

STALLING OF SET NETS IN THE KAIPARA HARBOUR - FINAL ADVICE

Executive Summary

- 1 This paper provides final advice to you on the review of regulation 14 of the Fisheries (Auckland and Kermadec Areas Commercial Fishing) Regulations 1986 that permit commercial fishers to stall set nets of a particular configuration in the Kaipara Harbour.
- 2 Stalling is the process whereby a net is set in such a manner that any fish enclosed or entangled by the net is left stranded by the falling tide; or is enclosed or entangled in such a manner that there is an insufficient depth of water at either end of the net to enable the fish to pass from the waters above the net to the waters below the net.
- 3 Regulation 61 of the Fisheries (Commercial Fishing) Regulations 2001 provides that commercial fishers must not set nets so that stalling occurs, and must ensure that stalling does not occur while the nets are set. However, the Kaipara Harbour is the only area of New Zealand where commercial fishers may stall nets, but only where the set net in question are of a prescribed configuration. The regulatory exemption is provided through regulation 14 of the Fisheries (Auckland and Kermadec Commercial Fishing) Regulations 1986.
- 4 The historical rationale for the exemption related to advice from local commercial fishers who indicated that the nature and extent of the tides, and the extent of the tidal mudflats within this harbour, made the retrieval of set nets difficult, without the likelihood of stalling at least a partial amount of net. The configuration of the nets specified in the exemption reflected the commonly used set nets of some decades ago.
- 5 There is no obvious reason to continue to allow stalling of nets in the Kaipara Harbour as a special case above other harbour environments that have similar extensive tidal mudflats (e.g. the Manukau Harbour). MFish believes that stalling of set nets has the potential to cause a significant amount of fish wastage. When fish are left out of the water in stalled nets for too long they deteriorate and undersized bycatch can not be returned to the water alive. Fish may then be discarded and not reported. Further, the fishing equipment used by commercial set netters has changed over the decades since the stalling exemption was initially allowed.
- 6 An Initial Position Paper (IPP) was released for consultation on 29 June 2007. The Ministry of Fisheries (MFish) proposed three options: 1) retain the status quo; 2) require attendance at stalled nets in the Kaipara Harbour; or 3) prohibit stalling in the Kaipara Harbour.
- 7 Option 1 (status quo) is supported by the Northern Fisheries Management Stakeholder Committee Limited (the Northern Stakeholder Group), Sanford

Limited and the New Zealand Seafood Industry Council Limited (SeaFIC), who submit that there is no risk to sustainability of fish stocks caused by stalling. These industry members submit that commercial fishers depend on stalling their nets in the Kaipara Harbour to utilise the fisheries resources, and prohibiting stalling will have a significant impact on these fishers.

- 8 MFish notes that a data extract of catch effort forms submitted for the 2004-05 through to the 2006-07 fishing years indicates that few commercial set netters in the Kaipara Harbour would meet the specified net configurations for stalling to be legally undertaken. Most commercial set netters use nets longer than 540 m in length, and grey mullet set netting is undertaken with net mesh less than that specified by the regulatory exemption (i.e. 100 mm). The stalling provision is therefore most likely to be used legitimately for the fishing of flatfish and rig.
- 9 Te Ohu Kai Moana Trustee Ltd (TOKM) submits that the safety issues which led to stalling being allowed need to be recognised. MFish notes the regulation that permits stalling in the Kaipara Harbour was not introduced to address a safety issue, but to provide greater flexibility for commercial fishers who were sometimes collecting their nets in situations where nets might begin to stall. Commercial fishers set nets in other harbour environments without similar safety issues being raised as a concern, and some submitters believe that these concerns are no longer valid due to modernised, more efficient fishing gear and boats, and fishing practices.
- 10 Option 2 requires attendance at stalled nets at all times. This option is supported by the Kaipara Harbour Sustainable Fisheries Management Study Group (Kaipara Study Group) which is made up of local commercial and non-commercial fishers. The Kaipara Study Group reports widespread stalling of nets where fish are left to dry out over low tides. They submit that the practice has a detrimental effect on fish quality and reduces the probability that juvenile fish can be returned live to the water. Attendance at stalled nets is also supported by customary fisheries interests and some recreational fisheries interests. They submit that the tributaries of the Kaipara Harbour are important nursery habitats and juvenile fish often get caught and die in stalled nets.
- 11 Option 3, to prohibit stalling of nets in the Kaipara Harbour, is supported by the New Zealand Recreational Fishing Council (NZRFC) and a local Kaipara Harbour commercial fisher.
- 12 The impact of amending or removing the regulation that allows stalling of particular set nets in the Kaipara Harbour will have a direct cost for some commercial fishers as they will be required to attend and work their nets if they continue to set nets in shallow water. The extent of that cost is unlikely to be high as few commercial set netters in the Kaipara Harbour use set nets that conform to the regulatory exemption for legitimate stalling. However, reduced fish wastage in the Kaipara Harbour could benefit both commercial and non-commercial fishers.

- 13 The options consulted on in the IPP have been retained for your decision. However, MFish has revised Option 1 to accommodate the concerns of the larger commercial fishing organisations. Should you decide to retain the status quo, MFish will work with industry representatives to establish a code of practice to improve legitimate stalling practices.
- 14 MFish recommends that you take into account the social, economic and cultural factors of the fishing community in the Kaipara Harbour when making your decision. Changing the regulation may add short term costs for commercial fishers. However, there will be long term social, cultural and economic benefits linked to ensuring the best use of fish taken in the harbour by removing or amending the existing regulation.

The Issue

- 15 Stalling of set nets is considered a fishing practice that can cause a significant amount of fish wastage which has implications for sustainable use of fisheries resources. When fish are left out of the water in stalled nets for too long they deteriorate and become unfit for sale. They may then be discarded and not reported. The lack of reporting could lead to stocks being unknowingly fished above the level permitted under the quota management system (QMS). This has implications for the allowance that may be set for other sources of fishing-related mortality, prior to a total allowable commercial catch (TACC) being set for a stock. Similarly, where a set net has collapsed through a lack of water, the effectiveness of the minimum net mesh size is likely to be reduced. This may mean that a greater number of juvenile fish may be taken.
- 16 Large volumes of fish wastage could reduce the availability and relative abundance of fish in the Kaipara Harbour, where stalling of set nets is permitted in particular circumstances. Within the Kaipara Harbour, stalling may only occur if the size of the mesh of set nets is not less than 100 mm, and the length of set net is no more than 540 m, and not set within 90 m of another set net. There is a concern that set nets are being stalled without adherence to such specifications. Stalled nets could also attract other animals to predate on fish exposed at low tide which has the potential to cause non-fish bycatch.

Summary of Options

Initial Proposals

- 17 The IPP proposed the following options:
 - a) *Option one:* Continue to permit stalling of nets by commercial fishers in the Kaipara Harbour (status quo); OR
 - b) *Option two:* Require commercial fishers to attend their stalled set nets at all times; OR
 - c) *Option three:* Prohibit stalling of set nets by commercial fishers in the Kaipara Harbour.

Final Proposals

18 It is recommended that you either:

AGREE to

- a) **Option 1:** continue to allow commercial fishers to stall set nets of the prescribed configuration in the Kaipara Harbour (status quo), AND
- b) for MFish to work with industry to establish a code of practice for the stalling of such set nets;

OR:

AGREE to

- c) **Option 2:** amend regulation 14 of the Fisheries (Auckland and Kermadec Areas Commercial Fishing) Regulations 1986 to require commercial fishers to attend at all times set nets that may be stalled when fishing in the Kaipara Harbour;

OR:

AGREE to

- d) **Option 3:** revoke regulation 14 of the Fisheries (Auckland and Kermadec Areas Commercial Fishing) Regulations 1986 with the effect of prohibiting the practice of commercial fishers stalling set nets of the prescribed configuration in the Kaipara Harbour.

19 The options above are presented for your consideration. Option 1 has changed from the IPP. MFish considers that option 1 is the least preferred option. MFish does not consider that there is sufficient justification to warrant the continuation of the present regulation for the Kaipara Harbour.

20 You may elect to choose a different course of action if you believe an alternative approach is more appropriate. However, if you wish to consider options well beyond the range proposed in this paper, MFish considers that further consultation would be required with stakeholders before a decision on such measures could be taken. As a consequence, such measures could not be implemented prior to the commencement of 1 April 2008. MFish is able to provide you with additional advice on any further options you may wish to consider.

Consultation

21 Consultation on the IPP was undertaken with such persons or organisations representative of those classes of persons having an interest in the stocks or the effects of fishing on the aquatic environment in the Kaipara Harbour, including Maori customary, environmental, commercial, and recreational interests. Further, provision was made for the input and participation of tangata whenua having a non-commercial interest in the stocks in the Kaipara Harbour or an interest in the effects of fishing on the aquatic environment in

the area. MFish has had discussions on the subject of the stalling of set nets with representatives from Te Uri o Hau (TUOH) and Ngati Whatua Nga Rima of the Kaipara.

Submissions Received

- 22 Submissions regarding the IPP were received from:
- Environs Holdings Ltd, the subsidiary of the Te Uri o Hau Settlement Trust (TUOH)
 - Farmers of New Zealand, Head Office, Whangarei
 - Kaipara District Fishery Sub-Committee
 - The Kaipara Harbour Sustainable Fisheries Management Study Group (Kaipara Study Group)
 - New Zealand Recreational Fishing Council (NZRFC)
 - Northland Non-Commercial Fishing Forum
 - The Northern Fisheries Management Stakeholder Company Limited (Northern Stakeholder Group)
 - Te Ohu Kai Moana Trustee Ltd (TOKM)
 - The New Zealand Seafood Industry Council Ltd (SeaFIC)
 - Sanford Limited (Sanford)
 - Peter Yardley (commercial fisher from the Kaipara Harbour)

MFish Discussion

Context for review

- 23 Submissions were received from a range of stakeholder organisations, businesses and individuals with an interest in set netting and fisheries in the Kaipara Harbour.
- 24 The Northern Stakeholder Group and Sanford submit that the Kaipara Harbour catch should be considered at a quota management area level, not at the harbour level. MFish notes that the regulatory provision for stalling is locally based and this proposal is addressing a local issue about a fishing practice that is otherwise prohibited on a national scale. Any fish wastage that might result, at whatever scale, should however be factored into allowances for other sources of fishing-related mortality when considering TACC decisions at the level of the stock.
- 25 MFish also notes that the proposal to review the stalling provision for the Kaipara Harbour is not in response to catch levels. The review seeks to

address the question of whether there is sufficient justification to warrant the on-going ability of commercial fishers in the Kaipara Harbour to stall set nets in prescribed circumstances, when this practice is prohibited elsewhere in New Zealand. In addition, recreational fishers are not allowed to stall their nets in the Kaipara Harbour. This may reflect the fact that the length of set net involved (maximum of 60 m) is more easily managed by recreational interests.

Sustainability

- 26 The Northern Stakeholder Group, Sanford, SeaFIC and TOKM raised concerns that the IPP does not show a clear sustainability problem caused by stalling. SeaFIC also states that there is no evidence of bycatch of protected species and that any bycatch of protected species in stalled nets would not necessarily be a sustainability risk.
- 27 MFish stated in the IPP that it has no information to suggest how much stalling occurs in the Kaipara Harbour, nor how much fish is wasted through the use of stalling. However, fishing methods that are more in keeping with best practice on a national scale should be encouraged. MFish believes that the stalling of nets within the Kaipara Harbour leads to fish wastage, which in turn has implications for sustainability. The Kaipara Study Group has previously identified that some sets nets have been stalled for hours in the Kaipara Harbour, resulting in the loss of juvenile fish and other bycatch.
- 28 A reduction in fish wastage could contribute to sustainability outcomes for fish populations and stocks. Where the quantity of fish wasted exceeds allowances for fishing-related mortality at the level of the stock, there is a risk that the total allowable catch will be exceeded. MFish observes that allowances for other sources of fishing-related mortality for some of the stocks taken by set net in northern waters have yet to be set, or have not explicitly taken into account any increased mortality as a result of the current stalling provision.
- 29 Prohibiting stalling or requiring attendance at stalled nets should help increase catch efficiency, reduce fish spoilage and allow for bycatch and undersized fish to be returned to the water. These outcomes would be in keeping with the purpose and environmental principles of the Fisheries Act 1996 (the Act) by using finite resources more appropriately.
- 30 In developing the final advice, a data extract was made of several thousand records of catch effort data submitted by commercial set netters in the Kaipara Harbour over the last three fishing years (i.e. 2004-05 to 2006-07). This revealed that the majority of set netting activity is conducted using lengths of net greater than that permitted under the regulatory exemptions for stalling (i.e. 540 m). Similarly, set netting for grey mullet is undertaken using net mesh of less than 100 mm, and stalling would not be exempted in such circumstances. Accordingly, most legitimate stalling activity would be undertaken when fishing for flatfish or rig, as the minimum net mesh size for these species is above 100 mm.
- 31 Accordingly, the amount of fish wastage related to the legitimate stalling of nets may be relatively low, and therefore the concern from a sustainability

perspective would be of lesser significance. Submissions from some commercial stakeholder organisations indicate that some commercial fishers may rely on the stalling practice in the Kaipara Harbour. However, the review of the catch effort data extract, and a selection of the original forms submitted, suggest that few commercial fishers would be able to legitimately stall their nets within the parameters specified by the exemption. Some further reduction in risk from a sustainability perspective could therefore be gained if commercial fishers checked to ensure that their stalling practices were consistent with the existing regulation specifications for the Kaipara Harbour.

Use and Value

- 32 Stakeholders provided further information on the extent to which stalling of set nets is occurring in the Kaipara Harbour. The Kaipara Study Group, the NZRFC and TUOH reported that some commercial fishers are allowing their nets to stall in a way that leaves fish stranded for many hours, almost daily. Some of these stalling activities do not appear to be within the parameters required by the existing regulation (i.e. maximum length of net, and minimum net mesh size requirements). Provision of an ability to allow stalling of set nets might have also given rise to abuses of restrictions on the time period that set nets can be left in the water (i.e. maximum soak time of 18 hours).
- 33 Further, the Kaipara Study Group, the NZRFC, and TUOH state that stalling has significant effects on fish quality due to deterioration and lice attacking the fish, and prevents the live return of juvenile fish to the water. These interests consider that the tributaries of the Kaipara Harbour provide extremely important nursery habitats for fish. These interests consider that such juvenile fish need protection and the practice of stalling does not allow for this. A reduction in juvenile fish may mean that fewer legal sized fish are available in the future, although the movement of fish within and between the harbour and adjacent coast is likely to address this potential outcome, having allowed sufficient time.
- 34 The Northern Stakeholder Group, Sanford and SeaFIC submit that reports of discarding of fish and unreported bycatch are not substantiated in the IPP and are not logical due to good economic returns to commercial fishers as seen in the Auckland Fish Market. These industry organisations also state that there is no evidence in the IPP that the use of stalling causes fish to deteriorate and become unfit for sale.
- 35 MFish notes that good returns on fish, as seen in the Auckland Fish Market, are partly due to the level of demand for fish in the market. MFish also notes that there are incentives for commercial fishers to discard fish if some of the fish caught will bring a higher return at market than other fish. The TACCs for the main fishstocks taken by set net in the Kaipara Harbour (flatfish, grey mullet and rig) are not necessarily constraining, and annual catch entitlement (ACE) is readily acquired. This could mean that there is less incentive for commercial fishers to avoid wastage.

- 36 There is no data on the extent to which stalling causes fish to deteriorate and become unfit for sale. However, MFish has been provided with anecdotal information from commercial and non-commercial fishers that fish left in stalled nets for an extended period will deteriorate, and are wasted, discarded and unreported. Further, the Kaipara Study Group, the NZRFC, TUOH and Peter Yardley submit that stalling usually occurs in the late evening or early morning, is difficult to see from the main channels, and is not usually observed.
- 37 It is also pertinent to observe that one of the reasons for the related maximum set net 'soak-time' regulation (as applied nationally) was the fact that fish left in set nets deteriorate over time. Fish left in stalled nets in very shallow water, or without any covering of water, will be exposed to warmer waters or ambient air temperatures, and deteriorate even quicker than fish caught in set nets in deeper waters.
- 38 SeaFIC states that there is no analysis or information about community conflicts raised in the IPP and therefore the practice of stalling set nets does not require resolution by active management. MFish believes that taking proactive steps about best fishing practices is in the best interest of fisheries resource users of the harbour and users of the resource as a whole. MFish is not attempting to resolve a dispute by proposing a change to the regulation that permits stalling of certain set nets. MFish considers there is a legitimate question to address about the Kaipara Harbour stalling provision, when stalling is more generally considered an inappropriate fishing method. Review of the provision is considered by MFish to be a proactive step in ensuring that fisheries resources are sustained, and that their use provides for people's well-being.
- 39 Sanford and SeaFIC state that the IPP is responding to community perceptions rather than stock sustainability concerns. SeaFIC also believes that the Minister cannot restrict utilisation for the reasons of community perception, and that MFish has not assessed the economic impacts of the options in the IPP. MFish notes that it has not presented an in depth economic analysis of each of the options proposed as there is little direct information available to suggest how much catch in the Kaipara Harbour is taken when using the practice of stalling nets. Further, submitters did not take the opportunity to provide such information during the consultation period. Nevertheless, valid qualitative assessments have been made and in MFish's view you are able to respond to community concerns which are reasonable.
- 40 The Northern Stakeholder Group welcomes future discussions with MFish to develop a code of practice to improve community perceptions of Kaipara Harbour commercial fishers. If you decide to retain the status quo, the Northern Stakeholder Group believes that stakeholders and MFish should work together to implement a code of practice to improve community perceptions of Kaipara Harbour commercial fishers or the fishing industry more generally. MFish notes that the Northern Inshore Fisheries Company Ltd produced a draft code of practice in 2005 in response to the initiative to review catch limits for northern flatfish, grey mullet and rig stocks in that year.

MFish is not aware of the present status of this draft code of practice, and whether it was implemented from October 2005 as proposed.

Compliance

- 41 The Northern Stakeholder Group and Sanford state that the IPP provides no examples of non-reporting and discarding of fish, and that if MFish considers there is a compliance issue it should be disclosed, and effort should be increased to address this non-compliance.
- 42 MFish is aware of incidences of non-compliance with set netting regulations in the Kaipara Harbour and periodically undertakes actions to address non-compliance as resources allow. For example, a commercial set netter was prosecuted in the 1990s for significant non-reporting of grey mullet. Furthermore, some commercial fishers in the Kaipara have identified the nature of more recent problems of wastage and these have been canvassed with a range of fishery interests with a view to resolving them. MFish believes that it would be helpful if the fishing industry took further initiatives itself to ensure voluntary compliance, and the adoption of best fishing practices.
- 43 The Kaipara Study Group and Peter Yardley submit that there is a large amount of fish wastage happening almost daily. For example they submit that they have observed 800 m nets set on a Saturday at 9.00am and stalled at 5.30pm with no commercial fisher present, and again at 6.00am also unattended. Nets were finally retrieved at 9.00am on the Sunday, having been allowed to stall twice over a soakage time of 24 hours with no fisher in attendance. MFish notes that the net length involved in this observation exceeds the 540 m maximum provided by the stalling regulation for the harbour. The existing exemption may have been misinterpreted by the commercial fisher in question to apply to all set netting in the Harbour, or other factors may have accounted for this incident.
- 44 MFish acknowledges that increased compliance may be needed to address illegal use of set nets. However, the same difficulty occurs in all harbours where set netting occurs. MFish continues to maintain its operational capacity to monitor and detect alleged illegal activity. MFish encourages commercial fishers to take initiatives themselves that demonstrate a willingness to address any compliance issues within their sector.

Kaipara Harbour Conditions

- 45 The Kaipara Harbour fishing community is concerned about the wasteful practice of stalling of nets by commercial fishers. The Kaipara Study Group and TUOH submit that although there is a case for allowing stalling of nets on the Kaipara due to the tidal nature of this harbour, there is also a need to ensure that fish quality is enhanced and that juvenile and bycatch mortality is reduced.
- 46 The NZRFC submits that the Kaipara is a large harbour with vast areas of tidal mudflats and stalling was permitted because commercial fishers were unable

to retrieve their nets within the tidal cycle. This practise was allowed when commercial fishers had slow fishing launches towing flat bottom rowing punts. The NZRFC points out that fishing technology has modernised with faster launches and dories making it possible to access nets during the changing tides. The NZRFC also notes that the nets used historically were multi-strand web nets that had to be walked at low tide to clean them from weed. This is no longer the case with the monofilament nets used today.

- 47 TOKM submits that there are safety issues for set netters in the Kaipara Harbour. It states that low tides present navigational challenges within the harbour for small set net vessels, and make it impossible to retrieve nets on the harbour during low tides or extreme weather conditions. TOKM understands that stalling was established to enable commercial fishers to safely access their nets given the tidal nature of the Kaipara Harbour waters, and so leave netted fish in the dry until commercial fishers were able to collect them.
- 48 MFish acknowledges that stalling has been permitted in the Kaipara Harbour to help commercial fishers who were not able to collect their nets easily, or within the time required before partial stalling occurs, due to the tidal nature of the harbour. However, other harbours have similar tidal ranges and there is no obvious reason to continue to allow stalling of commercial nets in the Kaipara Harbour as a special case above other tidally influenced harbours and estuaries. The stalling exemption for the Kaipara Harbour was put in place some decades ago, and more modern fishing equipment and practices are likely to have overcome some of the historical constraints.
- 49 MFish considers that commercial fishers can avoid unsafe situations by setting their nets in safer areas or at safer times of the tide as would be the case in other harbour situations. The setting of nets in sub-tidal areas would avoid the situation where set nets begin to stall. Furthermore, a data extract of catch effort data from the last three fishing years indicates that only a small proportion of overall set netting effort is undertaken with nets of a length of 540 m or less, and with a net mesh size of 100 mm or more. Therefore, legitimate stalling practices are not widespread.
- 50 SeaFIC states that the IPP failed to note the concerns made by commercial fishers at an industry meeting of the Northern Inshore Fisheries Company Ltd in October 2004. At that meeting, it was noted that accompanying nets whilst stalling was not an option for all commercial fishers due to access problems in certain parts of the harbour.
- 51 MFish notes that the meeting referred to by SeaFIC, of the Northern Inshore Fisheries Company Ltd and held in Kaiwaka in October 2004, discussed the development of an industry-developed and accepted code of practice for the Kaipara Harbour. The revised draft code of practice of early 2005 replaced the initiative developed by the Kaipara Study Group and stated that 'stalling is only allowed when fisher is in attendance and actively working the net in areas where nets can be sensibly accessed at low tide'. MFish is not aware if this code of practice has been further developed or implemented for October 2005, as proposed.

Rationale for Management Options

Historical regulatory context

- 52 Stalling is defined in regulation as the process whereby a net is set in such a manner that any fish enclosed or entangled by the net is left stranded by the falling tide; or is enclosed or entangled in such a manner that at any stage of the tide there is an insufficient depth of water at either end of the net to enable the fish to pass from the waters above the net to the waters below the net.
- 53 The Fisheries (General) Regulations 1950 (as amended) permitted stalling in the Kaipara Harbour on condition that the mesh of the set nets used was not less than 108 mm and that the net was no more than 540 m in length. The Fisheries (Vessel, Gear and Method) Notice 1983 prohibited stalling everywhere in New Zealand.
- 54 The Kaipara Harbour stalling exemption continued through the Fisheries (Auckland and Kermadec Areas Commercial Fishing) Regulations 1986, with a reduced set net mesh size of 100 mm, and a requirement that a 90 m space was provided between nets. The 540 m maximum net length still applied.
- 55 Stalling by amateur fishers is also prohibited everywhere in New Zealand (including the Kaipara Harbour), through regulation 10 of the Fisheries (Amateur Fishing) Regulations 1986.
- 56 The IPP noted that stalling of nets is a fishing practice that causes fish wastage. When fish are left out of the water in stalled nets for too long they deteriorate and become unfit for sale. Such fish can then be discarded and not reported. A lack of reporting could potentially lead to stocks being unknowingly fished above the level permitted under the relevant TACC, and potentially the TAC.
- 57 Some northern quota stocks fished using set net (e.g. grey mullet) do not yet have a tonnage allowance for other sources of fishing-related mortality, although such mortality is known to occur. MFish is not aware that specific consideration was made to the stalling provision of the Kaipara Harbour when allowances for fishing-related mortality were originally set for other stocks such as flatfish or rig.
- 58 Large volumes of fish wastage could reduce the availability and abundance of fish for use at a local scale, through to the scale of the stock. Stalled nets could also attract other animals to predate on fish exposed at low tide which has the potential to cause non-fish bycatch.

Recent Review of Catch Limits

- 59 When TAC limits for flatfish, grey mullet and rig stocks in the northern half of the North Island were reviewed in 2005, many stakeholders with interests in the Kaipara Harbour raised concerns about wastage associated with set net stalling.

60 At that time the Minister decided not to alter any TACs, or set or vary allowances for fishing-related mortality prior to decisions on TACCs, but noted there was value in considering other management issues in these fisheries. While the Minister at the time did not consider any one change would address all concerns raised, he believed a package of measures may be necessary. This regulation review is one of those measures.

Set net fisheries in the Kaipara Harbour

61 Table 1 shows catch taken of flatfish, grey mullet and rig by commercial set net in the Kaipara Harbour for the 2004-05 and 2005-06 fishing years. MFish has no direct quantitative information to suggest how much of this catch is taken when using the practice of stalling of set nets, or how much fish might be lost due to wastage. However, a data extract of catch effort information submitted by commercial set netters in the Kaipara Harbour over the last three fishing years suggests that the majority of their catch of grey mullet, flatfish and rig is not taken within the net configurations allowed for the practice of stalling.

Table 1: Number of commercial set net fishers in the Kaipara Harbour and catch taken by commercial set net for the 2004-05 and 2005-06 fishing years.

		Catch taken by commercial set net (tonnes)		
Fishing year	Number of fishers using set nets	Flatfish	Grey mullet	Rig
2005-2006	50	76	81	34
2004-2005	54	91	110	65

62 MFish has received anecdotal information on the stalling of nets by commercial fishers in the Kaipara Harbour and from members of the Kaipara community. They advise that stalling is a regular practice for many commercial flatfish fishers in the Kaipara Harbour. Soakage times vary but can be up to 24 hours, despite commercial regulations specifying a maximum soak time of 18 hours. This means that the nets can stall more than once before the fish are removed, assuming that the nets are set in areas where stalling will occur. Alternatively, observations from MFish Compliance staff suggest that the stalling of set nets in the Kaipara Harbour is less frequently undertaken in more recent times. This observation would be consistent with catch effort information over the last three years, although this assumes that stalling only occurs on a legitimate basis.

63 While stalling causes wastage of fish, there is no substantive evidence to suggest that stalling significantly affects the sustainability or utilisation of fish stocks found in the Kaipara Harbour. The extent of legitimate stalling is not considered to be common place based on a data extract of set netting fishing returns from the Kaipara Harbour over the last three years. The extent of fishing related mortality due to wastage related to stalling activities is

unknown in quantitative terms, despite the practice being considered undesirable, or illegal beyond the parameters provided by the exemption.

Assessment of Management Options

Option 1: Continue to permit stalling of nets by commercial fishers in the Kaipara Harbour and establish a code of practice (status quo)

- 64 Retaining the status quo could be a valid option to consider. While stalling can be a wasteful fishing practice, there is no clear evidence to suggest that stalling affects the sustainability or utilisation of fish populations in the Kaipara Harbour. Further, the exact frequency of stalling and the amount of loss of fish due to wastage are not known with sufficient accuracy, although some submitters suggest that it is frequent enough to be of concern. The data extract of recent catch effort forms for set netters in the Kaipara Harbour suggest that the typical length of net and the mesh sizes used would not enable a commercial fisher to legitimately stall their net. Should enforcement effort be focused on illegal stalling behaviours, then the potential for fish wastage can still be reduced.
- 65 The information principles of the Act provide that the absence of, or any uncertainty in, any information should not be used as a reason for postponing or failing to take any measure to achieve the purpose of the Act. One element of the Act's purpose is to avoid, remedy or mitigate adverse effects of fishing on the aquatic environment. The question remains as to whether the practice of stalling set nets is having an adverse effect on the aquatic environment, or warrants preventive action consistent with this purpose and principles of the Act.
- 66 The regulation that permits stalling in the Kaipara Harbour was put in place several decades ago because the tidal nature and extensive mudflats within the harbour caused difficulties for commercial set netters retrieving their nets. At the time, there was a concern that a commercial fisher could be in the process of retrieving the net, and some of it may be technically stalled given the time taken to bring the net on board. However, fishing equipment used for set netting practices has been modernised in recent decades.
- 67 While the NZRFC questions the appropriateness of stalling set nets given fishing methods and equipment available today, some commercial stakeholders state that there is a case for retaining the provision to stall set nets in the harbour. These interests believe that removing the provision would mean they could not utilise the fishery resources in the harbour. MFish observes that set netting continues to occur in other harbours with similar tidal conditions and extensive mudflats, without the need to stall nets. MFish is also of the view that the use of the stalling technique in the Kaipara Harbour is becoming less common place in comparison to earlier years.
- 68 Option 1 requires MFish to work with stakeholders to establish a code of practice for stalling set nets in the Kaipara Harbour. This might further achieve outcomes consistent with the purpose of the Act, while providing

more time for commercial fishers to demonstrate their case that stalling of set nets of the prescribed configuration, should be allowed to continue in the Kaipara Harbour. Any code of practice implemented would need to be monitored to ensure that it is being adhered to over the longer term.

Option 2: Require commercial fishers in the Kaipara Harbour to attend their stalled set nets at all times

- 69 Option 2 requires commercial fishers to attend their stalled set nets at all times. It assumes that commercial fishers will be able to retrieve, under-run or clear their gear when it is in a stalled condition.
- 70 In the IPP it was noted that if commercial fishers attended their stalled set nets at all times, they could immediately remove all fish that may be exposed by the falling tide and avoid spoilage and wastage. This option should therefore improve the quality of catches by reducing the time that fish are caught in a stalled net. Adoption of this option was supported by the Kaipara Study Group and TUOH as a practical solution.
- 71 However, some submitters state that attendance of a stalled net is not practical as it is unlikely that a commercial fisher would stay with their net in mud or sit in their dory while it goes dry for a long time. They submit that to allow a net to go dry while watching it is not sensible. MFish observes that the definition of stalling would apply in circumstances when there is very shallow water, and not just when the tide has gone out completely. MFish would envisage that commercial fishers would not deliberately watch their nets stall under this option, but would be making efforts to prevent that from occurring.
- 72 This option may have a direct cost for some commercial fishers as they will be required to attend and work their nets if stalling is a likely outcome. The precise economic impact on commercial fishers of a requirement to attend stalled set nets will be dependent on the number of nets being worked, and on whether these fishers need to stall their nets to enable the catching of fish. The prevalence of stalling will also relate to which area of the harbour is being fished, and the presence or absence of particular species at specific locations.
- 73 As emphasized, only nets of a particular configuration can be stalled. Grey mullet set netters using net mesh of less than 100 mm would not be affected by the implementation of Option 2, as they would not be eligible to stall their nets. More generally, it is evident that most commercial fishers use net lengths of more than 540 m, such that they would be largely unaffected by the requirement to attend a stalled net of less than 540 m.
- 74 The ability to adapt fishing practices to prevent the stalling of nets or to be in attendance of stalled nets would seem relatively simple, while still being able to take the target species. The same target species could be fished in an adjacent location within the Kaipara Harbour where the stalling of set nets is not an issue. Commercial fishers undertake set netting in similar harbour environments such as the Manukau Harbour without the need to stall nets. Further, some of the commercial fishers use a range of harbour and coastal environments, and are not confined to fishing in the Kaipara Harbour alone.

- 75 MFish would need to inform commercial fishers of any regulation change. There will be a small cost involved for MFish to raise awareness among commercial fishers of any such changes. Further, a new offence and penalty would need to be created for any breach of a requirement for a commercial fisher to attend a stalled net. Should this option be chosen, a person who commits an offence against this measure will, upon conviction, be fined up to \$20,000, and be subject to forfeiture provisions for the first offence. Repeat offenders will be fined up to \$100,000 with forfeiture if convicted.
- 76 Compliance monitoring of attendance at stalled nets could be done at the same time as existing monitoring operations. However, there may be a need for additional regular inspections to ensure that any stalled nets, within the parameters allowed for stalling, are attended. One concern identified through submissions is the possibility that some commercial fishers may stall their nets even though its configuration does not meet the regulatory requirements (eg. length of 540 m, or minimum net mesh size of 100 mm).

Option 3: Prohibit stalling of set nets by commercial fishers in the Kaipara Harbour

- 77 Option 3 seeks to revoke the regulatory exemption that allows commercial fishers to stall set nets of a prescribed configuration when fishing in the Kaipara Harbour. The effect of this change would be to prohibit stalling as a fishing practice throughout New Zealand. The option has support from a range of sectors, but is opposed by larger commercial fishing organisations. Submitters in support of Option 3 see it as the best way to remove the potentially wasteful fishing practice of stalling commercial nets.
- 78 Commercial fishers may benefit by improved quality of catches if stalling is prohibited. However, commercial stakeholder organisations state that there are commercial fishers who will not be able to fish without this practice. No information was provided to substantiate this requirement from commercial fishers, or to elaborate on how commercial fishers in other similar harbour environments successfully undertake their activities. Submissions from the Northern Stakeholder Group provided data on the decline of catch and number of fishing permits held in the Kaipara Harbour. However this data does not illustrate the economic impact of removing the stalling provision.
- 79 If commercial fishers do need to stall their nets to be able to fish effectively, adoption of Option 3 could affect those commercial fishers while they adjust their fishing practices. However, stalling of set nets in the Kaipara Harbour is only allowed currently under certain parameters. It is uncertain whether some commercial fishers placing some reliance on the ability to stall set nets are in fact complying with the existing requirements (i.e. a maximum net length of 540 m, and minimum net mesh size of 100 mm).
- 80 Grey mullet (or kahawai) may be taken by commercial set nets with a minimum net mesh size of 90 mm, and most commercial fishers taking grey mullet in the Kaipara are not using 100 mm mesh nets. Flatfish must be taken by commercial fishers using a minimum of 100 mm net mesh, yet most commercial fishers use a net of more than 540 m in length. The minimum net

mesh size for the taking of rig by commercial fishers in the upper North Island is 125 mm.

- 81 A total prohibition on the practice of stalling set nets is likely to be much easier to enforce than Option 2. It would bring fishing practices in the Kaipara Harbour into line with the rest of New Zealand. As a result, benefits such as improving the quality of the catch are more likely to be realised under this option than under Option 2.
- 82 MFish would need to inform commercial fishers of any regulation change. There will be a small cost involved to raise awareness among fishers of any changes. The existing penalty for stalling a set net is a maximum of \$100,000 on conviction with automatic forfeiture.
- 83 If there is a total ban of stalling, monitoring will be required to ensure that no stalling takes place, which could be done in tandem with existing operations and therefore without a significant increase in resources. A total ban may remove any doubt over the manner in which stalling is allowed to occur, and provide a clearer approach about the appropriate use of set nets, both in the Kaipara Harbour and elsewhere.

Other Management Controls

- 84 The Kaipara Study Group and the NZRFC requested that you consider management of the Kaipara Harbour on a more local scale. MFish notes that during the TAC review of flatfish, grey mullet and rig in 2005 the Minister asked MFish to “begin developing a process to discuss possible measures as a matter of priority”. This regulatory review is one of those measures. MFish is also developing a fisheries plan for the West Coast North Island finfish fishery which will incorporate fisheries management issues from the Kaipara Harbour. Further research has been commissioned to also assist with future reviews of management settings.
- 85 The NZRFC has also requested that all commercial set nets are attended at all times in the Kaipara Harbour. MFish notes that attendance at nets is being reviewed as part of the Hector’s and Maui’s dolphin Threat Management Plan. The Hector’s/Maui’s dolphin proposals may impact on set netting in west coast harbour areas, and those proposals have raised the interest of the commercial set netting community to the extent that this final advice is unlikely to be seen as the ‘main event’.
- 86 Peter Yardley submits that MFish and the Minister need to cut set net soak times to a maximum of 6 hours and have compulsory net attendance. He states that mesh sizes and weights should be adjusted because monofilament, lightweight nets are very hard on juvenile fish. He states that the minimum fish size for flounder should be reduced. MFish acknowledges these requests from Mr Yardley but notes that these issues are beyond the scope of the present review.

Statutory Considerations

87 Statutory considerations are summarised in Appendix One.

Appendix One

Statutory Considerations

- 88 MFish considers that the set net stalling provision in the Fisheries (Auckland and Kermadec Areas Commercial Fishing) Regulations 1986 is a sustainability measure under section 11 of the Act. The stalling of set nets as a fishing practice can lead to fish wastage and is a source of fishing related mortality of various fishstocks. Any amendment to the set net stalling provision would be made by regulation under section 298(a) of the Act.
- 89 In reviewing the regulation that permits the stalling of nets by commercial fishers in the Kaipara Harbour, the following statutory considerations under the Act have been taken into account.
- a) **Section 5(a)** – there is a wide range of international obligations relating to fishing (including sustainability and utilisation of fishstocks and maintaining biodiversity). MFish considers issues arising under international obligations are adequately addressed in the management options proposed for commercial set netting in the Kaipara Harbour.
 - b) **Section 5(b)** – Maori have a particular affinity to the aquatic environment and to the management of fisheries resources. The options for set netting in the Kaipara Harbour proposed in this paper appropriately balance the utilisation opportunities with the overriding interest to ensure that the values of the aquatic environment are not adversely affected. MFish considers that the management measures proposed are consistent with the provisions of the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992. MFish notes its on-going obligation to ensure that customary Maori interests are provided for in subsequent review of management measures.
 - c) **Section 8** – None of the management options are contrary to the purpose of the Act. All options provided should help increase catch efficiency, reduce fish spoilage and allow for bycatch and undersized fish to be returned to the water, with positive outcomes expected for sustainable use. Option 1, maintaining the status quo, is a valid option because the extent of fish wastage is unknown in quantitative terms, and there may be further avenues for the commercial sector to explore through a code of practice that achieve desirable outcomes to all concerned. Removing or amending the regulation that permits stalling would lead to more credible fisheries management through the use of more appropriate fishing practices, while being consistent with the Act's purpose, particularly the avoidance of adverse effects of fishing on the aquatic environment.
 - d) **Section 9** – All options would decrease the level of fish wastage of undersized and non-quota bycatch species and may also reduce any incidental bycatch of sea birds and other animals that are attracted to stalled nets to feed on fish. The options will have no adverse impact on habitats of particular significance for fisheries management.

- e) **Section 10** – Although the exact frequency of commercial stalling of nets and the exact amount of fish wastage is not sufficiently known, decisions by the Minister should be based on the best available information. A review of catch effort information submitted in statutory returns over recent fishing years suggests that the majority of commercial set net catch would not be able to be legitimately taken by the stalling method. However, anecdotal evidence suggests that there is considerable fish wastage on a daily basis caused by commercial stalling of nets in the Kaipara Harbour. The best available information suggests that there may be some legitimate and some illegitimate stalling of set nets in the Kaipara Harbour, and that some wastage of fish taken in stalled nets is evident.
- f) **Section 11(1)(a)** – Set net stalling is a fishing practice that causes fish wastage. All options should therefore seek to reduce the wastage of fish in the Kaipara Harbour.
- g) **Section 11(1)(b)** – Most stocks that are thought to be caught by stalled set nets are managed under the quota management system (QMS). As stalling can lead to dumping and under-reporting of fish, all options should lead to greater adherence to the TACC set for the stocks concerned, and therefore the TAC (particularly where no allowance for other sources of fishing-related mortality has been set, or has not taken into account mortality arising from stalled nets in the Kaipara Harbour).
- h) **Section 11(1)(c)** – The natural variability of the fish caught by stalled set nets in the Kaipara Harbour is relevant to the issues outlined in this paper. The presence of juvenile fish increases in the summer months at the same time as set netting activity increases. The management measures proposed allow fishing for these species to continue and to assist in reducing fish wastage as juvenile fish are more likely to be caught in stalled nets.
- i) **Section 11(2)(a) and (b)** – 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. No such statements, strategies or plans that are relevant to the regulation that permits stalling of set nets in the Kaipara Harbour are known to MFish.
- j) **Section 11(2A)** – No decisions on conservation services or fisheries services, or approved fisheries plans, exist, or have any bearing on the proposal to vary the sustainability measure to modify or revoke the provision allowing the limited use of stalled set nets by commercial fishers in the Kaipara Harbour.