



# Annual Operational Plan for Inshore Finfish Fisheries

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## 2.0 Glossary of Terms

Aquatic environment	The natural and biological resources comprising any aquatic ecosystem including aquatic life. These environments can include: oceans, seas, coastal areas, inter-tidal areas, estuaries, rivers, lakes and other places.
Biological diversity	The variability among living organisms, including diversity within species, between species and of ecosystems
Biomass	The size of a <b>stock</b> in units of weight.
$B_{MSY}$	The average <b>stock</b> biomass (or size) that results from taking an average catch of <b>maximum sustainable yield</b> under various types of harvest strategies.
Fisheries resources	Any one or more <b>stocks</b> or species of fish, aquatic life or seaweed.
Fishstock or Stock	Any fish, aquatic life or seaweed of one or more species that are treated as a unit for the purpose of fisheries management.
Group	The grouping of fish stocks to facilitate multi-stock objective setting and service delivery. The grouping methodology categorises stocks according to their desirability to fishers, their biological vulnerability, and how <b>management objectives</b> and <b>service strategies</b> might differ across categories.
Habitat	Includes all aspects of the <b>aquatic environment</b> which fisheries resources depend on directly or indirectly in order to carry on their life processes.
Hard limit	A specified <b>biomass</b> (or proxy) reference level below which a fishery should be considered for closure.
Harvest strategy	Identifies target, soft and hard biomass reference points and management actions associated with achieving the target and avoiding the limits.
Management Action(s)	The key results that will be targeted for completion during the time period of the AOP that will contribute to the delivery of management objectives in the National Fisheries Plans for Inshore Fisheries.
Management Objective(s)	The high-level objectives set for inshore finfish fisheries in the National Fisheries Plan for Inshore Finfish.
Management Procedure	Tool used to guide the setting of catch limits. Specifies what data will be used, and how it will be used, to determine a catch limit.
Management Service(s)	The high-level tasks and resources required to ensure delivery of the Management Actions. These include services provided for the purposes of fisheries management, such as changes to catch limits and rules, education, enforcement, monitoring and research.

Maximum Sustainable Yield (MSY)	In relation to any <b>stock</b> , means the greatest yield that can be achieved over time while maintaining the stock's productive capacity, having regard to the population dynamics of the stock and any environmental factors that influence the stock.
Performance measure(s)	Assists the Ministry in determining whether the <b>management objective(s)</b> is/are being met. Performance measures may be direct or indirect depending on the information available. Assessment of the measure may provide a signal that there is a need to investigate further and to possibly take new action.
Protected species	As defined in the Wildlife Act 1953 and the Marine Mammals Protection Act 1978.
Quota Management System (QMS)	System of fisheries management for the main harvest species in New Zealand which includes the requirement to set a <b>TAC</b> , make allowances for customary Māori interests, recreational interests and fishing-related mortality and set a <b>TACC</b> .
Service Strategies	The Ministry's preferred approach (in general terms) where a management intervention or service is required to achieve the management objective(s).
Soft Limit	A specified <b>biomass</b> (or proxy) level that triggers a requirement for a formal, time constrained rebuilding plan.
Stock Status	A determination made about the current condition of the <b>stock</b> on the basis of stock assessment results.
Sustainability	Maintaining the potential of <b>fisheries resources</b> to meet the reasonably foreseeable needs of future generations and avoiding, remedying or mitigating any adverse effects of fishing on the <b>aquatic environment</b> .
Sustainability Measures	Means any measure or action taken for the purpose of ensuring sustainability.
Target biomass	Generally a <b>biomass</b> (or proxy) level that management actions are designed to achieve with at least 50% probability.
Total Allowable Catch (TAC)	The total quantity of fishing-related mortality allowed for a <b>QMS stock</b> in a given fishing year.
Total Allowable Commercial Catch (TACC)	The total quantity of commercial catch allowed for a <b>QMS stock</b> in a given fishing year.
Utilisation	Conserving, using, enhancing and developing fisheries resources to enable people to provide for their social, economic and cultural wellbeing.

## 3.0 Introduction

### 3.1 Purpose

The Annual Operational Plan describes the specific Management Actions relating to all fisheries managed under the National Fisheries Plan for Inshore Finfish (the Finfish Plan) that will be undertaken during the 2012/13 financial year. Completion of the Management Actions will contribute to meeting the Management Objectives, outcomes and goals described in the Finfish Plan.

Also included in this Annual Operational Plan are details of the Management Services (compliance, research, regulatory, etc.) that will be required to deliver the specified Management Actions, and the agency and business group responsible for delivery.

### 3.2 Context

The Annual Operational Plan is one of two annual companion documents to the Finfish Plan. The Finfish Plan provides the overarching framework for management of New Zealand's inshore finfish fisheries and is implemented through an annual planning and service delivery cycle (refer Figure 1).

The Finfish Plan guides the annual cycle by establishing the Management Objectives for the fisheries. The Annual Operational Plan sets out the specific stock, fishery and across-fishery Management Actions and Management Services that will contribute to the achievement of the Finfish Plan Management Objectives.

This Annual Operational Plan is informed by an Annual Review Report for Inshore Finfish. The Annual Review Report presents information on:

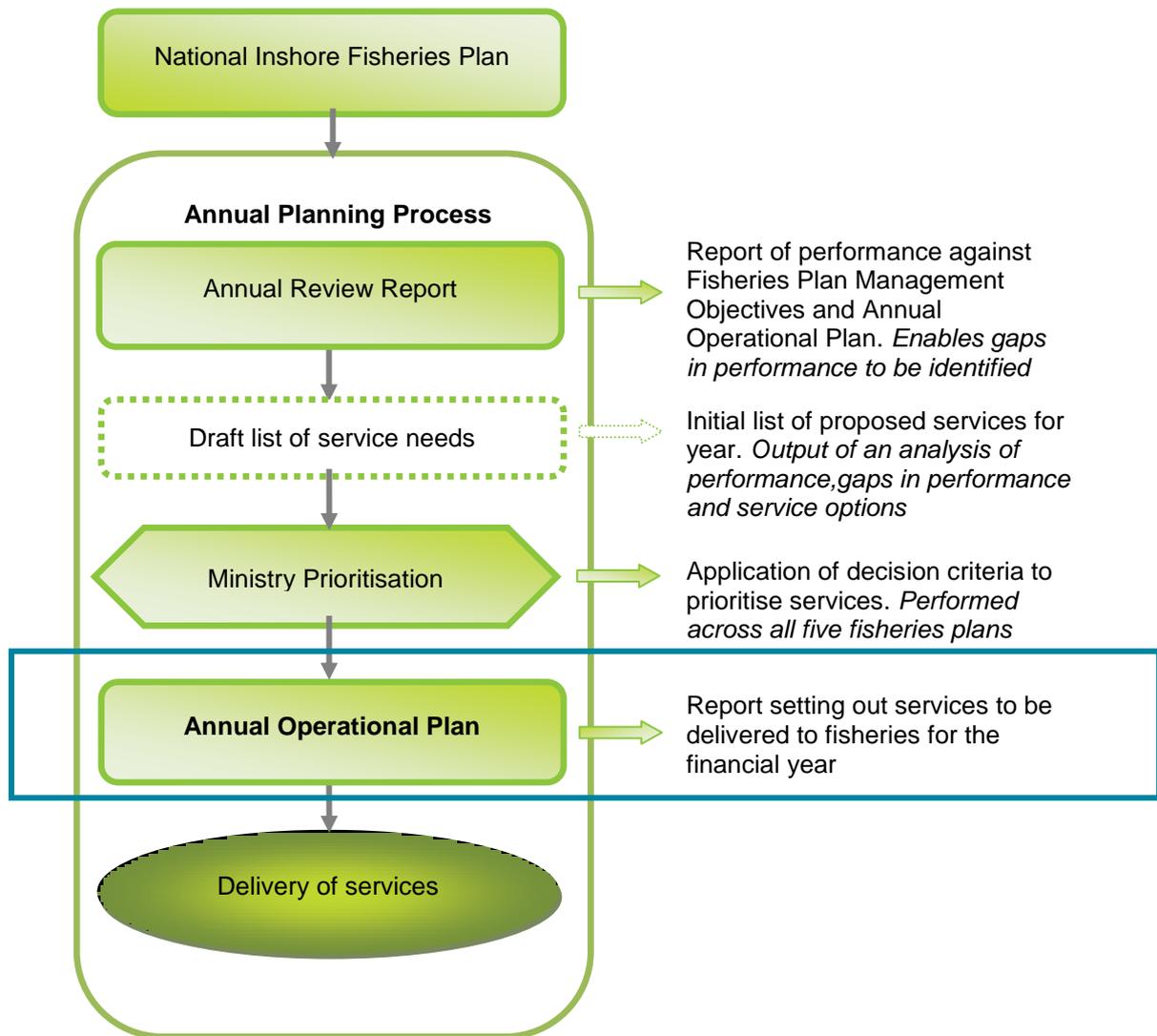
1. The status of finfish fisheries relative to the performance measures set out in the Finfish Plan (and associated stock-specific performance measures), and
2. Delivery of Management Actions and Services specified in the previous year's Annual Operational Plan [Note: the upcoming Annual Review Report will review last year's (i.e. the 2011/12) Annual Operational Plan].

Together, parts one and two of the Annual Review Report identify potential areas of focus when developing the Annual Operational Plan, which are analysed and discussed with tangata whenua and stakeholders to determine what, if any, management action is required.

Not all management actions are driven by performance gaps. Management Actions and Services are also applied to maintain a desired level of performance or to further enhance performance in a key result area.

The demand for Management Services is frequently greater than can be provided by the Ministry for Primary Industries (the Ministry). An internal prioritisation within the Ministry across Annual Operational Plans from the five different Fisheries Plans (Deepwater, Highly Migratory, Inshore Finfish, Inshore Finfish, and Freshwater) seeks to address competing interests. Engagement with tangata whenua and stakeholders also provides opportunities to identify where these groups can provide needed or desired services.

**Figure 1: Annual Planning and Service Delivery Cycle**



### 3.3 Operational Plan “Components”

The terminology used in the Annual Operational Plan is further described below.

#### Stock Groups

The Finfish Plan groups fish stocks to facilitate multi-stock objective setting and service delivery. The grouping methodology categorises stocks according to their desirability to fishers, their biological vulnerability, and how management objectives and service strategies might differ across categories. This Annual Operational Plan organises management actions by stock groups (defined in Appendix 1), but there are also a number of actions that relate to stocks in multiple groups.

#### Management Actions

Management Actions are the key results targeted for completion during the time period of the Annual Operational Plan. These actions will contribute to the successful delivery of the Management Objectives specified in the Plan. Each Management Action will provide a clear link to the relevant Management Objective(s) in the Finfish Plan.

Management Actions are described at a high-level to provide a clear overview of what the Ministry is planning to achieve for that financial year. They may apply to a specific stock, fishery, group, or across the entire Finfish Plan.

#### Management Objectives

Management objectives in this Annual Operational Plan are taken from the Finfish Plan. They are shown within the table as italicised headings. A management action may relate to more than one objective but in most cases only the key management objective is referenced.

#### Type of Action

The “Type of Action” column includes:

- **Carry-over** Actions that were progressed or initiated in 2011/12.
- **Triggered** Actions that have arisen out of the review of performance in 2010/11 or have been identified as opportunities to improve current frameworks.
- **Maintenance** Actions that are required to maintain performance of a stock, fishery, or the fisheries management framework (e.g. application of an approved management procedure).

#### Need for Action

The “Need for Action” column describes the performance gap the Management Action seeks to address and identifies links between management actions.

## 4.0 Management Actions

### 4.1 Introduction

The Ministry has set out 80 Management Actions to deliver in the 2012/13 financial year for inshore finfish fisheries. 26 of these are multi-stock actions that relate to stocks in multiple groups (and in some cases, stocks managed outside the Finfish Plan). The Management Action tables explain the need for action and how it will support the achievement of Management Objectives in the Finfish Plan.

### 4.2 Cross Group Management Actions for Finfish

Management Action	Type of Action	Need for Action
A1. Develop framework and programme for Inshore vessel monitoring	Maintenance	Improved ability to monitor at sea will increase confidence in commercial catch information and promote best practice behaviours across a range of areas including interactions with non-fish species. This is a key underlying action that relates to all the management objectives in the Finfish Plan and will support a number of actions within this Annual Operational Plan.
<b>Maximise/secure social, economic, and cultural benefits from each fishstock.</b>		
A2. Increase proportion of New Zealand fisheries waters covered by the customary regulations.*	Triggered (Carry-over)	The quality of information on non-commercial use and value is poor relative to available commercial sector information. <ul style="list-style-type: none"> <li>Customary authorisation and harvest reporting is low and/or reporting is not required (Regulation 27A<sup>2</sup> applies) in significant portions of many Fishery Management Areas.</li> <li>Participation in recreational fishing activities is thought to have increased in the last decade, but available information is highly uncertain and insufficient to determine trends over time.</li> </ul>
A3. Design initiatives to improve iwi and Tangata tiaki/Kaitiaki understanding of the importance and use of customary permit data and provide for easy reporting of data.*	Triggered (Carry-over)	The lack of information makes it difficult to determine whether management objectives are being met and impacts advice for decision-making.
A4. Complete large-scale multi-species survey to monitor recreational fisheries.*	Triggered (Carry-over)	Existing initiatives to gather information will continue and improved in 2012/13 while a longer term strategy is developed to guide improvements over the medium term. This will include consideration of how to enable non-commercial representatives to contribute information and participate in research processes and activities.
A5. Undertake research projects to		

\* Cross-fisheries plan management action – relevant to the National Fisheries Plans for Inshore Shellfish, Finfish, & Freshwater.

<sup>2</sup> Fisheries (Amateur Fishing) Regulations 1986

Management Action	Type of Action	Need for Action
<p>integrate and improve estimates of recreational catch.*</p> <p><b>A6.</b> Review catch reporting requirements in charter boat regulations, increasing fish stock coverage.<sup>1</sup></p> <p><b>A7.</b> Develop strategy for gathering information on non-commercial fisheries (including, but not limited to, catch and value). *</p>	<p>Maintenance</p> <p>Triggered</p> <p>Triggered (Carry-over)</p>	
<p><b>A8.</b> Develop and implement strategies to manage mixed species finfish fisheries.</p> <p><b>A9.</b> Complete and implement Discards-at-Sea project</p>	<p>Triggered (Carry-over)</p> <p>Maintenance (Carry-over)</p>	<p>Inshore finfish are often taken within mixed fisheries and utilisation of target species can be constrained by associated species.</p> <p>Strategies to improve understanding of mixed fishery dynamics and options to better reflect these characteristics in management will be explored.</p>

<sup>1</sup> Currently reporting of hapuku, bass, and kingfish is required when fishing activity is undertaken in Fisheries Management Areas (FMAs) 1 and 7 and blue cod in FMA 7 only. MPI proposes to extend catch reporting of these species to all FMAs with the exception of BCO 1, and also include bluenose for all FMAs from 1 October 2012.

Management Action	Type of Action	Need for Action
<p><b>A10.</b> Undertake analysis of identified opportunities for improvement to regulatory frameworks and develop process to support identification of other opportunities.</p>	<p>Maintenance</p>	<p>The Government and MPI are committed to actively seeking opportunities to increase benefits from sustainable utilisation.</p> <p>Some regulations may inadvertently and unnecessarily constrain or impact the benefits that can be attained from sustainable utilisation of finfish fisheries. Others may create unnecessary compliance costs.</p> <p>The following areas have been identified for further analysis over 2012/13:</p> <ul style="list-style-type: none"> <li>a) <b>Recreational daily bag limits</b> are adjusted to support sustainability measures as reviewed from time to time for particular stocks or species. Analysis across current regulations will look for opportunities for improvement across the package (e.g improved consistency across areas to support education and compliance).</li> <li>b) Opportunities to better manage the unique characteristics of <b>amateur fisheries in the Chatham Islands</b> have also been identified.</li> <li>c) Analysis across both recreational and commercial <b>set net regulations</b> will look across both recreational and commercial regulations to identify areas for improvement</li> <li>d) Suggestions put forward to alter <b>amateur fishing regulations for the Fiordland Marine Area</b> (to reduce bulk harvesting) and <b>Southland and South East</b> areas (to revise restrictions on number of lines) will also be explored alongside the analysis above.</li> </ul> <p>The development of a process to systematically scan for other opportunities is intended to increase the timeliness by which unnecessary restrictions or areas for improvement can be identified and removed or amended.</p>
<p><b>A11.</b> Develop a medium term compliance strategy for inshore finfish.</p> <p><b>A12.</b> Increase deterrent activities where emerging or systemic illegal activities (or opportunities for illegal activity) are identified.</p> <p><b>A13.</b> Improve fisher awareness and understanding of fishing laws where current compliance levels are sub-optimal.</p>	<p>Maintenance (Carry over)</p>	<p>Education and compliance services are essential to support the operation of management frameworks.</p> <p>Illegal fishing negatively impacts on the benefits that may be derived from legitimate finfish fisheries across all sectors. Reducing illegal fishing may require fisheries management or compliance intervention services, or a combination of these.</p> <p>A compliance strategy for inshore finfish will provide some agreed areas of focus over the medium term while recognising the need for core business and an adaptive framework including intelligence-based models to identify and respond to risks as they arise during the year.</p>

Management Action	Type of Action	Need for Action
<p><b>A14.</b> Develop education programme on hook use for all South Island blue cod stocks.</p>	<p>Triggered</p>	<p>In response to sustainability concerns in the Marlborough Sounds a number of measures have been enacted in the recreational fishery in recent years. These measures have been accompanied by the promotion of best fishing practices including hook use.</p> <p>Blue cod is a highly desired species across the South Island and there are a number of local concerns. This action seeks to extend the promotion of best practice for hook use across all South Island blue cod stocks and will consider potential incentives and educational approaches to support best practice.</p>
<p><b>A15.</b> Complete review of sustainability measures for the 1 October 2012 fishing year<sup>3</sup> and identify candidates for 2013-14.</p>	<p>Maintenance</p>	<p>Timely management intervention is important for ensuring sustainability and maximising the long-term benefits from a stock.</p> <p>To ensure changes are in place for the beginning of the October fishing year development of advice begins in May/June. For those managed in-season development will begin in December.</p> <p>New information on the status for some stocks will become available during 2012/13<sup>4</sup> and in conjunction with harvest strategies (as applicable) will support decisions on which stocks to put forward for review for the 1 October 2013 fishing year.</p>

<sup>3</sup> See BNS 1,2,3,7,8 (Group 3) GUR 3, GUR 7 (Group 4) ELE 5, GSH 2, GSH 8, JDO 7, POR 2 (Group 6) SCH (Group 5- listing on the 6<sup>th</sup> schedule), potential in-season increase for FLA 3 and RCO 3 (Group 2). Deemed values are also reviewed annually and changes are proposed this year for all GSH, MOK, POR, SNA and TRU stocks.

<sup>4</sup> Stock assessments are expected for SNA 1 and BCO 5 (Group 1) and updated abundance indicators are expected for BCO 3, LIN 1, TAR7 (Group 3) GUR 1, RCO7, GUR7 (Group 4) RSK 7, SSK 7, SPD7 and all SPO stocks (Group 5) and STA7 (Group 6).

Management Action	Type of Action	Need for Action
<b>Maintain stocks at/above specified target reference levels.</b>		
<b>A16.</b> Continue the implementation of a plan to establish harvest strategies for Group 1 – 5 finfish stocks and define management approaches for Group 6 stocks. <sup>5</sup>	Triggered (Carry-over)	A harvest strategy specifies a stock's management target and other reference points that will guide fisheries management decisions. Alongside an associated research plan, harvest strategies will provide greater clarity to all fishery stakeholders about how stocks will be managed, and the timing and approach to management interventions (for example, total allowable catch setting).  Where research is not considered to be cost-effective a more conservative approach to catch limits will be required and these principles will be developed and defined under the management approaches for Group 6.
<b>A17.</b> Continue the review and development of a medium-term research plan for inshore finfish stocks.	Triggered (Carry-over)	Medium-Term Research Plans (MTRPs) set out the research needed to determine and monitor stock-level targets.  As the finfish MTRP develops it will improve efficiency and certainty in purchasing research and support development/operation of harvest strategies (e.g supporting development and operation of cost-effective management procedures). These plans also indirectly support the delivery of other initiatives to improve value derived from New Zealand's finfish fisheries.
<b>A18.</b> Undertake West Coast South Island Trawl Survey and commission independent review of trawl survey approach.	Triggered	A number of South Island finfish stocks are currently monitored using biannual trawl surveys <sup>6</sup> . The West Coast South Island trawl survey is scheduled to be undertaken in 2013. A technical report on both this and the East Coast South Island trawl survey series alongside cost-benefit analysis of the use/ potential use of the data will provide a platform for future planning and harvest strategy development.
<b>A19.</b> Require reporting of catch by species for HPB (hapuku/bass) and FLA (flatfish) stocks.	Triggered	Both HPB and FLA quota management stocks cover multiple species with varied biological characteristics. Requiring catch reporting by species will improve the quality of information available for monitoring harvest and determining target levels.

<sup>6</sup> West Coast South Island- see TAR 7 (Group 3), RCO7, GUR7 (Group 4), RSK 7, SSK 7, SPD 7 (Group 5) GSH7 and STA 7 (Group 6). East Coast South Island- see RCO 3 (Group 2), ELE 3 (Group 3), GUR 3 (Group 4), RSK 3, SSK 3, SPD 3 (Group 5) TAR 3, GSH 3, (Group 6)

Management Action	Type of Action	Need for Action
<b><i>Protect, maintain and enhance habitats of particular significance for fisheries management.</i></b>		
<b>A20.</b> Implement an agreed definition and process for identifying and protecting habitats of particular significance for finfish fisheries management.*	Triggered	A working definition of habitats of particular significance for fisheries management was developed in 2012, along with guidelines for its application in fisheries management decision making. Where habitats of particular significance for fisheries management are identified, the guidelines support efforts to identify threats and determine measures to protect and/or mitigate negative impacts on those habitats.
<b>A21.</b> Improve information to identify (locate) habitats of particular significance for fisheries management.	Triggered	Although some habitats/areas that contribute to fishstock wellbeing have been protected, it is currently difficult to plan action or assess effectiveness in a cohesive way. Implementation of the policy definition will assist in planning to improve the information available to support identification of such areas.
<b>A22.</b> Develop “peer networks” in natural resource management agencies to share information where non-fishing activities may impact on the health of inshore finfish fisheries.*	Triggered (Carry-over)	The concept of habitats of particular significance for fisheries management is only captured at a high-level in most resource policy and planning documents. There are few operational objectives or policies that would support protection of such habitats. With work on a policy definition underway MPI is in a better position to promote dialogue amongst networks both internally and externally (e.g. with DOC and council counterparts) at the operational level. The purpose of these networks will be to grow levels of understanding, monitoring and mitigation of non-fishing activities that may impact habitats of particular significance for fisheries management.
<b><i>Minimise adverse effects of fishing on the aquatic environment, including on biological diversity.</i></b>		
<b>A23.</b> Improve information to monitor and manage impacts of finfish fishing on benthic habitats.	Triggered (Carry-over)	Trawling hours have increased nationally over the last three years but it is unclear whether this indicates increasing interactions with the benthos. Improved information, for example through vessel monitoring systems, will help to assess impacts and determine the need for management response.
<b>A24.</b> Review the Maui’s dolphin component of the Hector’s and Maui’s Dolphin Threat Management Plan	Triggered	Public and government concern over the effect of human induced mortality on Hector’s and Maui’s dolphins led to the development of a Threat Management Plan in 2007.  The Maui’s dolphin population is now estimated to be approximately 55 individuals over one year of age. This very small population size suggests that the population is at high risk of extinction and that any human-induced mortality poses a serious threat to any future recovery. Due to overlaps between fishing effort and species distributions, a number of inshore finfish fisheries have been associated with high levels of risk.
<b>A25.</b> Gather information to monitor and manage impacts of finfish fishing on Maui’s and Hector’s dolphins.		The Government is committed to protecting and ensuring the long term survival of Hector’s and Maui’s dolphins. A review of the Maui’s dolphin component of the Hector’s and Maui’s Dolphin Threat Management Plan has been prioritised for completion in 2012. Consideration will also be given to the timeframe for review of the Hector’s dolphin components.

Management Action	Type of Action	Need for Action
<b>A26.</b> Develop National Plan of Action-Seabirds	Triggered (Carry-over)	<p>Incidental mortality from commercial fishing in New Zealand has been identified as a risk for a number of seabird species, with black petrel standing out as the species currently at highest risk. Due to overlaps between fishing effort and species distributions, and low observer coverage, a number of inshore finfish fisheries have been associated with high levels of risk.</p> <p>MPI is working with DOC and the fishing industry to determine management approaches that will be effective and practical. Guiding this work the National Plan of Action–Seabirds is being developed to define policy objectives. MPI is also involved in the Southern Seabirds Solutions Trust which aims to empower fishermen to avoid and mitigate the effects of their fishing.</p> <p>New information is expected during 2012/13 and this will support decisions on the best operational approach to addressing risks to seabird populations, including black petrel, from inshore finfish fisheries.</p>
<b>A27.</b> Gather information to monitor and manage impacts of fishing on seabirds.		
<b>A28.</b> Participate in the Southern Seabird Solutions Trust.		
<b>A29.</b> Review National Plan of Action-Sharks	Maintenance	<p>A number of shark species are managed under the Finfish Plan or taken in inshore fisheries. The National Plan of Action for the Conservation and Management of Sharks (NPOA-Sharks) is programmed for review this year and it will be important to provide inshore perspectives in this review.</p> <p>In support of the current NPOA–Sharks a proposal has been put forward to list school shark species on the 6<sup>th</sup> Schedule of the Fisheries Act 1996 from 1 October 2012. The need for further action in 2012/13 will be determined following the review.</p>
<b>A30.</b> Develop and undertake approaches to support the objectives of the National Plan of Action for Sharks.		

### 4.3 Management Actions for Group 1 Finfish Stocks

The management approach for Group 1 stocks ensures accurate and frequent monitoring, including regularly updated estimates of biomass and yield. Programming research to complete stock assessments and the development of harvest strategies to guide management responses are key areas of work for this group in 2012/13.

Management Actions	Type of Action	Need for Action
<b>Maintain stock size at or above <math>B_{MSY}</math> (or agreed proxy)</b>		
<b>Blue Cod 5 (BCO 5)</b>		
<b>A31.</b> Complete stock assessment for BCO 5.	Triggered	Catch per unit effort analysis suggests BCO5 is declining. There are concerns that continued decline could carry risks for stock sustainability and have negative short and long-term impacts on the level of benefits that can be derived from the stock. The total allowable commercial catch and recreational bag limits were reduced on 1 October 2011 in an attempt to address these concerns. A South East Finfish funded research project is currently underway to develop an "Ecosystem spatial management model" for BCO5. Outcomes from this project will help determine the need for further information to assess the stock, and support harvest strategy development and a potential TAC review in 2013 (see A15, A16 and A17).
<b>A32.</b> Include BCO 5 in requirements for charter boat catch reporting.	Triggered	
<b>Kahawai 1 (KAH 1)</b>		
<b>A33.</b> Complete current research projects to support a 2013/14 KAH 1 stock assessment update.	Maintenance	There have been a number of research projects initiated over the last couple of years to support monitoring and a future assessment of KAH 1. No new action is planned for 2012-13, but a proposal for a stock assessment will be put forward for prioritisation in 2013-14.
<b>Snapper 1 &amp; Snapper 8 (SNA1 &amp; SNA 8)</b>		
<b>A34.</b> Complete SNA 1 stock assessment and undertake catch sampling to support future stock assessment updates.	Maintenance	SNA 1 and SNA 8 are rebuilding stocks highly valued by all sectors and the upkeep and improvement of monitoring approaches is very important.  A medium term approach for managing these stocks will be a key work area for 2012/13 and will be progressed through the MTRP and harvest strategy workstreams (see A16 and A17). As new information becomes available for SNA 1 the need for management intervention can be assessed (see A15).
<b>A35.</b> Undertake catch sampling to monitor SNA 8.	Maintenance	

Management Actions	Type of Action	Need for Action
<b>Tarakihi 1 (TAR 1)</b>		
<b>A36.</b> Develop research plan for TAR stocks.	Triggered	At least part of TAR 1 is considered likely to be biologically linked to TAR 2 and TAR 3. An East Coast tarakihi stock assessment was attempted in 2011/12 but not completed due to uncertainties. Determination of next steps is a high priority for 2012/13 and will be progressed through the MTRP workstream (see A17).
<b>Trevally 1 &amp; Trevally 7 (TRE 1 &amp; TRE 7)</b>		
<b>A37.</b> Undertake catch sampling to support a TRE 1 stock assessment in 2013/14.	Triggered	<p>An aerial sightings index suggests TRE 1 is declining. A stock assessment will provide more information to determine the current biomass relative to <math>B_{MSY}</math> and support harvest strategy development and a management response.</p> <p>The size and age composition obtained through sampling of TRE 1 commercial catch is expected to be an important input into the stock assessment which is currently planned for 2013/14. The timing of the assessment will be confirmed through the MTRP workstream (see A17).</p>
<b>A38.</b> Undertake catch sampling to support an updated TRE 7 stock assessment (including CPUE analysis) in 2013/14.	Maintenance	A stock assessment was last undertaken for TRE 7 in 2009. Catch sampling is needed to support an updated assessment currently planned for 2013/14. The timing of the assessment will be confirmed through the MTRP workstream (see A17).

## 4.4 Management Actions for Group 2 Finfish Stocks

Stocks within this group have highly variable abundance. The management approach is to provide for increased utilisation during periods of high abundance without impacting the long term sustainability of the stocks. The key focus for 2012/13 is to develop an approach specific to RCO 3, given latest information indicates increasing abundance in this stock.

Management Actions	Type of Action	Need for Action
<i>Maximise social, economic and cultural benefits obtained from each stock by enabling annual yield to be maximised.</i>		
<b>Flatfish 3 (FLA 3)</b>		
<p><b>A39.</b> Operate the approved in-season management procedure for FLA 3 to determine potential for an in-season TAC review in 2013.</p> <p><b>A40.</b> Require reporting of catch by species for FLA 3.</p>	Maintenance	A management procedure that uses information from the start of the fishing year to inform in-season management adjustments has been operated for FLA 3 since the 2008/09 fishing year (see A15). The requirement to report FLA by species will improve information for future monitoring (see A19).
<b>Red Cod 3 (RCO 3)</b>		
<b>A41.</b> Develop and operate an in-season management procedure for RCO 3 to determine potential for an in-season TAC review in 2013.	Triggered	Catches and survey biomass have been declining in RCO 3 for a number of years but information from the current fishing year suggests abundance has increased significantly. A management procedure is to be developed in 2012 to inform potential in-season management adjustments in 2013 (see A15). The use of the East Coast South Island trawl survey for monitoring RCO 3 will also be looked at as part of a wider review (see A 18)

## 4.5 Management Actions for Group 3 Finfish Stocks

Improving the cost-effectiveness of current research plans alongside development of harvest strategies is a key theme in the management actions for Group 3 stocks in 2012/13.

Management Actions	Type of Action	Need for Action
<b>Maintain stock size at or above target reference level.</b>		
<b>Blue Cod 3, Blue Cod 4, Blue Cod 7 and Blue Cod 8 (BCO 3,4,7 &amp;8)</b>		
<b>A42.</b> Include BCO 3, BCO 4, and BCO 8 in requirements for charter boat catch reporting.	Triggered	Blue cod is a highly desired species but there is limited information on recreational catch. Reporting of catch taken under the amateur fishing regulations while on board charter boats is a cost-effective mechanism to provide improved information to support management decisions (see A5).
<b>A43.</b> Undertake independent potting surveys at North and South Otago (continuation of survey series).	Triggered	Commercial CPUE analysis suggests that BCO 3 may be declining. Given the commercial fishery covers only part of the stock, and the relatively high levels of recreational fishing across the stock, more information is needed to determine a management response.
<b>A44.</b> Undertake boat ramp surveys at Kaikoura/Motunau (continuation of survey series)	Triggered	The continuation of existing survey series' will provide information on some key areas of the stock targeted by recreational fishers. This will support decision-making for the 1 October 2013 fishing year (see A15). However, the current monitoring approach relies on frequent surveys in a number of sites across the stock and is therefore relatively expensive. Following this year's research results, potential for improved cost-effectiveness will be considered as part of the medium term research plan and harvest strategy workstreams (see A16 and A17).
<b>A45.</b> Explore options to develop reliable indices of abundance for BCO 4, BCO 7 and BCO 8.	Triggered	Service strategies for Group 3 promote the development of harvest strategies and associated research plans which set out regular updates of abundance indicators. Consideration of the best approach for these stocks will occur in the context of the medium term research plan and harvest strategy workstreams (see A16 and A17).
<b>Bluenose 1, Bluenose 2, Bluenose 3, Bluenose 7, Bluenose 8 (BNS 1,2, 3, 7 &amp;8)</b>		
<b>A46.</b> Review catch limits for BNS stocks.	Triggered	Bluenose stocks are currently subject to a recovery plan which requires further reductions to TACCs. Alongside decisions on the size of those reductions in 2012/13 (see A15) a monitoring strategy will be confirmed through the medium term research plan and harvest strategy workstreams (see A16 and A17).
<b>A47.</b> Include BNS 1, BNS 2, BNS 3, BNS 7 and BNS 8 in requirements for charter boat catch reporting.		A requirement to report catch taken under the amateur fishing regulations while on board charter boats will provide additional information to support future management (see A5).

Management Actions	Type of Action	Need for Action
<b>Elephantfish 3 (ELE 3)</b>		
<b>A48.</b> Confirm monitoring approach for ELE 3.	Maintenance	ELE 3 is currently one of the stocks included in the East Coast South Island trawl survey series. The effectiveness of the survey for monitoring ELE 3 will be looked at as part of a wider review (see A18). Subsequent decisions on future monitoring approaches will be captured under the MTRP workstream (see A17).
<b>Hapuku/Bass 1, Hapuku/Bass 2, Hapuku/Bass 3, Hapuku/Bass 7 (HPB 1,2,3 &amp;7)</b>		
<b>A49.</b> Include HPB 2 and HPB 3 and all of HPB 1 in requirements for charter boat catch reporting.	Triggered	Hapuku and bass are highly desired species but there is limited information available to support monitoring and management responses.
<b>A50.</b> Require reporting of catch by species for HPB 1, HPB 2, HPB 3 and HPB 7.	Triggered	Including HPB2, HPB 3 and all of HPB 1 in the requirements to report catch taken under the amateur fishing regulations while on board charter boats (see A5), and requiring catch reporting at a species level (see A19) are cost-effective mechanisms to provide improved information to support management decisions.
<b>Kahawai 2 and Kahawai 3 (KAH 2 &amp; KAH 3)</b>		
<b>A51.</b> Explore options to develop reliable indices of abundance for KAH 2 and KAH 3.	Triggered	Service strategies for Group 3 promote the development of harvest strategies and associated research plans which set out regular updates of abundance indicators. Consideration of the best approach for these stocks will occur in the context of the medium term research plan and harvest strategy workstreams (see A16 and A17).
<b>Kingfish 1 and Kingfish 8 (KIN 1 &amp; KIN 8)</b>		
<b>A52.</b> Explore options to develop reliable indices of abundance for KIN 1 and KIN 8.	Triggered	Service strategies for Group 3 promote the development of harvest strategies and associated research plans which set out regular updates of abundance indicators. Consideration of the best approach for these stocks will occur in the context of the medium term research plan and harvest strategy workstreams (see A16 and A17).

Management Actions	Type of Action	Need for Action
<b>Ling 1 (LIN 1)</b>		
A53. Undertake analysis of commercial catch per unit effort in LIN 1.	Triggered	Commercial CPUE analysis is likely to provide an accepted abundance indicator for LIN 1. Outcomes from this project will support harvest strategy and research plan development and a potential TAC review in 2013 (see A15, A16 and A17).
<b>Blue moki 1 (MOK1)</b>		
A54. Confirm approach to monitoring MOK 1.	Triggered	Service strategies for Group 3 promote the development of harvest strategies and associated research plans which set out regular updates of abundance indicators. The approach for MOK 1 will be confirmed in the context of the medium term research plan and harvest strategy workstreams (see A16 and A17).
<b>Gemfish 1 and Gemfish 2 (SKI 1 and SKI 2)</b>		
A55. Explore options to develop reliable indices of abundance for SKI 1 and SKI 2.	Triggered	Service strategies for Group 3 promote the development of harvest strategies and associated research plans which set out regular updates of abundance indicators. SKI 1 and SKI 2 have been subject to a rebuilding plan for over ten years and anecdotal information suggests abundance has increased significantly during this period. However, fishery information can not support these observations because it has been impacted by low catch limits. An agreed approach on how to manage and monitor these stocks will occur in the context of the medium term research plan and harvest strategy workstreams (see A16 and A17).
<b>Snapper 2 (SNA 2)</b>		
A56. Explore options to develop reliable indices of abundance for SNA 2	Triggered	Service strategies for Group 3 promote the development of harvest strategies and associated research plans which set out regular updates of abundance indicators. A significant amount of work has already gone into trying to establish an abundance indicator for SNA 2. Determination of next steps will occur in the context of the medium term research plan and harvest strategy workstreams (see A16 and A17) alongside broader consideration of FMA 2 mixed fisheries (see A7).
<b>Snapper 7 (SNA 7)</b>		
A57. Determine medium term research plan for SNA 7	Triggered	Research was recently undertaken to explore the use of decision rules to manage SNA 7. Determination of next steps will occur in the context of the medium term research plan and harvest strategy workstreams (see A16 and A17) alongside broader consideration of FMA 7 mixed fisheries (see A7).

Management Actions	Type of Action	Need for Action
<b>Tarakihi 2 (TAR 2)</b>		
A58. Confirm monitoring approach for TAR 2.	Triggered	An East Coast tarakihi stock assessment including TAR 2 was attempted in 2011/12 but not completed due to uncertainties. Determination of next steps is a high priority for 2012/13 (see A32) and will be progressed through the MTRP workstream (see A18). The approach for TAR 2 specifically will also be considered in the broader context of FMA 2 mixed fisheries (see A7).
<b>Tarakihi 7 (TAR 7)</b>		
A59. Confirm monitoring approach for TAR 7.	Maintenance	TAR 7 is currently one of the stocks included in the West Coast South Island trawl survey series. An updated abundance estimate will support decision-making for the 1 October 2013 fishing year (see A15). The effectiveness of the survey for monitoring TAR 7 will be looked at as part of a wider review (see A18). Subsequent decisions on future monitoring approaches will be captured under the MTRP and harvest strategy workstreams (see A32, A16 & A17).

## 4.6 Management Actions for Group 4 Finfish Stocks

Group 4 includes a number of stocks that naturally vary in abundance, and a key focus for this group in 2012-13 is to develop cost-effective approaches that ensure timely management responses to these changes.

Management Actions	Type of Action	Need for Action
<b>Secure social, cultural and economic benefits from each stock.</b>		
<b>Red Cod 7 (RCO 7)</b>		
<b>A60.</b> Determine a cost-effective management approach for RCO 7.	Triggered	Development of a management procedure for RCO 7 to support responsive management will occur in 2012/13 alongside RCO 3 (see A32). RCO 7 is currently one of the stocks included in the West Coast South Island trawl survey series. An updated abundance estimate will support management in the short term (see A15). The effectiveness of the survey for monitoring RCO 7 will be looked at as part of a wider review (see A18). Subsequent decisions on future monitoring and management approaches will be captured under the MTRP and harvest strategy workstreams (see A16 & A17).
<b>Maintain stock size at or above target reference level.</b>		
<b>Flatfish 1, Flatfish 2 and Flatfish 7 (FLA 1, FLA 2, FLA 7)</b>		
<b>A61.</b> Require reporting of catch by species for FLA 1, FLA 2 and FLA 7.	Triggered	Service strategies for Group 4 promote the development of harvest strategies and associated research plans which set out regular updates of abundance indicators. The requirement for commercial fishers to report catch by species within FLA management stocks (see A19) will improve information to progress these actions.
<b>Grey mullet 1 (GMU 1)</b>		
<b>A62.</b> Explore options to develop reliable indices of abundance for GMU 1	Triggered	A characterisation of GMU 1 in 2012 suggested that there have been changes in commercial fishing strategies that have affected the use catch per unit effort analysis for monitoring the stock. Next steps to determine approaches for monitoring abundance will be looked at as part of the MTRP workstream (see A17).

Management Actions	Type of Action	Need for Action
<b>Red Gurnard 1, Red Gurnard 2, Red Gurnard 3 and Red Gurnard 7 (GUR 1, GUR 2, GUR 3 and GUR 7)</b>		
<p><b>A63.</b> Undertake analysis of commercial catch per unit effort in GUR 1.</p> <p><b>A64.</b> Develop management approaches for GUR stocks</p>	Triggered	<p>Red gurnard is a valuable component of mixed fisheries in a range of areas. The management focus for 2012/13 is to continue and confirm research plans for these stocks while determining management approaches that can respond to their cyclical nature (see A16 and A17).</p> <p>TAC increases are proposed for GUR 3 and GUR 7 (see A15), which are included in the East Coast South Island and West Coast South Island trawl surveys respectively (see A18).</p> <p>An update to CPUE in GUR 1 will support management decisions for this stock in 2013 (see A15).</p>

## 4.7 Management Actions for Group 5 Finfish Stocks

The shark and skate stocks within Group 5 are taken in a range of fisheries and are relatively vulnerable to fishing pressure. Cost-effective opportunities to improve monitoring and management will be initiated in 2012/13 and further guided by the outcome of the review of the National Plan of Action–Sharks (see Action 26). A proposal to allow commercial fishers to return school shark that are likely to survive to the water follows on from the provision made for rig stocks in 2011/12.

Management Actions	Type of Action	Need for Action
<i>Maintain stock size at or above target reference level.</i>		
<b>Rough Skate 3, Rough Skate 7 (RSK 3 &amp; RSK 7) Smooth Skate 3 and Smooth Skate 7 (SSK 3 &amp; SSK 7)</b>		
<b>A65.</b> Confirm monitoring approach for RSK 3, SSK 3, RSK 7 and SSK 7	Triggered	Trawl surveys are currently the key source of information for these skate stocks. The effectiveness of the surveys for monitoring skate will be looked at as part of a wider review (see A18). Subsequent decisions on future monitoring approaches will be captured under the MTRP and harvest strategy workstreams (see A16 & A17).
<b>School Shark 1, School Shark 2, School Shark 3, School Shark 4, School Shark 5, School Shark 7, School Shark 8 (SCH 1,SCH 2,SCH 3,SCH 7 &amp; SCH 8)</b>		
<b>A66.</b> Consider inclusion of SCH stocks on the 6 <sup>th</sup> Schedule of the Fisheries Act 1996  <b>A67.</b> Determine medium term research plan for SCH stocks	Maintenance	Commercial catch per unit effort analysis suggests there are concerns for SCH 5 and SCH 7. A national research project has been discussed and will be confirmed under the MTRP and harvest strategy workstreams (see A16 & A17). In the meantime, the flexibility to return school shark that are likely to survive will support compliance with current catch limits.
<b>Spiny Dogfish 3 and Spiny Dogfish 7 (SPD 3 and SPD 7)</b>		
<b>A68.</b> Confirm monitoring approach for SPD 3 and SPD 7	Maintenance	Trawl surveys are currently the key source of information for SPD 3 and SPD 7. The effectiveness of the surveys for monitoring these stocks will be looked at as part of a wider review (see A18). Subsequent decisions on future monitoring approaches will be captured under the MTRP and harvest strategy workstreams (see A16 & A17).

Management Actions	Type of Action	Need for Action
<b>Rig 1, Rig 2, Rig 3, Rig 7 and Rig 8 (SPO 1, SPO 2, SPO 3, SPO 7 and SPO 8)</b>		
<p><b>A69.</b> Undertake analysis of commercial catch per unit effort across SPO stocks</p> <p><b>A70.</b> Determine medium term research plan for SPO 7</p>	<p>Triggered</p> <p>Triggered</p>	<p>Service strategies for Group 5 promote the development of harvest strategies and associated research plans which set out regular updates of abundance indicators. A national update of CPUE is a cost effective way to update available information and will support management decisions for this stock in 2013 (see A15).</p> <p>SPO 7 is currently rebuilding and considered likely to be about at the soft limit. Determination of next steps for managing the rebuild will occur in the context of the medium term research plan and harvest strategy workstreams (see A16 and A17).</p>

## 4.8 Management Actions for Group 6 Finfish Stocks

As fishing pressure on group 6 stocks is relatively low, the general management approach is to minimise management costs, and use catch trends as the key monitoring tool for each stock. Declining catch trends or landings in excess of the TACC are used as a trigger for further investigation and consideration of review. Given the associated uncertainty with using catch as monitoring tool for stock status, a relatively cautious approach will be taken to adjusting catch limits where these reviews are triggered (e.g POR 2). Where cost-effective, collecting additional information can support better provision for utilisation (e.g ELE 5).

Management Actions	Type of Action(s)	Need for Action
<b>Enable utilisation of each stock.</b>		
<b>Blue cod 2 (BCO 2)</b>		
A71. Include BCO 2 in requirements for charter boat catch reporting.	Triggered (by BCO 5 and BCO 3)	Reporting of BCO 2 catch taken under the amateur fishing regulations while on board charter boats (as has been proposed for other BCO stocks) is a cost-effective mechanism to provide improved information to support management decisions (see A5).
<b>Elephantfish 5 (ELE 5)</b>		
A72. Confirm management approach for ELE 5.	Triggered	Commercial catch per unit effort analysis suggests there is a utilisation opportunity in ELE 5. Management decisions for the 1 October 2012 fishing year (see A15) will be considered alongside the medium term research plan and harvest strategy workstreams (see A16 and A17).
<b>Ghost shark 2 , Ghost Shark 3, Ghost Shark 7 and Ghost Shark 8 (GSH2 &amp; GSH 8)</b>		
A73. Enable utilisation of GSH 2 and GSH 8	Triggered	Catch limits have been exceeded in GSH 2 and GSH 8 in recent years and the proposal to increase Total Allowable Catch (see A15) to provide for this level of utilisation is considered to be low risk.
A74. Confirm monitoring approach for GSH 3 and GSH 7		GSH 3 and GSH 7 are currently included in the East Coast South Island and West Coast South Island trawl surveys respectively. The effectiveness of the surveys for monitoring GSH will be looked at as part of a wider review (see A18). Subsequent decisions on future monitoring approaches will be captured under the MTRP and harvest strategy workstreams (see A16 & A17).

Management Actions	Type of Action(s)	Need for Action
<b>Hapuku/Bass 4, Hapuku/Bass 5, Hapuku/Bass 8 (HPB 4, HPB 5 &amp; HPB 8)</b>		
<b>A75.</b> Include HPB 4, HPB 5 and HPB 8 in requirements for charter boat catch reporting.	Triggered (by HPB 1, HPB 2, HPB 3 and HPB 7)	Including HPB 4 and HPB 5 and HPB 8 in the requirements to report catch taken under the amateur fishing regulations while on board charter boats (see A5), and requiring catch reporting at a species level (see A19) as has been proposed for other HPB stocks, are cost-effective mechanisms to provide improved information to support management decisions.
<b>A76.</b> Require reporting of catch by species for HPB 4, HPB 5 and HPB 8.	Triggered	
<b>John Dory 7 (JDO 7)</b>		
<b>A77.</b> Confirm management approach for JDO 7.	Triggered	JDO 7 is currently one of the stocks included in the West Coast South Island trawl survey series. Available information supports a proposal for a TAC increase in the 1 October 2012 fishing year (see A15). Decision rules to support responsive management in JDO 7 are currently being looked at as part of an Industry-led project, and the trawl survey approach is also being reviewed (see A18). Subsequent decisions on management approach will be reflected in the medium term research plan and harvest strategy workstreams (see A16 and A17).
<b>Porae 2 (POR 2)</b>		
<b>A78.</b> Enable utilisation of POR 2	Triggered	Catch limits have been exceeded in POR 2 in recent years and the proposal to increase Total Allowable Catch (see A15) to provide for increased utilisation is considered to be low risk.
<b>Stargazer 7 (STA 7)</b>		
<b>A79.</b> Confirm monitoring approach for STA 7	Triggered	STA 7 is currently one of the stocks included in the West Coast South Island trawl survey series. An updated abundance estimate will support decision-making for the 1 October 2013 fishing year (see A15). The effectiveness of the survey for monitoring STA 7 will be looked at as part of a wider review (see A18). Subsequent decisions on future monitoring approaches will be captured under the MTRP and harvest strategy workstreams (see A16 & A17).

Management Actions	Type of Action(s)	Need for Action
<b>Tarakihi 3 (TAR 3)</b>		
A80. Confirm monitoring approach for TAR 3.	Triggered	An East Coast tarakihi stock assessment including TAR 3 was attempted in 2011-12 but not completed due to uncertainties. Determination of next steps is a high priority for 2012-13 (see A32) and will be progressed through the MTRP workstream (see A18).

#### 4.9 Management Actions for Group 7 Finfish Stocks

Group 7 covers all inshore finfish stocks that are not managed within the QMS. While no specific management actions have been identified for this year, the annual process of applying the QMS standard will be undertaken to identify potential candidates for introduction into the QMS for the 1 October 2013 fishing year.

## 5.0 Appendix 1: Stock Groupings

QMS stocks	<b>Group 1</b>	
	Blue cod (BCO 5)	Tarakihi (TAR 1)
	Kahawai (KAH 1)	Trevally (TRE 1, 7)
	Snapper (SNA 1, 8)	
	<b>Group 2</b>	
	Flatfish (FLA 3)	Red cod (RCO 3)
	<b>Group 3</b>	
	Blue cod (BCO 3, 4, 7, 8)	Kahawai (KAH 2, 3)
	Blue moki (MOK 1)	Kingfish (KIN 1, 8)
	Bluenose (BNS 1, 2, 3, 7, 8)	Ling (LIN 1)
	Elephant fish (ELE 3)	Snapper (SNA 2, 7)
	Gemfish (SKI 1, 2)	Tarakihi (TAR 2, 7)
	Hapuku/Bass (HPB 1, 2, 3, 7)	
	<b>Group 4</b>	
	Barracouta (BAR 1)	Red cod (RCO 7)
	Flatfish (FLA 1, 2, 7)	Red gurnard (GUR 1, 2, 3, 7)
	Grey mullet (GMU 1)	Yellow-eyed mullet (YEM 3, 7)
	John dory (JDO 1)	
	<b>Group 5</b>	
	Rig (SPO 1, 2, 3, 7, 8)	School shark (SCH 1, 2, 3, 4, 5, 7, 8)
	Rough skate (RSK 1, 3, 7, 8)	Smooth skate (SSK 1, 3, 7, 8)
		Spiny dogfish (SPD 1, 3, 7, 8)
	<b>Group 6</b>	
	Anchovy (ANC 1, 2, 3, 4, 7, 8)	Ling (LIN 2)
Blue cod (BCO 1, 2)	Parore (PAR 1, 2, 9)	
Blue (English) mackerel (EMA 1, 2)	Pilchard (PIL 1, 2, 3, 4, 7, 8)	
Blue moki (MOK 3, 4, 5)	Porae (POR 1, 2, 3)	
Blue warehou (WAR 1, 2, 3, 7, 8)	Red cod (RCO 1, 2)	
Butterfish (BUT 1, 2, 3, 4, 5, 6, 7)	Red gurnard (GUR 8)	

<b>QMS stocks</b>	Elephant fish (ELE 1, 2, 5, 7)	Red snapper (RSN 1, 2)
	Frostfish (FRO 1, 2)	Ribaldo (RIB 1, 2, 9)
	Garfish (GAR 1, 2, 3, 4, 7, 8)	Sea perch (SPE 1, 2, 8, 9)
	Ghost shark, dark (GSH 1, 2, 3, 7, 8, 9)	Snapper (SNA 3)
	Grey mullet (GMU 2, 3, 7)	Sprats (SPR 1, 3, 4, 7)
	Hapuku/Bass (HPB 4, 5, 8)	Stargazer (STA 1, 2, 3, 4, 5, 7, 8)
	Jack mackerel (JMA 1)	Tarakihi (TAR 3, 4, 5, 8)
	John dory (JDO 2, 3, 7)	Trevally (TRE 2, 3)
	Kahawai (KAH 4, 8)	Trumpeter (TRU 1, 2, 3, 4, 5, 6, 7, 8, 9)
	Kingfish (KIN 2, 3, 4, 7)	Yellow-eyed mullet (YEM 1, 2, 4, 5, 6, 8, 9)
Leatherjacket (LEA 1, 2, 3, 4)		
<b>Non-QMS stocks</b>	<b>Group 7</b>	
	All other species/stocks, including for example: conger eel, hiwihwi or kelp fish, lamprey, rock cod and hagfish.	