



**REVIEW OF THE EFFECTIVENESS  
OF THE MANAGEMENT OF THE  
FIORDLAND MARINE AREA**

**FINAL REPORT**

**28 SEPTEMBER 2010**

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## EXECUTIVE SUMMARY

This independent review has found that the structures, mechanisms and processes established under the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005 (the Act) have contributed to the effective management of the Fiordland Marine Area (FMA) over the past five years. The effectiveness has extended on the legacy of the Guardians of Fiordland's Fisheries and Marine Environment, which in developing the Fiordland Marine Conservation Strategy not only laid the foundations for the specific provisions within the Act, but set important principles and expectations around how management decisions would be made.

The review focuses on three elements of the integrated management model: the Fiordland Marine Guardians (FMG); the specific marine management measures in place; and the protocol between the management agencies<sup>1</sup> and the FMG. It seeks to determine how effective these elements have been in contributing to the integrated management of the FMA and in achieving the intent of the Act.

This small-scale review is predominantly based on qualitative interviews with the FMG, management agencies and other key stakeholders about their *perceptions* of the effectiveness of the FMG, the mechanisms and the management model. Thirty eight people were interviewed as part of the review.

In drawing out overall conclusions, the key findings for each of the three elements of the integrated management model have been analysed according to five themes.

**Local awareness understanding and support:** There is strong local awareness and understanding of, and support for, the FMG. The FMG has strong relationships with the management agencies and with Ministers (both current and past), and management agencies regularly seek the advice and input of the FMG, appearing to genuinely value their role and expertise. Tensions between the FMG and management agencies, which should be expected, have consistently been resolved. There is also strong awareness and understanding of the marine management measures, and strong support for most of these, including for the 'fish for a feed' concept. The trust and respect for the current Guardians is a key reason that users support the measures. Local awareness and understanding about the integrated management of the FMA is less apparent, but there is a high level of support for the management model amongst the FMG and management agencies.

**Emerging trends in activities and focus:** The FMG has increasingly focused on providing advice on resource consents, monitoring and research proposals, and on biosecurity measures. There is also an increasing trend for the FMG to provide advice to the management agencies on other areas of work that are not strictly part of the management of the FMA. In terms of the specific marine management measures, the FMG has focused its effort on biosecurity measures. The protocol itself appears to be self-managing in that it does not require a great deal of effort to implement.

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<sup>1</sup> As outlined in the Act (section 4(1)) the management agencies are: the Department of Conservation; Environment Southland; the Ministry for the Environment; the Ministry of Agriculture and Forestry; and the Ministry of Fisheries.

**Gaps and areas for improvement:** The FMG clearly has a high workload, and a large proportion of its workload comes from reactive work, such as preparing submissions on resource consents. To improve this situation, the FMG would benefit in being more strategic about what areas of work to focus on and what areas are of low priority. This could be achieved through a strategic planning process and setting annual work programmes in support of the strategic plan. This work planning should happen across the current work streams, and be integrated with budget planning. The main gap in terms of the FMG's membership is in the area of succession planning. Given the likely continued focus on monitoring, research, resource consents and biosecurity, scientific expertise is likely to remain a key consideration for the mix of skills on the FMG. A further area identified for improvement is in sharing research and monitoring information. There were no major gaps identified with the management measures, but suggested areas for improvement include communicating clearer messages about habitat lines and about fisheries rules and regulations more generally, and reviewing the crayfish bag limits in the inner fiords.

**Shortcomings and successes:** The review has identified little in the way of shortcomings or major concerns. One shortcoming is the perceived high level of turnover of staff in Wellington-based management agencies and lack of priority sometimes accorded to the FMG and management model. The success stories, on the other hand, are numerous, including:

- the support for the FMG members, the local knowledge that they bring to the table, and their ability to represent the interests of the FMA foremost
- the benefits that flow from local user involvement on the FMG (eg, the FMA users are their local peers, which helps in gaining support, compliance with the regulations and compliance monitoring)
- the trust and support for the FMG as evidenced by the community and management agencies wanting the FMG to be 'at the table' on all manner of local decisions
- the cooperative working relationships between the management agencies
- the effective and professional relationship between the FMG and the management agencies.

**Overall effectiveness:** The three elements of the integrated management model have contributed to the effective management of the FMA over the past five years. The FMG has been effective in fulfilling its mandated functions and, by extending its activities to areas at the outer limits of these functions, it has achieved a wide base of understanding, awareness and support for its role. It is too early to judge the effectiveness of the marine management measures. The level of awareness, support and compliance with the measures is encouraging. The cooperation and collaboration between the FMG and management agencies has contributed to effective joint working, particularly at an operational level. Fully integrating strategic planning and budget planning processes across the partners and across the FMA work streams may further enhance the model's effectiveness.

# 1. INTRODUCTION

## 1.1 Objectives of the review

This report presents the findings from a review of the effectiveness to date of the management of the Fiordland Marine Area (FMA) established under the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005 (the Act). This review was undertaken by *Allen & Clarke Policy and Regulatory Specialists* (refer to terms of reference in Appendix A).

The Act requires the Minister for the Environment, as the responsible Minister for the Act, to “initiate a review to determine the effectiveness of the management of the Fiordland Marine Area, at five years after the commencement of this Act” (section 25(1)). This review has been undertaken in response to this requirement.

The review focuses on three elements of the integrated management model: the Fiordland Marine Guardians (FMG), as the statutory advisory body; the specific marine management measures in place; and the protocol between the management agencies<sup>2</sup> and the FMG. It seeks to determine how effective these elements have been in contributing to the integrated management of the FMA and in achieving the intent of the Act.

When considering the effectiveness of these three elements, the following factors have been used as the basis for the review and analysis:

- local awareness, understanding and support
- emerging trends in activities and focus
- gaps and areas for improvement
- shortcomings and successes
- overall effectiveness
- limitations due to insufficient data
- recommendations for future reviews.

It is anticipated that the findings of the review will be used to inform the ongoing development of the management model.

This small-scale review is predominantly based on qualitative interviews with the FMG, management agencies and other key stakeholders about their *perceptions* of the effectiveness of the FMG, the mechanisms and the management model.

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<sup>2</sup> As outlined in the Act (section 4(1)) the management agencies are: the Department of Conservation; Environment Southland; the Ministry for the Environment; the Ministry of Agriculture and Forestry; and the Ministry of Fisheries.

## **1.2 Report structure**

This report does four things. First, it outlines the methodology used for this review. Second, it sets the scene with background information on the FMG and the Act. Third, it discusses findings in relation to the three key areas of the FMG, the management measures, and the management model. Finally, it provides an overall analysis and conclusions. It is important to note that there is overlap between the three key areas (the FMG, the management measures, and the management model) and the report often refers the reader to other relevant sections.

## 2. METHODOLOGY

This review was based on a scan of key documents, interviews and discussions with a selection of key stakeholders in the Fiordland marine environment, and observation of a meeting of the FMG and management agencies. The process adopted to undertake the review is outlined below.

### 2.1 Key questions framework

To ensure that the review addressed all the key elements required, a key questions framework was developed by *Allen & Clarke* (refer to Appendix B). This framework identified all the questions and issues that needed to be addressed as part the data collection, and that needed to be included in the final report.

### 2.2 Document scan

A desk-based scan of key documents was completed to gain an understanding of the background and history behind the FMG and the management model, and to look for insights into the effectiveness to date of the measures established under the Act. The scan was carried out as part of the initial scoping of the project in order to familiarise the review team with the issues and to help define and clarify the objectives and nature of the review. A full list of the documents reviewed is included at the end of this report.

### 2.3 Small group and individual interviews

The review was predominantly based on small qualitative semi-structured group and individual interviews with various stakeholders involved in, or affected by, the management of the FMA.

Following development of the key questions framework and the document scan, an interview schedule (Appendix C) and information sheet (Appendix D) were prepared. The interview schedule served as a checklist to ensure that all key topics were covered in the interviews.

In total, 38 people were interviewed for this review. This included: 14 past and present agency staff;<sup>3</sup> ten past and present FMG members; five people with tourism interests;<sup>4</sup> one iwi representative;<sup>5</sup> one environmental group representative; three commercial fishing representatives; three

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<sup>3</sup> Department of Conservation (2); Environment Southland (3); MAF Biosecurity New Zealand (2); Ministry for the Environment (4); Ministry of Fisheries (3).

<sup>4</sup> These were dive, charter boat and cruise operators.

<sup>5</sup> In addition to the iwi representative on the FMG.

recreational fishers; and one marine scientist.<sup>6</sup> Twenty eight people were interviewed face to face and ten were interviewed on the telephone. Interviews lasted between 30 and 90 minutes.

It is important to note that FMG members also come from a wide range of backgrounds and therefore bring multiple perspectives to the review (eg, commercial fishing, recreational fishing, iwi, diving, science and environmental perspectives). Given the limited time and resources for the review a broad range of opinions and voices have been captured in this report.

To recruit participants, the Ministry for the Environment provided contact details for FMG members (past and present), agency staff (past and present), iwi, and the environmental group. It was agreed that *Allen & Clarke* would directly recruit participants who were potentially affected users of the area (eg, commercial and recreational fishers and tourism interests) to ensure there was no bias. In order to recruit these parties the following approaches were used:

- an article inviting people to participate in the research was put in the Destination Fiordland newsletter
- three recreational boating clubs were approached in writing and by telephone
- six boating syndicates were contacted in writing and followed up by telephone
- a commercial fishing representative sent an email to commercial fishers inviting them to participate in the research
- a random selection of tourism interests were contacted directly by email and invited to participate
- three recreational fishers suggested by other stakeholders were contacted.

Despite the extensive recruitment process carried out to contact users of the area and invite them to participate in the review, the numbers of commercial and recreational fishers who agreed to be interviewed is relatively low. The potential reasons for this and associated limitations are discussed further in section 2.6.

## 2.4 Observation

The interviews in Southland were timed to coincide with the June 2010 meeting of the FMG and management agencies. A member of the review team was able to informally attend this event to observe and learn more about the contents and dynamics of the meeting, and how the FMG and the agencies work together.

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<sup>6</sup> A second marine scientist was invited to be interviewed as part of this review but was not available within the given timeframe.

## 2.5 Analysis and write up

Interview notes were analysed qualitatively to identify themes and issues relating to the key questions in the framework. The documents and observations provided insights that informed this analysis. The information included in this report was selected by the review team based on an assessment that it represented the key issues and significant themes. A draft report was sent to the Ministry for the Environment for comment prior to being finalised.

The personal details of participants have been kept anonymous (refer to Appendix D). However, where appropriate and where anonymity can still be reasonably assured, the particular stakeholder or interest group is identified (eg, management agency, FMG). Other information has been attributed either to 'key stakeholder' (scientist, iwi and environmental group) or 'user' (fishing and tourism interests).

## 2.6 Limitations

*Allen & Clarke* was commissioned to undertake this small-scale review that is predominantly based on qualitative interviews with the FMG, management agencies and other key stakeholders, and a document scan. As discussed in further detail in this report, there is currently not a lot of completed research and monitoring information available to be able to undertake a detailed analysis to assess the effectiveness to date of the management mechanisms in terms of fish stocks and biodiversity. The five-year time period since the Act was passed does not give enough time for a rich data source to be available in order to undertake a detailed critique of the mechanisms. Instead, this review provides an interim 'stocktake' on participants' *perceptions* of the effectiveness of the FMG, the mechanisms and the management model.

Many participants stressed the need for ongoing and regular monitoring of fisheries and biodiversity in the Fiordland area in order to track changes over time. It is important that these monitoring programmes continue in order to provide a richer source of data for future reviews.

Aside from the limitations of robust monitoring data not being available, another key limitation was the difficulty recruiting commercial and recreational fishers for the review. Given the various approaches used to recruit participants (refer section 2.3), it is unfortunate that only a small number of recreational and commercial fishers volunteered to be interviewed for this review. It was suggested by one commercial fishing representative that the timing was not good as most commercial fishers are busy in the middle of the year. For recreational fishers, it would perhaps have been more effective to attend a boat club meeting in order to get 'face to face' engagement with a captive audience, rather than trying to rely on contacting people by phone, letter or email.

### 3. BACKGROUND

The section summarises the history of the management model, provides some background information on two philosophies that were critical to its development (and remain critical to its implementation), and includes some key information from the Act.

#### 3.1 Background to the current management model

The process that led to the current management model for the FMA has been well documented elsewhere.<sup>7</sup>

The Guardians of Fiordland's Fisheries and Marine Environment was formed in 1995 and included representatives of local community organisations, such as the Ōraka Aparima Rūnaka of Ngāi Tahu, commercial fishing, recreational fishing, and tourism interests, and from 2000, environmental interests. The group was formed in response to concerns regarding:

- the escalating pressures on the Fiordland area from increasing human activities
- the need for improved and integrated management of the area
- a desire that the community be more involved in the management of the Fiordland marine environment.

The group started by developing an overall vision for Fiordland's marine environment. This vision – *that the quality of Fiordland's marine environment and fisheries, including the wider fishery experience, be maintained or improved for future generations to use and enjoy* – remains the vision to this day. The group then went through a process of gathering information and identifying issues that needed to be addressed in order to progress the vision, developing objectives for each of the main issues identified, and proposing a package of measures to meet those objectives. This process involved lengthy discussions, careful negotiations and significant consultation with a range of interest groups and stakeholders. This included gaining support and advice from a number of government agencies, including Environment Southland, the Ministry of Fisheries, Department of Conservation, and the Ministry for the Environment (which also provided funding to support the process through the Sustainable Management Fund). The process took eight years, culminating in 2003 with the completion of the Fiordland Marine Conservation Strategy (the Strategy).

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<sup>7</sup> The *Fiordland Marine Conservation Strategy* (Guardians of Fiordland's Fisheries and Marine Environment 2003) describes why the Guardians of Fiordland's Fisheries and Marine Environment group was formed, its objectives, and the process it followed in developing the Fiordland Marine Conservation Strategy. Player (2004) identifies the features of the Guardians of Fiordland's Fisheries and Marine Environment that contributed to its success, and to why its marine conservation strategy was well respected. The group was set up to investigate options for implementing the Fiordland Marine Conservation Strategy also report on the background to the Guardians of Fiordland's Fisheries and Marine Environment and to the development of the strategy (MfE 2004). The annual reports of the Fiordland Marine Guardians (FMG 2006, 2007, 2008 and 2009) reflect on the history and achievements of their forerunners. A number of other articles and presentations were provided to the review team that described the journey prior to the implementation of the Fiordland Marine Management Act in 2005 (eg, Carey 2004 and Tierney 2006).

The Strategy advocated for an integrated approach to managing Fiordland's fisheries and marine environment and included three recommendations concerning implementation of the Strategy, including that special legislation be adopted. The Strategy was presented to the Ministers of Fisheries and Environment in September 2003. The Ministers committed the Government to implementing the Strategy by September 2005 and an investigative group was established to report on the best implementation options. This group also recommended the Strategy be implemented through special legislation, along with amendments to current legislation. The Government subsequently accepted this recommendation leading to the Act.

### **3.1.2 Key philosophies**

In the process of developing the Strategy, two related philosophies emerged that were critical to the development process. These concepts – 'gifts and gains' and 'fish for a feed' – were also seen as critical to the successful implementation of the Strategy.

#### ***'Gifts and gains'***

The process of developing and agreeing the Fiordland Marine Conservation Strategy involved, as discussed above, significant debate and negotiation amongst stakeholder and interest groups. Despite the range of interests, the way the groups engaged and the relationships that developed were largely constructive and cooperative, and this helped to resolve issues and build consensus amongst the groups. The concept of 'gifts and gains' evolved as a negotiating and wider relationship framework, and continues to be central to how the FMG operates today.

As a concept, 'gifts and gains' was the balance negotiated between the different interest groups and their rights applying to the marine environment. The term conveyed the process of giving something up for the good of the marine area. The concept of 'gifts and gains' was then applied quite methodically within the negotiation process in order to address some of the complex issues. As a result, when 'gifts' were made by one group, it was considered fair that these would be offset by certain 'gains'. Some of the 'gifts' made as a result of the negotiations between the groups include commercial fishers agreeing to withdraw from fishing grounds in the inner fiords, recreational fishers agreeing to drastically reduce bag limits, and recreational and customary fishers agreeing to withdraw from certain areas of special significance within the fiords. While each gift was not necessarily offered as a direct response to another group's gift, the underlying philosophy was that no one group should be disadvantaged as a result of the negotiations and that if everyone gave a bit then everyone would gain a bit.

Ensuring this balance was safeguarded when the Strategy was implemented was critical to the integrity of the entire strategy (Guardians of Fiordland's Fisheries and Marine Environment 2003).

### ***'Fish for a feed'***

The 'fish for a feed' concept was developed in recognition that localised depletion of fishing stocks was occurring under the standard rules for accumulation of daily catch limits. The basis of the concept was to change recreational fishers' attitudes from taking as much fish as possible and stacking the freezer full, towards sustainable practices of only taking the quantity of 'fish for a feed' for yourself and your family.

In response to the concept, a number of provisions were proposed within the Strategy that were designed to support the required behavioural changes. For recreational fishers, these provisions included daily catch/bag limits, prohibitions on accumulating/aggregating limits over several days, recommendations on fishing in the more productive outer fiords, avoiding anchoring, and provided guidelines for handling of finfish, shellfish and crayfish to avoid fatally harming undersized or unintended catch. Further restrictions on hook sizes to size six or larger were recommended to reduce mortality rates from undersized blue cod released after being caught. Other method and gear restrictions include prohibition of set nets, blue cod pots and lines with more than five hooks.

## **3.2 The Fiordland (Te Moana o Atawhenua) Marine Management Act 2005**

The Act establishes the FMA, eight new marine reserves and other measures to support the preservation, protection and sustainable management of the area's exceptional marine biodiversity, valuable marine resources, outstanding landscape and cultural heritage. It also provides for amendments to the Southland Regional Coastal Plan (SRCP) to make it consistent with marine management measures in the Act (see section 5.1).

The Act provides for structures and processes for integrated management of the area, including the establishment of a statutory advisory body – the FMG – to provide ongoing oversight and direction on the management of the area, and for an agreement (the protocol) between the management agencies and the FMG about how they will work together in achieving the integrated management of the FMA.

As outlined in the Act (section 4(1)) the management agencies involved are: the Department of Conservation; Environment Southland; the Ministry for the Environment; the Ministry of Agriculture and Forestry; and the Ministry of Fisheries.

## 4. FIORDLAND MARINE GUARDIANS

The FMG, management agencies, users and key stakeholders were all asked to comment on the functions and effectiveness of the FMG. Most responses to questions on this topic came from the FMG and management agencies. Where key stakeholders and users specifically commented on issues regarding the FMG, this has been highlighted.

### 4.1 Overview

Section 13 of the Act sets out the functions of the Guardians. In summary, the Guardians:

- advise and make recommendations to management agencies and Ministers on the effectiveness of management measures, activities that may impact on, and activities that may threaten the FMA
- facilitate and promote the integrated management of the FMA
- obtain, share and monitor information on the state of the FMA
- assist management agencies to prepare and disseminate information, monitor the marine environment and biological diversity, and plan for enforcement and compliance
- conduct reviews.

### 4.2 Functions and activities

Most participants in the review were satisfied with the functions of the FMG as outlined in the Act. The functions were described as open and flexible:

The Act covers everything and is reasonably open and flexible. We can adapt it as we need to. There are no deficiencies (FMG).

The current role of the Guardians is exactly what is reflected in the Act – to be the group that advises and makes recommendations ... As long as we have the confidence of government agencies we can do that (FMG).

One participant (FMG) commented that the actual functions and purpose of the FMG have not changed as a result of the Act, but the Act now provides a legislative mandate for their work.

While the essential functions of the FMG may not have changed, participants (FMG and management agencies) commented that the level and nature of the work involved had changed. Many participants (FMG and management agencies), for example, referred to the increased focus on RMA issues and resource consent applications. The FMG are notified by Environment Southland of all relevant applications and often advise and/or submit.

They receive all applications as an affected party, it is a sign of how well they get listened to (management agency).

A number of participants (FMG and management agencies) commented that this focus on consent applications was not anticipated when the Act was first put in place. However, as the FMG have become recognised as an official voice of the FMA, there is an expectation (by the public and agencies) that they will comment and provide advice on consents (FMG, management agencies, users, key stakeholders). It was evident from interviews that users liked the idea of the FMG being 'at the table' during consent processes and acting as an advocate.

The FMG group holds the agencies to account and the public holds us to account ... The public expect us to be a watchdog with consent applications. They expect us to be involved (FMG).

FMG need to be involved in consents, like Meridian going for increased freshwater discharge from Lake Manapouri. FMG will have some comment to make on this consent (user).

We have seen an increase in the amount of energy and time going into commenting on resource consent applications ... they have taken more of an interest and see a role for themselves (management agency).

On account of their extensive knowledge of Fiordland, agencies also rely on the FMG to provide first hand advice on a broad range of issues.

We are a one stop shop for agencies, they can go to one group for advice, they use us as a focus group (FMG).

The Council seems to take notice of us if we've got something to say (FMG).

We have practical local knowledge. Environment Southland needs this and staff need this. They don't have the level of understanding. It comes back to being on the water. I know the area really well. I have a good understanding (FMG).

However, this informal advice work can also take time and put additional pressure on the FMG.

They are taking more of a role in everything, we run most things past them, so they are getting busier (management agency).

They are a great resource for agencies. People who get their hands dirty and know about the resource. It is easy to overstretch them. Certain individuals shoulder a lot of work for the group (FMG).

A number of participants (FMG and management agencies) also raised concerns about the time spent on resource consent applications. One participant questioned whether the role of the FMG should be to provide advice to agencies, rather than make formal submissions. Another commented:

They do spend a lot of time on individual applications and do get focused on the details. They could move towards a more strategic approach rather than looking at every consent and commenting on every submission. Instead, council could consider their views by default as part of the decision making process (management agency).

A number of participants also referred to the FMG taking on the role of the marine reserve committee as another new area of work:

Southland Conservation Board has decided to vest management of the marine reserve in the FMG. It shows they have confidence in the FMG (FMG).

We have been appointed as the management committee for the marine reserves. We are not sure what it means. The conservation board have offered this through the Act. We have accepted but don't know what it involved (FMG).

Guardians and management agencies both raised concerns about the current level of work involved for the FMG and how this could be managed:

The limitations of the group are around how much time we can put into it. It has expanded with the RMA consents work and the marine reserve committee (FMG).

There is a risk of being overloaded ... most of us claim only 20% of what we do ... our workload has increased ... being asked to give advice and recommendations on resource consent applications ... now we have been given the role of the marine reserves committee ... I don't think there is an appreciation of the time involved (FMG).

Five years down the track, with the amount of work they have, will they need a couple of people paid to do their work? It is getting to the stage where it is almost too big for eight volunteers to do. The amount of work they do is quite amazing (management agency).

There needs to be a balance between overloading FMG with information and requesting their assistance, equal to their capacity to deliver. It can become a bit of an avalanche. You need to keep the demands on members realistic (ex-FMG).

Table 1 gives an overview of the level and nature of FMG activities over the past five years as documented in the Guardian's annual reports. Members of the FMG are also involved in other activities throughout the year, including participating in various meetings (eg, with the Minister for the Environment and the Southland Conservation Board), attending presentations and conferences, and publishing articles relating to the management of the FMA. A brief review of the minutes of the joint meetings of the FMG and management agencies indicates a significant focus on: resource consents, monitoring/research surveys and, particularly over the past two years, biosecurity issues.

**Table 1: Information on the FMG's activities, as they relate to advice and recommendations given, outlined in its annual reports**

Year	Summary of FMG activities
2005-06	<ul style="list-style-type: none"> <li>• 11 meeting of the FMG</li> <li>• Submissions on six resource consent applications</li> <li>• Review of a Biosecurity NZ assessment of a permit application (in respect of Didymo)</li> <li>• Submission on the Ministry of Fisheries' Benthic Protection Areas Plan</li> <li>• Advice on two monitoring/research projects</li> </ul>

Year	Summary of FMG activities
2006-07	<ul style="list-style-type: none"> <li>• Nine meetings of the FMG</li> <li>• Review and advice relating to four monitoring/research projects</li> <li>• Feedback on Ministry of Fisheries compliance activity reports</li> <li>• Input into an interim biosecurity plan for the FMA</li> <li>• Input into a communications plan, including the Guardian's first newsletter and website</li> <li>• Advice on marine reserve markers</li> <li>• Submissions on a paua management plan and a regional pest management plan</li> <li>• Advice to Minister of Fisheries on a mataitai reserve application</li> <li>• Recommendations on blue cod closure</li> <li>• Input into Meridian Energy science forum</li> <li>• Input into proposed changes to Southland Regional Coastal Plan</li> <li>• Submissions and comment on numerous resource consent applications</li> <li>• Advice, including to Ministers, on marine pests (especially <i>Undaria</i>)</li> </ul>
2007-08	<ul style="list-style-type: none"> <li>• Seven meetings of the FMG</li> <li>• Further advice and recommendations on marine pest threats</li> <li>• Further advice on a regional pest management strategy</li> <li>• Further input into Meridian Energy science forum</li> <li>• Submission and recommendations on management plan for Doubtful Sound bottlenose dolphin</li> <li>• Further advice on ongoing monitoring/research projects</li> <li>• Advice on information kiosks</li> <li>• Assessment and recommendation on application for pest control on Coal Island</li> <li>• Recommendation on anchoring at two marine reserves</li> <li>• Submissions and comment on numerous resource consent applications</li> </ul>
2008-09	<ul style="list-style-type: none"> <li>• Eight meetings of the FMG</li> <li>• Comments on interim biosecurity plan</li> <li>• Agreement to Fiordland Marine Biosecurity Strategic Plan</li> <li>• Comments and recommendations on operational management plan for Fiordland marine biosecurity risk</li> <li>• Submission on Environment Southland's LTCCP</li> <li>• Submission on consultation paper on rock lobster holding pots</li> <li>• Input into the development of a fishery plan for the Fiordland paua fishery</li> <li>• Recommendations on marking of marine reserves</li> <li>• Further advice on blue cod closure</li> <li>• Submissions and comment on numerous (at least six) resource consent applications</li> <li>• Review and advice relating to two new monitoring/research surveys</li> <li>• Launch of <i>Beneath the Reflections A User's Guide to the Fiordland (Te Moana o Atawhenua) Marine Area</i></li> </ul>
2009-10	<ul style="list-style-type: none"> <li>• Five meetings of the FMG</li> <li>• Submission on regulations about rock lobster holding pots</li> <li>• Advice on navigational aids</li> <li>• Submission on commercial harvest of <i>Undaria</i></li> <li>• Review and advice on research permit (in capacity as marine reserves advisory committee)</li> <li>• Submissions and comment on numerous (at least six) resource consent applications</li> <li>• Assistance with two monitoring projects (china shop and deep reef surveys)</li> </ul>

Given the broad and diverse nature of the FMG work and high workload for the Guardians, a few participants (management agencies) recommended that the Guardians use a system to prioritise their work. For example, one participant suggested that the group could have a more proactive and structured annual work programme that provides direction and goals for the management of the area (eg, a vision for the blue cod fishery, or a plan of how they will use the information from the user survey).

### 4.3 Priorities

Within the broad framework of functions as outlined in the Act, participants were asked to comment on what they perceived to be the priority issues for the FMG, now and into the future.

With the management mechanisms now in place, monitoring and compliance were frequently mentioned by participants (FMG, management agencies, key stakeholders, users) as the key priorities:

Since the legislation, the workload hasn't reduced, it has increased ... The first part was designing what needs to be done, the second part was trying to implement it as a whole package. The third part is making sure it works properly – monitoring (FMG).

There is a lot more focus on monitoring. It has moved so far from where the original group was, now it's about monitoring (FMG).

It is important to make sure we keep monitoring what we are doing ... we are committed to making sure it does work ... if it is not working properly we need to monitor it so we know how to change it (FMG).

Biosecurity (particularly *Undaria*) was also seen as an important issue that was going to remain a top priority (FMG, management agencies, key stakeholders, users) (refer to section 5.3):

Biosecurity is a huge focus now. Not an issue when we developed in the original strategy (FMG).

Ongoing education and communication work was also identified as key, as was keeping the local Fiordland community involved in the decision making process (FMG, management agencies, key stakeholders, users). Other priority areas mentioned by a few participants were monitoring tourism numbers and activity, and fisheries management (refer to section 5.2).

### 4.4 Membership

Nearly all participants expressed satisfaction with the membership of the FMG and could not think of any gaps in membership (FMG, management agencies, key stakeholders, users). Current members were generally described as have a high degree of local knowledge and a connection to, and understanding of, the area.

The secret to success is that they are the ones on the water, they know how it works, they have the knowledge (key stakeholder).

It is about local involvement. It is controlled by locals who know the area really well (user).

There are no gaps in the FMG membership. We are not there to represent certain groups. There is no one there from a tourist outfit but that is not a problem (FMG).

You need members who spend a lot of time on the water. You do lose that touch if you don't go there. Being on the water you know what is going on. It is very important to retain people actively involved (FMG).

The current membership was often described by participants as providing a 'good balance' with a broad range of skills (eg, local knowledge and policy, legislative, scientific and management skills) represented on the group.

The strength of the FMG is that they have a range of groups included (FMG).

There is a nice a balance on the FMG ... people are all familiar with Fiordland and all bring something really valuable to the mix ... this is the success of the FMG (management agency).

You need academics but you need people at the coal face who touch and feel the place and get down and dirty ... You need practical people, not people with knowledge based on theory ... The group has a good mix of practical skills ... one of the most honest groups I've worked with (FMG).

They are comprised of a wide cross section of the community. They have all the people on board, from the commercial fishermen, to the recreational fishermen, and the 'greenies'. They work well because they have a presence; they are not in your face, and they work quietly behind the scenes (user).

A few participants (FMG, management agencies, key stakeholders) suggested that as the role of the FMG has shifted towards a focus on monitoring and oversight, the skill requirements of the group has changed and it is important to have people with scientific skills in particular.

While members come from a range of sectors (eg, recreational fishing, commercial fishing, iwi, science), the members interviewed all emphasised that they did not represent their particular sector on the group, but rather represented the interests of the FMA. This is in keeping with section 15(2)(b) of the Act which states that membership must reflect a balanced mix of knowledge and experience in relation to the FMA.

They have Fiordland's interest at heart. Not commercial considerations (management agency).

We don't represent anyone anymore, we work for FMA ... We have got rid of the 'us and them' attitude between recreational and commercial fishers (FMG).

I put aside my commercial viewpoint for the wider view point (FMG).

There is a good mix on the FMG. They have Fiordland at heart, not their own interests. People accept it (user).

In terms of other interest groups that could be represented on the FMG, a few participants suggested tourism representatives and one user recommended land based hunters. However, most

participants commented that all interests were currently covered as members do not officially represent any particular group. A few participants also commented on the difficulty of getting women onto the FMG.

One participant (management agency) was concerned that the membership was, on paper, skewed towards fishing interests. However, they acknowledged that in practice this does not negatively influence the group who are there to represent the interests of Fiordland.

A number of participants (FMG and management agencies) did, however, raise concerns about succession planning for the FMG and questioned who was likely to be FMG members in the future. One participant stressed the need for any future members to have a connection to Fiordland but also cautioned that potential members may be nervous about the amount of work and time that is involved. According to participants:

Fiordland is quite difficult and there is only a limited number of people with the skills and knowledge of Fiordland (FMG).

You need people who are out there fishing, but they struggle to find the time (FMG).

I am concerned about succession and the loss of people who retire. They have a huge amount of knowledge (FMG).

It is difficult to be a guardian and have a normal day job. It requires someone who is self employed or a fisherman who doesn't fish for part of the year (management agency).

One participant (FMG) also stressed that the group membership needed to continue to include people with institutional knowledge of where the FMG came from.

Nearly all FMG members commented on the need to have people with scientific and ecological skills on the FMG to provide advice and knowledge (particularly when commenting on consents).

A number of participants (FMG, management agencies, key stakeholders, users) referred to the risk of a political appointment that does not have the same vision and way of working as the current FMG. Participants stressed the need to respect the culture and vision of the FMG when making appointments. While participants described some concern that the group would become a Wellington based group and lose the local flavour and support, in practice it was not perceived that this had happened. This was partly attributed to the fact that the Act states that five people on the FMG must be from the Otago/Southland region (section 15(1)) and also because appointments to date have been done in consultation with the FMG.

Now that they are government appointed and don't represent a sector, there was a potential they would lose touch (management agency).

I was concerned that when it changed to a government appointed group it could be hijacked. This was a risk but doesn't appear to have happened ... You need people who have fished out there for years ... people with genuine anecdotal evidence ... who can talk from their experiences, rather than from guess work (user).

There is a risk that they are a political appointment. The appointments have been done up until now on the recommendation of FMG. If this changed it could undermine it. The FMG is based on local knowledge and expertise. Before [the Act] we could target people, now it is up to the Minister ... this could undermine the strategy and process (FMG).

In the next five years there could be changes in membership. This would have a massive influence on how it works and the balance of the group if the new people didn't have a good grasp of where it came from (user).

One participant (management agency), however, raised concerns with the current appointment process where FMG makes recommendations to the Minister and suggested that there may be a public perception that FMG is simply 'voting in their mates'. They argued that it needed to be a transparent and open process. Another participant (key stakeholder) cautioned against the group becoming 'an old boys' network'.

One participant commented:

It is definitely more of a fishing board than a conservation board. It is still about taking fish rather than leaving fish there. It is a fisheries management board. But their end vision is still the same, it's just their motivation that is different. It is not an issue that it is fish focused (management agency).

One participant (management agency) stated that they would be cautious about any greater proportion of the FMG coming from a fishing background. Similarly, while another participant (management agency) acknowledged that the current membership (and dominance of fishing interests) reflected where the FMG had come from, they emphasised the need for fair balance on the group with national as well as local representation.

## 4.5 Community awareness

Nearly all participants (FMG, management agencies, key stakeholders, users) commented that the FMG members were well known in the community, with users of the area likely to know one or more of the FMG. One FMG member commented that the group represented users and therefore it was important for members to maintain contacts with these user groups. Participants, including users, referred to casual conversations, the FMG newsletter, annual reports, the website, brochures and FMG members attending events as key tools the group uses to connect with interested parties.

FMG are good at explaining the rules and getting people on side. They have their own stand at the boat show and people can talk with them, gives them their own identity (management agency).

Anyone who operates in Fiordland would know one or more of the FMG. This thing was born out of Fiordland and is still there. The guide book has helped (management agency).

The concept of FMG is good. Fishermen, divers, users managing their own resource ... Not a bunch of Auckland and Wellington people telling us. It's very successful, a great concept, seems to be working (user).

Most people are positive about the FMG. It is not a government agency. It is down to eight people and they can remember eight people's names (management agency).

We are kept up to date through newsletters, annual reports and their website ... they couldn't do anything else and most people are aware of them (user).

One participant recommended that more information is provided to users on attending meetings:

FMG is pretty well advertised ... I would be very surprised if people go there and haven't heard of FMG ... it should publicise that the public can attend meetings (user).

A number of participants commented on the level of respect that FMG members have from their peers and the community:

Overall, a great concept, I have respect for people who are on it and I think most people have (user).

The results of a research survey on FMA users' activities and perceptions (Booth et al 2007 and 2010) shows that most users are aware of the FMG (refer to Table 2, below), and that except for greater awareness amongst commercial fishers, the difference in results for 2007 and 2010 are not statistically significant. The research also found that respondents who use the FMA more frequently and/or have a longer term association with the area have a greater awareness of the FMG.

**Table 2: Awareness of the Fiordland Marine Guardians**

User subgroup	2007	2010
Commercial fishers	82%	100%
Recreational fishers	59%	45%
Tourism operators/employees	61%	49%
Other	57%	64%

Most respondents to the user survey were reasonably well informed about the role of the FMG. The most clearly recognised role was to 'assist agencies with monitoring the state of the marine environment' with around 60 per cent of all the user subgroups being aware of this role in 2007, and between 66 per cent and 83 per cent in 2010 (Booth et al 2007 and 2010).

Interviews conducted as part of the research on FMA users showed that some users felt that FMG should have greater representation from users who have nothing to do with fishing, as there was a perception that it was currently mainly about fishing regulations and of little interest to other user groups. There was also a concern that the FMG would become too 'green' (Booth et al 2007).

## 4.6 Kaitiakitanga

Local iwi, represented by Ōraka Aparima Rūnaka with support from Awarua, Waihopai and Hokonui Rūnaka, have a long and special association with the Fiordland area. A stated key objective of the

original Fiordland Marine Conservation Strategy was to appropriately express kaitiakitanga<sup>8</sup> for the areas fisheries and marine environment. The Strategy supported the use of temporary closures, or rahui, but with imposed time limits, mataitai reserves for traditional food gathering and the concept of taiapure (coastal waters of special significance as a source of food or for cultural reasons) as appropriate methods to express kaitiakitanga in the Fiordland marine environment.

One of the five stated purposes of the Act is to acknowledge the importance of kaitiakitanga (section 3(e)).

When most FMG members were asked about how the Guardian's expressed kaitiakitanga, they referred to the skills, integrity and mana of the Ōraka Aparima Rūnaka member on the FMG. They considered that if there was an issue concerning kaitiakitanga then this member would raise it with the group. Other participants (including iwi), however, referred to the FMG as being about kaitiakitanga – about ensuring the marine environment is maintained or improved for future generations:

The Guardians and the meetings are about kaitiakitanga and stewardship. It is about working together to look after it for future generations (FMG).

This view is reflected in *Beneath the Reflections: A User's Guide to the Fiordland (Te Moana o Atawhenua) Marine Area* (FMG et al. 2008) which states:

All of those persons who have taken on management responsibilities in any form or manner would be seen to be working within the concepts of kaitiakitanga/stewardship/custodianship.

Thus, while the FMG may not have a strong sense of ownership of the term 'kaitiakitanga' there is a belief that the concept comes through strongly in their actions.

## 4.7 Key findings

The functions of the FMG as outlined in the Act give the Guardians the mandate and flexibility to advise and make recommendations to agencies and Ministers in order to help ensure the marine environment and fisheries are maintained or improved for future generations. Participants in this review were satisfied with the provisions of the Act with regards to these functions. The FMG certainly appears to be performing the functions as set out in section 13 of the Act, and these functions would seem to be appropriate for the management of the FMA. Elsewhere in this review (refer to sections 5.4 and 5.7) we have found that the FMG could improve its performance with regards to sharing scientific research and monitoring findings. This relates to one of the FMG's functions: to obtain, share and monitor information on the state of the FMA.

There are concerns about the level and nature of the FMG's workload. The interviews and review of documents indicate that the Guardians take on a number of formal and informal advisory roles (eg,

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<sup>8</sup> Kaitiakitanga is the ethic of guardianship of natural resources and is exercised by tangata whenua to manage resources and protect taonga for future use.

consent processes, general advice to agencies, marine reserve committee). The growing trend towards involvement in resource consent processes illustrates the breadth of work related to the FMG's role in marine environment and fisheries management. This level of involvement had not always been anticipated. However the respect for the Guardians within the community and management agencies means that there is a desire and expectation for the FMG to be 'around the table' as part of these decision making processes. Unless the expanded workload can be resourced, there would be value in the FMG undertaking a regular strategic planning process which would guide decisions about how to apply its limited resources to priority issues rather than reacting to most issues. The current priorities mentioned by participants were monitoring, compliance, biosecurity, education and communication. Finding 'space' for the FMG to undertake regular planning activities, as well as people with the expertise and capacity to drive the process, is likely to be the main barrier to implementing such a process.

Most participants were satisfied with the current membership of the FMG and felt the group represented a balanced mix of knowledge and experience in relation to the FMA as outlined in section 15(2)(b) of the Act. A common theme in the interviews was that the FMG membership had maintained a strong local flavour, and that members were effective in representing the interests of the FMA rather than of a specific interest group or sector.

The key concern was the future membership of the group and the need for succession planning to ensure the group continues to stay focused on the original vision and has the support and respect of their peers. In considering future membership, acknowledging the point in the previous paragraph that FMG members do not represent specific interest groups, and that Guardians are appointed by the Minister for the Environment, participants emphasised the need to ensure local interests continue to be well represented on the group and also that other wider interests are included (eg, ecological and marine scientists). The interviews indicated there was some tension between ensuring local interests are represented but also ensuring that wider regional and national interests are included. In terms of local interests, a number of participants commented that the group was dominated by fishing interests and while this currently was not a concern, tourism interests were identified as a potential gap to be addressed in future appointments. Given the FMG's focus in considering resource consents, monitoring and research, consideration of scientific interests on the group will continue to be important.

From this review, there appears to be a high level of awareness of the FMG and individual members. Taking a more representative population, the survey work by Booth et al (2007 and 2010) indicates an awareness of between 45-100 per cent for the different user subgroups. The respect and mana the group has highlights the need to ensure future members are appointed very carefully to ensure the original spirit, vision and kaupapa continues.

While the FMG may not have a strong sense of ownership of the term 'kaitiakitanga', there is a belief from iwi and other participants that the concept comes through strongly in their actions.

## 5. MARINE MANAGEMENT MEASURES

The FMG, management agencies, users and key stakeholders were all asked to comment on the functions and effectiveness of the FMG. Most responses to questions on this topic came from FMG and management agencies. Where key stakeholders and users specifically commented on issues regarding the FMG, this has been highlighted.

### 5.1 Overview

In addition to establishing the FMA, the Act establishes eight marine reserves in the area and implements measures to assist in the preservation, protection, and sustainable management of the marine environment and biological diversity of the FMA. A full list of the measures is provided in Appendix E. Overall, the Act puts in place a framework for the integrated management of the FMA with provisions relating to conservation, fisheries, and biosecurity.

The Act also outlines amendments to the SRCP. The amendments to the SRCP give effect to the measures outlined in the Act. Amendments to the SRCP include measures to:

- ensure that in considering applications under the Resource Management Act 1993 for activities within marine reserves and within china shops in the FMA, the activities are compatible with the values and purposes of these areas
- minimise the risk of invasive species arising from discharges related to hull cleaning, cleaning of ships, structures, and equipment by placing restrictions on these activities
- minimise the adverse effects of anchoring or mooring through the establishment of mooring facilities and china shops
- minimise the adverse effects of diving on the unique and fragile habitats in the area.

As part of this review, participants were asked to comment on the effectiveness of the marine management measures. While interviewees did not specifically comment on the mechanism of the SRCP, they did comment on the specific measures that the Plan gave effect to as outlined in the sections below.

### 5.2 General comments

While some participants provided specific feedback on individual measures (discussed below), many participants stated that they could not separate out and discuss individual measures as they all worked as an integrated package. Many participants were very positive that special legislation had been put in place to allow this integrated package to be rolled out.

You can't separate out management measures. It is an integrated package. It is a massive hit with special legislation ... Most innovative thing was having special legislation (key stakeholder).

It was amazing to get special legislation, don't see that very often (FMG).

The only way it worked was as one package – wouldn't have worked as separate legislation (FMG).

Legislation allowed us to give Fiordland a focus, before it was just part of Southland. Now has given us a focus that Fiordland is unique and special (management agency).

The process of the Act was good ... It was ground breaking to make a new law, rather than try and incorporate it into fisheries laws ... It wouldn't have the same effect if it was in bits and pieces (user).

However, while participants were positive about the measures, there was a general feeling that five years was not a long enough period to be able to make any conclusions about the impact of the measures on Fiordland.

You need to give it a long time to get a pattern and see if it's going to be a success ... nature can also change things (FMG).

A number of participants (FMG, management agencies, key stakeholders, users) also commented on the fact that any changes in the environment may be due to natural processes and were therefore reluctant to attribute any changes they had noticed to the measures (refer to further discussion in section 5.4). In order to be able to connect changes in biodiversity or biomass to the measures, many participants advocated for the need for ongoing monitoring (FMG, management agencies, key stakeholders, users).

Monitoring is key and fortunately the legislation requires monitoring. The legislation means we needed to do baseline studies. The legislation sets the framework for a sound environmental management regime (FMG).

Five years is not a long period. There wasn't a lot of statistical data when it was put in place. It was based on anecdotal evidence. Now we have a survey and we have a benchmark. It hasn't been long for recovery (user).

A key outcome of the Act is that it has allowed agencies to obtain funding to increase the knowledge base ... this is very important (FMG).

## 5.3 Conservation and biodiversity

### 5.3.1 Overview

Participants were invited to comment on the following conservation and biodiversity measures.

- **Habitat lines** – these lines distinguish between inner and outer fiords, and commercial fishers cannot fish in inner fiords.
- **Marine reserves** – there are ten marine reserves throughout Fiordland. Two of these existed prior to the Act and eight were established in the Act. Four of the marine reserves can be used to store crayfish pots and live crayfish.

- **China shops** – there are 23 china shops dotted throughout Fiordland. These are discrete areas protected for their abundance/diversity of animal/plant communities or areas containing key species.
- **No-anchoring areas** – there are seven small non-anchoring areas throughout Fiordland. These areas protect particularly fragile communities and habitats which could be damaged by anchors, chains or ropes.
- **Doubtful Sound Dolphin Protection Zones** – these zones offer non-statutory protection for a population of bottlenose dolphins that reside in Doubtful Sound. The purpose of the zone is to minimise disruption (eg, low speed, must take direct route, do not enter zones if dolphins are present) and hope to stop the population decline.

### 5.3.2 Effectiveness of measures

A number of participants (FMG, management agencies, key stakeholders, users) made generally positive comments about the conservation measures. A number of participants also stressed the need for better and ongoing biodiversity research (FMG, management agencies, key stakeholders, users).

Many participants (FMG, management agencies, key stakeholders, users) described habitat lines as an important tool for moving commercial fishing effort outside of the fiords and dividing inner from outer. Some participants were hesitant to comment as to whether the lines were in the right place with a few recommending they be reviewed. One described them as “arbitrary and not based on any particular ecosystem” (management agency) and other said their position was based on “a gut feeling because there was no data” (management agency). One participant said the location of one habitat line potentially “undermined the integrity of the whole process” (FMG).

A few participants were critical of the concept of habitat lines. One participant commented that fishers find the habitat lines confusing and don’t understand why they can fish on one side and not on the other (FMG). Another commented that they were difficult to enforce (management agency).

A number of participants said the marine reserves were a positive thing, with one stating:

They are a huge gain in terms of marine protected areas, they are pretty unique in New Zealand and will matter in 20-30 years time (management agency).

A few participants advocated for a review of marine reserves with more discussion needed on whether they adequately represent the ecosystems of the Fiords (management agency, key stakeholder). In terms of gaps in the marine reserve representation, one stakeholder recommended that there be a marine reserve on the outer coast (to represent the kelp forests), and the Gut Marine Reserve be increased in size to compensate for the Elizabeth Island marine reserve being less effective because of the increased freshwater outflow from the Manapouri power station.

Some participants commented that the china shops were good for raising awareness of the unique biodiversity of Fiordland and it was a useful mechanism for designating no anchoring areas (FMG,

management agencies, key stakeholders). However, many participants stated that there were limitations with the mechanism as the areas had no protection in legislation (unlike the marine reserves), with one stakeholder suggesting they become marine reserves. Some participants were also concerned that the areas identified as china shops were not necessarily special compared with other areas of Fiordland (FMG, management agencies, key stakeholders, users). However, some participants commented that the process involved in amending the Act means that it is difficult to add in new china shops.

A few participants (management agencies, key stakeholders) emphasised the need for ongoing monitoring of the biodiversity of the marine reserves and china shops.

Some participants commented that the no anchoring areas are a good idea but questioned whether they are protecting all types of communities (management agencies, key stakeholders). A few participants advocated for a more proactive programme to identify them.

No anchoring areas and china shops are good in theory but the locations are vague. There is not necessarily anything in the areas designated as china shops. There are a massive variety of communities but there is no knowledge of where they are and lots of communities are not covered (management agency).

A few participants were concerned about the impact of cruise ships anchoring with one key stakeholder commenting that cruise ships should not be able to anchor in the inner fiords.

A number of participants were critical of the dolphin protection zone and did not think it would have any impact on dolphin numbers (FMG, users). They instead commented that dolphin numbers were a natural phenomenon or that interaction with vessels was not an issue. A number of participants were quick to stress that the dolphin protection zone was not one of the measures brought in with the Act but was a Department of Conservation led initiative (FMG, users).

One key stakeholder recommended that the FMG explore the possibility of including a marine wilderness area and a marine mammal sanctuary in Fiordland, and also working towards World Heritage Area status.

## 5.4 Fisheries

### 5.4.1 Overview

Participants were invited to comment on the following fisheries mechanisms.

- **Commercial fishing outside the internal waters** – As per the ‘gifts and gains’ strategy (refer to section 3.1.2) commercial fishing is prohibited in the internal waters of the fiords. Commercial rock lobster fishers can, however, store their catch in areas of the internal waters.

It is important to note that the following restrictions and rules for recreational fishing are based on the ‘fish for a feed’ concept (refer to section 3.1.2).

- **Finfish limits** – there are daily catch limits for a number of species; bag limit across all species.
- **Shellfish limits** – there are daily limits as per user guide (FMG et al., 2008), size limits for some species.
- **Blue cod fishing restrictions** – Milford and Doubtful Sounds have been closed to amateur blue cod fishing since 2005. Outside of these two sounds, blue cod can be caught according to regulations which set: minimum size (33cm); daily limit (3 cod per person per day in internal waters, 20 per person per day in the outer waters); no undersized fish to be used for bait; no accumulation.
- **Bulk harvest method restrictions** – there are limitations on the use of blue cod pots, rock lobster pots, long lines, and nets.
- **Line fishing restrictions** – there are restrictions on the number and use of long-lines, set lines, droplines and dahn lines.
- **Gear restrictions** – it is not possible to: use dive tanks to collect paua; use or possess a dredge in FMA; use spring-loaded loop or lasso to catch rock lobster; and use a set net within the FMA.
- **Rock lobster restrictions** – there are size limits, daily catch limits and accumulation limits. There are lower catch limits for crayfish taken from the internal waters.
- **Rock lobster holding pots** – there is a regulation unique to Fiordland that allows the use of holding pots to store live crayfish.
- **Compliance activities** – joint agency patrols and inspections of vessels fishing in the FMA are carried out.

#### 5.4.2 Effectiveness of measures

A number of participants talked generally about the need for more research and monitoring on the biodiversity and biomass of species before any conclusions could be drawn on the effectiveness of the measures (FMG, management agencies, key stakeholders, users). Many users interviewed were also interested in reading the findings of any research so they could better understand what was happening (see also section 5.7).

Science is saying the fish are not there, but they don't show us the results of the science (user).

There is nothing that says the biomass of X species was X tonne at day one and now it is X – the fishery has therefore gone up by X% ... but I haven't heard its going downhill (key stakeholder).

They need to share scientific findings. Once a year they should have one page in the local paper and fishing magazines. They should have an article on scientific results for the whole area (user).

In the absence of access to research findings, many of the following comments on the effectiveness of measures are based on anecdote and personal experience.

A number of users commented on the fluctuating nature of fish stocks and other influences, and therefore the difficulty in attributing any increase to the FMA measures:

I haven't noticed a big change in the fish numbers. Fish come and go over the years, right now there are lots of fish but you don't know how long that will last. You can't just put that down to the FMA measures that have been put in place (user).

There hasn't been that much difference to the fish stock. I think that the fish stocks have recovered more under the Quota Management System rather than under the management of the FMG (user).

Many participants commented on the blue cod fishing restrictions and the closure of Milford and Doubtful Sounds and noted that the blue cod stock in the inner fiord had not recovered (FMG, management agencies, key stakeholders, users).

Blue cod is a big issue, people want to see it opened again ... people are complaining because they are forced out to sea (past the habitat lines) where it is rougher and it becomes a safety issue (FMG).

There was an assumption that the blue cod closures for recreational fishing in Milford and Doubtful could be opened again in the future but that hasn't happened (management agency).

The blue cod ban is sitting on top of our thoughts. We thought we could open it up again. We have to rethink the strategy around this (FMG).

Some participants offered the following suggestions regarding the blue cod fishery:

- undertaking more research on why the blue cod inner fiord stock has not recovered (key stakeholder, user)
- limit the catch to one or two per day over the whole sound to spread the catch area (take for a feed not for the freezer) (user)
- drop blue cod catch to one per person a day as part of 'fish for a feed' philosophy (user)
- reduce the quota of 20 blue cod in the outer fiords as this doesn't fit with the 'fish for a feed' concept (user)
- have minimum and maximum size level on blue cod (the breeders) (user)
- restrict the type of hook you can use. J hooks are very hard to get out of the mouth. Big circular hooks easier to get out and therefore have less time out of the water (user)
- restrict numbers as the current limitations are still too many if you are adopting the principle of 'fish for a feed' (user).

Some participants (management agencies, users) commented that the closure of Milford and Doubtful Sounds to amateur blue cod fishing had forced fishers into a smaller area, putting increased pressure on these areas.

There is displaced effort with bigger boats now in Bradshaw Sound to get cod ... They can't catch blue cod in Doubtful Sound so they go to Bradshaw Sound. This has an effect on Bradshaw Sound and people complain ... The closure of one area puts pressure on another (management agency).

They made a mistake when they closed off Doubtful but not Bradshaw and Thompson. It has put pressure on those areas. They should close off all three fiords (user).

Many participants commented that the number of crayfish had increased, with stock now healthy and abundant (FMG, management agencies, key stakeholders, users). However, all of these participants were reluctant to attribute this increase to changes introduced in the Act. Instead, it was explained by way of natural cycles or the CRA8<sup>9</sup> management strategy.

Crays are prolific, but I don't know if it's just a timing thing. Crays migrate around New Zealand and they move a lot so it could be a seasonal thing (FMG).

The crayfish numbers have always been high in the inner fiord, it is not a result of the FMA (user).

A number of participants (FMG, users) commented that bag limits for crayfish need to be increased:

I am sure we will be able to change cray bag limits inside the sounds because it is riddled with lobsters ... I don't think the abundance is to do with the bag limits, it is about the fishery (FMG).

Only allowed to take three crayfish from the inner fiord, while allowed to take more in the outer fiord. The inner fiord is just covered in crayfish, while there aren't as many in the outer fiord ... The crayfish take should be the same in the inner fiord as it is in the outer fiord (user).

The key concern, however, expressed by many participants (FMG, management agencies), was the difficulty in easily adjusting the recreational fishing quota to respond to changes in stock numbers.

One criticism we hear is that the commercial quota can be adjusted quickly, but the recreational quota can't – people want to know why we can't relax the numbers (management agency).

Although a number of participants commented that it would be good to increase the quota for crayfish, it can take a long time to change the quota in legislation.

If we want to make changes it takes about 18 months. We need to put recommendations forward to the Minister, then it needs to be prioritised, then a discussion document/paper needs to be prepared ... They need to identify the issues as soon as possible ... knowing that government processes take a long time it is important to start the ball rolling (management agency).

Rock lobster holding pot regulations (to hold live crayfish over multiple days) were described as very useful, in keeping with the isolated nature of the area, and they stopped crayfish going to waste.

One user recommended that restrictions on the use of dive tanks with paua be lifted.

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<sup>9</sup> CRA8 fishery is New Zealand's largest quota area and includes Fiordland.

## 5.5 Biosecurity

### 5.5.1 Overview

Participants were invited to comment on the following biosecurity measures.

- **Compliance and monitoring activities** – there are regular joint-agency patrols to monitor the FMA and vessels in the FMA for biosecurity threats and for compliance with the requirement to have a clean hull. MAF Biosecurity New Zealand (MAFBNZ) also run a programme in Bluff Harbour to monitor *Undaria* growth on jetty piles and on vessels known to travel to the FMA. As part of this programme growth is removed and vessel owner notified to encourage proper hull cleaning and anti-foul treatment.
- **Requirement to clean vessels before entering FMA** – under the SRCP, ships, structures and equipment destined for the internal waters of Fiordland are required to be thoroughly cleaned and disinfected before entering the FMA.
- **Communication and education activities** – this includes the production of informative pamphlets/booklets, signage at ports, and direct communication with vessel owners.

### 5.5.2 Effectiveness of measures

Many participants identified biosecurity as a high priority area where there needed to be ongoing education, communication and compliance activities, with *Undaria* often referred to (FMG, management agencies, key stakeholders, users). One user commented that with more boats and visitors in the future there is increased risks of transportation. Particular problems referred to include people not cleaning their vessels before entering the FMA. One user stressed the need to monitor anchorages and plan for each species that has the potential to colonise Fiordland. Another user stated that there needed to be more information on *Undaria*, particularly the speed of growth. Compliance and communication issues relating to biosecurity are discussed further in sections 5.6 and 5.7.

Many participants stressed the need for quick responses and a number of participants (FMG, management agencies) expressed concerns that MAFBNZ initially did not give these measures a lot of priority when it became clear there was a threat of *Undaria* in Fiordland. This example is discussed further in section 6.2.2.

## 5.6 Community awareness and compliance

Most participants (FMG, management agencies, key stakeholders, users) considered that there was a high level of awareness and compliance with the measures that have been put in place. One key reason given for this by participants (FMG, management agencies, key stakeholders, users) was there was generally a high level of awareness and respect for the Guardians (also refer to section 4.5).

There is quite a lot of awareness of the FMG and the measures. They have connections to the community and fishing industry. The users are aware of why we have moved in this direction. None are complaining and none are hurting ... People have accepted it because it was a community group and they were all represented (FMG).

There is a lot of compliance. It is better than five years ago. They are peers in their field and they expect them to toe the line (FMG).

There is a general acceptance that what we've done is right ... you must have limits and quota or it won't last (FMG).

The two year cod closure in Doubtful Sound has been rolled over and people have accepted it. They assume there is science behind it. A mind shift has occurred (user).

We weren't very happy at first. It has only eliminated a small number of fishermen. I think everyone has accepted it now. There is a high level of awareness, everyone is involved, and all of the public has been a part of it. There have been no hidden agendas (user).

Findings from the interviews suggest that because these measures were developed and put in place by their peers, there is greater respect and compliance than if they had been put in place by an agency.

There was wariness from commercial fishers, but view that if FMG didn't do it, DOC may force policies on us and decisions would be made in Wellington. It is a good model (key stakeholder).

I think the FMA has been so successful because it has not been taken over by government departments, it is not controlled by Wellington. It is still kept local, that's the main thing, and that's why it has been so successful (user).

During the development of the measures, many FMG members also spent a lot of time talking with people and answering questions in order to gain support for the management concept.

Because it has been a community driven project, a number of participants commented on the importance of local ownership and peer pressure to encourage compliance (FMG, management agencies, key stakeholders, users).

There is more compliance now because of peer pressure ... people watching each other (FMG).

The biggest issue is self policing. Because the area is so big there is not much chance of seeing DOC or MFISH. Self policing is important. One boat talks to another, everyone talks with everyone, they tell people what they should do (FMG).

Compliance was a problem but we are past that now ... All regular users of Fiordland keep an eye on what is happening. Now there is a sense of ownership. 'If you do something wrong you are stealing from us' (FMG).

After the legislation I thought my job would be to keep fishers honest but it became clear after the legislation that they were as keen and committed as I was (FMG).

There is also a bit of self-policing among the fishermen; we are all keeping an eye on everyone. We tell people who don't know the area well what the rules are. If people are not doing what they should, usually there are other recreational fishermen keeping an eye on them to tell them what they can and can't do (user).

There is compliance amongst the commercial fishing guys and most respect it too. They are not going to stuff around trying to get a few crayfish inside the sound (user).

It works because it is logical and sensible. There is no heavy handed big compliance thing (user).

As part of this review we reviewed the minutes of the joint FMG and management agency meetings, and found instances of the Guardians and management agencies agreeing to speak to individuals that were thought to have breached compliance rather than handing the cases directly to Ministry of Fisheries' officers to investigate.

Many FMG members relayed stories of users who were initially against the management initiative approaching them to tell them how positive it had been.

I was in Milford and meet two recreational fishers who were against the project. They came up to me and said 'it's worked. It is the best thing that has happened to Fiordland' (FMG).

When the strategy went out users said it would impinge on their rights (eg, fishing bag limits). We see it as protecting their rights. But over time this attitude has changed. There wouldn't be many who haven't seen this as a positive (FMG).

A large number of participants (FMG, management agencies, key stakeholders, users) referred to the underlying principle of 'fish for a feed' and commented that it had been adopted by many users in the area.

Before the FMG people would take 500 crayfish, since FMG that doesn't happen now, that's great. The FMG book talks about 'fish for a feed' (user).

Once you've got a culture of 'fish for a feed' in there it becomes self policing (user).

We want people to have the Fiordland experience, not just fishing ... The focus should be on 'fish for a feed'. It should be on enjoying Fiordland for what it is and shifting that fishing focus (FMG).

They have been very successful in making people aware of the levels and 'taking a feed', trying to change the mentality (management agency).

Many participants had stories of bulk extraction by recreational fishers and charter boat operators who previously loaded up freezers with blue cod. They commented that, as part of the changing culture, this practice rarely happens now (FMG, management agencies, users).

Some users commented that the measures may not have been as bad as people expected.

There has been a distinct change in attitude. People were very wary but the result hasn't been as bad as they expected (user).

People have adopted it because Fiordland is unique, it's a gem. It does need to be looked after. The rules in the Act are not as draconian as people thought they would be. The 'gifts and gains' approach was well publicised as it went ... It disrupted what people were doing as little as possible (user).

Everyone was aware legislation was coming and it wasn't half as bad as they thought (user).

A number of participants (FMG, users) commented that another reason the measures have been accepted by stakeholders is due to the large scale of the area.

The size of the area helps. There is geographically enough space to put in management mechanisms to satisfy most people. Groups in other areas have struggled because they have a smaller area to put this model in (FMG).

In its annual report to 30 June 2009 (FMG 2009), the FMG report that the levels of compliance with the various regulations pertaining to the FMA have continued to increase, and that knowledge of the specific requirements that apply within the area is becoming more widespread. This finding is based on Ministry of Fisheries data reported to the December 2008 joint meeting of the FMG and the management agencies. The data showed that the number of people spoken to as part of the Ministry's compliance patrols had increased since the management regime involving the FMG had begun, but the number of people found in breach had decreased (minutes of meeting, 12 December 2008).

The two FMA user surveys (Booth et al 2007 and 2010) include a number of findings on community awareness, including:

- around a third of users correctly identified the number of marine reserves in the FMA
- most respondents to the surveys had a fairly accurate idea of what activities are allowed in the marine reserves (with the exception of anchoring and feeding fish)
- the majority of respondents (67-83 per cent across all the user subgroups – commercial fishers, recreational fishers, tourism operators/employees, and other – in 2007, and 54-89 per cent in 2010) had heard or seen information on the current management of the FMA
- awareness of management of the FMA was significantly lower amongst respondents who do not use the FMA as frequently or have a shorter length of time associated with the area
- none of the respondent subgroups felt that they were very well-informed about the management of the FMA, and commercial fishers felt more well-informed in 2010 than in 2007, but recreational fishers felt less well-informed
- a large number of respondents answered "don't know" when asked if they wanted to change some aspect of the FMA management, possibly reflecting a lack of knowledge about the existing management of the area

- in 2010, commercial fishers were most satisfied with the management of the FMA, with 66 per cent not wanting to change the current management and 9 per cent wanting to change some aspect of the FMA management
- views on compliance were polarised, with some users thinking there should be more policing and others thought less
- similarly, there was a wide division in comments about the degree to which the regulations were being followed.

## 5.7 Communication

In terms of communication tools, the user guide (*Beneath the Reflections: A User's Guide to the Fiordland (Te Moana o Atawhenua) Marine Area, 2008*) was described by many participants as a great resource for boaties and an important tool for communicating fisheries regulations (FMG, management agencies, users). The book provides an introduction to the marine environment and fisheries and the Act, and includes practical information about the activities permitted and the regulations.

The user guide means there is no excuse for not knowing. It is subsidised to a level that everyone can afford. It is a quality piece of work ... A user can have all the practical information in one place (FMG).

The guide is a good publication. It should be on all the boats. It has history information as well and is used as part of our tourist commentary (user).

Other effective tools to increase awareness of the regulations mentioned by participants (FMG, management agencies, key stakeholders, users) included the newsletter, annual reports, website and other publications.<sup>10</sup> The joint patrols of Fiordland by the agencies were also described as an effective communication and compliance tool (FMG, management agencies, users).

The results of the user survey in 2007 shows that the most common means of users learning about the management of the FMA is through information brochures, (Booth et al 2007), while in 2010 the user guide (which was published in 2008) was the most used information source (Booth et al 2010).

Some participants commented that some people outside of Southland and Otago do not know the rules and these people are the target for the FMG's future communications work.

We need to alter the expectations of fishers from outside the areas, who see pristine area and don't feel fishing would have a big impact (management agency).

For the most part, awareness is pretty good ... there are always people from other areas who are ignorant (FMG).

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<sup>10</sup> A number of pamphlets and publications have been produced, including: a FMA information pamphlet; a marine reserves information book; and a FMA recreational fishing rules pamphlet.

We need to change the culture of what people expect from a fishing holiday (FMG).

Some participants also suggested other areas for improvement:

- rethink the use of signs on boat ramps as people don't read them. A number of participants commented that people get overwhelmed and saturated by information and go fishing to get away from signs and information (FMG, user, management agency)
- look at how the regulations can be simplified as some fishers have difficulty understanding some of them (eg, rock lobster accumulation) (management agency)
- ensure that if someone gets caught they are convicted as this would be an effective way to get the message out to the public (user)
- include detailed survey and monitoring reports on the website so the public can find out about the state of the environment and fishery (key stakeholder)
- include all meeting minutes, strategy documents and research reports and papers on the website (key stakeholder)
- have voluntary fisheries officers in Milford and Doubtful Sounds over long weekends (key stakeholder)
- share science in a user friendly way so people can understand, particularly about the blue cod fishery (user)
- put information in the media about monitoring, newly discovered species, and human interest stories (user)
- the focus of future communication should also be on children as it often takes a generation to get a complete change of attitude and culture (user).

In terms of comments from interviews in the research on FMA users (Booth et al 2007), there was a predominant comment about the FMA regulations being complex and confusing. A number of interviewees also provided ideas about improving the management of the FMA, including: that the FMG should share information about its 'big picture' or long term plan for management of the area; there should be greater focus on reporting study results including the effects/outcomes of changes in the management of the area (eg, effects of blue cod closures); and that the FMG should convene a forum where information is shared with FMA users.

Taken as a whole, the data about perceptions of FMA management suggest that the FMG has avoided 'ruffling too many feathers' to date. The current management regime does not appear to be having any significant positive or negative effect on people's use or experience of Fiordland, and most respondents do not want to change any aspect of current FMA management. While most respondents had seen/heard information about the management of the FMA, overall they did not feel very well-informed about FMA management. The question arises as to whether this is a problem. Despite some misperceptions about its role, awareness and knowledge about the FMG was reasonably sound (Booth et al 2007).

## 5.8 Key findings

Participants were, overall, very positive that special legislation had been enacted to allow the integrated package of measures to be put in place. Consistent themes from the interviews included:

- the measures are an integrated package, and it is more appropriate to focus on the effectiveness of the whole package rather than on individual measures
- five years is not a sufficient period of time over which to review the effectiveness of the measures
- ongoing research and monitoring is required in order to determine the effectiveness of the measures.

Participants were generally positive about the conservation and biodiversity measures, particularly the marine reserves and china shops which are useful for raising awareness about the unique biodiversity within the FMA. There was some concern relating to both the concept and specific location of habitat lines, suggesting a need to better communicate the purpose of this measure and perhaps review the current location of the lines.

The majority of comment was in response to the fisheries measures, with participants consistently saying that it was not currently possible to attribute any changes to fish stock to the FMA measures. With the blue cod fishery still depleted and crayfish in apparent abundance, many participants suggested that the rules and regulations need to be reviewed and amended to respond to the fluctuating environment. However, some participants recognised that the fishing regulations in the Act cannot be changed without going through an extensive and lengthy legislative process and therefore the current system does not have the flexibility to respond easily to changes.

Few participants commented in any depth on the biosecurity measures, although many recognised this area as a priority and stated the need for ongoing education, communication and compliance activities.

Awareness of and compliance with the marine management measures appears to be high, and this can be attributed in part to users respect and trust of the FMG. The benefit of local involvement appears to be strong in this respect, contributing to feelings of local ownership, respect for peers, and peer pressure to encourage compliance (ie, contributing to a degree of self-policing). The concept of 'fish for a feed' appears to be readily understood and supported.

There is a general acceptance that the Act gives effect to a pragmatic suite of regulations and the challenge now is to keep users on side with current and future management decisions, such as the decision to extend the closure of the blue cod fishery. If users are to continue to comply with the regulations there needs to be ongoing communication to explain the reasoning behind why certain decisions are being made and to share information on the state of fish stocks and other aspects of the marine environment. While there is general acceptance and support for the measures, it is important that the FMG, in partnership with the management agencies, put effort into maintaining

this support through ongoing communication, promoting success stories and sharing research and monitoring findings.

The user guide (FMG et al., 2008) is a key highlight of the implementation of the Act and is a valuable tool for sharing information and education about the measures. Areas identified for future communication effort include targeting people outside of the Fiordland area, publicising the meetings and minutes of the FMG, sharing the FMG's long term plan for the FMA, and simplifying messages about the rules and regulations associated with the FMA.

## 6. RELATIONSHIPS AND PROTOCOL

Only the FMG and the management agencies were asked to comment on the nature and effectiveness of the relationship between the FMG and the agencies.

### 6.1 Overview

One objective of the Act (section 3(d)) is to facilitate and promote co-operation between the Guardians and the management agencies, to assist in achieving the integrated management of the FMA. In order to meet this objective, section 27(1) requires the chief executives of the management agencies to enter into an agreement (protocol) with the Guardians.

The protocol between the FMG and the management agencies came into effect in September 2006 with the first review completed in August 2009. According to the protocol document:

The protocol is intended to ensure that the spirit of co-operation that has characterised the development of the Fiordland initiative continues under the regime instituted by the Act.

The protocol sets out how the management agencies and FMG have agreed to work together to assist in achieving integrated management in relation to the following key areas:

- roles and responsibilities
- working together
- conflict resolution
- meetings and events
- payment for meetings
- sharing information.

In order to achieve the integrated management of the FMA each agency has taken the lead role in the following areas of work:

- compliance – Ministry of Fisheries
- monitoring – Department of Conservation
- communications – Environment Southland and the Ministry for the Environment
- biosecurity – MAFBNZ.

While there is a lead agency for each of these four work areas, other agencies are involved along with members of the Guardians in forming sub-committees to look at the detail of these work areas.

## **6.2 Effectiveness of relationships and protocol**

### **6.2.1 Relationship between agencies**

The high level of collaboration and cooperation between the management agencies was described by many participants as the key highlight from the Act being put in place.

All the agencies are working together, sitting in the same room. It wouldn't happen without us (FMG).

The biggest achievement has been getting the agencies to work together. They often protect their territory ... It took a fair bit of moulding them around to our way of thinking ... agencies are very concerned about losing their control (FMG).

All the agencies have fallen into line, I find this opportunity remarkable. It has been a catalyst for facilitating government departments working together for a holistic, sustainable environment. They are now much more cooperative together ... protocol is a no surprises type policy which works well (FMG).

The relationship between the agencies is a key success of the FMG ... bringing them together and combining their resources (FMG).

It has had a huge impact on how agencies work together ... To 'facilitate and promote integrated management of Fiordland Marine Area' is the best thing in the Act (ex-FMG).

Many participants (FMG and management agencies) commented positively on how the agencies now run joint monitoring and compliance operations in Fiordland, with the Ministry of Fisheries, Environment Southland, the Department of Conservation and MAFBNZ all working together. Participants from the management agencies also gave examples of how they were working more collaboratively now across a range of projects and issues, with one commenting that they previously did not work together but now actively look for opportunities to combine their resources and work together. Similarly, according to another participant:

The agencies working together is such a positive thing. It helps so much in doing work outside of the Guardians. We talk more closely together about other things (management agency).

### **6.2.2 Relationship between agencies and FMG**

The second key outcome often cited by participants was the relationship between agencies and the FMG. Participants from the management agencies and FMG were very positive overall about their relationship. The following quotes capture common themes in the interviews:

There is nothing more the agencies could be doing, it works well. It comes back to individuals and managers. There is buy in, recognition and support. Recognition of value ... we have support from senior management and enthusiasm from staff (FMG).

The relationship with the agencies is good. I can talk with them about anything (FMG).

The process of developing the protocol was described as useful for clarifying roles and expectations. However, the actual document was not referred to on a regular basis.

The protocol is a document to govern how the arrangement works. It was good to go through the process of developing it to clarify and establish everyone's roles. Because the relationships have been successful it is now just 'business as usual' and the relationships have moved beyond what the protocol covers ... The process of developing the protocol facilitated what we had to do (management agency).

The processes for developing the protocol and the user guide were valuable for bringing people together, talking around the table, and getting communal and collaborative input (management agency).

The protocol was also described as being useful for helping new staff to get up to speed to understand the vision of FMG and the relationship with agencies.

The 'face to face' nature of the FMG meetings was also identified as a key component in facilitating effective working relationships between agencies and also encouraging informal socialising and connections.

It is important to come and eye ball each other. The whole beauty is sitting together, the collaborative nature ... build up relationships with each other over a cup of tea (FMG).

Everyone gets on so well ... the mutual respect has built up over time (management agency).

Best thing is that agencies attend the meeting. It's good to have people there, that it's not just email (FMG).

The effectiveness of the relationship was also associated with the honest and direct approach of the FMG and the group's ability to deal with issues and concerns. A number of participants (FMG and management agencies) described how FMG members are confident applying pressure to agencies when an issue is important to them or they feel the values they are being protected are being threatened. *Undaria* was frequently used as an example of how the FMG applied pressure to both agencies and Ministers to ensure action was taken.

They are a staunch group. They take ownership. They use the agencies to get their own information through. They are not driven by officials. They are not afraid (management agency).

The FMG is not backward in coming forward in front of other agencies, they will speak their minds (FMG).

The relationship with the partner agencies is very good. We are not just associates but have built up a relationship and understanding. Part of the family and part of the kaupapa ... people say what they want to say, they are honest and say what they think (FMG).

As well as agencies supporting the vision of the FMG, participants also described how the agencies have used the FMG as a source of information and advice in other areas of their work.

Agencies can use FMG as a resource. They have a wide range of backgrounds and knowledge of Fiordland. They are useful as a group and as individuals. The fishing guys have fished there their

whole lives, they have a lot of information ... There is a culture in Fiordland ... FMG allows us access to that culture (management agency).

They are respected by the Council. Council would find it hard to not listen to them (management agency).

The Council is currently doing changes to the coastal plan to deal with level of activity and carrying capacity. FMG are involved in changes as stakeholders with specialist knowledge (management agency).

Although collaborative relationships exist between the FMG and agencies, concerns about particular aspects of the relationship were raised by some participants. In particular, the frustrations for FMG associated with high turnover of staff and lack of continuity from the partner agencies based in Wellington.

One issue is the faces of agency staff changing and agency turn over. It is very difficult for the FMG ... FMG have to explain 'gifts and gains' to new people every time (management agency).

I am very happy with agencies, but it's a continuity issue, don't just send anyone available on the day (FMG).

Local input of agencies is critical ... Wellington groups can sound silly, don't know the place ... local knowledge is critical to success ... know the place inside out (FMG).

One problem in the whole process is government [head office] staff. You just get someone up to speed and they start to produce and they go (FMG).

Some participants (FMG and management agencies) described a disconnection between Wellington officials and locals, with out of town agencies often not appreciating the role and significance of the FMG, and not giving the FMG the appropriate level of priority or 'grunt that is required' (management agency). Any difficulties in the relationship between agencies and the FMG were usually associated with agencies that did not have a physical presence or office in Southland. Some participants also raised concerns that some agencies did not recognise FMG as a priority, did not send senior staff to the meetings, and did not enter into the spirit of FMG.

Many agency staff interviewed commented that the FMG must find it frustrating to have to deal with government processes, bureaucracy and long time frames. Some participants also gave examples of disagreements between the FMG and agencies including the markers on the marine reserves and the approach to addressing *Undaria*.

When you have so many bureaucratic agencies working with so many passionate people there will always be some differences of opinion (management agency).

A number of participants commented on the frustrations when FMG request specific action for the FMA and a government department is reluctant as they want to maintain national consistency, they do not see the issue as a priority, or do not appear to take it seriously. The response by MAFBNZ to the *Undaria* threat was often given as an example of this tension.

We needed MAFBNZ to initiate a plan for Southland. It has taken a while. It has been harder to get MAFBNZ to show same resolve as some of the other agencies ... some reluctance of MAFBNZ to come on board but they are now pulling their weight (FMG).

In some cases there appears to be tension, therefore, between government agencies trying to maintain a nationally consistent policy approach, and then allowing specific provisions for Fiordland within this national framework.

Minutes of joint meetings between the FMG and the management agencies support many of the interview findings, including that the protocol is often not referred to because the relationship between the FMG and the management agencies is strong. While there seems to be agreement that the protocol has not been necessary to date, and that it may never be needed, it is seen as a safety net that should be maintained in case something does go wrong with the relationship. There has been discussion at the joint meetings (in 2009) about whether the protocol should be made more comprehensive, however the predominant view seem to have been that it is fine in its current form. Some management agencies have acknowledged that new CEOs, as signatories to the protocol, probably need to be reminded of their duties under it.

### **6.2.3 Relationship with Ministers**

A number of participants (FMG and management agencies) commented on the high level of support the FMG has had from Ministers (both from the National and Labour led governments). Participants also provided examples of where FMG have used their political influence to address an issue at a Ministerial level when they have not been satisfied with the response from an agency (for example the response to the risk of *Undaria*).

When MAFBNZ pulled funding in 2002 [regarding *Undaria*], the FMG used their political influence quite strongly in that debate ... they can get their message heard at a political level (management agency).

We have had problems with MAFBNZ and trying to get them to take responsibility for biosecurity and *Undaria*. We told the Minister we needed *Undaria* acted on and it worked (FMG).

They are not scared of going to the Minister (management agency).

They have had a lot of contact with both national and labour ministers ... when agencies got difficult went to Minister ... this is a massive threat to agencies, takes away their control (FMG).

### **6.2.4 Co-ordination of work programmes**

As mentioned previously, each agency is responsible for coordinating a stream of work. It appears that the process of developing these plans using sub-committees is another opportunity to facilitate agencies and the FMG working together. One agency described how their sub-committee meets once a year to develop an annual operating plan about how the agencies can work together to achieve the goals.

The key area for improvement for work planning mentioned by a number of participants (particularly FMG) was improving the annual business planning and budgeting process with the following suggestions made:

- FMG should have the opportunity to sit with agencies as part of the business planning round to see where money can be made available
- FMG should have the opportunity to present business cases for funding to the agencies as part of the business planning round
- there needs to be mechanisms for shifting funds between agencies (and pooling resources) to respond to high priority issues.

According to participants:

I think the FMG would like to have more control about how the money is spent. They are worried about waste and there is no system for moving it between agencies (depending on the priorities) ... It is very difficult to isolate money for Fiordland. The money we get is absorbed into the wider budget ... FMG would like us to identify opportunities to spend research money rather than not spend it (management agency).

They should bring the combined budgets together for the FMG work. This could make better use of funds ... With the government model of spending within 12 months we lose it ... if there as a pool could plan for it (FMG).

### 6.3 Key findings

For nearly all FMG and management agency representatives interviewed, a key outcome from the Act had been seeing the agencies working together collaboratively. Some management agencies commented that they had extended this collaborative approach to include other areas of work.

The relationship between the FMG and the management agencies was also a highlight for many with the protocol now 'business as usual' with a lot of respect and goodwill between parties. The relationship was seen as mutually beneficial, with the agencies supporting the FMG's vision and the FMG supporting and advising the agencies in related areas of work. The manner in which the agencies actively seek the advice and input of the FMG on a range of issues (eg, many of the issues listed in Table 1 in section 4.2), strongly indicates that the advice is taken into account and specific examples of this are evident (eg, the FMGs advice on marine reserve marker posts). The integrated management model as set out in the Act therefore appears to have been highly successful at bringing agencies and the FMG together.

While relationships are generally positive, the FMG does get frustrated with the high staff turnover within some agencies and the associated difficulties of trying to get new staff up to speed. Another key concern was that some agencies in the past had not appeared to enter into the spirit of the FMG or did not appear to take it seriously. The initial response by MAFBNZ to the *Undaria* threat was often cited as an example of this. In cases like this, there seems to be a tension between government

agencies trying to maintain a nationally consistent approach to policy, and the FMG wanting to develop specific provisions for Fiordland as permitted under the legislation. Where there have been frustrations with the management agencies, the FMG has successfully used the provisions of the Act and directly contacted appropriate Ministers. In the case of the *Undaria* threat, through directing the actions of their agencies, Ministers clearly took the FMG's advice into account.

While planning the specific work programmes has provided another positive opportunity for the FMG and management agencies to work together, a number of participants commented that the FMG would like to have more input into budgeting decisions across the streams of work. In particular, they would like to see the integrated agency model extended so funding could be more readily moved from one agency to another depending on the work priorities. There would appear to be some inconsistency in the current approach where there is integrated management but departmental budgets. There is also some inconsistency between the budget practices of the management agencies, with a ring-fenced budget for FMA management in the Ministry for the Environment but baseline budgets (not ring-fenced) in the other management agencies.

## 7. ANALYSIS AND CONCLUSIONS

This report presents the findings from a review of the effectiveness to date of the management of the FMA established under the Act. The review has focused on three elements of the integrated management model: the FMG, as the statutory advisory body; the specific marine management measures in place; and the protocol between the management agencies and the FMG. This final section of the report provides a synthesis of the key findings in relation to the following themes:

- local awareness, understanding and support
- emerging trends in activities and focus
- gaps and areas for improvement
- shortcomings and successes
- overall effectiveness.

These themes are drawn from the main deliverables for this review as identified in the terms of reference (Appendix A). Two other deliverables are included in the terms of reference: limitations due to insufficient data and recommendations for future reviews. Limitations are discussed in section 2.6 while recommendations for future reviews have been reported to the Ministry for the Environment separately from this report.

It is important to note that this small-scale review was predominantly based on qualitative interviews with the FMG, management agencies and other key stakeholders about their *perceptions* of the effectiveness of the FMG, the mechanisms and the management model.

### 7.1 Local awareness, understanding and support

This review has found that the level of local awareness and understanding of, and support for, the FMG is strong. Participants feel that the members of the FMG are well known in the local community, and that the community has a reasonable knowledge of the role of the FMG. Surveys amongst a wider user population (Booth et al 2007 and 2010) indicate that most respondents were reasonably well informed about the role of the FMG.

The FMG has strong relationships with the management agencies and with Ministers (both current and past), and management agencies regularly seek the advice and input of the FMG and they genuinely appear to value the role and expertise of the group. There have been tensions between the FMG and management agencies, as should be expected (eg, over *Undaria* and marine reserve boundary markers), but these have been resolved and not less because of the mutual respect and support between the partners.

The review has also found strong awareness and understanding of the marine management measures, and strong support for most of these. The processes used to develop the proposed measures during the development of the Fiordland Marine Conservation Strategy (eg, the 'gifts and

gains' approach) has resulted in a pragmatic set of measures that was able to accommodate most users' interests. The trust and respect for the current Guardians is a key reason that users support the measures. Support for the measures is evidenced by the increasing compliance and self-policing style of enforcement commonly referred to by participants. Perhaps most encouraging is the level of awareness and support for the 'fish for a feed' concept which you might expect to take generations to embed.

Aside from the above, local awareness and understanding about the integrated management of the FMA is less apparent, with the user surveys (Booth et al 2007 and 2010) indicated that most respondents felt they were not well-informed about the management arrangement. However, amongst the partners (the FMG and the management agencies), there is a high level of support for the integrated management model.

## **7.2 Emerging trends in activities and focus**

The trend for the FMG's efforts has been towards advice and submissions on resource consents, review and advice relating to monitoring and research proposals, and a focus on biosecurity measures. The work on resource consents is largely reactive and has increased the breadth of issues covered by the FMG (given the diversity in the subject matter of the resource consents). There is also an increasing trend for the FMG to provide advice to the management agencies on other areas of work (ie, not strictly part of the management of the FMA), which is primarily the result of the good relationships between the partners. Involvement in monitoring and research projects is likely to continue to increase into the future as the ability of these projects to produce robust results on the effectiveness of the FMA increases over time – this assumes there will be ongoing funding for such projects.

In terms of the specific marine management measures, the FMG has focused its effort on biosecurity measures. The continued depletion of the blue cod fishery and the associated management of this problem has been a priority, but in terms of keeping a watching brief rather than necessarily taking up a lot of the FMG's time. Looking to the future, biosecurity remains a focus with a particular emphasis on education, communication and compliance activities.

The protocol itself appears to be self-managing (ie, it is considered 'business as usual') and it does not require a great deal of effort to implement.

## **7.3 Gaps and areas for improvement**

The FMG clearly has a high workload, and it would seem that a large proportion of its workload comes from reactive work, such as preparing submissions on resource consents and responding to research and monitoring proposals. To improve this situation, there would be benefit in being more strategic about what areas of work to focus on and what areas are of low priority. This could be achieved through a strategic planning process that sets out to define the FMG's long term plan, and

annual work programmes in support of this direction. This work planning should happen across the current work streams, and be integrated with budget planning. As well as informing the planned work programme of the FMG and management agencies, such planning could usefully provide a framework for prioritising involvement in more reactive work. Integrating with budgetary planning would mean resources could more readily be applied to where they are needed.

In terms of the FMG's membership, the main gap and area for improvement is in the area of succession planning. It would seem sensible, although not critical, to broaden the membership to other interests, outside of fisheries (eg, tourism). More importantly, however, is to plan for a membership that fits the group's planned or expected activities (ie, it would be sensible to undertake this planning in parallel to or immediately following the planning process referred to in the previous paragraph). Given the likely continued focus on monitoring, research, resource consents and biosecurity, scientific expertise is likely to remain a key consideration for the mix of skills on the FMG.

The local awareness, understanding and support for the FMG, referred to in section 7.1, indicates that there has been effective communication on the role and functions of the FMG. One gap that has been identified in this review is the gap in publicising the FMG's meetings, minutes and the long term plan, and in sharing research and monitoring information. The latter could prove a valuable strategy in ensuring ongoing support for the more contentious marine management decisions, such as the closure of certain fisheries.

There were no major gaps identified with the management measures, but suggested areas for improvement include communicating clearer messages about the concept and specific location of habitat lines, clearer messages more generally around the fisheries rules and regulations, and reviewing the crayfish bag limits in the inner fiords.

## **7.4 Shortcomings and successes**

The review has identified little in the way of shortcomings. Certainly there are gaps and areas for improvement, as discussed above, but one of the few shortcomings is the perceived high level of turnover of staff in Wellington-based management agencies and lack of priority sometimes accorded to the FMG and management model. The review has not attempted to validate this perception, although it would not be surprising to find higher turnover amongst staff in Wellington and high priority amongst locally based staff and Guardians.

The success stories, on the other hand, are common. The following stand out as particularly notable achievements:

- the support for the FMG members, the local knowledge that they bring to the table, and their ability to represent the interests of the FMA foremost, and not their personal interests
- the benefits that flow from this local user involvement on the FMG, in terms of the support from the local peers, and its impact on compliance and compliance monitoring

- the trust and support for the FMG as evidenced by the community and management agencies wanting (and expecting) the FMG to be 'at the table' on all manner of resource management decisions
- the cooperative working relationships between the management agencies
- the effective and professional relationship between the FMG and the management agencies.

## **7.5 Overall effectiveness**

This review has found that, based on a predominantly qualitative analysis, the integrated management model for the FMA has proved highly effective over the past five years. The effectiveness has extended on the legacy of the Guardians of Fiordland's Fisheries and Marine Environment, which in developing the Fiordland Marine Conservation Strategy not only laid the foundations for the specific provisions within the Act, but set important principles and expectations around how management decisions would be made.

The FMG has been effective in fulfilling its mandated functions and, by extending its activities to areas at the outer limits of these functions, it has achieved a wide base of understanding, awareness and support for its role.

It is too early to judge the effectiveness of the marine management measures. The level of awareness, support and compliance with the measures is encouraging.

The cooperation and collaboration between the FMG and management agencies has contributed to effective joint working, particularly at an operational level. Fully integrating strategic planning and budget planning processes across the partners and across the FMA work streams may further enhance the model's effectiveness.

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# APPENDIX A: TERMS OF REFERENCE

## A review of the effectiveness of the management of the Fiordland Marine Area: Terms of reference

### 1. Introduction

Under the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005, the Minister for the Environment must conduct a review to determine the effectiveness of the management of the Fiordland (Te Moana o Atawhenua) Marine Area. The review will focus on three elements of the management model: the Fiordland Marine Guardians (FMG), as the statutory advisory body; the specific marine management measures; and the Protocol between the management agencies and the FMG. *Allen & Clarke Policy and Regulatory Specialists Limited* has been selected to undertake this review on behalf of the Minister. *Allen & Clarke* is a Wellington-based consultancy that specialises in the development, implementation, review and evaluation of public policy projects.

### 2. Background

The Fiordland (Te Moana o Atawhenua) Marine Management Act 2005 (the Act) establishes marine reserves and other measures to support the preservation, protection and sustainable management of the area's exceptional marine biodiversity, valuable marine resources, outstanding landscape and cultural heritage. The Act was drafted from a conservation strategy developed by a local group, the Guardians of Fiordland's Fisheries and Marine Environment, in partnership with local and central government agencies.

The Act provides for structures and processes for management of the Fiordland Marine Area (the Area), and a requirement to review the effectiveness of the management of the Area five years after the commencement of the Act. This review of the management model will reflect on how effective it has been in the past, to help ensure that it remains 'fit for purpose' in the current and future context.

### 3. Scope of the project

This review will focus on the perceptions of the effectiveness of the management of the Fiordland Marine Area and will be based on interviews and discussions with a selection of key stakeholders in the Fiordland marine environment, and a review of relevant documents. The interviews will focus on three elements of the management model (the FMG as the statutory advisory body, the specific marine management measures, and the Protocol between the management agencies<sup>11</sup> and the FMG) and will determine how effective they have been in contributing to the management of the Fiordland Marine Area and in achieving the intent of the Act. This targeted review will complement other work underway to monitor outcomes from the management mechanisms in the Fiordland Marine Area.

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<sup>11</sup> Ministry for the Environment, Ministry of Fisheries, Environment Southland, Department of Conservation, MAF Biosecurity New Zealand

The main deliverable from this review is a report that includes:

- analysis of gaps in the management model
- identification of improvements to the model and its implementation
- analysis of local awareness, understanding of and support for the management model
- identification of emerging trends in the FMG's activities, focus and effort
- specification of areas where limited data affected analysis
- identification of failures/challenges and successes
- conclusions to the effectiveness of the management model
- identification of lessons that could guide future reviews of the management of the Fiordland Marine Area.

The findings of the review will be used to:

- inform the future work programme of the FMG and management agencies
- inform any changes required to the management model
- identify any further monitoring that will support improvements to the management model.

#### **4. Methodology**

In order to complete the key deliverables of the review, as listed above, the work will involve a desk-based document review and qualitative interviews with various stakeholders involved in, or affected by, the management of the Fiordland Marine Area.

Stakeholders who will be included in the review include: past and present FMG members; past and present staff from management agencies; Ngāi Tahu; Royal Forest and Bird Protection Society of New Zealand; and parties affected by the management measures established under the Act. The precise method of engagement (eg, face to face or telephone interviews, individual or group interviews) will depend on the preferences and location of participants, their availability, and cost. In total, approximately 40 stakeholders will be interviewed for this review.

*Allen & Clarke* will adopt a phased approach to this review, based on the tasks, deliverables, scope and timetable identified by the Ministry for the Environment. The key phases for this review are:

1. Project scoping
2. Desk-based review of current management model, structures and processes, work programme and protection measures
3. Preparation of data collection tools and planning of stakeholder engagement
4. Stakeholder engagement
5. Analysis and reporting.

## **5. Reporting**

There will be six key reporting points between the Ministry and *Allen & Clarke* over the course of the project, to review progress, seek feedback and make decisions on each phase. The final report is due on 17 September 2010.

## APPENDIX B: KEY QUESTIONS FRAMEWORK

### A review of the effectiveness of the management of the Fiordland Marine Area: Key review questions framework

Theme	Fiordland Marine Guardians (FMG)	Marine management measures	Protocol <sup>12</sup>
<b>Gaps</b>	<p>What are the desired skills and knowledge for the FMG membership? Are there any skills and knowledge gaps in the FMG membership? If so, what skills/knowledge gaps and why?</p> <p>Are the functions of the FMG as set out in section 13 appropriate in order to manage the Area? What functions in section 13 do the FMG currently perform? Are there any functions in section 13 of the Act that the FMG currently do not perform? If so, why?</p> <p>Does the governance structure allow the FMG to perform effectively? If not, what are the limitations/gaps with the governance structure?</p>	<p>What conservation and biodiversity measures<sup>13</sup> are currently in place to ensure the protection of areas of special value? What are the limitations/ gaps with these measures?</p> <p>What fisheries measures<sup>14</sup> are currently in place to manage commercial and non commercial fishing to ensure sustainable utilisation and improved fishing experience? What are the limitations/gaps with these measures?</p> <p>What biosecurity measures<sup>15</sup> are currently in place for managing the risk of pest invasion? What are the limitations/gaps with these measures?</p> <p>What changes to the Southland Regional Coastal Plan<sup>16</sup> have taken place through the Act in order to implement the desired changes for the Area? What are the limitations/gaps with these changes?</p>	<p>How does the Protocol promote integrated management? What are the limitations/gaps with the Protocol with regard to promoting integrated management?</p> <p>How does the Protocol facilitate co-operation and collaboration between the parties (including sharing of resources)? What are the limitations/gaps with the Protocol with regard to facilitating co-operation and collaboration?</p> <p>How does the Protocol assist with co-ordinating work programmes<sup>17</sup>? What are the limitations/gaps with the Protocol with regard to helping to co-ordinate work programmes?</p>

<sup>12</sup> Allen & Clarke will go over the content of the Protocol with the participant at the beginning of each interview.

<sup>13</sup> For the purpose of this review, conservation and biodiversity management measures are: habitat lines, marine reserves, china shops, prohibiting anchoring, Southland Regional Coastal Plan erection and placement of structures policy and diving policy.

<sup>14</sup> For the purpose of this review, fisheries measure are: excluding commercial fishing from the internal waters, recreational fishing restrictions in the internal waters, specific recreational fishing catch limits, bulk harvest method restrictions, finfish limits, line fishing restrictions, blue cod fishing restrictions, compliance activities.

<sup>15</sup> For the purpose of this review, biosecurity measures are: communication and education activities, compliance activities, prohibiting cleaning of vessel hulls.

<sup>16</sup> Policy changes to the Southland Regional Coastal Plan that have taken place through the Act concern: 4.1 Protection of values; 7.3 Discharges; 11.2 Erection or placement of structures; 11.7.7 Anchorages and moorings; 14.3 Diving.

<sup>17</sup> This refers to the biosecurity, compliance, monitoring and communications work programmes.

Theme	Fiordland Marine Guardians (FMG)	Marine management measures	Protocol <sup>12</sup>
<b>Awareness, understanding and support</b>	<p>Has the level of awareness and understanding of the FMG increased within the partner management agencies<sup>18</sup>? If so, how?</p> <p>Has the level of awareness and understanding of the FMG increased within the directly affected communities<sup>19</sup>? If so, how?</p> <p>Is the advice and recommendations of the FMG being taken into account by partner management agencies and Ministers as per section 26 of the Act? If so, how?</p>	<p>Has the level of community awareness of the measures increased over time? If so, how has awareness been increased<sup>20</sup>?</p> <p>Has the level of community support for the measures increased over time? If so, how has support been increased?</p> <p>Has the level of community compliance with the measures increased over time? If so, how has compliance been increased?</p>	<p>What support has the FMG received from the management agencies (eg, staff levels, engagement with the initiative, secretariat support, financial support and flexibility)? Is the level of support FMG receives from management agencies appropriate?</p>
<b>Emerging trends in activities and focus</b>	<p>Where does the FMG focus its time and effort in terms of its functions as per Section 13 of the Act? Why does the FMG focus on these functions?</p> <p>Where is the FMG expected to focus its time and effort in the future?</p>	<p>What marine management measures have been the main focus of the FMG and management agencies?</p> <p>What marine management measures are expected to be the future focus?</p>	<p>How much focus or effort is required to implement the Protocol? Has this changed over time?</p>

<sup>18</sup> Department of Conservation, Ministry for the Environment, MAF Biosecurity NZ, Ministry of Fisheries, Environment Southland.

<sup>19</sup> For example commercial fishers, recreational fishers, divers, marine scientists, tourism operators.

<sup>20</sup> For example, is it due to publications, signs, interaction with FMG members?

Theme	Fiordland Marine Guardians (FMG)	Marine management measures	Protocol <sup>12</sup>
<b>Improvements</b>	<p>How could the FMG membership be improved to ensure a fair representation in the range of desired skills and knowledge?</p> <p>How could the FMG improve its performance as per Section 13 of the Act?</p> <p>How could the Act be improved to assist the FMG to manage the Area more effectively?</p> <p>How could the governance structure be improved to allow the FMG to perform more effectively?</p> <p>How could section 26 of the Act be improved to ensure the advice and recommendations of the FMG are taken into account by partner management agencies and Ministers?</p> <p>How could the level of awareness and understanding of the FMG be increased within partner management agencies and the directly affected communities?</p> <p>What are the barriers to implementing any improvements to the FMG?</p>	<p>How can the conservation and biodiversity measures be improved to protect areas of special value?</p> <p>How can the fisheries measures to manage commercial and non commercial fishing be improved to ensure sustainable utilisation and improved fishing experience?</p> <p>How can the biosecurity measures be improved to manage the risk of pest invasion?</p> <p>How could the changes to the Southland Regional Coastal Plan be improved to implement the desired changes for the Area?</p> <p>How could the level of community awareness, support and compliance with the measures be improved?</p> <p>What are the barriers to implementing any improvements to the marine management measures?</p>	<p>How could the Protocol be improved to better facilitate co-operation and collaboration between the parties?</p> <p>How could the Protocol be improved to assist with the co-ordination of work programmes?</p> <p>How could the level and nature of support the FMG receives from the management agencies (eg, staff levels, engagement with the initiative, secretariat support, financial support and flexibility) be improved?</p> <p>What are the barriers to implementing any improvements to the Protocol?</p>

Theme	Fiordland Marine Guardians (FMG)	Marine management measures	Protocol <sup>12</sup>
<p><b>Shortcomings and successes</b></p>	<p>What are the limitations/failings with the FMG?</p> <p>What are the highlights/success stories from the FMG (what is working well)?</p>	<p>What are the limitations/failings of the conservation and biodiversity measures?</p> <p>What are the highlights/success stories from the conservation and biodiversity measures (what is working well)?</p> <p>What are the limitations/failings of the fisheries measures?</p> <p>What are the highlights/success stories from the fisheries measures (what is working well)?</p> <p>What are the limitations/failings of the biosecurity measures?</p> <p>What are the highlights/success stories from the biosecurity measures (what is working well)?</p> <p>What are the limitations/failings in terms of increasing community awareness, support and compliance with the measures?</p> <p>What are the highlights/success stories in terms of increasing community awareness, support and compliance with the measures (what is working well)?</p>	<p>Overall, what are the limitations/failings with the Protocol?</p> <p>What are the highlights/success stories from the Protocol?</p>

Theme	Fiordland Marine Guardians (FMG)	Marine management measures	Protocol <sup>12</sup>
<b>Overall effectiveness</b>	<p>How effectively does the FMG perform its functions as per Section 13 of the Act?</p> <p>How effective is the current governance structure in supporting the FMG to perform their functions?</p> <p>How effective is the Act for enabling FMG to perform their functions and contribute to the management of the area?</p>	<p>How effective have the conservation and biodiversity measures been in protecting areas of special value?</p> <p>How effective have the fisheries measures to manage commercial and non commercial fishing been in allowing for sustainable utilisation and improved fishing experience?</p> <p>How effective have the biosecurity measures been for managing the risk of pest invasion?</p> <p>How effective have changes to the Southland Regional Coastal Plan been to implement the desired changes for the Area?</p> <p>How effective have efforts been to increase community awareness, support and compliance with the management measures?</p>	<p>How effective is the Protocol at promoting integrated management?</p> <p>How effective is the Protocol at facilitating co-operation and collaboration between the parties?</p> <p>How effective is the Protocol as a mechanism for co-ordinating work programmes?</p>
<b>Limitations due to insufficient data</b>	<p>In relation to the review of the FMG, in what areas was analysis difficult/hindered due to insufficient data?</p>	<p>In relation to the review of the management measures, in what areas was analysis difficult/hindered due to insufficient data?</p>	<p>In relation to the review of the Protocol, in what areas was analysis difficult/hindered due to insufficient data?</p>
<b>Recommendations for future reviews</b>	<p>What issues/elements should be assessed in any future review of the FMG?</p> <p>What are the key indicators for measuring the effectiveness of the FMG?</p>	<p>What issues/elements should be assessed in any future review of the management measures?</p> <p>What are the key indicators for measuring the effectiveness of the management measures?</p>	<p>What issues/elements should be assessed in any future review of the Protocol?</p> <p>What are the key indicators for measuring the effectiveness of the Protocol?</p>

## **APPENDIX C: INTERVIEW SCHEDULES**

### **Interview questions for Fiordland Marine Guardians**

Questions for the Fiordland Marine Guardians have been divided into three sections: (a) Fiordland Marine Guardians (FMG); (b) marine management measures; and (c) protocol. The questions to ask in relation to these three sections are outlined below.

#### **Introduction**

1. How did you become involved in the FMG?

#### **A. Fiordland Marine Guardians (FMG)**

##### ***Functions***

1. What is your understanding of the role of the FMG?

2. How does the FMG perform each of the following functions [provide the following bullet points to interviewee]:

- Advise and make recommendations to management agencies and Ministers'
- Facilitate and promote the integrated management of the FMA;
- Obtain, share and monitor information on the state of the FMA;
- Assist management agencies to: prepare and disseminate information about the FMA; monitor the FMA; and plan for the enforcement of, and compliance with, the management of the FMA.

3. Where does the FMG focus its time and effort in terms of the functions? Why does the FMG focus on these particular functions?

4. Has the focus of the FMG changed over time? If so, please explain.

5. Where do you expect the FMG to focus its time and effort in the future in relation to these functions?

6. Are there any functions that the FMG does not currently perform, or could perform better? If so, please explain.

7. Does this list capture everything that you feel is the role of the FMG?

##### ***Membership***

8. Over the last five years, what have been the most valuable skills, knowledge and experience to have in the FMG?

9. Do you think the same mix of skills, knowledge and experience will be required in the future?

##### ***Partner management agencies***

10. In your view, how much understanding and awareness of the FMG is there within partner management agencies? Has this changed over time? [prompt: DOC, Environmental Southland, MfE, MFish, MAFBNZ]

11. Do you think there needs to be more understanding and awareness of the FMG within partner management agencies? If so, how could this be achieved?

12. How is the advice and recommendations of the FMG being taken into account by the partner management agencies and Ministers?

13. What improvements could be made to ensure that the advice and recommendations of the FMG are taken into account by the partner management agencies and Ministers?

### ***Affected communities***

14. In your view, how much understanding and awareness of the FMG is there within the directly affected communities? Has this changed over time? [prompt: commercial and recreational fishers, tourism operators, scientists, etc.]

15. Do you think there needs to be more understanding and awareness of the FMG within the directly affected communities? If so, how could this be achieved?

### ***Summary***

16. Do you think the FMG is achieving what was intended under the Act

17. Overall, what do you think works really well with the FMG?

18. Overall, what doesn't work well with the FMG and could be improved?

## **B. Marine management measures**

[Interviewees will be given a map of the Fiordland Marine Area to refer to and write on before the following questions are asked]

1. Please describe the conservation and biodiversity measures you are aware of that are currently in place to ensure the protection of areas of special value. *Are you aware of any measures not on this list?*

2. How effective do you believe the conservation and biodiversity measures have been?

3. What are the highlights/success stories from the conservation and biodiversity measures?

4. What, if any, of the conservation and biodiversity measures have not been effective and why?

5. How could the conservation and biodiversity measures be improved?

[Measures for interviewer to be aware of: habitat lines, marine reserves, china shops, no-anchoring areas, dolphin protection zone]

### ***Fisheries measures***

6. Please describe the fisheries measures you are aware of that are currently in place to manage commercial and non commercial fishing.

7. How effective do you believe the fishing measures have been?

8. What are the highlights/success stories from the fishing measures?

9. What, if any, of the fisheries measures have not been effective and why?

10. How could the fisheries measures be improved?

[Measures for interviewer to be aware of: excluding commercial fishing from the internal waters, recreational fishing restrictions in the internal waters, specific recreational fishing catch limits, bulk harvest method restrictions, finfish limits, line fishing restrictions, blue cod fishing restrictions, compliance activities]

### ***Biosecurity measures***

11. Please describe the biosecurity measures you are aware of that are currently in place to manage the risk of pest invasion.

12. How effective do you believe the biosecurity measures have been?

13. What are the highlights/success stories from the biosecurity measures?

14. What, if any, of the biosecurity measures have not been effective and why?

15. How could the biosecurity measures be improved?

[Measures for interviewer to be aware of: communication and education activities, compliance activities, prohibiting cleaning of vessel hulls]

**Southland Regional Coastal Plan**

16. Please describe the changes you are aware of to the SRCP that have taken place through the Act.

17. How effective do you believe these changes have been?

18. What, if any, of the changes have not been effective and why?

19. How could changes to the SCRCP be improved?

[Changes for interviewer to be aware of: discharge restrictions (prohibiting cleaning of vessel hulls), erection of structures, anchorages and mooring]

**Community awareness and support**

20. What is the current level of community awareness and support for the measures?

21. Do you consider that the level of community awareness and support of the measures has increased or decreased over time? Why do you think this is?

22. What is the current level of community compliance with the measures?

23. Do you consider that the level of community compliance with the measures has increased or decreased over time? Why do you think this is?

24. What further work could be undertaken to increase community awareness, support and compliance?

25. What are the difficulties, if any, with increasing community awareness, support and compliance?

**Summary**

26. Overall, what measures do you think are most effective and why?

27. What measures do you consider should be the future focus of the FMG and partner agencies and why?

28. Are there any other government agencies or groups that could add value or improve management of the FMA by being involved?

**C. Protocol**

[A copy of the protocol will be available for the interviewee to refer to if necessary]

**Role and purpose**

1. How would you describe the relationship between the FMG and the partner management agencies?

2. What is your understanding of the role and purpose of the Protocol?

3. How does the Protocol facilitate and promote co-operation between the management agencies and the FMG? [prompt: includes sharing resources]

4. How does the Protocol assist in achieving the integrated management of the FMA?

5. How does the Protocol assist with the co-ordination of work programmes? [prompts: biosecurity, compliance, monitoring and communications]

**Support**

6. What support has the FMG received from the management agencies? [prompts: staff levels, engagement, secretariat, financial]

7. Is the level and nature of support provided by your agency appropriate?

8. Do you think any changes are needed in the level or nature of support provided by your agency, or by other agencies involved?

**Summary**

9. Overall, what do you think works well with the Protocol and why?
10. Overall, how could the Protocol be improved to better achieve its purpose?

## **Interview questions for partner management agencies**

Questions for the partner management agencies have been divided into three sections: (a) Fiordland Marine Guardians (FMG); (b) marine management measures; and (c) protocol. The questions to ask in relation to these three sections are outlined below. These questions will be amended for each interview to ensure they are focused on the specific interests of each agency.

### **Introduction**

1. What is your agency's role in relation to the Fiordland Marine Area and the FMG?
2. How long have you been involved with the FMA and the FMG?

### **A. Fiordland Marine Guardians (FMG)**

#### ***Functions***

1. What is your understanding of the role of the FMG?
2. How does the FMG perform each of the following functions [provide the following bullet points to interviewee]:
  - Advise and make recommendations to management agencies and Ministers'
  - Facilitate and promote the integrated management of the FMA;
  - Obtain, share and monitor information on the state of the FMA;
  - Assist management agencies to: prepare and disseminate information about the FMA; monitor the FMA; and plan for the enforcement of, and compliance with, the management of the FMA.
3. Where do you think the FMG focus its time and effort in terms of the functions? Why does the FMG focus on these particular functions?
4. Has the focus of the FMG changed over time? If so, please explain.
5. Where do you expect the FMG to focus its time and effort in the future in relation to these functions?
6. Are there any functions that the FMG does not currently perform, or could perform better? If so, please explain.
7. Does this list capture everything you feel is the role of the FMG?
8. What is your understanding of the concept of kaitiakitanga? Do you feel that the FMG and the management agencies work within this concept? Is this concept adequately expressed in the actions of the management group?

#### ***Membership***

9. Over the last five years, what have been the most valuable skills, knowledge and experience to have in the FMG?
10. Do you think the same mix of skills, knowledge and experience will be required in the future?

### ***Partner management agencies***

11. In your view, how much understanding and awareness of the FMG is there within your agency? Has this changed over time?
12. Do you think there needs to be more understanding and awareness of the FMG within your agency? If so, how could this be achieved?
13. How is the advice and recommendations of the FMG being taken into account by your agency and Minister?
14. What improvements could be made to ensure that the advice and recommendations of the FMG are taken into account by the agency and Minister?

### ***Affected communities***

15. In your view, how much understanding and awareness of the FMG is there within the directly affected communities? Has this changed over time? [prompt: commercial and recreational fishers, tourism operators, scientists, etc.]
16. Do you think there needs to be more understanding and awareness of the FMG within the directly affected communities? If so, how could this be achieved?

### ***Summary***

17. Do you think the FMG is achieving what was intended under the Act?
18. Overall, what do you think works really well with the FMG?
19. Overall, what doesn't work well with the FMG and could be improved?

## **B. Marine management measures**

[Interviewees will be given a map of the Fiordland Marine Area to refer to and write on before the following questions are asked.]

### ***Conservation and biodiversity measures***

1. Please describe the conservation and biodiversity measures you are aware of that are currently in place to ensure the protection of areas of special value. *Are you aware of any measures not on this list?*
  2. How effective do you believe the conservation and biodiversity measures have been?
  3. What are the highlights/success stories from the conservation and biodiversity measures?
  4. What, if any, of the conservation and biodiversity measures have not been effective and why?
  5. How could the conservation and biodiversity measures be improved?
- [Measures for interviewer to be aware of: habitat lines, marine reserves, china shops, no-anchoring areas, dolphin protection zone]

### ***Fisheries measures***

6. Please describe the fisheries measures you are aware of that are currently in place to manage commercial and non commercial fishing.
7. How effective do you believe the fishing measures have been?
8. What are the highlights/success stories from the fishing measures?
9. What, if any, of the fisheries measures have not been effective and why?
10. How could the fisheries measures be improved?

[Measures for interviewer to be aware of: excluding commercial fishing from the internal waters, recreational fishing restrictions in the internal waters, specific recreational fishing catch limits, bulk harvest method restrictions, finfish limits, line fishing restrictions, blue cod fishing restrictions, compliance activities]

### ***Biosecurity measures***

11. Please describe the biosecurity measures you are aware of that are currently in place to manage the risk of pest invasion.
12. How effective do you believe the biosecurity measures have been?
13. What are the highlights/success stories from the biosecurity measures?
14. What, if any, of the biosecurity measures have not been effective and why?
15. How could the biosecurity measures be improved?

[Measures for interviewer to be aware of: communication and education activities, compliance activities, prohibiting cleaning of vessel hulls]

### ***Southland Regional Coastal Plan***

16. Please describe the changes you are aware of to the SRCP that have taken place through the Act.
17. How effective do you believe these changes have been?
18. What, if any, of the changes have not been effective and why?
19. How could changes to the SCRCP be improved?

[Changes for interviewer to be aware of: discharge restrictions (prohibiting cleaning of vessel hulls), erection of structures, anchorages and mooring]

### ***Community awareness and support***

20. What is the current level of community awareness and support for the measures?
21. Do you consider that the level of community awareness and support of the measures has increased or decreased over time? Why do you think this is?
22. What is the current level of community compliance with the measures?
23. Do you consider that the level of community compliance with the measures has increased or decreased over time? Why do you think this is?
24. What further work could be undertaken to increase community awareness, support and compliance?
25. What are the difficulties, if any, with increasing community awareness, support and compliance

### ***Summary***

26. Overall, what measures do you think are most effective and why?
27. What measures do you consider should be the future focus of the FMG and partner agencies?
28. Are there any other government agencies or groups that could add value or improve management of the FMA by being involved?

## **C. Protocol**

[A copy of the protocol will be available for the interviewee to refer to if necessary]

### ***Role and purpose***

1. How would you describe the relationship between the FMG and the partner management agencies?
2. What is your understanding of the role and purpose of the Protocol?
3. How does the Protocol facilitate and promote co-operation between the management agencies and the FMG? [prompt: includes sharing resources]
4. How does the Protocol assist in achieving the integrated management of the FMA?
5. How does the Protocol assist with the co-ordination of work programmes? [prompts: biosecurity, compliance, monitoring and communications]

### ***Support***

6. What support has the FMG received from your agency? [prompts: staff levels, engagement, secretariat, financial]
7. Is the level and nature of support provided by your agency appropriate?
8. Do you think any changes are needed in the level or nature of support provided by your agency, or by other agencies involved?

### ***Summary***

9. Overall, what do you think works well with the Protocol and why?
10. Overall, how could the Protocol be improved to better achieve its purpose?

## Interview questions for users and stakeholders

Questions for users and stakeholders have been divided into two sections: (a) Fiordland Marine Guardians (FMG); and (b) marine management measures. The questions to ask in relation to these three sections are outlined below.

These questions will be amended for each interview to ensure they are focused on the specific interests and experiences of each user or stakeholder.

### Introduction

1. Please describe your interest and involvement in the Fiordland Marine Area.
2. What do you know about the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005?
3. What do you know about the management of the FMA? [prompt: management rules, the parties involved, and how the management model evolved]

### A. Fiordland Marine Guardians (FMG)

1. What is your understanding of the functions of the FMG?
2. In your view, how much understanding and awareness of the FMG is there within [commercial and recreational fishers, tourism operators – their sector and other sectors]? Has this changed over time?
3. Are the following functions of the FMG [interviewer to summarise section 13] appropriate in order to manage the area?
  - Advise and make recommendations to management agencies and Ministers'
  - Facilitate and promote the integrated management of the FMA;
  - Obtain, share and monitor information on the state of the FMA;
  - Assist management agencies to: prepare and disseminate information about the FMA; monitor the FMA; and plan for the enforcement of, and compliance with, the management of the FMA.
4. Overall, what do you think works really well with the FMG?
5. Overall, what doesn't work well with the FMG and could be improved?

### B. Marine management measures

[Interviewees will be given a map of the Fiordland Marine Area to refer to and write on at this point]

### B. Marine management measures

[Interviewees will be given a map of the Fiordland Marine Area to refer to and write on before the following questions are asked.]

### ***Conservation and biodiversity measures***

1. Please describe the conservation and biodiversity measures you are aware of that are currently in place to ensure the protection of areas of special value. *Are you aware of any measures not on this list?*
  2. How effective do you believe the conservation and biodiversity measures have been?
  3. What are the highlights/success stories from the conservation and biodiversity measures?
  4. What, if any, of the conservation and biodiversity measures have not been effective and why?
  5. How could the conservation and biodiversity measures be improved?
- [Measures for interviewer to be aware of: habitat lines, marine reserves, china shops, no-anchoring areas, dolphin protection zone]

### ***Fisheries measures***

6. Please describe the fisheries measures you are aware of that are currently in place to manage commercial and non commercial fishing.
  7. How effective do you believe the fishing measures have been?
  8. What are the highlights/success stories from the fishing measures?
  9. What, if any, of the fisheries measures have not been effective and why?
  10. How could the fisheries measures be improved?
- [Measures for interviewer to be aware of: excluding commercial fishing from the internal waters, recreational fishing restrictions in the internal waters, specific recreational fishing catch limits, bulk harvest method restrictions, finfish limits, line fishing restrictions, blue cod fishing restrictions, compliance activities]

### ***Biosecurity measures***

11. Please describe the biosecurity measures you are aware of that are currently in place to manage the risk of pest invasion.
  12. How effective do you believe the biosecurity measures have been?
  13. What are the highlights/success stories from the biosecurity measures?
  14. What, if any, of the biosecurity measures have not been effective and why?
  15. How could the biosecurity measures be improved?
- [Measures for interviewer to be aware of: communication and education activities, compliance activities, prohibiting cleaning of vessel hulls]

### ***Southland Regional Coastal Plan***

16. Please describe the changes you are aware of to the SRCP that have taken place through the Act.
  17. How effective do you believe these changes have been?
  18. What, if any, of the changes have not been effective and why?
  19. How could changes to the SCRCP be improved?
- [Changes for interviewer to be aware of: discharge restrictions (prohibiting cleaning of vessel hulls), erection of structures, anchorages and mooring]

### ***Community awareness and support***

20. What is the current level of community awareness and support for the measures?
21. Do you consider that the level of community awareness and support of the measures has increased or decreased over time? Why do you think this is?

22. What is the current level of community compliance with the measures?
23. Do you consider that the level of community compliance with the measures has increased or decreased over time? Why do you think this is?
24. What further work could be undertaken to increase community awareness, support and compliance?
25. How can they best communicate with you and your industry to increase awareness and compliance?
26. What are the difficulties, if any, with increasing community awareness, support and compliance

***Summary***

27. Overall, what measures do you think are most effective and why?
28. What measures do you consider should be the future focus of the FMG and partner agencies?

## APPENDIX D: INFORMATION SHEET

### A review of the effectiveness of the management of the Fiordland Marine Area

The Ministry for the Environment has asked *Allen & Clarke Policy and Regulatory Specialists* – a company that specialises in the development, implementation, review and evaluation of public policies and programmes – to undertake a review of the effectiveness to date of the management measures established under the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005 (the Act).

As the Act has been in place for five years, it is now timely to review the management model, reflecting on how effective it has been in the past, to help ensure that it remains ‘fit for purpose’ in the current and future context.

This review will be based on interviews and discussions with a selection of key stakeholders and a review of relevant documents. The interviews will focus on three elements of the management model: the Fiordland Marine Guardians (FMG) as the statutory advisory body; the specific marine management measures; and the Protocol between the management agencies<sup>21</sup> and the FMG. The review will complement other work underway to monitor outcomes from the management mechanisms in the Fiordland Marine Area.

Individuals from the following key stakeholder groups will be interviewed as part of the review: past and present FMG members; past and present staff from management agencies; Ngāi Tahu; Royal Forest and Bird Protection Society of New Zealand; and parties affected by the management measures established under the Act.

Interviews (either in person or by telephone) will occur in June and July 2010. *Allen & Clarke* will report back to the FMG and management agencies in October 2010.

*Allen & Clarke* will be contacting potential interviewees in the next few weeks to provide further information on the review and to arrange an interview time. Please note all participation in this review is voluntary. The information collected and that is presented in the final report will be anonymous and will not be used for any other purpose. All information held by the Ministry and collected by *Allen & Clarke* on behalf of the Ministry can be requested under the Official Information Act 1982. However, we will seek to withhold the personal details of individuals so as to preserve the anonymity of interviewees if there are any requests made under this Act.

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<sup>21</sup> Ministry for the Environment, Ministry of Fisheries, Environment Southland, Department of Conservation, MAF Biosecurity New Zealand.

If you have any questions or wish to discuss this further, please contact Carla Wilson [cwilson@allenandclarke.co.nz](mailto:cwilson@allenandclarke.co.nz) or Ned Hardie-Boys [nhardie-boys@allenandclarke.co.nz](mailto:nhardie-boys@allenandclarke.co.nz) by email, phone (04 8907300) or post (PO Box 10730, Wellington 6143).

## APPENDIX E: LIST OF MARINE MANAGEMENT MEASURES

### Conservation

**Habitat lines** – distinguish between inner and outer fiords; important as commercial fishers cannot fish in inner fiords.

**Marine reserves** – ten marine reserves throughout Fiordland, two which existed prior to the Act and eight established in Act, no-take zones; four marine reserves can be used to store cray pots and live crays.

**China shops** – 25 (?) dotted throughout Fiordland, discrete areas protected for their abundance/diversity of animal/plant communities or areas containing key species.

**No-anchoring areas** – seven small areas throughout Fiordland, protect particularly fragile communities/habitats which could be damaged by anchors, chains or ropes.

**Doubtful Sound Dolphin Protection Zones** – non-statutory protection for a population of bottlenose dolphins that reside in Doubtful Sound, aim to minimise disruption (low speed, must take direct route, do not enter zones if dolphins are present) and hope to stop the population decline.

### Biosecurity

**Compliance and monitoring activities** – regular joint-agency patrols monitor the FMA and vessels in the FMA for biosecurity threats and for compliance with the requirement to have a clean hull. MAFBNZ runs a programme in Bluff Harbour to monitor *Undaria* growth on jetty piles and on vessels known to travel to the FMA. Growth is removed and vessel owner notified to encourage proper hull cleaning and anti-foul treatment.

**Requirement to clean vessels before entering FMA** – Under the SRCP, ships, structures and equipment destined for the internal waters of Fiordland are required to be thoroughly cleaned and disinfected before entering the FMA.

**Communication and education activities** – production of informative pamphlets/booklets, signage at ports, direct communication with vessel owners.

Fisheries – all rules for recreational fishing are based on the ‘fish for a feed’ concept

**Commercial fishing outside the internal waters** – As per ‘gifts and gains’ strategy (commercial fishers voluntarily withdrew for overall benefit to FMA) commercial fishing is prohibited in internal waters. Commercial rock lobster fishers can store their catch in areas of the internal waters.

### **Recreational fishing restrictions in the internal waters**

**Finfish limits** – daily catch limits for a number of species; bag limit across all species.

**Shellfish limits** – daily limits as per user guide, size limits for some species.

**Blue cod fishing restrictions** – Milford and Doubtful Sounds have been closed to amateur blue cod fishing since 2005. Outside these two sounds, blue cod can be caught according to regulations which

set: minimum size (33cm); daily limit (3 cod per person per day in internal waters, 20 per person per day in the outer waters); no undersized fish to be used for bait; no accumulation.

**Bulk harvest method restrictions** – limitations on the use of blue cod pots, rock lobster pots, long lines, and nets.

**Line fishing restrictions** – restrictions on the number and use of long-lines, set lines, droplines and dahn lines.

**Gear restrictions** – not allowed to use dive tanks to collect paua; cannot use or possess a dredge in FMA; cannot use spring-loaded loop or lasso to catch rock lobster; cannot use a set net within the FMA.

**Rock lobster restrictions** – size limits, daily catch limit, accumulation limit, lower catch limit for crayfish taken from the internal waters.

**Rock lobster holding pots** – regulation unique to Fiordland allowing the use of holding pots to store live crayfish.

**Compliance activities** – joint agency patrols and inspections of vessels fishing in the FMA.

Southland Regional Coastal Plan changes – as per Schedule 12 of the FMMA 2005

**Discharge restrictions (prohibiting cleaning of vessel hulls)**

**Erection of structures**

**Anchorage and mooring**

**Diving**

**Deed of Agreement between the New Zealand Cruise Ship Industry and Environment Southland** – governs the number and location of visits by cruise ships and the activities cruise ships can undertake in the FMA, with the aim of managing pressures and minimising the environmental harm posed by cruise ships.