

Annual Report

for the year ended 30 June 2015



Fiordland
Marine Guardians
Beneath the Reflections



The Guardians' 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."

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LONG SOUND, PRESERVATION INLET

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Acknowledgements

Thank you to the following who provided images for this annual report.

MAIN COVER IMAGE: Doubtful Sound sunset (*Paddy Ryan*).

FRONT COVER IMAGES: Sea Pen (*Richard Kinsey, DOC*). Fiordland crested penguin (*Richard Kinsey, DOC*). MPI inspection, Doubtful Sound (*Jim Flack, MPI*). Red coral (*Richard Kinsey, DOC*). South East Bligh poupu installation (*DOC*).

BACK COVER IMAGES: Groper fishing (*Jim Flack, MPI*). Sunday Cove, Biosystematics (*NIWA*). Crayfish boat in Pendulo Reach, Doubtful Sound (*Jim Flack, MPI*). Brachiopods (*Richard Kinsey, DOC*). Bottlenose dolphin (*Chloe Corne, DOC*).

INSIDE FRONT COVER: Long Sound, Preservation Inlet (*Jim Flack, MPI*).

PAGE 2: Waterfall at the head of Long Sound, Preservation Inlet (*Roz Anderson, MfE*).

PAGE 8: Blue Cod (*Richard Kinsey, DOC*). Bottlenose dolphin (*Chloe Corne, DOC*).

PAGE 12: Fiordland Marine Guardians (*Fiordland Marine Guardians*).

PAGE 13: Hon Pete Hodgson, Hon Marian Hobbs and Hon Dr Nick Smith cut the 10-year celebration cake (*Fiordland Marine Guardians*). Guardian's Chairman Malcolm Lawson and Minister of the Environment Hon Dr Nick Smith (*Fiordland Marine Guardians*). Fiordland Marine Guardians 10-year celebration cake (*Fiordland Marine Guardians*).

PAGE 14: MPI and Environment Southland Biosecurity Officers (*Jim Flack, MPI*). Sunday Cove seaweed community (*NIWA*).

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PAGE 26: Butterfly perch and black coral (*Richard Kinsey, DOC*). Spiny sea dragon (*Richard Kinsey, DOC*).



The Guardians wish to record their sadness at the untimely passing of Frana Cardno and Ron Peacock during the year. Their passionate advocacy and dedication over many years to the Fiordland area, including the Fiordland Marine Area, will be missed. Fiordland is a better place due to their efforts.

CHAIRPERSON'S REPORT

During April this year a notable milestone was reached – the 10th anniversary of the introduction of the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005.

This occasion was marked in June with a function in Invercargill. It was very pleasing that both the Hon Pete Hodgson and the Hon Marian Hobbs could attend. These two people were the Ministers of Fisheries and Environment respectively in 2003 and really drove the introduction of the Act. The current Minister for the Environment, the Hon Dr Nick Smith, also attended. Again, it was very pleasing for the Fiordland Marine Guardians (Guardians), as he has been a solid advocate for us over a number of years.

Looking back now, I can see that the introduction of the Act, and with it the appointment of the Guardians and requirement for more integrated management of the Fiordland Marine Area (FMA), was a challenge for everyone involved. It required a fair amount of faith from the government of the time, and has for successive Ministers. To my knowledge, this was the first example of this type of formal collaborative model between government and communities. It took working together to another level. To an extent it meant that, all of a sudden, government staff had two masters. I regularly have to remind people that we have not taken over any of the roles of the government agencies. We are not in a position to do that – we do not have the resources or the budget – and of course that was never the intention of the Act. Instead, we rely on those agencies to work with us.

Over time we have come to realise just how many people have an interest in the FMA, and that is illustrated by our contact database of individuals and groups, which now numbers around 500. We are reaching those people, but in a wider sense we are there first and foremost for the area and then for all of the communities. I think that we can gauge this from the levels of support we have received – people understand and agree with what is in place – and any number will tell you that it is much more than just a place to visit or work in. It does have an effect on you. Because of that, there is a feeling of stewardship, of kaitiakitanga. We have accepted and enjoyed that responsibility.

With the timing of its introduction, the Act was a fence at the top of the cliff, not the ambulance at the bottom. Sure, there were some restrictions put in place, but in the main the place was not broken. And that has been shown in the results of the subsequent biological surveys, where the changes have been few. Where fisheries limits were changed, the populations have responded. These examples illustrate the foresight of the original voluntary group, the value of the work they did, and the opportunity it provided for us – and I mean both the Guardians and agencies – to take a longer term view. It meant that where issues arose, we could also look for compromises and solutions without having to wield the heavy hand of prohibition. It is the perfect illustration of a stitch in time.

We have hosted a number of Ministers on visits to the FMA over the years, which I see as being very important. It gives the Ministers a chance to see the area for themselves and understand the context of size, weather and isolation, which all present challenges in carrying out meaningful actions. The programme to eliminate *Undaria* from Sunday Cove is the perfect example. It takes time and it costs far more than a similar programme would if it was attempted in more accessible parts of the country, but the consequences of not doing it far outweigh these costs. But without high-level understanding and support, it would not have got off the ground.

Things never have been, and never will be, dull when you are involved in an area as big, diverse and complex as the FMA. So the challenge for the next 10 years is to continue to engender that support and to deliver on the expectations of governments and communities. For this is an area that is not only important in a New Zealand sense, but in a world-wide sense also.

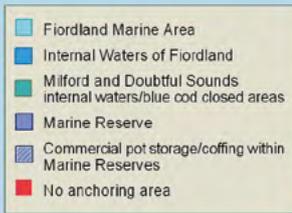
On a personal note, my latest tenure is up and I have chosen not to offer myself for reappointment. It is not that I have lost enjoyment, in fact far from it, but I have decided that after 10 years it is time for someone new to sit at the top table and to bring in a new approach and some new thinking. I will always be grateful for the opportunity to have served the FMA, and look forward to seeing what happens in the future.

I leave you with this thought: everyone should visit Fiordland at least once in their lifetime.

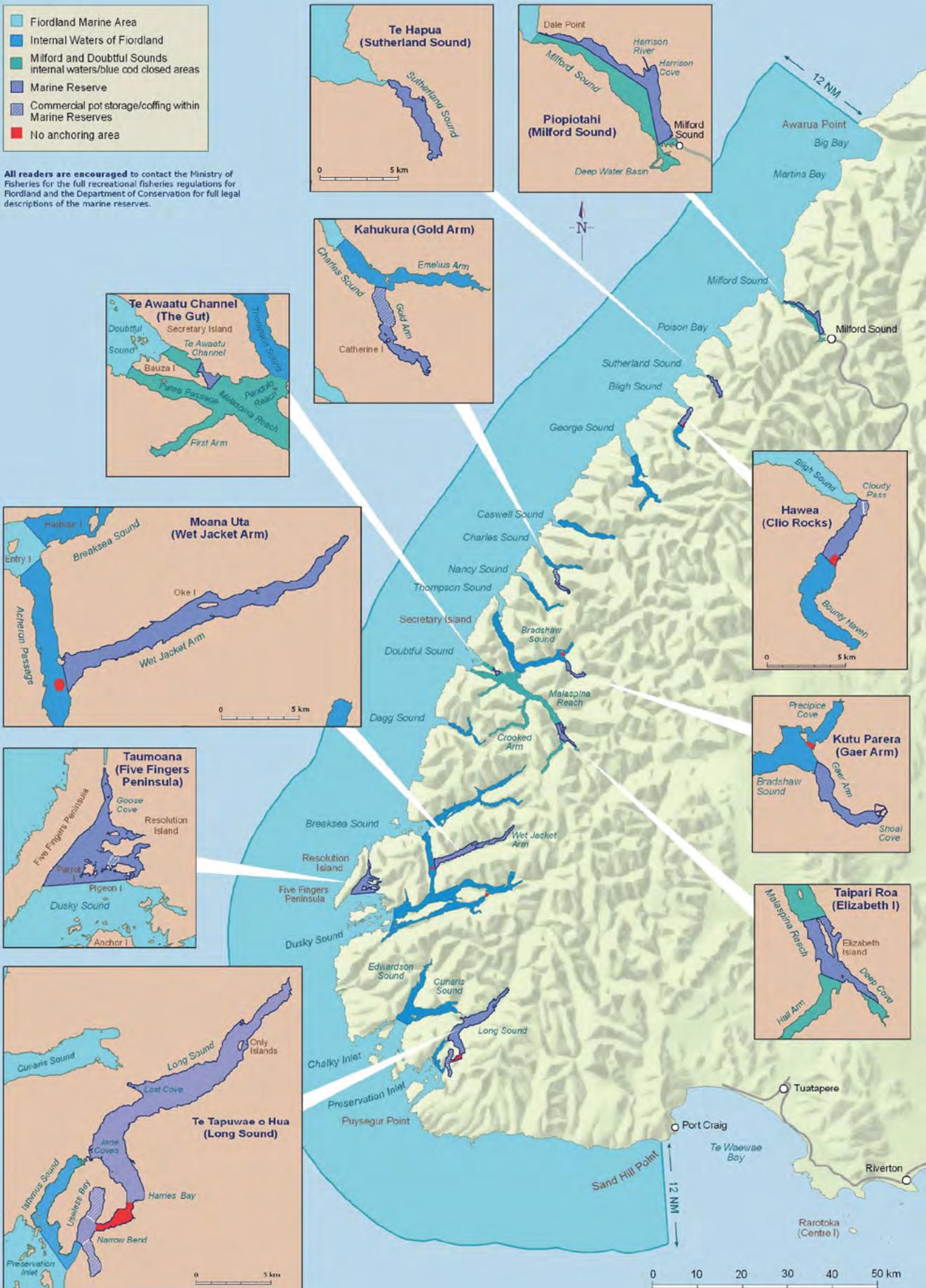


Malcolm Lawson
Chairperson

FIORDLAND (TE MOANA O ATAWHENUA) MARINE AREA



All readers are encouraged to contact the Ministry of Fisheries for the full recreational fisheries regulations for Fiordland and the Department of Conservation for full legal descriptions of the marine reserves.



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.

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. However, when one interest or sector benefited at the cost of another, 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 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 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.

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

ACHIEVEMENTS IN 2014/2015

Plans

The Fiordland Marine Guardians (Guardians) were involved in, and received reports on, the plans below. Each is discussed in further detail in Appendix 3 of the report, where management agencies report on their activities.

Biosecurity

The Guardians continued to receive reports on the monitoring of vessels in Bluff Harbour for the pest seaweed *Undaria* (*Undaria pinnatifida*). Other topics reported included:

- progress on the commercial-use policy for *Undaria*
- the development of the Craft Risk Management Standard on biofouling requirements for vessels arriving in New Zealand
- range expansion of various marine pests
- development of the Fiordland Marine Pathway Management Project (see separate page for details of this project).

The threat posed by the introduction of marine pests remains a top priority for the Guardians. The Guardians are pleased that the work carried out in Bluff Harbour retains a very high level of support and awareness from owners of vessels that have been found to have *Undaria*, and from those that travel to the Fiordland Marine Area (FMA).

It is also pleasing that the regular surveillance surveys carried out by Ministry for Primary Industries staff at Otago and Bluff Harbours have not identified any new marine pests.

Compliance

The Guardians support the ongoing compliance activities, in particular Environment Southland's extension to checking that conditions of coastal surface water consents are being complied with. Compliance rates reported by all agencies are high.

Communications

During the year, new information, reports and links were added to the Fiordland Marine Guardian's website (www.fmg.org.nz). This continues to be a major source of contact and information for both the Guardians and the public.

The 2013/14 Annual Report was sent to approximately 500 individuals, groups and organisations. Half of these now choose to receive the report electronically, via a link to the website.

The Communications sub-committee members Anne McDermott and Jon Clow were involved in a number of activities during the year, including:

- contributing to the update of the communications plan that is headed jointly by the Ministry for the Environment and Environment Southland
- renewal of signage within the FMA
- updating the Guardians' DVD with a new section on the use of poupou as marine reserve boundary markers and the cultural significance of these to Ngai Tahu.

In addition, Anne compiled a large number of information packs comprising a copy of *Beneath the Reflections – A User's Guide to the Fiordland (Te Moana o Atrawhenua) Marine Area* and updated pamphlets from the agencies for distribution.

Biological monitoring

Priority projects

The Monitoring sub-committee identified a list of priorities for ongoing projects, including:

- a repeat of the biological baseline monitoring
- a repeat of the social monitoring project
- marine reserve monitoring
- further deep reef exploration
- china shop surveys ('china shops' are small, discrete areas containing species of special significance)
- characterisation of fiords where limited work has occurred.

Seal diet research

Research into the diet of seals residing within the FMA has been carried out through the Department of Conservation. This research originated from questions about whether the increasing seal populations posed any risk to the fish stocks, particularly in the inner fiords. While initial results showed that seals eat a wide variety of species, none were of species that were of importance to recreational fishers, with the diet being dominated by squid and small deep sea species. The results are to be refined further.

Southland Boat Show

The Southland Boat Show was held on 9–10 August 2014, and around 5000 people attended over the two days. The Guardians used a poupou as a point of interest to attract people to the display. As a result more than 50 new contacts were added to the Guardian's contact database. A large number of information packs were given to people who indicated that they either visited or were interested in visiting the FMA.

A subsequent article on the front page of "The Express" community newspaper, with a photo of Chairman Malcolm Lawson alongside the poupou, added to the exposure the Guardians gained.

Branded clothing

During the year, Guardians members each received a jacket and polo shirt that includes the Guardians' logo. These will be worn at public events, such as boat shows or presentations, to make members more easily identified.

Copper leaching tests in Milford Sound

In 2013, the National Institute for Water and Atmospheric Research (NIWA) released the results of a national project, modelling the leaching of copper from antifouling paints on vessels' hulls. This testing arose from that report. The modelling suggested that copper concentrations in some areas could be above the guidelines for the protection of marine life. Copper is used in many antifouling paints in New Zealand, and these paints are designed to leach copper while the vessels are in the water. One of the areas identified to be at risk was Milford Sound, due to the limited amount of tidal flushing that occurs within the Freshwater Basin Harbour.

With the assistance of the Milford Sound Development Authority, samples were taken for testing. Subsequent results showed concentrations to be below the detection levels for copper. Further testing of samples in Australia with enhanced equipment confirmed that concentrations were within 95 per cent of the Australian and New Zealand Guidelines for Fresh and Marine Water Quality, and were therefore below a level that would result in any biological impacts. Future checks will be carried out at five-yearly intervals.

ADVICE AND RECOMMENDATIONS GIVEN

Resource consents

The Fiordland Marine Guardians (Guardians) responded to a number of resource consent applications 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.

Southern Discoveries Ltd

The company sought an amendment to their coastal permit to both:

- increase kayak numbers from 48 to 60
- allow the use of double kayaks.

S Ellis and M Kuster

This application was to amend an existing coastal permit to increase:

- their vessel size from 20m to 26m
- passenger numbers from 12 to 15.

Meridian Energy Ltd

The company applied for a discretionary activity resource consent to allow a ship to operate in Doubtful Sound on two occasions to deliver replacement transformers for the Manapōuri Power Station.

The Guardians supported the application, as it was clearly the most appropriate avenue for delivering the transformers. Details were provided regarding appropriate biosecurity measures and operational limits that would avoid any environmental issues.



BLUE COD



BOTTLENOSE DOLPHIN

NIWA

The applicant sought consent to install four temporary oceanographic moorings in Deep Cove as part of a research project in Deep Cove, Doubtful Sound in September 2015. The moorings were to be placed between Deep Cove and Elizabeth Island, and would support several subsurface temperature and salinity loggers and an acoustic current profiler to study internal waves in the fiord.

The Guardians raised a concern as to whether the moorings will be outside normal navigation lines used by vessels when entering and exiting Deep Cove. Following assurances that the moorings would include lighting to increase the visibility of the moorings, the Guardians supported the application.

J Excell

This application was for consent to install a structure, specifically a mooring and stern lines, and to occupy the seabed in Deep Cove. The mooring is to provide for a new vessel. The position where the mooring and stern lines will be sited is in one of the areas identified by Environment Southland during the review of moorings and structures that was carried out in 2013.

Deep Cove Charters

This application was for consent to occupy the coastal marine area with a pontoon wharf and associated works in Deep Cove. Again, it was for an area identified by the 2013 review of moorings and structures.

Real Journeys

This application was for consent to install, maintain and occupy the coastal marine area with a fore and aft mooring at Helena Falls, Deep Cove. The area had been identified as suitable for up to four such moorings although the Guardians did question whether Environment Southland had envisaged the area being utilised by vessels of the size that the applicant intends mooring in the area. Due to the size of vessel and hence the distance between the fore and aft moorings there was the real possibility that other moorings may have to be moved.

Real Journeys sought a consent to install, maintain and exclusively occupy the coastal marine area with a swing mooring at Deepwater Basin, Milford Sound. Currently there is sufficient room to provide safe clearance between this and existing moorings.

Sanctuary of the Seas Ltd

This application was for consent to install, maintain and exclusively occupy the coastal marine area with a swing mooring at Harrison Cove, Milford Sound. This proposed mooring is within the Piopiotahi/Milford Sound Marine Reserve. The Guardians raised concerns about the design of this mooring, due to the size of the vessel intended to use the mooring and the adverse weather conditions that can be encountered within Harrison Cove.

Semi-permanent mooring of vessels throughout the Fiordland Marine Area

It has come to the Guardian's attention that in recent years there have been a number of private vessels brought into the fiords where they remain moored for extended periods of time. These vessels are in more remote areas, are unmanned, and the owners do not hold any form of consent to allow the vessels to remain. This is of concern due to:

- vessels being left for extended periods of time in the same place, and appear to be used only as an accommodation base for the owners and associates
- potential for vessels to become an environmental risk, either through deterioration (something that has occurred in the past where vessels have sunk at their moorings) or by breaking free and washing ashore in adverse weather
- other vessel owners could see the lack of action as tacit approval, and seek to bring vessels into the area for similar purposes.

This is not a desirable situation. The Guardians have raised this issue with Environment Southland, who will first seek clarification from the owners of their intentions.

Doubtful and Milford Sound blue cod management

The Ministry for Primary Industries released a consultation document seeking the views of stakeholders on the future management of the Doubtful and Milford Sound blue cod stocks. Fishing in these areas for blue cod has been prohibited since 2005. The closure has allowed research to be carried out into the abundance, sustainability and dynamics of the populations. It has always been the intention of the Guardians to develop a management plan once sufficient information was available from the research to guide the formulation of recommendations for such a plan.

The Guardians identified that in considering the reopening of Doubtful Sound to recreational blue cod fishing, the whole of the Doubtful Sound complex (Doubtful, Thompson and Bradshaw Sounds) needed to be considered in the decision. This is due to the close relationship between the three Sounds, and the anecdotal evidence that the closure of Doubtful Sound has resulted in fishing effort shifting to the other two Sounds, with resulting increase in pressure on the stocks in those areas.

The Guardians recommended that the consultation document include options for a low daily bag limit of between one and three blue cod that can be taken in the Doubtful Sound complex. This will achieve the best balance between utilisation and sustainability concerns for the area.

It was also recommended that Milford Sound remain closed. This was due to the limited habitat within Milford Sound, and concerns that any amount of fishing pressure on the very limited population will have adverse effects on sustainability of that stock.

A decision document has been prepared for the Minister for Primary Industries.

Proposed listing of Dusky Sound/Tamatea and Preservation Inlet/Rakituma as historic areas

In October 2014, the Guardians received a presentation from staff of Heritage New Zealand (formerly the Historic Places Trust) regarding proposals to list Dusky Sound/Tamatea and Preservation Inlet/Rakituma as Historic Areas. These areas contain numerous sites of historical significance and were first identified in 1995 as areas worthy of recognition. Both encompass land and marine areas within their boundaries.

The Guardians sought clarification on the implications of listing on the development of future management strategies for the area, and also asked to what extent marine-based activities could be restricted as a result of the listing. After receiving further information, the Guardians resolved that listing these as historic areas was likely to enhance the protection of historic structures in the Fiordland Marine Area's underwater environment, and therefore Heritage NZ and the Guardians should work together and would complement each other in this role.

A new section will be added to *Beneath the Reflections – A User's Guide to the Fiordland (Te Moana o Atawhenua) Marine Area* regarding the areas.

International Union for the Conservation of Nature petition on bottlenose dolphins

In August 2014, the Guardians became aware of a proposal by the International Union for the Conservation of Nature (IUCN) to list the Fiordland bottlenose dolphin sub-populations as a critically endangered species due to a decrease in population size. The actual implications for management are unclear, as any such a listing is then subject to United States federal legislation.

On investigation it was found that this proposal was published in 2013, and was now in its latter stages. Of great concern is that the assessment to support the proposal was carried out in 2010 using abundance estimates from 2003 and 2008. The proposal was therefore badly out of date both in terms of the age of the data used in the assessment, and the time lag between the assessment and when the proposal was published.

It is of concern to the Guardians that neither they nor Te Anau-based staff had been involved in compiling the information or in providing any submission to the process. Instead, information had been supplied by Wellington-based Department of Conservation (DOC) staff some years earlier. This meant that more recent data, which shows significant increases in the populations, was not used.

The Guardians asked DOC staff to remind their Head Office counterparts of their obligations to include the Guardians in anything involving the Fiordland Marine Area.

Meridian Energy monitoring programme

Mr Andrew Feierabend, the Statutory and Compliance Strategy Manager at Meridian Energy Ltd, presented a summary of the last year's physical and biological monitoring results. Meridian Energy Ltd is obliged to seek the Guardians' approval of their annual monitoring, as a condition of their resource consent. The report noted that there have been no significant changes for the 10 years associated with the Doubtful Sound Adaptive Management Programme. The purpose of the monitoring is to assess any impacts of the freshwater discharge on the environmental condition of the Sounds, particularly those associated with the 2012 Manapōuri Tailrace Amended Discharge (MTAD) consent (which provides for higher discharge rates under certain conditions). Last year's biological monitoring results of the intertidal and sub-tidal rock wall communities indicated that there was no significant change.

He advised that, due to issues with transformers at the Manapōuri Power Station, MTAD hadn't been used since January 2014, and it was unlikely to be used before March 2015. As a result, the Cawthron Institute (which carries out the monitoring) recommended that biological monitoring did not occur in 2015, as there is sufficient baseline data already under non-MTAD conditions. Cawthron also recommended:

- physical data collection continue as normal for 2014/15
- a condensed report summarising weather conditions, tailrace discharge, and general salinity patterns is prepared.

If MTAD is used more extensively in 2015, Cawthron recommended that biological monitoring should resume in 2016 and a standard comprehensive physical and biological report be produced. The Guardians agreed to endorse the recommendations to:

- continue with the physical monitoring at this stage
- re-examine the biological situation next year when there was more chance of the MTAD consent being utilised.

Very high frequency (VHF) coverage in the Fiordland Marine Area

The Guardians received reports throughout the year on the progress of this project, to install new repeaters in Fiordland that will increase effective VHF coverage for vessels in the Fiordland Marine Area. As with most projects carried out in the Fiordland area, the weather and financial costs have a major impact. This is the case in this instance and as a result progress has been slower than expected. At the moment Environment Southland is providing all of the finances for the project.

The Guardians agreed that as Maritime New Zealand is the government agency responsible for safety at sea it would be prudent to write to them seeking their support to enable the current work to be completed and the repeaters commissioned.

10-YEAR ANNIVERSARY OF FIORDLAND (TE MOANA O ATAWHENUA) MARINE MANAGEMENT ACT 2005

The 10-year anniversary of the introduction of the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005 was marked on 20 April 2015.

At the time that this legislation was enacted, it was considered to be ground-breaking in that it required the government agencies, both central and local, to adopt an integrated approach when managing the Fiordland Marine Area. In 2003, the then government had accepted the Fiordland Marine Conservation Strategy, and given an undertaking to enact it. The Act was seen as the solution to ensuring all of these recommendations were put in place.

A function was held in Invercargill on 10 June 2015 to mark the anniversary, and to celebrate what had been achieved over that time. The current Minister for the Environment, the Hon Dr Nick Smith, attended. He has been a long-time advocate of the Act and the Fiordland Marine Guardians (Guardians). All of the past and current Guardians attended, as did most of the agency staff who have played major roles over that time. The current Guardians were pleased to have the opportunity to acknowledge the efforts of all these people in ensuring the success of the aims of the Act.

It was particularly pleasing that the Hon Pete Hodgson and the Hon Marian Hobbs were present, being the Fisheries and Environment Ministers respectively who accepted the Strategy, and were vital in establishing the Act.

During the evening Minister Smith presented certificates of achievement to previous Guardians Sir Allan Mark, Alan Key, Laurel Teirney, and outgoing Chairman Malcolm Lawson, in recognition of their contributions to the management of the Fiordland Marine Area.



FIORDLAND MARINE GUARDIANS

PRESS RELEASE

Minister celebrates 10 years of Fiordland Marine Guardians

Environment Minister Dr Nick Smith celebrated the 10-year anniversary of the Fiordland Marine Guardians at a dinner with the Guardians in Invercargill last night.

"I am delighted to celebrate more than a decade of achievement by the Fiordland Marine Guardians, who have achieved a lot since the Fiordland Marine Management Act was enacted in 2005. They have much to be proud of. Last night was an opportunity to congratulate all the Fiordland Marine Guardians, past and present, for reaching this significant milestone and to thank them for their hard work and commitment over the years," Dr Smith says.

The Fiordland Marine Guardians were one of the first groups in New Zealand to use the collaborative process, and included representatives from stakeholder groups including commercial and recreational fishers, charter boat and tourism operators, environmentalists, marine scientists, community representatives and tangata whenua (Ngāi Tahu).

"The Guardians, and other groups such as the Land and Water Forum, have shown that collaboration is a very effective way of achieving better, more enduring results for our environment. The collaborative process has helped many groups across New Zealand reach long-term and balanced solutions," Dr Smith says.

"The Fiordland Marine Guardians, over the past 10 years, have provided expert advice on local environmental issues such as environmental monitoring, biosecurity, communications and fisheries compliance. The Guardians have helped to stop the spread of pests in the local marine environment, as well as carrying out work to educate the community and share their experiences of how working collaboratively can achieve great results for the environment.

"One of the challenges for the better management of New Zealand's oceans is a lack of information on the marine environment. The monitoring programme of the local Fiordland marine environment has given us a much better understanding of marine species and pests in the Fiordland areas," Dr Smith says.



TOP: HON PETE HODGSON, HON MARIAN HOBBS AND HON DR NICK SMITH CUT THE CAKE WHILE GUARDIANS, EX-GUARDIANS AND GOVERNMENT AGENCY STAFF LOOK ON. BOTTOM LEFT: GUARDIAN'S CHAIRMAN MALCOM LAWSON AND MINISTER OF THE ENVIRONMENT HON DR NICK SMITH.

FIORDLAND MARINE PATHWAY PLAN

The Fiordland Marine Guardians (Guardians) have long regarded marine pests to pose 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 that these pests are only one boat ride away from reaching this precious environment. Our experience with the eradication program for *Undaria* in Sunday Cove means we are all too aware of the challenge and cost involved in removing pests once they have arrived.

The Guardians have been working with Environment Southland, the Ministry for Primary Industries and the Department of Conservation to develop a pathway plan for Fiordland. Pathway plans are considered the most effective way to prevent the transport of pests, and a number of these are being developed around the country. A steering group made up of representatives from these agencies, and drawing on other expertise, has been meeting on a regular basis to draft the plan and seek feedback.

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.

The plan is currently in draft form and includes clean vessel standards (for hulls, gear, residual seawater, and bilge water) and provisions for a clean vessel pass that operators will need to hold 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.

The steering group has been seeking feedback on the proposed plan throughout the process, and recently conducted consultation meetings with a range of users of the Fiordland Marine Area. There has been an encouraging level of engagement and constructive feedback, which is being incorporated into the plan.

Towards the end of this year the proposed Fiordland Pathway Management Plan will be presented to Environment Southland, who will then go through a formal process of considering the plan. If the plan is adopted, Environment Southland will play a lead role in providing funds and staff resources for its development and implementation.

The 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.



MPI AND ENVIRONMENT SOUTHLAND BIOSECURITY OFFICERS

SUNDAY COVE SEAWEED COMMUNITY

OTHER ACTIVITIES UNDERTAKEN BY THE GUARDIANS

Meetings

Five meetings involving Fiordland Marine Guardians (Guardians) and management agencies were held during the year. In addition, three sub-committee meetings were held. Further details are in Appendix 2.

Sub-committees

The Guardians operate four sub-committees. These align with the requirement of the Act to develop plans and disseminate information on:

- biological monitoring
- biosecurity
- compliance
- communications.

The Guardian sub-committee members are:

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

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

Newsletters

The Guardians sent out two newsletters during the year, to the 494 people on the Guardians' contact database. Of those people, 252 have now opted to receive newsletters electronically.

Waitutu Mataitai Reserve

The application by the Oraka-Aparima Runaka for a mataitai reserve in the vicinity of the Wairaurahiri River mouth was approved by the Minister for Primary Industries during August 2014.

Guardian Rebecca McLeod has agreed to act as the Guardian's representative on the mataitai advisory committee.

Meeting with Auditor General's staff

During December 2014 the Chairman, Malcolm Lawson, met with staff from the Auditor General's office about the operation of the Guardians. The office was involved in a project that assessed the effectiveness of co-management and collaborative environmental group models.

The Guardians were the first group of its kind. Different groups throughout the country refer to its success. The Guardians have focused on using the annual report as a communication tool receiving compliments from Ministers and government officials, especially around the involvement of multiple government agencies in the report.

Governance and liability

Guardian Ken Grange questioned what the level of liability on the Guardians is from a health and safety perspective when contracts are being carried out which have been endorsed by the Guardians. While all contracts are let by the appropriate agency, the Guardians felt it prudent to seek legal advice on this matter in light of the anticipated strengthening of health and safety legislation.

LOOKING AHEAD – THE NEXT 12 MONTHS

Recreational fisheries monitoring and reporting

Initial discussions with the Ministry for Primary Industries have been held regarding developing a recreational fisheries monitoring and reporting system for the Fiordland Marine Area (FMA). The Fiordland Marine Guardians (Guardians) position is that accurate data on fishing effort and catch will mean better decisions can be made on managing the fisheries within the FMA. Currently data is available on commercial, customary and charter vessel activities but little is known about recreational activities.

During the year the objectives for a monitoring and reporting system will be developed, as well as an assessment of the best methods for gathering the data.



Reprint of users' guide

An update of *Beneath the Reflections – A User's Guide to the Fiordland (Te Moana o Atawhenua) Marine Area* will be carried out. It is necessary to republish it, due to the number of changes and additions needed to the original version. New information will also be included regarding the use of poupou as marine reserve markers and the listing of Dusky Sound/Tamatea and Preservation Inlet/Rakituma as historic areas.

Appointment of Guardians

The appointment period for Ken Grange and Malcolm Lawson expired in November 2014, and for Anne McDermott will expire in November 2015. A public nomination process has been run by the Ministry for the Environment on behalf of the Minister, who will present recommendations on appointments to Cabinet. We expect confirmation of appointments by October 2015.

Appointment of new Guardians' chairperson

When the new Guardian appointments are announced, the Guardians will meet to appoint a new Chairperson.

Meeting with Ministers and agency Chief Executives

During the year the Guardians intend to meet with the government agencies' Ministers and Chief Executives. It is vitally important that the Guardians continue to receive support from senior managers. The people in a number of these positions have changed since the last round of meetings, meaning that it is timely that relationships are renewed.

The Guardians will also look at an opportunity to continue the tradition of hosting Ministers on visits to the FMA.

Doubtful and Milford Sound blue cod management

It is intended that regulatory amendments to allow changes to the management of blue cod (see Advice and recommendations section) will be in place from 1 October 2015.

Additional poupou for Milford and Doubtful Sounds

As a result of the installation of poupou as marine reserve boundary markers in the more remote fiords, the Department of Conservation has agreed that they can also be used to mark the boundaries of the three marine reserves within in the Doubtful Sound complex and in Milford Sound. Meridian Energy and Real Journeys have confirmed funding support for the production of poupou for these areas.

During 2015/16, the Guardians and agencies will assess the durability of those already in place, decide on the materials to be used in the production, and install the new poupou. We also intend to erect one each at the Deep Cove and Milford Sound wharves for advocacy and information purposes.

Biological baseline monitoring report

A project to repeat previous biological baseline surveys will be carried out in February 2016. Reports and analysis of the results will be presented to the Guardians and agencies in the following months.

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
 - (i) 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;² or
- e) the Minister of Conservation.

² The Minister for Primary Industries is now responsible for Fisheries and Biosecurity.

APPENDIX 2: MEETINGS – DATES AND TIMES

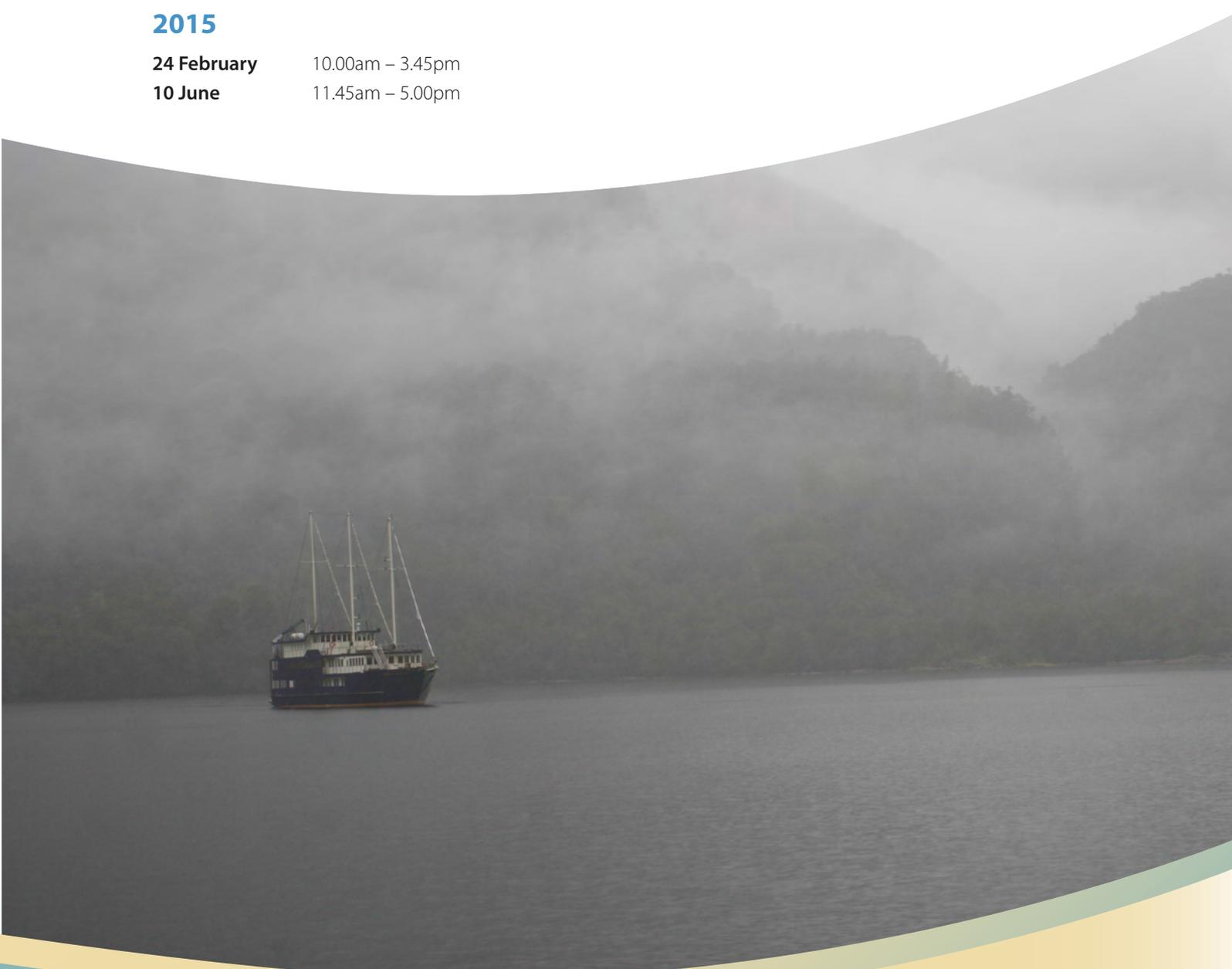
In accordance with Section 20 of the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005, details of meetings held during the year are as follows:

2014

7 August	10.30am – 3.40pm
13 October	10.00am – 3.40pm
21 October	9.00am – 10.30am <i>Biosecurity sub-committee meeting</i>
26 November	10.00am – 11.30am <i>Communications sub-committee meeting</i>
11 December	10.00am – 3.30pm
16 December	10.00am – 12.00pm <i>Biosecurity sub-committee meeting</i>

2015

24 February	10.00am – 3.45pm
10 June	11.45am – 5.00pm



APPENDIX 3: 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 Fiordland Marine Guardians (Guardians)
- coordinates the Fiordland (Te Moana o Atawhenua) Marine Area Communications Plan
- supports the Minister in fulfilling his obligations under the Act.

In June, the Hon Dr Nick Smith, Minister for the Environment, joined the Guardians to acknowledge and celebrate their 10-year anniversary. He noted that the Guardians have:

- provided expert advice on local environmental issues such as environmental monitoring, biosecurity, communications and fisheries compliance
- helped to stop the spread of pests in the local marine environment
- helped educate the community
- shared their experiences of how working collaboratively can achieve great results for the environment.

Achievements

Nominations for new Guardians

An open nomination process began in the first quarter of 2015, as three guardians have terms that have expired, or will do in the near future. The Cabinet Appointments and Honours Committee will approve final appointments, following recommendations from the Minister.

DVD: Beneath the Reflections

A new section was added to the Guardians' DVD *Beneath the Reflections: The story of the Fiordland Marine Guardians*, which covers the newly erected poupu marking marine reserve boundaries.

Website

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

Newsletter

Two newsletters were produced in this financial year covering the pertinent issues in the area, as well as the achievements of the Guardians and management agencies. These were sent to 494 people on the mailing list.

Looking ahead

Confirmation of appointments to the Fiordland Marine Guardians

The appointment process for Fiordland Marine Guardians began in February.

DVD: Beneath the Reflections

Copies of the Guardian's DVD *Beneath the Reflections: The story of the Fiordland Marine Guardians* will be presented to libraries in the Southland region.

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.



Department of Conservation
Te Papa Atawhai

DEPARTMENT OF CONSERVATION

Role

The Department of Conservation (DOC) 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 (FMA). The key agencies work together to implement the plan, with direct input from the Fiordland Marine Guardians (Guardians). The Department is also responsible for managing Fiordland's 10 marine reserves and for the protection of marine mammals within the FMA.

Achievements

The 2014/2015 year has proven to be very busy and fruitful for the Department, with a number of projects completed and others progressing well. One of the most significant milestones was reaching the 10-year anniversary of the Fiordland (Te Moana o Atawhenua) Marine Management Act. It is a great achievement for all concerned and something that DOC has been exceptionally proud to be a part of. It is testament to the tenacity and drive of the Guardians, and those that went before them, that these 10 years have been so successful.

NIWA biosystematics programme

The first project to be completed in 2014/15 was a biosystematics contract with the National Institute for Water and Atmospheric Research (NIWA). The project used NIWA's extensive taxonomic expertise to document the major ascidian, sponge and algal communities in the Sunday Cove region of Breaksea Sound. A total of 131 species were collected and photographed; made up of 24 ascidians, 50 sponges, and 57 algal species. This project has built on work done while the *Undaria* eradication programme has been in Sunday Cove, and forms a baseline of species in the area should the *Undaria* programme be unsuccessful.

Fiordland seal diet analysis

During the Guardians review in 2010, public discussions held throughout Southland raised questions on how seals fit in to the food web and what exactly they feed on. In 2014/15, a PhD student from Lincoln University helped gather information, using DNA sampling, on what seals from the fiords eat.

Twenty-one samples were taken over two surveys from Breaksea Island in Breaksea Sound. After analysis, the main prey items found were deep sea fish species and squid/octopus species. The only recreationally important species found in the samples were tarakihi and butterfish, and these were only found in one sample. It is interesting to see that seals in Fiordland appear to have very similar diets to seals from other parts of the country, and their predominant food source comes from the deeper water species.

Poupou

The marking of Fiordland's marine reserves has carried on this year with all of the marine reserves outside of Piopiotahi/Milford Sound and Patea/Doubtful Sound being completed (with the exception of Sutherland Sound). The markers for the remaining marine reserves are still being worked on and hopefully will be finished in the coming year. DOC is very proud to have worked alongside local tāngata whenua and the Guardians to get these in place, and we hope that they will remain a prominent feature in years to come.

Undaria eradication programme

This year, the Department has once again been heavily involved in the *Undaria* programme alongside Environment Southland and the Ministry for Primary Industries (MPI). The programme is still on track to realise the goal of ridding the fiords of *Undaria*, but it is still too early to be complacent. A lot of hard work still needs to be done, but we are definitely heading in the right direction. The agencies would like to take this opportunity to thank all of the people that have been involved in the project this year, especially all of the contract divers, John Twidle, and Meridian Energy. Also a special thanks to Hannibal Hayes and Southern Lakes Helicopters, without your help the project would struggle to function.

To complement the *Undaria* work, DOC has been involved in the steering group for the development of a biosecurity Pathways Plan. This plan, if successful, will help to safeguard the fiords from unwanted pests.

Marine mammals

DOC's annual bottlenose dolphin monitoring programme, run in conjunction with Otago University and the Fiordland tourism operators, continued last year with three trips in to Patea/Doubtful Sound and three in to Dusky Sound. Both populations are currently doing well, with numbers sitting at 64 and 133 respectively. No new calves were born in Patea/Doubtful Sound in the 2014/15 summer. This was probably due to having such a good breeding season the year before. Five calves were born in Dusky Sound over the summer.

One of the most exciting developments over the past couple of years has been the increase in sightings of humpback whales off the Fiordland coast. Up until recently, sightings were a relatively rare occurrence, but it seems that each year numbers are increasing. It is currently believed that the whales are part of the Australian population coming across the Tasman, rather than animals migrating from tropical waters to the North. More research is needed to confirm that this is the case.

Looking ahead

The year ahead is shaping up to be another busy, but exciting, one for the Department.

There is a contract in place with NIWA to repeat the baseline biological monitoring of the Fiordland area, which will help inform how the biological systems are trending since the Act began in 2005. The fieldwork for this will take place in February and there will be a report available next year with the results.

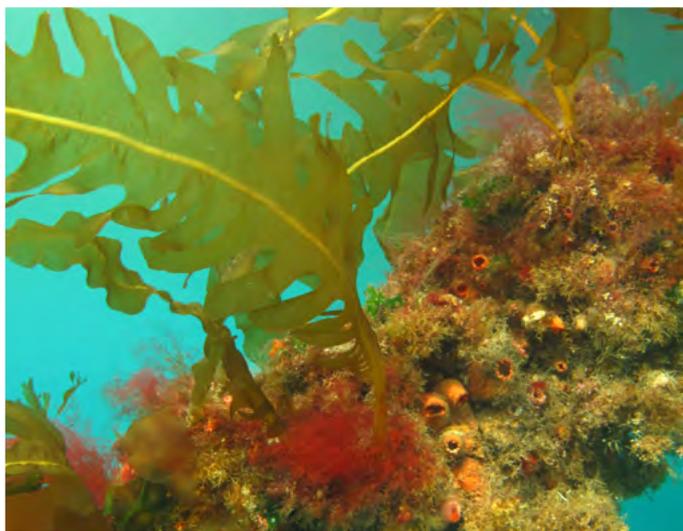
Work will continue on the *Undaria* programme with Environment Southland and MPI. This year we hope to make significant strides towards realising our long-term goals for eradication. With the Pathways Plan pushing forward, we will hopefully add to the protection of the fiords and make the need for programmes like the *Undaria* response a thing of the past.

Both the marine mammal programme and the installation of the pou pou markers in Piopiotahi/Milford Sound and Patea/Doubtful Sound will also continue.

Congratulations to the Guardians – here's to the next 10 years of looking after the fiords.



DOC BOAT, DOUBTUFL SOUND



PEST SEAWEED, UNADARIA PINNATIFIDA



MINISTRY FOR PRIMARY INDUSTRIES

The Ministry for Primary Industries (MPI) has a mandate to grow and protect New Zealand. Its focus is to:

- maximise export opportunities
- improve sector productivity
- increase sustainable resource use
- protect New Zealand from biological risk.

Key MPI functions of interest to the Fiordland Marine Area (FMA) 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.

MPI 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 MPI in ensuring compliance.

Biosecurity

Role

MPI is responsible for leading the development and maintenance of the biosecurity system supporting sustainable fisheries management and protecting the environment from biological risk. MPI works with industry and a wide range of other partners to agree and implement biosecurity planning to minimise impacts of marine biosecurity risks to the FMA.

MPI'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.

Achievements

In 2009/10, MPI contracted the Cawthron Institute to develop a five-year risk management operational plan for Fiordland. This plan and the Strategic Plan have now been reviewed by MPI, the other government agencies, and the Fiordland Marine Guardians (Guardians) to form a five-year Fiordland Marine Biosecurity Plan. For completeness the joint agency marine biosecurity response agreement has also been incorporated. Final sign-off on the Biosecurity Plan by all parties is underway. The plan sets out recommended activities that MPI, other relevant agencies and the Guardians could take to mitigate marine biosecurity risks to Fiordland.

In the last year, MPI has worked with the other agencies and the Guardians to implement previously planned biosecurity recommendations. These are outlined below.

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 FMA 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 in 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 MPI to undertake these inspections for at least another year.

- **Joint agency compliance and surveillance patrol.** In April 2015, MPI 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.

Communications

- A marine biosecurity message for Fiordland was placed on the marine pages of the Metservice web page from October 2014 to April 2015. "*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 biosecurity articles have been placed in the Mana marina *Onboard Magazine*, and the New Zealand Fishing News.

Fiordland Marine Pathway Management Plan

- MPI has been a key member of the steering group working towards the development of the Fiordland Marine Pathway Management Plan (refer to the Fiordland pathway management plan section for further information).

Joint-agency response to *Undaria* in Sunday Cove

MPI continues to work collaboratively with the Department of Conservation (DOC) and Environment Southland on the joint agency attempt to locally eliminate the invasive marine pest seaweed, *Undaria*, from Sunday Cove, Breaksea Sound. Significant efforts have been made over the last year to further improve the effectiveness of the dive surveys, and to reduce the chance of any *Undaria* plants reaching maturity. Results to date are promising as there has been a significant reduction in the number of *Undaria* sporophytes found, even with intensive search efforts (refer to the *Undaria* in Sunday Cove section for further information).

Targeted marine pest surveillance

As part of a National Marine High Risk Site Surveillance Programme, MPI undertakes biannual 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 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 FMA, 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 last 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, including detections in Nelson, Picton, and many new locations around the North Island, 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. MPI and regional councils are however responding to range extensions of marine pests such as the Mediterranean fanworm.

Craft Risk Management Standard progress

MPI 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.

MPI has been engaging with vessel sectors on how they will comply with the standard by May 2018. For more information see: www.biosecurity.govt.nz/files/regs/ships/crms-biofouling-standard.pdf.

This includes talking to Cruise New Zealand and the main cruise lines about the provision that any first arrivals to Milford 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.

MPI will soon start to require biofouling management information from ships on part of the existing Ballast Water Declaration that must be supplied to MPI with the Advance Notice of Arrival. This information will help MPI 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, MPI 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. MPI has been identified as the lead agency on national marine pathway management, with regional councils leading at a regional level. In this role, MPI 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 understand where to invest effort to achieve the greatest risk reduction. Ultimately for marine pest and pathway management to be successful, MPI and regional councils will need to work in collaboration with tāngata 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 CMRS.

MPI is creating governance and working group structures to support the Domestic Marine Pathway Management project, which will use Treasury's Better Business Case guidance and the reports commissioned from NIWA and the Cawthron Institute to develop a high level strategic business case to inform and develop a Domestic Marine Pathway Management Strategy.



FISHERIES

Achievements

Compliance

Fishery Officers from the MPI Compliance Southland district office conduct fisheries enforcement activities in the FMA across the compliance spectrum of commercial, recreational and customary fishing.

The Fiordland Marine Area Integrated Compliance Plan remains a key focus of the MPI Compliance – Southland district team, which is tasked with leading and coordinating the delivery of an integrated compliance programme in collaboration with DOC and Environment Southland.

This includes sharing compliance information between the agencies, and MPI reporting back to the Guardians on a regular basis all relevant fisheries compliance matters including any non-compliance issues.

To deliver an integrated enforcement programme, MPI Fishery Officers work closely with DOC Compliance Rangers and Environment Southland Compliance Officers to optimise enforcement activities such as conducting joint agency seaborne patrols.

In April 2015, a nine-person joint MPI/DOC/Environment Southland agency compliance and biosecurity team conducted a five-day seaborne patrol aboard the DOC GV Southern Winds. The patrol covered eight fiords from Thompson Sound to Preservation Inlet, including six marine reserves. As a result, inspections were carried out of 30 manned vessels, including seven commercial fishing vessels, five amateur-fishing charter vessels, and 18 other recreational craft. This resulted in 156 persons being inspected, with the predominance of charter and recreational parties involved in a mix of deer stalking, rock lobster diving, and line fishing for blue cod and groper. Predictably, rock lobster, blue cod and groper dominated the inspected catch composition, although fishers had also caught lesser amounts of blue nose, trumpeter, tarakihi, sea perch and paua. Pleasingly, only three separate amateur fisheries regulation breaches were detected and appropriately resolved by infringement or warning letters.

Despite the three detected fishing offences, fisher compliance and behaviour was excellent, with good awareness and positive views of the more recent recreational fishing rule changes promoted by the Guardians.

At other times during the year, MPI fishery officers have independently conducted waterborne surveillance using the MPI patrol vessel *Ahuriri* to patrol both Milford Sound and the Doubtful/Bradshaw and Thompson Sound fiord complex, monitoring recreational and commercial CRA8 fishing activity.



BUTTERFLY PERCH AND BLACK CORAL



SPINY SEA DRAGON

Over the weekend of 9-10 August 2014, MPI compliance officers and the Response directorate (Marine Biosecurity) staff manned an MPI exhibition stand at the 2014 Southland Boat Show alongside the Guardians and Environment Southland stands. The twin key MPI messages promoting fishers to download the recreational fishing rules before going fishing, and boaties to ensure vessels have clean hulls and gear before heading into Fiordland, appeared to be well received. This was the first Boat Show for five years, owing to the 2010 stadium roof collapse. Plans are afoot for MPI to again participate in this year's 2015 Boat Show Southland.

Fisheries management

Engaging with the Guardians on key fisheries issues remains an important component of the work of MPI fisheries management. The past 12 months have seen progress on proposals to review the recreational blue cod fishery in Doubtful Sound.

The recreational blue cod fisheries in Doubtful and Milford Sounds have been closed since 2005, due to concerns about localised depletion and a need to research the fisheries in the absence of fishing pressure.

Over time, the Guardians have become concerned that the closure in Doubtful Sound has led to negative impacts on the adjoining Thompson and Bradshaw Sounds, as fishing activity has been displaced to these locations. Furthermore, research on the blue cod populations in Doubtful and Milford Sounds has been undertaken for some years now. The results indicate that although the size of fish may be increasing, the overall number of fish is not. This is likely to be because habitat preferred by blue cod is limited in these locations.

Previously, the Guardians had recommended that the recreational blue cod fisheries in both Doubtful Sound and Milford Sound be reviewed. Following a closer review of the science, the Guardians have determined that Milford Sound is unlikely to sustain any recreational fishing pressure, and advised that it should remain closed at this time.

The impact of displaced fishing effort from the Doubtful Sound closure on Thompson and Bradshaw Sounds has remained a key concern for the Guardians. Anecdotal reports and MPI compliance records suggest that the blue cod fishery could be declining in these fiords.

The Guardians consider that a low bag limit is likely to be sustainable in Doubtful Sound, and therefore that the current closure may be restricting utilisation unnecessarily. They have proposed that the recreational blue cod fishery in Doubtful Sound be reopened, and a low bag limit set for Doubtful, Thompson, and Bradshaw Sounds.

Consultation on options for the Doubtful Sound fishery ran from 22 April to 18 May 2015. MPI is currently developing a decision document, which will go to the Minister for Primary Industries to make a final decision on rules for the recreational blue cod fishery in Doubtful, Thompson, and Bradshaw Sounds.

Looking ahead

MPI looks forward to continuing to work closely with the Guardians in the future.

MPI (Biosecurity) will continue to work with all Fiordland partners to implement the Biosecurity Plan recommendations over the next year, including the development of the Fiordland Marine Pathway Management Plan. MPI will continue to work collaboratively with DOC and Environment Southland in the attempt to locally eliminate *Undaria* from Sunday Cove.

Further information on Fiordland marine biosecurity can be found on the MPI website at: www.biosecurity.govt.nz/fiordland.

MPI expects that any outcomes of the proposal to reopen Doubtful Sound will be in place by October 2015.



ENVIRONMENT SOUTHLAND

Achievements

BIOSECURITY

Fiordland Marine Pathways Plan

Early last year we heard that Environment Southland's Council had approved the development of a joint agency (between Environment Southland, Ministry for Primary Industries (MPI), Department of Conservation (DOC), and the Fiordland Marine Guardians (Guardians)) marine pest pathways plan for Fiordland. Such a plan will provide a fantastic tool to mitigate the risks of invasive marine species reaching the Fiordland Marine Area (FMA). Since then, Laurel Tierney and the rest of the Fiordland Marine Pathways Steering Group have made substantial progress towards preparing a proposal to Council. Currently, the proposal is in its final stages before being presented.

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 to keep on top of, particularly in the FMA. 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 clean vessel, gear, and residual seawater standards, and also the requirement for vessel operators operating within the FMA for any period of time to apply for an annual 'clean vessel pass'. The clean vessel pass not only increases compliance with the standards but also encourages users to be aware of the importance of marine biosecurity and protecting Fiordland from further incursions.

Over the last year, five updates of the pathways plan process have been sent out to over 600 contacts who are involved with the FMA (marinas, ports, researchers, fishermen and fishing companies, tourism operators, regional councils), and readers were encouraged to provide feedback on the aspects of the plan. In addition to this consultation, the steering group wanted to ensure stakeholders had an opportunity to hear more about the proposal and express their views. Meetings and presentations were held with key Fiordland user groups to gather their opinions on the matter and these groups included:

- Kai Tahu
- representatives of commercial fishers (rock lobster, pāua, blue cod and Sanford)
- recreational fishers
- divers
- hunters
- tourist vessel companies
- cruise ship industry.

Overall, the feedback received from key user groups was positive and very constructive, and these groups recognised the importance of managing the marine pest pathways to Fiordland. The main issues of concern from the consultation process were:

- whether vessels that reside in the FMA permanently need to apply for an annual vessel pass
- concerns around super yachts
- the need for more public awareness.

These are issues that will be resolved in the near future, before the proposal is put to Council.

If successful, the Fiordland Marine Pest Pathways plan is set to be up and running by mid-2016.

Marine pest surveillance

In conjunction with MPI and DOC, inspections of vessel hulls for marine pests continues, both on vessels within Fiordland, and vessels arriving from other locations into Bluff. Environment Southland is increasing its activity in this area, with on-going checks for invasive marine pests in Fiordland and within Southland's Coastal Marine Area (CMA). The nationwide port surveillance programme carried out by MPI also provides information to the Regional Council on whether any new marine pests have been identified. To date, *Undaria* is the only invasive marine organism found in the Southland CMA.

To increase surveillance within Southland, a summer scholarship programme will be undertaken during the 2015/16 summer, to survey key sites for marine invasive species. The programme was established in 2013 and covered nine locations throughout Waikawa, Bluff, Riverton, Cosy Nook, Port Craig and Stewart Island. For the 2015 season we're hoping to expand and build upon the investigation and trial the use of new surveillance tool.

Fab dock

A vessel quarantine facility known as a 'fab dock' has recently been purchased with the help of MPI to increase Environment Southland's ability to control the spread of new marine invasive species. It is a PVC containment system that can be used to effectively contain a vessel (up to 20m in length) infected with marine pests such as *Undaria*, Mediterranean fanworm, and the clubbed tunicate *Styela clava*.

The fab dock will provide the ability to quickly contain infected vessels and thus immediately prevent the spread of invasive marine species. To disinfect vessel hulls and quickly kill the target pest, liquid or granulated chlorine will be added to the floating dock.

The fab dock is to be used primarily as an emergency measure if a marine pest is identified to be on the hull of a vessel travelling to or within Fiordland, or any new-to-Southland pest species such as Mediterranean fanworm or *Styela clava* is found on a vessel's hull. If a pest was identified on a vessel in Fiordland, the fab dock would be deployed from DOC's vessel, *Southern Winds*. If this occurs in other areas of Southland, vessels are likely to be at ports and popular mooring sites such as Bluff Harbour or Halfmoon Bay, and in this instance the fab dock would be deployed from a suitable location within the area, such as a pontoon or wharf.



FIGURE 1: NORTHLAND REGIONAL COUNCIL'S FAB DOCK IN USE. ENVIRONMENT SOUTHLAND'S FAB DOCK WILL BE SLIGHTLY LARGER TO ACCOMMODATE THE AVERAGE VESSEL THAT TRAVELS TO THE FIORDLAND MARINE AREA

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* individuals are removed by hand. At the beginning of each dive trip the team leader explains the search process and shows photos of *Undaria* to the dive team so they can remind themselves of what to look for. The dive leader then explains what the protocol is if *Undaria* is found. If an individual is found in a new location, a plastic triangle is deployed to mark the spot, and the *Undaria* is then placed carefully into a zip lock bag and destroyed once back at the boat. Dive leaders also encourage their teams to remove any suspect seaweed that may look like *Undaria*, as it is better to be safe than sorry.

To make searching easier, transect lines have been installed throughout Sunday Cove approximately 5m apart, to guide divers and ensure the entire habitat has been completely searched. Two dive teams of three people 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 they are searched twice. High risk areas have been determined to be those where *Undaria* has been found regularly in the past, with a buffer area around these. Double searching allows greater confidence in our ability to detect *Undaria* for a number of reasons:

- simply doubling the search effort
- having different sets of eyes searching the area
- searching the areas at different tides, different weather conditions, or from a different direction.

From trips occurring between 1 July 2014 and 30 June 2015, *Undaria* juveniles were found during five of the monthly surveys (August, November, January, February and March), 14 plants in total, and none of them were mature. No plants have been discovered in Sunday Cove since late March 2015. Despite the recent *Undaria* finds, the response team is still confident *Undaria* will be eradicated from Sunday Cove, Breaksea Sound.

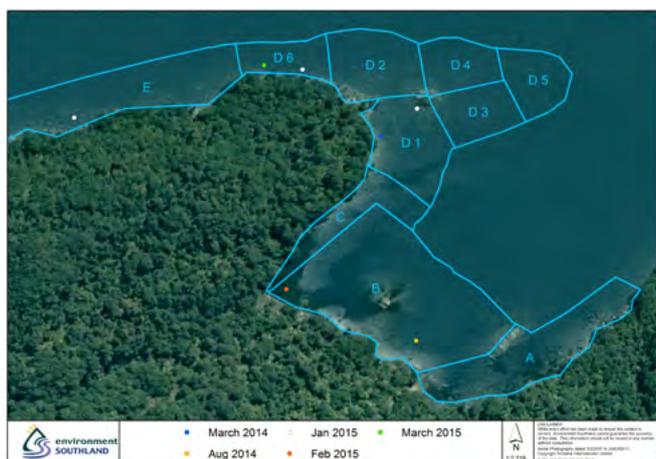


FIGURE 2: LOCATIONS OF *UNDARIA* PLANT FINDS SINCE THE RESPONSE'S INCEPTION IN 2010

Environmental compliance

The Council's Compliance Division investigated one complaint in the FMA in the last year:

- Illegal commercial vessel activity within Fiordland. An investigation was undertaken but no conclusive evidence of commercial activity was discovered. The vessel in question will continue to be monitored.

As part of annual inspections, staff interviewed vessel operators, checking for compliance with consents such as hull inspection requirements and operating limits. Structures were also inspected, and a lack of appropriate signage was identified as a common issue. Consent holders will be informed that all structures require clearly identifiable signage.

Oil spill response

Fortunately Environment Southland was only involved in one oil spill response in the FMA from July 2014 to June 2015.

On 10 January 2015, an aircraft flying into Milford Sound reported a 2 kilometre long slick near Brig Rock and about 2 nautical miles west of the entrance to Milford Sound. Concerned that the slick could have come from a sunken boat, staff contacted Carol Brown from Fiordland Fisherman's radio. Pilots from the reporting company were asked to monitor the slick on subsequent flights. They advised that the slick was moving towards Saint Anne Point, but remained well offshore and was breaking up into several smaller slicks. Staff deduced that the spill was most likely an instantaneous, rather than ongoing, spill that would naturally disperse. Carol was advised accordingly.

Resource consents

The Guardians are considered to be affected parties for any resource consent applications for the FMA, 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-201724-V1: Maria Kuster & Sean Ellis – commercial surface water activity variation to increase vessel length
- APP-20146999: Ian & Nicola McCracken – renew commercial surface water activity (after transfer from Craig Harpur)
- APP-20147305: Meridian Energy Ltd – to use a ship exceeding 1000 tons on two occasions in Doubtful Sound to transport transformers for the Manapōuri Power Station
- APP-20147363: Jeremy Excell – install and exclusively occupy CMA with a mooring at Deep Cove, Doubtful Sound
- APP-203872-V1: Robert Swale – commercial surface water activity variation to increase vessel length
- APP-20147465: Real Journeys Ltd – install and exclusively occupy CMA with a mooring at Helena Anchorage, Deep Cove, Doubtful Sound
- APP-20157864: Real Journeys Ltd – exclusively occupy CMA with a mooring at Precipice Cove, Bradshaw Sound
- APP-20147491: Real Journeys Ltd – exclusively occupy CMA with a mooring at Precipice Cove, Bradshaw Sound
- APP-301928: Southern Discoveries Ltd – renew commercial surface water activity in Milford Sound.

Improving very high frequency (VHF) coverage

The Environment Southland funded installation of a VHF repeater site equipment continues on into the 2015/16 year, with the project aiming to fill in VHF coverage gaps in the Fiordland area.

Contractors commissioned by Environment Southland to improve VHF radio coverage in Fiordland by linking existing radio towers and other structures have made steady progress. The first repeater site at Mt Clerke is expected to be completed late in 2015.

Milford Sound Safety Management System

Environment Southland implemented a Safety Management System (SMS) for commercial operators in Milford Sound in 2014/15. The SMS is currently awaiting approval by Maritime NZ.

A cruise ship SMS is currently being worked on, identifying risks associated with cruise ships visiting Fiordland.

Milford Sound weather stations

The Milford Sound Development Authority and Environment Southland jointly funded weather station at Copper Point continues to work well after having been repaired in 2014. A second weather station at Saint Anne Point, which Environment Southland is funding, is still in the development stage and is expected to be up and running by the end of 2015. The combination of these two stations will provide significantly better coverage to improve voyage planning for local operators, and for cruise ships arriving from the southern fiords and Australia.

Looking ahead

Environment Southland will continue to work with the Guardians and other management agencies, providing a local perspective in managing the FMA.

APPENDIX 4: GUARDIANS' BIOGRAPHIES



Stewart Bull

Stewart Bull has extensive knowledge of customary uses of Fiordland, particularly customary fishing. He is the chair of the Ōraka-Aparima Rūnaka and is also a Tāngata Tiaki, appointed by the then Minister of Fisheries, in recognition of his particular expertise in local customary fishing management and resource issues. He is the Ōraka-Aparima Rūnaka representative on the Customary Fisheries Advisory Group. Stewart has been a member of the Guardians of Fiordland since its inception.



Jonathan Clow

Jonathan brings a wealth of maritime and management experience to the Guardians having started out life 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-specialised as Advanced Navigator or 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 centered 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.



Jerry Excell

Jerry Excell 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 12 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 is also involved in research projects; collecting and providing data about the rock lobster fishery.



Ken Grange

Ken Grange 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.



Malcolm Lawson

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 is the chairperson of the Guardians.



Anne McDermott

Anne has significant experience of the area, having dived, fished and tramped in Fiordland for 20 years. She has dived in the fiords more than 350 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.



Rebecca McLeod

Rebecca has extensive knowledge of Fiordland from the rainforests to its unique marine environment, having actively conducted ecological research in the area over the past 10 years. She is Lead Scientist for Oritain Global Ltd, a postdoctoral fellow in the Chemistry Department at the University of Otago and also sits on the Marine Protected Areas Sub-committee of the NZ Marine Sciences Society (NZMSS). Rebecca was also previously an elected member of the NZMSS council.



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 DOC, MFish 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 implementing the first two marine reserves in Fiordland.

BENEATH THE REFLECTIONS

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



This **fully water-proof** 'one-stop shop' guide will help you get the most out of your visit to Fiordland.

It contains information on:

- how the Fiordland Marine Area was established
- the history and physical and biological environment of the Fiordland Marine Area
- relevant Fiordland marine regulations
- practical information on visiting the area.



ON SALE AT:



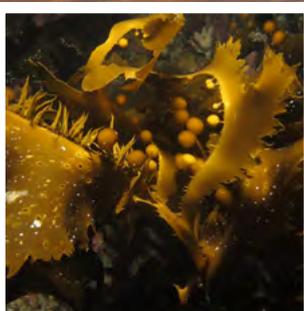
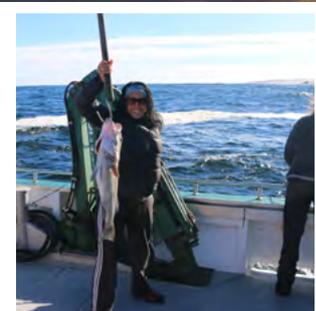
DOC's Fiordland National Park Visitor Centre
Lakefront Drive, Te Anau, phone: 03 249 7924,
email: fiordlandvc@doc.govt.nz

DOC's Invercargill Office
Level 7, 33 Don Street, Invercargill



Or online at www.fmg.org.nz





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