

chapter sixteen



Fiordland Marine Guardians

Introduction

The ‘Guardians of Fiordland’ began as a stakeholder-led initiative in 1995. Local citizens and representatives from various sectors of the community became concerned about the impacts of tourism in the region and the sustainability of local fisheries.¹ United by their interest in preserving Fiordland’s exceptional qualities as a unique marine environment and valuable resource, the group developed a collective 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.*”²

This vision guided the drafting of the ‘Fiordland Marine Conservation Strategy’ which, backed by the Ministry for the Environment, gained support not only from the community but from government agencies alike.³ To implement the Strategy, special legislation was drafted in the form of the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005, formalising what some regard as one of New Zealand’s most successful example, of a cooperative and integrated management scheme.⁴

A total of 103 square kilometres of inner fiord marine habitat is currently protected in marine reserves. An independent Ministerial review of the initiative was completed in 2010, lifting a moratorium on the creation of further marine reserves. There is now an opportunity to assess whether the protection measures in place in Fiordland are adequate and appropriate for the high ecological value of the region.

The research for this case study has been conducted using information and documents publically available on the Fiordland Marine Guardians and the Ministry for the Environment websites. Further insights were gained from research conducted by Jason Mize, the results of which were published in a report titled ‘Stakeholder engagement strategies for designating New Zealand marine reserves’.⁵ In addition, material was drawn from an independent review conducted by Allen and Clarke Policy and Regulatory Specialists on the effectiveness of the management of the Fiordland Marine Area,⁶ which was required five years after the commencement of the Act.

Figure 16.1: Fiordland marine reserves

Source: Department of Conservation



Context

Social and economic environment

Māori exploration of Fiordland began around 800 years ago. It is thought that two significant battles were fought between Ngāti Mamoe and Ngāi Tahu around 1780 in Preservation Inlet, which was called Rakituma, or ‘the threatening sky’ by

Māori. Ngāti Mamoe were escaping to the remote south-western corner of Fiordland whilst being pursued by Ngāi Tahu.⁷

The first European interest in Fiordland stemmed from Captain Cook's voyages on the *Endeavour* through Dusky and Doubtful Sounds in 1770 and 1773. Sealers returned in 1791, and began killing with such intensity that fur seals were driven to the brink of extinction by the early 19th Century. In 1829, a whaling station at Preservation Inlet was established, but after exhausting the resource, the station was deserted in 1838.⁸

From 1952, a host of explorers made various expeditions, surveyed, took up settlement, established sheep runs and searched for gold. By the early 1900s, however, activity slowed and the area returned to a more undisturbed state. In 1945, crayfishing began and rapidly grew in the 1950s and 60s, becoming a major export industry which persists today although at much reduced levels.⁹

In addition to fishing, other commercial activities in the region include live deer recovery, commercial deer shooting, farming along the fringes of the National Park and tourism.¹⁰ The most significant of these is tourism, beginning with the opening of the Milford Track in 1890. The urban hub of Fiordland is the town of Te Anau, which most visitors either stay in or pass through on their way to a range of tourist activities including tramping, boat cruises, sea kayaking, diving, fishing, scenic flights or exploring glow worm caves. The permanent population of Fiordland is around 3,000, although this increases to around 10,000 in the summer months.¹¹

Natural environment

Fiordland, nestled in the south-western pocket of New Zealand, is a spectacular terrestrial and marine environment which is recognised as globally unique. Inscribed with the name 'Te Wāhipounamu/South West New Zealand' on the World Heritage List, the area is characterised by its steep mountains, abundant waterfalls and dense forest reflected across the water surface within deep narrow fiords carved by ancient glaciers.¹²

The area experiences exceptionally high levels of rainfall, with up to seven metres received annually, compared to the 0.6 to 1.6 metre average in other areas of New Zealand.¹³ This fresh water runoff from the mountains carries tannins, humic acid and dissolved organic substances which stain the water its characteristic brownish tea colour.¹⁴

Underwater sills formed by glacial terminal moraines shield the inner waters from the open ocean, maintaining the unusual colouring of the surface waters due

to a lack of turbulence and mixing in the fiords.¹⁵ The dark coloured freshwater floats on top of the denser seawater, reduces the light and encourages typically deep water species such as sea pens, black coral and sponges to grow nearer the surface and making them unusually accessible to divers.¹⁶

Coral communities include *brachiopods* (lamp shells), *antipatharians* (black corals) and *gorgonians* (horny corals including sea fans and red coral). Rock lobster, blue cod, paua and Jock Stewarts (sea perch) are also abundant in the area.¹⁷ Kelp generally cannot grow on the inshore rocks within the fiords, due to the poor light conditions and low salinity in surface waters, and are excluded to the more turbulent areas beyond the fiord entrances and outer coast.¹⁸ This interesting dynamic creates distinctly different environments between the inner fiords and the outer coastline, with implications for the marine species occupying these areas.

Fiordland is home to a number of special marine species including bottlenose dolphins, New Zealand fur seals (kekeno), Fiordland crested penguins (tawaki) and blue penguins (korora). Whales also swim close to the edge of the continental shelf here.¹⁹ There are around 200 bottlenose dolphins in the area which frequent the narrow fiords.²⁰

There are a wide range of marine-related interests in the area. Diving is popular both for recreational and research purposes. Tourism plays a major part in the local economy, with charter and tour operators benefiting from the high ecological values of the region.²¹ Both recreational and commercial fishers have a strong interest in the ongoing use of Fiordland's fishing resources. Twenty per cent of New Zealand's commercial rock lobster harvest comes from Fiordland, as does 12 per cent of the paua harvest.²² The sheltered fiords make recreational fishing more accessible for small boat owners.

Māori customary use of Fiordland has traditionally been seasonal. The remote location led to temporary residence for mahinga kai (food gathering) which was typical of South Island Māori. Also of significance is the collection of pounamu, important for cultural practices and trade.²³ Ngāi Tahu represents interests in both the commercial and non-commercial sectors.²⁴

Existing marine protection

The Fiordland National Park was established in 1952, although it encompasses the land area only. Due to its special character, Fiordland was successful in becoming a World Heritage Site in 1990, but again the designation stops at mean high water springs.²⁵

Prior to the establishment of the Fiordland Marine Guardians, two marine reserves were established in 1993 by the Fiordland Fisherman's Association which was part of the New Zealand Federation of Commercial Fishermen. These were the Piopiotahi (Milford Sound) Marine Reserve and the Te Awaatu Channel (The Gut) Marine Reserve. This was the first initiative to prevent further decline in these fiords and throughout the greater region.²⁶

There are mixed perceptions on what the underlying drivers for these applications were. Publically, local fishers say that the application arose solely from the observed decline in fish stocks and genuine concerns about deteriorating conditions. But fishers also admit that the action was in part strategic, designed to pre-empt environmentalists, through fishers retaining control over the placement of protected areas and avoiding areas of fishery significance.²⁷

Southland Regional Coastal Plan

The Southland Regional Coastal Plan became operative on 10 September 2008.²⁸ It describes the values and management issues for Southland's coast, sets out fundamental principles, and then deals with specific matters in its various sections. The Plan contains general rules that permit, limit or prohibit various activities. For example, these may place restrictions on disturbances such as noise levels, protect against threats such as bio-invasion, meet Treaty of Waitangi obligations, or identify areas of outstanding natural character.

There are some rules in the plan that pertain to the Fiordland coastal marine area and which address the specific needs of that special area. These rules include anchoring prohibitions in places containing particularly fragile species, marine farming prohibitions, and rules controlling the conduct of cruise ships and surface water activities.

Stakeholder body

Establishment

The Fiordland Marine Guardians initiative did not begin as a marine reserve designation process, nor was there any original intent to create a network of marine reserves. The increasing visitor interest in Fiordland had led to a corresponding increase in risk to the marine ecosystem due to damage from vessels anchoring, reckless diving practises, over-extraction of fish and bio-invasion of species

brought in on the hulls of visiting boats. A charter boat could deliver 15 divers to an area who could take 600 to 800 crayfish within legal recreational limits. These activities, in combination, were having a major effect on the inner fiord and concerned locals began looking for a solution.²⁹

Resident fishers observed that a 1994 working group approach in Southland, had successfully developed a fisheries plan for the Paterson Inlet (Stewart Island), assisted by the Ministry of Fisheries and the Department of Conservation. This initiative included various voluntary measures but eventually led to the establishment of a marine reserve in 2004.³⁰ Representatives from the fishing community approached the Ministry to assist with a similar initiative in Fiordland.

In 1995, the Guardians of Fiordland's Fisheries was established with representatives from commercial fishing, recreational fishing, charter boat operators and Ngāi Tahu.³¹ The group was able to secure Laurel Tierney as a facilitator. She had also facilitated the Stewart Island initiative in her capacity as Ministry of Fisheries Southern Regional Manager.³²

In 1999, the Guardians of Fiordland Fisheries became an incorporated society. In May 2005, the organisation changed its name to Guardians of Fiordland's Fisheries and Marine Environment Incorporated, reflecting its broader scope.

The group finalised the Fiordland Marine Conservation Strategy in 2003, which was later implemented through special legislation – the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005. This Act not only implemented the Strategy, but it formally established the Fiordland Marine Guardians under section 12.

Purpose

The Guardians adopted a shared vision at their first meeting that provided them with a common purpose. The vision endured and was retained, word for word, in their Conservation Strategy:³³

“That the current quality of Fiordland's marine environment and fishery, including the wider fishery experience, be maintained for future generations to use and enjoy”

Once the Guardians were established as an incorporated society they agreed to the following objectives to be contained in their rules:

- To ensure sustainable utilisation of the finite fisheries resources, having regard to the special nature of the fiord marine environment

- To support the current fisheries management framework
- To ensure the rights of tāngata whenua, recreational, charter operators, commercial and other user groups are identified and recognised and that these groups are involved in fisheries management decisions
- To ensure an equitable allocation of access to the fishery resource for harvesting groups
- To prevent uncontrolled expansion of effort/harvest by any one group
- To identify information requirements/research needs
- To adopt a cautious and responsible approach to developing any new fisheries

On 29 November 2001 the objectives contained in the rules were altered slightly to read as follows (changes shown in italics):

- To ensure sustainable utilisation of the finite fisheries resources, having regard to the special nature of the fiord marine environment
- *Ensure the ongoing integrity of areas, habitats and communities of special significance*
- Support *overarching* fisheries management framework
- Ensure the rights of tāngata whenua, recreational, charter operations, commercial and other user groups identified and recognised are involved in fisheries management decisions *including access to the fisheries resources*
- *Encourage voluntary compliance and reinforce the view that non-compliance is unacceptable behaviour*
- Prevent uncontrolled expansion of effort/harvest by *all* groups
- *Take a proactive role in identifying and advocating research needs to obtain the necessary information for advancing the Guardians' objectives*
- Adopt a cautious and responsible approach to proposals *for new developments* including fisheries

The progression of name changes and rewording of objectives shows how the group matured and gained broader perspectives and a deeper understanding of the issues about which they were concerned.

The above objectives were superseded by the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005. The purpose of the Act, among other matters, was to establish the Fiordland Marine Guardians to provide advice on fisheries management, biosecurity, sustainable management and marine preservation and protection. Section 13 of the Act specifies the Guardians' functions, which include providing advice and recommendations on relevant matters such as the effectiveness of management measures in the Fiordland Marine Area, facilitating and promoting integrated management in the Fiordland Marine Area, assisting management agencies in various roles and performing other functions as assigned.

Membership

Members were originally derived from those groups that were already active in Fiordland's fisheries such as commercial fishing organisations, the Southland Recreational Fisheries Association and charter operators. Selection was based on knowledge and experience of Fiordland's fisheries and the marine environment, a commitment to looking after the resource, a willingness to work with other interests and the time to invest in the group's operations.³⁴

The Guardians developed a draft 'conservation strategy' which they presented to the Minister of Fisheries and the Minister for the Environment in order to gain support and to investigate options for implementation. The strategy was initially rejected and improvements were demanded in two particular areas.³⁵

First, it required greater inclusion of conservation values and recognition of the entire environment. The strategy had not considered putting areas aside for reserves and had completely overlooked marine mammals.³⁶ Secondly, the process had excluded certain representatives, namely science and environmental interests. The Guardians justified this by arguing that inclusion of 'extreme' views, such as the environmentalists, would have prevented the cooperation and cohesion that the Guardians achieved and would have slowed down the whole process.³⁷ They believed it was better to have a good process rather than complete representation.

To resolve this issue, in June 2000 the Department of Conservation selected marine scientist Steve Wing to represent science issues, and then Dr Alan Mark was also invited onto the Guardians in 2002.³⁸ Although he was an alpine botanist, Mark was a member of Forest and Bird, had been involved in the 'Save Manapouri' campaign in the 1970s and was a Southlander. This gave him credentials to be

an environmental representative and acceptable to the Guardians.³⁹ Further representational changes included the appointment of Ian Buick, a helicopter operator, and Irene Barnes who represented community interests.⁴⁰

Unlike the statutory processes for the west coast of the South Island and the Sub-Antarctic Islands, where the community forums were appointed for a fixed term, the commitment by the Guardians is ongoing. Therefore, representatives change in order to share the workload across the community. All representatives live in the Fiordland area, the exception being the science representative. When an appropriately qualified science representative is not available locally, he or she will be selected from somewhere in the wider southern region.

Figure 16.2: Fiordland Marine Guardians members

Name	Role	Resident or Non-resident	Interest
Stewart Bull	Member Guardian (since inception)	Resident	Māori customary uses
Jerry Excell	Member Guardian	Resident	Commercial fishing (CRA8 rock lobster)
Ken Grange	Member Guardian	Non-resident (Nelson)	Marine science (NIWA)
Alan Key	Member Guardian (since inception)	Resident	Recreational fishing
Malcolm Lawson	Chairperson	Resident	Commercial Fishing (CRA8 rock lobster)
Alan Mark	Member Guardian	Non-Resident	Conservation and science (botany)
Anne McDermott	Member Guardian	Resident	Recreational use (diving, boating and fishing)
Mark Pechers	Member Guardian (since inception)	Resident	Commercial fishing and tourism (charter cruises)

Process

Overview

The Fiordland Marine Guardians process was characterised by the ‘ground rules’ adopted at the suggestion of their facilitator. These included a willingness to share information and knowledge, listen to others, discuss issues rather than positions, be committed to sustainability of the resource, cooperate and devote sufficient time to the process.⁴¹ The facilitator required the group to adopt a shared vision that would guide the group and keep members working towards the same goal.

Role of stakeholder body

The Fiordland Marine Guardians meet approximately every two months, usually in the Southland Regional Council offices. Their meetings are open to the public, and representatives from each of the supporting agencies attend, although voting and decision-making rights are vested only in the Guardians themselves.⁴² The meetings provide an opportunity for the key agencies involved in management of the marine space to meet, get updates on progress in other areas, discuss key issues and build relationships.

A significant rule or strategy was the concept of ‘gifts and gains’. This approach required members to offer a concession or offer up something that would benefit the group before they asked for a concession from another member or from the group. This approach helped neutralise potential conflict and maintained better group cohesion through the negotiation process.⁴³

Early concessions led to commercial fishers agreeing to stay out of the inner fiords completely and recreational fishers considerably reducing catch limits. In some ways, the concessions were not great, as there was little commercial fishing conducted in the inner fiords anyway and marine reserves were still not on the agenda.⁴⁴ The process minimised impact on existing users, which was also a key feature of the MPA Policy.

Role of statutory agencies

The Guardians were initially supported by the Ministry of Fisheries, but this support was short-lived as the Ministry focused on the quota-management system to manage fisheries and considered a community-led initiative to be outside of its mandate.

A significant source of funding came from the Ministry for the Environment through the Sustainable Management Fund. The decision to pursue support through the Ministry for the Environment rather than the Department of Conservation was partially because funding was more readily available through the Ministry, but the Guardians also thought that it provided a better organisational fit. The Department of Conservation was already involved in the management of the Fiordland National Park and individuals from that agency had expressed support for either extending the National Park boundaries or including the marine area as part of the World Heritage Site.⁴⁵ The Guardians did not want to be pressured by any party that had a preconceived 'agenda'. Even still, the affiliation with the Ministry for the Environment forced the Guardians to broaden their focus to managing the marine environment rather than just sustaining fisheries.⁴⁶

The administrative costs for the Guardians are borne by the Ministry for the Environment, whilst the other supporting agencies undertake their roles as part of their regional operating budget. The Guardians have an informal protocol to outline the relationship they have with the supporting agencies. Generally, the agencies take the lead in their area of expertise, whilst the Guardians will raise specific concerns about relevant issues, gather community opinion, and make recommendations where appropriate.⁴⁷

Information and science

The Guardians initially gathered their own information to respond to the issues identified, which the members then used to produce a number of community guides and codes of practice. The members published 'Beneath the Reflections: Caring for Fiordland's Fisheries', a code for responsible fishing practice.⁵³ The group later invited a number of scientists to collaborate in order to publish a survey of Fiordland's resources titled 'Beneath the Reflections: A Characterisation of Fiordland's Fisheries' (1999). The Guardians also published a listing of research publications which was called 'Beneath the Reflections: Fiordland's Fisheries and the Marine Environment, a Bibliography' (2001).⁵⁴

Figure 16.3: Summary of agency support

Agency	Involvement
Ministry for the Environment	Provides administrative support to the Guardians and the administering agency under the Fiordland (Te Moana o Atawhenua) Marine Management Act. It also leads the communication plan. ⁴⁸
Ministry for Primary Industries (formerly Ministry of Fisheries)	Leads compliance for fisheries regulations and is responsible for ensuring the sustainable use of fisheries resources. The Ministry also collects some scientific data in the Fiordland Marine Area. ⁴⁹
Biosecurity New Zealand (located within the Ministry for Primary Industries)	Primarily responsible for implementing measures that will reduce the risks of invasive organisms, one of the most serious risks to Fiordland fishing. ⁵⁰ A biosecurity plan co-ordinates measures taken by different agencies and individuals.
Department of Conservation	Responsible for the Fiordland Marine Area monitoring plan which determines methods by which the health of the marine environment can be assessed. It will also indicate how successful the management strategy is. The Department of Conservation is responsible for managing marine reserves under the Marine Reserves Act 1971. ⁵¹
Environment Southland	Responsible under the Resource Management Act for the sustainable management of the Fiordland marine areas' natural and physical resources. Environment Southland also assists the Ministry for the Environment in education and information distribution in accordance with the communication plan. ⁵²

As part of the information gathering process, it was necessary for the fishers in the group to share anecdotal information about their fishing practises. Although there was a considerable amount of information available already, and there was ongoing research being conducted on Fiordland in general, the information was insufficient considering the group's strong focus on fisheries sustainability.⁵⁵ To overcome this information gap, members volunteered details on their own fishing activities, and gathered further anecdotal evidence through their constituents and communities. This kind of knowledge was exceptionally valuable and enabled the Guardians to develop an intimate knowledge of their marine space. Members were able to identify areas of high biodiversity and those with fragile species termed 'china shops'. Proposed protection measures for these areas included anchoring prohibitions and diving regulations.⁵⁶ Some suggested that this local knowledge meant that they were able identify areas that needed protecting better than Wellington-based central government officials.⁵⁷

One of the key tasks to meet the requirements of the strategy was to define the habitat lines. Some boundaries between the inner fiords and the outer habitats were not clear cut so a project was initiated to develop a GIS model to indicate where the habitat lines would be. Five features were used to distinguish between the inner and outer habitat. These were: (1) surface salinity, (2) wave exposure, (3) bathymetry, (4) slope of the rock wall, and (5) aspect. Ground truthing was conducted in 2002 through sampling. The final lines were confirmed through the discussion of further information and management practicalities.⁵⁸

Public consultation

The 'Draft Integrated Management Strategy for Fiordland's Fisheries and Marine Environment' was made available for public comment in September 2002 through a series of public meetings. The final strategy was released in September 2003 as the 'Fiordland Marine Conservation Strategy: Te Kaupapa Atawhai o Te Moana Atawhenua'.⁵⁹

Outcomes

Stakeholder recommendations

In the strategy the Guardians identified around 45 issues that affected fisheries and the marine environment. These issues were grouped into four general components that were: (1) provisions to address fisheries management, (2) commitments to protect values of special significance, (3) identification of potential risks and measures to respond to them, and (4) expression of kaitiakitanga, recognising Māori ties to the area.⁶⁰

The strategy saw commercial fishers withdraw completely from habitat lines in the inner fiords, recreational fishers reduce bag limits, and a two-year closure of the blue cod fishery in Doubtful and Milford Sounds. Areas of special significance were protected with a range of restrictions including anchoring prohibitions, fishing closures and a code of practice for divers. There were also areas designated as no-take, although marine reserves were still not identified as the appropriate tool to achieve this.⁶¹

Fishing restrictions

The strategy includes a number of fishing restrictions. In Milford and Doubtful Sounds there is no commercial fishing inside the habitat lines. There is also a Fisheries Act section 186B temporary closure of the blue cod fishery for a two-year period that has been rolled over for another two years. This closure continues to be monitored and will be maintained if required. The groper daily recreational take is limited to two, with no accumulation, as is the rock lobster recreational take. In the remaining inner fiords, there is no commercial fishing inside habitat lines, and the daily recreational limit for blue cod, groper and rock lobster is three.

In the fiord entrances and outer coast, commercial fishing is controlled by the quota management system. The recreational limit for blue cod is set at 20 with no accumulation, groper is set to five with no accumulation and rock lobster is limited to six with an accumulation limit of 15 for three days. There are bag limits for scallop, paua, groper and sea perch for the fiords and outer coast. The total finfish take cannot exceed 30 and there are restrictions on various fishing methods including no scallop dredges, no set nets, no cod and rock lobster pots and limits on Dahn lines. Cod pots cannot be stored in china shops, but they can be stored in marine reserves outside of the season.

Government response

The Guardians initially looked to provisions in the Fisheries Act to implement the strategy, although the range of measures available were not well integrated to control impacts beyond those of fishing. Traditional customary fishery management measures were initially seen as having potential, but were later deemed inadequate for long-term protection. Eventually the Guardians met with the Minister for the Environment and the Minister of Fisheries to seek support.

The strategy was launched at a formal ceremony in Te Anau on the 6th of September 2003. In this public forum the Ministers committed to implement the strategy by September 2005 through special legislation.⁶² The Ministers delivered on this commitment which saw the creation of the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005.

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

The Act, containing three parts, establishes the Fiordland Marine Area with a unique management framework. This had the effect of formalising the Guardian's

strategy into law. The legislation included the creation of eight new marine reserves to protect the representative areas identified in the strategy. Through this Act, the Fiordland Marine Guardians are assigned an enduring role as government-appointed advisors.

Functions of the Guardians

Section 13 of the Act details the functions of the Guardians. These statutory obligations include providing advice and making recommendations to central and local government management agencies⁶³ and respective Ministers on: (1) management procedures in the marine area; (2) activities having an effect on the marine area; and (3) threats to the marine area. The Guardians are also tasked with facilitating and promoting integrated management, obtaining, sharing and monitoring information, assisting management agencies, conducting reviews when invited and performing other functions when requested. Any recommendations or advice must be ‘taken into account’ when exercising powers under the Act. Section 27 also requires an agreement or protocol to be entered into between the Guardians and the management agencies. This provides a basis for the Guardians to raise any procedural concerns with the Minister for the Environment.

Relationship to other legislation

The marine reserves within the Fiordland Marine Area are established in accordance with section 4(1) of the Marine Reserves Act 1971 and are therefore subject to the same high level of protection and preservation as any other marine reserve established under that Act.

The Guardians are to be appointed in the same way as any committee established under section 56 or section 6N(2)(b) of the Conservation Act 1987. Commercial fishing in the Fiordland marine area is governed by the Fisheries (Southland and Sub-Antarctic Areas Commercial Fishing) Regulations 1986.

Moratorium on further protection

The Fiordland (Te Moana o Atawhenua) Marine Management Act 2005 imposed a moratorium on creating any further marine reserves under the Marine Reserves Act 1971, until such time as seven years had passed since the commencement of the Act or a Ministerial review was conducted (scheduled to occur five years after

the commencement of the Act). The Ministerial review was conducted in the latter half of 2010. With the review complete, the moratorium is deemed to be expired.

Marine reserves

The eight marine reserves established by the Act are:

- Te Hapua (Sutherland Sound) – 4.49 square kilometres
- Hawea (Clio Rocks) – 4.11 square kilometres
- Kahukura (Gold Arm) – 4.64 square kilometres
- Kutu Parera (Gaer Arm) – 4.33 square kilometres
- Taipari Roa (Elizabeth Island) – 6.13 square kilometres
- Moana Uta (Wet Jacket Arm) – 20.07 square kilometres
- Taumoana (Five Fingers Peninsula) – 14.66 square kilometres
- Te Tapuwae o Hua (Long Sound) – 37.62 square kilometres

The two previously existing marine reserves are:

- Piopiotahi (Milford Sound) – 6.90 square kilometres
- Te Awaatu Channel (The Gut) – 0.93 square kilometres

The total marine area within Fiordland protected as marine reserves therefore totals 103 square kilometres, which is 1.01 per cent of the total area of the Fiordland bioregion. All the marine reserves are within the fiords. In comparison 12,000 square kilometres is protected in the National Park area.⁶⁴

Future

The Guardians continue to contribute to the management of the Fiordland marine area in various ways. An array of guides and publications such as user guides, annual reports, newsletters and media releases are available on their website as well as on the Ministry for the Environment's website.

In 2007, and then again in 2010, the Guardians conducted a user survey to investigate what activities people are conducting in Fiordland and to understand their perceptions and values associated with the area. The Guardians, in conjunction with support agencies, have a number of monitoring projects underway. The Fiordland Marine Area monitoring programme involves research commissioned in several areas over both biological and social issues, as shown in Figure 16.4.

Figure 16.4: Fiordland Marine Area monitoring programmes

Research	Lead Agency	Issue
Blue Cod closure	Ministry of Fisheries	Biological
Baseline biodiversity survey and biosecurity checks	Department of Conservation	Biological
Milford port survey	Biodiversity New Zealand	Biological
Biosecurity risk assessment	Biodiversity New Zealand	Social and biological
Catch/diary survey	Ministry of Fisheries	Social and biological
Fisheries management area user survey	All Agencies	Social

In 2008 the Guardians published 'Beneath the Reflections: A User's Guide to the Fiordland (Te Moana o Atawhenua) Marine Area'. This is a practical user guide for visitors to Fiordland containing information about the area's history, the environment, the establishment of the Fiordland Marine Area and all the marine regulations, including a fiord-by-fiord guide complete with maps and descriptions.

In response to the lifting of the moratorium, in 2011 the Guardians conducted a review of the rules governing the Fiordland marine area. The review considered the eight objectives of the strategy,⁶⁵ what was originally intended and what had happened since. The Guardians then sought public feedback and formal submissions to gain community views on what needs to be done. Submissions closed on 29 April 2011. The Guardians received no strong indications that change was required, and have not indicated an intention to make any radical changes to the measures they already have in place.⁶⁶ Therefore no applications for further marine reserves are anticipated in the near future.

The ongoing role of the Guardians in managing the Fiordland marine area is seen as important. As set out above, the Guardians provide a mechanism through which to integrate the management agencies and act as an intermediary with the community and general public. Their community involvement has a positive effect on compliance, reducing the enforcement burden, which can be a logistical challenge for agencies due to the remote nature of the region.⁶⁷ This increases the efficiency and effectiveness of the supporting agencies and enhances the cohesion of the central and local government agencies.

The Guardians are likely to continue to be supported as long as there are clear benefits being observed. The indication from agency officials is that they are

still seen to be contributing to the overall effectiveness of marine management in Fiordland and will continue to serve a purpose.⁶⁸ One of the key issues they face, however, is continual representation. There is pressure to keep rotating membership and to have new people appointed, but the number of people with appropriate skills, knowledge, experience, long-standing in the community and the time to contribute is limited. It is therefore difficult to keep bringing in new people.⁶⁹ There is also a risk that members will become ‘burnt out’ if they are required to remain on the Guardians for an extended period of time, for lack of an appropriate replacement.

Strengths of the approach

Process and consensus-building approach

There is potential for conflict wherever competing or overlapping interests exist. Within the Guardians, some of the strongest contention arose between the commercial and recreational fishers. They each placed a high value on continued use of the resource, but realised that the only way forward was to concede some of their usage. One of the notable approaches to consensus-building adopted by the group was the process by which stakeholders were prepared to relinquish benefits in the interests of ensuring the quality and sustainable management of the Fiordland marine environment and its fisheries. This strategy is referred to as ‘gifts and gains’ and enabled agreement to be reached on proposals and conservation strategies to progress.

The gifts and gains approach was only applied because Laurel Tierney, the Guardians’ independent facilitator, convinced the Guardians to adopt this technique. Her role was pivotal to the group achieving consensus. Using this approach, the commercial fishers withdrew beyond the habitat lines to the open coast and recreational fishers reduced their bag limits and abolished accumulated catch. The Guardian representatives then worked exceptionally hard to sell their strategy to the community.⁷⁰

Broad focus

The Fiordland Marine Guardians are different from the other marine protection initiatives canvassed, in that the creation of marine protected areas is not their primary focus. Their role is broader and ongoing, with continuous involvement

in implementation of the strategy and management of the Fiordland marine area. The Guardians approach keeps the community involvement strong and stimulates a sense of stewardship.

Broad stakeholder involvement during the early stages has been important to the ongoing success of this model. If not from the beginning, the Guardians model now involves wide representation from across the district including commercial and recreational fishers, divers, charter boat and tourism operators, environmentalists, scientists, community representatives and tangata whenua (Ngāi Tahu). This community-led approach, with strong local involvement, ensures stakeholder 'buy in' and agreement on major issues. Enforcement requires resources and the more 'self-enforcement' that occurs the more efficient the system will be.

The management approach considered a variety of conservation tools, including a large number of non-statutory measures to achieve the vision. Initiatives included voluntary measures that in combination contribute to the overall effectiveness of the scheme. These include the establishment of 'china shops' to protect small, discrete areas with species of special significance; habitat lines that distinguish between inner and outer fiords to prevent commercial fishers from fishing inner fiords; no-anchoring areas to protect particularly fragile communities and habitats which could be damaged by anchors, chains or ropes; and the 'Doubtful Sound dolphin protection zones' which offer non-statutory protection for bottlenose dolphins that reside in Doubtful Sound. Their insistence on developing new approaches overcomes the lack of statutory tools considered suitable for marine protection.

Weaknesses of the approach

Lack of conservation values

The process was principally led by commercial fishers, who may have had a number of motivations to initiate marine protection in their region. Firstly, recreational fishing and charter boats were not governed by the quota management system. Significant increases in boat numbers and people visiting the area, meant that overall numbers of fish being taken was increasing, whilst remaining within legal bag limits.⁷¹ This rise in activity was putting pressure on the fishery and highlighted tension between competing interests.

John Steffens, previous Chairperson of the Guardians, acknowledges that the ultimate motivation for forming the Guardians was to do something before more restrictive conservation measures were imposed on them.⁷² After the IUCN awarded Fiordland National Park world heritage status, there were suggestions that a marine park should be created that encompassed the coastal environment out to 200 nautical miles.⁷³ The implications for commercial fishers were immense. Royal Forest and Bird Protection Society was one of the environmental organisations which strongly advocated for total protection and hence from the outset was regarded by commercial fishers as radical. It was thought that ‘positional’ stances would compromise the consensus and halt the entire process.⁷⁴ Forest and Bird were initially excluded from the Guardians and from community dialogue about marine protection.

The perception that an environmental interest was too extreme to be accommodated within the Guardians had a direct effect on representation. The Guardians portrayed themselves to be an inclusive stakeholder-led initiative that represented all interests, but they were reluctant to include anyone with marine science or environmental interests until they were eventually directed to do so by the government.⁷⁵

It was also clear that even when Dr Alan Mark was added to the Guardians, as a newcomer and only one voice, little would change in the conservation strategy and any ideas of extending the national park status of Fiordland beyond mean high water springs were out of the question.⁷⁶ Of concern was the attitude taken towards submissions that mentioned either Forest and Bird or marine reserves. These were all side-lined as ‘extreme’ viewpoints and largely dismissed, despite often being based on extensive scientific research.⁷⁷

Dominance of use rights

There were concerns raised by the commercial fishers that people were ‘forced out’ of the industry. The rock lobster fishery has suffered severe decline in the past 15 years forcing the quota to be cut by 65 per cent and reducing the commercial fleet from 240 boats to 60.⁷⁸ Anecdotal evidence from older fishers indicates that the cray fishery in the 1950s was vastly different to what it is now. Fishing in an unregulated virgin fishery, boats would fill to capacity. However, within three years they estimate the fishery was reduced by half and within ten years fishers were recovering 70 per cent less than their original 1950s catch.⁷⁹ The announcement of the quota management scheme in the 1980s sent fishers into a harvest frenzy,

so that by the time quota management was introduced, stocks were so low fishers could not even catch their quota. Commercial fishers acknowledge the degradation that has occurred, and aim to reverse it, although regard trying to return the fishery to its original biomass as unrealistic.⁸⁰

Fishers go so far as to argue that taking the productive areas of the outer coast from them would be like taking land away from farmers.⁸¹ There is a failure to recognise that marine protection measures are also required for regeneration and have positive effects that may be beneficial to fishers and other users.

Effectiveness of tools

The effectiveness of the protection measures described in the strategy deserves closer scrutiny. Despite the establishment of ten marine reserves, there are none positioned in any of the fiord entrances or on the outer coast. The areas are also small. Therefore, protection of the full range of habitats and scientific baseline information has not been achieved.⁸² The commercial fishers argue that the quota management system sufficiently protects the fishery in these unprotected areas and nothing more is required.

Conclusions of the independent evaluation

A Ministerial review on the effectiveness of the management of the Fiordland marine area was completed in September 2010, as required in section 25(1) of the Act. The review evaluated how effective the advisory body (the Guardians), marine management measures and the protocol between the Guardians and management agencies have been in: (1) contributing to integrated management, and (2) in achieving the intent of the Act. Overall the review found very few shortcomings and many successes to report.

To improve, the reviewers suggested a more strategic approach was required to set priorities and make the Guardians less reactive. They also suggested further attention to succession planning for Guardians membership, in particular, considering scientific input.

The review found local awareness, understanding and support for the Guardians to be strong. They are highly regarded by the community and have a positive relationship with the management agencies and their respective Ministers. Subsequently, a high level of compliance from users and co-operation

with management regulations is experienced in the Fiordland marine area. The review also found that the high level of collaboration and cooperation between management agencies was essential to the successful operation of the Guardians. The usual ‘turf battles’ between agencies concerned about losing control or influence did not exist in this situation.

Two factors were identified by the review as being critical to the Guardians’ success. The first was the ‘gifts and gains’ approach set out above which allowed for balance and negotiation. The second was a concept referred to as ‘fish for a feed’, which represents a shift in approach to recreational fishing. Instead of taking as much as possible on any occasion, fishers only take what they and their family require for a meal.

The review concluded that to really determine how successful the Fiordland Marine Guardians have been in the preservation, protection, and sustainable management of the marine environment and biological diversity of the marine area, monitoring results would need to be evaluated to determine if there had been improvement. A monitoring plan is in place, although the review found that insufficient research and monitoring information is available to draw any conclusions. More time and research is required to fully determine the effectiveness of the marine management measures.

Conclusion

Fiordland’s Marine Guardians are the product of a local community’s desire to better manage their marine resource. Although its focus was initially upon fisheries management measures, this expanded to include marine protection when the group received statutory recognition. The Guardians’ work resulted in the development of a number of marine reserves and an ongoing management strategy for the Fiordland marine area. The ongoing commitment to long-term management helps to ensure that rules are enforced and management measures are responsive to changes in the marine environment.

Figure 16.5: Chronology of key events for marine protection in Fiordland

Date	Event
1993	Te Awaatu Channel (The Gut, Doubtful Sound) and Piopiotahi (Milford Sound) marine reserves formally established. Initially proposed by the New Zealand Federation of Commercial Fishermen.
1995	Guardians of Fiordland's Fisheries and Marine Environment (the Guardians of Fiordland) established.
2002	Draft Fiordland Marine Conservation Strategy published in October.
2003	Guardians of Fiordland present finalised strategy to the Minister of Fisheries and the Minister for the Environment who make a commitment to implement the strategy within in two years (by September 2005). The Ministers appoint an 'investigative group' (comprising representatives of central and regional government and the Guardians of Fiordland) to report on how best to implement the strategy.
2004	Government agrees to develop special legislation to give effect to recommendations of the investigative group's report.
2005	Commencement of Fiordland (Te Moana o Atawhenua) Marine Management Act 2005 (date of assent 20 April)
2010	A Ministerial review on the effectiveness of the management of the Fiordland marine area completed in September 2010

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