7.0 IMPLEMENTATION PLAN

What do we need to do, when and how, to achieve our fishery goals?

7.2 Implementation Timetable

Included on the next page is a calendar that will show the preferred timing for progressing each management tool and service.

As noted in section 1.4, the implementation timeframes in the calendar are a guide only. The ability to undertake actions and meet timeframes is subject to available resources, including, for example the availability of MFish resources to write and consult on regulatory proposals, the availability of specialist science resources to complete a research project, or the availability of stakeholder resources to develop a feasibility study or education tool.

Manukau Harbour, Auckland
Photo: T. Smith

8.0 MONITORING AND REVIEW PLAN

What do we need to do, when and how, to achieve our fishery goals?

8.1 Summary of Performance Indicators

The following table summarises the performance indicators that will be monitored to measure performance against objectives.

Performance Indicators
Goal 1 - NIWC finfish fisheries are sustainable today and in the future
More collaborative approach adopted for setting TACs and management measures
Action taken to reduce wastage, juvenile mortality and bycatch.
Harvest strategy in place for NIWC stocks, with special recognition of local management aspirations.
Best information is used, a combination of anecdotal, kaitiaki and scientific information.
Goal 2 - NIWC finfish fisheries are managed inclusively
Tangata whenua, communities and stakeholders are better aware of fisheries management issues that affect them, and are able to participate in identifying ways to manage these issues
Networks are established that allow local communities to share information and interact together
This Fish Plan is recognised and provided for in the planning of measures that affect these finfish fisheries
Goal 3 - NIWC finfish fisheries are used and valued for the wellbeing of all
Increased acceptance of everyone's participation in shared fisheries
Improved compliance with fishing rules
Spatial conflict is reduced
More reliable harvest estimates available
Regulations are supported
The rights of all fishery users are better understood
Goal 4 - NIWC finfish fisheries are part of a healthy marine environment
Improved understanding of associated and dependant species, biological diversity and essential fish habitats
This plan is recognised and provided for when activities that impact on fisheries are undertaken
Best fishing practices are promoted and impacts of fishing on the NIWC are reduced
The management of the NIWC environment is better coordinated amongst agencies
The impacts of land based activities on NIWC finfish fisheries are better understood

APPENDIX 1: DETAILED GAP AND RISK ANALYSES

Goal 1: NIWC finfish fisheries are sustainable today and in the future:

Objective A: TACs are set transparently, ensure sustainability and reflect the information principles.	
Assessment: *"Are we on track?"*	Amending TACs and supporting management measures requires MFish to consult with people that have an interest in the area concerned, and to provide for the input and participation of tangata whenua. These obligations are prescribed under section 12 of the Act. The process generally involves the release of a consultation document (Initial Position Paper) that outlines sustainability (and other) issues associated with particular stocks and various options to resolve these issues. MFish then prepares a Final Advice Paper that outlines issues raised in submissions to assist the Minister of Fisheries with his decision. The Minister then makes a decision and writes a decision letter outlining why the decision was made. This process typically occurs within a 6-9 month period. The Advisory Group consider the current process is not an effective way to engage with stakeholders and tangata whenua. Unless they receive a letter from MFish, many are unaware of upcoming reviews. They would like to have more face to face engagement, particularly in the initial stages when the problem definition and options are being developed. An absence or lack of quality information is a critical issue in the process to review TACs and management measures. Action may not be taken due to a lack of supporting information. Anecdotal information is often not able to be verified or multiple sources may contradict each other, so it is typically not given as much weight as scientifically peer-reviewed information. However, anecdotal information can be useful and in some cases may be the only source of information, and should therefore be taken into account more than it has been in the past. Finally, addressing urgent issues is problematic due to the length of time it takes for TAC or management reviews. The Advisory Group consider the time required to conduct the review process prevents and/or hinders urgent management issues from being addressed. However, rushing a decision without the proper information and deliberation could have major consequences on the fisheries and tangata whenua, communities and stakeholders and this consideration needs to be balanced with the need for timely decisions.
Risk:	The current risk to the fishery if this objective is not achieved is **HIGH** The current process to review TACs and management measures creates a significant barrier to enable tangata whenua, communities and stakeholders to participate in fisheries management.
Objective B: All fishers use and promote best fishing practices to ensure sustainability	
Assessment: *"Are we on track?"*	There is a relatively good understanding of fishing methods used in the NIWC fishery. However, the effects of different fishing practices are not as well known or defined and best practices may require promotion. This includes customary, recreational and commercial practices (e.g. fish handling to increase survivability of released fish). In the particular case of set nets, the Advisory Group has expressed significant concerns about certain netting practices that lead to wastage and juvenile mortality. Mesh sizes, attendance of nets, line weighting and soakage times have all been raised as issues that require review. The Advisory Group raised concerns that wastage or juvenile mortality is not adequately reported, and as such is not fully accounted for in the TAC setting process.
Risk:	The current risk to the fishery if this objective is not achieved is **VERY HIGH** Poor fishing practices can lead to localised problems and depletion. Tangata whenua, communities and stakeholders feel strongly that all fishers in the fishery should respect the resource. Recreational and commercial fishers' knowledge of best fishing practices has generally

	improved in recent years, through education and improved awareness. However, there is a need to continue to educate people on fishing practices as new information becomes available.
Objective C: Catches maintain NIWC stocks at, or above, levels that produce the maximum sustainable yield.	
Assessment: *"Are we on track?"*	Most NIWC finfish stocks are managed under s 13 of the Act. This requires that each stock is managed at, or above, a level that produces the maximum sustainable yield (BMSY). Of the 30 fish stocks listed in the Information Brief for this Fisheries Plan, the relationship between current stock size and BMSY is only known for 5 of these stocks. Snapper is estimated to be only 50% of this level, while gurnard, bluenose and trevally are considered to be at or above BMSY. While a management strategy is in place for rebuilding the snapper biomass no formal strategies exist for other stocks, other than managing them at their catch limits. Implementing the Harvest Strategy will require that target and limit reference points be set for each stock. The Harvest Strategy has yet to be applied to any NIWC stock. The Advisory Group has concerns about the lack of precision, particularly around customary and recreational harvest levels, for most stocks. This is one factor preventing an accurate assessment of the biomass of stocks as we are not clear on what is actually being removed by fishing. The Advisory Group has additional concerns that current large-scale management areas prevent addressing localised depletion problems. This is particularly evident in west coast harbours. The size of some QMAs contributes to this lack of sensitivity to local issues – for example flounder and grey mullet QMAs cover both the east and west coasts of the northern North Island.
Risk:	The current risk to the fishery if this objective is not achieved is **MED-HIGH** Managing stocks at or above MSY is a primary sustainability objective under the QMS framework. Strategies to manage our NIWC stocks, guided by the Harvest Strategy, require a better understanding of harvest levels and the implications of large scale management areas.
Objective D: Best information is available.	
Assessment: *"Are we on track?"*	<u>Catch Information</u> Commercial fishers furnish detailed fishing information on both catch quantities and fishing location. For example, all vessels over 6 m for most fisheries now report positional fishing information (eg latitudes and longitudes). The collection of customary and recreational catch information is not as rigorous, particularly for the recreational sector where there are no formal reporting requirements. Annual harvest estimates derived from the national diary survey programme are generally unreliable for NIWC stocks. Proposed charter boat reporting requirements are seen as a good first step to get an estimate of some recreational catch. Tangata Kaitiaki are required to report customary catches taken under the Fisheries (Kaimoana[12] Customary Fishing) Regulations 1998. There is no requirement to report catches taken under Regulation 27A of the Fisheries (Amateur Fishing) Regulations 1986 <u>Scientific Information</u> MFish commissions scientific research on an annual basis. Approximately 65% of the research is funded by cost-recovery (i.e. through levies paid by quota owners) and 35% is crown funded. Research projects include assessing stock sustainability and the effects of fishing on non-target species and habitats. However, there is a limited funding pool and not all stocks are well studied. <u>Anecdotal Information</u> Anecdotal information exists in most fisheries and may be the only source of information available. The Advisory Group believe MFish does not value or recognise anecdotal information, and believe that there should be a better process for collecting and using this information when making management decisions. MFish does take account of both

[12] Kaimoana – food from the sea.

	anecdotal and scientific information in some cases. For example the advice paper for the Maui's dolphin protection areas used anecdotal information to support the need for some of the proposed closed areas and disagree with the need for others.
Risk:	The current risk to the fishery if this objective is not achieved is **MED-HIGH** A lack of information makes it difficult to assess the sustainability of some stocks and for some decisions to be made.

Goal 2 - NIWC finfish fisheries are managed inclusively:

Objective A: Tangata whenua, communities and stakeholders participate in and contribute to decision making about NIWC finfish fisheries.	
Assessment: *"Are we on track?"*	Stakeholders and tangata whenua have the ability to raise issues with MFish and participate in decision-making processes through a number of channels including: o Iwi forums o Recreational forums There are no equivalent forums for commercial and environmental stakeholders. MFish largely relies on section 12 consultation to involve stakeholders and tangata whenua in the decision making process. Consultation typically occurs after an Initial Position Paper has been written and this creates a number of problems including: o This process does not allow for extensive stakeholder and tangata whenua involvement in identifying the full spectrum of possible solutions to address issues. o Tangata whenua and stakeholders potentially affected by proposals may not be aware of the consultation being undertaken. o Consultation documents are written in a style and format that tangata whenua and stakeholders often find difficult to understand. o Consultation timeframes (generally 20-30 working days) may be inadequate.
Risk:	The current risk to the fishery if this objective is not achieved is **HIGH** The risk relates to the risk discussed with Objective 1A. Relationships with tangata whenua, communities and stakeholders are at risk from being unable to participate and influence decision-making. In addition, management decisions have less credibility and buy-in from tangata whenua, communities and stakeholders.
Objective B: Tangata whenua, communities and stakeholders are involved in managing their local fisheries with MFish.	
Assessment: *"Are we on track?"*	There are numerous community based groups along the west coast of the North Island that have interests in the marine environment (see appendix of the Information Brief). The Kaipara Harbour Sustainable Fisheries Management Study Group has developed a plan 'Fishing for the Future: A strategy for the Fisheries of the Kaipara Harbour' that proposes regulatory and voluntary measures to improve their local fisheries. While not all measures have been implemented, MFish has implemented several new measures proposed by the strategy (e.g. scallop closure, scallop survey, grey mullet, rig and flounder research, net stalling and review of flounder and grey mullet TACs). Community groups are also working to improve water quality through riparian planting and farm fencing in the Hokianga and Whaingaroa (Raglan) Harbours. Whaingaroa Harbour fishers suggest that fish abundance has increased, as they have found it easier to catch fish. Despite these examples, communities have little direct ability to manage fisheries or activities that impact on their local fisheries, and generally are only able to take part in consultative processes and to directly raise issues with MFish staff. Community awareness has been growing over time, and continues to do so. Communities have been becoming more involved in managing their local fisheries. The Advisory Group has noted that an improved understanding by groups and networks would help to facilitate their involvement and information sharing.

Risk:	The current risk to the fishery if this objective is not achieved is **MEDIUM** While biological stocks often cover large areas, communities would like to have the opportunity to have more say in their local issues and manage their local fisheries (e.g. through harbour plans and rohe moana plans. If they are not included in the management of their local areas or in national issues that cover their area, relationships are at risk, and decisions will have less buy-in. In addition, tangata whenua, communities and stakeholders that are familiar with specific areas can provide valuable anecdotal information.
Objective C: This fisheries plan promotes information sharing and integration of processes that affect NIWC finfish fisheries.	
Assessment: *"Are we on track?"*	There are a number of non-fishing activities that impact on NIWC finfish fisheries. Currently there is no formal framework to ensure that these impacts are managed in a consistent way. In July 2000, the government decided to develop an Oceans Policy to provide a cross-government approach, covering all aspects of ocean management, including effects from land. Work on the Oceans Policy was delayed in June 2003 to take account of government decisions on public access and customary rights to the foreshore and seabed. Since 2006, the Oceans Policy has taken a new direction focussing on addressing high priorities first, rather than a complete policy package. The first action has been to draft legislation to manage the environmental effects of currently unregulated activities in the Exclusive Economic Zone. At present, the large number of agencies involved in managing activities can make finding the right contact difficult. It is also difficult for agencies to determine who specifically should be contacted and kept informed about upcoming proposals and activities. Te Uri o Hau of Ngäti Whätua and partners have initiated the Integrated Kaipara Harbour Management Group - a project to assist in co-ordinating the various resource management agencies and stakeholders in a united vision for the Kaipara Harbour and its catchments. There are also some projects that government agencies work on together. For example, MFish and DoC have collaborated to produce a strategic planning tool to guide the implementation of the Marine Protected Areas Policy. A formal natural resources network is being established across government agencies (Ministries of Agriculture and Forestry, Economic Development, Environment, Te Puni Kokiri, Fisheries, Land Information and the DoC) to ensure a strategic and integrated approach to natural resource policies and management. While these larger strategic policies should help to improve consistency amongst government agencies, and some regions are working well together, there is currently no way of integrating information specific to the NIWC.
Risk:	The current risk to the fishery if this objective is not achieved is **VERY-HIGH** A lack of integration between processes poses risks for their effectiveness, as they can undermine or create barriers for each other. Failure to share information can also reduce the quality of decision-making. Further, stakeholders' time, effort and participation can be fragmented across different agencies and processes, causing frustration, fatigue and reluctance to get involved.

Goal 3 - NIWC finfish fisheries are used and valued for the wellbeing of all:

Objective A: All sectors understand and recognise the use and value each gains from NIWC finfish fisheries.	
Assessment: *"Are we on track?"*	Iwi and recreational forums provide opportunities for these sectors to improve their understanding of other sectors management roles and the uses and values they gain from fishing. These forums are generally formed of people with interests and knowledge of only one sector, and a greater understanding between sectors could be reached if sectors meet or work together. As noted above, prior to the NIWC Fish Plan Advisory Group being

	formed there were few examples of sectors working together on the NIWC. Increasing internet use and availability of web-based resources and media coverage of fishing issues can increase the knowledge of people within sectors about other sectors. As people from all sectors are becoming more involved in fisheries management, they are gaining further insight into other sectors roles, uses and values.
Risk:	The current risk to the fishery if this objective is not achieved is **MEDIUM** A lack of understanding makes collaborative work between sectors difficult and can increase the level of conflict between sectors when facing fisheries issues. Fisheries management processes can take longer and sectors may be unaware of all possible solutions, as they may only focus on one aspect of the fishery.
Objective B: All sectors are made aware of and comply with all regulations.	
Assessment: *"Are we on track?"*	Overall awareness and compliance of fishing regulations have increased in recent years. One reason for this is that information about fishing regulations is now more accessible. The internet provides people with an easy and quick method of checking regulations, but it is not always available or easy to access. Signage and pamphlets have also improved, and an effort is being made to provide information in multiple languages. Popular television shows such as Coastwatch also assist to inform people of the regulations as well as the consequences of not following the regulations. Recreational and iwi forums provide a method for getting information out to these sectors. The development of Commercial Stakeholder Organisations has increased communication to commercial fishers regarding new or changing regulations. While there is no MFish organised forum for environmental stakeholders, environmental organisations such as Department of Conservation, ECO (Environment and Conservation Organisations of Aotearoa New Zealand) and Forest and Bird are included in mail outs to stakeholders.
Risk:	The current risk to the fishery if this objective is not achieved is **MED-HIGH** The integrity of the existing fisheries frameworks requires a high level of compliance with regulations. Illegal fishing has the potential to compromise both the sustainability of stock and to cause local depletion issues. Awareness of regulations is very important as fishers are unlikely to comply with regulations that they are not aware of. In addition, while fishers may be aware of the regulations they may not understand the risks of committing an offence to both the fish stocks and themselves. If they do not understand these risks they may be less likely to comply.
Objective C: People's access to fisheries are maximised by seeking to ensure there is enough fish for everyone where they fish.	
Assessment: *"Are we on track?"*	In general the NIWC has a low spatial conflict between sectors, particularly when compared with the much more highly populated and fished east coast, where in some areas a large proportion of some fisheries are caught by customary and recreational fishers. On the NIWC there are a number of closures and restrictions to commercial fishing where customary and recreational fishing continues. Some of these are voluntary agreements and others through regulations. While some were put in place for the specific purpose of separating the sectors, most were for other purposes such as the protection of Maui's dolphins or fish nursery areas. There is also a growing awareness amongst fishers to only catch what they need and not what they can. Many recreational fishing clubs voluntarily impose catch and size limits at competitions. Commercial fishers avoid areas of high fish abundance to avoid over-catch and to spread the catch of the fish throughout the year in order to maintain a steady supply of fish to the market and gain the best prices. The size of most of the stocks in the fish plan in relation to B_{MSY} is unknown, though for many of these stocks the current catches are considered to be sustainable. However, anecdotal and scientific information has documented localised depletion of fish in the Raglan, Manukau and Kaipara harbours, which is not reflected by the overall status of the stock.

Risk:	The current risk to the fishery if this objective is not achieved is **HIGH** A lack of access can increase conflict between sectors, reduce trust and make co-management of the fisheries difficult. There can be serious consequences for each of the sectors if they do not have access to their fisheries. There is a cultural cost to customary fishers who are unable to exercise their customary rights and provide kaimoana at hui[13] and tangi[14]. Tangata whenua can suffer a loss in mana[15] by not providing manaakitanga[16] for their manuhiri[17]. The cost to recreational fishers is largely social, but many recreational fishers also fish to provide a food source for themselves and their families. The impacts on commercial fishers can be on both an individual level with fishers being unable to make a living from their catch, but also a national level reducing export earnings and having a flow-on effect to processing plants and other infrastructure.
Objective D: Best harvest information is used to allocate catch levels fairly amongst all sectors of NIWC finfish fisheries.	
Assessment: *"Are we on track?"*	Where available, catch information is the primary guide for allocating TACs amongst the sectors. While this is done in the fairest way possible, the lack of quality information about customary and recreational catch makes it difficult. Better quality information about all sectors catches would make allocation decisions more fair, realistic and more likely to protect the sustainability of stocks.
Risk:	The current risk to the fishery if this objective is not achieved is **VERY-HIGH** While allocations that do not represent actual sector catches are not likely to have an affect on the sustainability of stocks, there is a potential for stocks to be over-caught, particularly if estimations of customary and recreational catches are inaccurate. Inaccurate allocations can also reduce fishers' access to fisheries and increase conflict between sectors, reduce trust and make co-management of the fisheries difficult.
Objective E: Fishing regulations are clear, effective, practical & enforced.	
Assessment: *"Are we on track?"*	Over the years the number and scope of regulations that apply to west coast fisheries has grown. However, there has been no review of NIWC regulations to ensure that older regulations are still relevant, clear and effective. A plan is in place to review co-ordinates of regulations to ensure that they are correct. In places there is a complication that while sectors have strongly advocated for the need for simple regulations that apply in all areas, coastal communities have equally strongly emphasised the need for localised regulations to reduce problems within their local area. In some cases the best action could involve making people aware of why particular regulations are necessary or why changing them could have wider implications than just in their local area. MFish has guidelines for the penalties given for particular offences, which correspond to the severity of the offence. However, once offenders are prosecuted the judge is responsible for determining a penalty. MFish has limited resources for compliance. Compliance activities are mostly focussed around high risk and high value fisheries such as snapper and grey mullet on the west coast.
Risk:	The current risk to the fishery if this objective is not achieved is **VERY-HIGH** The integrity of the existing fisheries frameworks requires a high level of compliance with regulations and regulations. Illegal fishing has the potential to compromise both the sustainability of stock and cause local depletion issues. Fishers are less likely and/or able to comply with regulations that they can not understand or are not practical.
Objective F: The rights of all users of NIWC finfish fisheries are recognised, enhanced and protected.	

[13] Hui - gathering
[14] Tangi - bereavement
[15] Mana – social standing
[16] Manaakitanga – the act of providing hospitality
[17] Manuhiri - visitor

Assessment: *"Are we on track?"*	Commercial fishing rights are well defined in our existing legislation. The right to fish is provided for through permit access and through the QMS where individual transferable quota is allocated, and can be bought and sold. In contrast, recreational fishing rights have not been defined through legislation and exist only as the inherent right of all New Zealander's to fish recreationally. The lack of specified rights for recreational fishers makes it difficult to recognise and protect these rights. Maori fishing rights stem from the Treaty of Waitangi which guaranteed Maori "the full exclusive and undisturbed possession of their...Fisheries". Various legislation has attempted to address these rights such as the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992, and the Fisheries Act. These Acts and preceding legislation allow Mäori Ongoing access to fisheries for both commercial and customary purposes. Commercial through the provision of quota and customary through the application of specific tools and regulations designed to recognise and provide for management practices of Mäori. The establishment of rohe moana, the notification and training of kaitiaki and the establishment of customary tools (e.g mätaitai reserves[1], rähui[2], taiapure[3]) has increased the capability of the sector to exercise their customary rights. However, the exact nature of Mäori customary fishing rights was never defined and Maori feel that their fishing rights have been eroded over time by successive governments and legislation. The concept of tangata whenua or people of the land is crucial to the definition of Mäori customary fishing rights. Tangata whenua are Iwi or Hapü that hold customary authority over a particular area. Rather than being a general right, customary rights belong to tangata whenua and can only be exercised within their area. The customary fishing rights pertained not only to the use of the fisheries but also the management of the resources. While practices may differ between different Iwi and Hapü customary fisheries have always been actively managed by individuals known as kaitiaki or guardians. The lack of an accepted definition of the nature of customary rights has meant they are not always well recognised by other sectors and enhancing and protecting these rights is more difficult. The recognition of each sectors' fishing rights is increasing through better education of fishers and their involvement in fisheries management. However, for many fishers there is still a lack of understanding of the full nature of these rights. Sector fishing rights can be enhanced in various ways. For commercial fishers the enhancement of their rights stems largely from upholding the integrity of the QMS system. Recreational fishers' rights can be enhanced by improving the accuracy of harvest estimates to ensure adequate allowances are set, by increasing knowledge and capacity through recreational forums. Rights of environmental interests will eventually be taken into better account through a marine protected area strategy for the North Island West Coast region. Non-fishing impacts on fisheries can affect sectors' fishing rights. These include seabed mining, land use, non Fisheries Act closures such as marine reserves and cable zones. Tangata whenua, communities and stakeholders feel that they have not been adequately consulted in relation to these activities, which are regulated under a number of agencies. In order to protect all sectors rights to fisheries, the fisheries must be protected. MFish protects fisheries through the Fisheries Act. Other threats to the marine environment and fisheries were discussed under the environmental objectives.
Risk:	The current risk to the fishery if this objective is not achieved is **MEDIUM** There is increasing body of case law associated with the way the Fisheries Act requirement 'to recognise and provide for sector rights' has been exercised by Ministers of Fisheries. By failing to adequately recognise rights, the Minister risks legal challenge. By failing to enhance rights, rights holders may lose their ability to take part in the management and utilisation of their fisheries. The integrity of existing management frameworks is at risk.

Goal 4 - NIWC finfish fisheries are part of a healthy marine environment:

Objective A: Decision making reflects the Environmental Principles of our legislation.	
Assessment: *"Are we on track?"*	The Act requires decision-makers to take into account three specific environmental principles. These principles are: o Maintaining associated and dependent species above levels that ensure their long-term viability; o Maintaining biological diversity; and o Protecting habitats of particular importance for fisheries management. The Minister of Fisheries must take into account the environmental principles when making decisions. However, at present a lack of information about the relationships between various species, and species and their habitats can make this requirement difficult.
Risk:	The current risk to the fishery if this objective is not achieved is **MEDIUM** The lack of detailed information relating to the environmental principles could result in unexpected or more severe impacts on fisheries and the environment.
Objective B: Awareness of the impacts of non-fishing marine activities is promoted.	
Assessment: *"Are we on track?"*	There are many non-fishing marine activities that may have an impact on the NIWC marine environment. These include: o Building structures on the sea floor e.g. marinas, natural gas well platforms or the Kaipara Harbour turbines. o Disrupting the sea floor e.g. dredging harbours/shipping lanes, seabed mining or cable laying. o Flood protection activities (e.g. removal of mangroves, channel creation), in harbours and estuaries. Within 12 nautical miles of the coast these activities are managed under the Resource Management Act 1991 (RMA). Consents for these activities are granted by Regional Councils and in some cases the Minister of Conservation. Currently, when applying for resource consent applicants must make an assessment of the environmental effects of their activity. This includes effects on the marine environment, and fisheries and fishing activities. The Council will then assess the application and decide whether or not to grant the consent. The Council can impose conditions on the consent that may include monitoring the effects of the activity, restoration or mitigation methods. Seabed mining outside of 12 nautical miles is managed under the Continental Shelf Act 1964 (CSA) and is administered by Crown Minerals and the Minister of Energy. There is no environmental agency solely responsible for environmental issues on the continental shelf. However, the Minister of Energy can consider environmental issues under his powers under the CSA. The current prospecting licences that have been granted have covered this to a certain degree. The CSA is currently under review, which includes the Minister's ability to set environmental conditions when granting permits. Crown Minerals have stated that it is not their policy to inform MFish of any permit application. However, they are "looking into this as a process going forward for any coastal offshore permit applications." There are some examples of cases where the effects of activities on fishing have been taken into account: Ports of Auckland dredge the Manukau harbour to maintain shipping channels. Following environmental objections to disposal of dredgings within the Manukau Harbour in 1991, a working group was established to assess the different options and recommend a preferred site. The Northland Regional Council has granted consent to Crest Energy to install 200 turbine units in the Kaipara Harbour. The Council has proposed numerous conditions on the consent requiring environmental monitoring before and throughout the development. The water quality, effects on customary, recreational and commercial fishing, benthic invertebrates, important spawning areas and cetaceans will be monitored. MFish made a submission to the Council highlighting the importance of the Kaipara Harbour fishery and nursery habitat and cautioned that the development should take this into account. This decision is currently subject to appeal before the Environment Court, which will review the decision and proposed conditions.

Risk:	The current risk to the fishery if this objective is not achieved is **MED-HIGH** Non-fishing marine activities can impact on fisheries. MFish and tangata whenua, communities and stakeholders need to make consent agencies aware of these impacts to ensure they are considered when future activities of this kind are proposed.
Objective C: All sectors promote best fishing practices to minimise the impacts of fishing on the NIWC marine environment.	
Assessment: *"Are we on track?"*	Some fishing methods are known to have impacts on the marine environment. Some of these impacts are reasonably well documented such as those caused by commercial dredging and trawling, and bycatch of fish, birds, mammals and turtles by long lines and set nets. Ghost fishing, (lost or discarded fishing gear) and mammal entanglement in static gear (e.g. rock lobster pots) can also kill bycatch species and mammals. The effects of customary and recreational fishing are less well studied but may include bycatch mortality, gear loss (softbaits, sinkers, nylon line) and littering of the marine environment. There are numerous regulatory measures that mitigate the effects of fishing on the NIWC marine environment. There are several where some fishing methods are prohibited such as the Sugar Loaf Islands Marine Protected Area, the Spirits Bay Closure, trawling within harbours and out to 1 nautical mile, three sea mounts closures, set net closures around 90 Mile Beach (to reduce ghost fishing) and the Maui's dolphin closures. There are also three marine reserves where all fishing is prohibited. There are also national plans of action for sharks and seabirds. Both plans promote methods to reduce bycatch during fishing including a range of regulatory and voluntary methods. The Government's approach to protecting seabed habitats is outlined in the Strategy for Managing the Environmental Effects of Fishing (launched in 2005). This strategy sets standards based on the relative vulnerability of habitats (standards will determine how much of each habitat will remain free of impact). A Habitat Standard will define how much of each sea-bed habitat must remain free of damage, including from fishing. This will ensure that the effects of fishing do not stop sea-bed habitats functioning and contributing effectively to fish production and the marine ecosystem, including increasing fish populations. MFish is currently undertaking a range of research projects to give more information on sea-bed habitats, particularly soft-sediment and seamount habitats in offshore areas and assess the effects of trawling on different habitat types. MFish regularly publishes guides that promote best fishing practices within the customary and recreational sector such as releasing undersized fish and the correct way to use set nets. Recreational fishing clubs often impose their own best practices by having club minimum sizes and bag limits. Commercial fishing companies have also implemented their own voluntary codes of practice to promote best practice.
Risk:	The current risk to the fishery if this objective is not achieved is **HIGH** Standards are being developed to ensure NIWC finfish fisheries are managed consistently with other fisheries. Action to address best practice has been prioritised in Objective 1B.
Objective D: All sectors work together to promote and maintain a healthy NIWC marine environment	

Assessment: *"Are we on track?"*	Prior to the formation of the NIWC Advisory Group there were few examples of fisheries sector participants working together on the NIWC. In Taranaki, MFish co-ordinates a long-standing, multi-stakeholder fisheries forum that includes tangata whenua and stakeholder representatives from all sectors within the region. Some other agencies such as the Department of Conservation and regional councils are also involved with this committee. The Kaipara Harbour Integrated Management Group was formed in 2007 by Te Uri O Hau, Ngäti Whätua and partners. The group includes representatives from councils and other government agencies, the agriculture industry, Te Puni Kokiri and Forest and Bird. The group aims to bring about an improvement in the health and productivity of the Kaipara Harbour by promoting a co-ordinated management of the Kaipara and its catchment. Other than the NW finfish Plan there are no multi-sector groups that cover large geographic areas on the west coast.
Risk:	The current risk to the fishery if this objective is not achieved is **MEDIUM** There are significant benefits of all tangata whenua, communities and stakeholders working together. This leads to more effective decisions with wider support, achieved through improved assessment of options and sharing of information.
Objective E: The impact of land-based activities on the NIWC marine environment is understood and reflected in decision making.	
Assessment: *"Are we on track?"*	There is widespread recognition that the effects of human activities on land can contribute to the degradation of the marine environment, but there is limited information to detail the extent and impact of these effects on the west coast. The coastal environment can be affected by land use both on the surrounding coastline but also land use and in inland areas through contributing river catchments and stormwater discharges. This can include contaminants such as sediment, nutrients and toxicants. The Resource Management Act 1991 (RMA) provides a framework to manage the effects of land based activities, but relies on assessments of environmental effects based on the current knowledge. Councils may impose conditions on resource consents that specify monitoring programmes or mitigation measures that must occur such as planting of trees or sediment traps. However, there are many activities that can occur as of right, such as pastoral farming and forestry that also indirectly affect important marine habitats through contaminant discharges. There is growing awareness of the need to control these discharges, but the need to do so for fisheries purposes has only recently been identified. Regional, district and city councils have responsibility under the RMA to monitor the environment and make the results available every five years. The most common monitoring of the marine environment is water quality at coastal swimming spots which is measured by testing for enterococci bacteria. A number of sites in the NIWC harbours and coastal areas are regularly monitored for water quality. Freshwater water quality monitoring, measuring a number of indicators, is also undertaken regularly in a number of streams and lakes in the NIWC region. In addition, other projects have been undertaken to monitor sediment levels, contaminants and biological indicators in some of the harbours. MFish recently commissioned a report to assess the current state of knowledge of land-based activities' impacts on coastal fisheries and their supporting habitats in New Zealand. This report considers that our current understanding of the impacts of land use on coastal fisheries and in the New Zealand marine environment is limited. However, there is evidence that sediment and nutrients in particular can have negative impacts on fish habitats and directly on some (mainly juvenile) fish. The report notes that while many local areas would benefit from individual studies, there are some broad research questions that need to be addressed and that the relative role of other stressors such as fishing should be included in the research. Suggested gaps in the research include fish-habitat associations, habitat connectivity, river plume influence, and the actual effects of sedimentation and eutrophication on selected fished species and key habitats and the interaction of multiple impacts. While there is a lot of work going on to improve our understanding of land based effects, and to create policies and plans that will ensure that resource consents manage the effects of land based activities, users of the North Island West Coast marine environment feel that the wrong decisions are made in many cases.

	The sheer number of these decisions makes it difficult for interested parties to stay involved and people are further alienated by a process that is difficult for those without professional advice to participate in.
Risk:	The current risk to the fishery if this objective is not achieved is **HIGH** Land based activities can significantly affect fisheries – including overall sustainability and reduced access for fishers. There needs to be far more integration between agencies to ensure these impacts can be minimised.

Photos: T. Smith

APPENDIX 2: PARTICIPANTS

Sheryl Hart	NZ Recreational Fishing Council/ North Island West Coast Recreational Forum
Tommy Moana	Nga Hapu o Te Uru o Tainui
Clive Monds	ECO
Ron Fenwick	Northland Recreational Forum
Victor Holloway	Te Hiku o Te Ika / Ngati Kahu
Sam Karaka	Nga Hapu o Te Uru o Tainui
Henry Gentry	Te Hiku o Te Ika
Ben Potaka	Te Taihauāuru Iwi Forum
Brent Rolston	Feilding Surfcasters Club / North Island South West Recreational Forum
Richard Orzecki	Te Hinakinui o Kapiti
Doug Carter	Northland Non-Commercial Fishing Forum/Kaipara Harbour Sustainable Fisheries Management Study Group
Carol Scott	Challenger Finfish Management Company
Leane Makey	ECO
Mark Bellingham	Royal Forest & Bird Protection Society
Andrew Bond	Sanford Ltd / Northern Fisheries Stakeholder Management Co. Ltd
Kevin Moratti	Taranaki Recreational Fishers Association/ North Island South West Recreational Forum
Trish Rea	Option4 / North Island West Coast Recreational Forum / Hokianga Accord
Kerry Torpey	Manukau commercial fisher
Hally Toia	Ngati Whatua
Lynette Stafford	Nga Hapu o Te Uru o Tainui
Abe Witana	Te Hiku o Te Ika / Te Rarawa
Des Subritzky	Kaipara Harbour Sustainable Fisheries Management Study Group/ Northland Recreational Forum
Keith Mawson	Taranaki Commercial Fishermen's Association / Egmont Seafoods

MFish

Sarah Omundsen	MFish North West Inshore Fisheries Manager (Chair)
Paul Creswell	MFish Central Inshore Senior Fisheries Analyst
Richard Fanselow	MFish North West Fisheries Analyst
Dominic Vallieres	MFish Compliance Analyst
Barney Anderson	MFish Pou Hononga (Waikato)
Laura Mitchell	MFish North West Fisheries Analyst
Tracey Smith	MFish North West Fisheries Analyst (Co-ordinator)
Te Puoho Katene	MFish Science Officer
Kevin Sullivan	MFish Science Manager

Note: Participants were involved in an advisory role and were not required to be mandated representatives of their organisations/groups.

APPENDIX 3: GLOSSARY

Best available information – defined in the Fisheries Act as the best information that, in the particular circumstances is available without unreasonable cost, effort or time.

Bycatch - fish species, or size classes of those species, that are caught in association with key target species.

DoC – Department of Conservation

Environmental Principles – under the Fisheries Act 'All persons exercising or performing functions, duties, or powers under this Act, in relation to the utilisation of fisheries resources or ensuring sustainability, shall take into account the following environmental principles:

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

Eutrophication - the process where water becomes enriched in dissolved nutrients (e.g phosphates) that stimulate the growth of aquatic plant life usually resulting in the depletion of dissolved oxygen.

The Advisory Group - Fisheries Plan Advisory Group – a group consisting of tangata whenua and other stakeholders from different fishing sectors that advise MFish on the development of a Fish Plan.

Harvest Strategy - The Harvest Strategy Standard is a policy statement of best practice in relation to the setting of fishery and stock targets and limits for fishstocks in the QMS. It is intended to provide guidance as to how fisheries law will be applied in practice, by establishing a consistent and transparent framework for decision-making to achieve the objective of providing for utilisation of New Zealand's QMS species while ensuring sustainability. The Harvest Strategy Standard outlines the MFish's approach to relevant sections of the Fisheries Act 1996, and will form a core input to the MFish's advice to the Minister of Fisheries on the management of fisheries, particularly the setting of TACs under sections 13 and 14.

Information Principles - All persons exercising or performing functions, duties, or powers under this Act, in relation to the utilisation of fisheries resources or ensuring sustainability, shall take into account the following information principles:

(a) Decisions should be based on the best available information:
(b) Decision makers should consider any uncertainty in the information available in any case:
(c) Decision makers should be cautious when information is uncertain, unreliable, or inadequate:
(d) The absence of, or any uncertainty in, any information should not be used as a reason for postponing or failing to take any measure to achieve the purpose of this Act.

Inshore – close to the shore/land.

Kaitiaki - guardian

Kaitiakitanga – guardianship

Littoral – close to the shore/land.

Mana – prestige, authority, status

Management tools and services – these refer to actions MFish and sectors may take to manage or improve the management of fisheries e.g. regulation changes, reviews, research or principles to work by.

Mätauranga – Knowledge

Marae - Māori community facilities that usually consist of a carved meeting house, a dining hall and cooking area and the marae ātea (sacred space in front of the meeting house).

MSY – Maximum Sustainable Yield - For the purposes of the Fish Plan Maximum Sustainable Yield is the largest long-term average catch or yield that can be taken from a stock under prevailing ecological and environmental conditions. It is the maximum use that a renewable resource can sustain without impairing its renewability through natural growth and reproduction.

QMA - Quota Management Area. An area of ocean within the

QMS - Quota Management System. The QMS is the name given to the system by which the total commercial catch from all the main fish stocks found within New Zealand's 200 nautical mile Exclusive Economic Zone is regulated.

Risk and Gap analysis – the Fish Plan includes an analysis of the likely risk to the sustainability and health of fisheries is if action is not taken and the gap between the current situation compared to objectives of the Fish Plan.

Set net soakage – the length of time a set net is in the water from deployment to haul in.

Stock - The term has different meanings. Under the Fisheries Act, it is defined with reference to units for the purpose of fisheries management. For the purposes of the Harvest Strategy Standard, a biological stock is a population of a given species that forms a reproductive unit and spawns little if at all with other units. However, there are many uncertainties in defining spatial and temporal geographical boundaries for such biological units that are compatible with established data collection systems. For this reason, the term "stock" is often synonymous with an assessment/management unit, even if there is migration or mixing of some components of the assessment/management unit between areas.

Sustainability – harvesting or using a resource so that it is not permanently damaged, to allow further use.

TAC - Total Allowable Catch – the total amount of a quota management stock that can be taken in a fishing year.

Tangata whenua - local people

Taonga – treasure, possessions

NIWC - North Island West Coast

APPENDIX 4: INFORMATION BRIEF