportion of larger eels.

reported to already use the larger escape tubes voluntarily. Furthermore, there is currently no active commercial eel fishery in the Chatham Islands.

As described above, there may be an impact on commercial fishers who fish in poor habitat areas (e.g. Hawke's Bay and Northland) where there are populations of stunted shortfin eels. They claim that 31mm escape tubes will take shortfin eels from 430-440g in these waterways, preventing them from taking smaller legal-size eels. Some of these submitters would like to fish these areas for the purpose of enhancement or aquaculture development.

Option B2 may, however, have an impact on at least three of the submitters' ability to take 'stunted' shortfin eels from these areas. According to one of these submitters, [withheld to protect commercially-sensitive information]. It is unlikely that there will be less level of impact on the export revenue and value of the fishery as a whole given that all North Island shortfin eel TACCs (except in Taranaki) were fully caught in 2011/12. MPI understands that these areas are fished on a rotational basis and have not been fished recently. Consequently, should you agree to Option B2 and given recent catch trends, MPI considers fishers should be able to relocate their effort to other areas and still get their catch entitlements.

The main benefit of the proposal would be to make the requirement for minimum diameter for fyke net escape tubes for the North and Chatham Islands effective in ensuring escapement of undersize eels and would also make it consistent with the requirement applicable in the South Island. The regulation would strengthen the voluntary practice adopted by the industry and would support future compliance and enforcement in relation to new entrants. This would ensure that the current benefits from use of the larger escape tubes are maintained into the future. It is also consistent with the objective of maintaining adequate spawning biomass.

For any North Island commercial eel fishers that may be currently using escape tubes of less than 31mm, the cost of replacing their escape tubes is approximately \$5 per fyke net. However, as mentioned above, the eel industry reports that the majority of fishers already use 31mm escape tubes. Aside from any gear modification costs required and the administrative costs of making and implementing regulatory changes, this proposal is not expected to result in additional costs to the industry, other resource users, or MPI.

TOKM, Ms Gubb, DOC, NZRFC, Raukawa, EECO, Mr Holmes, SIEIA, Mr Higginson and Waikato-Tainui support Option B2. SIEIA highlights that regulated use of 31mm escape tubes in the South Island has resulted in improved yield per recruit. TOKM and EECO suggest the change will result in better yield and value, simpler enforcement, nationwide consistency and potentially lower mortality of smaller eels in fyke nets. EECO also highlights that the change is consistent with the scientific monitoring currently in place in the fishery and with the investment that the majority of fishers have already made in fitting the larger escape tubes as part of their voluntary Code of Practice. EECO notes the issues raised by some submitters in relation to private waterways, stunted eels and the implications of the change for future eel farming and enhancement.

In regard to the last point above, MPI notes that currently there are provisions under section 97 of the Act for fishers to take and possess undersize eels, or use otherwise prohibited fishing methods (e.g. fyke nets without or with smaller escape tubes) under special permit, for

the purpose of enhancement or to mitigate the effects of habitat modification. Eel farming or aquaculture is not yet provided for in the same way, except on the basis of investigative research. However, MPI is currently developing a policy to provide for the development of eel aquaculture, including the management of juvenile eel take. This work will address some of the points raised by submitters who support Option B1.

6 Other considerations and points raised in submissions

Although the changes proposed in this paper are ‘business as usual’ adjustments to management settings for the eel fishery (shortfin and longfin), it may be premature to consider management changes on minimum ACE holdings for the South Island until the PCE’s recommendations are reviewed and considered in detail. As described above, the change proposed may lead to an increased catch of longfin eels. MPI and DOC are currently reviewing the PCE’s report and will be providing you and the Minister of Conservation with advice on that report shortly.

TOKM and DOC also highlighted this. MRFA does not provide any comment on the proposals but instead calls on MPI to act on the PCE’s recommendations. NZRFC and Mr Allen recommend, as does the PCE, splitting South Island eels stocks into longfin and shortfin.

On the other hand, the second proposal; to increase the minimum diameter for fyke net escape tubes in the North and Chatham Islands, relates to sustainability of the fishery and kaitiakitanga and would lead to higher yields per recruit and reduced catch of small and undersize eels. Consequently, MPI recommends you consider this proposal now, ahead of considering the PCE’s recommendations.

Given the taonga status of eels to tangata whenua, you must have particular regard to kaitiakitanga when considering the recommendations included in this paper. Under Waikato River settlement legislation, you must have particular regard to the vision and strategy for the Waikato River, and recognise and provide for the environmental plans that have been submitted by Waikato-Tainui and Raukawa (under the Waikato-Tainui Raupatu Claims (Waikato River) Settlement Act 2010 and the Ngati Tuwharetoa, Raukawa and Te Arawa River Iwi Waikato River Act 2010 respectively). You should note that the recommendation to increase the minimum fyke escape tube is consistent with these plans and aspirations.

In addition to supporting that proposal, Waikato-Tainui also recommends increasing the minimum eel size from 220g to 300g. MPI will be discussing this recommendation with Waikato-Tainui in the context of bylaws for, and co-governance of, the Waikato River.

1 Executive Summary

In this Final Advice Paper (FAP) you are asked to make decisions on recreational harvest regulations proposed by the Maketu Taiāpure Committee.

Section 185 of the Fisheries Act 1996 (the Act) allows a taiāpure management committee to recommend to the Minister for Primary Industries (the Minister) the making of regulations for the conservation and management of fish, aquatic life, or seaweed in the taiāpure local fishery.

The Maketu Taiāpure Management Committee (the Committee) is concerned that key fishery populations with the taiāpure area are depleted and that the current level of recreational harvest is unsustainable. To reduce fishing pressure and encourage recovery and growth of these key fish populations, the Committee has recommended you make regulatory changes.

MPI has completed consultation on the Committee's recommendations with submissions showing a mixture of support and opposition.

MPI recommends that you approve the recommendation made by the Committee to decrease the daily bag limit for green-lipped mussels from 50 to 25 per person per day. MPI does not support the proposals to introduce a minimum legal size for green-lipped mussels and to enact a yearly notified closed season for the recreational harvest of paua and green-lipped mussels. MPI considers these regulatory changes would result in unreasonable implementation costs and impacts on recreational fishers.

The Committee's recommendations are made under section 185 of the Act and would be enacted under section 297 1(a) through amendments to the Fisheries (Auckland and Kermadec Areas Amateur Fishing) Regulations 1986.

2 Recommendations

MPI recommends that you:

- a) **Note** that Taiapure provide recognition of rangatiratanga by allowing a committee of management to make recommendations under section 185 of the Fisheries Act 1996 on fisheries regulations for the taiapure area.

Noted

- b) **Note** these recommendations are given effect through normal regulatory processes.

Noted

- c) **Note** that the Maketu Taiāpure Management Committee has put forward three recommendations, but that MPI proposes it work further with the committee on two of these as they would result in unreasonable implementation costs and impacts on recreational fishers.

Noted

- d) **Agree** (*MPI preferred*) to implement the Committee's recommendation to reduce the daily bag limit of green-lipped mussels from 50 to 25 within the taiāpure.

Agreed / Not Agreed

OR

- e) **Agree** to retain the existing recreational regulations for green-lipped mussels.

Agreed / Not Agreed

OR

- f) **Agree** to implement all three of the Committee's recommendations to;
- reduce the daily bag limit of green-lipped mussels from 50 to 25 within the taiāpure
 - set a minimum size limit of 90 mm for green-lipped mussels within the taiāpure
 - introduce a yearly notified seasonal closure on amateur harvest of green-lipped mussels and paua within the taiāpure

Agreed / Not Agreed

Andrew Doube
Inshore Fisheries Manager

Hon Nathan Guy
Minister for Primary Industries

/ /2013

/ /2013

3 Introduction

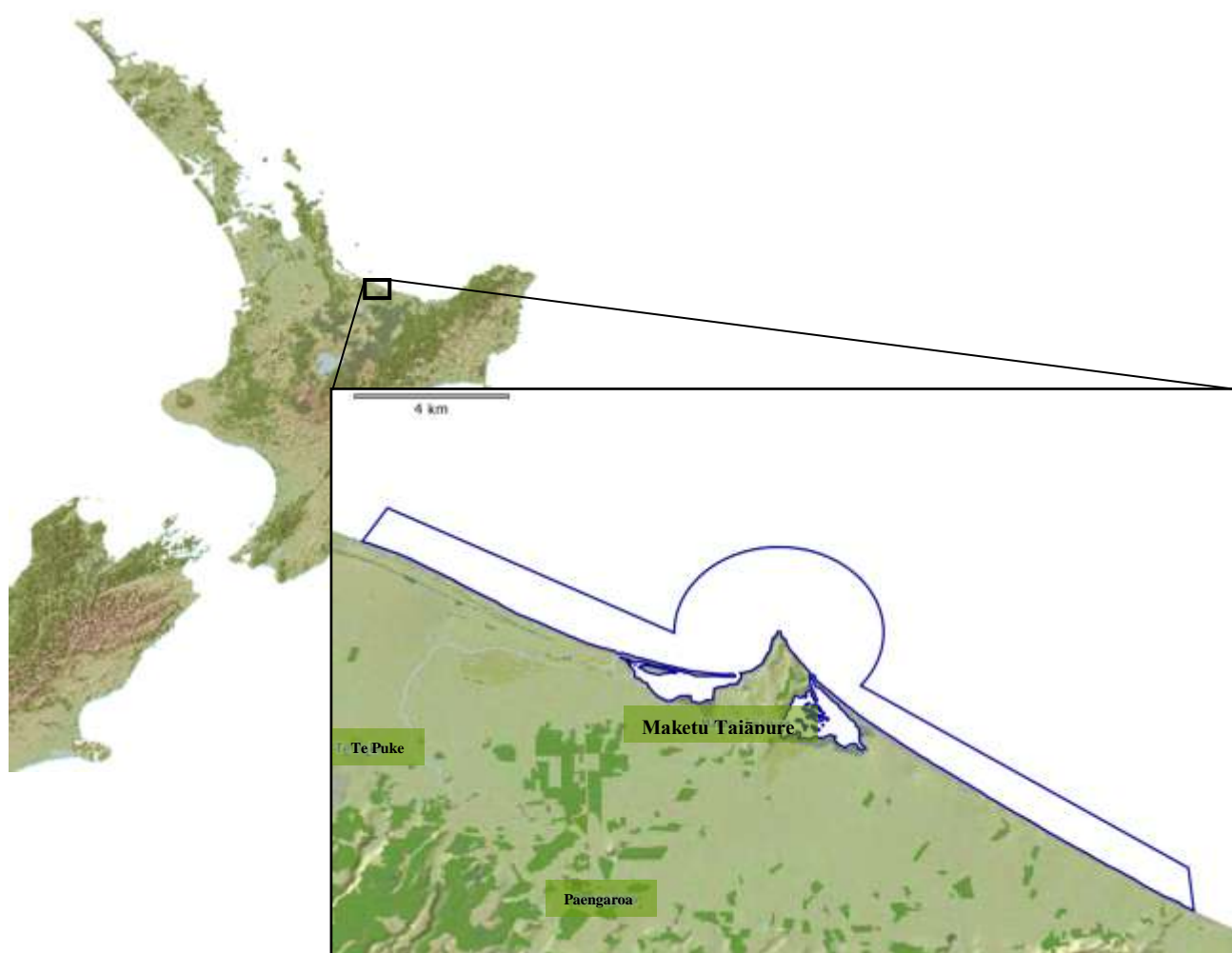


Figure 1: Map showing the Maketu Taiāpure

The Maketu Taiāpure Committee (the Committee) has recommended the following regulations:

- a. Reduce the maximum amateur daily bag limit of mussels from 50 to 25 within the taiāpure;
- b. Set a minimum size restriction of 90 mm for the amateur harvest of green-lipped mussels within the taiāpure;
- c. Notify a yearly seasonal closure on the amateur harvest of green-lipped mussels and paua within the taiāpure.

Section 185 of the Fisheries Act 1996 (the Act) allows a taiāpure management committee to recommend to the Minister for Primary Industries (the Minister) the making of regulations for the conservation and management of fish, aquatic life, or seaweed in the taiāpure local fishery.

The Committee is concerned that, in their view, key fishery populations with the taiāpure area are depleted and that the current level of recreational harvest is unsustainable. To reduce fishing pressure and encourage recovery and growth of these key fish populations, the Committee has proposed regulatory changes. The Committee's recommendations are attached (Appendix).

3.1 STATUS QUO

The Maketu Taiāpure is comprised of 60 km of open shore, situated mid way along the Bay of Plenty coastline between Wairakei in the west to Otamarakau in the east (Figure 1).

The taiāpure was established in 1996 to meet the objectives set out in section 174 of the Act. The objectives involve making better provision for the recognition of rangatiratanga and of the right secured in relation to fisheries by Article II of the Treaty of Waitangi. The Maketu taiāpure was the second taiāpure to be formed out of eight that are established around New Zealand.

The taiāpure is governed by a committee made up of representatives from Ngati Makino, Ngati Whakahemo, Te Awhe, Ngati Whakaue ki Maketu, Tapuika, Waitaha and inland hapu.

The Committee's strategic plan includes the following vision statement: "Te Waka o Te Arawa will exercise control over the marine resources of our traditional rohe...to enhance and manage the coastal resources of the Te Arawa in a sustainable manner for the benefit of present and future users".

In taking on this role of guardianship over traditional rohe, the Committee considers action is needed to address what is seen as unsustainable fishing pressure within the taiāpure. In particular, the Committee has concerns over mussel and paua stocks. The Committee considers that current recreational limits for mussels and intensive recreational fishing, are contributing to observed declines in the shellfish populations. Currently, under the Fisheries (Auckland and Kermadec Areas Amateur Fishing) Regulations 1986, recreational fishers may collect up to 50 green-lipped mussels with no restriction on size and 10 paua that are above the minimum size limit of 125 mm. There are no regulated closed seasons for the recreational collection of green-lipped mussels and paua in this area.

3.2 PROBLEM DEFINITION

The Committee believes that there has been a decline of key shellfish resources in the area, and that immediate action is required to rebuild shellfish populations within the taiāpure area. The Committee cites intensive recreational activity from people that come from outside the local area as having the major effect on the current state of paua and green lipped mussel stocks within the taiāpure. This intensive recreational activity is driven by these factors:

- Okurei Point, within the taiāpure, is the only major rocky reef system between Mt Maunganui and Whakatane,
- the rock reef system provides the best source of green-lipped mussels and paua stock in this area, and
- the area is easily accessible to the public.

No MPI-reviewed population surveys for green-lipped mussels have been completed within the taiāpure. However, in 2008 a population survey on green-lipped mussels was carried out by Bay of Plenty Polytechnic. This study notes that in the past mussel populations in the area have declined rapidly due to recreational harvesting and an influx in the abundance of spiny starfish (*Coscinasterias calamaria*), a predator of mussels. The survey found, healthy but small and vulnerable populations of mussels surrounding Okurei Point. The subsequent report recommended that an existing voluntary rahui stay in place to promote continued growth and establishment of mussel beds.

Local experts and Kaitiaki have reported that juvenile populations of mussels are healthy, but consider there is still a need to alleviate the fishing pressure on juvenile populations to ensure they reach maturity and contribute to the recruitment potential of the area.

The state of local paua populations within the taiāpure has not been formally assessed. However, local experience and feedback from customary fishers suggests that paua are no longer as abundant or accessible as they once were. Accessible areas have been heavily fished to the point where paua above the legal limit of 125mm are unable to be found. The Committee believes this decline in paua abundance can be attributed to recreational fishing pressure.

A recreational fishing survey conducted by the Ministry of Fisheries in 2000, however, suggested that little paua is harvested within the taiāpure, with no paua harvesting by recreational fishers observed during the survey period. Whether this observation is indicative of low fishing effort, or a symptom of a low abundance of legal size paua, is unknown.

The Committee has a close relationship with the Bay of Plenty Polytechnic Marine Studies Programme, and on-going surveys to monitor the health of fisheries resources within the taiāpure are planned. Should the proposed changes to regulations be made these surveys would provide useful data on the impact of these on green-lipped mussel and paua populations.

The Committee has previously tried traditional, non-regulatory tools to reduce the fishing pressure in this area. In 2001 a rahui (local voluntary closure) was placed on the taiāpure prohibiting the harvesting of mussels and paua. However, the Committee considers that people from outside the local community did not adhere to the closure and that voluntary measures cannot effectively reduce recreational fishing pressure.

3.3 CONSULTATION

On 11 March 2013, MPI released a consultation paper for 6 weeks of public consultation. The paper was published on the MPI and former Fisheries external websites, and stakeholder letters were sent to persons and organisations with an interest and/or affected by the proposals. The distribution list included tangata whenua, recreational and commercial stakeholders.

Submitters were encouraged to provide additional information of relevance to, and their views on, the proposed areas. The management options put forward for your consideration reflect the variety of submissions received, including variations to the initial proposals.

Furthermore, pre-consultation discussions on the proposal took place at the Fisheries Management Area 1, Mai i Nga Whare ki Tihirau Iwi Fisheries Forum (Bay of Plenty).

3.3.1 Summary of submissions

A total of 4 submissions were received. Copies of all submissions received are available from your office.

Summary of submissions:

In favour of Option 1 (status quo)

Two submissions (Mt Maunganui Sport Fishing Club and Mark Hemingway) do not support any of the proposed recreational regulations recommended by the Committee. The Club believes that a majority of the effort occurring with the taiāpure is customary, with very few of the Club's members recreationally harvesting there. The Club notes there are current health warnings for the Bay of Plenty area discouraging the collection of bivalve and filter feeding organisms due the presence of paralytic shellfish poisoning. This health warning has seen a decrease in recreational collection of green-lipped mussels and other species.

The Club also disagrees with the Committees claims of reduced prevalence of green-lipped mussels within the taiāpure, providing recent pictures of established mussel beds above the water line at low tide. The Club believes new and more comprehensive research is needed to assess the state of green-lipped mussel and paua populations before concluding the state of the fisheries resources within the taiāpure.

The Club's submission notes previous research suggests paua is very rarely recreationally gathered due to the limited presence of paua over the minimum legal size of 125 mm.

MPI response

MPI agrees the use of fisheries within the Maketu taiāpure has in all likelihood declined since the release of a health warning around the risk of paralytic shellfish poisoning.

MPI acknowledges the lack of independent and comprehensive research on the state of green-lipped mussel and paua stocks within the Maketu taiāpure area.

In favour of Option 2 (approval of all recommendations)

Submissions in favour of the Committee's recommendations came from the East Otago Taiāpure Management Committee and Te Rūnanga o Ngāi Tahu. These submissions make no points in regards to the state of the fisheries resource. These submissions support the recognition of rangatiratanga and customary management of important fisheries resources through taiapure.

4 Analysis of management options

Three options are assessed: retaining the existing recreational fishing regulations, implementing the recommendations of the Committee, or implementing one of the Committee's recommendations. The analysis of options discusses the potential impact on customary, recreational and commercial fishers.

Statutory considerations

The purpose of the Fisheries Act 1996 is to provide for the utilisation of fisheries resources while ensuring sustainability. The regulatory options proposed below are consistent with this purpose.

Section 9 of the Act prescribes three environmental principles that you must take into account when exercising powers in relation to utilising fisheries resources and ensuring sustainability. These principles include:

- Associated or dependent species should be maintained above a level that ensures their long-term viability;
- Biological diversity of the aquatic environment should be maintained;
- Habitat of particular significance for fisheries management should be protected.

MPI considers the proposals consistent with these principles. There is no information to suggest that associated and dependent species abundance or existing biodiversity would be modified. There are no changes to designated habitats of particular significance within the areas being reviewed.

Section 10 of the Act sets out the information principles, which require that decisions be based on the best available information, taking into account any uncertainty in that information and applying caution when information is uncertain, unreliable, or inadequate. In accordance with s 10, the absence of information should not be used as a reason to postpone, or fail to take, any measure to achieve the purpose of the Act, including providing for utilisation at levels considered to be sustainable. The information and options presented reflect these principles. MPI notes that there is limited information on the prevalence of the stocks covered by this proposal.

Section 174 of the Act sets out the object of sections 175 to 185 of the Act as, “...to make, in relation to areas of New Zealand fisheries waters (being estuarine or littoral coastal waters) that have customarily been of special significance to any iwi or hapu either—

- (a) As a source of food; or
- (b) For spiritual or cultural reasons,—

better provision for the recognition of rangatiratanga and of the right secured in relation to fisheries by Article II of the Treaty of Waitangi.”

Section 297 of the Act empowers the Governor-General to make regulations for certain purposes. MPI considers that the proposed amendments to the relevant regulations of the Fisheries (Auckland and Kermadec Areas Amateur Fishing) Regulations 1986 fit within the relevant provisions of s 297.

4.1 OPTION 1 – STATUS QUO

Option 1 would retain the existing recreational regulations for green-lipped mussels and paua within the Maketu Taiāpure.

Impact

The Committee has expressed concerns about the state of green-lipped mussel and paua populations within the taiāpure. Continuing with the status quo would fail to address these concerns.

Costs

Local knowledge and some studies suggest local populations of green-lipped mussel, have been depleted. Unaddressed, the population could decline to a point where the community is unable to utilise these key fisheries resources in the future. However, as noted by submitters, the presence of paralytic shellfish poisoning may have reduced recreational fishing pressure.

Benefits

Under Option 1 the committee would continue to rely on traditional voluntary measures to address their concerns. Recreational fishers would continue to use the fisheries resources as they currently are. No additional compliance costs would be incurred.

4.2 OPTION 2 – IMPLEMENT ALL OF THE COMMITTEE’S PROPOSALS TO MANAGE THE HARVEST OF GREEN-LIPPED MUSSELS AND PAUA

Option 2 would result in all of the Committee’s recommendations being implemented as follows:

- a. The maximum amateur daily bag limit of mussels would be reduced from 50 to 25 within the taiāpure;
- b. A minimum size restriction of 90 mm for the amateur harvest of green-lipped mussels would be set within the taiāpure;
- c. A yearly seasonal closure on the amateur harvest of green-lipped mussels and paua within the taiāpure would be notified.

Under this option the Committee’s concerns about the level of take of green-lipped mussels and paua within the taiāpure are addressed. However, MPI considers some of these the regulations would be problematic to administer, and are not currently supported by currently available information. .

4.2.1 Reduce the amateur daily bag limit of green-lipped mussels

Impacts

This would likely reduce the overall harvest by recreational fishers. However, not all recreational fishers fully utilise their daily bag limits when harvesting shellfish. Thus the impact will be limited to those that regularly collect their daily bag.

Costs

A decreased bag limit would incur additional compliance costs. As with the implementation of any changes in fisheries regulations, there will be the cost of advertising and informing the public on changes in the bag limits for green lipped mussels. New signage and updated brochures will be needed. The suggested high prevalence of fishers from outside the local community using this area means information campaigns would be needed to ensure a high level of public awareness of new harvest restrictions.

Benefits

A reduction in the daily bag limit will help decrease the recreational fishing effort currently putting pressure on the green-lipped mussel resource. This will help ensure the sustainability and availability of this fisheries resource into the future.

4.2.2 Minimum size limit for green-lipped mussels

Impacts

This regulation will reduce the number of smaller green-lipped mussels and would likely reduce the amount that a recreational fisher could reasonably harvest in one fishing event.

Costs

Of the three proposed regulations, the introduction of a minimum size limit would cause the biggest increase in compliance costs. Monitoring and enforcing a minimum size limit would be onerous and time consuming. Measuring devices and other resources are required to educate fishers when a new size limit is introduced. Providing such devices in a relatively small area is cost- prohibitive and confusing for infrequent fishers visiting the area. Without these resources a minimum size would be difficult to introduce and risks recreational fishers unintentionally breaking the law.

Benefits

Introducing a minimum size for green-lipped mussel would ensure that mussels grow large enough to spawn before being harvested, and aid in the re-growth of the local stocks.

4.2.3 Yearly notified seasonal closure on the amateur harvest of green-lipped mussels and paua

Impacts

The introduction of a closed season for green-lipped mussels will have a significant impact on fishers targeting green-lipped mussels within the taiāpure. However, the impact of a seasonal closure on paua harvest may not be as significant. Anecdotal evidence suggests the majority of paua in the Bay of Plenty area do not grow to the legal minimum size due to environmental factors.

Costs

The resources and time needed to review and implement a seasonal closure annually are prohibitive. Yearly closure would require advice to the Minister, public consultation, and a subsequent Gazette notice. Public communication of any closure period would also be required. MPI does not consider such intensive management is required.

Determining the appropriate seasonal closure over the peak spawning period for green-lipped mussels and paua may also be difficult. Spawning for both of these species is variable and depends on a range of factors. Paua populations in north east New Zealand have a long spawning season due to warmer waters in the area, extending from summer through autumn to winter and possibly into early spring. For green-lipped mussels, the key spawning season occurs from spring through the summer to early autumn.

Taking the spawning characteristics of green-lipped mussels and paua into consideration, any closure to cover key spawning periods will include part or all of the summer period, likely extending from late spring through to early autumn. A closure over the summer period would also coincide with the period of heaviest recreational fishing effort. This may unduly affect recreational fishers who are already limited in their ability to gather shellfish due to the risk of paralytic shellfish poisoning.

Benefits

Closure of the green-lipped mussel fishery to recreational harvest within the taiāpure during the peak spawning season would significantly decrease fishing pressure. Such a closure would have maximum effect given that the broad spawning season of these two species coincide with the period of maximum usage by recreational fishers.

4.3 OPTION 3 – IMPLEMENT SOME OF THE COMMITTEE’S PROPOSALS TO MANAGE THE AMATEUR HARVEST OF GREEN-LIPPED MUSSELS AND PAUA

Option 3 would implement only the first of the three proposed recreational regulatory changes put forward by the Committee.

4.3.1 Reduce the amateur daily bag limit of green-lipped mussels

The impact, cost and benefit for this proposal remain as set out under Option 2. Overall, MPI believes that reducing the daily bag limit would be the most effective of the three Committee’s recommendations.

Addition of new destination type code

1 Executive Summary

This paper recommends the addition of a new destination type code to the Fisheries (Reporting) Regulations 2001.

A destination type code must be reported on all landing forms in order to monitor what happens to fish taken in New Zealand waters.

The addition of a new destination type code is a minor change that will allow for better monitoring of the fate of fish captures in New Zealand. The new destination type code will apply to fish legally returned to the sea with authorisation from an MPI observer or Fishery Officer. This will distinguish that catch from accidental losses. This has no substantial impacts on industry.

Implementation of this decision will require a change to Part 6 of Schedule 3 of the Fisheries (Reporting) Regulations 2001.

2 Recommendations

MPI recommends that you:

- a) **Agree** to amend Part 6 of Schedule 3 of the Fisheries (Reporting) Regulations 2001 to add a new destination type code ('J') to apply to 'fish or fish product returned to the sea under section 72(5)(c) of the Fisheries Act 1996'; and

Agreed/Not Agreed

- b) **Note** that your decision is to be made pursuant to section 297 of the Fisheries Act 1996

Noted

Jeremy Helson
Deepwater Fisheries Manager

Hon Nathan Guy
Minister for Primary Industries

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3 Consultation

MPI has publicly consulted on this proposal.

One submission was received from Deepwater Group Limited, representing the majority of quota-owners in New Zealand's major deepwater fisheries.

DWG was generally supportive of the new destination type code, but made several related points:

- The addition of the new destination type code does not solve the problem surrounding the reconciliation of observer data with fisher-reported data, this problem will require further work
- There will be a cost to the new code to put together an appropriate transition programme to ensure fishers are aware of the new code, when to use it, and have all necessary documentation provided to them
- Requested the requirement to be charged a fee for the authorised return of fish to the sea be rescinded

4 Addition of new destination type reporting code 'J'

4.1 OBJECTIVE

There are three main objectives of this proposed new reporting code:

- Destination type reporting codes accurately reflect the ultimate fate of all fish taken in New Zealand waters
- To enable fisheries managers to accurately monitor the use of the observer authorised discard provision
- To differentiate between accidental losses and those returned to the sea with authorisation by an MPI observer or Fishery Officer.

4.2 CURRENT SITUATION

Under the Fisheries (Reporting) Regulations 2001, a destination type code must be reported on all landing forms in order to monitor what happens to all fish taken in New Zealand waters.

Currently, destination type code 'A' is used to report fish or fish product of species subject to the Quota Management System (QMS) that are returned to, or abandoned in, or accidentally lost at sea. This includes both accidental losses (from torn nets or nets abandoned for safety reasons), and returns of QMS species to the sea under the observation and authorisation of an MPI observer or Fishery Officer. The 'J' code intends to be a separate destination code for this latter portion of the catch currently reported under the 'A' code.

4.3 PROBLEM DEFINITION

The use of the 'A' reporting code makes it impossible for fisheries managers to differentiate between accidental losses and returns made under the observation and authorisation of an MPI observer or Fishery Officer. While neither of these comprises a large proportion of commercial landings, it is important for fisheries managers to be able to monitor the extent of observer-authorised returns, as changes in the use of this provision may indicate a change in fishing behaviour that, in turn, may indicate a need for management actions.

All fish returned to the sea under this provision are currently recorded in detail by Ministry observers, however this data is stored separate to the commercial landings database, making it difficult to match up and align quantities. Adding a new reporting code would make it easier to quantify authorised discards and have the information available in the commercial landings database.

4.4 ANALYSIS OF MANAGEMENT OPTIONS

MPI consulted on the following management options:

Option 1 (<i>status quo</i>)	Maintain the current destination type codes listed in Part 6 of Schedule 3 of the Fisheries (Reporting) Regulations 2001.
Option 2 (<i>Preferred option</i>)	Add a new destination type code ('J') to Part 6 of Schedule 3 of the Fisheries (Reporting) Regulations 2001 to apply to 'fish or fish product returned to the sea under section 72(5)(c) of the Fisheries Act 1996'.

4.4.1 Option 1 – current situation

Option 1 would retain the existing destination type codes for reporting on landing forms.

Impacts

Option 1 has no impacts on the industry, customary or recreational fishers.

Costs

Continued inability of fisheries managers to accurately monitor the use of the observer authorised discard provision, and lack of information on the true final destination of fish caught in New Zealand waters.

Benefits

MPI considers there are no benefits from retaining the status quo.

4.4.2 Option 2 – Addition of new destination type code 'J'

Option 2 would add a new destination type code ('J') to Part 6 of Schedule 3 of the Fisheries (Reporting) Regulations 2001 to apply to 'fish or fish product returned to the sea under section 72(5)(c) of the Fisheries Act 1996' (i.e. under observation and authorisation of an MPI observer or Fishery Officer).

Note that all fish reported under the proposed ('J') code would be counted against a fisher's Annual Catch Entitlement, as is currently the case for fish reported under the 'A' code. This is required by section 72(5)(c) of the Fisheries Act.

Impacts

Under this option those fishers who return fish to the sea under the observation and authorisation of an MPI observer or fishery officer must report these quantities under the new 'J' code instead of 'A'.

Costs

DWG has submitted that there will be a cost of implementing the new code relating to the need for a good education and transition programme to ensure that fishers are aware of the new code and use it appropriately.

MPI considers that any costs associated with the implementation of the new code will not be significant and are justified in the benefits to New Zealand's fisheries management.

Benefits

The addition of a new reporting code enables fisheries managers to more accurately monitor the destination of all landings in New Zealand waters, cross-check reporting, and will contribute to science analyses that underpin fisheries management.

DWG supports the objective of the reporting code change and agrees that it resolves the information gap identified by fisheries managers.

5 Other considerations and points raised in submissions

Deepwater Group has raised the point that it is important to have an appropriate transition programme to ensure that all fishers are aware and well-informed about the new reporting code and understand its use. MPI agrees with this submission and will develop an appropriate transition plan prior to implementation of the new code.

DWG has also requested that the current requirement for the vessel to pay a \$28 fee for each observer authorised discard be rescinded. MPI will look further into the charge and determine if it is appropriate to retain or rescind the charge.