

Te Ohu Kaimoana's response to Fisheries New Zealand's Draft Squid 6T Operational Plan



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Executive summary

- 1. Te Ohu Kaimoana is committed to the conservation of marine mammals. Over the past decade we have seen a considerable and consistent reduction in the incidental mortality of New Zealand sea lions (rāpoka) associated with the Squid 6T fishery (SQU6T). This improvement can be largely attributed to the development and full and proper use of excluder devices (known as SLEDs) that allow the release of live rapoka from trawl nets. The fishing-related mortality limit (the FRML) has not been met since 2003 and observed captures have been below 10 since 2006 with high observer coverage. This shows over a decade of commitment and effective protection for rapoka.
- 2. The reduction of rapoka mortalities has been achieved through a "bottom up" approach to the codified management of the behaviour and operations of the fishing companies involved. "Bottom up" means the measures and procedures to reduce rapoka captures have been developed and implemented by the participants in the fishery. These measures are required through industry Operational Procedures which support and align with Fisheries New Zealand's SQU6T Operational Plan.
- 3. Annual population monitoring provides confidence that the rapoka population is being maintained above a level that ensures its long-term viability. Further, the long period of low captures in SQU6T has reduced effects on the Auckland Island's (Maungahuka/Motu Maha) sub-population ensuring that biological diversity within the wider population is maintained.
- 4. We have reviewed the draft SQU6T Operational Plan (the Plan) against this backdrop of progress and have concluded that the regulatory measures outlined in it are unnecessary – particularly the setting of a statutory FRML and regulating the use of SLEDS – given these proposals seek outcomes that have already been achieved.
- 5. The Fisheries Act 1996 (the Act) obliges the Minister of Fisheries to ensure that the rapoka population is maintained above a level that ensures its long-term viability. The Minister may set sustainability measures under Part III of the Act to assist with meeting that obligation. Before setting or varying a sustainability measure, the Minister of Fisheries (the Minister) must consider the effects of fishing on the aquatic environment, which includes protected species. If the Minister is satisfied that existing measures are managing the effect, there will be no need to set a formal sustainability measure. It is our contention that the impacts of fishing on the rapoka population are being managed beyond the requirements of the Act and that there is no need for setting further sustainability measures.
- 6. In addition, we do not consider the case has been made for compulsory use of SLEDs in SQU6T. This is for two reasons:
 - First, SLEDs are used by every vessel operating in the fishery in accordance with both industry Operational Procedures and the Operational Plan. Put simply, the Minister requests their full use every year and industry both agree and deliver on this. Every tow in SQU6T has had a standardised SLED deployed for the last ten years and thus it is not necessary to regulate their implementation.
 - Second, if regulated the prescription of SLED specification would restrict further innovation. There is no benefit for the regulation of SLEDs; only potential cost and risk.

- 7. The Plan claims that the most relevant consideration for the regulation of the use of SLEDs is the existence of National Deepwater Fisheries Plan. We understand that the plan being referred to was in effect between 2011 and 2016 but has since expired. It is not appropriate for a consultation document to give weight to a plan that does not currently appear to have status under the Act.
- 8. The proposals in the Plan are unnecessary and, if implemented, risk destabilising the high and demonstrable level of responsibility industry have taken to protect rāpoka. They would effectively replace "bottom up" outcomes that have been achieved through industry operational procedures with a "top down" set of regulations. This approach risks disconnecting the very people who are best placed to continue adapting their fishing operations to further reduce incidental mortality. Further we note from Deepwater Group's (DWG) submission their declaration to continue to maintain full use of SLEDs and other relevant operational requirements and given the performance over the last decade see no reason to doubt their capability to or sincere willingness to deliver this.
- 9. We strongly support continuation of the non-statutory measures set out in the current SQU6T Operational Plan and consider they have been successfully implemented to date by collaborative development, application, maintenance and monitoring. This is evidenced by the low captures of rāpoka over the past decade. Our strong preference is for such plans to be used to enable innovation and therefore be developed through a bottom up process. Industry have already proven through the success of the SQU6T fishery that they are capable and committed to such action. We consider the actions that have been taken in the SQU6T fishery to be a success for protected species mitigation. We strive to maintain and build on this progress.

Introduction

- 10. This document outlines Te Ohu Kaimoana's response to the proposals for an updated Plan. Our interest in the matter relates to our responsibility to protect the rights and interests of Iwi and assist the Crown to discharge its obligations under the Deed of Settlement and the Treaty of Waitangi¹. To achieve our purpose, we are guided by the principles of Te Hā o Tangaroa. We do not intend for this response to derogate from or override any response or feedback provided independently by Iwi, through their Mandated Iwi Organisations (MIOs²).
- 11. MIOs have approved our Māori Fisheries Strategy and three-year strategic plan, which has as its goal "that MIOs collectively lead the development of Aotearoa's marine and environmental policy affecting fisheries management through Te Ohu Kaimoana as their mandated agent". We play a key role in assisting MIOs to achieve that goal.
- 12. We work on behalf of 58 MIOs, who collectively represent the interests of all Māori. Asset Holding Companies (AHCs) hold Fisheries Settlement Assets on behalf of their MIOs. The assets include Individual Transferable Quota (ITQ) and shares in Aotearoa Fisheries Limited which, in turn, owns 50% of the Sealord Group.

¹ Our purpose, set out in section 32 of the Māori Fisheries Act, is to "advance the interests of iwi, individually and collectively, primarily in the development of fisheries, fishing and fisheries-related activities, in order to:

⁽a) Ultimately benefit the members of iwi and Māori generally; and

⁽b) Further the agreements made in the Deed of Settlement; and

c) Assist the Crown to discharge its obligations under the Deed of Settlement and the Treaty of Waitangi; and

⁽d) Contribute to the achievement of an enduring settlement of the claims and grievances referred to in the Deed of Settlement."

2 MIO as referred to in The Māori Fisheries Act 2004: in relation to an iwi, means an organisation recognised by Te Ohu Kai Moana Trustee Limited under section

MIO as referred to in The Māori Fisheries Act 2004: in relation to an iwi, means an organisation recognised by Te Ohu Kai Moana Trustee Limited under section 13(1) as the representative organisation of that iwi under this Act, and a reference to a mandated iwi organisation includes a reference to a recognised iwi organisation to the extent provided for by section 27

13. The focus of this response is the Plan. However, we also discuss how the proposals in the document relate to the requirements of the Act as well as the existing protocols and procedures required by the Deepwater Group. The Act requires fishing effects to be avoided, remedied or mitigated where long-term viability is threatened. In our view fisheries risks to rāpoka have been managed to ensure their long-term viability.

Guiding principles

Our advice is based on Te Hā o Tangaroa

- 14. Iwi/Māori have a unique and lasting connection with the environment. Our challenge is to ensure that this connection is maintained. Te Hā o Tangaroa kia ora ai tāua is an expression of a Māori World View that encapsulates the idea that the breath of Tangaroa sustains us. It contains the principles we use to analyse modern fisheries policy, and other policies that may affect the rights of Iwi under the Deed of Settlement.
- 15. Te Hā o Tangaroa, kia ora ai tāua highlights the importance of our interdependent relationship with Tangaroa, including his breath, rhythm and bounty and how those parts individually and collectively sustain humanity. The guiding principles underpinning this worldview highlight the need to ensure that we protect and maintain our relationship with Tangaroa.
- 16. Protection of the reciprocal relationship with Tangaroa is an inherent part of the Deed of Settlement agreed by Māori and the Crown in 1992. The fundamental purpose of the Settlement was the sustenance of Māori identity through the full range benefits that fisheries provides. This was inherent in the fundamental guarantee of Article 2 of Te Tiriti o Waitangi.
- 17. The fisheries settlement is an important and relevant part of modern fisheries management for Aotearoa. As a result, Māori rights in fisheries can be expressed as a share of the productive potential of all aquatic life around Aotearoa. Māori rights are not just a right to harvest, but also to use the resource in a way that provides for their social, cultural and economic wellbeing.
- 18. The Act complements and supports Te Hā o Tangaroa kia ora ai tāua. Our ability to maintain a reciprocal relationship with Tangaroa depends in part upon appropriate implementation of the Act.
- 19. Te Hā o Tangaroa kia ora ai tāua does not mean that Māori claim a right to use fisheries resources to the detriment of other children of Tangaroa. It speaks to striking an appropriate balance between people and those we share the environment with.
- 20. Kaitiakitanga relates to the obligation of Māori to tiaki the environmentthrough the management of resources including protection and use. It encapsulates both sustainable management and utilisation of resources in such a way and at such a rate as to ensure that they are not diminished. Approaches that seek either 100% utilisation or 100% preservation do not align with kaitiakitanga. This speaks to the intent of both the Act and to the Deed of Settlement.

Context

Fisheries New Zealand is proposing the following options for the review of the Plan:

- 21. Options for the maximum fisheries related impact:
- Option 1: 2.5% maximum impact with an annual FRML of 26
- Option 2: 5% maximum impact with an annual FRML of 52; and
- Option 3: 10% maximum impact with an annual FRML of 104 (not preferred)³
- 22. Statutory requirement of Sea Lion Exclusion Devices.
- 23. New methodology to monitor performance of the Plan based on:
- observed captures,
- use of fatal interaction rate of 2.3 deaths per 1,000 tows for unobserved fishing activity
- use of 1.3 scalar for cryptic mortalities
- 24. Minimum target for observer coverage of 90% of tows.
- 25. Duration of Plan Fisheries New Zealand is proposing either a four- or six-year duration.
- 26. Trigger points for review Fisheries New Zealand is proposing the trigger for a review should be if any significant new information becomes available that indicates:
- fisheries activities are having a different impact on sea lion survival than estimated in 2019,
- if there are changes in fishing operations or level of effort, or
- if there are significant new concerns regarding the sea lion population.
- 27. Fishery Closure Process Fisheries New Zealand proposes a closure if the FRML is reached.

The New Zealand Sea Lion Threat Management Plan 2017 guides the development of the Plan

- 28. The Threat Management Plan sets out objectives to:
 - a. Halt the decline of the New Zealand sea lion population within five years
 - b. Ensure the New Zealand sea lion population is stable or increasing within 20 years, with the ultimate goal of achieving 'Not Threatened' status.

The objectives of the Threat Management Plan are being met

29. All sub-populations of rāpoka are increasing or stable including the population on Maungahuka/ Motu Maha. We consider this progress a monument to a comprehensive and inclusive Threat Management Plan. This year's review of the threat classification of rāpoka by the Department of Conservation improved the status by two categories from Nationally Critical to Nationally vulnerable. The reason for the reclassification was due to "actual improvement" which was based on the population estimate and analysing the rate of past decline.

³ Stated as "not preferred" by Fisheries New Zealand in the discussion document

⁴ Conservation Status of Marine Mammals 2019 – Department of Conservation

Fisheries are not adversely affecting rapoka – the threat has been mitigated

30. It is currently estimated that fisheries result a 0.5% impact on the Maungahuka/Motu Maha adult female population. In the decades leading up to 2000 when SLED development started anywhere up to 120 rāpoka were estimated to have been captured in some years. Over the last seven - eight years the SQU6T fishery is delivering an approximately 97% reduction in captures and in 2015–16 the SQU6T fishery caught no rāpoka (with 92% of tows observed).

Ngāi Tahu have an important relationship with rāpoka

31. This relationship reflects the long history of interaction, management and use. Ngāi Tahu works in partnership with the Department of Conservation, which has enabled the lwi to maintain their relationships with the lands, waters, flora and fauna within the Ngāi Tahu takiwā. By exercising rangatiratanga across these ancestral lands and waters, and as active tangata tiaki, the traditions that support the central values that define Ngāi Tahu can be maintained. Under the Threat Management Plan, Ngāi Tahu are actively involved in the management and decision making in relation to the enhancement of the species, to ensure the flax-roots knowledge and the Ngāi Tahu voice is heard⁶.

Effort in the squid fishery is driven by squid abundance and price

32. Squid have a life span of 18 months, therefore squid fisheries are internationally seasonal and highly variable in abundance and economic value. In recent years the prices have been high at \$NZ6,000 per tonne. These prices reflect poor catches in other international fisheries. Over the last decade catches in SQU6T have averaged nearly 15,000 tonnes, worth \$NZ90 million per annum. While prices remain high it remains profitable to fish at lower catch rates and total volumes per unit cost.

The squid trawl fishery is an important part of the deepwater fleet dynamic

33. There are no trawlers that focus solely on squid, rather the fishery forms a supplementary part of an annual catch plan. Thus, capacity to fish for squid is dependent on the relative price and availability of other deepwater fishstocks, especially the hoki fishery. There will be a significant reduction in hoki ACE available in the 2019-20 fishing year. Hence there is likely to be a relocation of some extant hoki vessel capacity into squid fisheries. This is particularly likely if price and abundance support increased effort economically.

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⁵ Marine mammal risk assessment 2019 - "When future squid fishery deaths were equal to the average across the most recent estimated period, the mature female population status in 2025 was 99.5% of that estimated in the absence of future squid fishery mortality (95% CI = 99.5%–99.5%)

⁶ New Zealand sea lion/rāpoka Threat Management Plan 2017 p6

Our view: regulatory limits are not necessary for the SQU6T fishery

34. The case for the proposed regulations in the SQU6T fishery is not well made. The regulatory measures outlined in it are unnecessary – particularly the setting of an FRML and requiring the use of SLEDS. These measures are seeking outcomes that have already been achieved. It is contrary to good practice to regulate for outcomes that are already being delivered.

Regulatory options for fisheries management should be based on the purpose and principles of the Fisheries Act 1996

The Deed of Settlement should be protected

- 35. Section 5(b) of the Act states that the Act should be interpreted, and decision-makers must act in a manner consistent with, the provisions of the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992 (the Settlement Act).
- 36. The Settlement Act enacted the provisions of the Deed of Settlement signed by Māori and the Crown to resolve Māori claims to fisheries. The Settlement involved:
 - a. allocation of commercial fishing assets, including quota, to iwi
 - b. implementation of a regime for management of customary non-commercial fishing by kaitiaki.
- 37. At the time settlement was reached, Māori accepted that:
 - a. the quota management system was an appropriate system for managing commercial fishing
 - b. their fishing rights would be subject to sustainability measures.

However, Māori did not accept that the value of their rights or their traditional cultural practices which those rights support should be undermined by measures that go further than what is necessary to sustain fisheries and the aquatic environment. To do so would be to undervalue their ongoing relationship with Tangaroa.

38. Action taken to provide protection beyond a level necessary to achieve the purpose of the Act cannot be defined as a "sustainability measure". Actions of this kind need to be done through a more engaging approach with industry and lwi. We call this a "bottom up" approach.

Sustainability and utilisation must be balanced

39. The purpose of the Act is to provide for the utilisation of fisheries resources while ensuring sustainability. This means there must be a balance when decisions are made about sustainability measures. In relation to protected species, the Act requires sufficient action to ensure long-term viability of species and to maintain biodiversity. Actions taken to support these obligations need to be balanced with the obligation to provide for utilisation of fisheries resources.

There are considerations to make when varying sustainability measures

- 40. Section 11 requires the Minister to consider the following when varying sustainability measures:
 - a. any effects of fishing on any stock and the aquatic environment; and
 - b. any existing controls under this Act that apply to the stock or area concerned; and
 - c. the natural variability of the stock concerned.
- 41. The consultation document claims that the most relevant consideration for the regulation of the use of SLEDs is not the performance of the fishery itself, but the existence of a National Deepwater Fisheries Plan. It is stated that this plan has been approved under section 11A of the Act. We understand that the plan being referred to was in effect between 2011 and 2016 but has since expired. There is no provision for an expired plan under the Act to retain any interim status.
- 42. We do not think it is appropriate for a consultation document to give weight to a plan that does not appear to have status under the Act. But even if it did, Parliament's intent when introducing fisheries plans under section 11A was to provide a mechanism for lwi and stakeholders to take responsibility for achieving fisheries management objectives with the agreement of the Minister.
- 43. While the Act does not specify who can prepare a fisheries plan, the history of fisheries management in New Zealand highlights that statutory plans have been unsuccessful when developed through a "top down" process. Our strong preference is for such plans to be used to enable innovation and therefore be developed through a "bottom up" process.

Decisions for managing the effects of fisheries should be based on the best available information

- 44. The information principles outlined in section 8 of the Act require decision-makers to take the following into account:
 - a. decisions should be based on the best available information;
 - b. decision makers should consider any uncertainty in the information available in any case;
 - c. decision makers should be cautious when information is uncertain, unreliable, or inadequate;
 - d. the absence of, or any uncertainty in, any information should not be used as a reason for postponing or failing to take any measure to achieve the purpose of this Act.
- 45. For Maungahuka/Motu Maha rāpoka and SQU6T fisheries, the best available information is just that: the best available information. There is a high level of monitoring of both the rāpoka population and the fishing operations. It is a candidate for being the most overseen and strictly managed fishery in Aotearoa's waters. The information provided by this monitoring and management demonstrates that a successful programme is in place and that the SQU6T fishery is not having an adverse effect on the population. This information provides te context for decision making.

⁷ Section 9

Measures under the Act are limited to the effects of fishing

46. The Act enables the Minister of Fisheries, after consultation with the Minister of Conservation, to:

take such measures as he or she considers are necessary to avoid, remedy, or mitigate the effect of fishing-related mortality on any protected species ...8

Court proceedings relating to rāpoka interactions with the squid fishery analysed this provision of the Act⁹. Of particular importance, the Court found that the Minister has discretion as to what is an appropriate measure to manage the effects of fishing. However, the Minister may only take measures which they consider necessary in terms of avoiding, remedying or mitigating adverse effects of fishing on a protected species.

Statutory limits no longer necessary for SQU6T fishery

We recognise the successful protection of rapoka in the SQU6T fishery

47. Historical high mortalities of rāpoka are no longer a part of the contemporary SQU6T fishery (figure 1 - *over page*). The last decade of rāpoka interactions in SQU6T demonstrates that this fishery has appropriately and consistently managed bycatch risk. Through the implementation and subsequent requirements of SLEDs and other operational protocols, this fishery has achieved great outcomes for protected species mitigation. This is a true success and exemplar of responsible fisheries management in Aotearoa.

Estimated annual sea lion deaths and fishing effort diagram

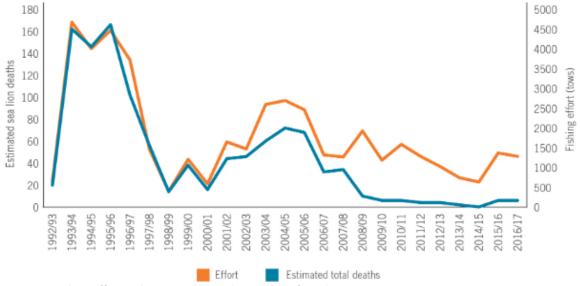


Figure 1: Fishing effort and estimated bycatch mortality of rāpoka in SQU6T

⁸ Section 15

⁹ Squid Fishery Management Company Limited V Minister of Fisheries (See France J CIV-2003-485-2706 and McGrath J CA39/04).

The fishing industry has gone beyond the statutory requirements of the SQU6T fishery

48. The operational measures in place and the protocols set out in Deepwater Group's Code of Conduct manage the risk posed by fisheries well below the FRML. Table 1 (below) sets out the last ten years of successful implementation of standardised SLEDs and the resulting incidental mortalities. The 2008-16 iterations of the SQU6T Operational plan did not stipulate a required level of observer coverage. Industry have been supportive of observer coverage in this fishery and therefore achieved the high levels set out in the table.

Table 1. Regulatory settings vs. fishery achievements since 2008

Fishing year	FRML	Observed captures ¹⁰	Observer coverage ¹¹	Observer coverage required	Tows with standardised SLEDs**
2008/09	95*	2	40%	n/a	100%
2009/10	76	3	26%	n/a	100%
2010/11	68	0	35%	n/a	100%
2011/12	68	0	45%	n/a	100%
2012/13	68	3	86%	n/a	100%
2013/14	68	2	84%	n/a	100%
2014/15	68	1	88%	n/a	100%
2015/16	68	0	92%	n/a	100%
2016/17	68	3	70%	n/a	100%
2017/18	68	2	89%	70%	100%
2018/19	38	7***	95%	70%	100%

^{*} Set at 113 then reduced voluntarily by industry due to low pup count

A Statutory Fishing Related Mortality Limit in SQU6T is obsolete

49. The FRML for rāpoka in the SQU6T fishery hasn't been met since 2005/06, this is due to a range of operational improvements including the efficacy of SLEDs as a mitigation method. The effectiveness of SLEDs as a mitigation tool allow for fisheries to interact with rāpoka with a low risk of mortality. This is evidenced by the considerable and consistent reduction in captures. The reduction means that this fishery is no longer adversely affecting the long-term viability or biological diversity of this population. Estimated mortalities have averaged 5.8% of the FRMLs over the past decade. This renders the use of an FRML setting obsolete as a conservation tool, however, this does not prevent industry from continuing to reduce and maintain low risk through a bottom up approach.

^{**} SLEDs have not been statutorily required

^{***} Includes four male subadults (population is driven by adult female survival)

¹⁰ Fisheries New Zealand and Dragonfly 2019

¹¹ Fisheries New Zealand and Dragonfly 2019

Unnecessary regulations contradict good regulatory practice

50. Setting an FRML or regulating the requirement of SLEDs is unnecessary and would have no tangible effect on the rāpoka population or current fishing operations. Further, the proposal does not fit with the guiding document - Government expectations for good regulatory practice which states:

We should not introduce a new regulatory system or system component unless we are satisfied it will deliver net benefits for New Zealanders¹².

We do not recognise a net benefit from setting an FRML or requiring SLEDs that regulates to achieve an already demonstrated outcome. Regulatory agencies are meant to "pay particular attention to requirements that appear unnecessary, duplicative, ineffective or excessively costly".

There is no justifiable reason to deem Option 3 as "not preferred"

51. Fisheries New Zealand stipulated that Option 3 is not preferred (Table 2 - below). This position is contrary to the view previously held by Fisheries New Zealand which supported a 90% population objective with 90% certainty and referred to these management criteria as "agreed, conservative". This position was held for the period of 2003-2017. However, despite this change of view, there was no rationale for the new position in the discussion document. Deepwater Group requested the rationale behind the statement, Fisheries New Zealand responded - 'This option is not Fisheries New Zealand's preferred option given the high number of mortalities it would allow (104) compared to recent observed mortalities of 3-5 per year (higher this year)". This reasoning is not appropriate nor lawful. By this measure, the more the industry reduced captures, the more the population objective would need to increase to inhibit the FRML. This is counter to the objectives of the TMP and the SQU6T Operational Plan. The response from Fisheries New Zealand also suggests that the FRML is no longer necessary to restrict bycatch, but it is instead used to manage perceptions. The Court of Appeal has made it clear that the political acceptability of an increased FRML is an irrelevant consideration.

Table 2. Options proposed for the SQU6T FRML

	Maximum impact on population	Fishing-Related Mortality Limit
Option 1	2.5%	26
Option 2	5%	52
Option 3 (Not preferred)	10%	104

¹² Government expectations for good regulatory practice – New Zealand Treasury

¹³ Squid Fishery Management company Limited v Minister of Fisheries (See McGrath J CA30/04)

The options for an FRML do not represent the current state of the fishery

52. There is a large gap between actual mortalities and the options for an FRML. This creates two issues for the SQU6T fishery. First, population modelling scenarios conducted for the Maungahuka/Motu Maha population is pessimistic in that it assumes the full FRML is caught every year. This is not a true representation. By modelling with actual captures the impact reduces from 1.5%¹⁴ to less than 0.5%¹⁵. It is inappropriate to use the FRML to model impacts if the FRML is not representative of the actual known impact (best available information). Second, having an FRML that is far higher than actual mortalities generates a misconstrued view of the fishery for the public and environmental groups. These groups have the tendency to interpret the FRML as a target, or that it is the true level of mortality incurred from fishing. This is far from the case and doesn't reflect the commitment and improvements this fishery has achieved toward protecting rāpoka.

The FRML cannot be constrained to the level of mortalities that are occurring

53. For SQU6T, setting an FRML well above mortality levels is inappropriate and unrepresentative. However, constraining the FRML to actual mortality levels would be contradictory to the purpose of the Act as the levels of mortality are well below a level that would cause an adverse effect. For these reasons we rationalise that an FRML is unnecessary to achieve conservation outcomes.

We remain committed to the ongoing protection of rapoka

With rights come responsibilities to act as kaitiaki

54. The SQU6T Operational Plan is carried out under the Act and therefore must be deemed consistent with the Deed of Settlement. SQU6T is a deepwater fishery and Settlement assets are allocated to lwi on a population basis. This has the effect of making all 58 MIOs quota owners in this fishery. As Settlement quota owners, it is also their responsibility to ensure sustainable management of this fishery.

The Plan provides "backstops" that allow timely response to changes in fishery or rapoka populations

55. The trigger levels set out in the Plan are aligned with the objectives of the Threat Management Plan. These triggers mean that any drastic changes in the fishery or the rāpoka population result in a review of the Plan. We have confidence in our ability to detect these trigger points with high certainty, due to the level of observer coverage and annual population assessments.

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¹⁴ SQU6T Operational Plan discussion document - 2019

¹⁵ Marine mammal risk assessment 2019 - "When future squid fishery deaths were equal to the average across the most recent estimated period, the mature female population status in 2025 was 99.5% of that estimated in the absence of future squid fishery mortality (95% CI = 99.5%–99.5%)

The Deepwater Group Operational Procedures address every rapoka capture event

- 56. Under the Operational Procedures (MMOP) the trigger level for action is one rāpoka capture. The actions required are summarised as follows:
- advise your vessel manager
- check any failures relevant to the MMOP risk actions
- two identification photos taken
- complete the rāpoka capture form
- check SLED where relevant
- promptly and immediately report to Deepwater Group either directly or via shore management.

The Deepwater Operational Procedures require the use of SLEDs

- 57. The specifications required for SQU6T in the Operational Procedures are summarised as follows:
- SLED built to specification of SQU6T Operational Plan
- any SLED to be deployed must be checked and certified prior to use
- vessels must carry at least two SLEDs with unique identifier numbers
- SLEDs must be used in all tows in SQU6T fishery
- damaged and repaired or transferred SLEDs must be notified to Deepwater Group as soon as possible.

The Deepwater Group also codifies a required response to rapoka captures that is agreed to by all vessel operators

- 58. There is an annual collective agreement by the SQU6T fleet outlining additional measures to support the SQU6T Operational Plan, including:
- agreement that all capture events are notified to the fleet with details of which vessels and any
 relevant circumstances related to the capture event. This ensures collective understanding of what
 is happening and if risk exacerbators are identified or explicable they are advised to all
- industry trigger of five captures where it is agreed to meet collectively and discuss circumstances of captures and any further actions that should be considered
- no vessel will fish without a certified standard SLED and any vessel who has damaged their SLEDs will leave the fishery until repaired and checked.

Monitoring means more than just watching

59. Fisheries New Zealand monitor the fishery via Global Positioning Satellite, observer records and daily effort and catch reports. Any rāpoka capture is a matter of immediate discussion between Fisheries New Zealand and Deepwater Group. The identification photographs collected under Deepwater Group's MMOP are provided for confirmation if there is uncertainty around which species was captured.

Reporting provides transparency to all stakeholders

60. Fisheries New Zealand provide weekly reports to all stakeholders on the fishery and all aspects of effort, observer coverage, captures and non-conformance to the Operational Procedures. Deepwater Group circulate this to all quota-owners and vessel operators.

SQU6T is one of the most strictly and conscientiously managed fisheries in Aotearoa

61. There are no other fisheries in Aotearoa (excepting SBW6I) with such levels of codified requirements, checks and audits, oversight and reporting. It is not a "voluntary" system, the Crown requires it upon delivery of the Operational Plan. It is also required and supported by quota owners who protect the value of their property right through conformance to the requirements. The last decade of delivering these outcomes demonstrates that industry is able to manage to this level of discipline.

Recommendations

62. We strongly support the ongoing implementation of industry procedures.

We recommend removal of the statutory FRML from the SQU6T fishery

- 63. We propose continuing the successful regime of operational measures, protocols and research that have consistently reduced rāpoka mortalities for over a decade. Removal of the FRML will restore focus to the actual number of mortalities occurring each year which better represents the current relationship between the squid fishery and rāpoka.
- 64. If Fisheries New Zealand consider that it is still necessary to impose an FRML as an insurance policy then we would recommend an FRML of no less than 104. If caught, this FRML allows the population no more than 10% impact with 90% certainty. This population objective is conservative by international standards; however it is congruent with the previously agreed objective for this population and we consider it appropriate for at least the term of the current Threat Management Plan. While this population objective is appropriate in our view, we remain uncomfortable setting an FRML that so poorly reflects the state of current mortalities.
- 65. It is difficult to support rational population objectives and principles when they result in such high "limits" that are not applicable to the fishery. Doing so risks misinterpretation of the intentions of industry as callous or not caring about rāpoka protection, which is definitely not the case. On the other hand, we cannot support the setting of a restrictive FRML that goes beyond the purpose of the Act. Therefore, our position is that no statutory FRML be set for SQU6T.

We recommend continuing high levels of observer coverage for the SQU6T fishery

66. For this iteration of the Plan, we recommend observer coverage is as high as possible with no less than 90% tows observed. However, the in the instance where Fisheries New Zealand is not able to provide an observer, fishing activity should not be restricted. It would be inappropriate to prevent fishing on the basis of observer limitations in this fishery. If these instances were to occur, the unobserved mortality rate (para. 68) will apply.

We do not support the statutory regulation of SLEDs

67. For ten years a standardised and audited SLED has been deployed for 100% of tows without the need for statutory backing. Statutory regulation of SLEDs is unnecessary to guarantee their implementation. Further, if regulated in this way, the ability to modify for improvements becomes greatly restricted. To do so would have the effect of reducing the incentives for ongoing innovation in both design and application. We recommend that the requirement that every tow in SQU6T deploys a SLED remains in the Plan.

We recommend using the cryptic multiplier to monitor the fishery

68. We support the use of the following methodology for estimating mortality:

- observed captures as the base count
- fatal interaction rate of 2.3 deaths per 1,000 tows for all unobserved tows
- cryptic multiplier of 1.3.

Fisheries New Zealand have also proposed an option to use a Spatially Explicit Fisheries Risk Assessment model to extrapolate observed mortalities to unobserved tows. We support innovation to make monitoring fisheries more efficient. However, it would be preferable to run both approaches in order to "calibrate" and not disrupt the continuous data set we currently hold.

We recommend the use of triggers to review the Plan

69. The use of triggers allows managers and operators to respond to changes in fishing effort or pup productivity. We fully support the adaptive and conscientious approach this provides to both fisheries and protected species management.

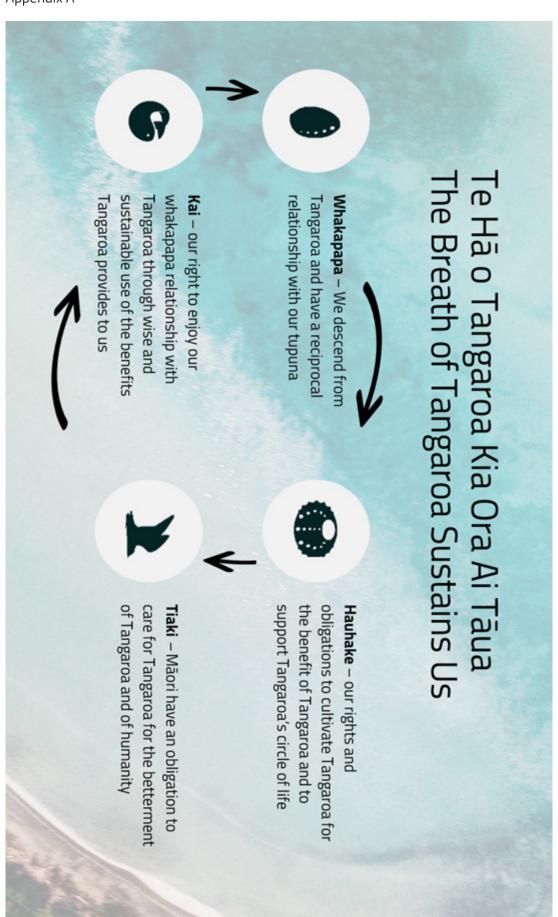
We recommend a six-year duration for the Plan

70. The consistent performance of mitigation measures as well as the improving health of the rāpoka population on Maungahuka/Motu Maha provides support for a longer term for the Plan. We support this timeframe with the provision of appropriate triggers to catalyse early review if necessary.

Conclusion

We are proud of lwi, industry, Fisheries New Zealand and Department of Conservation for their collaboration that is successfully protecting rāpoka – and Aotearoa should be too

71. We consider the SQU6T fishery an exemplar of fisheries management excellence in protected species mitigation. Collaborative and comprehensive research and operational programmes have generated a world class. The high-level monitoring of both the fishery and the rāpoka population provides assurance and transparency. We consider the relationship between the SQU6T fishery and rāpoka to be well balanced and we remain committed to improvement.



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Te Ohu

Kaimoana

