## **Hon Stuart Nash**

## **MP for Napier**

Minister of Police

Minister of Fisheries

Minister of Revenue

Minister for Small Business

B17-0817

2 1 DEC 2017

Dear Stakeholder



Decision on the Operational Plan to Manage the Incidental Capture of New Zealand Sea lions in the Southern Squid Trawl Fishery (SQU6T) 2017 to 2019

In August 2017, the Ministry for Primary Industries (MPI) publically consulted on a number of options to manage the incidental capture of New Zealand sea lions in the southern squid trawl fishery (SQU6T). This letter sets out the management measures that will apply to this fishery for the next two years.

In reaching my decision, I have taken into account the views of the Minister of Conservation, advice from MPI and the multi-stakeholder Squid 6T Operational Plan Technical Advisory Group, and also the views provided by tangata whenua and stakeholders. I have also given careful consideration to my obligations under the Fisheries Act 1996 (the Act), particularly the purpose of the Act (section 8), the environmental and information principles (sections 9 and 10) and my obligations to manage the fishing-related mortality of protected species (section 15). In addition I have considered the vision and objectives of the 'New Zealand Sea Lion/Rāpoka Threat Management Plan 2017-2022' which provides a framework for the management of threats to sea lions.

The following management measures will be implemented through the Squid 6T Operational Plan. They include setting a Fishing Related Mortality Limit (FRML) of 38 sea lions and the following arrangements to monitor the FRML:

- i. setting the 'Strike Rate' at 6.34 per 100 tows;
- ii. setting the Sea Lion Exclusion Device (SLED) 'Discount Rate' at 75%;
- iii. a minimum of 70% coverage by MPI Observers of tows in SQU6T;
- iv. 72-hour notice to MPI of any trip intending to operate in SQU6T; and
- v. notification to MPI of any marine mammal captures within 48 hours

The FRML of 38 defines the maximum number of sea lion mortalities that may occur in the fishery before it is closed. I have set it at a level that I consider will prevent adverse impacts of fishing on the sea lion population. The previous FRML was 68. However, because of the deployment by all vessels of Sea Lion Exclusion Devices (SLEDs) to allow sea lions to escape from squid trawl nets, and the ongoing debate about the survival rate of sea lions interacting with SLEDs, the number of sea lions brought on deck cannot be used to count mortalities for the purposes of the FRML. Instead, the FRML will be converted into an annual limit on the number of tows allowed in the SQU6T fishery (2,397 tows).

To monitor the number of potential sea lion mortalities against the FRML, a proxy estimate for mortalities will be assumed based on two parameters:

- the 'Strike Rate', which approximates the assumed rate of sea lion interactions with trawl nets that would be fatal in the absence of SLEDs; and
- 2. the 'Discount Rate', which is a management setting that reflects the probability that, in an interaction with a trawl net equipped with an approved SLED, a sea lion will escape and subsequently survive.

The Strike Rate of 6.34 sea lions per 100 tows is based on the past fishing years with the most reliable data that underpin the estimation of the number of sea lions that enter trawl nets. It also provides for uncertainty, and the changes in the fishery (such as the smaller number of vessels operating in the fishery and the increased length of the tow duration) that have occurred since the data were collected. The Discount Rate of 75% is based on modelled data and was derived by applying an allowance for uncertainty in the effectiveness of SLEDs.

The current modelling information that was developed in support of the New Zealand Sea Lion/Rāpoka Threat Management Plan (TMP) has been peer-reviewed by the DOC Conservation Services Programme Technical Working Group, the MPI Aquatic Environment Working Group, and by an independent panel of international marine mammal experts. These groups include representatives from all sectors and it should be noted that all have endorsed the existing model and risk assessment methods and outputs.

I have instructed my officials to prioritise research into cryptic mortality and SLED efficacy, and also to look for ways that research in these areas can be expedited, which may provide the opportunity to review this plan sooner than the current two-year timeframe. There is also relevant research that is utilising camera monitoring in SLEDs to estimate body non-retention currently underway in Australia that will be considered and incorporated as appropriate to better inform our understanding of SLEDs. All these efforts will allow future decisions to benefit from a stronger evidence base.

This fishery will be monitored closely to ensure that the management settings are meeting their objectives. Although this operational plan is intended to apply until 2019, I reserve the right to review the plan prior to that date should additional information (including reports of sea lion mortalities or outcomes from new research) demonstrate the need for an earlier review.

In addition to the increased minimum levels of observer coverage, trawl vessels in SQU6T will report weekly to MPI. If the estimated proxy for sea lion mortalities (based on number of tows) approaches the level of the FRML, vessels will report daily to ensure a timely management response. MPI will provide stakeholders with weekly email updates as the SQU6T fishery progresses. Copies of the Operational Plan and the Final Advice Paper provided to me are available on the Ministry for Primary Industries website at <a href="https://www.mpi.govt.nz">www.mpi.govt.nz</a>.

Yours sincerely

Hon Stuart Nash

Minister of Fisheries