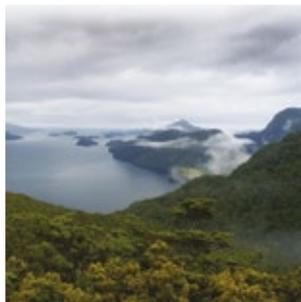


Annual Report

for the year ended 30 June 2014



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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WETJACKET ARM POUPOU INSTALLATION

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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: Fur seal pup (*DOC*). Octopus (*Richard Kinsey, DOC*). Resolution Island (*Richard Kinsey, DOC*). Psuedochinus sea urchin (*Richard Kinsey, DOC*). Bottlenose dolphin (*Chloe Corne, DOC*).

BACK COVER IMAGES: Fiordland crested penguin (*Richard Kinsey, DOC*). Doubtful Sound (*Richard Kinsey, DOC*). Jason's nudibranch (*Richard Kinsey, DOC*). Wet Jacket Arm (*Richard Kinsey, DOC*). South East Bligh pou pou installation (*DOC*).

INSIDE FRONT COVER: Wetjacket Arm pou pou installation (*DOC*).

PAGE 2: Sea kayaking in Deepwater Basin, Milford Sound (*Tony Brunt, Hedgehog House*).

PAGE 7: Deep Cove, MV James McKerrow and MV Aries (*DOC*).

PAGE 8: Fiordland crested penguin (*Richard Kinsey, DOC*). Dusty Buller's Mollymawk (*Richard Kinsey, DOC*).

PAGE 12: Fiordland pou pou installations (*DOC*).

PAGE 14: Kina - Evechinus Chloroticus being deployed in Sunday Cove (*Derek Richards, Environment Southland*).

Pest seaweed - *Undaria Pinnatifida* (*Kath Blakemore, DOC*).

PAGE 19: Harrison Cove, Milford Wanderer and tourists kayaking (*Colin Monteath, Hedgehog House*).

PAGE 21: Bluenose dolphins (*Chloe Corne, DOC*).

PAGE 25: FV Southern Star MPI boarding (*Alan Christie, MPI*).

PAGE 26: Rock lobster (*Richard Kinsey, DOC*). Unlawful cod pot retrieved in Seymour Island (*Stephen Logie, MPI*).

PAGE 30: Breaksea Sound (*Richard Kinsey, DOC*).



CHAIRPERSON'S REPORT

As each year goes by, important events occur that reinforce the importance of the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005's (the Act) influence on what happens in the Fiordland (Te Moana o Atawhenua) Marine Area (FMA) and other places. This last year is another example of this.

In February 2014, members of the Fiordland Marine Guardians (the Guardians) agencies and iwi gathered in Charles Sound to take part in the unveiling of the first poupou. These mark boundaries of marine reserves. This significant event demonstrated the willingness of all parties to work together to produce the best outcome for the area. This event is covered in more detail in a feature article within this Annual Report.

Secondly we witnessed the culmination of another body of work that has taken a number of years to come together, the introduction of the Kaikōura (Te Tai ō Marokura) Marine Management Act. This is the implementation by the government of the integrated strategy that Te Korowai o Te Tai ō Marokura - the Kaikōura Coastal Marine Guardians – had developed. This group drew on our experiences and examples that have already occurred in Fiordland. The process they undertook and the results are very similar. I congratulate them on their achievement in providing community backed solutions for another very important coastal area. There is no doubt that a large portion of the Government's confidence in supporting Te Korowai comes from the ongoing success of the Fiordland initiative.

The last year has also seen a continuing focus on marine biosecurity. Various projects are reported on within this Annual Report, including an update on the *Undaria* eradication programme and the formation of the Fiordland Marine Pest Pathway Plan. The protection of the unique biodiversity found in the FMA remains the biggest issue and I cannot see this changing. We commonly see vessels coming from northern ports where the focus on biosecurity and the need to keep boats and gear clean of marine pests is not so clear. Spreading the message is a challenge and the Guardians and agencies are always looking to develop strategies to get the information out to this wider audience.

As indicated in the last Annual Report, fisheries regulations amendments became live on 1 October 2013. The daily rock lobster bag limit from within the inner waters increased and the use of rock lobster pots were prohibited to protect a sensitive area through Pendulo Reach. The changes have been well received.

Topics and the other activities that you will read about reflect the management of Fiordland's fisheries and the marine environment is an ever evolving process. It may come as a surprise to some people that the Guardians do not support the proposal to include the waters and seabed of the fiords as an extension to the Te Wāhipounamu – South Westland World Heritage Area. The Guardians are unequivocal in their view that we must remain free from outside influence to develop advice and recommendations. The intention of the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005 is for local community based decisions. We hold strongly to that and remain committed to doing the best for the area and all that have an interest in it.



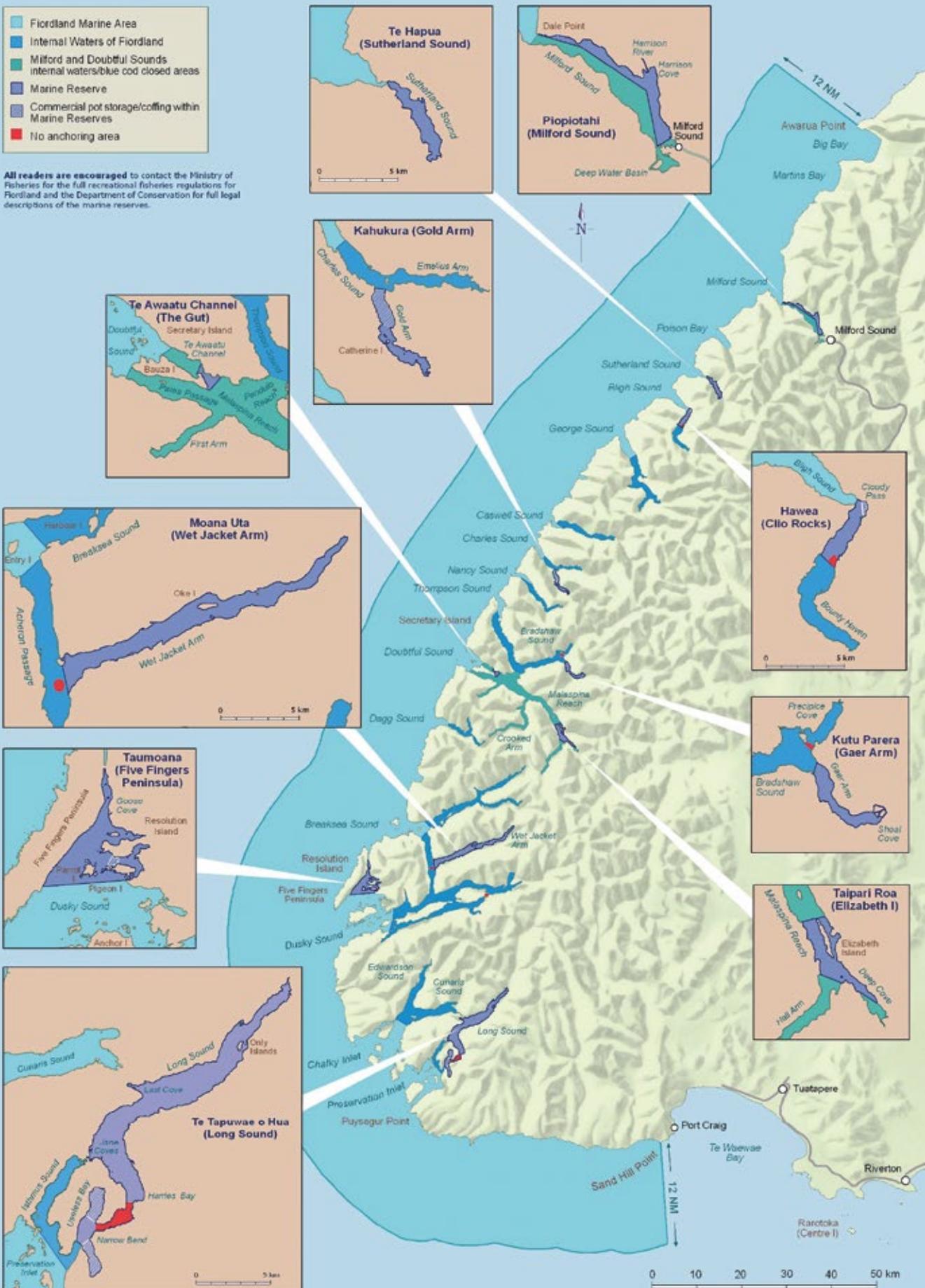
Malcolm Lawson

Chairperson

FIORDLAND (TE MOANA O ATAWHENUA) MARINE AREA

- Fiordland Marine Area
- Internal Waters of Fiordland
- Milford and Doubtful Sounds internal waters/blue cod closed areas
- Marine Reserve
- Commercial pot storage/colling within Marine Reserves
- No anchoring 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 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.

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

ACHIEVEMENTS IN 2013/2014

Plans

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

Biosecurity

The Guardians continued to receive reports on the monitoring of vessels in Bluff Harbour and Stewart Island for *Undaria pinnatifida* (*Undaria*) and other marine pests. 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, marine pest surveillance in Bluff and Otago harbours, joint agency response to *Undaria* in Fiordland, the domestic marine pathways project and progress with development of the Fiordland Marine Pathway Management Plan.

Compliance

The Guardians were pleased to receive reports that compliance trips within the Fiordland (Te Moana o Atawhenua) Area (FMA) found a very high level of awareness of the fisheries regulations and other rules. In turn this has resulted in low levels of offences being detected.

Communications

During the year the website (www.fmg.org.nz) was redesigned by the Ministry for the Environment and new information, reports and links added (including one for the Fiordland weather and the Marine Mate app²). A further 150 copies of the Guardian's DVD were distributed to schools, libraries, marinas and interested groups.

Trip to Doubtful Sound

At the 2012 Southland Environment and Conservation Awards, the Guardians were presented with the Environmental Achiever Award. The prize included goods provided by Real Journeys Ltd. As a result, during September 2013 the Guardians hosted Rob Phillips, Chief Executive of Environment Southland and Peter Bodeker, Chief Executive of the Otago Regional Council, as well as management agency staff, on an overnight trip on board the 'Milford Wanderer' to the Doubtful Sound complex.

The focus of the trip was on marine biosecurity with presentations and discussion on the threats and strategies to prevent the introduction of unwanted marine organisms. Involving Messers Phillips and Bodeker helped reinforce the role and functions of regional councils in biosecurity, particularly in the development, implementation and support for the Fiordland Marine Pathway Management Plan³. They also have important links into the wider network of South Island Regional Council Chief Executives.

Governance training

During August 2013 Guardians Anne McDermott, Jon Clow and Rebecca McLeod attended a governance workshop with the New Zealand Institute of Directors. The topics covered provided valuable insight and assistance in understanding and undertaking their role as Guardians.

Signage

Guardians Anne McDermott and Jon Clow directed a review of the signage within the FMA and decided that the current signs contained too much and some out of date information. Newly designed signs now highlight the main points and more detailed information packs are available for visitors to take with them.

² See advice and recommendations on page 11

³ See advice and recommendations on page 10

ADVICE AND RECOMMENDATIONS GIVEN

Resource consents

The Fiordland Marine Guardians (the 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
- notified, where the Guardians provided a submission.

Those of particular interest included:

Applications for Structures and Moorings and Consent to occupy the Coastal Marine Area in Deep Cove

A review of moorings and structures within Deep Cove was undertaken by Environment Southland during 2013. A legal opinion was sought by Environment Southland into options relating to rights of occupation of moorings and structures. The advice received stated that the only options available were for 'non-exclusive' or 'exclusive rights'. A number of existing consents had previously been granted providing for 'preferential' rights but there is no legal provision for this, even though the Southland Regional Coastal Plan makes reference to 'preferential rights'. Therefore some applications have been amended and others withdrawn.

Environment Southland then advised the Guardians that it will allow those consents already granted for 'preferential' access to stand for the life of the consent.

The Guardians commented on some of these applications, particularly in regard to whether the applicants met the test of being an owner whose vessel occupied berths or moorings prior to 31 December 2010 and thus having priority in applying for consent. This was another outcome from the review carried out by Environment Southland.



THE FIORDLAND MARINE GUARDIANS



DEEP COVE, MV JAMES MCKERROW AND MV ARIES

MA and D Soper

The applicant's previous application for consent for a mooring at Helena Falls Anchorage was declined and they had been advised that compliance action may be taken as their vessel was moored without approval. The Guardians requested that Environment Southland staff work through options with them and they have now been granted a non-exclusive consent to construct a structure and occupy the adjacent marine area.

Island Escape Cruises Ltd

The company lodged an application to occupy Coastal Marine Area with a mooring at Harrison Cove. There are already four moorings in the area but there is space for five. The company has stated that the mooring would be available to other people when it's not in use by the applicant. The mooring is inside the Piopiotahi (Milford Sound) marine reserve so the Guardians also had an interest in this application as part of their role as the Marine Reserves Advisory Committee for the Fiordland (Te Moana o Atawhenua) Marine Area (FMA). The company indicated that it intends to commission a vessel from elsewhere in the country for travel to the FMA to install this and other moorings in some of the other northern fiords, for which resource consent is not required. The Guardians advised that potential biosecurity concerns about the vessel and the equipment needed to be addressed.

AW and BA Johnson

The applicants sought renewal for an existing consent to moor a barge permanently in Luncheon Cove, Dusky Sound.

Southern Lakes Helicopters

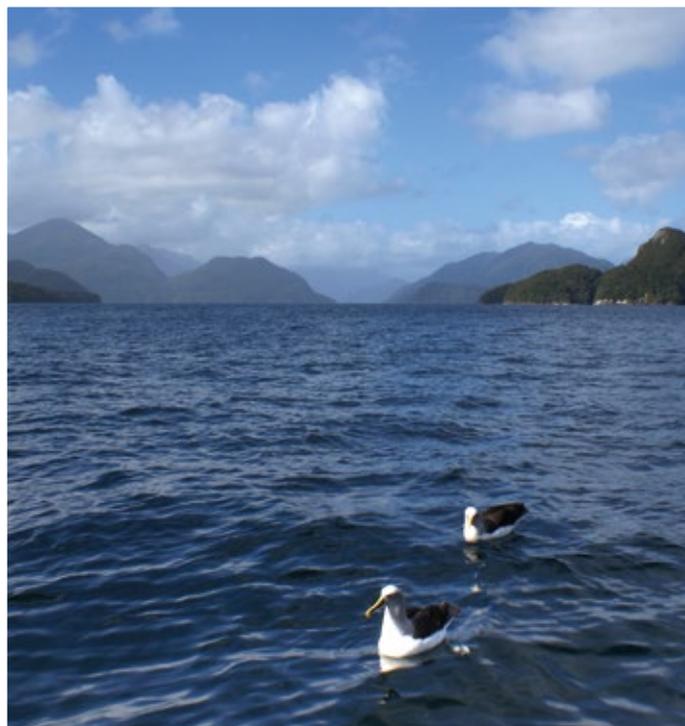
The company sought renewal of an existing consent for a helipad at Blanket Bay, Doubtful Sound.

K Purtscher and M Johnson

The applicants applied for consent to install a structure in Deepwater Basin in Milford Sound, specifically a mooring for their privately owned vessel. The Guardians questioned whether the radius of the swing mooring was likely to impact on vessels at other moorings in the area and commented that the duration of the consent (35 years) was inconsistent with other similar applications. The applicants were able to demonstrate that the position of the proposed mooring was safely clear of any other vessels and have agreed to a more suitable term.



FIORDLAND CRESTED PENGUIN



DUSTY BULLER'S MOLLYMAWK

Southland/Murihiku Draft Conservation Management Strategy

The "Looking Ahead – The Next 12 Months" section of the 2012/13 Annual Report included a commentary on the impending release for consultation of the Southland/Murihiku Conservation Management Strategy (CMS) during 2013/14.

The Guardians submission commented on the following proposals:

- An application for World Heritage status for the waters and seabed of the fiords of Fiordland (Te Moana o Atawhenua) as an addition to the Te Wāhipounamu – South Westland World Heritage Area.

The Guardians initially supported the inclusion of this proposal within the draft CMS to allow for public consultation. As a result of receiving and considering further information the Guardians do not support the progress of this proposal. World Heritage listing would limit the ability for the Guardians to make strategic decisions. They would need to anticipate the views of the United Nations Educational Scientific and Cultural Organisation – an organisation that the Guardians have never had any contact with. The Guardians consider that a World Heritage Area listing would undermine the fundamental purpose of the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005 (the Act) by limiting their ability to provide unfettered advice and recommendations. It would also undermine the original *Fiordland Marine Conservation Strategy* and the Act by limiting local input into decisions on the management of the FMA.

- Add the foreshore (the area between mean high and low water) to the Fiordland National Park.

This proposal was not supported. The Guardians submitted this would add a layer of confusion and potential costs to an area that would then be subject to two different management philosophies (ie, Department of Conservation (DOC) and Environment Southland). Currently the demarcation between the two is well recognised and consistent with the balance of the Southland coastline.

- Investigate and increase the boundaries of the Te Wae Wae Bay marine mammal sanctuary.

The Guardians submitted that currently there is little evidence to show what this would achieve and recommend a comprehensive research programme into Toroa/Southern right whales is required to provide the data necessary to support this proposal. The research programme should include: mapping of migration routes, numbers of individuals, time spent in the area, behaviour and evidence of areas used for breeding.

- Support mechanisms to protect a full representative range of marine ecosystems within the Fiordland Te Rua-o-te-moko Place.

The Guardians support the continued investigation and consideration of appropriate protection mechanisms as an on-going priority.

- Work with Ngāi Tahu whānui and the wider community (including relevant agencies and the Guardians) to minimise the effects of land and freshwater use on the coastal environment within the Foveaux Te Ara A Kiwa Place. This includes improving freshwater quality and minimising coastal erosion.

The draft CMS recognises the interdependence between adjacent marine areas and in particular the connection between the Foveaux Te Ara A Kiwa Place and the Fiordland Coastal Marine Area. The Guardians support this as poor freshwater quality and coastal erosion may have effects on areas some distance from the actual source of the problem.

- Identification of pressures/threats within the Fiordland Bioregion include:

The reference to the introduction of large amounts of freshwater via the Manapōuri power scheme should note that significant impacts on the fiord rockwall communities and the extended ecosystem have already occurred. Continuous monitoring has shown little ongoing change.

There are generalised statements that do not reference examples to the management and sustainability of fish stocks. This ignores the role of the Quota Management System and the Guardians role in monitoring fishing effort and effects on species. The Guardians are in the position of being able to make recommendations that enable measures to be put in place to mitigate any adverse effects from fishing in a timely manner.

The establishment of the Dolphin Protection Zones as an active measure to mitigate the effect of vessel based tourism on the Doubtful Sound bottlenose dolphin population has been ignored as have other threats such as disease.

Lack of acknowledgement that specific anchoring areas for cruise ships have been identified so that anchoring damage to important habitats and species is avoided.

Meridian Energy Monitoring Project

Mr Andrew Feierabend, (Statutory and Compliance Strategy Manager at Meridian Energy Ltd) presented a summary of last year's monitoring results. Meridian Energy Ltd is obliged, as a condition of their resource consent, to seek the approval of the Guardians with regards to their annual monitoring. The purpose of the monitoring is to assess any impacts of the freshwater discharge on the environmental condition of the Sounds (particularly any additional impacts associated with the 2012 Manapōuri Tailrace Amended Discharge (MTAD) consent that provides for higher discharge rates under certain conditions).

The report noted there have been no significant changes for the nine years associated with the Doubtful Sound Adaptive Management Programme. Monitoring results indicated there was no significant change despite the higher discharge being implemented more frequently than in the first year. There was a major thickening of the lower salinity level which was not attributable to increased freshwater discharge but rather due to natural weather occurrences.

Mr Feierabend also updated the Guardians and agencies on the Trap, Travel and Migration Programmes for Eels/Elvers and on dolphin research.

Meridian Energy Ltd has proposed the full suite of biological and physical monitoring be undertaken next season to better understand any impact associated with the exercising of the MTAD. The Guardians support this proposal.

Copper Leaching Model

During 2013, NIWA released a report on the results of a national project for modelling the leaching of copper from antifouling paints on vessel hulls. The modelling suggests that copper concentrations in some areas could be above the guidelines for the protection of marine life. Copper is used in most antifouling paints in New Zealand. 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.

The release of this report generated a significant amount of media coverage. The Guardians cautioned that this report provided modelling only and not actual evidence of adverse copper concentrations. There was concern that misconceptions from this report would affect how the area was perceived by the public.

With the assistance of the Milford Sound Development Authority, samples were taken for testing. Results showed concentrations to be below the detection levels for copper. Further testing of samples will occur in Australia with enhanced equipment that will provide absolute results. Ongoing monitoring will also take place.

Proposed vessel cleaning facility in Bluff

Environment Southland biosecurity staff introduced a proposal to install a vessel cleaning facility for small to medium sized vessels in the vicinity of the Bluff Yacht Club ramp in Bluff Harbour. The design included a fully bunded area to trap run off from vessels undergoing cleaning to ensure any organisms removed from vessel hulls did not re-enter Bluff Harbour.

The Guardians suggested an improvement to the existing South Port syncrolift area was a better proposition. Currently this area is unbunded. Options are now being considered supported by South Port.

The Guardians also recommended consideration be given to assessing the biosecurity risk from other slips and vessel haul-out facilities in Southland and Stewart Island.

Fiordland Marine Pathway Management Plan

In 2012, the Government introduced its Marine Biosecurity Pathways Policy by providing for Pathway Management Plans. This was done via an amendment to the Biosecurity Act 1993.

The Guardians consider biosecurity to be the main threat to the FMA environment. They are pleased to be part of the development of a Fiordland Marine Pathway Management Plan that will be constructed jointly between DOC, MPI, Environment Southland and the Guardians. Rebecca McLeod represents the Guardians on the Steering Group.

The plan will first identify the pathways where all marine pest organisms could be transported into the FMA. It will assess the risk of each pathway and then develop strategies to address these risks.

The Guardians will also support the distribution of information and material to FMA users.

Cando Fishing Company

Officials from Cando Fishing Ltd outlined plans for a new venture to process kina in the FMA on board a designated barge. The Guardians recommended the company start negotiations with Environment Southland to identify issues that may inhibit the granting of resource consent. The Guardians are part of the consent process and will have input then.

Manapōuri Doubtful Sound User Group Workshop

Jon Clow represented the Guardians at a workshop to provide feedback on the Manapōuri Doubtful Sound User Group (MDSU) Infrastructure Development Strategy. The MDSU is a group mainly comprising of tourism operators established to address common concerns and operational issues on Lake Manapōuri and Doubtful Sound.

VHF coverage in the FMA

The Guardians received reports throughout the year on the progress of this project. The Guardians supported plans to use as many existing structures and repeater sites as possible. The improvement of coverage will increase safety for all users, initially in the southern parts of the FMA, and then progressing further north. Many vessels visiting the FMA use VHF (very high frequency) as their only means of radio coverage as they come from northern ports where coverage is extensive.

Environment Southland coastal compliance

The Guardians have previously made submissions to Environment Southland regarding the limited funding and resources allocated to marine biosecurity. It's a concern that any monitoring of compliance with resource consent conditions, or provisions of the Regional Pest Management Strategy relating to marine organisms, has been ad hoc. In addition to increasing funding, the Guardians were introduced to Maria Reed who has been employed in the role of Coastal Compliance Officer.

The Guardians often comment in resource consent applications on specific biosecurity conditions and there is an expectation these will be complied with. Accordingly, it was recommended visits be made to entities soon after receiving consents to ensure they are familiar with their obligations.

Marine Mate App

Environment Southland introduced the Marine Mate mobile application software (App) to the Guardians and agencies. The App is now widely used throughout the country. The App has all the FMA rules and regulations, conditions on boat ramps, tides and other special information. Because there is no cell phone or wifi reception in the FMA, users are expected to download it before entering the area. A link to the App is provided on the Guardians website.

Wildlands restoration document for Dusky Sound

DOC presented a draft document plan for the restoration and conservation of Dusky Sound terrestrial and marine environments. Whilst the Guardians were positive about a holistic approach to restoration incorporating land and sea, they advised the marine information needed significant amendments to bring it to the standard of other DOC papers. The report contained information that was incorrect and misinformed. The Guardians suggested the report should be peer reviewed.



THE INTRODUCTION OF TE POUPOU O RUA O TE MOKO AS MARINE RESERVE MARKERS

The Fiordland Marine Guardians (the Guardians) are pleased their initiative for marine reserve markers has finally come to fruition with the erection and unveiling of Te Poupou O Rua O Te Moko (poupou) in the majority of marine reserves within the Fiordland (Te Moana o Atawhenua) Marine Area (FMA).

In the past the wilderness attributes of the fiords were reflected by a reluctance to have any man-made structures including marine reserve markers, except for the signage already in place in the more populated Piopiotahi Marine Reserve (Milford Sound) and the reserves in Doubtful Sound – Te Awaatu Channel (The Gut), Kutu Parera (Gaer Arm) and Taipari Roa (Elizabeth Island) Marine Reserves.

However, the Guardians believed that marine reserves should be marked and celebrated, and they also wanted to acknowledge the cultural significance of tāngata whenua in the area. The Marine Reserves Act is not prescriptive as far as beacons or marks are concerned therefore poupou were considered in keeping with the wilderness values of the fiords and acknowledging the important cultural heritage of the area. This led to several years of collaborative concept planning and effort among the Guardians, DOC and local iwi from the Ōraka-Aparima Rūnaka (the mandated iwi kaitiaki) on behalf of the wider Te Rūnanga o Ngāi Tahu.

The poupou are symbols of Māori whakapapa and genealogy within Fiordland. They remind us of the deities, explorers, whānau and whānui who have travelled in the area previously. Individual poupou are named after these ancestral connections. The poupou were based on a design by Cliff Whiting and carved by a talented local carver from Awarua Rūnanga, Bubba Thompson. The poupou are designed to be attractive and functional to withstand the vigorous fiord marine environment. They were jointly funded by Rūnanga o Ngāi Tahu and DOC.

A ceremony was held on-board the DOC vessel *Southern Winds* to unveil the first of the poupou at the Kahukura (Gold Arm) Marine Reserve in Charles Sound on February 2014. Guests included representatives from each of the four Southland Rūnanga, Government agency representatives and the Guardians. Dignitaries included Sir Mark Solomon (Chairperson of Te Rūnanga o Ngāi Tahu) and Kevin O'Connor (Deputy Director-General of Conservation Services). The ceremony was very moving with speeches and waiata that echoed throughout the sound, perfectly illustrating the true significance of the poupou.

The Kahukura Marine Reserve is now graced by the presence of the Kaitiaki Kahukura, the Goddess of travellers who assisted Tu-te-raki-whanoa with his challenges in the area. In addition, the reserve has the Kaitiaki Heheue, who came to explore the area after Tu-te-raki-whanoa finished his great feats of carving up the area. He was one of Maui's sailing masters who accompanied him as he explored Aotearoa.

Since the unveiling ceremony of the first poupou, DOC has announced it is supportive of marking the remaining marine reserves with poupou in Piopiotahi / Milford Sound, Doubtful Sound – Te Awaatu Channel (The Gut) Marine Reserve, Kutu Parera (Gaer Arm) Marine Reserve and Taipari Roa (Elizabeth Island) Marine Reserve. The Guardians agreed this would be a fitting culmination of the project, providing consistency throughout the whole of the FMA and endorsing the unique nature of this special area.

The Guardians would like to acknowledge and thank the following organisations for their help with arrangements for the unveiling ceremony:

- The Deep Cove Outdoor Education Trust, who provided free accommodation enabling the majority of people to travel to the ceremony
- Real Journeys Ltd, who provided return travel to Deep Cove
- Southern Lakes Helicopters Ltd, who provided return travel for the dignitaries.

PEST SEAWEED *UNDARIA PINNATIFIDA* IN SUNDAY COVE, BREAKSEA SOUND

Progress report on the local elimination project

Since the initial find of a single mature pest seaweed *Undaria pinnatifida* (*Undaria*) plant in April 2010 there has been an ongoing elimination programme in Sunday Cove, Breaksea Sound. Below is a brief explanation of the programme.

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 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 5 metres apart to guide divers and ensure that 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 that they are searched twice. High risk areas are 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:

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

The results for this year’s *Undaria* eradication project have been interesting and the response team still believes that the programme is on track to achieve the goal of eliminating *Undaria* from Sunday Cove. Only one individual has been found in the last 12 months (period ending March 2014) with a total of four individuals found in the last year and a half. Even though these results are positive, the team are still cautious, simply because of the life history of this highly invasive seaweed. To help with the programme the team transferred around another 3000 Kina (*Evechinus chloroticus*) into Sunday Cove (see figures 1 and 2). The decision to do this was due to the large amount of native seaweed regrowth in these areas, causing difficulty with searching.



KINA (*EVECHINUS CHLOROTICUS*) BEING DEPLOYED IN SUNDAY COVE



PEST SEAWEED (*UNDARIA PINNATIFIDA*)

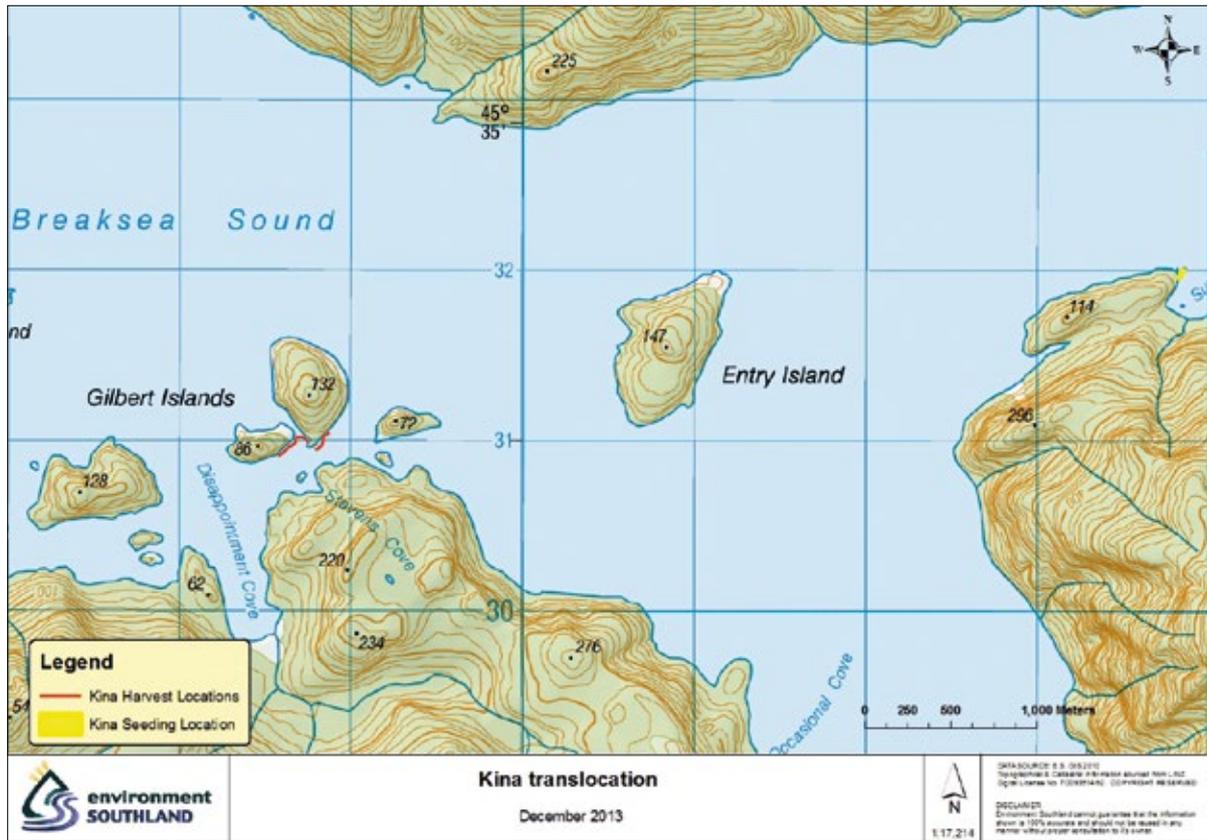


FIGURE 1 (ABOVE): LOCATION OF THE KINA HARVESTING AND TRANSFER IN BREAKSEA SOUND FIORDLAND 2013.

FIGURE 2 (RIGHT): KINA TRANSFER AND DEPLOYMENT IN SUNDAY COVE, FIORDLAND DECEMBER 2013.

The response team met with the Response Strategic Leadership to summarise the current situation at Sunday Cove. A potential mature *Undaria* individual was discovered during the March 2014 survey. At this meeting it was agreed to extend the programme by an additional six months (until July 2015) due to new information about the longevity of spores. July 2015 will be three and a half years since the last mature *Undaria* was detected. This assumes that the specimen found in March did not contain any mature spores and it works in with the three year time frame that the microscopic life stage can survive with a buffer of half a year (from independent expert technical advice).

The discovery of the individual was a timely reminder of how easy it could be to slip up in our attempt to eradicate *Undaria* from Sunday Cove. It also meant the team has been able to refocus for the final push to July 2015. With a dedicated team of divers and some more kina to help combat *Undaria* in Sunday Cove, we are still hopeful of seeing the Fiordland (Te Moana o Atawhenua) Marine Area once again declared "pest free".



OTHER ACTIVITIES UNDERTAKEN BY THE GUARDIANS

Meetings

Four meetings involving the Fiordland Marine Guardians (the 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 relating to: biological monitoring, biosecurity, compliance and communications.

Due to the appointment of two new Guardians, Rebecca McLeod and Jon Clow in 2013, the sub-committee members were revised:

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.

Re-appointment of Stewart Bull

Stewart Bull was reappointed by the Minister for the Environment as Te Rūnanga o Ngāi Tahu's nominated member of the Guardians.

Newsletters

Two newsletters were sent out during the year to 483 people on the Guardians contact database. More and more people are opting to receive newsletters electronically with almost 100 now on the electronic mailing list. Newsletter feedback is heartening, in particular from people receiving an electronic copy which offers colour photography. With this in mind, together with environmental factors and cost, in the future the Guardians will send out the newsletter electronically to people who have previously supplied an email address.

'Top of the South' Biosecurity Partnership Forum

Guardian Ken Grange attended this forum on behalf of the Guardians in May 2014. His attendance recognised that vessels from this area travel down the West Coast to the Fiordland (Te Moana o Atawhenua) Marine Area (FMA) and can potentially provide a vector for the introduction of unwanted marine organisms.

Future of Gut Hut

The Guardians continue to support Geoff Milne in his endeavours to keep open and maintain the Gut Hut. Anne McDermott continues to keep in touch with Geoff to assist him with this project.

Waitutu Mataitai Reserve Application

The Guardians supported a revised application from Ōraka-Aparima Rūnaka for a mataitai reserve in the vicinity of the Wairaurahiri River mouth. Representatives of the runaka, Waitutu Land Incorporation and the commercial fishing industry agreed to the establishment of an area with a size that will allow for the management of a customary fishing ground while limiting the impact on the commercial fishing industry. The result supports two FMA management fundamentals. Firstly, it recognises the Ōraka-Aparima Rūnaka as the kaitiaki rūnaka for the FMA and secondly that best results for the FMA and users arise from negotiation and agreement.

The date for the establishment of the mataitai reserve will be announced by the Minister for Primary Industries in due course.

LOOKING AHEAD – THE NEXT 12 MONTHS

Trip to the Fiordland (Te Moana o Atawhenua) Marine Area

The Fiordland Marine Guardians (the Guardians) plan to continue the tradition of hosting Ministers of the agencies who have management roles in the Fiordland (Te Moana o Atawhenua) Marine Area (FMA). These visits provide context and understanding of the challenges faced in managing a large and isolated area. The decision on who to invite will be made following the 2014 General Election and appointment of Ministers.

Celebration of the 10 year anniversary of the Fiordland (Te Moana Atawhenua) Act 2005

April 2015 marks the 10 year anniversary since the introduction of the Fiordland (Te Moana o Atawhenua) Act 2005. A function will be held to mark this occasion.

Doubtful and Milford Sound blue cod management

During 2014, the Ministry for Primary Industries (MPI) will produce an Initial Position Paper (IPP) for public consultation on options for the management of amateur blue cod fisheries. The options in the IPP will reflect recommendations made by the Guardians and advice from MPI. Implementation of any subsequent regulatory changes will occur in 2015.

Boat Show

The Southland Boat Show is scheduled for 8 and 9 August 2014. The Guardians, MPI and Environment Southland want to have an integrated display in one area. This will provide a one-stop-shop situation where members of the public can speak to representatives from all of the entities and obtain relevant FMA information.

Marine reserve markers

The final poupou that identify the boundaries of the marine reserves will be erected. A small ceremony to mark the completion of this project will be held.

Seal diet research

This project has been carried over from 2013/14.

Research into the diet of seals residing within areas of the FMA will be carried out through the Department of Conservation (DOC). Questions were raised about the roles that fur seals play in the fiord ecosystems during the last Guardians review, including whether they pose any level of risk to fish stocks in the inner fiords. Little Fiordland specific research has ever been carried out on fur seal diet so it's a good opportunity to assess the extent that seal diet changes throughout a year and to identify the species targeted.

Monitoring programme

The monitoring sub-committee will meet with the agencies to discuss and formulate a plan for future years that identifies the priorities for monitoring and research. This will be headed by DOC who is the lead agency for the monitoring plan.

Reprint of User's Guide

An update of *Beneath the Reflections – A User's Guide to the Fiordland (Te Moana o Atawhenua) Marine Area* will be carried out. This was originally produced in 2008. Due to changes in some of the information since then an updated reprint is necessary. Analysis will be undertaken to achieve the best production costs. The new *User's Guide* will also include information on the poupou as marine reserve markers (See poupou ceremony, see pg 13).

Appointment of Guardians

The appointment period for Ken Grange and Malcolm Lawson expires in November 2014. The Minister has indicated that a public nomination process will be held with a subsequent announcement on decisions for appointments or reappointments.

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; or
- (e) the Minister of Conservation.

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:

2013

20 August	10.00am – 3.55pm
6 September	10.00am – 12.00pm – Biosecurity sub-committee
16 October	1.00pm – 2.45pm – Communications sub-committee
05 November	10.00am – 3.40pm

2014

11 February	9.30am – 2.30pm
6 May	10.00am – 3.35pm
25 June	10.00am – 12.00pm – Monitoring sub-committee



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) and is responsible for coordinating the Fiordland (Te Moana o Atawhenua) Marine Area Communications Plan. The ministry provides administrative and secretariat support to the Fiordland Marine Guardians (the Guardians), and ensures the Minister's obligations under the Act are met.

Achievements

An achievement for the Ministry this year was the appointment of Te Rūnanga o Ngāi Tahu's nominated member of the Guardians. Stewart Bull, who has extensive knowledge of Fiordland and has been a member of the Guardians since their inception, was reappointed to this role for a further four years. Among other things, Stewart is the chair of the Ōraka-Aparima Rūnaka and is also a Tāngata Tiaki, appointed by the former Minister of Fisheries (in recognition of his expertise in local customary fishing management and resource issues).

The Fiordland Marine Guardians Communications Plan was updated this year, which sets out communication objectives and work programmes identified by the communications sub-committee. Communications objectives achieved this year include:

Website

The website has been updated with an intuitive layout and current news articles are featured more prominently to increase accessibility. Weather information for the area and links to the *Marine Mate* mobile application software has been added.

Newsletter

Two newsletters were produced in this financial year covering the substantive issues in the area, as well as the achievements of the Guardians and management agencies. These were sent to 483 people on the mailing list.

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

An update was made to the online version of *Beneath the Reflections: A User's Guide to the Fiordland (Te Moana o Atawhenua) Marine Area* to include the Pendulo Reach prohibited potting area.

Beneath the Reflections: DVD – The Story of the Fiordland Marine Guardians

Further copies of this DVD were produced and circulated to 61 marinas and boating clubs throughout the country with further copies sent to 34 local schools in the Southland region.

Contact database

The administrator/secretary maintains the contact database, which is updated throughout the year with new contacts added and amendments made as necessary. This list is used for the various postal and electronic mail-outs during the year.

Looking ahead

Malcolm Lawson and Ken Grange's terms as Guardians are coming to an end. An appointment process will begin in the 2014/15 year.

The Guardians' DVD *Beneath the Reflections: The story of the Fiordland Marine Guardians* is in the process of having a new section added to it to include coverage of the newly erected poupou marking marine reserve boundaries. Presentation copies of this DVD will be sent to libraries in the Southland region.

Beneath the Reflections – A User's Guide to the Fiordland (Te Moana o Atawhenua) Marine Area, initially produced in 2008, will be updated in the coming year.



Department of Conservation
Te Papa Atawhai

DEPARTMENT OF CONSERVATION

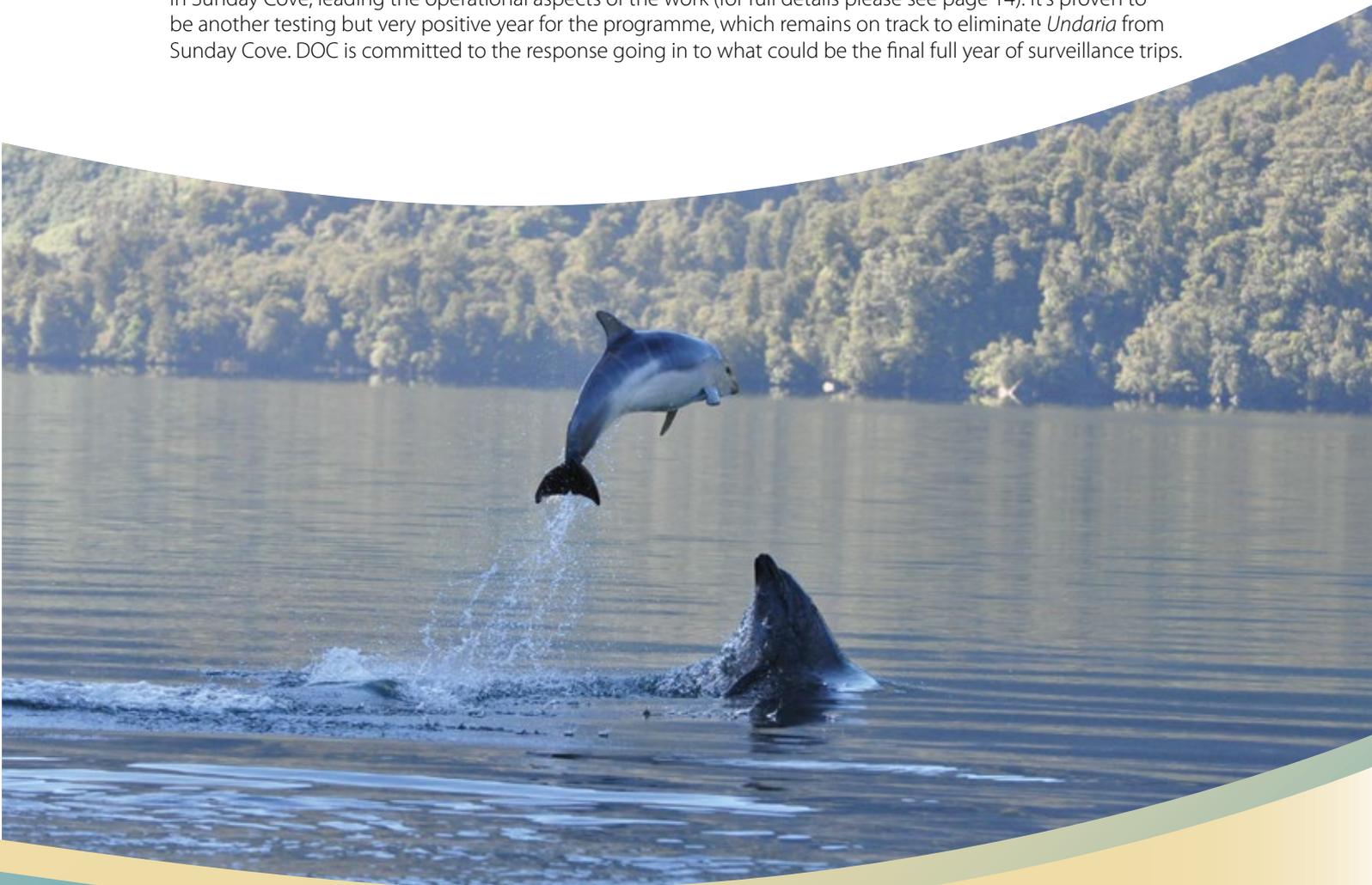
Role

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

Achievements

DOC has achieved some great results over the past twelve months. The most significant milestone has been to finish and place the poupou marine reserve markers. The poupou represent the very nature of the Guardians process and are testament to the hard work and dedication of a number of different groups and individuals. They also show how important kaitiakitanga is to the local iwi and it was a privilege to see how much it meant to those involved in the unveiling ceremony. DOC is proud to now see them standing as guardians to Fiordland's marine reserves.

DOC has continued to be heavily involved in the joint agency pest seaweed *Undaria pinnatifida* (*Undaria*) response in Sunday Cove, leading the operational aspects of the work (for full details please see page 14). It's proven to be another testing but very positive year for the programme, which remains on track to eliminate *Undaria* from Sunday Cove. DOC is committed to the response going in to what could be the final full year of surveillance trips.



In September of 2013, NIWA provided the final report for the marine reserve monitoring that took place in the summer of 2013. The monitoring was carried out in four marine reserves: Kahukura (Gold Arm), Kutu Parera (Gaer Arm), Moana Utu (Wetjacket Arm) and Taumoana (Five Fingers Peninsula). It aims to provide a greater level of power for detecting any changes over time. There were some significant effects detected between reserve and non-reserve comparisons for blue cod, rock lobsters and kina but not for all of the marine reserves. It may be too early to detect any major changes and so the monitoring sites will be revisited in the future.

The bottlenose dolphin population monitoring has continued this year in conjunction with the tourism operators who hold marine mammal viewing permits, Otago University and DOC. Three trips were undertaken in both Dusky Sound and Doubtful Sound with encouraging results.

The Doubtful Sound population had their best breeding season for a number of years last year and all those calves have made it through their first winter – a very good sign. Recent research from Otago University suggests there bad mothering could affect the calves' chances of survival.

The Dusky Sound population also had a very good breeding season this year (2013/14) with 14 calves being born, the most since 2007. Hopefully they will all survive the winter and make it through to their first year.

An additional piece of research was completed in 2013 by a student from Otago University. The research was funded by the Fiordland Marine Mammal Levy Group and looked at vessel effects on bottlenose dolphins in Fiordland. The research found a number of interesting results. Vessels and vessel noise affect the behaviour and communication of bottlenose dolphin groups and this appears to have the greatest impact on groups that contain calves. The Code of Management (a voluntary set of rules in Doubtful Sound) has reduced the frequency and length of interactions with dolphin pods in Doubtful Sound and this may go a long way to alleviate the potential long-term pressures on the population.

Looking ahead

One of the most exciting developments this year has been agreement from within DOC to replace all of the normal triangular marine reserve markers in Piopiotahi/Milford Sound and Patea/Doubtful Sound following the success of the carved poupou. Initially the poupou were only planned for the reserves that weren't already marked but they will now stand as guardians over all of Fiordland's marine reserves.

DOC will continue to work with the Ministry of Primary Industries and Environment Southland on the *Undaria* eradication programme in Sunday Cove this coming year. The response team and everyone associated have worked hard over the last four years and remain totally committed to finishing the task and ridding *Undaria* from Breaksea Sound for good.

The dolphin population monitoring will continue this coming year with a new master's student from Otago University starting. There will be the usual three trips in to both Doubtful Sound and Dusky Sound beginning with the winter trips in July 2014.

DOC has a number of new contracts lined up in the coming year, starting with a Bio-blitz style project in Sunday Cove to be carried out by NIWA. The plan is to look at characterising the area and developing a comprehensive list of species that are present so that if the *Undaria* programme proves successful (or unsuccessful) we know what the potential consequences might be. NIWA will also be collecting some sample specimens for taxonomic purposes because so many species from the fiords are yet to be described.

DOC hopes to collect some information on the ecology of New Zealand fur seals this coming year, to try and learn more about their foraging habits and what they are feeding on. There may also be the opportunity to carry out more habitat assessment and exploration work, especially looking at deep reef areas within the fiords.



MINISTRY FOR PRIMARY INDUSTRIES

The Ministry for Primary Industries (MPI) is focused on 'growing and protecting New Zealand'. The focus is to maximise export opportunities and improve sector productivity, increase sustainable resource use and protect from biological risk. Key MPI functions of interest to the Fiordland (Te Moana o Atawhenua) 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, using a voluntary-assisted-directed-enforced approach to compliance. Education and informing public and stakeholders is essential to ensuring effective compliance.

Biosecurity

Role

MPI is responsible for leading development and maintenance of the biosecurity system that supports sustainable fisheries management and protects the environment and the resources from biological risk. MPI works with industry and other partners to agree and implement biosecurity planning and on inter-agency activities aimed at minimising impacts of marine biosecurity risks to the FMA. The Investigation and Diagnostics Centres and Response Directorate are responsible for leading this work. Teams include advisers and investigators with specialist skills in surveillance, investigation and incursion response to detect, eradicate or control the establishment and spread of marine pests and diseases.

Achievements

In 2009/10, MPI contracted the Cawthron Institute to develop a 5-year risk management operational plan for Fiordland. The plan sets out recommended activities that MPI, other relevant agencies and the Fiordland Marine Guardians (the Guardians) could take to achieve the goals identified in the Fiordland Marine Biosecurity Strategic Plan. In the past year, MPI has worked with the other agencies and the Guardians to implement previously planned 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 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 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 two years.
- Joint-agency compliance and surveillance patrol. In April 2014, 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 about 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 pest seaweed *Undaria pinnatifida* (*Undaria*) from Sunday Cove, Breaksea Sound.

Communications

- A marine biosecurity message for Fiordland was placed on the marine pages of the Metservice webpage from October 2013 to April 2014. *"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."*
- Marine Biosecurity signs have been placed on some barges throughout the FMA.

Joint-agency response to *Undaria* in Sunday Cove

MPI is working collaboratively with the Department of Conservation 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 past 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 despite intensive search efforts. Only one *Undaria* sporophyte was found in the last year of surveys. (Refer to the *Undaria* in Sunday Cove article and Fiordland pathway management plan article for further information.)

Targeted marine pest surveillance

As part of a National Marine High Risk Site Surveillance Programme, MPI 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 FMA, such as detecting 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 invasive Mediterranean fanworm (*Sabella spallanzanii*) was detected for the first time in Nelson this summer, as this species continues to rapidly expand its range around New Zealand. Vessels arriving into Fiordland from Nelson could now potentially transfer this species to the fiords.

Issuing of Craft Risk Management Standard for vessel fouling

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 CRMS applies to all types of sea-craft that have come from or recently visited coastal waters of another country.

The CRMS requires vessels to arrive with 'clean hulls'. A 'clean hull' is defined for two categories of vessels, with 'short-stay' vessels allowed more light biofouling than 'long-stay' vessels which are allowed a slime layer and goose barnacles only.

There are a number of measures given in the new CRMS for vessels to use to comply. During the lead-in period, MPI will work with vessel operators to help them decide which measures are most suitable for them. MPI will also communicate the requirements to international commercial shipping lines and other interested parties to ensure that vessel operators planning to visit New Zealand are aware of the measures and can make any changes needed to come into compliance by 2018 or earlier.

The CRMS is aligned with the 2011 International Maritime Organisation Guidelines for Biofouling Management. Following best practice according to these guidelines is deemed to meet the requirements of the CRMS.

During the four year voluntary lead-in period, action will continue to be taken on cases of severe biofouling as has been done in the past under the Biosecurity Act (1993). MPI will also be more active in gathering information on biofouling. This will be through a Biofouling Declaration to be supplied to MPI with the Advance Notice of Arrival. This information will help assist MPI monitor improvement in biofouling management practices by vessel operators.

A guidance document accompanies the CRMS to show how the requirements will operate at the New Zealand border from 2018. This is currently a draft but will be further refined during the lead-in period.

The CRMS and accompanying guidance document are available at:

<http://www.biosecurity.govt.nz/regs/sea-craft-ports/sea-craft> (offsite link to www.biosecurity.govt.nz)

For background documents on development of the standard refer to:

<http://www.biosecurity.govt.nz/biosec/consult/draft-ihs-bnz-std-biofoul> (offsite link to www.biosecurity.govt.nz)

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 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, MPI and regional councils will need to work in collaboration with tāngata whenua and industry to jointly 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 CRMS.

To support the development of the Strategy, MPI commissioned two reports from NIWA and the Cawthron Institute which summarised the practical policy options and operational tools available for reducing the spread of unwanted marine species along domestic pathways. This report will be used to inform the framework for prioritising actions that can be taken to improve marine pathways management.



FISHERIES

Role

MPI is committed to the sustainable management of New Zealand's fisheries resources. The long term goal is New Zealanders maximising benefits from the use of fisheries within environmental limits. Two directorates within MPI, Compliance and Fisheries Management, collectively work to achieve this goal. The Compliance Directorate is responsible for the operational delivery of compliance services while the Fisheries Management Directorate carries out a full range of statutory regulatory functions, duties and powers to manage New Zealand's fisheries. The directorates work alongside the Guardians who are charged with providing advice and recommendations to management agencies and Ministers, to promote the sustainable utilisation of fisheries in the FMA.

Achievements

Compliance

The Fiordland Marine Area Integrated Compliance Plan remains a key focus of MPI's Compliance Southland District team, which is tasked with leading and co-ordinating the across agencies delivery of an integrated compliance programme. This entails the sharing of relevant information between the several agencies involved and MPI reporting back on a regular basis all relevant fisheries compliance matters including any non-compliance issues to the Guardians.

To deliver an integrated enforcement programme, MPI Fishery Officers work closely with Department of Conservation (DOC) Compliance Rangers and Environment Southland Compliance Officers to optimise resources and to maximise and share seaborne patrols.

During July 2013 the local MPI Compliance team contributed to the National Rock Lobster Management Group review of the amateur rock lobster regulation amendments and provided input into the drafting of the final regulations for introduction on 1 October 2013. During October associated work was carried out to update the content of the *Fiordland Marine Area Recreational Fishing Rules* brochure, incorporating the new regulation changes to rock lobster limits and potting rules.

New fishing regulations were introduced on 1 October 2013 with the Pendulo Reach prohibited potting area in Doubtful Sound and changes to rock lobster daily limits. MPI Fishery Officers provided inspection coverage of the Doubtful/Bradshaw/Thompson fiord complex by conducting two three-day patrols commencing with Labour Weekend in late October 2013 and repeated again in early November 2013.



ROCK LOBSTER



UNLAWFUL COD POT RETRIEVED IN SEYMOUR ISLAND

The two phase MPI waterborne patrol operation, aboard the MPI PV *AHURIRI*, inspected 88 amateur fisher's on-board 17 craft that were recreational trailer craft, private syndicate boats or amateur-fishing charter vessels. There was good general awareness and acceptance of the new fishing rule changes, including an increased rock lobster internal waters limit (from three to six per fisher) for all fiords except Milford Sound. Officers distributed relevant hand-out information with particular emphasis on informing fishers how to comply with the new provision requiring fishers to record and account for all accumulated live rock lobster stored in holding pots.

In the new prohibited potting area surrounding Seymour Island, on both patrol occasions, a total of two unlawful rock lobster pots were seized after being found to be in breach of the ban.

In April 2014, a joint MPI/DOC/Environment Southland agency compliance and biosecurity team joined the DOC vessel *GV Southern Winds* to conduct a five day seaborne patrol covering eight fiords from Thompson Sound to Preservation Inlet. As a result multi-agency inspections were carried out of 15 manned vessels including commercial CRA8 vessels, amateur-fishing charter vessels and other recreational craft. This resulted in 132 persons being inspected, predominantly charter and recreational parties involved in a mix of deer-stalking, rock lobster diving and line fishing for blue cod and groper. Rock lobster, blue cod and groper dominated the inspected catch composition, although fishers had also caught lesser amounts of blue nose, albacore, trumpeter, tarakihi, sea perch and paua.

Despite one unmarked cod pot being seized from well inside the new Pendulo Reach prohibited potting area, fisher compliance and behaviour was excellent with good awareness and positive views of the new recreational fishing rule changes promoted by the Guardians.

Fisheries management

MPI's Fisheries Management team regularly attends meetings with the Guardians to discuss local fisheries issues. This provides a platform for strong engagement with a knowledgeable stakeholder body, as well as for receiving advice from the Guardians, which the Minister for Primary Industries must take into account when exercising powers or carrying out functions in the FMA.

2013 has been an important year for the recreational blue cod fishery in the FMA. In 2013, the Guardians recommended to MPI the recreational blue cod fisheries in Milford and Doubtful Sounds be reopened to amateur fishing. Following this recommendation, MPI has been working with the Guardians on how to best manage these fisheries in the event that they are reopened. MPI has carried the Guardian's recommendation forward into our prioritisation and planning processes and has a target for including regulatory review of the Milford and Doubtful Sounds recreational blue cod fisheries as part of the April 2015 Regulatory Round. Following discussions with the Guardians, MPI is currently aiming for public consultation to occur in late 2014.

Looking ahead

MPI (Biosecurity) will continue to work with the Guardians and other agencies to implement risk management operational plan recommendations over the next year.

The strategic and operational plans will be reviewed over the coming year.

MPI will also continue to work collaboratively with DOC and Environment Southland in the attempt to locally eliminate *Undaria* from Sunday Cove, and to progress development of the pathway management plan for the FMA.

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



ENVIRONMENT SOUTHLAND

Achievements

BIOSECURITY

Fiordland Marine Pathway Management Plan

In March, Environment Southland's Council approved the development of a marine pest pathways plan for Fiordland. This is subject to formal confirmation by the Ministry of Primary Industries (MPI) and the Department of Conservation (DOC) being partners in the project through co-funding and/or contributions in-kind. This is really positive news and will, once implemented, substantially reduce the risk of marine pests establishing in Fiordland.

To aid the progress of this plan a Fiordland Marine Pathways Management Plan Steering Group has been formed. This is as a partnership between Environment Southland, MPI, DOC and the Fiordland Marine Guardians (the Guardians). In this structure, Environment Southland will play a lead role providing funds and staff resources for the development and implementation of the plan.

Day-to-day activities will include communication, receiving information, running the database (once developed) and on-water activities (surveillance and compliance). Environment Southland has appointed Laurel Teirney to help coordinate the development process. MPI will provide technical and operational expertise and will also provide the same level of funding as Environment Southland for development of the plan. DOC will provide technical expertise. The Guardians will play an important role in consultation with the wider community and be actively involved with the development and communication of the plan.

The Steering Group will bring in outside expertise of direct relevance (eg, NIWA, Cawthron Institute and industry experts) and additional internal resources (ie, MPI, Environment Southland, DOC and the Guardians) as it's required during the development of the plan. The group aims to meet every few months with the goal of producing a draft plan by the start of 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 national 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).

With this in mind, Environment Southland recently established a summer scholarship in conjunction with the University of Otago. Baseline surveys of potential hot spots for marine pests were conducted over the summer of 2013/14 within Southland's CMA. The aim of the project was to document marine flora and fauna in potential 'hot spots' and establish if these areas are free of pest species. Nine locations, Waikawa, Bluff, Riverton, Cosy Nook, Port Craig, and two locations at Stewart Island (see figure 3) were surveyed during this project. The only invasive marine organism found was pest seaweed *Undaria pinnatifida* (*Undaria*), which was found at Bluff and Stewart Island.

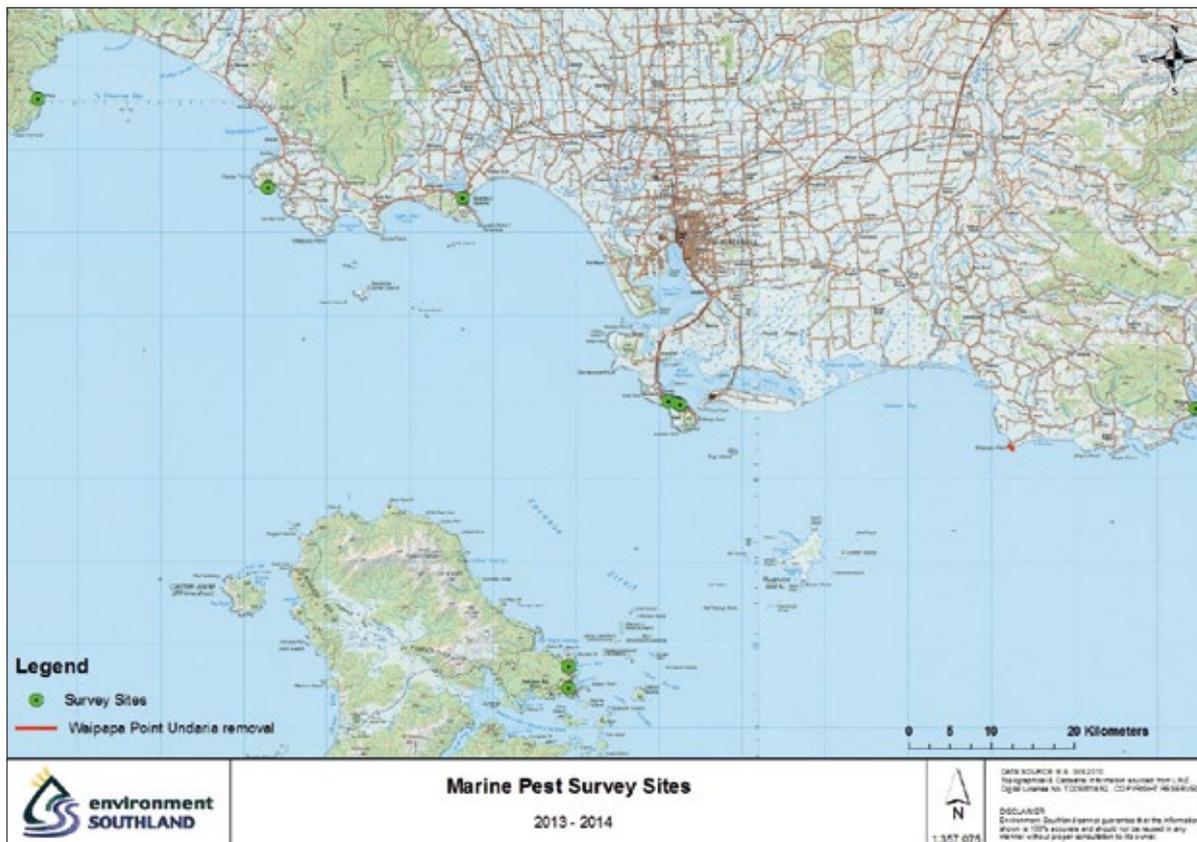


FIGURE 3. LOCATION OF THE 2013/2014 BASELINE SURVEYS IN SOUTHLANDS CMA.

Spread of *Undaria* in Southland

On 7 December 2013, local ecologist Lloyd Esler notified Environment Southland that *Undaria* was present at Waipapa Point in a large rock pool (see photo right). Consequently, we sent two marine summer students to investigate. Unfortunately they confirmed the presence of *Undaria* at this location. Environment Southland has since initiated a containment programme in order to minimise the risk of *Undaria* spreading northwards into Waikawa and the Catlins (both are currently free of *Undaria*). During 22 to 23 January 2014, staff removed approximately 1600 *Undaria* individuals from the rock pools and platform and recorded the extent of the *Undaria* population for future reference and management. Environment Southland will continue to monitor and remove *Undaria* from at Waipapa point on a biannual schedule. We see this as an important step in hindering the spread of *Undaria* within Southland's CMA.



MATURE *UNDARIA* IN A ROCK POOL AT WAIPAPA POINT, SOUTHLAND JANUARY 2014.

Environmental compliance

Environment Southland's Compliance Division investigated one complaint in the Fiordland (Te Moana o Atawhenua) Marine Area (FMA) in the last year:

- The complainant advised that an unconsented vessel was operating as a charter boat for about two months. The vessel operated at several points around Fiordland, but was believed to be based in Picton. An investigation found that it was, in fact, a private vessel with no commercial activities being undertaken.

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 with no significant compliance issues found.

Oil spill responses

Environment Southland was involved in several oil spill responses in FMA from July 2013 to June 2014.

- 11 October 2013 – *Amethyst* sinking off the Petrel Islands, Dusky Sound. Response staff flew in the following day but there was no sign of diesel in the windy conditions. DOC was concerned that rodents may have been on the boat and got onto Anchor Island.
- 5 March 2014 – *Paragon* grounding off the north side Chalky Island. The boat was towed ashore at North Port and fuel transferred to other vessels. The boat was eventually towed back to Bluff. No diesel spilled. DOC was concerned initially about the possibility of rodents on the boat getting onto Chalky Island.
- 1 April 2014, oil seepage from the sea bed was discovered below the Meridian Wharf in Deep Cove, Doubtful Sound, with persistent and intermittent seepage over a period of about four months. The site was dived on twice, but no obvious source was discovered, although there was a considerable amount of concrete and steel rubble dumped in the area. Oil samples analysed indicated that it appeared to be lubrication oil. Booms were deployed for a period of two months to contain and absorb seeping oil and the seepage appears to have stopped after that time.
- 14 April 2014 – *Tutoko II* grounded on Seal Rocks, Dusky Sound. The boat was refloated at high tide with only minor damage and no oil spilled.
- A few minor spills of fuel at Freshwater Basin, Milford Sound.



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 and attend 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:

- K Burtscher and M Johnson – install and occupy the coastal marine area with a mooring at Deepwater Basin, Milford Sound
- Cruising Milford Sound Ltd – amendment to existing commercial surface water activity consent to increase vessel size, passenger and crew numbers
- Deep Cove Charters – install and exclusively occupy the coastal marine area with a pontoon wharf at Deep Cove, Doubtful Sound
- Deep Cove Outdoor Education Trust – install and exclusively occupy the coastal marine area with a mooring at Deep Cove, Doubtful Sound
- Deep Cove Outdoor Education Trust – install and occupy the coastal marine area with a slipway at Deep Cove, Doubtful Sound
- Dive Otago Ltd – carry out commercial surface water activities, namely scuba diving and snorkelling using the vessel 'Seahorse' at Milford Sound
- D A and F M Excell – install and exclusively occupy the coastal marine area with a mooring at Deep Cove, Doubtful Sound
- Island Escape Cruises Ltd – carry out a commercial surface water activity in the internal waters of Fiordland from Anxiety Point to Yates Point, using the vessel 'MV Island Passage'
- Island Escape Cruises Ltd – install and occupy the coastal marine area with a mooring at Harrison Cove, Milford Sound
- Real Journeys Ltd – install and exclusively occupy the coastal marine area with a mooring at Helena Anchorage, Doubtful Sound
- South West Helicopters Ltd – occupy the coastal marine area with a helipad in Blanket Bay, Doubtful Sound.

Improving VHF radio coverage

Environment Southland commissioned contractors to investigate linking existing radio towers and other structures to improve VHF (very high frequency) radio coverage in Fiordland, particularly in the lower fiords.

Environment Southland funded equipment installed in the 2013/14 year, as well as providing funds to continue the study to fill in VHF coverage gaps in following years. Some additional masts will be required in the medium term beyond 2014 and further funding will be sought prior to the commencement of this stage.

Milford Sound safety management system

In accordance with the Port and Harbour Marine Safety Code, Environment Southland implemented a safety management system for commercial operators in Milford Sound in 2013/14. The system is based around the management of risk by the operators. The Guardians will have a role as observer from time to time and asked to provide input.

Milford Sound weather stations

The Milford Sound Development Authority and Environment Southland jointly funded a weather station at Copper Point several years ago, but it had not functioned properly. The weather station, which provides wind speed and direction, has been re-built completely and is now working well. Environment Southland has agreed to fund a second weather station located at Saint Anne Point at the entrance to Milford Sound. 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 to provide a local perspective in managing the coastal waters of the FMA, supporting the Guardians in the fiords.

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 last 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 the implementation of 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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