

# SEABIRD MITIGATION MEASURES FOR TRAWL AND LONGLINE VESSELS – FINAL ADVICE PAPER

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## Purpose

- 1 The purpose of this paper is to present final advice on proposals for the introduction of seabird mitigation measures for trawl and longline vessels.

## Executive summary

- 2 Under the Fisheries Act 1996 (the Act), you are required to ensure that any adverse effects of fishing on the aquatic environment, including on seabirds, are avoided, remedied or mitigated.
- 3 Modelling of observer data suggests that, across the whole of New Zealand's EEZ, fishing-related mortality of seabirds from trawl and longline vessels was around 5,500 in 2003/04. While MFish considers that fishing-related mortality may have reduced in some fisheries since then, analysis by MFish suggests that fishing is likely to be having an adverse effect on at least some species of seabirds.
- 4 Currently, regulated or voluntary seabird mitigation measures are in place for only a proportion of the New Zealand fishing fleet, meaning that a significant number of vessels may not be deploying any effective mitigation measures. Furthermore, some fisheries that are particularly high risk may not have sufficient measures in place to adequately mitigate this risk.
- 5 MFish has recently released for consultation a comprehensive framework for managing the effects of fishing-related mortality on seabirds across all trawl, longline and set-net fisheries, and management measures are likely to be implemented from late 2008 onwards.
- 6 However, recent significant incidents of fishing-related mortality of seabird in the bottom longline and surface longline fleets have highlighted the immediate and ongoing risk that fishing without effective mitigation can pose to threatened species of seabirds. Lack of regulated mitigation measures also prevents government from taking action where vessels do not use mitigation devices.
- 7 In response to these incidents, you introduced mandatory mitigation measures in the surface longline fishery and recently directed MFish to consult on the introduction of mandatory mitigation measures across all other fisheries that may be posing an unacceptable risk to seabirds.
- 8 MFish proposed a range of sustainability measures for bottom longline, surface longline, inshore trawl and deepwater trawl fisheries, to be implemented initially by Gazette Notice under section 11(4) of the Act and to eventually be superseded by changes to commercial fishing regulations in

2008. Section 11(1) of the Act allows you to set or vary any sustainability measure for stocks or areas, after taking into account the effects of fishing on any stock and aquatic life, such as seabirds. Such sustainability measures may relate to the areas from which any fish, aquatic life, or seaweed of any stock may be taken, or relate to fishing methods by which any fish, aquatic life, or seaweed of any stock may be taken, under section 11(3) of the Act.

- 9 MFish considers that there is sufficient immediate and ongoing risk to seabirds from vessels not using adequate mitigation to consider the immediate implementation of a range of mitigation measures by Gazette Notice. You will need to determine what measures are necessary now and what level of risk you consider acceptable for the time period before a more comprehensive framework can be implemented. As such, you need to determine the *minimum acceptable mitigation* that vessels should be using in the short-term. MFish notes, however, that some of these proposed measures will still take up to six months to implement, to ensure measures are safe, practical and effective.
- 10 You should also note that implementing minimum acceptable sustainability measures will carry advantages on an ongoing basis. These include providing a mechanism to allow action to be taken against vessels not using mitigation, and having a baseline upon which to develop longer-term regulatory and voluntary measures, as part of a more comprehensive framework. However, implementing measures without the support of stakeholders will also carry disadvantages.
- 11 While all stakeholders supported the desired outcome of the proposals, that all vessels using the methods of trawl and longline within New Zealand's EEZ will be fishing using effective seabird mitigation measures, the majority of industry respondents did not see the need for urgent measures and did not support the use of blanket regulations to reduce fishing-related mortality of seabirds. Environmental stakeholders stressed the importance of mitigating fishing-related mortality by applying workable and effective measures.
- 12 SeaFIC, supported by industry stakeholders, puts forward an alternative approach to the IPP that proposes longer-term solutions using vessel-specific mitigation measures, education programmes and supported by a regulatory backstop. MFish broadly supports the overall approach proposed by SeaFIC but does not consider it to be a straight alternative to the measures proposed in the IPP. This is because of the long development and implementation time, during which risk to seabirds would be ongoing, and the lack of minimum mitigation measures that will apply across all vessels.
- 13 MFish acknowledges the difficulties of proposing method-wide mitigation measures that are safe, practical and cost-effective. MFish has amended proposals in light of stakeholder feedback on these issues but notes that uncertainty still exists in some areas.

## Summary of options

- 14 Options for surface longline vessels:

- i) Option 1: Status quo (currently required to carry and use a streamer line and set at night)
    - ii) Option 2: retain requirement to carry and use a streamer line, but provide fishers with the option of line weighting as an alternative to setting at night
- 15 Options for bottom longline vessels:
- i) Option 1: Status quo (no regulated measures currently in place)
    - ii) Option 2: Introduce requirement to carry and use a streamer line
    - iii) Option 3: Introduce suite of measures:
      - Requirement to carry and use a streamer line; and
      - Requirement to either use line weighting or set at night; and
      - Requirement to hold all offal and whole fish while setting, and only discharge on the opposite side of the vessel while hauling
- 16 Options for inshore trawl vessels:
- i) Option 1: Status quo (no regulated measures currently in place)
    - ii) Option 2: Introduce a suite of offal management measures:
      - Retain all offal and fish during shooting and hauling, and restrict discharge immediately prior to shooting
      - Restrict the discharge of offal and fish while trawling by only permitting one discharge per tow
      - Provide for an exemption for vessels that cannot safely meet requirements
      - Allow three months for the Gazette Notice to come in to force
- 17 Options for deepwater trawl vessels:
- i) Option 1: Status quo (currently required to carry and use a paired streamer line, warp scarer or bird baffler. Some voluntary offal management measures also in place)
    - ii) Option 2: In addition to existing measures, introduce a suite of offal management measures:
      - Retain all offal and fish during shooting and hauling, and restrict discharge immediately prior to shooting
      - Restrict the discharge of offal and fish while trawling by only permitting one discharge per tow for fresher vessels and one discharge per half-hour for factory vessels
      - Provide an exemption for vessels that cannot safely meet requirements

- Allow six months for the Gazette Notice to come in to force
- 18 No additional measures are proposed at the current time for set net fisheries, pending outcomes of the Hector's Dolphin Threat Management Plan. Some localised measures are currently in place.
- 19 No measures are proposed at the current time relating to requiring notification of intention to fish, to facilitate improved observer coverage. However, MFish will be providing you with separate advice on this issue in the New Year.

## **Submissions**

- 20 Submissions were received from the following organisations:
  - i) The New Zealand Seafood Industry Council Ltd (SeaFIC)
  - ii) Deepwater Group Ltd (DWG)
  - iii) Sanford Limited (Sanford)
  - iv) Ling Autoline Working Group (LAWG)
  - v) Te Ohu Kaimoana Trustee Ltd (TOKM)
  - vi) The Northern Fisheries Management Stakeholder Company Ltd (NSG)
  - vii) Challenger Finfisheries Management Company Ltd (Challenger Finfish)
  - viii) Area 2 Inshore Finfish Management Company Ltd (Area 2)
  - ix) Sealord Group Limited and Sealord Charters Limited (Sealord)
  - x) Tuna Management Association of New Zealand Inc (TMA)
  - xi) Aurora Fisheries Limited (Aurora)
  - xii) The Royal Forest and Bird Protection Society Inc. (Forest & Bird)
  - xiii) WWF-New Zealand (WWF)
  - xiv) Maritime New Zealand (MNZ)
- 21 The proposals were also discussed with surface longline fishers at a workshop on 30 October 2007. Discussions at this workshop have been treated as an oral submission.
- 22 Stakeholder submissions can be split into three main areas:
  - i) General comments on the proposals, including the need for immediate measures to mitigate risk
  - ii) Industry proposals for an alternative management framework to that proposed in the IPP; and
  - iii) Specific comments on the proposals for each method

- 23 A detailed summary of submissions can be found in Appendix XXX. Key aspects of the submissions are discussed below under the relevant sections of the paper.

## Background to proposals

### *Risk to seabirds from fishing*

- 24 New Zealand is an important breeding ground for approximately eighty seabird species and has the greatest variety of albatross and petrel species in the world. These species range in IUCN threat ranking from critically endangered (e.g. Chatham Albatross), to least concern (e.g. Flesh-footed shearwaters). Seabird species globally are facing a number of threats to their long term viability, both at the sites where they breed and while they are foraging at sea. One of the key threats is the incidental mortality of seabirds in the course of fishing activity.
- 25 Several population characteristics of albatrosses and petrels make them susceptible to long-term population decline from fishing-related mortalities. Albatrosses and petrels typically have late maturity (3–15 years old), low productivity (maximum of one nestling per year), and take a long time to form pairbonds if a partner is killed. If the death of a breeding individual occurs, the chick almost always dies and the remaining partner may take several years to start nesting again with a new partner.
- 26 The intrinsic rate of population increase for these species is very low (around 1% per year), meaning that birds may not be able to reproduce sufficiently rapidly to compensate for fishing related removals at the population level. As a result, decreases in population sizes and an associated increase in threat status are likely to occur.

### *Purpose of the Fisheries Act and environmental principles*

- 27 The purpose of the Fisheries Act (the Act) is to provide for the utilisation of fisheries resources while ensuring sustainability. The meaning of sustainability includes ensuring that the adverse effects of fishing on the aquatic environment, including on seabirds, is avoided, remedied or mitigated.
- 28 The Act also contains a set of environmental principles that you are required to take into account, along with specific provisions relating to managing the effects of fishing-related mortality on protected species. The key environmental principles in relation to seabirds are that associated and dependent species (including seabirds) should be maintained above a level that ensures their long-term viability and that biodiversity of the aquatic environment should be maintained.
- 29 Long term viability is defined in the Act as ‘a low risk of collapse of the stock or species, and the stock or species has the potential to recover to a higher biomass level’. The extent to which the long term viability of seabirds is threatened can be ascertained in part by the species’ threat status ranking, as

this is a reflection of the risk of a species of seabird becoming extinct. For example, according to the IUCN redlist, the threat status of New Zealand seabird species varies from “critically endangered” through to “least concern”.

- 30 Where fishing related mortality is likely to cause an increase in severity of the threat status of a species, or prevent a species with an already existing high threat status from recovering, this may be considered by the Minister to be posing an unacceptable risk to the long term viability of that species.
- 31 Biological diversity means the variability among living organisms, and can be considered at a number of different levels, such as the existence of sub-populations or sub-species, or the genetic diversity within a population. If fishing-related mortality contributed to reductions in numbers of breeding sites, or decreases in the size of a sub-population, this could be considered by the Minister to be contrary to this environmental principle.
- 32 When considering what steps are necessary to ensure sustainability, you should be mindful of the need to meet the purpose of the Act, including weighing up the potential impacts on utilisation of avoiding, remedying and mitigating the effects of fishing on seabirds.
- 33 As Minister of Fisheries, you have some discretion around the point at which you consider it necessary to implement management measures to ensure sustainability. When making your decision, you should carefully consider the information contained in this paper, including information on:
- i) The biological implications of current levels of fishing-related mortality on seabirds
  - ii) The effectiveness, cost and safety implications of a range of mitigation measures
  - iii) The level of uncertainty surrounding information on risk and measures to mitigate risk

### *Determining the effects of fishing-related mortality*

- 34 It is difficult to quantify current levels of seabird incidental mortality and equally difficult to assess the risk that this level of mortality poses to seabird populations. Modelling of observer data relating to fishing-related mortality of seabirds across the whole of New Zealand’s EEZ has only been conducted once using data from the 2003/04 fishing year, though more recent estimates are available for some individual fisheries. This modelling suggests that New Zealand-wide fishing-related mortalities from trawl and longline vessels were between 3,000 and 11,500 birds, with a mean of 5,500. The large variation in estimates is predominantly due to uncertainty over captures in inshore fisheries, due to low levels of observer coverage.
- 35 Modelled estimates for 2003/04 for each method of fishing are as follows:

- a) Trawl 2,650
- b) Bottom longline 947

c) Surface longline 1,870

- 36 These seabird incidental mortality estimates are highly uncertain, and are likely to have reduced from these levels in some fisheries since then. For example, in trawl fisheries, vessels over 28 metres are now required to deploy back of boat mitigation measures, alongside voluntary offal management measures. Surface longline vessels are now required to set their lines at night and operate using revised streamer line specifications.
- 37 Nevertheless, reductions from these levels are far from certain. For example, although observer data indicates that seabird bycatch in the hoki fishery may have been lower in 2004/05 than in 2003/04, a substantial increase in seabird bycatch (about 50%) was recorded over the same period in the squid fishery. There may be further mortality from these fisheries not estimated from certain areas, due to the level of observer coverage and the estimation method used. Industry data from the squid fishery in 2005/06 and 2006/07 suggest a marked decrease in bycatch following implementation of regulated mitigation measures and voluntary offal management measures, but a comprehensive analysis of these data has not been conducted and the real trends may turn out to be different or less marked.
- 38 The impact that any given level of fishing-related mortality is having on individual seabird species or populations is highly uncertain. The best available information on the effects of fishing related mortality on seabird populations is currently the calculation of Potential Biological Removals (PBR). PBR values provide an indication of the level of mortality that a species of seabird may be able to sustain, aside from natural mortality, without substantially delaying their recovery towards healthy levels. However, PBR modelling is cautious in that better information may reveal that removals above the PBR level may not result in a decreasing population size or reduced population recovery potential. PBR values should not therefore be relied upon to determine with certainty the maximum level of fishing-related mortality that can be sustained by a population. In summary, annual removals of less than the PBR value for a species are likely to be sustainable over time, but removals above PBR values will carry increasing risk to that population.
- 39 PBR values range from 20 individuals per year for the most vulnerable species up to 110,000 individuals for the most abundant species. Seven species have PBR values of 100 or less<sup>1</sup>. The total number of birds from each species killed each year by fishing boats is very uncertain. However, MFish estimates that over half of seabirds caught may be from species that are of relatively low abundance and relatively high vulnerability. Analysis conducted by MFish<sup>2</sup> suggests that, based on 2003/04 estimates of fishing-related mortality, the

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<sup>1</sup> Buller's albatross (100), Southern Royal albatross (100), Northern Giant petrel (90), Northern Royal albatross (70), Chatham albatross (60), Westland petrel (30) and Black petrel (20)

<sup>2</sup> For more details, see Dillingham, Fletcher and MacKenzie. Unpublished report to the Ministry of Fisheries, 2006. Available on request. See also "Proposals for managing the fishing-related mortality of seabirds – draft for public consultation" available at [www.fish.govt.nz](http://www.fish.govt.nz), for an analysis of this information.

PBRs of three species of seabird are likely to be being exceeded<sup>3</sup>, and the PBRs of seven species may be being exceeded<sup>4</sup>.

### *Proposed management of fishing-related mortality*

- 40 The National Plan of Action to reduce the Incidental Catch of Seabirds in New Zealand Fisheries (NPOA Seabirds) is the main policy framework for delivering on MFish's obligations under the Act. The NPOA Seabirds sets out a long term, strategic approach to reducing the incidental catch of seabirds that includes goals, objectives, management measures and supporting services such as monitoring and research.
- 41 In 2005, the Minister of Fisheries directed officials to review the NPOA Seabirds to increase the effectiveness of the strategy, with a particular focus on the management framework. MFish is currently consulting on revisions to this framework.
- 42 In addition to revising the NPOA Seabirds, MFish has recently begun consultation on a seabird standard that sets out more explicitly the point at which the Minister considers it necessary to avoid, remedy or mitigate the effects of fishing on seabirds and, hence, provide certainty about the level of utilisation that can be provided for under the provisions of the Act.
- 43 Seabird mitigation measures driven by these frameworks are not likely to be implemented until late 2008.

### *Need for more immediate action*

- 44 Currently, mitigation measures are required only on trawl vessels greater than 28 metres in length and on surface longline vessels, although some other groupings of vessels have initiated effective voluntary measures, often through Codes of Practice.
- 45 A significant proportion of the New Zealand fishing fleet are currently therefore not required to use any seabird mitigation measures and have not initiated mitigation measures voluntarily. Furthermore, some fisheries where measures are in place are considered to be particularly high risk and may not have sufficient measures in place to adequately mitigate this risk. Finally, government observers report that mitigation measures are not always deployed by vessels fishing under voluntary Codes of Practice.
- 46 The risk posed by vessels not using effective mitigation measures was recently highlighted by a vessel fishing targeting ling and bluenose using the method of bottom longline on the Chatham Rise. A large number of albatross, including 12 of the critically endangered Chatham Island albatross, were caught over the course of a few days of fishing. This species has a PBR value of just 60 birds per year.

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<sup>3</sup> Antipodean albatross, Southern Buller's albatross and Salvin's albatross.

<sup>4</sup> Antipodean albatross, Southern Buller's albatross, Salvin's albatross, Black Petrel, Campbell albatross, Grey petrel and White-capped albatross.

- 47 Similarly, in November 2006, a single charter vessel on a single trip targeting swordfish and bigeye tuna in the Kermadec Fisheries Management Area using the method of surface longline caught 51 Antipodean albatross<sup>5</sup>. This species is listed by the IUCN as vulnerable and has a PBR value of just 110 birds per year. Significant bycatch events have also been recorded by observers in trawl fisheries in recent years.
- 48 In response to these incidents, you introduced additional mandatory mitigation measures in the surface longline fishery and you recently directed MFish to consult on the introduction of mandatory mitigation measures across all other fisheries that may be posing an unacceptable risk to seabirds, to be implemented ahead of the longer-term management framework described above.
- 49 MFish has therefore developed options for mitigation measures for all vessels fishing using the methods of trawl and longline. Should you consider measures necessary, they would be implemented initially by Gazette Notice under Section 11 of the Act and superseded by changes to commercial fishing regulations in 2008. Section 11 of the Act allows you to set or vary any sustainability measure, after taking into account the effects of fishing on any stock or any aquatic life such as seabirds. A sustainability measure may relate to the areas from which any fish, aquatic life, or seaweed of any stock may be taken, or relate to fishing methods by which any fish, aquatic life, or seaweed of any stock may be taken.
- 50 When determining whether measures are necessary, you should be mindful of the immediate and ongoing risk posed by vessels not using effective mitigation. However, you should also consider whether the risk posed by these vessels is sufficient to merit mandatory mitigation measures to be implemented ahead of the longer-term framework coming in to force. As such, you need to determine the *minimum acceptable mitigation* that vessels should be deploying, based primarily on the risk from further captures over the next year or two. MFish notes, however, that some of these proposed measures will still take up to six months to implement, to ensure measures are safe, practical and effective.
- 51 You should also note that implementing measures now will carry advantages into the future, including the ability to take action against vessels not using mitigation, and having a baseline of effective mitigation across all vessels, upon which to develop a more comprehensive regulatory and voluntary framework. Conversely, implementing measures that do not have widespread industry support may lose some opportunities for collaboration with industry to develop workable mitigation measures.

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<sup>5</sup> There is scientific debate as to whether Antipodean albatross (*Diomedea antipodensis*) is actually a single species with two subspecies (the international and IUCN perspective), or two species (the current Department of Conservation perspective, although this is expected to be revised): Antipodean albatross (*Diomedea antipodensis*) restricted to the Antipodes Islands and Gibson's albatross (*Diomedea gibsoni*) restricted to the Auckland Islands. The debate is, however, immaterial to the current proposals.

- 52 While the proposed measures are directed at trawl and longline fisheries, MFish also considers that set netting is a risk to seabirds. However, the risk posed to seabirds from set net fisheries may change over the coming months, following your consideration of possible changes to set net regulations proposed in the Hector's Dolphin Draft Threat Management Plan. MFish is therefore not proposing to Gazette measures to mitigate seabird bycatch in set nets at the current time. MFish will assess the need for measures to protect seabirds from set nets once the threat management plan has been finalised. Some localised measures are, however, currently in place.
- 53 Finally, in its IPP, MFish proposed to introduce a notification requirement similar to that which applies in the surface longline fisheries to all trawl and longline vessels less than 46 metres in length, with the aim of improving observer coverage in these fisheries. However, MFish now considers that measures to improve observer coverage across inshore fisheries might best be progressed outside of the current Gazette Notice process, through a dedicated work programme. MFish will provide you with separate advice on observer coverage in the New Year.

#### *Stakeholder views on whether measures are necessary*

- 54 All stakeholders supported the desired outcome of the proposals, that all vessels using the methods of trawl and longline within New Zealand's EEZ will be fishing using effective seabird mitigation measures.
- 55 However, the majority of industry respondents considered that the IPP had not demonstrated sufficient risk to merit urgent measures. Furthermore, industry stakeholders did not support the use of blanket regulations to reduce fishing-related mortality of seabirds, considering that significant mortality events were not likely to be widespread and a more targeted response was therefore required.
- 56 Environmental stakeholders stressed the importance of mitigating fishing-related mortality, but equally stressed the need to ensure that proposed measures were workable and effective.
- 57 Forest & Bird considers that a wider range of measures should form the starting point for the development of regulations, based on CCAMLR, ACAP and WCPFC successes to date. Forest & Bird considers key examples of best practice are omitted from the IPP or are not given full consideration. Forest & Bird is concerned that the measures in the IPP may not represent best practice or may be ineffective.
- 58 Forest & Bird emphasises the role that NGOs have in the future development of seabird advice, including wishing to be part of a technical advisory group for best practice mitigation measures and supporting cross-sector partnerships to implement mitigation measures and train fishers.
- 59 A detailed summary of submissions on whether the proposed measures are necessary and appropriate can be found in Appendix B.

- 60 SeaFIC, supported by industry stakeholders, proposed an alternative approach to the IPP to deliver longer-term solutions using vessel-specific mitigation measures, education programmes and supported by a regulatory backstop

### *Industry alternative to the IPP proposals*

- 61 SeaFIC has elected to use the consultation period to develop an alternative framework to the IPP, rather than to respond to the specific proposals contained in the IPP. SeaFIC has stated that, because of this, they would require additional time to comment meaningfully on the regulatory proposals as the consultation period did not allow time to both comment on the proposals and develop an alternative.
- 62 As an alternative approach to regulation, SeaFIC, supported by industry stakeholders, proposes a regime consisting of vessel-specific seabird mitigation plans, informed by a set of agreed guidelines, and backed up by an industry training programme. SeaFIC add that this regime would be integrated with Fisheries Act regulations so as to enable effective enforcement and prosecution for non-compliance.
- 63 SeaFIC cites considerable cross-industry support for their alternative to the IPP, while accepting that some within industry have also submitted directly on the IPP proposals. SeaFIC and DWG also acknowledge that interim measures may be advantageous as a transition to the proposed approach. However, consensus on possible interim measures has been difficult to achieve and is limited to bottom longline vessels. Industry proposed interim measures are discussed in the relevant sections below.
- 64 A full copy of SeaFIC's proposals can be found in Appendix C. SeaFIC would welcome the opportunity to discuss the proposal further with MFish.
- 65 Some stakeholders state they are already part-way through a process to deliver alternatives to the IPP proposals. For example, DWG has focussed its efforts on the highest risk areas to date. Processes and procedures can be spread out over the next twelve to eighteen months to other high risk fisheries. DWG considers government is not best equipped with either knowledge or structure to develop a comprehensive management regime and that Industry should, and to a large extent already has, taken on this function. Government still has a role to oversee this work and manage compliance with it.
- 66 Area 2 is working collaboratively with the Department of Conservation to gather information about protected species interactions in their area and to suggest future mitigation needs. Area 2 challenges the Minister to support this work and to not over-ride it with across the board regulatory proposals.
- 67 Area 2 also suggests MFish and commercial stakeholders should get together on a regional basis to discuss inshore measures with commercial stakeholder organisations (CSOs). These meetings could lead to the development of a draft Gazette Notice before Christmas.

## *MFish discussion*

- 68 MFish welcomes the active engagement by SeaFIC, CSOs and fishing companies in achieving a widespread and lasting solution to reducing the fishing-related mortality of seabirds. MFish sees considerable merit in SeaFIC's proposals, not least because they are industry-led and combine the application of mitigation measures with an education component and other supporting services for fishers. The proposed approach also seeks to achieve flexible solutions, taking into account differences between vessels and fisheries.
- 69 The proposal is also timely in that it fits well with MFish processes that are currently under development, such as the proposed revision to the NPOA Seabirds management framework and the development and implementation of fisheries plans and a seabird standard. While the proposal is preliminary in nature, and while some aspects of the proposal are somewhat ambitious given the sheer number of vessels and the lack of strong CSOs in many of the fisheries, the fundamentals of the approach seem sound.
- 70 MFish considers that there are only two potentially significant drawbacks in SeaFIC's proposals. First, inevitably, and quite rightly, they will take time to develop and implement. It is unlikely that any significant implementation of widespread measures would be possible within the next 12 months. MFish does not, therefore, consider that the proposals represent a straight alternative to the proposals contained in the IPP. Instead, the proposals represent a collaborative way of achieving medium term objectives, such as meeting the seabird standard and managing fishery-seabird interactions within a comprehensive framework such as a revised NPOA Seabirds.
- 71 Secondly, the proposals do not appear to require a minimum level of mitigation to be applied across all vessels, all of the time. MFish is concerned that without such a regulated minimum, there is a risk that vessels may at times be able to fish without sufficient minimum acceptable mitigation. Vessels acting in this way would not be subject to regulatory penalty under these proposals.
- 72 This is an important distinction. Industry proposals place an emphasis on regulating a *process*, such as the mandatory adoption of individual Vessel Management Plans (VMP). While some regulatory interface is proposed, it is not necessarily envisaged by industry that VMPs will contain the same minimum level of regulated mitigation considered necessary as part of the proposals contained in this paper. Industry's approach may therefore be more appropriate for additional measures, where some level of risk has already been mitigated through regulated mitigation measures.
- 73 MFish therefore recommends that you still need to consider whether regulated measures are necessary to manage the immediate and ongoing risk to seabirds based on the proposals contained within the IPP. However, in doing so, you should take into account the fact that industry may be less forthcoming in developing a longer term framework should you consider that implementing mitigation measures by Gazette Notice is necessary.

- 74 For example, MFish considers SeaFIC, DWG and others within industry hold a strong view that no additional measures are necessary within the timeframe specified and that government has not shown sufficient appreciation of measures taken or proposed to date.
- 75 Finally, MFish acknowledges the initiative by Area 2 and the Department of Conservation to take a more structured approach to identifying and addressing seabird-fishery interactions in the inshore environment and looks forward to advising you of the outcomes from this project. MFish also acknowledges the significant body of work undertaken by DWG and also looks forward to seeing reductions in seabird mortalities when data becomes available.

## **Proposed measures to mitigate the fishing-related mortality of seabirds**

### *Development of measures*

- 76 In developing these proposals, MFish has brought together information from observer data, published mitigation research, Industry Codes of Practice, the expertise of individual fishers, as well as from feedback received during the submission process. The proposals therefore reflect as far as possible the key components of best practice mitigation measures currently being implemented in New Zealand and in comparable fisheries overseas.
- 77 The measures are likely to affect some fishers more than others in terms of cost and potential safety issues to manage, and may vary to some extent in their effectiveness, since they will be applied across a wide range of vessel types and target fisheries. Many stakeholders have therefore cited this as a significant disadvantage of the Gazette Notice proposals and have recommended instead that measures be tailored to individual vessels.
- 78 Generic issues relating to costs and safety issues are as follows:

### *Costs of measures*

- 79 Costs are likely to fall into two areas:
- i) Purchase of seabird mitigation measures; or
  - ii) Changes in fishing practice that may affect fishing efficiency
- 80 MFish does not consider that the purchase of seabird mitigation measures as proposed will be a significant cost. Typically, measures proposed are low-cost such as streamer lines, line weighting and fish storage bins. However, measures may be more expensive for storage and possible reconfiguration of offal management practices for some trawl vessels. Operational changes required to implement measures can also carry a cost.
- 81 Based on available information from observers on fishing practice, MFish does not consider that the proposals will lead to significant costs for the majority of fishers due to the need to change fishing practices. However, some

stakeholders do not consider information from observers to be adequate and MFish is conscious of the possibility that some vessels or fisheries may need to make significant changes to meet the proposed requirements. Some stakeholders also raise issues of cost in their submission. Where possible, MFish has revised proposals to take into account cost issues highlighted by fishers, however, some are still likely to be affected. These issues are discussed under the actual proposals below.

### *Safety issues*

- 82 The proposed measures are by nature generic across a wide range of vessels. As with cost implications, it is not possible to fully understand the safety issues associated with the proposed measures. For example, measures for trawl vessels typically focus on the retention of offal and fish as a primary mitigation strategy. In this regard, Maritime New Zealand (MNZ) cautions that any measures that affected vessel stability have the potential to lead to an increase in accidents.
- 83 MFish has amended proposals relating to storage of offal and fish in light of concerns expressed by MNZ and has also introduced an exemption process for vessels where safety concerns can be demonstrated. MFish also considers that, should you consider measures necessary, promotion of safety issues should be a key component of the notification of new measures.

### **Proposes measures by fishing method**

- 84 The proposals are split into the following:
- i) Surface longline fisheries
  - ii) Bottom longline fisheries
  - iii) Inshore trawl fisheries
  - iv) Deepwater trawl fisheries
- 85 A detailed summary of submissions on the proposed measures can be found in Appendix B.

### *Proposed measures for surface longline fisheries*

#### *Measures currently in place*

- 86 Seabird mitigation measures for surface longliners were revised in January 2007. The measures now in place are:
- a) Commercial fishers set surface longlines only at night.
  - b) Commercial fishers using surface longlining must deploy a streamer line consistent with existing regulations at all times whilst setting.
- 87 MFish has recently revised the specifications for seabird mitigation devices (streamer or tori lines) that must be used at all times when setting surface

longlines. Commercial fishers must also notify MFish of their intention to use the method of surface longlining at least five days' prior to departure.

#### *Risk from surface longline fisheries*

- 88 In longline fisheries, the baited hooks float on, or just below, the surface for a short time before they start sinking. During this period, the hooks can be attacked by foraging seabirds which become hooked and drown. In some fisheries the hooks can remain within reach of diving seabirds for a considerable length of time.
- 89 MFish considers that sufficient mitigation measures are already in place to ensure all surface longline fishers are using at least a minimum level of seabird mitigation. Fishers are also encouraged to use a variety of voluntary practices to further assist with seabird mitigation. More information can be found in Appendix D.

#### *Proposals for new measures*

- 90 The current mitigation measures are however restrictive in that fishers are unable to set during daylight hours. The measures in the Fisheries (Seabird Sustainability Measures) Notice 2007 were intended as interim measures. MFish will continue to develop a comprehensive seabird mitigation strategy for the fishery in conjunction with surface longline fishers. In the meantime, MFish proposed to allow fishers to use line weighting and streamer lines as an alternative to night setting and streamer lines.

#### *Stakeholder views on proposed new measures*

- 91 Commercial stakeholders favoured greater flexibility in relation to night setting. However, commercial stakeholders did not favour line weighting due to concerns over safety. Instead, fishers suggested blue-dyed bait as an alternative mitigation measure.
- 92 Environmental stakeholders suggested additional measures they considered to be best practice in surface longline fisheries (which did not include blue-dyed bait). Environmental stakeholders generally supported line weighting, although WWF noted specific line weighting configurations had not been proven in New Zealand fisheries.
- 93 A fuller discussion of measures already in place, and stakeholders' views on potential additional measures is found in Appendix D.

#### *MFish discussion*

- 94 MFish does not consider line weighting is required to mitigate immediate risk, but it will provide fishers with more options for effective mitigation. Blue-dyed bait is not yet sufficiently proven to be introduced as an alternative. Trials for blue-dyed bait and other mitigation measures are recommended for 2008.

### *Summary of options for surface longline fisheries*

- 95 Options for surface longline vessels:
- i) Option 1: Status quo (currently required to carry and use a streamer line and set at night)
  - ii) Option 2: retain requirement to carry and use a streamer line, but provide fishers with the option of line weighting as an alternative to setting at night
- 96 Option 2 is MFish's preferred option. Line weighting is recognised internationally as an effective mitigation measure, because it decreases the time that baited hooks are available to seabirds.

### *Proposed measures for bottom longline fisheries*

#### *Measures currently in place*

- 97 There are currently no regulations in place for bottom longline vessels relating to the use of seabird bycatch mitigation measures. Nonetheless, a number of vessels have used, or are currently using, a range of mitigation measures on a voluntary basis. These measures are best documented in the ling autoline fishery and include the use of streamer lines, line weighting, night setting, offal and fish retention during setting and haul mitigation.
- 98 Use of mitigation measures outside of the larger ling autoline vessels is poorly understood, and likely to be highly variable depending on fishing strategy (e.g. weighted lines, night setting) and voluntary commitment.

#### *Risk from bottom longline fisheries*

- 99 MFish considers that significant immediate and ongoing risk exists from the potentially large number of vessels that do not use any effective mitigation measures. The risk from just one vessel on one trip was highlighted earlier in the paper. MFish considers that this risk can be substantially reduced through the application of a combination of mitigation measures.
- 100 Additional measures over and above those proposed below are already in place on a voluntary basis for a proportion of the longline fleet and it is likely that more widespread uptake of additional measures will be required into the future.

#### *Proposals for new measures*

- 101 MFish proposes the introduction of a suite of seabird mitigation measures for the bottom longline fishery, reflecting as far as possible the key measures that are already being used successfully by the larger ling autoline vessels.
- 102 The proposals require vessels to carry a streamer line and use one at all times when setting, and also require vessels to either set their lines at night or to weight their lines. Finally, MFish proposes to prevent the discharge of offal

and fish while setting and to only allow offal and fish to be discharged on the opposite side of the vessel while hauling.

### *Stakeholder views on proposals*

- 103 While supporting many of the measures proposed in principle, industry stakeholders expressed an overarching concern that it was not possible to apply one set of measures across the bottom longline fleet, due to the diversity of vessels operating in the fishery. They typically considered that the measures had been based around larger autoline vessels and that these measures were not necessarily appropriate to the gear and fishing operations of smaller vessels. Industry stakeholders also considered that offal retention proposals were too restrictive.
- 104 With some exceptions, stakeholders were supportive of the implementation of streamer lines as a necessary and sufficient measure to mitigate against fishing-related mortality of seabirds in bottom longline fisheries, provided that specifications were sufficiently flexible. The minimum required aerial extent of the streamer line was seen as a particularly difficult requirement to regulate.
- 105 Proposals to require either night setting or line weighting were of more concern to some industry stakeholders, who cautioned that the proposals were likely to be very restrictive for targeting species of fish that typically lived off the bottom and were taken using floated lines, such as bluenose. Fishers would have to learn new ways to set up their gear, which may come at an economic cost and have safety implications. Furthermore, the diversity of vessels and gear types would make it very difficult to propose a one size fits all solution to line weighting.

### *MFish discussion*

- 106 MFish has included an option of just requiring streamer lines, following widespread support for this approach by industry stakeholders. However, MFish still considers it appropriate to also propose a suite of measures, including the requirement to either set at night or weight lines.
- 107 MFish has considered submissions relating to the difficulties of targeting bluenose using the proposed line weighting regime or at night time. However, MFish is not able to propose an alternative line weighting regime for bluenose that is likely to be both effective for mitigating seabird bycatch and sufficiently flexible as to have no impact on fishers.
- 108 Submissions suggest that bluenose is usually targeted with lighter weights and with more distance between weights than proposed by MFish, and that it is often targeted during daylight hours. MFish considers that such practices may significantly increase the risk to seabirds and may result in gear being deployed similar to the bottom longline vessel that recently caught a large number of Chatham albatross.

- 109 MFish cannot quantify the cost or impact of the proposals on bluenose fishermen due to a lack of detailed submissions on this issue. However, catch-effort data and observer records show that:
- i) Bluenose is often targeted at night; and
  - ii) Bluenose was targeted using line weighting regimes consistent with those proposed, on the limited number of trips that have carried observers in this fishery
- 110 MFish therefore considers that the proposals are at least consistent with how bluenose may be taken, if not necessarily allowing all fishers to operate as they currently do. It may be possible to introduce an alternative line weighting regime that may satisfy all parties if collaborative dedicated trials were possible early next year.
- 111 MFish has amended proposals relating to offal and discards, following concerns expressed by stakeholders. MFish has also made changes to the specifications of the line weighting and streamer line proposals to reflect concerns that they were not suitable for smaller vessels.

*Summary of options for bottom longline fisheries*

- 112 Options for bottom longline vessels:
- i) Option 1: Status quo (no regulated measures currently in place)
  - ii) Option 2: Introduce requirement to carry and use a streamer line
  - iii) Option 3: Introduce suite of measures:
    - Requirement to carry and use a streamer line; and
    - Requirement to either use line weighting or set at night; and
    - Requirement to hold all offal and whole fish while setting, and only discharge on opposite side of vessel while hauling
- 113 Option 1 carries significant risk in that further incidents of high seabird bycatch may occur before any measures are introduced through the NPOA Seabirds process. Furthermore, MFish considers that there is strong benefit in having minimum acceptable mitigation specified under regulation, regardless of the final long-term framework.
- 114 Option 2 is likely to mitigate some risk to seabirds, as well-deployed streamer lines have been shown to be effective across a wide range of fisheries, both in New Zealand and globally. This option is also supported by the majority of industry stakeholders and will result in all bottom longline vessels at least deploying a minimum level of mitigation without significantly altering normal fishing practices.
- 115 However, MFish notes that even a well deployed streamer line will not be sufficient in some circumstances to avoid significant captures of seabirds.

Furthermore, the risk is likely to be heightened where streamer lines are not actively managed, or where operational problems prevent their effective deployment. For example, the vessel responsible for the recent significant bycatch event on the Chatham Rise was at times deploying a streamer line, but the line was not effective.

- 116 Option 3 is likely to significantly reduce the risk of further large-scale captures of seabirds, and will serve to reduce interactions across the entire bottom longline fleet. However, this option is not well supported by industry stakeholders. In particular, it may have an economic cost on some fishers that target midwater species such as bluenose. MFish cannot quantify this cost. Stakeholders did not provide detailed submissions on the cost effects of the measures, but did indicate they considered the measures would impose potentially significant additional costs on them. Government observer coverage, though limited, has not identified any significant operational issues for implementing these options that MFish considers are likely to lead to high costs for industry.
- 117 Finally, some fishers may find it necessary to set at night if they cannot meet the line weighting requirements on their vessel, for safety or practicality reasons. MFish is not able to assess the number of vessels that may be affected and no detailed submission were received on this issue.

### ***Proposed measures for inshore trawl fisheries***

#### *Measures currently in place*

- 118 No regulations specifically relate to management of seabird incidental mortality for trawl vessels less than 28 metres in length. However, MFish has been advised by stakeholders that a number of companies and vessels may be operating in a way that minimises risk.
- 119 Observer coverage has been almost nil prior to this year making an assessment of fleetwide practices difficult, however, some observed vessels have not put in place voluntary measures, leading to seabird mortality events.

#### *Risk from inshore trawl fisheries*

- 120 In trawl fisheries, collisions with the warp cables causes significant levels of seabird mortality as seabirds forage on offal and discards from the vessel. Mortalities can also occur when birds dive into the trawl net or become entangled in the meshes when they are trying to seize fish in the net.
- 121 MFish acknowledges that many inshore trawl vessels may not pose a significant threat to seabirds. For example, some vessels do not generate large quantities of offal and others will tend to discard unwanted fish when the net is out of the water. However, many other vessels will discard during trawling and may head and gut some species on the deck, also during trawling. These practices may pose a significant risk to seabirds as they are known to lead to warp strikes, as birds attempt to feed on fish parts and discards. Net captures are also likely to occur when the trawl net is hauled for many vessels.

- 122 MFish acknowledges that the level of risk from inshore trawlers is uncertain, due to low observer coverage. Nonetheless, inshore trawl fishing grounds overlap with the foraging ranges of a large number of New Zealand seabirds, and many inshore trawl vessels manage their offal and unwanted fish in ways that are known to cause seabird mortalities. As no regulated measures or widespread voluntary Codes of Practice are currently in place, it is likely that many vessels will not be using any mitigation.

### *Proposals for new measures*

- 123 MFish proposes to restrict the discharge of solid offal and discards for most of the time while the net is in the water (allowing one discharge per tow) and immediately prior to shooting the net. MFish considers that this will significantly reduce the risk of warp strikes as well as the risk of birds being attracted to the vessel when shooting or hauling the net.

### *Stakeholder views on proposals*

- 124 There is no industry consensus on the need to specify in regulation particular measures for inshore trawlers. SeaFIC states that this is for the following reasons:
- a) There is no evidence to suggest that observed or reported levels of seabird interactions constitute a risk to seabird populations
  - b) There have been no significant incidents of seabird capture in inshore trawl fisheries and there is no reason to suggest that there will be such an incident in the near future
  - c) The inshore trawl fleet is extremely diverse. Measures that may be practical and safe for some vessels will be unnecessary, ineffective and potentially hazardous on other vessels
  - d) The challenges of observing the inshore trawl fleet make interim regulations difficult to enforce as offences will be difficult to detect
- 125 Many stakeholders cite safety concerns over vessel stability relating to holding large quantities of offal and fish, or concerns over lack of space. Maritime New Zealand also expressed concern that any measures relating to stability have the potential to lead to an increase in accidents.
- 126 Stakeholders questioned the relationship between the requirement to hold offal and fish at certain times, and the provisions under the Sixth Schedule of the Fisheries Act to be able to return to sea certain species of fish.
- 127 Sanford found the use of length criterion (28 metres) to differentiate between inshore and deepwater fisheries to be unhelpful, as five out of the six scampi vessels fall below 28 metres but are otherwise operationally similar across all six vessels. Sanford also raised concerns over meeting offal and discard management proposals when it is not normal fishing practice to remove the net from the water between tows.

- 128 WWF supports the proposal to hold all offal while fishing in principle, provided it can be successfully implemented. If not practical to do so now, WWF supports a phased approach to removing offal discharge while fishing.
- 129 Sanford and NSG support the use of mandatory streamer lines for all trawl vessels as an interim measure, provided there is allowance for some tailoring of specifications for each vessel. Similarly, Area 2 is not opposed to back of boat devices but does not consider that specifications can be developed without more extensive analysis. Challenger Finfish does not support the use of mandatory streamer lines as an interim measure because it considers trials are necessary to determine appropriate specifications and that streamer lines are a potential hazard to crew and vessel.

### *MFish discussion*

- 130 MFish acknowledges that assessment of risk from inshore trawl vessels is based largely on observers reporting the discharging of fish and offal from vessels and the associated warp strikes that sometimes accompany this practice. MFish also acknowledges that some inshore trawl vessels are likely to represent minimal risk to seabirds.
- 131 A significant factor that influences risk from inshore trawlers is the amount of offal or discards generated by the target fishery and the type of processing. MFish considers that those vessels not posing a risk to seabirds will be able to comply with the proposed regulations with minimal changes to fishing practices. For vessels that pose more of a risk due to more extensive processing and discharging of offal and fish, more significant changes will be necessary. These changes will significantly reduce risk to seabirds from the inshore trawl fleet.
- 132 MFish acknowledges stakeholder concerns over vessel safety associated with holding large quantities of offal and fish onboard or catching large amounts of fish that cannot be safely brought onboard the vessel. MFish also recognises the difficulties that the proposed measures would cause for vessels that do not typically remove the net from the water after each tow.
- 133 Following discussions with MNZ, MFish has amended the offal management proposals to allow vessels to discharge offal and fish once per tow, rather than holding for the entire duration of the tow. This will allow excess weight to be removed from the vessel before bringing the next tow on board and will also allow vessels that do not bring the net up after every tow an opportunity to discharge offal and fish while towing.
- 134 MFish notes that fishers already face situations where a vessel cannot safely land catch from a tow. Maritime law already provides for excess weight to be discharged such as by releasing fish from the net before the net is brought on board. This provision applies pragmatically, regardless of whether this practice is normally contrary to Fisheries Act requirements, such as the requirement to land all QMS species.

- 135 MFish takes the issue of vessel safety very seriously and is concerned that some vessel operators may not be aware of stability issues associated with the proposed measures. MFish therefore proposes to allow vessels to apply for an exemption to the offal management requirements if the vessel can demonstrate that it is unable to safely hold offal and fish as required. Vessel owners will need to provide evidence<sup>6</sup> of the limitations of their vessel, to be considered by MFish.
- 136 Should you consider measures are necessary, MFish recommends that any Gazette Notice should have a three month lead in time to allow for vessel safety issues to be assessed. MFish would also remind vessel operators of the importance of understanding vessel stability and capacity issues as part of the Gazette Notice implementation process.
- 137 MFish does not propose to introduce mitigation measure such as streamer lines. Firstly, the inshore trawl fleet is very diverse and specifying effective streamer lines across all vessels will be difficult. Secondly, where risk can be *avoided* altogether, such as by holding offal, this is far more preferable than relying on measures that may only partially *mitigate* risk, such as streamer lines. Nevertheless, fishers are encouraged to use mitigation measures on a voluntary basis at times when offal and fish are being discharged, such as during the one discharge per tow proposed in this paper.

#### *Summary of options for inshore trawl fisheries*

- 138 Options for inshore trawl vessels:
- i) Option 1: Status quo (no regulated measures currently in place)
  - ii) Option 2: Introduce suite of offal management measures:
    - Retain all offal and fish during shooting and hauling, and restrict discharge immediately prior to hauling
    - Restrict the discharge of offal and fish while trawling by only permitting one discharge per tow
    - Provide for an exemption for vessels that cannot safely meet requirements
    - Allow three months for the Gazette Notice to come in to force
- 139 Option 1 is supported by the majority of industry stakeholders. However, it carries risk as no regulated measures are currently in place for this fishery. Due to low observer coverage, both currently and in the past, MFish cannot quantify this risk, but considers that it is likely to vary amongst vessels in relation to processing and other operational practices. Significant incidents of high seabird bycatch, or lower levels of ongoing seabird bycatch across some sections of the fleet, may occur before any measures can be considered through the NPOA Seabirds process.

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<sup>6</sup> Criteria for exemption on the ground of stability would be the international accepted minimums which are reflected in maritime rule part 40D – design, construction and equipment for fishing ships.

- 140 Regardless of the final NPOA Seabirds framework, MFish considers that there is strong benefit in having minimum acceptable mitigation specified under regulation, should you consider measures necessary.
- 141 Option 2 is likely to significantly reduce any risk from vessels that discharge offal or discard whole fish and will also reduce uncertainty over levels of risk in this fishery, where observer coverage is low. However, this option is not well supported by Industry and carries potential risk in relation to vessel stability and safety if fishers do not consider safety issues when taking steps to meet requirements.
- 142 Should you choose this option, MFish recommends that a three month lead-in time be granted and that potential safety issues are communicated to all vessel owners, to ensure that safety concerns can be addressed and exemptions granted, should they be required.

### *Proposed measures for deepwater trawl fisheries*

#### *Measures currently in place*

- 143 Trawl vessels over 28 metres in length are required under regulations to deploy a seabird mitigation device that has been authorised by the Chief Executive. Currently, vessels have the choice between deploying paired streamer lines, a bird baffler or a warp scarer.
- 144 In addition, the Deepwater Group (DWG) has developed a voluntary vessel management plan (VMP) template for deepwater trawlers. Each VMP describes the offal and discard management plan, the deterrent devices employed and additional vessel management procedures used by each vessel to mitigate their impacts on seabirds.
- 145 VMPs are now in place for most of the deepwater trawl fleet operated by DWG members, although the success of implementation of VMPs has been variable between vessels.

#### *Risk from deepwater trawl fisheries*

- 146 Deepwater trawl fisheries, particularly squid and hoki, are considered by MFish to be some of the highest risk fisheries in New Zealand's EEZ. Observer coverage has generally been high and reasonably robust estimates of seabird bycatch are available up to the 2004/05 fishing year. In addition to recorded mortalities, an unknown but potentially significant number of birds are killed through contact with trawl warps, and are not recovered for counting<sup>7</sup>.

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<sup>7</sup> Warp strikes occur at different rates depending on several factors, including offal discharge, mitigation device used and fishery. At times, warp strikes may be occurring nearly 100 times more often than birds are actually recovered from the warps. However, it is not known what proportion of birds are killed following contact with the warps. For more details, see: A fleet scale experimental comparison of devices used for reducing the incidental capture of seabirds on trawl warps. Edward R. Abraham<sup>1</sup>, David A. J. Middleton, Susan M. Waugh, Johanna P. Pierre, Nathan Walker, Caren

- 147 MFish and Industry acknowledge the risk posed by these fisheries and have taken steps over the previous two years to reduce mortalities. All vessels now deploy seabird mitigation devices that have been shown to reduce warp strikes, to a great or lesser extent, depending on the device used. MFish considers that the use of seabird mitigation devices will have reduced warp strikes and seabird mortalities.
- 148 MFish also considers that the implementation of Industry VMPs will have reduced risk over this period. However, offal management practices are known to vary between vessels and across time, and while some vessels have clearly made significant improvements, MFish cannot determine how effective the VMP programme has been in mitigating mortalities across the fleet.
- 149 When considering whether additional measures are necessary, therefore, you should note that risk has probably reduced from the very high levels demonstrated in previous years, but the *extent* to which measures deployed to date have reduced risk is uncertain. For example, as noted above, observer data shows that seabird bycatch in the hoki fishery was probably lower in 2004/05 than in 2003/04, but a substantial increase in bycatch (about 50%) was recorded over the same period in the squid fishery. Since that time, seabird mitigation measures have been implemented by regulation and voluntary VMPs have been developed. It is not possible to know the impact that these measures have had on seabird mortalities, but a preliminary analysis of industry data from 2006/07 shows a decrease in mortalities occurring.

#### *Proposals for new measures*

- 150 Discharging of offal and whole fish while towing is recognised as a significant cause of seabird mortality in trawl fisheries, and no regulations are currently in place to manage offal or fish discharge.
- 151 While MFish is supportive of the VMP programme, MFish is concerned that VMPs do not set minimum standards for offal management and are not always followed by vessels. MFish is therefore proposing a suite of offal management measures that would act as minimum standards, to ensure that all vessels are taking steps to minimise risk to seabirds all of the time. The proposals are designed to complement the ongoing VMP programme, which is far more comprehensive, being vessel-specific, incorporating a range of voluntary measures and tailored to a range of target fisheries.
- 152 MFish proposes to prohibit the discharge of solid offal and fish during shooting and hauling and immediately prior to shooting the net. MFish also proposed to set minimum standards for the discharge of offal and fish while towing, to reduce the time that seabirds are exposed to risk of injury or death from warp strikes.
- 153 MFish notes that to date offal management practices, including those proposed in this paper, have focussed on achievable measures that are not at significant

cost to vessel owners. While MFish supports this approach in the short-term, there is clear benefit in exploring longer-term options for significantly reducing or preventing the release of all offal while fishing, or rendering it unattractive to seabirds. There is also benefit in ensuring that new entrants to the deepwater trawl fishery can manage their offal to a certain standard. MFish will be providing you with advice on longer-term solutions to reducing the risk from offal in the New Year.

### *Stakeholder views on proposals*

- 154 Industry stakeholders are not supportive of a regulatory approach to managing offal in the deepwater trawl fisheries. Industry provide evidence of a strong voluntary commitment in this area that they consider is a more effective and more appropriate mechanism for reducing fishing-related mortality of seabirds than regulating measures.
- 155 Other than considering regulatory measures unnecessary, at the root of industry's concern is that different vessels in the fleet have different target fishery and processing methods as well as having different catch rates, which generate different volumes of waste. They therefore consider that the time period and frequency of discharging offal needs to be flexible to reflect these waste streams, and the risk posed to the seabirds. Implementing across the board measures will not be effective compared to the current voluntary approach of implementing vessel-specific solutions.
- 156 Of principle concern to industry stakeholders is proposals to set minimum standards for the discharge of offal and fish while towing. DWG considers that this is inappropriate as there is no scientific evidence to suggest that 'batching' offal for longer periods is any more effective than batching for shorter periods. DWG also considers that specifying a minimum standard could lead to lowering the average and will not be as effective as vessel-specific measures.
- 157 Some industry stakeholders note that due to the inherent characteristics of their vessel, it is not possible or safe to meet the proposed offal management requirements. Industry is not able to suggest appropriate minimum standards in the time available and, with one exception, have not provided information on whether proposals are safe or possible.

### *MFish discussion*

- 158 MFish acknowledges stakeholders' preference for a voluntary regime that encourages holding offal and discards for as long as possible, depending on the target fishery, processing method and fishing conditions currently occurring. However, MFish considers that the main drawback of such an approach is that it does not seek to specify a bottom line that will minimise risk to seabirds at all times. Most VMPs do not indicate the minimum time that may elapse between batch discharges and the majority of VMPs also allow vessels to not follow any offal retention procedures at certain times, such as during peak finfish production. Continuous discharge is always specified in VMPs as a last resort and additional mitigation measures are supposed to be

deployed at these times. Finally, MFish observers report that some vessels may not always follow measures set out in the VMP.

- 159 MFish also acknowledges comments from submitters, supported by some VMPs, that there are significant differences within each vessel in batching times between squid target and finfish target fisheries (e.g. one batch every two hours for squid vs one batch every 20 minutes for finfish). In reality, any minimum standards in batching will only make a difference to risk in the finfish fishery since MFish does not consider it feasible to differentiate in a Gazette Notice between trawling for squid and trawling for finfish. For squid fishing, a significant proportion of the fleet should be able to achieve significantly longer intervals between batching.
- 160 MFish therefore considers that the most effective approach is to continue to support and develop the individual VMP approach to maximising vessel performance across the year, but with minimum legal standards to ensure that at least all vessels are engaged in offal management practices all of the time, and to set an effective benchmark for finfish fisheries.
- 161 With one exception, MFish has been unable to verify whether the batching regimes proposed in the IPP are achievable, as most stakeholders did not to submit this information, and DWG did not have this information available. Although MFish has simplified the proposals and reduced batching requirements, MFish proposes to allow a six month lead-in time to allow for vessel safety and offal management capability to be assessed against the proposals. As with inshore trawl, MFish proposes to allow vessels to apply for an exemption to the offal management requirements if the vessel can demonstrate that it is unable to safely hold offal and fish as required. Vessel owners will need to provide evidence<sup>8</sup> of the limitations of their vessel, to be considered by MFish.
- 162 MFish also intends to require vessel owners to provide evidence that their vessel can safely meet the offal management requirements, and will be advising you on procedures to implement this requirement in the New Year.
- 163 MFish considers that independent verification of offal management capability is the only way to resolve the asymmetry of information between industry and MFish relating to both safety and offal management capability. MFish therefore recommends that you request all trawl vessels over 28 metres in length to undergo a vessel stability audit to ascertain the maximum potential safe offal holding capacity of the vessel and to determine the costs of fitting out each vessel to achieve this maximum and to determine whether vessels can achieve the proposed minimum standards.
- 164 MFish considers that the assimilation of this new information, coupled with further discussion with industry, may present an opportunity for the minimum

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<sup>8</sup> For example, criteria for exemption on the ground of stability would be the international accepted minimums which are reflected in maritime rule part 40D – design, construction and equipment for fishing ships.

standards contained within the Gazette Notice to be amended, if a better approach can be developed.

*Summary of options for deepwater trawl vessels*

165 Options for deepwater trawl vessels

- i) Option 1: Status quo (currently required to carry and use a paired streamer line, warp scarer or bird baffler. Some voluntary offal management measures also in place)
- ii) Option 2: In addition to existing measures, introduce a suite of offal management measures:
  - Retain all offal and fish during shooting and hauling, and restrict discharge immediately prior to hauling
  - Restrict the discharge of offal and fish while trawling by only permitting one discharge per tow for fresher vessels and one discharge per half-hour for factory vessels
  - Provide an exemption for vessels that cannot safely meet requirements
  - Allow six months for the Gazette Notice to come in to force
- iii) For both options, request that vessels undergo an independent vessel stability audit to ascertain the maximum potential safe offal and discard holding capacity of the vessel

166 Option 1 is strongly supported by industry stakeholders. Option 1 also provides some level of comfort that significant bycatch events will not occur, as back of boat measures are currently regulated and a voluntary offal management programme is being implemented.

167 While this option already mitigates some risk to seabirds and has probably led to reductions in seabird mortalities, Mfish considers that the principle risk of this option is that minimum standards are not in place for offal management across all vessels all of the time. While Industry has taken significant action to manage offal, the approach allows continuous discharge of offal at certain times, such as when heavy processing of finfish is occurring. Furthermore, some vessels do not always follow the measures set out in their Vessel Management Plans.

168 You should therefore consider whether regulated minimum standards are necessary, or whether risk is sufficiently mitigated by existing voluntary offal management measures.

169 Option 2 will reduce the likelihood of a significant bycatch event occurring, but will not eliminate this possibility due to constraints on the ability of vessels to hold sufficient quantities of offal. Nevertheless, this option will ensure that all vessels are managing their offal at all times to a prescribed minimum standard.

- 170 The principal disadvantage of this option is that it is not supported by stakeholders, due to their concerns over whether the proposals are necessary, effective, practical or safe. Furthermore, this option carries uncertainty over whether it is achievable across the fleet. MFish is already aware of at least one vessel that cannot hold offal due to the vessel's automatic discharge and processing method. MFish proposes a six month lead-in time, coupled with an exemption process where vessels can demonstrate that it is not safe or possible for them to meet the minimum standard at the present time.
- 171 MFish considers that an exemption process is necessary in the short-term, however, the implications for vessels that cannot meet minimum offal management requirements will need to be considered and addressed through the longer-term management process.

### *Proposed measures relating to monitoring requirements*

#### *Measures currently in place*

- 172 In January of this year, the Minister of Fisheries required fishers targeting tuna and swordfish by surface longline to notify the Chief Executive of the Ministry of Fisheries of their intention to fish at least 5 days in advance of taking these species<sup>9</sup>.
- 173 The intent of this notice was to facilitate observer placement on surface longline vessels. This requirement has already enabled effective placement of observers and achievement of better coverage in the surface longline fishery than in the past, although there have been difficulties even in this relatively targeted use of the provision.
- 174 Already, surface longline coverage in 2007/08 is predicted to capture approximately 20% of expected national fishing effort using this method. In contrast, in inshore fisheries where the notification requirement does not apply, expected coverage is 0–5% of national fishing effort. It should be noted, however, that some inshore fisheries have such significant effort that notification alone will not improve observer coverage to the levels achieved recently in the surface longline fishery.

#### *Proposals for new measures*

- 175 In its IPP, MFish proposed to introduce a notification requirement similar to that which applies in the surface longline fisheries to all trawl and longline vessels less than 46 metres in length.

#### *Stakeholder views on proposals*

- 176 Submissions did not generally support this proposal, with many submitters considering that it would not have the desired effect. Submitters considered the wording to be unworkable and the desired outcomes unachievable without more widespread changes to the observer programme.

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<sup>9</sup> New Zealand Gazette, Issue 8, Friday 26 January 2007

### *MFish discussion*

- 177 MFish acknowledges stakeholder concerns over the practicality of the proposals and the benefits that the proposed measures might bring across such a wide range of fisheries, compared to more widespread changes to the observer programme.
- 178 On balance, MFish considers that measures to improve observer coverage across inshore fisheries might best be progressed outside of the current Gazette Notice process. All issues, including notification, can then be addressed in a dedicated work programme. MFish will provide you with separate advice on observer coverage in the New Year.

## **Recommendations**

179 MFish recommends you consider the following measures to manage fishing-related mortality of seabirds, to be implemented by Gazette Notice:

180 Agree to one of the following options for surface longline vessels:

- i) Option 1: Status quo (currently required to carry and use a streamer line and set at night)
- ii) Option 2: retain requirement to carry and use a streamer line, but provide fishers with the option of line weighting as an alternative to setting at night (recommended option)

181 Agree to one of the following options for bottom longline vessels:

- i) Option 1: Status quo (no regulated measures currently in place)
- ii) Option 2: Introduce requirement to carry and use a streamer line
- iii) Option 3: Introduce a suite of measures (recommended option):
  - Requirement to carry and use a streamer line; and
  - Requirement to either use line weighting or set at night; and
  - Requirement to hold all offal and whole fish while setting, and only discharge on opposite side of vessel while hauling

182 Agree to one of the following options for inshore trawl vessels:

- i) Option 1: Status quo (no regulated measures currently in place)
- ii) Option 2: Introduce a suite of offal management measures (recommended option):
  - Retain all offal and fish during shooting and hauling, and restrict discharge immediately prior to hauling
  - Restrict the discharge of offal and fish while trawling by only permitting one discharge per tow
  - Provide for an exemption for vessels that cannot safely

meet requirements

- Allow three months for the Gazette Notice to come in to force

183 Agree to one of the following options for deepwater trawl vessels:

- i) Option 1: Status quo (currently required to carry and use a paired streamer line, warp scarer or bird baffler)
- ii) Option 2: In addition to existing measures, introduce a suite of offal management measures (recommended option):
  - Retain all offal and fish during shooting and hauling, and restrict discharge immediately prior to hauling
  - Restrict the discharge of offal and fish while trawling by only permitting one discharge per tow for fresher vessels and one discharge per half-hour for factory vessels
  - Provide an exemption for vessels that cannot safely meet requirements
  - Allow six months for the Gazette Notice to come in to force

184 Regardless of option 1 or 2, agree to request that all deepwater trawl vessels undergo an independent audit to ascertain the maximum potential safe offal holding capacity of each vessel.

185 Note that MFish intends to require vessel owners to provide evidence that their vessel can safely meet the offal management requirements, and will be advising you on procedures to implement this requirement in the New Year.

186 Note that no measures are proposed at the current time for set net fisheries, pending outcomes of the Hector's Dolphin Threat Management Plan.

187 Note that MFish will be providing you with separate advice on observer coverage in the New Year.

Steve Halley

Manager, National Environmental Team

APPROVED/NOT APPROVED/APPROVED AS AMENDED

Hon Jim Anderton  
Minister of Fisheries

/ 12 /2007

## Appendix A: Statutory considerations

### *Statutory considerations*

- 188 MFish considers that the proposed sustainability measures are consistent with the statutory considerations under the Act, as discussed below.

### *International obligations*

- 189 **Section 5(a)** - requires that decisions should be consistent with New Zealand's international obligations relating to fishing. MFish considers that the proposed sustainability measures are consistent with New Zealand's international obligations.

### *Treaty of Waitangi (Fisheries Claims) Settlement Act 1992*

- 190 **Section 5(b)** - requires that decisions should be consistent with the provisions of the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992. MFish considers that the sustainable measures proposed are not inconsistent with the Treaty of Waitangi (Fisheries Claims) Settlement Act.

### *Purpose of the Act*

- 191 **Section 8** - sets out the purpose of the Act as being “to provide for the utilisation of fisheries resources while ensuring sustainability”. MFish considers that the proposed sustainability measures are consistent with the purpose of the Act, and in particular, the requirement to avoid, remedy or mitigate any adverse effects of fishing on the aquatic environment.

### *Environmental Principles*

- 192 **Section 9** - requires that decision makers take into account the environmental principles set out in:

**s 9(a)** - which states that associated or dependent species should be maintained above a level that ensures their long-term viability.

**s 9(b)** - which states that the biological diversity of the aquatic environment should be maintained.

**s 9(c)** - which states that habitats of particular significance to fisheries management should be protected.

MFish considers that the proposed sustainability measures are consistent with the environmental principles of the Act.

### *Information Principles*

- 193 **Section 10** - prescribes the information principles that are to be taken into account when exercising powers and functions under the Act. Decision makers should use the best available information, consider uncertainty in that information, and be cautious when information is uncertain, unreliable, or inadequate. The absence or uncertainty of information should not be used as a reason to postpone or fail to make decisions.

- 194 MFish considers that the best available information has been used to develop the Final Advice Paper and that uncertainties in the information have been adequately highlighted for consideration.

### *Sustainability Measures*

- 195 **Section 11(4)(b)** – stipulates that the Minister may implement any sustainability measure or variation of sustainability measure, as set or varied under subsection (1) by notice in the Gazette; or by recommending the making of regulations under section 298. In doing so, the Minister must take into account a range of factors set out in sections 11(1) and 11(2A). The Minister shall also have regard to the matters in section 11(2).
- 196 **Section 11(1)** – stipulates that the Minister ‘may’ take into account before setting or varying any sustainability measure: any effects of fishing on the stock and the aquatic environment; any existing controls that apply to the stock or area concerned; and the natural variability of the stock concerned.
- 197 **Section 11(2A)** – before setting a sustainability measure, the Minister ‘must’ take into account any conservation services or fisheries services, any relevant fisheries plans approved under Part III; and any decisions not to require conservation services or fisheries services.
- 198 **Section 11(2)(a) and (b)** – stipulates that the Minister, before setting or varying any sustainability measure, must have regard to the provisions applicable to the coastal marine area known to exist in any policy statement or plan under the Resource Management Act 1991, or any relevant management strategy or plan under the Conservation Act 1987.
- 199 **Section 11(3)** – stipulates that sustainability measures may relate (amongst other things) to the areas from which any fish, aquatic life, or seaweed of any stock may be taken; the fishing methods by which any fish, aquatic life, or seaweed of any stock may be taken or that may be used in any area; or the catch limit for any stock.
- 200 MFish considers that the proposals meet the relevant requirements under Section 11 of the Act and that the relevant considerations are discussed in the final advice paper.

### *Consultations*

- 201 **Section 12** – MFish conducted consultations for a period of four weeks with such persons or organisations as the Minister considered as representative of those classes of persons having an interest in the stock or the effects of fishing on the aquatic environment in the area concerned, including Maori, commercial, and recreational interests. MFish considers that it has met the relevant requirements under section 12 relating to consultation. Submissions were received from organisations listed under the Submissions on page 1 of this FAP.

## Appendix B: Summary of submissions

### Need for urgent regulatory intervention

- 202 SeaFIC, Area 2 and Challenger Finfish consider that the IPP does not establish that urgent regulatory intervention is required in order to meet Fisheries Act obligations with respect to seabirds. Based on Sections 8 and 9 of the Fisheries Act, SeaFIC argues a determination of “adverse effect” is required before considering measures. Action cannot simply be based on avoiding every isolated event of incidental seabird mortality.
- 203 SeaFIC considers the IPP appears to justify taking action based on the capture of even a small number of birds. Instead, a structured analysis of risk should have been presented in the IPP. TOKM and Challenger Finfish also suggest that a better risk assessment should have been conducted and cannot see that the risk has been demonstrated. SeaFIC argues there is no urgent risk, for the following reasons:
- i) The IPP contains no information to suggest that current levels of seabird interactions will place seabird populations in critical danger in the timeframe over which the IPP proposals are intended to operate
  - ii) Existing mitigation measures have been effective in the majority of cases, and are subject to continual industry-initiated improvement; and
  - iii) Recent isolated incidents of significant seabird mortality need to be viewed and dealt with in their appropriate context
- 204 SeaFIC stresses that measures should be targeted at the source of the risk – such as at the vessel operator, the particular fishing method in question or the fishing area concerned (if relevant). SeaFIC considers it unacceptable to impose measures on all trawl and longline vessels.
- 205 SeaFIC believes the current proposals are not only unnecessary, but are counter-productive. It is preferable to “do it once and do it right”. SeaFIC believes the current proposals will undermine incentives for industry initiatives to reduce seabird bycatch. The proposals will not encourage continual improvement or reward good operators for their current practices. SeaFIC proposes an alternative approach to that set out in the IPP, based on vessel management plans (VMP) tailored to specific vessels.
- 206 DWG considers further regulation of trawlers greater than 28 metres as an interim measure is unnecessary and vexing. DWG provides supporting information that it considers demonstrates commitment to reducing seabird incidental mortality on a largely voluntary basis. Sanford also supports the VMP programme as an effective way of reducing seabird interactions.

- 207 DWG considers that implementing mandatory measures that are relatively unproven, applied to poorly quantified risk across a fleet and fisheries that regulators do not understand well will not provide the outcomes required. This situation will create a less than optimal management environment.
- 208 LAWG strongly supports the need to address new entrants entering a fishery and ensuring through some form of enforcement that they use best practice mitigation measures. However, LAWG feels that across the board regulation does not respect the success of the LAWG voluntary Code of Practice and cannot be the best approach given the diversity of the fleet. Measures that work on large vessels may not work on small vessels. LAWG cites this as a reason it restricted its Code of Practice to larger vessels. LAWG considers the best approach is to have vessels working under an appropriate Code of Practice, using effective mitigation but not impacting on fishing effectiveness or economics.
- 209 TOKM agrees there is a section of the fishing industry that is not deploying best practice mitigation. Nonetheless TOKM is not convinced the number of these vessels is significant. TOKM would like to see analysis of the scale of the problem in the final advice paper, since it was not in the initial position paper. TOKM considers that recent incidents in the bottom and surface longline fisheries are likely to be isolated incidents. TOKM would like to know why MFish has not taken specific action against these operators.
- 210 Challenger Finfish considers regulation should be a last resort and not a first response. It is not straightforward to directly translate measures that work on large vessels onto small vessels. Further, Challenger Finfish would like to see an analysis of what additional information is required to complete a robust risk assessment for inshore fisheries, before any measures are implemented.
- 211 Forest & Bird notes the majority of areas in the New Zealand zone are high risk areas for seabird interactions, and the vulnerability of the albatross and petrel species affected by fisheries bycatch. For these reasons Forest & Bird considers best practice mitigation measures should be applied.
- 212 Forest & Bird considers that additional material should have been included in the IPP to support the need for urgent action, including the global peril of the albatross family of birds, the significance of New Zealand in the future conservation of these species and the high risk nature of the New Zealand fishing environment. An internationally established methodology could be used to assess risk in New Zealand fisheries areas. Including this information would enable better advice to the Minister of Fisheries about the seriousness of the risk posed to seabirds and the consequences of his decisions.
- 213 WWF considers that because New Zealand is the breeding and foraging range for a significant proportion of the world's seabirds, particularly albatrosses and petrels, it is critical that the New Zealand Government takes a strong international lead in its response to seabird bycatch.

## Use of regulations to reduce seabird incidental mortality

- 214 SeaFIC, Sealord, Aurora, TOKM, NSG, Sanford and DWG support the desired outcome of the IPP, that “all vessels fishing using the methods of trawl and longline within New Zealand’s EEZ will be fishing using effective mitigation measures”. However, they do not support the specific regulatory proposals.
- 215 DWG, Sealord, Aurora, NSG and Sanford support an outcomes based approach to reducing seabird interactions by providing for vessel flexibility and implementing best practice vessel-specific measures. Flexibility to mix, match and alter mitigation measures across vessels and on individual vessels across fisheries and seasons is seen as critical to reducing interactions.
- 216 Sanford reiterates that it is strongly engaged in the voluntary framework set out in the NPOA Seabirds. Sanford favours a transparent, long-term framework that allows for voluntary measures, alongside sensible regulations. However, Sanford does not support draconian regulations using arbitrary vessel size and method categories. Sanford does not consider that prescriptive measures are effective, as they do not allow a vessel to apply best practice.
- 217 SeaFIC argues that prescribing detailed mitigation methods in regulations is not the best way of achieving the desired outcome of reducing seabird interactions. SeaFIC does not agree with any of the advantages cited by MFish of a regulatory regime.
- 218 SeaFIC considers that vessels not currently using mitigation measures are no more likely to apply mitigation as a result of a regulatory requirement than as a voluntary measure. Secondly, SeaFIC notes that MFish has not prosecuted vessels that appear to have breached seabird regulations in the past. Finally, SeaFIC considers regulations will not reduce the likelihood that the behaviour of a minority of fishing vessels will damage the reputation of the fishing industry. The reputation of the fishing industry is as much influenced by how the government responds to seabird capture events.
- 219 Further, SeaFIC argues that:
- i) A one size fits all approach does not take into account variation across vessels, fisheries, fishing practices or areas
  - ii) Regulations are inflexible and do not allow for nor encourage innovation or continual improvements in best practice
  - iii) Regulations do not encourage ownership of managing seabird interactions
  - iv) Regulations focus attention on compliance and away from reducing seabird mortalities
  - v) Regulations do not reward good practice, and penalise all operators regardless of their current practices

- vi) Even as an interim measure, regulations lock in measures and behaviours that demotivate the development of alternative, more effective, mitigation measures
- 220 Challenger Finfish does not consider it appropriate to develop proposals outside of the established NPOA Seabirds Technical Working Group, and considers that the proposals lack insight and understanding of inshore fishing practices. Challenger Finfish suggests that the document be withdrawn and redrafted under the guidance of such a group.
- 221 WWF believes that regulations can be very effective, but only when they are understood and accepted, or when there is a strong incentive, such as the threat of prosecution. WWF believes regulations must be combined with education and high levels of monitoring. WWF notes that in Hawaii, fishers are required to attend a protected species workshop before going fishing. A similar workshop approach is also used in Australia.

## Offences and penalties

- 222 DWG and NSG do not condone catching seabirds, but note that at times this is unavoidable and should not be confused with rogue poor performance. They stress that any regulatory enforcement and penalty regime should only be applied when a vessel is proven to be non-complying, and not applied simply for catching or killing seabirds. Penalties must be based on measurable rules and be sufficient to improve performance.
- 223 Sanford and NSG strongly support the need for regulations that provide incentives for vessels to operate using effective mitigation measures, and penalise those that do not. They consider to successfully remove rogue operators it is critical the penalties are severe and are the direct responsibility of the vessel operator.

## Safety issues

- 224 DWG believes that due care and attention needs to be given to crew and vessel safety considerations. It notes that mitigation devices can affect both crew safety and vessel operational safety.
- 225 Issues regarding removal of offal as a part of free waste water from working decks of vessels are of particular concern to DWG. DWG does not recommend generic constraints on management of water removal from decks, which it considers to be fraught and irresponsible. Aurora is also concerned the proposed offal management measures will be contrary to Safe Ship Practice.
- 226 MNZ is concerned that there is a potential for an increase in accidents relating to stability if fishing vessels are to retain offal and fish. They note that some operators are unaware of how a small change can impact the vessel's stability and have made a concerted effort to educate and highlight the impact that changes to a vessel can have on stability. MNZ also offered to provide more detailed advice on stability issues.

- 227 Challenger Finfish considers that increasing the number of floats and weights on a bottom longline vessel, combined with potential storage of offal, may significantly compromise the safety of the crew.

## **Cost of proposed measures**

- 228 DWG does not recommend relying on observer reports that vessels can meet requirements relatively easily and therefore at relatively low cost. DWG instead suggests MFish's economic staff engage on the matter with industry.

## **Need for balanced advice**

- 229 Forest & Bird notes that the IPP seeks feedback from the fishing industry on operational considerations of the proposed measures but does not seek feedback from stakeholders about whether or not the proposed measures will be adequate to reduce seabird mortalities. Forest & Bird suggests this imbalance needs to be addressed, with recognition that other stakeholders are also affected by the proposals.
- 230 Forest & Bird considers that a wider range of measures should form the starting point for the development of regulations, based on CCAMLR, ACAP and WCPFC successes to date. Forest & Bird considers key examples of best practice are omitted from the IPP or are not given full consideration. Forest & Bird is concerned that the measures in the IPP may not represent best practice or may be ineffective.
- 231 Forest & Bird emphasises the role that NGOs have in the future development of seabird advice, including being part of a technical advisory group for best practice mitigation measures and supporting cross-sector partnerships to implement mitigation measures and train fishers.

## **Best practice or minimum standards?**

- 232 Central to Forest & Bird's overall submission is whether the purpose of the IPP is to introduce a suite of best practice mitigation measures or to introduce "minimum effective mitigation". Forest & Bird does not consider that the paper is sufficient to achieve either objective.
- 233 Forest & Bird considers that the proposed measures fall well short of being best practice. However, the measures may serve to reduce incidental mortality if implemented and monitored effectively. Nevertheless, Forest & Bird is not confident that the measures will be implemented and monitored effectively.

## **Set net fisheries**

- 234 Forest & Bird considers the IPP does not provide a sufficient basis for decision making in relation to set net fishing effects on seabird populations, because it contains partial information on set net mortalities and possible effects on seabird populations. Forest & Bird recommends that the paper present set net

information in a similar level of detail to that for trawl and longline fishing. Forest & Bird also requests a timeline for dealing with set net fishery risk.

- 235 WWF accepts MFish's rationale for delaying consideration of measures until after the Minister has made a decision on the Hector's and Maui's Threat Management Plan.

## Surface longline fisheries

- 236 For a summary of submissions and MFish discussion, see appendix D.

## Bottom longline fisheries

### *General issues*

- 237 Area 2 suggests that regulations need to be split between large autoliners, medium sized autoliners and hand baited liners. Their comments refer only to hand baited liners and even within this category they consider that regulations must allow for considerable diversity.
- 238 Overall, Area 2 suggests that the proposed combinations of mitigation measures in the IPP could work in principle, but that the Gazette Notice would have to be very complicated to accommodate the vessel and target fishing variety. They suggest that highly prescriptive regulations will force fishers into non-compliance because it will be physically impossible for their vessels to comply.
- 239 Forest & Bird considers the information presented in the IPP on best practice in international bottom longline fisheries is inaccurate and only partially presents the requirements for CCAMLR fisheries. Forest & Bird recommends the paper be revised to elaborate the measures used in medium and high risk areas of the CCAMLR zone for consideration in New Zealand fisheries.

### *Streamer (tori) lines*

- 240 While rejecting the IPP proposals and favouring a longer-term alternative management framework, SeaFIC acknowledges that there is general industry consensus behind the implementation of mandatory streamer lines as an interim measure for bottom longline vessels.
- 241 SeaFIC accepts the potential need for measures, because:
- a) Bottom longliners currently have no regulated mitigation measures
  - b) There has been at least one high profile event of seabird incidental mortality from a bottom longline vessel; and
  - c) Streamer lines are generally accepted as an effective and practical mitigation measure for longliners, are already compulsory in the surface longline fleet and are deployed currently by some bottom longline vessels

- 242 SeaFIC would be prepared to work with government to finalise the wording of any regulatory requirements for streamer lines, with a general preference for flexibility over specificity.
- 243 LAWG, NSG, Sanford and DWG also support the mandatory use of streamer lines for bottom longline vessels. However, they reiterate the need for specifications to be vessel-specific and for streamer lines to be actively managed. LAWG, Sanford and DWG believe that best practice principles should be applied with agreed minimum standards. However, minimum standards should not be prescriptive regarding configuration or aerial extent of streamer lines. Area 2 is not opposed to streamer lines provided that specifications are kept to a minimum.
- 244 LAWG notes the Incidental Mortality Associated with Fishing (IMAF) group of CCAMLR agreed not to recommend a mandatory minimum aerial extent because external factors can affect the behaviour of the streamer line. LAWG offers their assistance in identifying suitable specifications for a streamer line. CCAMLR specifications may be appropriate if they can be scaled to the size of the vessel. DWG provides a draft streamer line specification for consideration.
- 245 Challenger Finfish is less enthusiastic about streamer lines, citing problems with the size of the vessel and suggesting that longline vessels present only a low risk to seabirds. They consider that further risk assessment is required before any regulatory action is taken.

#### *Night setting*

- 246 DWG does not support night setting as a mandatory mitigation measure. Rather, night setting should be part of a suite of measures documented by individual vessels, to be used when it is necessary and when it will impart a useful mitigation effect. Area 2 also considers that night setting should be an option, not a requirement.
- 247 Sanford and NSG do not support night setting as a mandatory measure because many target fisheries such as snapper, bluenose and ling occur during daylight hours. Sanford believe other mitigation measures are less disruptive and more effective.
- 248 LAWG recommends the practice of night setting but does not consider it should be mandatory because other mitigation combinations, such as line weighting and streamer lines, are more effective and less disruptive. LAWG, Sanford and NSG acknowledge the benefits of night setting for some albatross species but note that some species such as white chinned petrels and sooty shearwater will still feed at night.

#### *Line weighting*

- 249 DWG, NSG, Area 2 and Sanford are not opposed to line weighting provided that it is non-prescriptive, to incorporate the various longline methods and gear types. Industry cites variations in backbone diameter and density, method and

target species as reasons line weighting should be used only when effective and appropriate.

- 250 LAWG supports the use of line weighting when targeting bottom dwelling fish but notes that there may be issues with other species of fish, such as bluenose. Challenger Finfish also cite bluenose as a species that does not lend itself easily to being targeted by bottom-set lines and is normally taken by floated lines. Challenger Finfish considers that fishers would have to learn new ways to set up their gear, which may come at an economic cost and have safety implications.
- 251 Area 2 suggests that when bluenose and hapuka/bass are targeted, weights are typically placed every 50-70 hooks, whereas, for ling, weights are typically every 30 or so hooks. Weights are usually 4kg.
- 252 Challenger Finfish considers that the proposed line weighting regime shows a lack of knowledge or consultation with the industry. Fishers use different sizes of backbone and MFish should have made more effort to find this out before drafting the IPP.
- 253 Sanford and NSG are opposed to the use of sink rate requirements because sink rates are difficult to measure and enforce, and such requirements place a greater burden on vessels with small crews.

#### *Offal management*

- 254 DWG, NSG, LAWG and Sanford note there is no provision in the IPP for discarding of offal when hauling, provided that this occurs in a location away from the area of high risk to seabirds. LAWG notes that they are shooting or hauling 80% of the time. Storage of very large quantities of offal may raise practicality and safety issues.
- 255 DWG, LAWG and Sanford consider that larger vessels should be allowed to discard, or batch discard, on the opposite side of the vessel from the haul. DWG, Challenger Finfish, NSG and Sanford suggest that the inshore fleet will also require some flexibility in this regard. Area 2 suggests that smaller vessels could be allowed to discharge on the opposite side of the vessel.

## **Inshore trawl fisheries**

### *Need for measures*

- 256 Challenger Finfish consider that the IPP does not present evidence to suggest the inshore trawl fleet presents such a risk to seabirds that regulatory measures are necessary. They consider that the trawl warps are much less of a risk on smaller vessels. Regardless, they consider that a flexible range of mitigation options would be more beneficial, given the diversity of vessels in the inshore trawl fleet.

- 257 Area 2 consider that many inshore trawl vessels do not pose any threat to seabirds and should be able to self-exempt themselves from using mitigation, unless seabird interactions are occurring.

#### *Offal and discard management*

- 258 Challenger Finfish considers the suggestion that it is best practice to clean 'stickers' from trawl nets before shooting is misinformed. Not all trawl vessels have the space to do this efficiently if they lack net drums. They also assert that the retention of offal onboard small inshore vessels is not possible in a number of instances, citing safety concerns over blocking scuppers, vessel stability and manoeuvrability. Challenger Finfish also gives an example of vessels catching large amounts of fish that cannot be retrieved onto the vessel and would have to be brailed or the bag emptied gradually.
- 259 Area 2 notes that the inshore trawl fleet is diverse. Area 2 supports batch discarding when operationally safe to do so, but considers that the advantages of batch discarding of offal are probably more than offset by the requirement to return species to the sea. Further, Area 2 considers that holding offal would mean that significant non-QMS species would die instead of being returned to sea alive.
- 260 WWF supports the proposal to hold all offal while fishing in principle, provided it can be successfully implemented. If not practical to do so now, WWF supports a phased approach to removing offal discharge while fishing.
- 261 Sanford and NSG cannot support retaining all offal and fish onboard as defined in the IPP because of the impacts on their diverse inshore trawl fleet using the vessel length (28m) criteria.
- 262 Sanford cites the scampi trawl fleet as a good example of this problem. Sanford notes the majority of its scampi fleet is under 28 metres and has licensed processing factories. These vessels are captured by the inshore trawl regulations (hold all offal while fishing) but operate very differently to most inshore trawl vessels. Sanford and NSG suggest it may be more practical to define vessels by whether or not they have a factory onboard.

#### *Scampi fleet*

- 263 With the existing wording of the IPP, Sanford notes that only one of their vessels (the F/V Tongariro) would be permitted to batch discharge, as it is over 28 metres in length. There is no difference between the operations of the vessels except for a slight increase in processing capacity for the Tongariro. Sanford notes the proposed regulations contradict the scampi CoP and could lead to an increase in risk to seabirds.
- 264 Of more concern to Sanford is the requirement to only discharge when the fishing gear is out of the water. Sanford's scampi vessels do not currently lift their nets out of the water after each tow as only the cod ends are swung out of the water and emptied onto the deck. Changing fishing practices to comply with the proposals is estimated by Sanford to add an additional 25% to costs.

### *Alternative mitigation measures*

- 265 Sanford and NSG support the use of mandatory streamer lines for all trawl vessels as an interim measure, provided there is allowance for some tailoring of specifications for each vessel. Similarly, Area 2 is not opposed to back of boat devices but does not consider that specifications can be developed without more extensive analysis. This process is considered likely to take more than 6 months.
- 266 Challenger Finfish does not support the use of mandatory streamer lines as an interim measure because it considers trials are necessary to determine appropriate specifications. Regardless, streamer lines are a potential hazard to crew and vessel. Challenger Finfish notes that while some fishers have employed forms of mitigation device, others have found no need to because risk is very low for their vessel.
- 267 SeaFIC notes that there is no industry consensus on the need to specify in regulation particular measures for inshore trawlers, for the following reasons:
- a) There is no evidence to suggest that observed or reported levels of seabird interactions constitute a risk to seabird populations
  - b) There have been no significant incidents of seabird capture in inshore trawl fisheries and there is no reason to suggest that there will be such an incident in the near future
  - c) The inshore trawl fleet is extremely diverse. Measures that may be practical and safe for some vessels will be unnecessary, ineffective and potentially hazardous on other vessels
  - d) The challenges of observing the inshore trawl fleet make interim regulations difficult to enforce as offences will be difficult to detect

## **Deepwater trawl**

### *General issues*

- 268 WWF supports the retention of the existing regulations for deepwater trawlers. Offal management is considered difficult to regulate. WWF encourages the Ministry to consider whether the planned measures are workable and whether they will lower seabird bycatch in the short term, compared to continuing with a voluntary process.
- 269 In the medium term, WWF considers it may be more productive to signal MFish will be phasing out offal discharge during fishing, unless an alternative, equally effective, solution can be developed such as if mincing can be shown to be effective. Other solutions may emerge if the medium term intention of the Ministry is made clear.
- 270 Forest & Bird considers a wider range of measures should be proposed for regulation, citing net cleaning, minimising net time at the surface and seabird bycatch limits.

### *Risk from fresher trawlers*

- 271 DWG presents evidence to suggest that large (28m+) fresher trawlers are not a risk to seabirds. DWG notes the two vessels identified in their submission have undertaken more than 10,000 trawl shots, caught 75,000 tonnes of fish and by extrapolation (presumably from the stated 14% observer coverage) would have retrieved dead only 7 birds. DWG does acknowledge one “rogue event” where 15 birds were captured, suggesting that this was likely weather-related rather than due to vessel practices.

### *Risk from factory trawlers*

- 272 Aurora provides evidence that their vessel, the Tomi Maru 87, has only caught 3 birds in 12 trips (one year of fishing), including 5 trips where observers were on board. They reject the need for further regulations and consider that the bird baffler that they use is sufficient mitigation.

### *Use of classifications*

- 273 DWG and NSG cite difficulty with the method and length classifications used in the IPP (28 metre being used to differentiate inshore and deepwater trawl vessels), noting that some vessels will operate both inshore and in deepwater over the course of the year. DWG also note that some smaller vessels also operate factories or meal plants.
- 274 Sanford, also, find the 28 metre differentiation unhelpful. Five of their six scampi trawlers fall below this size, with the sixth vessel being above it. However, vessel practices across the fleet are almost identical. This is outlined in more detail in the above section on scampi vessels.
- 275 DWG finds the vessel “classification” used in the batch discharging proposals in the IPP to be misleading and often technically wrong. In particular, the use of the word “class” is objected to, given that it has legal and technical meaning. DWG also stresses that where a vessel is built has no bearing on its capacities or potential seabird mitigation options. DWG considers the IPP is focussed on the current fleet and does not consider other vessel types that may or may not enter the fishery.
- 276 DWG, NSG and Sanford consider that rather than the proposed classification, vessels’ offal management practices should be described in terms of the waste stream being generated by the vessel and its engineering and design specifications, as well as the need to meet mandatory safety requirements.

### *Batch discharging*

- 277 Forest & Bird considers that batch dumping of offal is as yet unproven, suggesting instead that prohibition of offal discharge at all times during fishing should be considered.
- 278 DWG considers batching is a developing method that requires further proving. It is inappropriate to regulate a specific batch release time when information regarding what is or should be a minimum standard is not certain. DWG notes

that no information indicates either a 20 or 60 minute batch discharge is useful or reasonable.

- 279 DWG also considers that specifying a minimum standard could lead to lowering the average and will not be as effective as vessel-specific measures. With the exception of some vessels for engineering reasons, VMPs currently have a batch discharge option as either a primary or secondary contingency measure.
- 280 Furthermore, DWG, NSG and Sanford note that different vessels in the fleet have different trip, target and processing methods as well as having different catch rates, which generate different volumes of waste. The time period and frequency of discarding needs to be flexible to reflect these waste streams, and the risk posed to the seabirds. DWGs prefer a framework consisting of guidelines each vessel documents and follows, with suitable incentives and legal sanctions to deliver compliance.
- 281 Sanford supports batching offal in principle but suggests the times and locations should be specified in the VMP for the particular vessel. Sanford, along with NSG and Aurora therefore support DWG's work on batch offal control.
- 282 Aurora provides a detailed explanation of how their vessel cannot comply with the proposed batch discharge regime because it will not be possible to discharge 60 minutes or 30 minutes worth of offal in the allotted 5 minute period. However, Aurora supports new entrants to the fishery being assessed on their compliance and understanding of seabird interactions prior to registration.

#### *Holding offal while shooting and hauling*

- 283 DWG stresses that the definition of shooting and hauling trawl gear must be developed with reference to risk to seabirds. In general, when shooting, risk is minimised once the net is below the surface – DWG suggests that the trawl doors hitting the water could be a suitable proxy. When hauling, a logical definition might be when the main winches are engaged to retrieve the gear. However, this may be excessive for deeper trawls and a defined time or length of warp left to haul may be a better measure. DWG, NSG and Sanford do not support the “minute rules” and “1 nautical mile mitigation measures” surrounding shooting the net, as proposed.
- 284 While DWG supports the principle of not discharging during shooting and hauling, it considers voluntarily raising the standards around this practice, where technically possible, is the best way forward. Sanford supports the principle of not discharging during shooting and hauling, and supports the work DWG is doing in this area.
- 285 Aurora's vessel automatically discharges water and offal from the pumps as required for safety reasons. This cannot be safely turned off for any period of time. During surimi production, the press and meat separator cannot be stopped during shooting and hauling, for food safety reasons.

- 286 DWG, NSG and Sanford suggest MFish may have overlooked the current practice in some fisheries such as scampi of leaving the net in the water at all times, even when unloading catch. DWG and NSG also note it may not be possible to lift the net out of the water for reasons including vessel size, catch size, weather conditions, lifting gear on the vessel, unplanned and unmanageable technical failure or vessel configuration.

#### *Release of species on the Sixth Schedule*

- 287 DWG, NSG and Sanford note the proposals contradict current practices under the sixth schedule for spiny dogfish. Spiny dogfish may legally be discarded alive or dead under the sixth schedule, but may only be discarded alive at certain times under the Gazette Notice proposals. DWG requests clarification of this issue.

### **Monitoring and reporting requirements**

- 288 SeaFIC considers that the scope of the proposals in this section is too narrow, because they only focus on providing 5 days notice of intention to fish. Observer coverage is only one element of monitoring and reporting. SeaFIC therefore welcomes specific discussions on a wider set of proposals relating to reporting and observer coverage. SeaFIC considers robust monitoring and reporting is a high priority.
- 289 SeaFIC acknowledges that the IPP does recognise that “notification alone will not improve observer coverage”, however, it fails to discuss these other issues, including:
- a) Coverage must be planned and sought from a provider of observer services
  - b) Capacity must exist to provide the required observers; and
  - c) Any safety issues that arise through carrying an additional person must be addressed
- 290 SeaFIC questions some assertions about previous coverage, and notes one reason for poor coverage in the past is lack of planned activity (as well as inability to deliver). SeaFIC agrees current levels of observer coverage in many inshore fisheries do not allow good estimation of incidental seabird mortality. Nevertheless, SeaFIC notes MFish has still been able to conduct risk assessments based on existing data. Risk assessments are considered the best platform for prioritising observer coverage.
- 291 Rather than aiming to increase observer coverage across the board, SeaFIC suggests a more considered approach is required, such as intensive, rotational coverage of fisheries. SeaFIC emphasises that monitoring and reporting of protected species must:
- a) Integrate statutory reporting and observer coverage; and
  - b) Clearly define the objectives of protected species observer coverage and consider ways to achieve these in a cost-effective manner

- 292 SeaFIC agrees that observer coverage in the surface longline fleet has improved since notification requirements were implemented. SeaFIC suggests improved coverage has come about through cooperation between government and industry and through a pragmatic interpretation of the notification requirements.
- 293 SeaFIC is not aware of any other fisheries where MFish is struggling to achieve planned coverage. SeaFIC therefore does not favour duplicating the requirements for the remaining inshore fisheries. SeaFIC proposes more detailed discussions on observer coverage needs, to allow more tailored proposals for improvements. Any reporting regime must be robust enough to prevent avoidance behaviour but flexible enough to take into account legitimate changes in planned fishing activity.
- 294 SeaFIC recommends the benefits of a notification regime be considered alongside the bycatch monitoring and reporting regime. Consideration needs to be given to the objectives and role of both statutory reporting and observer coverage.
- 295 DWG, NSG and Sanford oppose the 5 day notification measure as worded in the IPP for the following reasons:
- a) Fishing plans commonly change or are delayed due to weather. The decision to leave port may be made as late as an hour before leaving, at any time of day or night
  - b) The definition of “fishing activity” is subjective. Clarification is needed about whether it refers to leaving to go fishing or to putting the fishing gear in the water
  - c) The definition of ‘intentions’ is subjective. It would not be uncommon for the intention of many fishing vessels to be to fish every day of the year.
- 296 DWG, NSG and Sanford submit that desired levels of observer coverage could be obtained more effectively by regionalising observer coverage. Observers could live in major fishing ports, allowing them to be on standby to leave within hours of notification. This would also save costs if the vessel did not depart at the expected time or date.
- 297 Challenger Finfish considers it is a failing of government that observer coverage has been so poor in the inshore fisheries and that there is subsequently uncertainty over the scale of seabird captures. Government should concentrate on collecting robust information from as many vessels as possible that are able to carry observers.
- 298 Challenger Finfish states that the industry is being cost-recovered for a number of days and would like to see some more appropriate outcomes from that cost, rather than an IPP proposing measures that are not warranted.
- 299 Area 2 cannot identify any way by which small vessels dependent on weather and vagaries of crew availability can predict their fishing 5 days in advance. Furthermore, Area 2 does not believe that observer coverage is required in

every fishery all of the time, meaning that the bulk of notifications would end up in the rubbish bin.

- 300 WWF encourages MFish to consider requiring all vessels to be in a position to legally carry an observer or, if too small, be able to be monitored by electronic means. WWF considers that a lead time of one to two years would mean that industry would support the testing and refining of electronic monitoring.
- 301 WWF also encourages MFish to respond to industry concerns about the high cost of observer coverage, by investigating placing observers in ports or by doing a a cost effectiveness audit to demonstrate industry are getting good value for money.

## Appendix C: Seafood Industry Council submission



The New Zealand Seafood Industry Council Ltd

SeaFIC submission on

### **Seabird Mitigation Measures for Trawl and Longline Vessels – Initial Position Paper**

23 November 2007

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#### **Introduction**

1. The New Zealand Seafood Industry Council Ltd (SeaFIC) is the primary umbrella organisation representing the generic interests of all sectors of the New Zealand seafood industry. Our shareholders collectively represent around 95% of the seafood industry by value. This submission has been prepared in consultation with our shareholders and the wider industry.
2. The seafood industry has a strong interest in the development and implementation of effective measures for avoiding and mitigating incidental seabird mortality. The industry has frequently taken a leading role in funding, developing and implementing measures to mitigate seabird interactions. As acknowledged in the IPP, these measures have been effective in reducing seabird interactions across a range of fisheries. We agree, however, that there is a need for continual improvement in seabird mitigation practice and for effective mitigation measures to be extended across all fisheries and all operators where there is a risk of fishing-related adverse effects on seabird populations. For this reason, SeaFIC supports the desired outcome of the IPP – i.e., that all vessels using the methods of trawl and longline within New Zealand's EEZ will be fishing using effective seabird mitigation measures.
3. SeaFIC is unable, however, to support the specific regulatory proposals in the IPP. We do not consider that prescribing detailed mitigation methods in regulations is the best way of achieving the desired outcome and reducing seabird interactions. As an alternative approach to regulation, in this submission we propose a regime consisting of vessel-specific seabird mitigation plans, informed by a set of agreed guidelines, and backed up by an industry training programme.

This regime would be integrated with Fisheries Act regulations so as to enable effective enforcement and prosecution for non-compliance.

#### **Considerable industry support for alternative proposal**

4. There is considerable industry support for the approach set out in this submission. The proposal has been developed through two industry workshops – the first organised by the Deepwater Group Ltd (Nelson, 6 November, 32 participants with a focus on skippers, vessel operators and Commercial Stakeholder Organisations (CSOs)), and the second organised by SeaFIC (Wellington, 12 November, 20 participants, with a focus on CSOs). The relevant CSOs have distributed the proposal to their members for feedback. While there is cross industry support for the proposal in principle, in practice some CSOs and individual fishers have proposed specific regulations for mitigation devices for the following reasons:
  - Many fishers believe that the Ministry is determined to regulate detailed and specific measures and that regulations will be promulgated regardless of risk, industry submissions or industry mitigation initiatives; and
  - Some fishers prefer the simple obligation of having to comply with a regulation (regardless of its effectiveness) to the more complex responsibility of having to deal in an appropriate way with reducing seabird interactions on their vessel.
5. SeaFIC considers that both of these reactions are useful (if unfortunate) illustrations of the negative impact that the proposed regulatory approach has in terms of discouraging industry responsibility and initiative.

#### **Partnership approach to further development**

6. SeaFIC, with the assistance of CSOs and industry members, has developed the industry's alternative proposal as far as possible in the limited time available for submissions. We would welcome the opportunity to discuss the proposal with Ministry officials, so as to ensure that it can be further developed and implemented in a manner that meets the Ministry's needs as well as the industry's. The alternative proposal is based in part on the Deepwater Group's Vessel Management Plans (VMPs) and in part on the successful FishSAFE programme, which was developed through a partnership between ACC, Maritime NZ, and the seafood industry. We would like to think that a similar partnership approach between MFish and the industry will make a significant contribution to improving environmental performance with respect to incidental seabird mortality in New Zealand's fisheries.

#### **Structure of submission**

7. The remainder of this submission is in four parts, as follows.
  - First, we address our two fundamental concerns with the IPP – i.e., that an urgent regulatory intervention is not required, and that regulated mitigation measures are not the most effective solution.
  - Second, we set out the key elements of the industry's alternative approach.
  - Third, we consider issues of implementation and transitional arrangements.

- Fourth, we comment on the proposed monitoring and reporting requirements, including the extension of the trip notification for observer placement to all trawl and longline vessels.
8. SeaFIC’s submission does not address the specific regulatory proposals in the IPP (aside from the proposal on trip notification). As noted in earlier correspondence,<sup>10</sup> our preference has been to spend industry time constructively on developing an effective approach to mitigation, as set out in this submission, rather than providing reactive comment on the technical details of regulatory proposals that we believe to be fundamentally inappropriate. Should the Ministry continue to pursue a regulatory approach to seabird mitigation, SeaFIC reserves the right to submit on the details of the regulatory proposals in the IPP. As noted in our earlier correspondence (to which we have not received a formal response), we require additional time in order to comment meaningfully on the regulatory proposals.

## **(1) Two fundamental concerns with the IPP**

### **Urgent regulatory intervention is not required**

9. The IPP does not establish that urgent regulatory intervention is required in order to meet Fisheries Act obligations with respect to seabirds. The Fisheries Act requires that populations of associated or dependent species (such as seabirds) should be maintained above a level that ensures their long-term viability (section 9). It also requires that adverse effects of fishing on the aquatic environment should be avoided, remedied or mitigated (section 8). The Fisheries Act anticipates and provides for a level of effects of fishing on seabirds. These effects are lawful unless they are identified as being “adverse”. The requirement to avoid, remedy or mitigate adverse effects of fishing on seabird populations is not about avoiding every isolated event of incidental seabird mortality. Rather, adverse effects must be identified in terms of overall consideration of the range and occurrence of the particular seabird species.
10. In contrast to these clear statutory obligations, the IPP appears to be based on the presumption that an observed capture of seabirds (even a small number of birds) in a particular fishery is an “adverse effect” in terms of the Fisheries Act and that this justifies regulatory intervention. SeaFIC emphasises that an incident of or a risk of fishing-related seabird mortality is not equivalent to a risk to seabird populations (or an adverse effect on seabird populations).
11. Irrespective of the issue of adverse effects on seabird populations, we would at the very least expect the IPP to provide a structured analysis of risk in order to justify the call for urgent regulatory intervention. Instead, the IPP provokes a sense of urgency simply by asserting the existence of risk. No information is presented to support the assertions of risk or urgency. SeaFIC considers that urgent regulatory intervention is unnecessary and unjustified for three main reasons, each of which is considered in more detail below:

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<sup>10</sup> SeaFIC letter of 9 November 2007 to Jonathan Peacey, MFish: Seabird mitigation measures – timeframe and submission process

- There is no risk assessment or other information presented in the IPP to suggest that current levels of seabird interactions will place seabird populations in critical danger in the timeframe over which the IPP proposals are intended to operate;
- Existing mitigation measures have been effective in the majority of cases, and are subject to continual industry-initiated improvement; and
- Recent isolated incidents of significant seabird mortality need to be viewed and dealt with in their appropriate context.

*No assessment of risk*

12. The IPP makes a number of assertions with respect to risk, and uses these to justify proposals for urgent regulatory intervention, for instance (our emphasis):
  - *recent significant incidents of seabird incidental mortality in the bottom longline and surface longline fleets have **highlighted the risk that fishing without effective mitigation can pose to threatened species of seabirds*** (paragraph 7);
  - *MFish considers that there is **sufficient immediate and ongoing risk to seabirds from vessels that do not deploy effective mitigation measures on a voluntary basis that urgent introduction of some mandatory mitigation measures may be necessary*** (paragraph 9);
  - ***The risk posed by vessels not using effective mitigation measures was recently highlighted** by a vessel fishing using the method of bottom longline on the Chatham Rise, where a large number of albatross... were caught over the course of a few days fishing* (paragraph 37); and
  - *Although seabird incidental mortality estimates are highly uncertain, and are likely to have reduced from these levels in some fisheries since [2004/05] MFish considers that **all trawl and longline vessels pose some level of risk to seabirds and that the cumulative effect of this risk may be significant, particularly for more vulnerable species of seabird*** (paragraph 40).
13. However, nowhere in the IPP is there any structured analysis to back up these assertions of risk. Appendix A is said to contain “more information on the risk to seabirds from longline, trawl and set net fisheries”, but instead simply lists birds that have been recorded as caught in the relevant fisheries, and describes the manner in which incidental mortality may occur – this does not constitute a risk assessment. No attempt has been made to link the observed or estimated levels of interaction with the threat status or population trends of particular seabird populations or to assess whether the estimated levels of interaction constitute an “adverse effect” in the context of the Fisheries Act. There is no mention of the positive impacts of fishing activity in providing a food source for seabirds. Neither is there any attempt to extrapolate estimates to assess whether seabird populations will become critically endangered over the time scale envisaged in the IPP (i.e., the next 12 months).
14. Isolated reported incidents (e.g., paragraph 37 of the IPP), indicate that there is a observed level of seabird mortality – they do not demonstrate that there is a risk to the long term viability of seabird populations. As noted above, the assumption in the IPP appears to be that because fishing-related seabird mortalities occur, a risk exists that may justify the imposition of urgent regulatory measures across

nearly all fisheries. In the absence of a structured consideration of risk that is specific to particular fisheries and seabird populations, this conclusion simply cannot be drawn.

15. SeaFIC also wishes to record our concern about some of the sources of information that are used in the IPP. At paragraph 38, the IPP refers to EEZ wide estimates of fishing-related mortalities from trawl and longline fisheries in 2004/05. The source of these estimates is not given. Under Ministry of Fisheries project ENV2004/04 EEZ wide estimates of seabird captures (not mortality) were attempted. However that project reported estimates only to the 2003/04 fishing year. Further, our understanding is that the Aquatic Environment Working Group agreed that while the work represented an interesting methodological development, the actual estimates should not be used without further work that was not undertaken within the project.

*Existing mitigation measures are effective*

16. Practical mitigation measures are generally already known and successfully applied in the majority of fisheries. We note, however, that levels of compliance with existing measures – whether regulated or industry-initiated – are unknown. The scope and success of existing measures is acknowledged (at least in part) in the IPP and more generally by the Ministry. For instance, the acting Chief Executive recently told the Primary Production Committee that the fishing industry was “responding superbly well” in reducing the level of seabird interactions.<sup>11</sup> Existing non-regulatory measures are subject to ongoing review and improvement in response to practical experience.
17. Existing mitigation measures include:
  - i) Regulated mitigation measures for trawl vessels greater than 28m (requires use of authorised seabird scaring devices);
  - ii) Regulated mitigation measures for tuna longline vessels (requires use of approved seabird scaring devices);
  - iii) Gazette Notice seabird sustainability measures for surface longline vessels (specifies various combinations of mitigation measures);
  - iv) Southern Bluefin Tuna Charter Vessels Code of Practice for the Avoidance of Incidental Seabird Bycatch (developed under NPOA by New Zealand Japan Tuna Co, includes tori lines, night setting and other measures);
  - v) Code of Practice for the Mitigation of Incidental Seabird Capture in New Zealand Ling Autoline Fisheries (includes tori lines, offal management and additional measures);
  - vi) Vessel Management Plans for deepwater factory trawlers, including offal management and other mitigation procedures (Deepwater Group initiative, building on Hoki Fishery Management Company and Squid Fishery Management Company Code of Practice for Reducing Incidental Catch of Seabirds 2004);
  - vii) South East Finfish Management Ltd Commercial Set Net Fishers Voluntary Code of Practice 2005/06 (includes measures primarily related to yellow eyed penguins);

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<sup>11</sup> MFish presentation to Primary Production Committee (annual review), 8 November 2007.

- viii) Scampi Vessels Code of Practice for Reducing Incidental Catch of Seabirds (applies to all Sanford scampi trawlers, and includes VMPs, mitigation devices, offal management and additional measures);
- ix) Code of Practice for Inshore Trawlers (applies to Sanford inshore trawlers and includes provisions relating to tori lines, offal management and reporting); and
- x) Draft Code of Practice for the Mitigation of Incidental Seabird Capture in New Zealand Tuna Fisheries, Nov 2007 (includes tori lines, night setting, offal management and additional measures).

*Isolated incidents do not merit a generic regulatory response*

18. The seafood industry does not condone significant seabird capture events, particularly where mitigation measures have not been implemented (regardless of whether under regulation or a Code of Practice), or where fishing practices have not been altered as a consequence of seabird capture. However, recent isolated incidents of significant seabird mortality need to be viewed and dealt with in their appropriate context and should not result in regulatory regimes that apply to all operators, regardless of performance.
19. Isolated incidents of seabird mortality such as those that have prompted the preparation of the IPP should be dealt with through measures that are targeted at the source of risk – i.e., in the first instance, the vessel operator concerned, and then the particular fishing method or fishing area concerned (if it is established that the extrapolated level of capture generates a risk to particular seabird populations). It is completely unacceptable that all trawl and all longline vessels should bear the costs of additional regulatory restrictions as a result of the actions of a handful of vessels, particularly when the industry has been successful in implementing mitigation approaches that have significantly reduced the level of incidental seabird catch in many of these fisheries.

*Urgent regulatory intervention not only unnecessary, but counter-productive*

20. Not only is an urgent regulatory intervention unnecessary, SeaFIC considers that in the present circumstances it is likely to be counterproductive. We believe that it is preferable to “do it once and do it right”. From the government perspective, a comprehensive approach to managing seabird interactions, developed through the proposed seabird standard and revised NPOA, is imminent. The industry hopes to be able to progress the approach set out in Part Two of this submission in a manner that is compatible with meeting the proposed seabird standard. Both of these frameworks are likely to be in place by the end of 2008.
21. The efforts of both government and industry are therefore more productively focused on making sure the comprehensive management proposals meet the desired objectives, rather than debating contentious short term regulatory proposals that have been developed in a hurry and that cut across and pre-empt a more strategic, properly considered approach. SeaFIC considers that the regulation of short term measures will undermine the incentives for industry-initiated proposals such as that set out in this submission, will not reward good

operators for their current practice, and will not encourage continual improvement.

### **Regulated mitigation measures are not the best approach**

22. SeaFIC considers that regulation of specific mitigation measures is not the most effective way of reducing seabird interactions – either as an interim measure or in the longer term. The Ministry suggests that the proposed regulatory measures have the following three “advantages” (IPP para 33). SeaFIC considers that none of these “advantages” stacks up. Our comments are provided beneath each point.

i) *The IPP measures manage the immediate risk to seabirds from vessels not currently using effective mitigation measures*

An “immediate risk” to seabirds has not been established. Loosely targeted regulations, developed in a hurry and without proper characterisation of the interactions that they are intended to manage, are unlikely to result in sensible and effective mitigation measures to manage any risk that might exist. Vessels not currently using mitigation measures are no more likely to apply mitigation as a result of a regulatory requirement than as a voluntary measure, particularly if the regulation is not well suited to the circumstances of the vessel.

ii) *The IPP measures allow fishers failing to use specified measures to be prosecuted*

The industry agrees that fishers who do not apply effective mitigation measures should be subject to penalties where an offence has been committed. That is why our alternative proposal includes a regulatory interface to enable effective enforcement and prosecution. We do not believe, however, that an effective compliance regime (including the ability to prosecute) requires detailed regulatory specification of mitigation measures. We also note that MFish has not prosecuted vessels that appear to have breached seabird regulations in the past.

iii) *The IPP measures reduce the likelihood that the reputation of the fishing industry will be damaged by the behaviour of a minority of fishing vessels that do not apply voluntary mitigation measures.*

As noted above there is a higher likelihood that fishers will comply with properly developed mitigation measures that they feel some ownership of, than with imposed regulations that do not make practical sense. The application of regulated mitigation measures provides no guarantee that seabird captures will be avoided. The reputation of the industry in this respect depends at least in part on how the government responds to isolated incidents of significant seabird capture, including through media coverage.

23. The Seabird NPOA is based on the concept of stakeholder solutions where possible, regulation where necessary. This concept has been reaffirmed by previous Ministers of Fisheries at the seafood industry conference<sup>12</sup>. SeaFIC agrees that regulation can be an appropriate response to persistent and

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<sup>12</sup> Hon Pete Hodgson, Acting Minister of Fisheries, address to the Seafood Industry Conference, Wellington, 18 May 2005.

demonstrated non-compliance with industry measures. Regulation may also be appropriate if implemented at the request of the industry. However, imposed regulation should be the last resort, and not the first response. SeaFIC considers that regulated mitigation measures have the following disadvantages:

- Regulations impose a “one size fits all approach” and do not take account of variation across vessels, fisheries, fishing practice or areas;
  - They are inflexible as they do not allow for nor encourage innovation or continual improvements in best practice;
  - Regulations do not encourage industry “ownership” of managing the interaction and neither do they encourage individual responsibility or thoughtful vessel-specific consideration and application of mitigation approaches;
  - The focus of both industry and government becomes compliance with a regulation rather than reduction of seabird mortality – this is inefficient as well as potentially ineffective; and
  - Regulations penalise all operators to the same extent, regardless of the current practice of those operators. Good practice is not rewarded.
24. Even when applied as an interim measure only (as suggested in the IPP), a Gazette Notice pre-empts and locks in place subsequent regulation. Regulations require certain behaviours which then act to demotivate the development of alternative, more effective, mitigation methods. The use of regulations is particularly inappropriate when there has been:
- no proper risk assessment on a fishery basis;
  - superficial analysis of potential mitigation methods; and
  - consequently poorly designed mitigation regulations that are not the best practice for the fisheries concerned.

## **(2) Alternative industry proposal**

25. The proposed industry approach builds on existing mitigation practice and existing industry-government initiatives, in particular, FishSAFE in the inshore sector and Vessel Management Plans (VMPs) in the deep water sector. The proposed approach consists of compulsory vessel-specific seabird mitigation plans, informed by a set of agreed Guidelines, and backed up by an industry training programme. The proposal is integrated with the Fisheries Act regulations so as to enable effective enforcement and prosecution where non-compliance is demonstrated. In this section of the submission we set out the key elements of the industry proposal and then discuss transitional and implementation issues.
26. SeaFIC considers that the main benefits of the alternative industry approach, in comparison with specifying particular mitigation methods in regulation, are as follows:
- it is vessel-specific, and therefore allows for flexible, tailor-made definition of best practice, based on vessel-specific risks;
  - it includes a training component to encourage changed behaviour;
  - it encourages fishers to adapt their mitigation measures to changing circumstances (e.g., in response to seabird capture);
  - it encourages an attitude of individual responsibility and continual improvement;

- it will result in an integrated and consistent process across all fisheries, which is preferable to the current *ad hoc* combination of inconsistent regulations, gazette notices and codes of practice; and
- it is based on a partnership approach between industry and government and therefore sets a useful precedent for constructive management of the adverse effects of fishing on the aquatic environment.

### **Guidelines**

27. Under the industry proposal, seabird mitigation practices would be based on a set of Guidelines which would act as an information resource to assist in the preparation of vessel-specific seabird mitigation plans (SMPs). The Guidelines would contain both generic and fishery-specific components, building on existing industry solutions and work done by Southern Seabird Solutions and other organisations such as Birdlife International. The Guidelines would not have statutory status. However, if in the process of preparing the Guidelines, minimum standards for seabird mitigation in particular fisheries are identified, then these minimum standards could be set out in the Guidelines and given particular weight in the approval process for SMPs (see below).
28. It is proposed that the Guidelines would be developed through an industry-government partnership process. An agreed joint process would also be used to periodically review and update the Guidelines. SeaFIC also recommends that NGO involvement in this process should be encouraged, provided constructive engagement could be ensured. Essentially the process needs to provide a constructive environment for bringing best national and international seabird mitigation experience and expertise together into a practical framework for New Zealand fisheries.

### **Vessel-specific seabird mitigation plans (SMPs)**

29. The primary element of the industry proposal is that all affected vessels will be required to have and implement a vessel-specific seabird mitigation plan (SMP). The scope of coverage of this requirement would in the first instance be all trawl and longline vessels (although see comments on staged implementation below). The SMP approach could subsequently be extended to other vessel types with seabird interactions (e.g., set netting) if these were considered to contribute to a risk to seabird populations.

#### *Content of SMP*

30. An SMP would contain a level of detail commensurate with the level of risk posed by the particular fishing operation. For example, SMPs might range from the comprehensive VMP already adopted in the deepwater trawl fleet, to a one page plan for a small inshore trawler with low risk of seabird interaction. The Guidelines (discussed above) would inform the content and development of SMPs. The contents of an SMP could include the mitigation measures to be implemented on the vessel, contingency plans (i.e., what to do if specified events occur), reporting requirements and so on.

#### *Approval of SMP*

31. SMPs would be approved based on:
- an assessment of consistency with the Guidelines and compliance with any minimum standards in the Guidelines; and
  - confirmation that the proponent of the SMP has completed appropriate training.
32. There are a number of potential options for the approval process, including (1) approval through an internal industry process, (2) approval by the Ministry of Fisheries, and (3) approval through a joint or multi-party process. All or any of these processes could potentially incorporate a self assessment along the lines of that currently used in the FishSAFE programme.<sup>13</sup> SeaFIC considers that further work is required to determine the most appropriate approval process (particularly as the approval process is closely linked to any subsequent compliance requirements). We note that some external (i.e., non-industry) involvement in the process would assist in establishing the credibility of the regime and may provide better integration with MFish compliance requirements. We also note that it would be counter-productive to require SMPs to meet a set of regulated specifications, as this would defeat the purpose of the flexibility allowed for in the vessel-specific approach.

*Monitoring of compliance with SMP provisions*

33. SeaFIC acknowledges that monitoring compliance with mitigation measures on vessels can be challenging, particularly on small inshore vessels. However, monitoring is a challenge regardless of whether mitigation measures are specified in regulations or in an SMP. We propose that an SMP will include a self-auditing mechanism (including incident reporting) with occasional external audits and compliance checks during routine inspections. This approach is similar to the FishSAFE model.<sup>14</sup> Self-auditing, review and implementation of corrective actions is also a feature of the Deepwater Group's VMP process.<sup>15</sup> A "no fault" incident reporting system would help identify circumstances in which incidental seabird mortality might occur and what can be done to avoid it, thereby improving both individual performance and feeding back into the Guidelines revision process.
34. We note that the industry approach, with its focus on individual responsibility and continual improvement, is more likely to lead to accurate reporting of seabird mortality (and, therefore, better information to support management) than regulated mitigation measures. The proposal should assist in changing attitudes

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<sup>13</sup> The approval process for FishSAFE (which results in a 10% ACC discount) entails (1) attending a training workshop, (2) working with a mentor to develop and implement vessel-specific guidelines, (3) filling out a self-assessment form to submit to ACC to demonstrate that the guidelines have been applied on the vessel in question.

<sup>14</sup> Under the FishSAFE regime, vessel owners/operators are occasionally asked to fill out a self-assessment on their implementation of the FishSAFE Guidelines and may be audited by ACC. Maritime NZ also checks implementation of the Guidelines during their routine audits and inspections.

<sup>15</sup> The DWG requires operators to submit to the DWG copies of all review documentation on a regular basis. Review documentation in VMPs includes a review form with various checks to be carried out, a review procedure to prepare a report on performance and identify whether changes are required, and a procedure to be followed if the internal audit identifies non-conformance with the VMP.

from “if I report this I will be punished” to “if I report this we can see where best practice needs further improvement”.

## **Training**

35. SeaFIC considers that industry training is a vital element of the proposal as it ensures that best practice can be adjusted to individual circumstances. For the inshore fleet, the port-based FishSAFE model has been particularly effective in reaching owners and operators of smaller vessels, and we recommend that a training regime for inshore vessel operators, possibly entailing the achievement of unit standards, could be built on the existing FishSAFE institutions. Several options for delivery could be explored, including (1) a one-day port-based generic workshop on seabird mitigation, followed by working with a mentor to develop a vessel-specific plan, or (2) a one-day workshop that is more directly focused on assisting vessel operators to prepare an SMP for their vessel. For the deep water fleet, delivery of seabird mitigation training could be based on existing training initiatives.
36. The use of a mentoring programme or extension officers working directly with vessel operators to develop and implement SMPs is likely to be an effective option, but is also more costly. Funding options that can be explored include forming a partnership between NGOs, MFish and the Seafood Industry Training Organisation (SITO) to develop and deliver training using the FishSAFE model. By including unit standards SITO can fund training as well as provide quality and moderation systems to demonstrate evidence of people’s knowledge of seabird mitigation. SITO already has unit standards in place which cover the consequences of seabird incidental capture, methods for the reduction of seabird incidental capture, handling techniques and reporting requirements. SITO has the resources and networks established to ensure quality delivery and assessment through the target sectors.
37. As noted above, it is proposed that a training component would be part of the SMP approval process rather than a separate regulatory requirement.

## **Regulatory interface**

38. The industry supports the need to ensure that this proposal is effectively integrated with the regulatory framework in order to enable the specification of offences and the application of appropriate penalties where offences are committed. The issues around designing an appropriate regulatory interface are complex and, due to time constraints caused by the tight submission deadline, the regulatory suggestions below are by necessity at a high level only. Further development of the regulatory interface would need to occur through a joint process between the industry and the Ministry.

### *General approach*

39. As a general approach to the design of the regulatory interface, SeaFIC proposes that:

- i) The basic regulatory requirement would be specified either via amendment to the Fisheries (Commercial Fishing) Regulations 2001 or via conditions on fishing permits. The advantages and disadvantages of these two options are outlined below;<sup>16</sup>
- ii) The person with the regulatory obligation (e.g., permit holder, vessel operator or master) must ensure that an approved SMP is carried by the vessel at all times. It would be a regulatory offence to operate an eligible vessel without an approved SMP;
- iii) The person with the regulatory obligation must also ensure that the vessel is operated in accordance with the terms of the approved SMP. We note that requiring compliance with the terms of an SMP is the more challenging part of the regulatory interface. We recommend that it should not be an offence to fail to comply with every detailed provision of an SMP and MFish should not be responsible for policing and enforcing all aspects of an SMP. Nevertheless it should be an offence to contravene key SMP provisions (for example, it would be an offence to not implement any mitigation at all). This suggests that there might be a two tier aspect to SMPs, with some elements reflecting (enforceable) minimum specifications identified in Guidelines, and other SMP elements being more discretionary and subject only to internal audit procedures. It would therefore be an offence to operate the vessel in a manner that is inconsistent with specified key elements of the SMP;
- iv) The training component would not be directly tied into the regulatory regime, but would instead be a requirement for the approval process for an SMP;
- v) A system of corrective actions for minor breaches of SMP conditions (possibly non-compliance detected through self assessment, audits, routine inspections etc, but which do not entail a failure to meet a specified minimum standard) would encourage improved practice. Corrective actions might include insertion of particular provisions in the vessel's SMP, or additional training requirements. This would operate like a system of warnings, with the regulatory offences and penalty regime being invoked if persistent non-compliance was detected or if minimum specifications were not adhered to.

*Option 1 – Fishing permit conditions*

40. SeaFIC considers that the Chief Executive's discretion under s 92 of the Fisheries Act (which provides for the imposition of conditions on fishing permits) is wide enough to encompass conditions relating to SMPs. We also note that there is a precedent for this approach in a recent MFish proposal for high seas permits to incorporate conditions to implement the SPRFMO interim measures relating to VMEs. The conditions include a requirement for a vessel specific authorisation, which is proposed to be subject to an assessment based on a fishing plan.

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<sup>16</sup> We have explored the possibility of implementing measures through conditions on vessel registration, but concluded that vessel registration is not a good fit for implementing what are essentially sustainability measures.

41. The imposition of an SMP regime through permit conditions has the following advantages:
  - It does not require separate regulations and can therefore be implemented, and amended in the future, relatively quickly; and
  - It can allow flexibility in terms of the SMP approval process. For example, delegation of approval of SMPs to a third party such as an industry body or a joint industry/government structure is arguably contemplated by s94.
  
42. The main disadvantages of imposing SMPs as permit conditions are:
  - inflexibility in terms of responsibility – the obligation is primarily on the permit holder rather than vessel operators or masters, so the permit holder would have to be responsible for all fishing vessels operating under the authority of the permit; and
  - inflexibility in terms of penalty for contravention of conditions (maximum penalty of \$100,000 fine and vessel forfeiture).
  
43. There are a variety of ways permit conditions could be drafted to incorporate conditions relating to SMPs. Indicative conditions could include:
  - The permit holder must ensure that any fishing vessel fishing under authority of the permit is not used to fish in New Zealand fisheries waters without carrying an approved seabird mitigation plan for that vessel;
  - The permit holder must ensure that any fishing vessel fishing under authority of the permit complies with the terms of the approved seabird mitigation plan; and
  - The permit holder must ensure that any commercial fisher fishing under authority of the permit allows the inspection of the approved seabird mitigation plan at any reasonable time by a fisheries officer or observer.
  
44. The approval process and requirements for SMPs would not need to be stated in the permit conditions, but guidelines and/or an assessment framework would need to be developed and disclosed to permit holders. For example, the approval of the SMP by the chief executive or a delegated body could be granted subject to the decision maker being satisfied that:
  - The SMP is consistent with the Guidelines, including any minimum standards stated in the Guidelines; and
  - The applicant has a training certificate from an organisation approved by the Chief Executive.
  
45. As noted above, contravention of permit conditions renders a person liable to conviction, a maximum penalty of \$100,000 fine and vessel forfeiture. While this might be considered an appropriate penalty for failing to have an approved SMP or serious failures to comply with the terms of the SMP, it is not appropriate for minor inconsistencies with the terms of an SMP. One possible option may be that the SMP specifies what constitutes contravention of the terms of the SMP for the purpose of breach of the condition. For example, the SMP could incorporate a requirement for corrective actions on certain events, failing which the permit holder is deemed not to have complied with the terms of the SMP for the purpose of the conditions.

*Option 2 – Regulations*

46. Regulations could be drafted to impose requirements relating to SMPs. These could either take the form of either new regulations or amendments to Part 4 of the Commercial Fishing Regulations. The regulation would replace the current seabird mitigation device regulations and would require carrying of, and compliance with, an SMP approved in accordance with a process set out in a Circular.
47. The main advantages of regulations are:
  - Flexibility in terms of specifying responsibilities of permit holders, operators or masters, and in relation to particular classes of vessels or fishing methods;
  - Flexibility in terms of what constitutes contravention and penalties;
  - The ability to use a Circular to set out the approval process, including potentially approval by a delegated body.
48. The main disadvantage is that regulations would take longer to implement than permit conditions relating to SMPs.
49. Regulations could incorporate the following matters:
  - Definition of terms;
  - The application of the regulation (e.g., by class of vessels, fishing method etc);
  - The requirements to carry an approved SMP at all times when fishing and comply with the terms of the approved SMP;
  - Authorisation for the chief executive, by notice in the Gazette, to issue, amend or revoke a Circular which provides the general criteria or guidelines for the drawing up of a SMP and sets out the process for the approval of a SMP;
  - The responsibilities of the permit holder or vessel operator or master in relation to ensuring that approved SMPs are carried and complied with; and
  - The penalties for contravention of the obligations or responsibilities. As with the permit conditions option, we consider that it would be possible for the SMP to incorporate a requirement for corrective actions on certain events, failing which the permit holder is deemed not to have complied with the terms of the SMP for the purpose of the regulations.

### **(3) Implementation and transitional arrangements**

50. Further work is required on the details of the industry proposal and, as proposed above, we would prefer to undertake this work in partnership with government. One of the matters to be considered is how such a proposal would be implemented in practice and any transitional arrangements that might apply in the interim.
51. Neither industry, nor training providers nor government has the capacity to implement a compulsory SMP/training approach across all trawl and longline vessels as an immediate requirement. This suggests a staged process for implementation, starting with fisheries or vessel categories of highest risk. Risk, in this case, might be defined in terms of risk of seabird interactions, taking account of existing uptake of mitigation measures. Alternatively, the requirement to comply could be universal, and a temporary exemption process provided for

individual vessels or categories of vessels or fisheries, again based on an assessment of relative risk.

52. SeaFIC also notes that an important part of the implementation process will be to review the existing mix of regulatory and gazette notice mitigation requirements to evaluate whether they are still necessary or desirable under an approach based on Guidelines and SMPs. Regulation that is unnecessary or inconsistent with the Guidelines/SMP approach should be repealed.

*Transitional measures*

53. SeaFIC is of the view that any transitional or interim measures such as interim gazette notices, regulations, or voluntary measures or initiatives should lead towards and enhance the longterm strategy (as proposed above) rather than detract from it. For this reason we are not generally in favour of interim regulations such as those proposed in the IPP. We are aware, however, that some CSOs or groups of fishers are considering interim regulations and we believe that this remains an option where there is industry support and the regulations are practical.
54. The only area in which SeaFIC is aware of an industry consensus in favour of a regulated mitigation measure is the specification of approved tori lines for bottom longline fisheries. This is a potential area for interim regulation because:
- Bottom longliners currently have no regulated mitigation measures;
  - There has been at least one relatively high profile event of incidental seabird mortality by a bottom longline vessel;
  - Tori lines are generally accepted as an effective and practical mitigation measure for longliners, are already compulsory in the surface longline fleet, and are deployed currently by some bottom longliners.
55. In contrast, there is no industry consensus on the need to specify in regulation particular mitigation measures for inshore trawlers, for the following reasons:
- There is no evidence to suggest that observed or reported levels of seabird interactions with the inshore trawl fleet constitute a risk to seabird populations;
  - There have been no significant incidents of seabird capture (i.e., incidents of the scale that has caused the Minister concern in longline fisheries) in inshore trawl fisheries, and there is nothing to suggest that such incidents will occur within the timeframe of any interim regulatory measures;
  - The inshore trawl fleet is extremely diverse in terms of vessel size and specification, target species, fishing practice, location of fishing (and overlap with potentially vulnerable seabird populations), and existing use of mitigation measures. Measures that may be practical and effective for some vessels, will be unnecessary, ineffective and potential safety hazards on other vessels; and
  - The challenges of observing the inshore trawl fleet make interim regulations difficult to enforce as offences will be difficult to detect – particularly in relation to regulated processes such as offal and discard retention (as proposed in the IPP).

56. We are aware that there has been some industry consideration of the specifications of a tori line requirement for bottom longliners. If necessary, SeaFIC and other industry representatives would be prepared to work with the Ministry to finalise the wording of a regulatory requirement for tori lines for bottom longliners. We note as a general point that any interim regulations should be drafted as general requirements that allow for a range of approved devices rather than highly specified measures. The current requirements for tuna longline and trawl vessels in regulations 58, 58A, 58B and 58C of the Fisheries (Commercial Fishing) Regulations 2001 provide a useful template.
57. The IPP also contains measures in respect of surface longline vessels. This fishery is already subject to interim measures recently introduced via gazette notice. We consider that these further proposed changes are a good illustration of the need for a more flexible system to develop and propagate effective seabird mitigation practice. While SeaFIC is unable to make specific comments on the proposed changes at this time, we recognise that short term changes to the currently gazetted measures may be useful if these do not detract from the long term strategy outlined above.

#### **(4) Monitoring and reporting requirements**

58. Paragraphs 147 to 157 of the IPP come under the heading of “Monitoring and reporting requirements”. Despite this broad heading, the discussion focuses entirely on observer coverage of inshore fisheries and the only measure proposed is to require inshore trawl or BLL vessels (< 46 m length) to provide 5 days notice of their intention to fish.
59. To properly address the proposed measures, SeaFIC considers that it is necessary to take a wider view of the monitoring and reporting regime. Observer coverage, while important, is only one part of that regime.
60. The reporting of the accidental death or injury of seabirds during commercial fishing operations is a requirement of the Wildlife Act 1953. The introduction of the Non-fish/Protected Species Catch Return (currently scheduled for 1 April 2008) is intended to provide a single, coherent regime for the reporting of non-fish and protected species by-catch.<sup>17</sup> SeaFIC considers that the statutory reporting of seabird by-catch through a regulated Ministry of Fisheries form should be considered an integral part of the “monitoring and reporting” regime.
61. While SeaFIC recognises that observer coverage in inshore fisheries has generally been low and patchy, the assertion at paragraph 149 of the IPP that “2006/07 is the first year that any inshore trawl coverage has been sought and achieved” is incorrect. For example, observer coverage of “inshore trawl” fisheries has been previously occurred in the Cook Strait hoki fishery and the Canterbury inshore trawl fishery.

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<sup>17</sup> SeaFIC. Submission on Review of Sustainability Measures and Other Management Controls for the April 2006 Fishing Year Initial Position Paper Of 22 December 2005. 17 February 2006.

62. Although the IPP does recognise (paragraph 154) that “notification alone will not improve observer coverage”, it does not discuss the other factors involved in achieving “appropriate levels of observer placement and coverage”. For example, in order to achieve observer coverage:
- coverage must be planned and sought from a provider of observer services;
  - capacity must exist to provide the required observers; and
  - any safety issues that arise through carrying an additional person, particularly on small, inshore vessels, must be addressed.
- The low predicted observer coverage for inshore fisheries in 2007/08 (Table 3, p.24 or the IPP) arises primarily through a lack of planned days, rather than through an inability to place observers on vessels that might be addressed via a notification process.
63. SeaFIC agrees that current levels of observer coverage in many New Zealand fisheries, especially inshore fisheries, do not allow good (accurate and precise) estimation of incidental seabird mortality. Thus determining the risk to individual seabird species is difficult. Nevertheless, we note that that it has been possible to carry out assessments of the risk posed to seabirds by New Zealand fisheries using existing observer data, most notably under the recent Ministry of Fisheries project ENV2005/01<sup>18</sup>.
64. Although risk assessments, such as that carried out in ENV2005/01, inevitably highlight uncertainty in existing information they are nevertheless invaluable in prioritising management, including monitoring requirements, and thus deserve greater consideration in the planning of a “monitoring and reporting” regime.
65. Protected species bycatch events tend to be rare, and clustered. These features imply that very high levels of observer coverage are required to estimate bycatch to acceptable levels of precision<sup>19</sup>. SeaFIC suggests that, rather than simply aiming for a general increase in observer coverage, a more considered approach to observer monitoring of protected species bycatch is required. The need to observe a large number of zero captures to precisely quantify bycatch rates, together with the significant costs of observer coverage, implies that intensive, rotational coverage may be the most effective solution.
66. SeaFIC notes that much of the recent protected species observer coverage has been carried out under the auspices of the Department of Conservation’s Conservation Services Programme (CSP) (although all the Ministry of Fisheries observer coverage for other purposes including compliance and stock assessment generates relevant data). CSP have recently recognised the need to rethink their approach to protected species observer coverage and are intending to hold discussions with both MFish and SeaFIC to advance this issue.

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<sup>18</sup> We acknowledge that the final report from ENV2005/01 is not yet available. Please refer to SeaFIC’s submission (dated 5 November 2007) on the Research Coordinating Committee Meeting of 16 and 17 October 2007 and Proposed Research Projects for 2008/09, in particular our comments on the proposed project PRO2008/01, for further comments and practical suggestions for progressing protected species risk assessments.

<sup>19</sup> See, for example, Smith, M.H., and Baird, S.J., (2005a). Observer coverage required for the estimation of incidental capture of seabirds in New Zealand commercial fisheries. Report prepared by NIWA for the Ministry of Fisheries (ENV2001/01 Objective 3) and presented to the Aquatic Environment Working Group.

67. In essence, SeaFIC wishes to emphasise that the monitoring and reporting of protected species bycatch must:
- Integrate statutory reporting and observer coverage; and
  - Clearly define the objectives of protected species observer coverage and consider ways to achieve these in a cost-effective manner.
68. The nature of the monitoring regime required must take account of the environment in which it is operating. SeaFIC's proposal for an alternative framework for regulating the seabird mitigation practices will both educate fishers in the importance of reporting seabird bycatch, and would expect to make regular use of that information in reviewing the effectiveness of mitigation measures. Our expectation is that the proposal to focus on individual responsibility, thoughtful vessel-specific mitigation approaches, and a desire for continuing improvement is likely to create an environment where open and transparent reporting can be fostered. In contrast, blanket regulations and punitive responses create a disincentive to honest reporting and have significant implications for the required compliance and enforcement regime.
69. SeaFIC considers that a robust bycatch monitoring and reporting regime is a high priority. Despite the interim focus of the proposed measures, we are disappointed by the narrow focus of this aspect of the IPP. SeaFIC works on an ongoing basis with the Ministry of Fisheries to ensure rigorous fisheries reporting systems, and we would welcome specific discussions on the wider framework.

#### **Trip notification for observer placement**

70. SeaFIC considers that observer coverage is, alongside statutory reporting, a core part of the fisheries monitoring and assessment regime. SeaFIC supports effective mechanisms for achieving required coverage, especially as these should increase the efficiency of the observer programme and therefore ensure that the coverage is delivered in a cost-effective manner.
71. SeaFIC recognises that observer coverage in the surface longline fisheries has improved following the introduction of a notification requirement in early 2007. SeaFIC continues to have a number of concerns over the wording of the notice that put this requirement in place, and notes that the improved coverage has come about only through efforts by MFish and industry to adopt a pragmatic interpretation of the requirement. This has primarily involved a system of quarterly notification of fishing intent.
72. SeaFIC understands that, having addressed coverage of the surface longline fishery, there are no other fisheries where the Ministry's observer programme is currently struggling to achieve the planned days. As a result SeaFIC proposes that instead of simply duplicating the 5 day notification requirement for trawl and longline vessels of less than 46m, a more detailed review is undertaken of the operation of the notification process for surface longliners with a view to better defining needs and considering how these may be met in a nationally consistent, equitable, and cost-effective manner.

73. The nature of a notification process must take specific account of the coverage to be achieved. We note that different approaches to notification may well result if there is a move to more intensive, but rotational, observer monitoring of protected species interactions with fisheries rather than the current nationally sparse approach. The introduction of the Non-Fish and Protected Species Catch Return may create specific monitoring needs.
74. Having properly defined these needs then consideration can be given to the best means of achieving the required notification. If a national system is required then this may fit best within the reporting regulations. Likewise flexible options should be considered to implement the requirement in a cost effective and efficient manner, including electronic systems.
75. The current proposal is essentially a statement of policy (i.e. that notification can be beneficial and should be introduced). SeaFIC questions the appropriateness of using Gazette Notices (with the associated penalty regime) for promoting a policy, without considering the details of how that policy could best be implemented.
76. SeaFIC understands that the desired outcome from the perspective of planning observer coverage is to obtain comprehensive notification of fishing *intentions* on a regular basis, to allow more detailed follow up and co-ordination with those vessels then selected for coverage. As a result it is necessary to design a system that recognises that intentions can legitimately change and, especially in the inshore fleet of smaller vessels, that plans must remain flexible to take account of weather in particular. Nevertheless any comprehensive notification system must be robust to the any attempt to avoid notification requirements, or undermining of the system through the notification of false intentions.
77. SeaFIC considers that a variety of potentially effective notification mechanisms are worthy of consideration, but that these are best addressed after the requirements of the monitoring and reporting regime are fully defined.
78. SeaFIC therefore proposes that:
  - Notification requirements are not imposed immediately on inshore vessels by Gazette Notice, on the grounds that these are currently unnecessary to achieve planned coverage; and
  - The benefits of a notification regime are considered in detail alongside a fuller specification of the bycatch monitoring and reporting regime, which details the objectives of this regime and the role of both statutory reporting and observer coverage in achieving these objectives.

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## Appendix D: Surface longline submissions and discussion

### *Summary of MFish proposal*

- 1 Seabird mitigation measures for surface longliners were revised in January 2007. The measures now in place are:
  - a) Commercial fishers set surface longlines only at night
  - b) Commercial fishers using surface longlining must deploy a streamer line consistent with existing regulations at all times whilst setting
- 2 Commercial fishers must also notify MFish of their intention to use the method of surface longlining at least five days' prior to departure.
- 3 MFish proposed in the IPP that surface longline fishers could be given the opportunity to choose from a wider range of mitigation measures, as follows:
  - i) Night setting plus streamer lines (the status quo); or
  - ii) Line weighting plus streamer lines; or
  - iii) Line weighting plus night setting (only between the third and first quarter of the moon).
- 4 Line weighting has not been extensively trialled in surface longline fisheries in New Zealand, but is generally recognised internationally as an effective mitigation measure for such fisheries. Allowing fishers to set during the day – providing they used line weighting – would give additional flexibility to fishers whose operations are constrained by the existing mitigation measures (which were established as interim measures after a single trip in which high numbers of birds were caught).

### *Submissions*

- 5 Sanford does not have vessels in the surface longline fishery, but receives fish as a licensed fish receiver. Sanford supports non-prescriptive measures required to reduce seabird bycatch in this fishery, including the use of streamer lines. Sanford supports the new specifications for streamer lines that came into effect in November 2007. The streamer line specifications are seen to provide for vessel-specific flexibility. Sanford also notes that fisheries restricted to night setting can become economically unviable. Further, the mitigation measure may be ineffective for night feeding seabirds such as white chinned petrels.
- 6 TMA is the commercial stakeholder organisation for albacore fishers. As such, TMA has been involved in discussions with tuna surface longline fishers. TMA emphasises the difficulties caused by proposals that apply to all vessels across the board, without taking into account the different types of vessels and gear in use.

- 7 SeaFIC notes the surface longline fishery is already subject to interim measures introduced via gazette notice. SeaFIC is unable to comment in detail because of the short timeframe for consultation. Nonetheless, short term changes to the currently gazetted measures may be useful, as long as changes do not detract from its proposed long term strategy for mitigating seabird bycatch.
- 8 WWF supports option (i) (the status quo); and option (ii) (line weighting plus streamer line) – after an appropriate weighting regime has been proven. Option (iii) (line weighting plus night setting (only between the third and first quarter of the moon)) is considered to make the regulations too complicated, without adding much value. WWF notes it would take several days to remove weights from a longline, which it considers would make option (iii) impractical.
- 9 WWF believes trials of different line weighting regimes should be undertaken on selected vessels, with 100% observer coverage. Extensive trials have been carried out overseas, but WWF notes New Zealand has a different suite of seabirds and may require heavier weights to achieve acceptable bycatch levels.
- 10 Forest & Bird considers the advice on measures considered to be best practice is incomplete, because it does not discuss several key examples where reductions in seabird mortality have been demonstrated. Whereas the initial position paper suggests a selection of two from three possible mitigation measures, the Australian eastern tuna and billfish fishery recommends six measures in high risk areas, including concurrent use of:
- i) Night setting
  - ii) Line weighting
  - iii) Prohibition of offal discharge during setting
  - iv) Seabird bycatch limits
  - v) Streamer lines
  - vi) Thawed baits
- 11 Forest & Bird further provides a list of additional measures commonly applied in bottom longline fisheries to consider for surface longline fisheries:
- i) Seasonal fishery closures
  - ii) Line weighting or sink-rate specification of 0.3m/s
  - iii) Restriction of offal discharge to the opposite side of the vessel than the hauling area during line hauling
  - iv) Haul curtain
  - v) Retention of hooks from discards

**Table 1: Forest & Bird submission: Mitigation requirements (regulated, or required as mandatory measures) for surface longline fisheries relevant to New Zealand fisheries where demonstrated decreases in seabird mortality have been documented (shaded) in comparison to the IPP proposal for measures. Requirements for various RFMO fisheries and the New Zealand Japan Tuna fishery voluntary code of practice are included. Measures near the top of the table are likely to make a more significant contribution to reducing seabird bycatch and the information on which this assessment is based is more certain than those near the bottom of the table.**

	Australian Eastern Tuna Billfish Fishery (S of 25°S)	Hawaii swordfish fishery	USA (Pacific N of 23°N)	WCPFC <sup>20</sup>	CCSBT	IOTC	IATTC	New Zealand surface longline (current)	NZ Japan tuna voluntary COP (2005)	IPP Proposals (choice of 2)
Night setting	x	x <sup>21*</sup>		(x)		x	x	x	x	x
Streamer lines	x	x <sup>22</sup>		(x)	x	x	x	x	x	x
No offal discharge at setting	x			x					x	
Line weighting / sink rate	x	x	x	(x)			x			x
Bird bycatch limit	(0.05 birds/1000 hooks) for fleet									
Thawed baits	x	x*	x						x	
Side setting + bird curtain		x		(x)						
Blue -dyed bait		x*	x	x			x			
Underwater setting devices				x			x		x	
Deep setting line shooter		x	x	x						

<sup>20</sup> Choice of two measures, including one of those bracketed

<sup>21</sup> and \* to be used when not side-setting

<sup>22</sup> Specific bird scaring lines designed for use with side setting are described.

- 12 Forest & Bird also submitted a technical review paper by the BirdLife International Global Seabird Programme, which provides additional information on measures used elsewhere that could be considered best practice (see **Error! Reference source not found.**). The paper further notes several measures for which there is little empirical evidence of reductions in seabird mortality, including:
- i) Blue-dyed bait
  - ii) Underwater setting devices
  - iii) Deep setting line-shooters
- 13 Forest & Bird recommends these measures not be included in the list of measures for consideration.
- 14 MFish discussed the proposals with surface longline fishers at a workshop on 30 October 2007. Fishers were concerned the options outlined still did not provide them with enough flexibility. Setting at night is difficult over summer when nights are shorter, so other options that would not entail compulsory night setting would be welcomed.
- 15 Safety was the main concern in relation to both streamer lines and line weighting. The value of using streamer lines was particularly questioned during the darkest phases of the moon (when it was assumed birds would not see the line, and safety concerns arose because operators were unable to see the line). Fishers noted that use of line weighting has resulted in a death in New Zealand. Fishers did not consider safety equipment such as helmets were a practical way of mitigating the safety risks.
- 16 Blue-dyed bait was suggested as an alternative. Blue-dyed bait is one of the mitigation measures fishers in the western and central Pacific may select under the rules of the Western and Central Pacific Fisheries Commission. Fishers considered blue-dyed bait had been successfully used to reduce bycatch, and was more practical than some of the other options.
- 17 Fishers also commented on the use of data in the initial position paper. They considered the numbers did not accurately reflect the domestic fleet bycatch, since the figures appeared to be inflated by a limited number of seabird bycatch incidents that were assumed to involve charter vessels. Overall fishers felt the domestic fleet had a low rate of seabird bycatch.

#### *MFish discussion*

- 18 Some submitters emphasised the need to avoid mitigation measures that are too closely specified. Others indicated additional or alternative measures they considered to be best practice.

#### *Use of data in the initial position paper*

- 19 The IPP contained several examples of recent bycatch in surface longline fisheries. The figures that were used did not differentiate between bycatch in domestic tuna fisheries from that on larger charter vessels. The charter vessels

are larger than domestic vessels, and their effort levels are higher. Further, in the examples used the charter vessels had fished earlier than usual and in new areas, which resulted in higher than usual bycatch. These vessels have since adopted additional mitigation measures. This context was not given for the figures provided in the initial position paper.

### *Streamer lines*

- 20 Recent revisions to the minimum specifications for streamer or tori lines in surface longline fisheries reflected concerns about practical difficulties in implementing the previous specifications. This process demonstrated that specifications can be developed in conjunction with industry that provide sufficient flexibility for individual vessels, whilst nonetheless specifying minimum standards. Sanford Ltd's submission recognises this approach.
- 21 At the surface longline workshop, fishers commented it was unnecessary and potentially unsafe to require streamer line use during the darkest phases of the moon. There was strong support for streamer line use around the full moon.
- 22 MFish recognises safety concerns arise particularly when fishers are unable to see the streamer line's movement, and therefore cannot quickly react to tangles that may occur. However, there are reasons for retaining a streamer line even on the darkest nights. Some seabirds are still present and actively foraging at such times. At least some seabirds are still able to target baited hooks, even on dark nights. Further, streamer lines provide both a visual and a physical barrier to seabirds accessing hooks, and at least the physical barrier is likely to still be effective.
- 23 One suggestion that may make streamer line use safer on dark nights is to attach a light stick at intervals along the line, so it is visible. It is proposed that fishers will now also have another option available, in that they could fish during the day using line weighting.

### *Line weighting*

- 24 The proposal to allow vessels the option of setting during the daytime, provided that they use line weighting as an additional mitigation measure, was intended to allow additional flexibility for fishers. The majority of tuna longliners have typically fished predominantly at night. However, particularly over the summer months when nights are shorter, night setting can cause operational difficulties (e.g. if any problems with gear occur, there may not be time to complete a set during the night). For example, fishers may wish to start setting in the afternoon and continue into the night. Fishers targeting swordfish may also prefer to set during the day.
- 25 Day setting does increase the risk of seabird bycatch. How effectively line-weighting offsets this increased risk is not well known in New Zealand surface longline fisheries. Most submitters had at least qualified support for allowing fishers to set during the day, provided they were using line weighting. Forest & Bird noted line weighting is regarded as best practice elsewhere, including in the Australian Eastern Tuna and Billfish Fishery. WWF supported line

weighting in principle, but wanted to see operational trials before it was introduced in this fishery.

- 26 A number of experiments have shown that increasing the sink rate of longline hooks reduces the incidental capture of seabirds, because it reduces the period in which seabirds can access hooks. In the Hawaiian pelagic fishery, weighted branchlines reduced contact rates by 93% and 91% for black-footed and Laysan albatrosses respectively. Vessels in the Australian eastern tuna and billfish fishery fishing south of 25 degrees latitude are required by law to use line weighting. In 2005 in this fishery, 12 seabirds were reported on 617,000 observed hooks, and in 2006, 8 seabirds on 505,000 observed hooks. Prior to introduction of line weighting, the fishery was failing to meet the government's Threat Abatement Plan target of 0.05 seabirds/1000 hooks, despite a requirement to night set.
- 27 Line weighting is not new to New Zealand fisheries. Although most surface longliners do not currently use line weighting, prior to the mid 1990s it was relatively common for fishers to use weighted branchlines. Further, some studies have been done on line weighting in New Zealand fisheries. For example, Anderson and McArdle compared weighted and unweighted hooks on a 60m New Zealand ex-Japanese longliner.<sup>23</sup> This study showed that weighted hooks reached over double the depth of unweighted hooks over a 30 second period.
- 28 Although trials have not specifically assessed optimal line weighting regimes in New Zealand, this work has been done elsewhere, including Australia. Line weighting regimes are fairly standardised internationally. The initial proposal was to use the specifications used by the Western and Central Pacific Fisheries Commission. MFish considers use of these specifications is reasonable. Observer data can be used to monitor use and effectiveness of line weighting. Proposed trials of safe weights (see below) may also provide experimental data on the effectiveness of specific line weighting regimes.
- 29 Despite widespread use in other fisheries worldwide, concerns about the safety of line weighting remain. Using weighted swivels at the hook end of branchlines can be dangerous under certain circumstances. Sharks caught on the line can bite through the branchline, and if it is under tension, the swivel can become a projectile and travel at high speed towards the vessel, creating a danger to crew. The following practices are used to mitigate risks:
- a) Hauling the line through a ring at waist height is considered to reduce the risk of serious injuries to the head and upper body (in comparison to hauling fishing lines through a block at or above head height).
  - b) The risk of injury can be reduced through good coordination between the crew.

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<sup>23</sup> Anderson, S.; McArdle M. 2002: Sink rate of baited hooks during deployment of a pelagic longline from a New Zealand fishing vessel. *New Zealand Journal of Marine and Freshwater Research* Vol. 36: 185–195.

- c) In Australia, some crew wear safety helmets with face visors to protect themselves if a hook or swivel does fly back towards the boat.
  - d) A UK company has developed a “Smart Lead” that falls off the branchline if the weight reaches dangerous speeds. This safe weight will be tested on New Zealand fishing vessels in 2007 and 2008.
- 30 Safety considerations are very important for fishers to take into account when assessing whether or not to use line weighting. Nonetheless, MFish believes sufficient options are available to mitigate any risks to crew safety posed by line weighting.
- 31 The initial position paper provided an option for fishers to fish at night with line weights (rather than a streamer line). This option was only for specified times of the moon cycle (because around full moon, birds are more active and streamer lines are considered necessary). WWF suggested this option would not be practical, because it would take time for fishers to weight their gear, and they would not subsequently want to remove weights for different moon phases.
- 32 MFish envisaged that if fishers wished to line weight, they would probably do so at all times, given that line-weighting also increases the time gear is at fishing depth. At certain times (around the full moon), they would also need to use a streamer line. However, there has been limited support from fishers for this option, and in practice the additional flexibility this provides may be minimal. MFish does not propose to proceed with option (iii) for these reasons.

#### *Blue-dyed bait*

- 33 Fishers have identified blue-dyed bait as a potential mitigation measure they would be interested in using. Blue-dyed bait is one of the options in fisheries under the jurisdiction of the Western and Central Pacific Fisheries Commission. However, Forest & Bird did not consider blue-dyed bait to be a best practice measure.
- 34 One concern with blue-dyed bait is that seabirds may initially avoid blue-dyed bait, but may subsequently become habituated to it. If this were to occur, mitigation benefits could be lessened. Nonetheless, preliminary studies do indicate some promise in blue-dyed bait. For example, a recent Australian study over a period of three months showed a 68% reduction in seabird interactions with blue-dyed squid, compared to non-dyed squid. The same study showed that when presented to seabirds, only 3-8% of blue-dyed squid baits were struck compared to 75-98% of non-dyed squid bait.<sup>24</sup> Blue-dyed squid is thought to be a more effective deterrent than blue-dyed fish.
- 35 Because of conflicting evidence about the efficacy of blue-dyed bait, MFish proposes to establish trials on dyed bait and other potential mitigation techniques in conjunction with fishers and the Department of Conservation.

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<sup>24</sup> Cocking, LJ, Milburn, PJ, Brando, V and Double, MC (in prep). The potential of blue-dyed bait to reduce seabird bycatch in pelagic longline fisheries.

Such trials would occur under special permit, for example to allow fishers participating in the trial to fish during the daytime using only a streamer line and the dyed bait during the course of the trial.

### *Additional measures*

- 36 Forest & Bird suggested various other measures for consideration, notably those used in the Australian eastern tuna and billfish fishery. Since release of the initial position paper, MFish has started consultation on a broader strategy for seabird mitigation, including revisions to the National Plan of Action–Seabirds management framework, and a seabird standard. These documents will set the context for consideration of any additional mitigation measures that may be required. The seabird standard proposes a seabird bycatch limit, which will be operationalised for surface logline fisheries through development of a fisheries plan for highly migratory species. The fisheries plan will assess whether or not the fishery is likely to meet the seabird standard. As part of that process, additional management measures – including those proposed by Forest & Bird – may be considered.
- 37 Other measures are currently included within a draft Code of Practice for the Mitigation of Incidental Seabird Capture in New Zealand Pelagic Longline Fisheries. SeaFIC is leading work on the code of practice, in conjunction with fishers and the Ministry of Fisheries. The draft code of practice includes measures suggested by Forest & Bird, such as use of thawed bait, offal management, and retention of hooks from discards. Another measure that could be considered for inclusion in the code of practice is the use of a haul curtain (to discourage birds from the bait during hauling).
- 38 Larger charter vessels have traditionally appeared to have more interactions with seabirds than the domestic fleet. MFish already works closely with this sector to mitigate seabird bycatch. For example, in addition to mandatory measures (night setting and streamer lines), New Zealand Japan Tuna Company’s charter vessels (which account for a significant part of the southern bluefin tuna fishery) employ the following measures as a condition of the 2008 chartering agreement:
- i) At least one additional tori line (including at least one tori line of 250m or more);
  - ii) All branch lines are to be weighted;
  - iii) Bait to be thawed;
  - iv) While hauling, offal to be discharged from port side;
  - v) Bird frighteners to be used during hauling;
  - vi) A maximum bycatch level across the charter fleet; and
  - vii) Each vessel’s access to southern bluefin tuna quota is restricted, with additional quota contingent on maintaining seabird bycatch within prescribed limits;
  - viii) Specific areas are closed to fishing;

ix) Additional observer coverage

- 39 Additional voluntary measures, including the use of explosive shells or fireworks, are encouraged. New Zealand Japan Tuna Company is also working with vessel masters to shorten the length of time vessels are in New Zealand waters, so vessels spend less time in high risk southern areas.
- 40 MFish has the ability to impose additional conditions of registration to manage large-scale charter vessels, including for the purpose of seabird mitigation. Where necessary, this would allow mitigation measures to be targeted at those sectors of the fishery considered most likely to interact with seabirds, rather than across the board.

*Revised proposals for surface longline fisheries*

- 41 MFish recommends the following seabird mitigation measures for surface longline fisheries. Fishers may employ:
- Either
- i) Night setting plus streamer lines (the status quo);
- Or
- ii) Line weighting plus streamer lines.
- 42 The latter option will be implemented through gazette notice, which will replace the existing Fisheries (Seabird Sustainability Measures) Notice 2007.
- 43 MFish also recommends trials on blue-dyed bait and other potential mitigation techniques begin in surface longline fisheries. Any other seabird mitigation measures that may be required will be assessed as part of development of the fisheries plan for highly migratory species, which will operationalise the seabird standard (once approved).