

Annual Report **2015/16**



Vision and Purpose

The Fiordland Marine Guardians (the Guardians) were formally recognised in The Fiordland (Te Moana o Atawhenua) Marine Management Act 2005.

Our vision is 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.

Our focus is the Fiordland Marine Area, which extends from Awarua Point on the West Coast to Sandhill Point, Te Waewae Bay and to 12 nautical miles offshore. We frequently address issues at a regional and national level, however, if we believe they are of consequence to the Fiordland Marine Area.

The Guardians work closely with the agencies that have an interest in the Fiordland Marine Area, to align focus and strategy and enhance collaboration in the region. We also engage with the wider community to ensure our focus remains relevant and directed towards the future.

Our challenge is ensuring the values of Fiordland are protected as the area faces increasing pressure from competing interests.

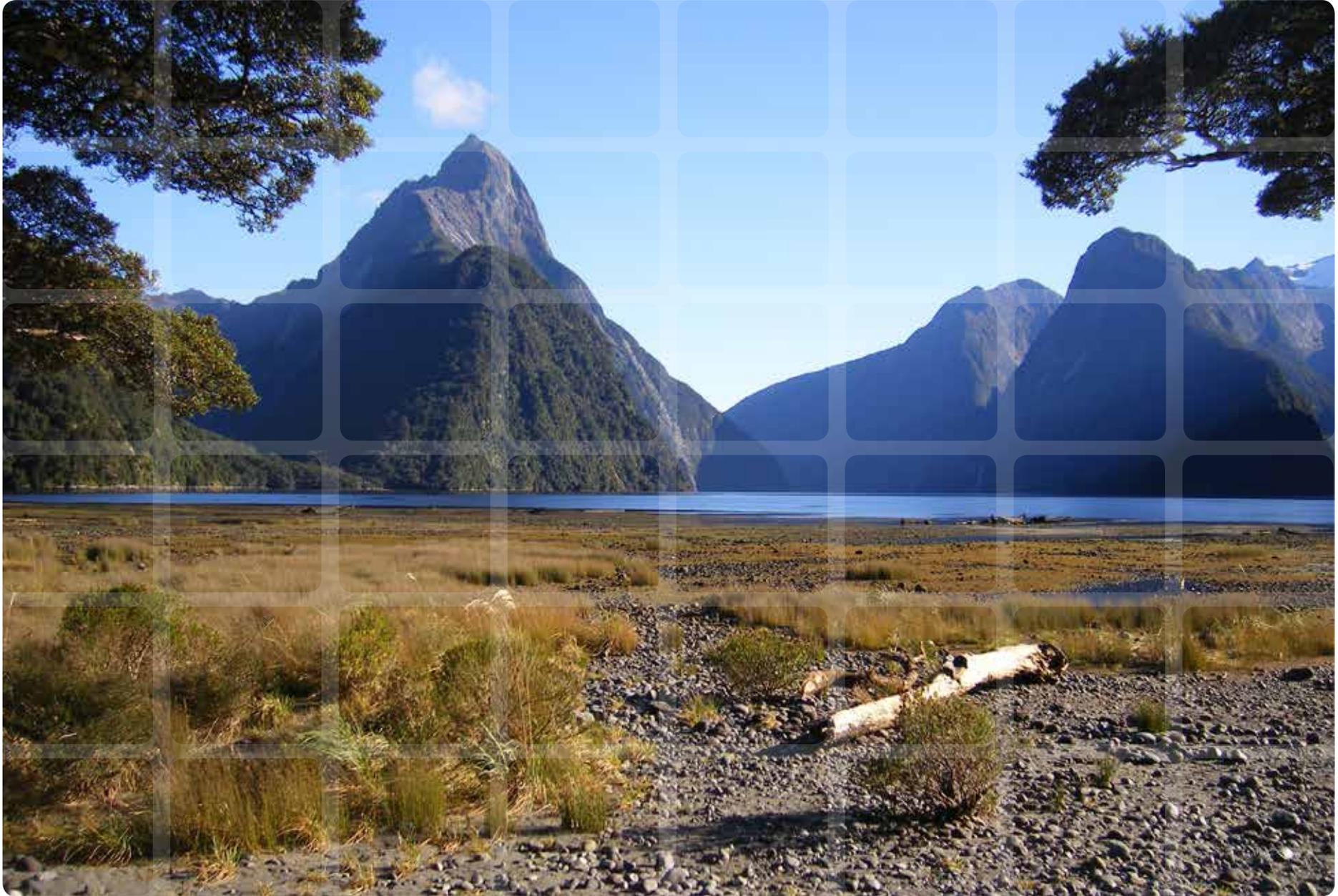
Guardians' statement of responsibility

The Fiordland Marine Guardians are proud to present, in compliance with section 20(1) of The Fiordland (Te Moana o Atawhenua) Marine Management Act 2005, the annual report for the Fiordland Marine Guardians for the year ended 30 June 2016.

Rebecca McLeod, PhD

Chairman

Fiordland Marine Guardians





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Chairperson's Report



In February the Government consulted on the new Marine Protected Areas Act, of which a central pillar is a collaborative framework for marine management at the regional level.

As one of the first examples of community-led collaborative marine management, the Guardians felt strongly that we should make a submission. It gave us an excellent opportunity to pause and consider the ingredients of success in the Fiordland model. In our submission we explained the continuing importance of our role now that the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005 is well and truly established.

The establishment of the Act was the culmination of many years' work, and signalled the beginning of a new chapter. Once the Act was in place there were marine reserves to establish, compliance and monitoring programmes to set up, biosecurity to consider, sensitive areas to protect and growing tourism and visitor pressure to manage. The Guardians focused largely on improving communications both among the agencies and with the community. It was an extremely busy time.

Over the last few years the Guardians have been transitioning in to the next chapter – a clear focus on identifying and responding to risks that threaten what we value about Fiordland. Although we can never predict exactly what challenges Fiordland will face in the future, we are confident that we are in a very strong position to

tackle issues head on in order to ensure that Fiordland remains pristine, productive and spectacular.

We need to continue to share thoughts and ideas with the community that visit, work, and play in Fiordland. A number of initiatives are planned for the next year to strengthen our engagement with the community, and we are pleased to have the energy and expertise of Kerri-Anne Edge Hill to lead these initiatives for the Guardians.

Over many years, the Guardians have brought together the local and national government agencies that have an interest in the fiords. We work hard to ensure that everyone is focused on what is best for Fiordland. The agencies know us well and hold our vision for the area central in their decision-making and operations. Our priorities drive their day-to-day work in the fiords: they come to us for advice and direction, and in return we gain knowledge and experience.

We believe that the Fiordland model remains one of the few examples in the country where these agencies are working so effectively together towards a common goal. The strong trust that has been built results in sharing of information, and we act in a truly collaborative manner to tackle problems that would otherwise seem insurmountable. This is shown in the joint-agency response to the detection of *Undaria* in 2010, and in Fiordland being the first region in New Zealand to progress a Pest Pathways Plan that will prevent pests reaching the area in the future. We are stronger together, and this is key to our continuing success.

During the year Malcolm Lawson stepped down as Guardian and Chairperson, having held this position for almost ten years. Malcolm ably led the Guardians through the challenges of implementing the many aspects of the Act, and ran a very smooth ship. We thank Malcolm for his many years of service and wish him well for his next challenge. We would also like to acknowledge Alison O'Sullivan, who stepped down from her role as Fiordland Marine Guardians Secretariat (Ministry for the Environment) in early 2016. Alison's endless energy and passion for the Guardians' cause will be sorely missed. We wish Alison all the best for her retirement.

If we can be sure of one thing, it is that Fiordland is going to face some challenges over the coming years as the world's population grows. There will be more pressure on our marine areas to deliver wilderness experiences and resources. More than ever, we are going to need guidance from the community as to what the future of Fiordland should hold. We invite you to get involved in looking after this incredibly precious part of the world.

Rebecca McLeod
Chairperson



The collaborative approach

The Guardians work closely with agencies with an interest in the Fiordland Marine Area, to align focus and strategy and enhance collaboration in the region. Representatives from each agency attend the Guardians' meetings, to report on progress and engage on matters of concern.

Sub-committees focus specifically on compliance, biosecurity, monitoring, and communication, and progress matters outside of the main meeting. Representatives from the Guardians and each agency sit on these sub-committees.

The working relationship between the Guardians, the Ministry for the Environment, Environment Southland, the Department of Conservation and the Ministry for Primary Industries is outlined in a protocol. The purpose of the protocol is to facilitate and promote cooperation between the Guardians and management agencies to integrate management of the Fiordland (Te Moana o Atawhenua) Marine Area.

The Ministry for the Environment administers the Guardians, and provides a budget to support the functions of the Guardians. Each of the other agencies contribute funding and resources to enable the Guardians' vision to be realised.

The Fiordland Marine Guardians



Dr Rebecca McLeod *(Chair)*

Rebecca has extensive knowledge of Fiordland, from the rainforests to its unique marine environment, having conducted ecological research in the area for many years. Rebecca began her career in academia then moved into the commercial sector, developing the skills required to translate technical information into a useful form for managers, and vice versa. Rebecca was awarded a PhD from the University of Otago and has received high profile honors and awards that recognise her scientific accomplishments and strengths in communication. Rebecca has experience with public, government and commercial sectors, and is a member of the New Zealand Marine Sciences Society and the Institute of Directors.



Jerry Excell

Jerry is a commercial rock lobster fisherman operating out of Deep Cove. He is the director of a family fishing and quota-owning company. Jerry has fished for more than 23 years in Fiordland and is heavily involved in the CRA8 rock lobster fishery as a member of the CRA8 Management Committee Inc board (the southern commercial rock lobster industry organisation). He has dived throughout the fiords as recreation since childhood, and uses his experience to assist in research projects, collecting and providing data about the rock lobster fishery.



Stewart Bull

Stewart has extensive knowledge of the customary uses of Fiordland, particularly customary fishing. He is the chair of the Oraka-Aparima Rūnanga and is the Oraka-Aparima Rūnanga representative on the Board of Te Rūnanga o Ngāi Tahu. Stewart is a Tāngata Tiaki, appointed by the Minister of Fisheries, in recognition of his particular expertise in local customary fishing management and resource issues. He is the Oraka-Aparima Rūnanga representative on the Customary Fisheries Advisory Group. Stewart has been a member of the Guardians of Fiordland since its inception.



Dr Ken Grange

Ken is a marine ecologist, and the Regional Manager of NIWA Nelson. He has a broad understanding of general marine science and, in particular, the Fiordland marine environment. Ken was the first to describe scientifically the unique marine environment of Fiordland, and is an internationally recognised expert on black coral. He is a member of a number of societies, institutions and committees, including the New Zealand Marine Sciences Society and the Royal Society of New Zealand.



Anne McDermott

Anne has significant experience of the area, having dived, fished and tramped in Fiordland for 30 years. She has dived in the fiords more than 400 times (in Preservation, Chalky, Dusky, Breaksea, Doubtful, Nancy, Charles and Caswell Sounds), giving her first-hand experience of the Fiordland marine environment. Anne and her husband own a boat and she has many contacts among the Southland recreational fishing, boating and diving sectors.



Dr Kerri-Anne Edge Hill (*newly appointed*)

Kerri-Anne's career in applied conservation ecology spans over 20 years, with 12 years working in Fiordland and living in Te Anau. Kerri-Anne holds a PhD in Zoology (in seabird ecology), and has worked on a diverse range of threatened species and island eradication/restoration programmes from the Kermadec Islands north of New Zealand to the sub-Antarctic Islands of New Zealand and Australia, and mainland Australia. Her work with the New Zealand Department of Conservation from 2003–13 required her to identify and develop opportunities where science would deliver greater confidence and credibility in frontline decision-making for conservation managers. In 2013 she established her own consultancy business, in partnership with her husband, where she focuses on strategic planning, and science communication and brokerage.



Jonathan Clow

Jonathan brings a wealth of maritime and management experience to the Guardians, having started out as a professional seafarer in the fishing industry followed by 15 years with the Royal New Zealand Navy. His military career was that of a Seaman Officer navigating ships worldwide, progressing to a career qualification of PWO(N+); Principal Warfare Officer, sub-specialisation as Advanced Navigator, more commonly called Naval Pilot. Jonathan is now the Marine Manager and Safe Ship Manager for Real Journeys Ltd, and is based in Te Anau. His responsibilities are centred on vessels, people and compliance across the business. This means that he has a vested interest and day-to-day involvement with the Fiordland Marine Area.



Mark Peychers

Mark has three decades of first-hand experience of the Fiordland marine environment, including 28 years as a commercial fisher. He was an original member of the Guardians of Fiordland's Fisheries. Through his work in Fiordland, Mark has built up positive relationships with the Department of Conservation, Ministry for Primary Industries and Environment Southland. He is a shareholding director of Fiordland Lobster Company Limited, and is actively involved with fisheries management in Fiordland, as well as other areas of New Zealand. Mark was involved in the implementation of the first two marine reserves in Fiordland.



Malcolm Lawson (*concluded 31 October 2015*)

Malcolm Lawson is the Chief Executive of the CRA8 Management Committee Inc. He is heavily involved in commercial fisheries management in Fiordland. He is a member of the New Zealand Rock Lobster Industry Council, and also sits on the ministerial advisory group for rock lobster. Malcolm has previously worked for the Ministry of Fisheries. He holds a B App Mgt (Strategic Mgt). He is also a company director and chaired the Guardians from 2006–15.

Key agency representatives

The Guardians acknowledge the dedication of the agencies to achieving the Guardians' vision for the Fiordland Marine Area, specifically the efforts contributed by these representatives, who regularly attend Guardians' meetings:

Rosalynn Anderson Lederer

Analyst – Remediation Projects
Ministry for the Environment

Allison Bockstruck

Fiordland Marine Guardians Secretariat
Ministry for the Environment (commenced February 2016)

Richard Bowman

Biosecurity Manager
Environment Southland

Jen Brunton

Senior Adviser
*Animal and Marine Biosecurity Response,
Ministry for Primary Industries*

Lyndon Cleaver

Deputy Regional Harbourmaster/Maritime Officer
Environment Southland

Chloe Corne

Ranger Operations
Department of Conservation

Shaun Cunningham

Biosecurity Officer
Environment Southland

Annabelle Ellis

Manager – Remediation Projects
Ministry for the Environment

Mark Geytenbeek

Senior Fisheries Analyst – Inshore Fisheries Management
Ministry for Primary Industries

Courtney Guise

Consents Officer
Environment Southland

Matt Hoffman

Consents Officer
Environment Southland

Richard Kinsey

Senior Ranger Operations
Department of Conservation

Stephen Logie

Chief Compliance Officer – MPI Compliance Directorate:
Southland
Ministry for Primary Industries

Jenny Oliver

Fisheries Analyst – Inshore Fisheries Management
Ministry for Primary Industries

Alison O'Sullivan

Fiordland Marine Guardians Secretariat
Ministry for the Environment (concluded February 2016)

Kevin O'Sullivan

Regional Harbourmaster
Environment Southland

Our year in review



August 2015 – The Guardians farewell long-standing Guardian and Chair, Malcolm Lawson.

November 2015 – Dr Kerri-Anne Edge Hill joins the Guardians. Anne McDermott and Dr Ken Grange appointed for a further term.

November 2015 – Dr Rebecca McLeod elected by the Guardians as Chairperson.

December 2015 – Doubtful Sound recreational blue cod fishery reopens after 10 years of closure. The Guardians promote conservative bag limits to support a sustainable fishery. Bag limits in Thompson and Bradshaw Sounds are reduced due to concerns of increased pressure in these areas.

December 2015 – The Guardians join agency representatives to present the Fiordland Marine Pathways Plan to Environment Southland councillors. This is the culmination of almost three years of development, and provides the most effective means to keep marine pests out of Fiordland.

February 2016 – The Guardians farewell long-standing Secretary, Alison O'Sullivan, and welcome new appointee Allison Bockstruck.



February 2016 – The Department of Conservation and NIWA conduct a Fiordland-wide ecological monitoring trip focused on marine reserves. Using a remote-operated camera, new deep habitats are explored and amazing communities discovered.

March 2016 – Representatives from Environment Southland travel to Fiordland with the New Zealand Navy, on board HMNZS Otago, and check compliance of moorings, structures and activities.

April 2016 – The Guardians travel to Wellington to meet with Minister for the Environment, Dr Nick Smith.

April 2016 – 10 personnel from the Ministry for Primary Industries, Department of Conservation and Environment Southland conduct a Fiordland patrol on board GV *Southern Winds*, focusing on compliance and biosecurity.

May 2016 – The Guardians meet with locals in Te Anau who are passionate about Fiordland. This is a great chance for the Guardians to hear about issues or concerns for the region, and for locals to find out more about what the Guardians do.

2015/16 Achievements

Submission on the new Marine Protected Areas Act

A central element of the new Marine Protected Areas Act is a collaborative model for regional marine management. The predecessors to the Fiordland Marine Guardians, the Guardians of Fiordland's Fisheries, were one of the first examples of this type of approach. The Guardians submitted on the new Act in order to share experiences and lessons learned over the years.

Response to eradicate *Undaria* from Sunday Cove

2015/16 marked the sixth year of the response, which was triggered by the discovery of the invasive seaweed *Undaria pinnatifida* in Sunday Cove, in Breaksea Sound. The Ministry for Primary Industries, Environment Southland and the Department of Conservation contribute funds and resources to support the eradication programme, which includes monthly dive efforts to the site and relocation of thousands of kina to clear seaweed. The response will continue for three years following the first full year of *Undaria*-free surveys.

The last *Undaria* plant was found in December 2015, bringing the total to just six plants found in the 2015/16 period. The Guardian's commend these agencies and the divers for their commitment to return Fiordland to its previous marine pest-free status. This very expensive and challenging exercise has reiterated the importance

of preventing marine pests from reaching Fiordland in the first place.

The Guardians firmly believe that without the strong working relationships and high level of trust that existed among agencies focused on Fiordland when *Undaria* was discovered in Sunday Cove in 2010, this eradication programme wouldn't have eventuated. This example demonstrates how valuable and effective collaborative management approaches can be for the coastal marine environment.

Improvements made to very high frequency (VHF) network

Environment Southland continues to work towards strengthening the VHF marine radio network throughout Fiordland, after the Guardians raised concerns about the large areas with no signal. The last year has seen a base established at Mount Clerke. Progress is slower than desired, due to funding constraints. The Guardians continue to raise the issue with Maritime New Zealand in the hope that they will recognise the necessity of improving the network from a maritime safety perspective and contribute funds and support appropriately.

Heritage New Zealand listings in Fiordland

Tamatea/Dusky Sound and Rakituma/Preservation Inlet have been added to the New Zealand Heritage List to ensure the continued kaitiakitanga and protection of these places. These places are important for both Māori and European history and include early Māori settlement sites,

places named by Captain Cook and one of New Zealand's first whaling sites, and tell stories that are of outstanding significance in New Zealand's history. Both areas were previously registered as Historic Places, and attract a significant number of visitors. The Guardians were supportive of these listings as they believe they are likely to enhance the protection of historic structures in the marine environment.

Doubtful Sound recreational blue cod fishery reopening

In December the internal waters of Doubtful Sound were reopened to recreational blue cod fishers, with a bag limit of one blue cod per person extending for the internal waters of the entire Doubtful/Bradshaw/Thompson complex. The fishery had been closed since 2005.

The Guardians' recommendation to the Minister for Primary Industries to review the fishery in this way was made following careful consideration of monitoring data, and anecdotal information that the closure was causing increased pressure on stocks in Thompson and Bradshaw Sounds. Central to the Guardians' philosophy is that people should be able to fish for a feed, not to fill the freezer.

The Guardians recommended that the temporary closure of the blue cod fishery in Piopiotahi/Milford Sound remain, as they believe this fiord is unable to support even the smallest of bag limits.

Connecting with the community

The Southland Boat Show was held in August, with approximately 5,000 people attending over two days. Anne McDermott represented the Fiordland Marine Guardians, sharing the Environment Southland stand. Brochure packs, including the Users' Guide, were handed out to interested parties and new contacts were added to the Guardians' database.

An opportunity was made for locals to meet the Guardians in Te Anau in May. Boaties, operators and anyone with a passion for the Fiordland Marine Environment were invited to meet at The Black Dog Bar. There was a great turnout and much discussion about issues facing the region now and in the future. The Guardians regarded the meeting as very successful and will consider holding such events on a regular basis.

The Guardians produced two newsletters, one of which focused specifically on important changes to blue cod fishing regulations, coinciding with the changes made in November. The newsletters were distributed to more than 500 people.

The final update (Update #6) on the development of the Fiordland Marine Pathway Plan was distributed to the Guardians' contact database and also posted on the Guardians' website. The series of updates, which began in 2014, was intended to keep the community informed on developments and encourage feedback.

Environment Southland and the Ministry for Primary Industries invest in Fabdock (Vessel Quarantine Facility)

The Guardians were pleased that Environment Southland and the Ministry for Primary Industries purchased a Fabdock in 2015. The Fabdock is an inflatable dock that vessels of less than 20 metres can enter to isolate them from the surrounding seawater so they can be inspected and possibly treated. This tool provides a way to respond quickly to immediate biosecurity threats, specifically the event of a vessel being found in Fiordland with marine pests on its hull. The Fabdock is portable and can be transported by helicopter – an absolute necessity in Fiordland. Staff from both agencies have undertaken extensive training on the operation of the facility.

Meridian Energy Monitoring Programme reviewed

Representatives from Meridian Energy and the Cawthron Institute presented the results of the year's monitoring to November 2015 to the Guardians, along with the findings of a review of the monitoring programme. The monitoring programme is a requirement of the consent to discharge an amended amount of water from the tailrace into Deep Cove, Doubtful Sound. The Guardians are satisfied with recommendations for the monitoring programme for the next year, which will include physical and biological monitoring. The monitoring programme will continue for the next five years.





Fiordland Marine Pathway Plan submitted to Environment Southland

Once marine pests find their way into Fiordland it is extremely challenging and expensive to get rid of them. We know this from experience: the Sunday Cove *Undaria* Eradication Programme is in its sixth year and has cost in excess of one million dollars.

The goal of the Fiordland Marine Pathway Plan is to prevent the establishment and proliferation of marine pests in the iconic Fiordland Marine Area, by addressing the threat of pests being transported into the area by vessels.

In December 2015 the Guardians, on behalf of the steering group, had the satisfying job of submitting the Fiordland Marine Pathway Plan to the councillors of Environment Southland. The Plan was well received by the council, who requested minor amendments and clarifications from the steering group. The Fiordland Marine Pathway Plan was then publicly notified on 9 April 2016. Submissions will be reviewed and a hearing process conducted, if considered necessary. If it goes ahead, this plan will be the first of its kind in New Zealand.

The submission marked the culmination of two years of development work by a steering group made up of the Guardians, the Ministry for Primary Industries, Environment Southland, the Department of Conservation, and Ngai Tahu, ably led by facilitator Laurel Tierney. Throughout this period the steering committee engaged boaties and other expert advisors, and consulted with stakeholders and partners. The group drew upon expertise, best practice and up-to-date science as required, to come up with rules and mechanisms that collectively will provide an effective and practical way of preventing marine pests from being transported into Fiordland.

The Guardians have long regarded marine pests one of the greatest threats to the Fiordland Marine Area. This threat is very real, with the majority of ports and harbours around New Zealand now home to multiple marine pest species. Marine pests can easily be transported on vessel hulls, attached to gear and in hard-to-access areas on boats such as ballast water and live wells. What this means for Fiordland is these pests are only one boat ride away from reaching this precious environment.

Pathway Plans are considered the most effective means of preventing the transport of pests. They provide a proactive approach, focused on preventing pests from reaching Fiordland on “pathways” such as vessel hulls, instead of responding after a pest has arrived. The Fiordland Marine Pathway Plan is the first “cab off the rank”, with a number of pathway plans being developed around the country.

The plan includes clean vessel standards (for hulls, gear, and residual seawater), a code of practice (for bilge water) and provisions for a clean vessel pass that operators will be encouraged to obtain for entry into the Fiordland Marine Area. The purpose of the pass is to encourage operators to learn about ways to prevent their vessel transporting pests into the area, and to agree to comply with the clean vessel standards. More specific information is available on the Fiordland Marine Guardians’ website.

If the plan is adopted, Environment Southland will lead the implementation of the plan. The Guardians will have an important role to play in continuing to raise awareness to the biosecurity risks that vessels and gear pose, and promoting the plan.

The Fiordland Marine Guardians are extremely supportive of this initiative, and have received the message loud and clear from the community that we must do everything possible to protect Fiordland from marine pests.

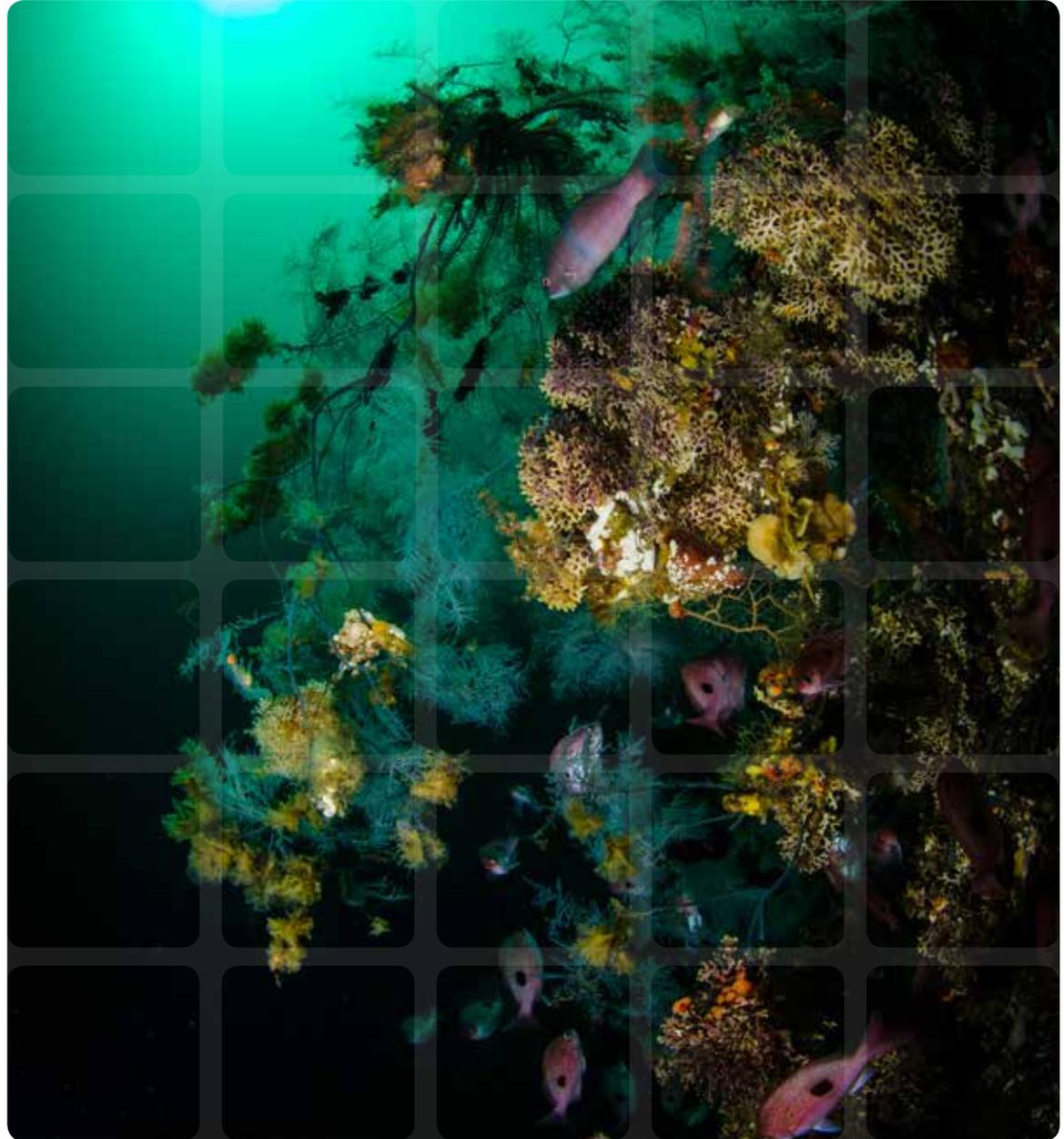
Guardians visit the Beehive

The Guardians travelled to Wellington on 14 April to meet with Minister for the Environment, the Hon Dr Nick Smith.

With a new Chair and a refreshed approach, it was valuable to meet with Minister Smith to report on recent achievements. The effectiveness of the collaborative approach to regional marine management was discussed in light of the new Marine Protected Areas Act, on which the Guardians had made a submission.

The opportunity was taken to hold a series of meetings with senior managers and CEOs of agencies, including the Ministry for the Environment, Department of Conservation and Ministry for Primary Industries. The meetings were extremely worthwhile, and provided a platform to highlight the important role that the agencies play in striving to achieve the Guardians' vision. It was also educational to learn of developments in research and technology that will aid biosecurity, compliance, and monitoring efforts in Fiordland in the future.

It is extremely important that the Guardians maintain profile at the national level in order to do the best for Fiordland, but also to provide an effective example of collaborative management in action. The Guardians intend to repeat the trip to Wellington in two years' time.



Resource consents

The Fiordland Marine Guardians responded to a number of resource consent applications to Environment Southland during the year.

These fell into three categories:

- non-notified, where the Guardians were identified as an affected party
- notified, where the Guardians felt that conditions imposed by current legislation, such as the Southland Coastal Plan, addressed all concerns and as a consequence did not provide a submission
- notified, where the Guardians provided a submission with recommendations for conditions that should be included in any consent granted.

Those of particular interest are outlined below.

Deep Cove Outdoor Education Trust

This application was to occupy the coastal marine area with a rope mooring and associated works in Deep Cove to support hostel activities.

Environment Southland Biosecurity

This application was for consent to discharge chlorine and sodium thiosulfate into the marine environment, following its use to treat infected hulls in the Southland region.

The discharge would be neutralised and diluted prior to discharge. The Guardians supported this application as it provides a means to respond to marine pest incursions in Fiordland in association with the newly-acquired FabDock.

Black Dog Fishing Company Ltd

This application was to install, maintain and exclusively occupy the coastal marine area with a mooring for a 20-metre vessel in Deep Cove.

Fiordland Cruises Ltd

This application was to amend an existing coastal permit to increase their vessel size from 20 metres to 26 metres length, and increase the number of kayaks from 4 to 12.

Ian Stewart

The applicant sought to install and exclusively occupy a mooring in Deep Cove, Doubtful Sound.

NIWA

This application was to deploy four temporary oceanographic moorings in Deep Cove, Doubtful Sound in March 2016, in order to measure temperature, salinity and currents. This followed a previous consented installation of similar moorings in September 2015. The Guardians queried the consideration given to navigational hazards before providing their written approval.

Southern Discoveries

The applicant sought consent to amend an existing surface water activity permit to increase guided kayaking trips from 60 to 100 kayaks per day and the number of trips per day from 5 to 7 in Harrison Cove, Milford Sound. The Guardians provided written approval due to the geographically constrained nature of the activity.

Alpine Group Ltd

This application was to install three new moorings and exclusively occupy the Coastal Marine Area with a total of six moorings and a barge in Cascade Cove, Dusky Sound. The Guardians were initially reluctant to support this application due to concerns about planned wider operations, for which consent application(s) had not yet been lodged. These concerns were discussed with the applicant, who undertook to consult with the Guardians prior to lodging any future applications for resource consent. In addition, the applicant encouraged the Guardians to review the draft consent conditions, resulting in amendments being made that decreased the biosecurity risks associated with the barge installation and servicing. The Guardians look forward to working with this applicant in the future.

Ian McCracken

This application was to install and exclusively occupy the coastal marine area with a fore-and-aft mooring in Helena Anchorage, Deep Cove, Doubtful Sound.

Future challenges for the Fiordland Marine Area

The Guardians are active in the area of risk identification and threat management, in keeping with the approach of the original Guardians and our functions under the Act.

The challenges outlined below will help to guide our activities into the future.

Biosecurity threat

The Guardians regard biosecurity to continue to be one of the leading challenges facing the Fiordland Marine Area. While the focus in recent years has been on the eradication of *Undaria* from Sunday Cove in Breaksea Sound, we now are becoming more focused on the overall threat that foreign pests bring to the region. The implementation of the Fiordland Marine Pathway Plan will be the next step in the process for keeping marine pests out of the Fiordland Marine Area. The Guardians will play a hands-on role in promoting the plan to individuals, groups and organisations throughout Southland and nationally.

Potential development of aquaculture operations

It is now becoming apparent that local and national government are looking for opportunities to develop aquaculture in Southland, which is part of a push to grow the industry nationally. The Guardians are

keeping a watching brief on the developments in Southland, which are becoming a regularly reported feature in the media. The iconic nature of the Fiordland Marine Area, coupled with its sensitive marine communities, will mean that any development will require significant consideration. The Guardians expect to be involved in relevant dialogue throughout the process.

Growth in visitor numbers

There was a noticeable decrease in the amount of 'tourist traffic' throughout the Fiordland Marine Area for the four to five seasons following the Global Financial Crisis (2007/08). Over the last few years, however, there has been an increase in both the numbers of private vessels and general tourism throughout Fiordland.

Fiordland is regarded as an area that combines natural beauty with security for high-net-worth individuals and their friends and family. The consequent increase in numbers of superyachts visiting the area brings added biosecurity risks. Over the past 12 months we are aware of several instances where vessels would have entered the Fiordland Marine Area with marine pests attached to their vessels hulls had it not been for the diligence of the agencies involved in the protection and prevention of these pests entering the area. The Guardians will continue to focus on ways that the biosecurity message can be spread loud and far, and also continue to encourage information sharing among the agencies regarding such vessels.

Local tourism

The Guardians perceive numbers of New Zealanders visiting the Fiordland Marine Area to be on the increase, which is a great thing; however, as numbers increase, some challenges are being presented. Kiwis are coming to the fiords either as short-term visitors or as vessel owners that require moorings or berthage for their vessels for the longer term. With the number of new applications for permanent moorings in Deep Cove over recent years, there is clearly little room left for future development of these sites.

The Guardians are concerned about the proliferation of general moorings throughout the Fiordland Marine Area, as there are safety considerations, such as a reduction in safe anchorages. We strongly advise vessel owners to check with Environment Southland as to the rules around the placement of these moorings. Vessel owners and masters need to be aware that they do not impede or restrict vessel movement with the placement of these moorings, especially for vessels transiting the smaller recognised 'all-weather anchorages' of the Fiordland Marine Area.

Climate change

With a wide level of acceptance that the climate is changing, we must consider the possible implications of climate change for the Fiordland marine environment and plan accordingly. Strengthening westerly weather patterns, increased wind and rainfall, more frequent storms, sea level rise and acidifying oceans are all on the cards, and some if not all of these will have significant implications for Fiordland. As forecasts are refined we will be in a better position to plan for the future.

The next 12 months

The coming year is going to be a busy time for the group and stakeholders, as a number of projects are advanced, essential updates are made to policy, agreements and outward communication tools, and the general tempo for the Fiordland Marine Area continues to increase.

Key among the projects that will be closed out in the next reporting period is a new edition of the Guardians' key publication, the Users' Guide to the Fiordland Marine Area. This essential companion for anyone coming to the region is in the process of being fully revised and updated, and is expected to be published in the last quarter of 2016. Alongside a physical hard copy print run, the Guardians are also exploring other forms of delivery such as integration with mobile applications, a digital 'e-book' edition, and standard PDF download from our website.

Overall communications will be critically reviewed, which is expected to spark projects that overhaul both the website (www.fmg.org.nz) and our regular newsletter. The website itself is seen as a key touch point for anyone seeking information about the Fiordland Marine Area, and a critical path in ensuring relevant information is available on demand.

The group and stakeholder agencies will be busy in the later stages of 2016 as the Fiordland Marine Pest Pathway Plan advances past the recently closed public submission process. The Guardians are a key stakeholder in the Pathways Plan, and have been involved from the outset as a member of the steering committee. The group will be actively supporting Environment Southland as they now integrate feedback, re-engage with all submitters, and seek final approval of the plan.

In recent times it has become clear that national initiatives to increase productivity from the coastal estate has put a spotlight on the Fiordland Marine area as a potential site for aquaculture development. To date this is specifically in the Preservation and Chalky fiord complexes, and not specific in the type of aquaculture proposed. The Guardians will be actively pursuing open consultation on this topic, and it is possible that it may grow to be a very active issue. Information and developments will be shared for the wider community via our website and newsletters.

Business as usual is increasing in response to the generally positive operating conditions for tourism, fishing, charter boat activity, and recreational use of the Fiordland Marine Area. The group will work with stakeholder agencies in the coming year to ensure that real increases in pressure, and changes in activity in the area, are managed well with a view to the future.

Key topics that will be on the agenda in the coming months will relate to an apparent proliferation of moorings in the area, pressure on all-weather anchorages, biosecurity and ongoing scientific research programmes.

With such a broad range of key topics on the horizon, we welcome engagement and input from all sectors and interested parties.

Meetings

Fiordland Marine Guardians general meetings

Four meetings involving Fiordland Marine Guardians and management agencies were held during the year, as detailed below.

25 August 2015	10.30am–3.30pm, Invercargill
19 November 2015	10.30am–4.15pm, Invercargill
3 March 2016	10.00am–3.50pm, Invercargill
31 May 2016	10.00am–3.45pm, Te Anau

Sub-committee meetings

The Guardians operate four sub-committees, which are attended by representatives from the Guardians and management agencies. Each sub-committee works to a plan, which is typically reviewed every four to five years.

These align with the requirements of the Act to develop plans and disseminate information on:

- Biological monitoring (*Convenor: Richard Kinsey, Department of Conservation*)
- Biosecurity (*Convenor: Jen Brunton, Ministry for Primary Industries*)
- Compliance (*Convenor: Stephen Logie, Ministry for Primary Industries*)
- Communications (*Convenor: Dr Kerri-Anne Edge Hill, Fiordland Marine Guardians*)

The Guardian sub-committee members are:

- Dr Ken Grange – *Monitoring, Biosecurity*
- Jerry Excell – *Compliance*
- Mark Peychers – *Compliance, Monitoring, Biosecurity*
- Stewart Bull – *Monitoring, Biosecurity*
- Jon Clow – *Compliance, Communications*
- Anne McDermott – *Communications*
- Dr Kerri-Anne Edge Hill – *Communications*
- Dr Rebecca McLeod* – *Monitoring, Biosecurity*

**The Chair, by virtue of that position, has oversight of all sub-committees.*

Sub-committee meetings held during the past year included:

25 August 2015	8.30am–10.00am, Invercargill <i>Communications sub-committee meeting</i>
20 November 2015	9.00am–3.00pm, Invercargill <i>Biological monitoring sub-committee meeting</i>
23 November 2015	1.30pm–3.05pm, via teleconference <i>Biosecurity sub-committee meeting</i>





Appendix 1: The Act – its purpose and function

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

Section 3: Purpose of the Act

In recognition of the Fiordland (Te Moana o Atawhenua) Marine Area's local, national, and international importance, unique marine environment, distinctive biological diversity, and outstanding landscape and cultural heritage, this Act –

- a) establishes the Fiordland (Te Moana o Atawhenua) Marine Area and 8 marine reserves in that area;
- b) implements measures to assist in the preservation; protection, and sustainable management of the marine environment and biological diversity of the Fiordland (Te Moana o Atawhenua) Marine Area;
- c) establishes the Fiordland Marine Guardians to provide advice on fisheries management, biosecurity, sustainable management, and marine preservation and protection;
- d) facilitates and promotes cooperation between the Guardians and management agencies, to assist in achieving the integrated management of the Fiordland (Te Moana o Atawhenua) Marine Area;
- e) acknowledges the importance of kaitiakitanga.

Section 13: Functions of Guardians

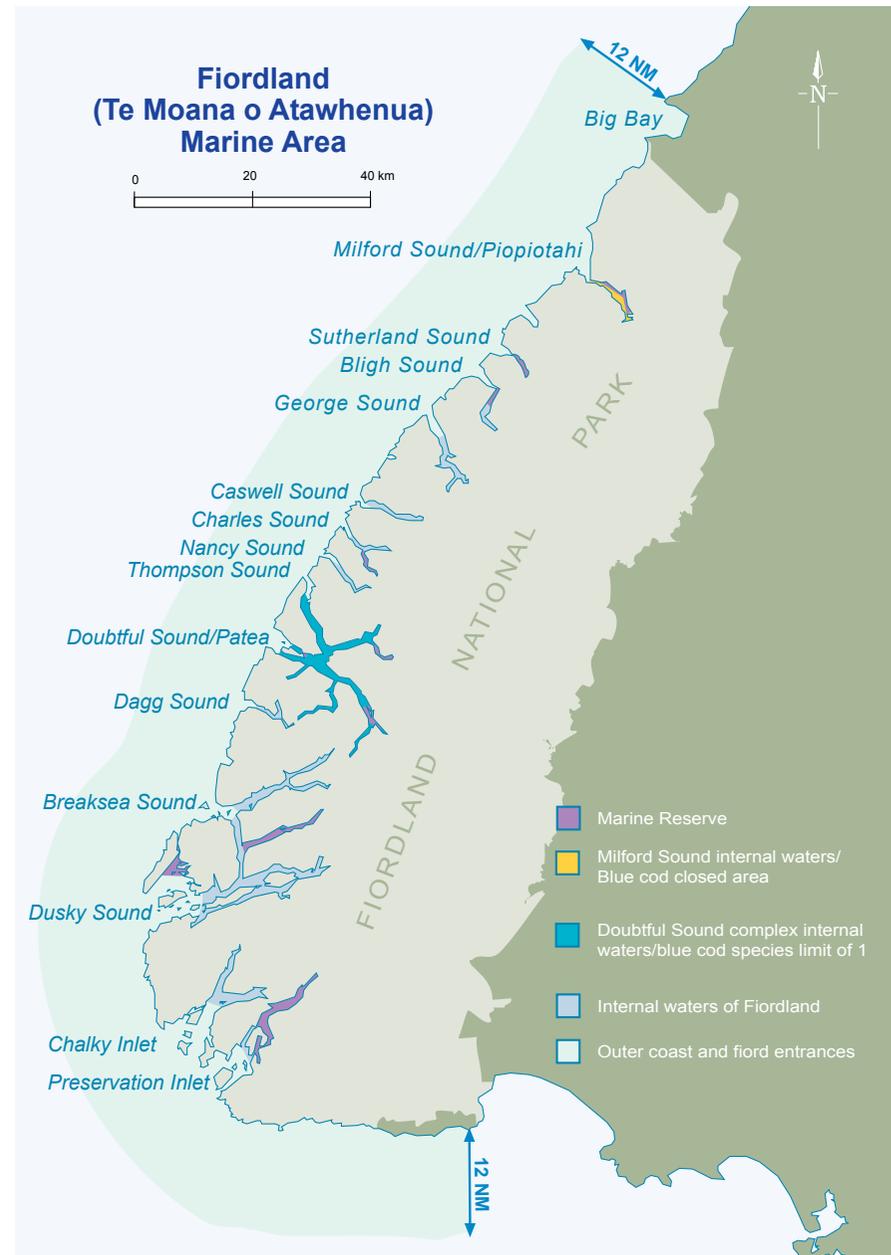
- 1) The functions of the Guardians are –
 - a) to advise and make recommendations to management agencies and Ministers who exercise functions under the enactments listed in Schedule

13, to achieve the purpose of this Act, including, but not limited to, –

- i. advice and recommendations on the effectiveness of the management measures in the Fiordland (Te Moana o Atawhenua) Marine Area;
 - ii. advice and recommendations on activities occurring outside of the Fiordland (Te Moana o Atawhenua) Marine Area if those activities impact, or are likely to impact, on the Fiordland (Te Moana o Atawhenua) Marine Area;
 - iii. advice and recommendations on likely threats | to the Fiordland (Te Moana o Atawhenua) Marine Area.
- b) to facilitate and promote the integrated management of the Fiordland (Te Moana o Atawhenua) Marine Area;
 - c) to obtain, share, and monitor information on the state of the Fiordland (Te Moana o Atawhenua) Marine Area;
 - d) to assist management agencies to –
 - i. prepare and disseminate information about the Fiordland (Te Moana o Atawhenua) Marine Area, including educational information;

- ii. monitor the state of the marine environment and biological diversity in the Fiordland (Te Moana o Atawhenua) Marine Area;
 - iii. plan for the enforcement of, and compliance with, the management of the Fiordland (Te Moana o Atawhenua) Marine Area.
- e) to conduct any reviews instituted under section 25 that they –
 - i. are invited by the Minister to conduct; and
 - ii. agree to conduct.
 - f) to perform any other functions given to them under this or any other Act.
- 2) Advice and recommendations under subsection (1)(a) may be given on the Guardians' own initiative or at the request of –
 - a) a management agency; or
 - b) the Minister; or
 - c) the Minister for Biosecurity; or
 - d) the Minister of Fisheries; or
 - e) the Minister of Conservation.

Appendix 2: Fiordland (Te Moana o Atawhenua) Marine Area



Appendix 3: History of the Fiordland Marine Guardians

From the first steps in 1995, the Guardians of Fiordland's Fisheries and Marine Environment embarked on a unique journey.

The goal was the protection of the region's marine environment by those who value and use it. It was the genesis of today's Fiordland Marine Guardians (the Guardians). The original group, endowed with first-hand knowledge, experience and a passion for the Fiordland marine environment, developed an integrated management strategy and, with support from the management agencies,¹ saw the Fiordland (Te Moana o Atawhenua) Marine Management Act enacted in 2005. The Guardians are now implementing the management programme.

The beginnings of an integrated approach

This process and its outcomes were a remarkable achievement. A variety of groups with very different interests had come together to share their views on how they could protect their own interests, and Fiordland, for the future. The groups included Te Rūnanga o Ngāi Tahu, commercial fishers, recreational fishers, charter boat operators, tourist operators, marine scientists, and environmental and community interest groups.

¹ The management agencies are the Ministry for the Environment, the Ministry for Primary Industries, the Department of Conservation and Environment Southland.

The original vision adopted in 1995 remains the same for today's Guardians:

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.

A shared vision was a fundamental first step towards merging interests and creating a group that could interact freely and constructively. Sharing information followed, and the value of first-hand knowledge and experience shone through. Gathering information from a wide range of sources also built up the cooperative team spirit.

Broadening the membership

In 2000, the group invited local government and representatives of central government agencies to join to provide a supportive advisory role. A complementary relationship soon evolved: the Guardians share information the management agencies need, and the agencies provide significant support to the Guardians.

Developing the draft conservation strategy in only two years required significant commitment. The group agreed on solutions for a number of issues. When one interest or sector benefited at the cost of another, however, the Guardians agreed that the advantaged party should give something in return, to help ensure that the greater good of Fiordland took precedence over competing interests. This became known as the 'gifts and gains' philosophy, which underpinned more difficult negotiations. For instance, when the commercial fishers volunteered to withdraw from

fishing the inner fiords, recreational fishers volunteered to set stringent fishing rules for these more vulnerable inner areas.

Areas that were biologically diverse were identified as deserving particular care and were designated marine reserves. Other fragile areas were identified as having special qualities and became known as 'china shops'. Some of these areas were deemed to be vulnerable to damage from anchors and were designated 'no anchoring' areas. For the strategy to succeed in an isolated area such as Fiordland, it was very important that all stakeholders respected the restrictions in these areas, and this meant they needed to support both the process and the philosophy that underpinned it. The Guardians worked with agency staff and encouraged them to look for solutions that crossed the usual boundaries between the different agencies' roles. This approach was new and refreshing, and fundamental to successful integrated management.

The 2005 Act

By 2003, the Guardians recognised the need for a way to protect the integrity of the whole package so that the balance of gifts and gains would not be compromised. The Fiordland (Te Moana o Atawhenua) Marine Management Act 2005 established the Fiordland Marine Guardians, and was the first legislation of its kind for the marine environment in New Zealand. It cements in place a statutory role for a community group to continue to provide oversight and direction.



Appendix 4: Agency Reports – Ministry for the Environment



Role

The Ministry for the Environment (the Ministry) administers the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005 (the Act). In this capacity, the Ministry provides administrative and secretariat support to the Guardians, coordinates the Fiordland (Te Moana o Atawhenua) Marine Area Communications Plan, and supports the Minister in fulfilling his obligations under the Act.

Achievements

Nominations for new Guardians

The new appointment of one and reappointment of two Guardians in 2015 and the reappointment of four Guardians in 2016 was approved by the Cabinet Appointments and Honours Committee, following recommendations from the Minister.

Website

The website has been updated throughout the year to reflect current research and important information relevant to visitors of the Fiordland Marine Area.

Looking ahead

Beneath the Reflections: A User's Guide to the Fiordland (Te Moana o Atawhenua) Marine Area

This publication, initially produced in 2008, is currently being updated for release in 2016.

Appendix 5: Agency Reports – Department of Conservation

Role

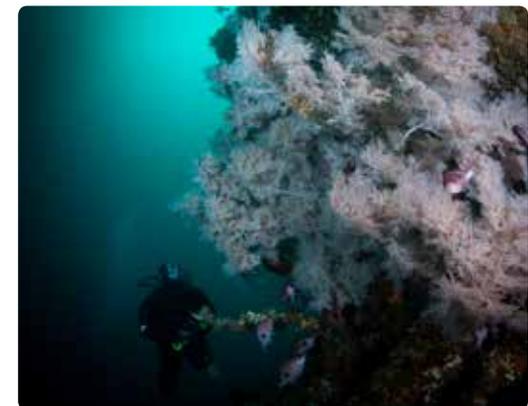
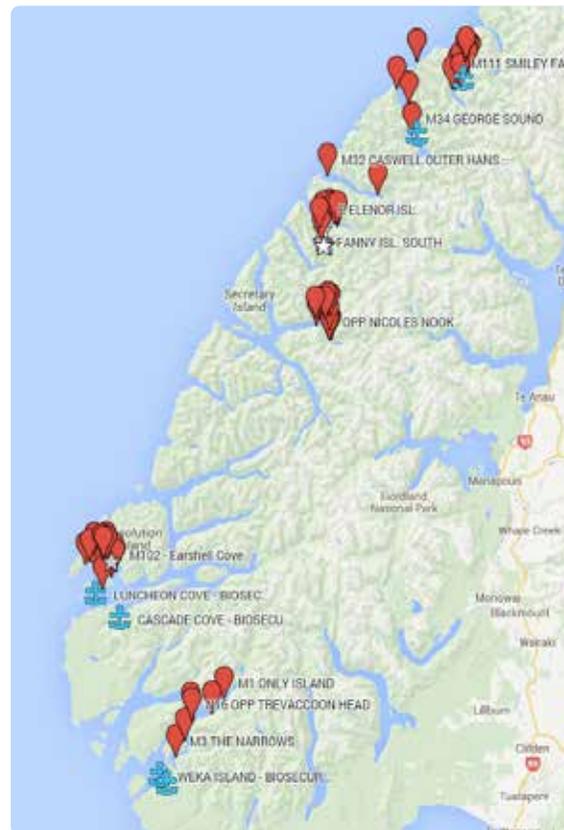
The Department of Conservation leads on the monitoring plan for the Fiordland (Te Moana o Atawhenua) Marine Area. This plan was developed to monitor the state of the marine environment and biological diversity in the Fiordland Marine Area. The key agencies work together to implement the plan, with direct input from the Guardians. The Department of Conservation is also responsible for managing Fiordland's 10 marine reserves and for the protection of marine mammals.

Achievements

This has been another busy and productive year for the Department of Conservation. The most significant milestone has been the completion of fieldwork for the long-term biological monitoring, which took place in February 2016. The long-term monitoring sites were designed and implemented at the initiation of the Fiordland (Te Moana o Atawhenua) Marine Management Act in 2005, and so the data is becoming more and more important.

This year the contract was carried out by the National Institute of Water and Atmospheric Research (NIWA). Using a combination of methodologies from previous biological surveys by Otago University and NIWA, a team of NIWA and Department of Conservation divers assessed a number of key indicator species, including fish, invertebrates, black coral and algae at each site. The team also monitored the habitat variables for the first time, to check how that affected biodiversity.

The survey sites looked at differences between inside and outside marine reserves, commercial exclusion zones and the open coast (see map). The analysis is still being worked through by NIWA as we move into the 2016/17 financial year, so the results will be available soon.





One of the advantages of having NIWA along was the chance to look at deep reef areas using their remote-operated vehicle (ROV). With the ability to dive down to over 200 metres, it is always a voyage of discovery. The most exciting finds this year were large beds of sea pens in some of the more remote northern fiords.



The Department has continued to be heavily involved in the *Undaria pinnatifida* (*Undaria*) response programme in Sunday Cove, with Environment Southland and the Ministry for Primary Industries (MPI). The Department of Conservation continues to lead the operational aspects of the work, and would like to take this opportunity to thank the many people who have been involved in the project so far.

A special thanks to all of our contract divers, John Twidle, Meridian Energy, Hannibal Hayes and Southern Lakes Helicopters, without whom this project would not be possible.



This has been another testing but positive year for the programme, with only six *Undaria* individuals being found since last July, the last being a small immature specimen in December 2015. If no *Undaria* is found in the 2016/17 year, the programme will remain on track towards the 18 months *Undaria*-free milestone in June next year.

The Department of Conservation has also been involved in the steering group for the development of the Biosecurity Pathways plan to complement the *Undaria* work. We see this as a very exciting and positive step to keeping marine pests out of Fiordland, and would like to congratulate all the dedicated people who have been involved in producing the plan.

Bottlenose dolphin population monitoring has continued for both the Doubtful and Dusky Sound populations.

The season of 2015/16 was a successful breeding year for both populations. Six new calves were born to the Doubtful Sound population, a great result as none were born during the preceding season. A report and photos from a local tour operator of a dolphin supporting a dead calf at the mouth of Doubtful Sound in January 2016 proved to be (on examination of the photos) a mother with a history of poor calf survival. This calf was never sighted alive by the monitoring team. At present the population census for the Doubtful Sound population is 67 individuals, including calves.

The Dusky Sound population added seven new calves this season, bringing the population up to 128. Several of the mothers that gave birth during the 2014 bumper breeding season, and subsequently lost those calves, have given birth again.



The Department would like to acknowledge the tireless work of Peter Young, the head skipper of the *Southern Winds*. Pete stood down from his position as skipper in April 2016 after a number of years at the helm, and has decided to go back to lobster fishing. He was an initial Guardian of Fiordland's Fisheries and Marine Environment before the Fiordland Marine Guardians were officially recognised in 2005, and he will be a huge loss to the running of the boat. The new skipper, when they are appointed, will have some large boots to fill. Thank you for all your hard work, Pete.

Looking ahead

The results from the February 2016 biological monitoring survey will be analysed and written up this year. The final report is due in September 2016, so keep an eye on the Guardians' website for the results.

The Department plans to redo both the long-term rock lobster surveys this coming year, in the Te Awaatu Channel (the Gut) Marine reserve in Doubtful Sound, and the Piopiotahi (Milford Sound) Marine Reserve. It will be interesting to see if the rock lobster populations carry on increasing in numbers.

Work on the *Undaria* response programme with Environment Southland and the Ministry for Primary Industries will continue. Although the programme is currently on track, complacency remains one of the biggest risks. With the Pest Pathways Plan currently with Environment Southland and open for submissions, things are looking up for managing future biosecurity risks to the Fiordland Marine Area.

Dolphin monitoring in both Doubtful and Dusky Sounds will continue, with help from Otago University and the Te Anau Marine Mammal Levy Group (which consists of the local tourist operators).

The Department is also looking forward to finalising the installation of Pou Pou throughout the fiords. Completing this project will be a significant milestone for iwi, the Department of Conservation, and the Guardians.





Appendix 6: Agency Reports – Ministry for Primary Industries

The Ministry for Primary Industries has a mandate to grow and protect New Zealand.

Its focus is to maximise export opportunities, improve sector productivity, increase sustainable resource use, and protect New Zealand from biological risk.

Key Ministry functions of interest to the Fiordland Marine Area include:

- providing policy advice and programmes that support the sustainable development of New Zealand's primary industries
- being the Government's principal adviser on fisheries and aquaculture management
- providing whole-of-system leadership of New Zealand's biosecurity system
- providing or purchasing services to maintain the effective management of New Zealand's fisheries.

The Ministry for Primary Industries also works to ensure that fisheries and other resources are managed sustainably by using a “voluntary, assisted, directed, enforced” approach to compliance. A commitment to ongoing education through informing the public and other stakeholders is also a key role for the Ministry for Primary Industries in ensuring compliance.

Role

The Ministry for Primary Industries is responsible for leading the development and maintenance of the biosecurity system supporting sustainable fisheries management and protecting the environment from biological risk. The Ministry works with industry and a wide range of other partners to agree and implement biosecurity planning aimed at minimising the impacts of marine biosecurity risks to the Fiordland Marine Area.

The Ministry for Primary Industry's Investigation and Diagnostics Centres and Response Directorate are responsible for leading this work. Specialist teams of advisers and investigators, highly skilled in surveillance, investigation, and incursion response, work to detect and eradicate or control the establishment and spread of marine pests and diseases.

The Ministry for Primary Industries (Fisheries Management) is committed to the sustainable management of New Zealand's fisheries resources. Our long-term goal is New Zealanders maximizing benefits from the use of fisheries within environmental limits. In line with this goal, the Guardians are charged with providing advice and recommendations to management agencies and Ministers for the Fiordland Marine Area.

Achievements

Biosecurity

Review of the Fiordland Marine Biosecurity Plan

The Fiordland Marine Biosecurity Plan has been reviewed and signed off by all agencies and the Fiordland Marine Guardians. The updated Biosecurity Plan is a consolidation of the earlier Operational and Strategic Plans and includes the Joint-Agency Marine Biosecurity Response Agreement between Environment Southland, the Department of Conservation and the Ministry for Primary Industries.

The Biosecurity Plan takes a “pathways” approach to biosecurity, where management tools to reduce or prevent the spread of pests can be applied to pathways or parts of pathways. The activities set out in the Biosecurity Plan address the full spectrum of the biosecurity system: reduction, readiness, response, recovery and resilience.

The Ministry for Primary Industries is the lead agency for implementing the Biosecurity Plan, but activities for the other relevant agencies and Guardians are also outlined to assist in mitigating biosecurity risks to Fiordland.

Operational activities

Over the past year, the Ministry has worked with the other agencies and the Guardians to implement operational biosecurity recommendations, including:



Vector management

- **Vessel inspections for marine pests (ongoing since February 2010).** Moored vessels in Bluff and at Stewart Island that are known to travel to the Fiordland Marine Area are inspected on a monthly basis for the presence of marine pests. Antifoul condition and the level of general marine growth on vessel hulls are recorded during these inspections. Any marine pests found on vessel hulls and niche areas are removed by divers at the time. When a marine pest is detected, vessel owners are informed and advised of what action to take before their next visit to Fiordland, to ensure their vessel is clean and free of marine pests. Young Fishing Ltd is contracted by the Ministry for Primary Industries to undertake these inspections for at least another year.
- **Joint-agency compliance and surveillance patrol.** In April 2016, Ministry for Primary Industries Biosecurity participated in the joint-agency compliance patrol. Vessels and any artificial structures encountered during this patrol were inspected in-water to ensure they were free of marine pests. Vessel owners were also advised about marine biosecurity. This was a great way to raise awareness of the importance of keeping marine pests out of Fiordland and is significant because of the intensive effort currently applied to achieve local elimination of the invasive seaweed, *Undaria*, from Sunday Cove, in Breaksea Sound. See the 'Fisheries Compliance' section for further information on this patrol.



Communications

- A marine biosecurity message for Fiordland was placed on the marine pages of the Metservice webpage from October 2015 to April 2016. This read: “*The only things you should leave behind are ripples. If your boat and equipment haven’t been properly cleaned and your hull antifouled before entering Fiordland, you could be spreading marine pests*”.

Fiordland Marine Pathway Management Plan

- The Ministry for Primary Industries has been integral in the development and support of the Fiordland Marine Pathway Management Plan (refer to the Fiordland pathway management plan article for further information).

Joint-agency response to *Undaria pinnatifida* in Sunday Cove

The Ministry for Primary Industries continues to work collaboratively with the Department of Conservation and Environment Southland on the joint-agency attempt to locally eliminate the invasive marine pest seaweed, *Undaria pinnatifida* from Sunday Cove, in Breaksea Sound. Significant efforts have been made over the past year to further improve the effectiveness of the dive surveys and to reduce the chance of any *Undaria pinnatifida* specimens reaching maturity. Results to date are promising as there has been a significant reduction in the number of *Undaria pinnatifida* sporophytes found despite intensive search efforts (refer to the *Undaria* in Sunday Cove article for

further information). The response will continue in its current form until there have been 18 continuous months of no *Undaria pinnatifida* detections prior to moving to a three-year monitoring period.

Fabdock (Vessel Quarantine Facility)

The Ministry for Primary Industries supported Environment Southland in the purchase of a Vessel Quarantine Facility (VQF) in 2015, to provide an on-water capability for vessels that might need to be treated for biofouling. This is an inflatable dock that vessels of less than 20 metres can enter to isolate them from the surrounding seawater for inspection and possibly treatment. Furthermore, the VQF is portable and can be transported by helicopter – an absolute necessity in Fiordland. The Ministry has also participated in training on the use of this facility.

Targeted marine pest surveillance

As part of a National Marine High Risk Site Surveillance Programme, the Ministry for Primary Industries undertakes bi-annual surveys (winter and summer) in 11 locations around New Zealand (including the Ports of Lyttelton, Dunedin and Bluff). This programme aims to achieve early detection of a range of unwanted marine pests in some of New Zealand’s busiest, and therefore high risk, locations – namely ports and marinas of first entry for international vessels. Undertaking surveillance in the Port of Bluff has benefits to the Fiordland Marine Area, such as the early detection of new and emerging invasive marine species.

No new marine pests have been found in the Ports of Bluff, Lyttelton or Dunedin by these surveys over the past year, however the clubbed tunicate *Styela clava* continues to expand in Otago Harbour, becoming more prevalent and prolific. The invasive Mediterranean fanworm (*Sabella spallanzanii*) continues to expand its range around New Zealand, especially in the North Island, and top of the south, as well as Lyttelton where it has been found since 2008. Vessels arriving into Fiordland from many locations outside of Southland could now potentially transfer this highly invasive species to the fiords. The Ministry for Primary Industries continues to support regional councils responding to range extensions of marine pests, such as the Mediterranean fanworm.

Progress with the implementation of the Craft Risk Management Standard for fouling on vessels arriving from overseas

The Ministry for Primary Industries has issued the Craft Risk Management Standard (CRMS) for Biofouling on Vessels Arriving to New Zealand, which will come into force on 15 May 2018, following a four-year lead-in period. The standard applies to all types of sea-craft that have come from, or recently visited, coastal waters of another country.

The Ministry has been engaging with vessel sectors on how they will comply by May 2018 with the Craft Risk Management Standard (CRMS) for Biofouling on Arriving Vessels (www.mpi.govt.nz/importing/border-clearance/vessels/biofouling-management).



This includes talking to Cruise New Zealand and the main cruise lines about the provision that any vessels that visit Milford as their first port of entry to New Zealand will be required to meet the long-stay threshold, which is more stringent (slime only on the hull) than that applying to vessels arriving at a designated Port of First Arrival.

The Ministry for Primary Industries will start soon to require biofouling management information from ships on part of the existing Ballast Water Declaration that must be supplied to the Ministry with the Advance Notice of Arrival. This information will help assist the Ministry for Primary Industries to monitor improvement in biofouling management practices by vessel operators and could assist in identifying vessel operators for targeted education. Also, to capture all vessels visiting Fiordland at any stage in a New Zealand visit, the Ministry for Primary Industries is encouraging Environment Southland to include real requirements for biofouling management in the Deed of Agreement.

Domestic marine pathway management

Marine pathway management is about controlling the spread, and consequently reducing the impact, of marine pests by managing the ways they move from place to place. Proactive marine pathway management will reduce the rate that established pests spread around New Zealand and limit the impacts of new introductions. The Pest Management National Plan of Action outlines national and regional leadership roles and accountabilities for marine pest management. The Ministry for Primary

Industries has been identified as the lead agency on national marine pathway management, with regional councils leading at a regional level. In this role, the Ministry is leading the development of a Domestic Marine Pathway Management Strategy.

The proposed strategy will provide a framework for prioritising short-term and long-term actions that can be taken regionally and nationally to improve pathways management and allow stakeholders to collectively understand where to invest effort to achieve the greatest risk reduction. Ultimately, for marine pest and pathway management to be successful, the Ministry for Primary Industries and regional councils will need to work in collaboration with tangata whenua and industry to develop aligned national and regional approaches. This may include aligned pest or pathways plans and the adoption of good hygiene practices by anyone operating in the marine environment, such as cleaning and antifouling vessels and avoiding movement of fouled structures. Domestic measures will need to align with and leverage border measures such as the implementation of the Craft Risk Management Standard.

The Ministry for Primary Industries has been developing a business case based on Treasury's Better Business Case guidance and the reports commissioned from NIWA and the Cawthron Institute. The Ministry will be testing the business case with key stakeholders in the near future.

Achievements

Fisheries

Compliance

The Ministry for Primary Industries' Compliance directorate is responsible for the operational delivery of fisheries compliance services within the Fiordland Marine Area. Southland-based Fishery Officers are tasked with enforcing fisheries regulations by conducting surveillance patrols, inspections, investigations and intelligence analysis across the fisheries compliance spectrum of commercial, recreational and customary fishing.

Since the Fiordland Marine Management regime inception in 2005, the Ministry's Southland District Compliance team has been tasked with leading and coordinating delivery of an Integrated Compliance Plan programme in collaboration with the Department of Conservation and Environment Southland.

When the need arises, Ministry for Primary Industries' Fishery Officers can work closely with Department of Conservation Compliance Rangers and Environment Southland Compliance Officers to optimise enforcement activities, such as conducting joint-agency seaborne patrols and in the sharing of information to assist directed enforcement by any one of the agencies.

In terms of reporting, Ministry for Primary Industries' Compliance provide regular updates to the Fiordland Marine Guardians of all relevant fisheries compliance matters including any non-compliance issues.

Events and opportunities to engage with recreational fishers and boaties are important to encourage fiord users to keep up-to-date with the Fiordland rules. Over the weekend of 8–9 August 2015, local Ministry for Primary Industries Fishery Officers and Response directorate (marine biosecurity) Incursion Management staff from Wellington manned a Ministry for Primary Industries exhibition stand at the Southland Boat Show 2015. The two main take-home messages for fishers to *check the MPI fishing rules before going fishing* and for boaties to *ensure vessel hulls and fishing gear are clean of pest fouling* appeared to be well received, with steady demand for advice and handouts. This repeats the Ministry for Primary Industries' participation in the 2014 Southland Boat Show, following a five-year enforced hiatus due to the Stadium Southland roof collapse. The next Boat Show in Invercargill is scheduled for 2017.

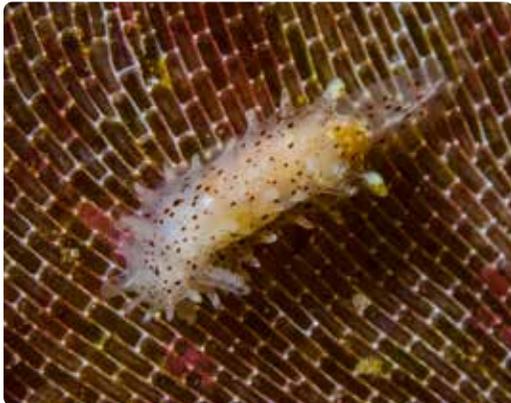
Fiordland Blue cod regulation amendments

As a result of the Guardians' recommendations and stakeholder consultation in early 2015, the Honourable Nathan Guy, Minister for Primary Industries, agreed to the reopening of Doubtful Sound internal waters to limited blue cod fishing. As a consequence, a new one-blue-cod daily limit, applying across the Doubtful-Thompson-Bradshaw Sounds three-fiord complex, was introduced. For Milford Sound internal waters, however, the blue cod fishery remains closed. Research survey findings since the original 2005 closure have confirmed a natural low blue

cod abundance and poor habitat productivity inside the fiord, hence the decision for the Milford closure status quo.

During August-September new Fiordland blue cod regulation amendments to the Fisheries (Amateur Fishing) Regulations 2015 were drafted, involving local Compliance technical input, and gazetted on 19 November before taking full effect on 20 December 2015. To support the amended regulations introduction the Invercargill Compliance Team led the production of communication material including a dedicated two-page A4 colour flyer to accompany the Guardians' December 2015 Newsletter. In conjunction, the Ministry for Primary Industries' *Fiordland Marine Area recreational fishing rules* brochure and www.mpi.govt.nz website recreational fishing rules web pages, and the smartphone app *New Zealand Fishing Rules* all underwent major content and design revision. Prior to Christmas 2015 blue cod flyers and information packs were dispatched to both the Deep Cove Hostel and the Department of Conservation, Te Anau, to be distributed on the Department's *GV Southern Winds*. By mid-January 2016 stocks of new Ministry for Primary Industries' Fiordland brochures were supplied to several fishing brochure outlets in Manapouri and Te Anau, including the Department of Conservation Te Anau Visitor Centre and to both Te Anau Sports fishing gear shops. Brochure packs were also dropped off to the three main Doubtful Sound Charter Vessel operators, to ensure all Deep Cove operators had the necessary brochures to inform their clients.





Ministry for Primary Industries compliance patrolling

In late November and in early December 2015, immediately prior to the blue cod rules taking effect, Southland Fishery Officers carried out two separate three-day waterborne patrols using the Ministry for Primary Industries' 6.95m Patrol Vessel *Ahuriri* to patrol the Doubtful, Bradshaw, and Thompson Sounds fiord complex. The opportunity was taken to promote the new blue cod rules with all 49 fishers encountered. Despite widespread acceptance of reopening Doubtful Sound to blue cod fishing, there was some minor confusion with one or two operators around the one fish per person daily limit, with no accumulation applying across all three fiords and how this related to the 20 blue cod maximum limit. Vessels inspected included six amateur fishing charter vessels, three large recreational fishing vessels and five trailer boat parties, along with numerous cray pot, holding pot and set line compliance inspections. One recreational vessel skipper received a \$250 infringement for possession of five under-sized rock lobster amongst a catch of 135 rock lobsters taken by the nine-man fishing party, while an unrelated unmarked cray pot was seized from inside the Pendulo Reach prohibited potting area.

Other Ministry for Primary Industries' seaborne compliance patrols were conducted in Milford Sound in late September 2015, and repeated again during January and February 2016. All three patrols involved inspections of both commercial CRA8 fishing vessels returning to Milford and recreational trailer boats out day fishing, as well

as checking recreational cray pots and holding pots clustered in both Anita and Fox Bays. Detected non-compliance included seizure of several unmarked rock lobster catching pots and one unmarked holding pot, while one commercial CRA8 operator had exceeded his recreational rock lobster entitlement.

Further patrol opportunity in late September 2015 was taken up by a Ministry for Primary Industries' Fishery Officer accompanying Department of Conservation staff on a GV *Southern Winds* trip from Bluff to Deep Cove. The five-day gorse eradication trip took in the lower fiords of Preservation, Chalky, Dusky and Breaksea up to Doubtful Sound, with five commercial fishing vessels boarded and inspected, along with one ex-charter vessel with an 11-person recreational fishing party aboard. Three of the commercial operators inspected had expired section 111 recreational approvals to take amateur catch, with one CRA8 permit holder detected in breach of reporting regulations by omitting to complete catch return data. One Bluff-based CRA8 vessel skipper and crew were each issued \$250 infringement notices for exceeding their amateur maximum 20 blue cod limit.

Multi-agency Compliance and Marine Biosecurity seaborne patrol

In early April 2016 a five-day multi-agency seaborne patrol was conducted by Compliance and Biosecurity Officers from the Ministry for Primary Industries, Department of Conservation, and Environment Southland, using the Department of Conservation GV *Southern Winds*.



The patrol targeted both commercial and recreational fishing activity, and was aimed to coincide with the autumn hunting 'roar' activity immediately following the Easter holiday break. The 10-agency personnel, included the Department of Conservation skipper and one-person crew, three Department of Conservation Compliance rangers, two Ministry for Primary Industries' Fishery Officers, one Ministry for Primary Industries' Marine Pest Advisor, and two Environment Southland (Compliance/Biosecurity) officers. The waterborne patrol began in Bluff and finished up in Deep Cove, covering five fiords between Preservation Inlet and Doubtful Sound, including five marine reserves.

Patrol coverage was curtailed by 100 kilometre plus gale force winds and rough seas encountered on day three, which kept the *Southern Winds* inside Breaksea Sound for much of the day before braving a rough passage north to Doubtful Sound later that evening. Interagency boarding teams managed to inspect a total of 20 manned vessels, including four commercial fishing vessels, six amateur fishing charter vessels (AFCV), one syndicate vessel, one sailing yacht, and nine recreational vessels. In addition, several barges/helipad structures, one Department of Conservation hut and one private lodge were inspected. This resulted in contact with a total of 117 persons, primarily engaged in a mix of fishing, deer hunting and cruising. Catch inspections involved 153 rock lobster, 192 blue cod and 40 tarakihi, along with smaller numbers of proper, sea perch and barracouta.



Pleasingly, fisheries regulation compliance was excellent. Albeit one new charter vessel, new to the area, was detected in breach by operating without a valid amateur fishing charter vessel operator registration or A-FC Vessel listing. Department of Conservation Compliance rangers spoke to 54 hunters from several different hunting parties as part of vessel inspections. Of this number, four hunters from one charter vessel party were found not to have valid hunting permits, requiring Department of Conservation compliance follow-up action.

Ministry for Primary Industries' fishing brochures and biosecurity material were given out to several visiting boat parties, including a sailing yacht circumnavigating the South Island (ex-Auckland and skippered by a South African) and two trailer boats cruising in tandem in Dusky Sound. The two trailer boat parties were from Christchurch and the Wairarapa, having trailered into the fiords via Deep Cove and thence down the coast. A total of 24 marine pest surveillance dives were carried out by two Marine Biosecurity divers on various vessel hulls and barges, wharf structures and high use mooring anchorages, which fortunately resulted in no sign of any *Undaria* or other invasive exotic marine pests being discovered.

Focus ahead

During the year ahead the Southland Ministry for Primary Industries' Compliance team is convening and facilitating an Interagency Compliance Working Group meeting to review compliance activities and to initiate a review and rewrite of the previous Integrated Compliance Plan.

This will involve content input, in terms of each agency's legislation mandate, resource capacity, identified risks and enforcement priorities. While the original plan was focused on implementation we now have the benefit of 11 years' experience. To ensure the new compliance plan is fit for purpose, the process will require input and agreement between the three agencies and the Fiordland Marine Guardians' Compliance sub-committee.

Fisheries management

Engaging with the Fiordland Marine Guardians on key fisheries issues remains an important component of the work of Ministry for Primary Industries' Fisheries Management. The Guardians continue to work constructively with fisheries management and the recent reopening of the recreational blue cod fishery with new bag limits in Doubtful Sound in December 2015 is a good example of this.

The recreational fisheries in Fiordland are set to grow in popularity as visitor numbers increase. The Ministry and the Guardians are working together to better understand the impact of this and how best to monitor and manage this increasing activity.

Ministry for Primary Industries' Fisheries management will continue to provide input and information into new ways of monitoring, and will work with the Guardians to provide information from existing systems of reporting that will assist them with assessing fishing pressure and sustainability. This can effectively be achieved by Ministry

Fisheries management staff regularly attending the Guardians' Monitoring sub-committee meetings.

In addition to these monitoring initiatives and information sharing, Ministry for Primary Industries fisheries management will keep the Guardians up to date with any changes in the regulatory environment with the ongoing review of the Fisheries Act, and ensure that the Guardians have relevant information on all fisheries management issues that impact on fish stocks with links to the Fiordland Marine area.

Looking ahead

The Ministry for Primary Industries looks forward to continuing to work closely with the Fiordland Marine Guardians and other agencies in the future.

MPI (Biosecurity) will continue to work with all Fiordland partners to implement the Biosecurity Plan recommendations over the next year, including progressing the Fiordland Marine Pathway Management Plan. The Ministry for Primary Industries will continue to work collaboratively with the Department of Conservation and Environment Southland in the attempt to locally eliminate *Undaria* from Sunday Cove.

Further information on Fiordland marine biosecurity can be found on the Ministry for Primary Industries' website at www.biosecurity.govt.nz/fiordland

Appendix 7: Agency Reports – Environment Southland

Achievements

Biosecurity

Fiordland Marine Pest Pathways Plan

Since early 2014 a steering group comprising of representatives from Environment Southland, the Ministry for Primary Industries, the Department of Conservation and the Fiordland Marine Guardians has been working together to form a Pathways Management Plan to minimise the risk of marine pests being transported to Fiordland. The process has involved informal consultation with Fiordland commercial and recreational operators, and earlier this year Environment Southland publically notified the plan. There were 17 submissions received from recreational and commercial operators.

The concept of a pathway approach is to prevent pests from reaching Fiordland in the first place, rather than responding after a pest has arrived. Responses to marine pest incursions require a lot of resources and time, particularly in the Fiordland Marine Area. Marine pest pathway regulation is very straightforward – vessel owners/operators need to keep their hulls, niche areas, gear and residual seawater areas clean and treated.

The major components of the pathways plan include having a clean vessel and gear, and residual seawater standards to be met upon entry to the Fiordland Marine Area. For more information on the proposed Pathway Plan visit www.es.govt.nz.

Currently, Environment Southland is working through the submissions and organising hearings, and it is likely a final decision will be made by the end of 2016. We foresee a plan that minimises the risk of marine pest transport and establishment, and at the same time is workable for Fiordland marine users.

Undaria incursion response in Sunday Cove

Dive surveys in Sunday Cove are undertaken approximately every four weeks by a team of six qualified divers, in which any *Undaria pinnatifida* (*Undaria*) individuals are removed by hand. At this stage of the *Undaria* response, divers are looking for sporophytes from 4 to 30 centimetres in length. The goal is to locate any *Undaria* individuals in the area before they reach maturity. This is a ‘search and destroy’ response, so if an individual is found, the specimen is removed and then placed carefully into a ziplock bag, and destroyed once back at the boat.

To make searching easier, transect lines have been installed throughout Sunday Cove approximately five metres apart to guide divers and ensure that the entire habitat has been completely searched. Two dive teams of three people each go on each trip, the first team searches the entire response surveillance zone in and around Sunday Cove and the second team revisits the “high risk” areas so that they are searched twice. Double searching allows greater confidence in our ability to detect *Undaria* for a number of reasons, including: doubling the effort, different sets of eyes, and searching the area during different conditions and from different directions.

Between 1 July 2015 and 30 June 2016, a total of six juvenile *Undaria* sporophytes were found during three of the monthly surveys (October, November, and December). No *Undaria* have been discovered in Sunday Cove since December 2015, and no reproductively mature *Undaria* have been found since January 2012. To help with the ongoing programme, the response team translocated a further 6,000 kina (*Evechinus chloroticus*) to the area. The decision to do this was due to the high regrowth of native seaweeds creating a difficult search environment in places.

The response will continue in its current form until there have been 18 continuous months of no *Undaria* detections. At that stage the response will then move to a three-year monitoring period.

Overall the response is looking positive, with only a handful of *Undaria* found over the last year. As *Undaria* individuals are becoming harder and harder to find, however, divers need to be extra vigilant to ensure all *Undaria* are located.

Environmental compliance

The Council’s Compliance Division investigated one complaint and one inspection non-conformance in the Fiordland Marine Area in the last year:

- Illegal commercial vessel activity within Fiordland. An investigation was undertaken and enforcement action is currently pending. The vessel in question continues to be monitored.
- Enforcement action was taken against one operator for breach of consent documentation requirements.



As part of annual inspections, staff interviewed vessel operators, checking for compliance with consents such as hull inspection requirements and operating limits. No compliance related issues were noted.

Consent holders need to clearly display on structures their name, their structure number and any other details required under their resource consent.

Consent holders also need to get any technical reports required under their consents in to us as soon as possible (email: escompliance@es.govt.nz).

Oil spill responses

No oil spill response activity to report.

Fiordland VHF Project

Stage One of the Fiordland VHF Project (Mt Clerke) was completed in March.

Stage Two (Mt Grono) will commence in the new financial year and will progress as funds become available.

Resource consents

The Guardians may be considered to be affected parties for resource consent applications for the Fiordland Marine Area, and provide advice to Environment Southland.

The Guardians consider the applications and report back to Environment Southland on the issues, or make submissions on the applications, attending pre-hearing meetings and hearings, depending on the nature and extent of the proposed activities.

This year the Guardians were asked to provide input on the following consent applications:

- **APP-20158275: Brian Humphrey**
Install and exclusively occupy the coastal marine area (CMA) with a mooring at Deepwater Basin, Milford Sound.
- **APP-20158467: Environment Southland Biosecurity Division**
Discharge contaminants to water, namely sodium dichloroisocyanurate and sodium thiosulphate within the CMA for the purpose of controlling invasive marine organisms attached to vessel hulls.
- **APP-201180-V2: Fiordland Cruises Ltd**
Vary Coastal Permit AUTH-201180 to:
 - increase the number of kayaks on the water at any one time from 4 to 12
 - increase the length of the consented vessel from 20 metres to 26 metres
 - increase the number of backcountry trips to take up the remaining unallocated backcountry trips still available in the Doubtful Sound/Patea complex under Rule 16.2.1 of the Regional Coastal Plan (RCP) as a discretionary activity.
- **APP-204954-V1: Fiordland Cruises Ltd**
Vary Coastal Permit AUTH-204954 to allow vessels up to 26 metres long to berth alongside a jetty at Deep Cove, Doubtful Sound.







- **APP-20158172: Ian McCracken**
Install and exclusively occupy the CMA with a fore-and-aft mooring in Helena Anchorage, Deep Cove, Doubtful Sound.
- **APP-20158479: Ian Stewart**
Install and exclusively occupy the CMA with a mooring and barge at Sunday Cove and Beach Harbour, Breaksea Sound.
- **APP-20169090: Ian Stewart**
Install and exclusively and occupy part of the CMA with a mooring.
- **APP-20169132: Island Escape Cruises Ltd**
Undertake commercial surface water activities in the CMA adjacent to Fiordland National Park, for one vessel up to 49 metres in length, with up to 34 passengers and 12 crew, for backcountry trips from Febrero Point to Puysegur Point.
- **APP-20158167: Stephen Blair-Edie**
Install and exclusively occupy the CMA with a fore-and-aft mooring in Helena Anchorage, Deep Cove, Doubtful Sound.
- **APP-20168717: Southern Discoveries Ltd**
Undertake commercial surface water activities in the CMA adjacent to the Fiordland National Park, namely guided sea kayaking tours with a total of up to 100 kayaks per day, spread across a maximum of seven trips per day; and the use of a motorised safety vessel up to five metres registered length, for the purpose of retrieving hampered or distressed kayakers.
- **APP-20158556: The Alpine Group Ltd**
Install three moorings, and exclusively occupy the CMA with six moorings for the purpose of securing a ship, namely a barge, and the use of the barge as base or temporary accommodation facility at Cascade Cove, Dusky Sound.

Looking Ahead

Environment Southland looks forward to continuing our work, and furthering our great relationship with the Guardians and other management agencies, providing a local perspective in managing the Fiordland Marine Area.



Thank you to the following for providing the photos in this year's report: J Davies, M Simms (MfE), V Zintzen (DOC), D Johnston, C Corne (DOC), R Bowman (ES), A Key, R Kinsey (DOC), NIWA and Environment Southland.



The Fiordland Marine Guardians welcome constructive feedback on the work that we do. We invite you to contact us directly with questions or concerns about the Fiordland Marine Area.

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