



Annual Report **2021/22**



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Vision and purpose

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

Our vision is that the quality of Fiordland's marine environment and fisheries, including the wider fishery experience, be maintained or improved for future generations to use and enjoy.

Our focus is the Fiordland (Te Moana o Atawhenua) Marine Area which extends from Awarua Point on the West Coast to Sandhill Point, Te Waewae Bay, and to 12 nautical miles offshore. However, we frequently address issues at a regional and national level if we believe they will have an impact on the Fiordland Marine Area.

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

Our challenge is ensuring the values of Fiordland are protected as the area faces increasing pressure from competing interests and a changing physical environment.

Statement of responsibility

The Fiordland Marine Guardians are proud to present, in compliance with section 20(1) of the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005, the annual report for the Fiordland Marine Guardians for the year ended 30 June 2022.

A handwritten signature in blue ink, appearing to read "Rebecca McLeod".

Rebecca McLeod, PhD

Chairperson
Fiordland Marine Guardians

Chairperson's report



Tēnā koutou katoa

Often it feels like progress is slow, despite a lot of hard work and enthusiasm. This probably reflects the complexity of realising our commitment to working with the community, and alongside multiple government agencies. It is therefore satisfying to report that a number of projects we have been focused on for some time are finally coming to fruition.

Notably, we are preparing to work with Fisheries New Zealand as they formally consult on our proposal for amendments to amateur fishing regulations in the Fiordland Marine Area (FMA). This project began in 2019 when several fishers and charter boat operators

raised concerns with the Guardians about fish stocks in the area. We have worked with the community, mana whenua and stakeholders to define the problem and develop solutions to stop the decline of several stocks and to rebuild stocks that have decreased to very low levels. When combined with improvements to policy, monitoring and reporting that the Guardians are advocating for, we are optimistic the fishery will be healthy for future generations to use and enjoy. Management of this recreational fishery has been challenged by a lack of robust catch data, so it is incredibly positive that Fish Mainland is developing a reporting app in conjunction with Fisheries New Zealand, and that Fiordland's fishing community has expressed a strong willingness to use it. We will continue to focus on developing a more holistic way of managing the entire shared fishery in years to come.

Resource management and consenting has required a lot of attention this year. The Fiordland Marine Guardians are considered an affected party for all applications in the FMA, requiring our review of each one. We have been vocal in our concerns about the ever-increasing levels of activity in the FMA and have been pleased with Environment Southland's proposed plan change regarding surface water activities. The Guardians contribute their wide-ranging expertise as applications and plans are assessed, and remain focused on maintaining the values of the FMA for the future.

It has been satisfying to follow progress of the *Undaria pinnatifida* (*Undaria*) control programme in Te Puaiahua/ Breaksea Sound, particularly the training and deployment of a skilled underwater workforce. In the first year of the programme the team removed 30 tonnes of this invasive kelp from the FMA and will continue to monitor the area to see whether this removal is enduring. We are also impressed with Biosecurity New Zealand's investment in developing new tools to eradicate *Undaria* on a large scale, including where it is invading the natural reefs in Fiordland.

This year we welcomed two new Guardians, Gavin Tayles and John Cushen. I have been impressed by how quickly they have got up to speed with our mahi. Their critical thinking and analysis of the direction the Guardians are taking has strengthened our decision-making processes.

The issues Fiordland faces are complex, dynamic and inter-connected. We remain focused on the Guardians' vision for this precious part of Aotearoa New Zealand.

Ngā mihi nui

Dr Rebecca McLeod
Chairperson



Working together for the good of Fiordland

The Guardians work closely with agencies with an interest in the Fiordland (Te Moana o Atawhenua) Marine Area to enhance collaboration in the region and align focus and strategy. Representatives from these agencies attend our meetings to report on progress and engage on matters of concern.

Sub-committees made up of Guardians and representatives from our partner agencies focus specifically on biosecurity, monitoring, compliance, communication and engagement with users, and progress matters outside the Guardians' main meetings. We also have a working group to coordinate our involvement in the review of the Regional Coastal Plan for Southland.

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

We acknowledge the relationship between Te Rūnanga o Ngāi Tahu, as tangata whenua, and Te Moana o Atawhenua. An expression of this special relationship is a requirement under the Act that one member of the Guardians is nominated by Te Rūnanga o Ngāi Tahu.

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

The Fiordland Marine Guardians



Dr Rebecca McLeod (Chairperson)

Guardian since 2012

Rebecca has chaired the Guardians since 2015. She is a marine scientist, specialising in southern marine ecosystems, has been involved with shaping New Zealand's Antarctic science programme, and sits on the Governance Board of the Centre for Research Excellence "Coastal People, Southern Skies" (University of Otago). Rebecca was working on her PhD in Fiordland when the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005 was established. Her research informed the Fiordland strategy and she feels very honoured to be able to ensure the Guardians' vision for the area is realised. Rebecca is a keen diver and boatie and enjoys getting out on the water with her young family.



Ali Ballantine

Guardian since 2018

Ali's passion for and interest in Fiordland began when she moved to the area in the early 1980s. During her tenure as Environment Southland Chairperson and Councillor, she advocated for the formation of the Guardians and the ongoing support and assistance the Council provides for them. Under her watch as Chairperson, biosecurity threats in Fiordland were prioritised, which resulted in the initiation of the Fiordland Marine Pathways Plan. Ali has been involved in wilding conifer issues in Southland and nationally for over 20 years, chairing the Mid Dome Wilding Trees Charitable Trust since its formation in 2007. She also holds governance responsibilities for the Ministry for Primary Industries' National Wilding Conifer Control Programme.



Stewart Bull

Guardian since 1995

Stewart has extensive knowledge of the customary uses of Fiordland, particularly customary fishing. He is the former chair of the Oraka-Aparima Rūnaka and the former Oraka-Aparima Rūnaka representative on the Board of Te Rūnanga o Ngāi Tahu. Stewart is a Tāngata Tiaki, appointed by the Minister of Fisheries, in recognition of his particular expertise in local customary fishing management and resource issues. He is the Oraka-Aparima Rūnaka representative on the Customary Fisheries Advisory Group and the Te Rūnanga o Ngāi Tahu representative to the Southland Conservation Board. Stewart has been a member of the Guardians of Fiordland since its inception and in 2018 was awarded a Queen's Service Medal for his services to conservation and Māori.



John Cushen

Guardian since 2021

John has a passion for Fiordland and has worked there as a tourism business advisor, nature guide, and boat skipper. He is involved in several community conservation projects, including Predator Free Rakiura, the Stewart Island/Rakiura Community and Environment Trust, the Wakatipu Wildlife Trust, and the Tuckers Beach Wildlife Reserve group. When not working as a tourism advisor, he likes nothing better than being out on his launch, cruising and fishing in southern waters.



Dr Kerri-Anne Edge Hill

Guardian since 2015

Kerri-Anne has a background in science, including a PhD in Zoology (in seabird ecology), and works as a science communicator, knowledge broker, writer, and facilitator. This work often takes the form of supporting the restoration and sustainable use of wild and natural places and fostering a greater connection between people and nature throughout Aotearoa New Zealand. Kerri-Anne has been a resident of Te Anau for 19 years. She has spent much of that time contributing to projects within Fiordland, including 10 years with the Fiordland Islands Restoration Programme for the Department of Conservation.



Mark Peychers

Guardian since 1995

Mark was a commercial fisher for almost 30 years, working throughout the Fiordland area. He is a shareholding director of the Fiordland Lobster Company. Mark has been a Guardian since the group began in 1995 and was involved in setting up Fiordland's first two marine reserves. Mark has built strong relationships with our partner agencies (Department of Conservation, Fisheries New Zealand, and Environment Southland). He is actively involved with fisheries management in Fiordland and other parts of New Zealand. Mark is also a trustee of the Southern Coastal Charitable Trust, which manages the coastal clean ups of Fiordland and Stewart Island/Rakiura.



Gavin Tayles

Guardian since 2021

Gavin's heritage is in Southland and he resides in rural Northern Southland. He has had a lifelong association with recreation in the Fiordland National Park and has been a recreational fisher and diver in the Fiordland Marine Area for more than 20 years. Gavin has a deep connection to the area and a strong desire to preserve it for future generations to enjoy. He works as a senior executive with FarmRight Ltd and has extensive networks in the recreational fishing sector.



Peter Young

Guardian since 2018

Pete has worked on boats since he was 15 years old. He lives in Te Anau and works in the fiords as a commercial fisher and skipper for charter vessels. He is also a very keen recreational fisher and hunter. For more than a decade, he crewed and subsequently skippered the Department of Conservation vessel *GV Southern Winds*, where he was involved in marine research and monitoring programmes conducted throughout the Fiordland (Te Moana o Atawhenua) Marine Area. Pete was an original 'Guardian of Fiordland', contributing to the development of the Fiordland Marine Conservation Strategy. He was also one of the original instigators of the Fiordland Coastal Clean Up in 2003 that now manages the regular coastal clean ups of both Fiordland and Stewart Island/Rakiura.

Agency representatives

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

Ali Meade

Biosecurity and Biodiversity Operations Manager
Environment Southland

Bruce Halligan

Consents Manager
Environment Southland

Chloe Corne

Ranger Operations
Department of Conservation (to February 2022)

Fiona Newlove

Manager, Mauri Moana – Marine Policy
Ministry for the Environment

George Gericke

Senior Consents Officer
Environment Southland

Haydee Wilton

Fiordland Marine Guardians Secretariat
Ministry for the Environment

Jen Geange

Senior Adviser, Pest Management Programmes
*Biosecurity New Zealand
Ministry for Primary Industries*

John Lucas

Operations Manager
Department of Conservation

Justyna Paplinska

Team Manager, Pest Management Programmes
*Biosecurity New Zealand
Ministry for Primary Industries*

Kathryn McLachlan

Team Leader – Marine
Environment Southland

Lucy Hicks

Policy and Planning Manager
Environment Southland

Lyndon Cleaver

Regional Harbourmaster/Maritime Manager
Environment Southland

Mark Geytenbeek

Principal Advisor – Sector Support and Innovation
*Fisheries NZ
Ministry for Primary Industries*

Richard Kinsey

Senior Ranger Operations
Department of Conservation

Robert Win

Senior Fisheries Analyst – Inshore Fisheries South
Environment Southland

Stephen Logie

District Team Leader – Southland: Fisheries Compliance
Ministry for Primary Industries



Our year in review

July 2021 – The Guardians attended the launch of the Milford Opportunities Project masterplan for Milford Sound/Piopiotahi.

We disseminated the findings of our Fiordland fisheries sustainability survey, where more than 200 fishers shared their views on the state of the fishing experience.

The Guardians received a letter from several Fiordland charter vessel operators regarding the carrying capacity of Tamatea/Dusky Sound and Te Puitaha/Breaksea Sound.

August 2021 – At the Guardians and partner agency meeting we welcomed newly appointed Guardians Gavin Tayles and John Cushen. Representatives of Meridian Energy presented their annual report of physical monitoring of Doubtful Sound/Patea.

The Guardians participated in a workshop in Wellington focused on developing a national marine biosecurity strategy.

We enjoyed two days at The Rock Boat Show Southland, where we spoke with many people about the Fiordland Marine Area, our review of recreational fishing and the biosecurity responsibilities of all boaties.

September 2021 – The Guardians met with Keith Turner, Chair of the Milford Opportunities Project, to emphasise the Guardians' interest in the project, and concerns about implications of decisions for the wider FMA.

October 2021 – The Guardians assisted Dr Kay Booth with her paper on remoteness and wilderness values in the FMA, which she was preparing for Environment Southland to consider.

A research cruise coordinated by Blue Cradle focused on Milford Sound/Piopiotahi, specifically looking at the prevalence of microplastics in coastal waters.

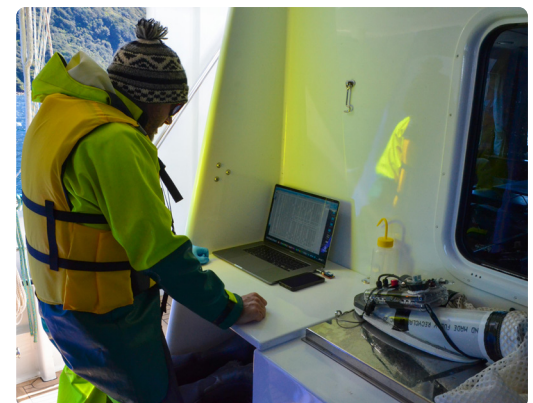
We welcomed an update from Fish Mainland on the development of their recreational fishing reporting app.

November 2021 – The Guardians travelled to Wellington to meet with the Ministers of the Environment, Oceans and Fisheries, and Biosecurity, and senior managers of Fisheries New Zealand and Biosecurity New Zealand. We presented a series of recommendations to Hon David Parker, Minister of Oceans and Fisheries, relating to our review of fisheries sustainability in the FMA.

At the Guardians and partner agency meeting we heard from researchers Leah Crowe (University of Otago) and Jenni Stanley (Waikato University) about their plans to use passive recording devices to measure underwater soundscapes. We were joined by Ben Knight from Sustainable Coastlines who briefed us on the nationwide Litter Intelligence Programme.

We submitted to Fisheries New Zealand regarding the review of recreational daily bag limits for finfish.

We wrote to Environment Southland to encourage them to include full biosecurity containment systems in the design for the new vessel haul out facility in Bluff.



December 2021 – The operational phase of the *Undaria* control programme (Jobs for Nature) began, with divers deployed to Te Puaitha/Breaksea Sound to begin monitoring and removal.

January 2022 – The Guardians met with Penny Nelson, the newly-appointed Director General of the Department of Conservation – Te Papa Atawhai.

February 2022 – At the Guardians and partner agency meeting Storm Stanley outlined the proposed PauaMAC5 fisheries plan, and shared interests in fisheries management were discussed. The Guardians were briefed on two new research programmes in the FMA, including the fiord carbon sink programme (led by the University of Otago and GNS Science, funded by MBIE Endeavour) and the Southern Fiordland Initiative (led by Paul and Katherine Mitchell).

We compared our experiences relating to fishing pressure and marine management with Alex Rogers from the Hauraki Gulf Forum.

Concerns began to surface about the size and positioning of new mooring installations in Cascade Cove (Tamatea/Dusky Sound) and First Arm (Doubtful Sound/Patea). The Guardians engaged with Environment Southland about the moorings in question.

The Guardians' Monitoring Sub-committee met.

We submitted to Fisheries New Zealand on the Review of Rock Lobster Sustainability Measures in Southern FMA (CRA 8) for 2022/23.

March 2022 – The Guardians met with members of the CRA8 executive regarding our review of recreational fishing.

We appeared at the resource consent hearing for The Alpine Group Limited and Stephen William Day. The application in question was for a resource consent for their barge (and associated activities) in Cascade Cove (Tamatea/Dusky Sound).

The Communications and Engagement Sub-committee met.

The Guardians submitted to Fisheries New Zealand on the proposed technical amendments to fisheries regulations, specifically correcting an oversight in the blue cod rules for the FMA.

April 2022 – The Guardians submitted to Environment Southland on the proposed change to the Southland Regional Coastal Plan that is designed to address concerns about the level of surface water activity in the FMA.

We received a proposal for a marine reserve in Tamatea/Dusky Sound from a local operator.

Biosecurity NZ requested proposals for innovative tools to manage *Undaria* infestations over large areas.

May 2022 – At the Guardians and partner agency meeting we heard from Steph Bennington and Dr Will Rayment (University of Otago) about their recent publication on the bottlenose dolphin population in Tamatea/Dusky Sound, and discussed implications for management.

June 2022 – The Guardians visited Stewart Island/Rakiura for a two-day strategy meeting where we met with Shona Sangster, Chair of the Southland Conservation Board; Phred Dobbins, Honorary Fisheries Officer; Bill Watt, Rakiura Marine Guardians; and Phillip Smith, Chair Te Whaka a Te Wera mātaimai.





Focus on fisheries

In November 2021, the Guardians travelled to Wellington to deliver their recommendations to Hon David Parker, Minister of Oceans and Fisheries, about changes to the amateur fishing regulations in the Fiordland (Te Moana o Atawhenua) Marine Area (FMA).

These recommendations were the culmination of more than two years of engagement with recreational fishers, operators of amateur-fishing charter vessels, and Ngāi Tahu ki Murihiku, spurred by increasing community concern about the state of key fish stocks. Over this time, the Guardians met with focus groups, presented information at Mahinga Kai Hi Ika Komiti, conducted a survey, analysed datasets held by the Ministry of Fisheries, and had wide-ranging discussions with members of the community at boat shows, prompted by our articles in *The Fishing Paper* and *Hunting News*. The Guardians also drew on their extensive first-hand knowledge of the issues and status of fisheries gained through their own experiences of fishing in the FMA.

It has become abundantly clear that multiple species targeted by recreational fishers, including blue cod/rāwaru, groper/hāpuku, pāua and scallops are considerably depleted in the internal waters of the fiords. There is clear evidence of increasing fishing pressure, and that trend is forecast to continue. It has also become apparent that

an unintended consequence of the fishing regulations introduced in 2005 has been a concentration of fishing in the entrances of many fiords, seaward of the habitat lines. There are clear signs that the current level of fishing pressure occurring inside the fiords is unsustainable, and many key fish stocks require rebuilding.

Our recommendations were wide-ranging and interconnected, and included:

- changes to the amateur-fishing rules to align them with the philosophy of ‘fishing for a feed, not to fill the freezer’, which guided development of the original Fiordland recreational rules in 2005
- developing and supporting innovative ways to collect long-term data that will inform future management decisions
- amending legislation and policy relating to amateur-fishing charter vessels to enable management of this sector to be tailored and improved.

The Guardians firmly believe that considerable changes are required to realise our vision for the FMA and ensure that the solution will be enduring for decades to come.

Minister Parker received our recommendations and instructed Fisheries New Zealand to begin public consultation on the recommendations relating to amateur-fishing rules. Consultation will close on 30 September 2022. The Guardians will continue to advocate the remaining recommendations to be actioned.

We are mindful that while the proposed solution may halt the decline of some stocks and enable their rebuild, we need to do more work to ensure fisheries sustainability for the long term (rather than just responding to current issues and pressures). The Guardians intend to progress the development of a more holistic fisheries management plan or other mechanism for the FMA.



Focus on monitoring the marine environment

As stated in the Act, an important function of the Guardians is to monitor the state of the marine environment and biological diversity in the FMA. We approach this responsibility by having a monitoring sub-committee with a membership of Guardians and agency representatives, that works to deliver a monitoring plan.

It is notoriously challenging to secure funding for long-term monitoring programmes which require consistent investment. Often, it is only after years or decades that the value of long-term datasets becomes apparent. Typically, the longer timeframe the dataset covers, and the more frequent the measurements, the more valuable the dataset is.

The Guardians strive to provide sound advice about management measures that is informed by robust information. Collecting data in the vast, remote FMA is costly and logistically challenging so we need to prioritise what, when and how to monitor. Information gleaned from this monitoring programme enables us to form views on a wide range of issues including marine biosecurity, fisheries management, visitor pressure, and resilience to climate change.

There are several monitoring programmes that the Department of Conservation – Te Papa Atawhai facilitates in the FMA that inform our management: underwater biodiversity monitoring throughout Fiordland; monitoring of marine mammal population dynamics; and monitoring of biological and physical features of marine reserves.

Supporting these programmes also encourages marine scientists to focus on the FMA, which can have wider benefits.

Ecological monitoring provides a solid basis for appreciating the incredibly biodiverse rock wall communities. A case in point is the concerning discovery in April 2022 of a mass mortality event that occurred in sponges throughout the FMA. Encouraging experts such as those from Victoria University of Wellington – Te Herenga Waka to focus on Fiordland allows phenomena like the sponge bleaching event to be quickly identified. Long-term measurements of the diverse communities that live on the rock walls of Fiordland have provided important context to quantify the extent of this event and consider the implications.

The Guardians have also been pleased to support new research coming out of the marine mammal monitoring programme. Researchers from the universities of Otago and Waikato are deploying equipment to measure underwater noise. The data captured will provide answers to a wide range of questions, including how far bottlenose dolphins travel within the FMA and how connected different

populations are to each other, and how much underwater noise vessels create in remote parts of the FMA and how this might affect marine species. The answers will help to inform policy around marine mammal protection and may prove useful as the Regional Coastal Plan for Southland is reviewed.

As the Guardians have worked through the review of the amateur fishing regulations, we have been challenged by the large data gaps that exist, particularly relating to the catch by and effort of recreational fishers. We are working hard to ensure that data collection is an ongoing focus, that existing long-term programmes are strengthened and improved, and that innovative thinking and advances in technology are applied as new monitoring programmes are developed.

We acknowledge the contribution of a growing number of commercial operators in the region who are supporting research to occur in the FMA. These leaders have the vision required to grow our understanding of this unique and fascinating place.



Looking ahead – the next 12 months

There are several key projects that we anticipate will require focus from the Guardians in the year ahead in addition to our regular mahi. By mid-2023, we plan to accomplish the following.

Encouraging reporting of amateur catch: As we look to introduce new amateur-fishing rules in the FMA, our focus will be on the reporting of amateur/recreational catch. Our review of fisheries sustainability has demonstrated the immense challenge of managing a fishery where there is an information void. The development of a recreational catch reporting app by Fish Mainland and Fisheries New Zealand is proving very timely. In our recent recreational fishing survey, more than 80 per cent of respondents stated they would use an app if one was developed. With the buy-in of Fiordland's fishing community, we can get to a position where we can assess which areas are recovering and places where fish stocks are under pressure. This information will aid timely responses that will ultimately enable the fishery to be managed in a sustainable way for future generations to use and enjoy.

Engagement with the Milford Opportunities Project (MOP): We expect the MOP to progress towards implementation in the year ahead. The Guardians are not on the MOP Governance Board but have made clear our expectation that we will be included in decision-making on matters relating to the FMA, such as the waters of Milford Sound/Piopiota. We consider there to be significant risk

of management decisions in Milford Sound/Piopiota having implications for the wider FMA. The Guardians are also concerned that plans to reform the governance of Milford Sound/Piopiota may conflict with the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005.

Supporting the review of the Southland Regional Coastal Plan: This plan is critical to achieving our vision, so the Guardians will continue to engage with Environment Southland as it is reviewed. The Guardians will contribute local knowledge, risk analysis, problem solving and guidance to ensure the plan is developed in a way that will protect the values of the FMA for the future, while providing for an acceptable level of development and activity. We also expect that the proposed plan change to address surface water activity will affect the way we consider resource consent applications.

Encouraging scientific research in the FMA: The Guardians will continue to encourage scientific research in the FMA, particularly that which has implications for the management of the area. The remote and vast nature of Fiordland provides a barrier to research, which can be overcome to some extent by our advocacy of research being supported and encouraged by the management agencies.

This support can include engaging researchers as studies are developed, showcasing research findings, facilitating logistical support, and encouraging pragmatic approaches to policy and consenting of activities. Robust research and monitoring is more important than ever as the FMA experiences unprecedented environmental and anthropogenic (human-made) pressures.

Planning future marine pest management: As we head into the second and final year of the Jobs for Nature-funded *Undaria* control programme, the Guardians will work with the agencies to develop a plan for the ongoing control of this invasive species. The goal has been to 'hold the line' until new tools are developed that will facilitate the control and ideally the eradication of marine invasive species in natural habitats like Fiordland. There is progress in this area with two research projects scoping and developing innovative tools. It is also heartening to see momentum building at a national level for proactive approaches to marine pest management. The Guardians will continue to collaborate at local and national levels to encourage and shape these initiatives.





Resource consents

We considered and responded to a number of resource consent applications to Environment Southland during the year.

These fell into two categories.

1. Non-notified, where we were identified as an affected party and asked to provide our written approval.
2. Notified (limited or publicly), where we provided a submission that stated our support or opposition to the application.

These applications are listed in Environment Southland's report on pages 30–31.



Meetings

Fiordland Marine Guardians general meetings

Four meetings involving Fiordland Marine Guardians and management agencies were held during the year, predominantly online due to the COVID-19 pandemic.

9 August 2021	Department of Conservation, Invercargill
10 November 2021	Video conference
24 February 2022	Video conference
4 May 2022	Video conference

Sub-committee meetings

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

The sub-committees align with the requirements of the Fiordland (Te Moana o Atawhenua) Marine Management Act to develop plans and disseminate information on:

- **Monitoring** (Convenor: Richard Kinsey, Department of Conservation)
- **Biosecurity** (Convenor: Jen Geange, Biosecurity New Zealand)
- **Communications and Engagement** (Convenor: Dr Kerri-Anne Edge Hill, Fiordland Marine Guardians)
- **Compliance** (Convenor: Stephen Logie, Ministry for Primary Industries).

There is also a working group that progresses work relating to Environment Southland's consultation on the Regional Coastal Plan for Southland (Convenor: Ali Ballantine, Fiordland Marine Guardians).

The Guardians' sub-committee and working group members are:

Gavin Tayles – Biosecurity, Communications and Engagement

Mark Peychers – Monitoring, Resource Consents, Review of Regional Coastal Plan for Southland

Stewart Bull – Biosecurity, Compliance

John Cushen – Biosecurity, Compliance

Dr Kerri-Anne Edge Hill – Communications and Engagement, Monitoring

Peter Young – Monitoring, Compliance

Ali Ballantine – Biosecurity, Resource Consents, Review of Regional Coastal Plan for Southland

Dr Rebecca McLeod – the Chair has oversight of all sub-committees.

Sub-committee meetings held during the past year included:

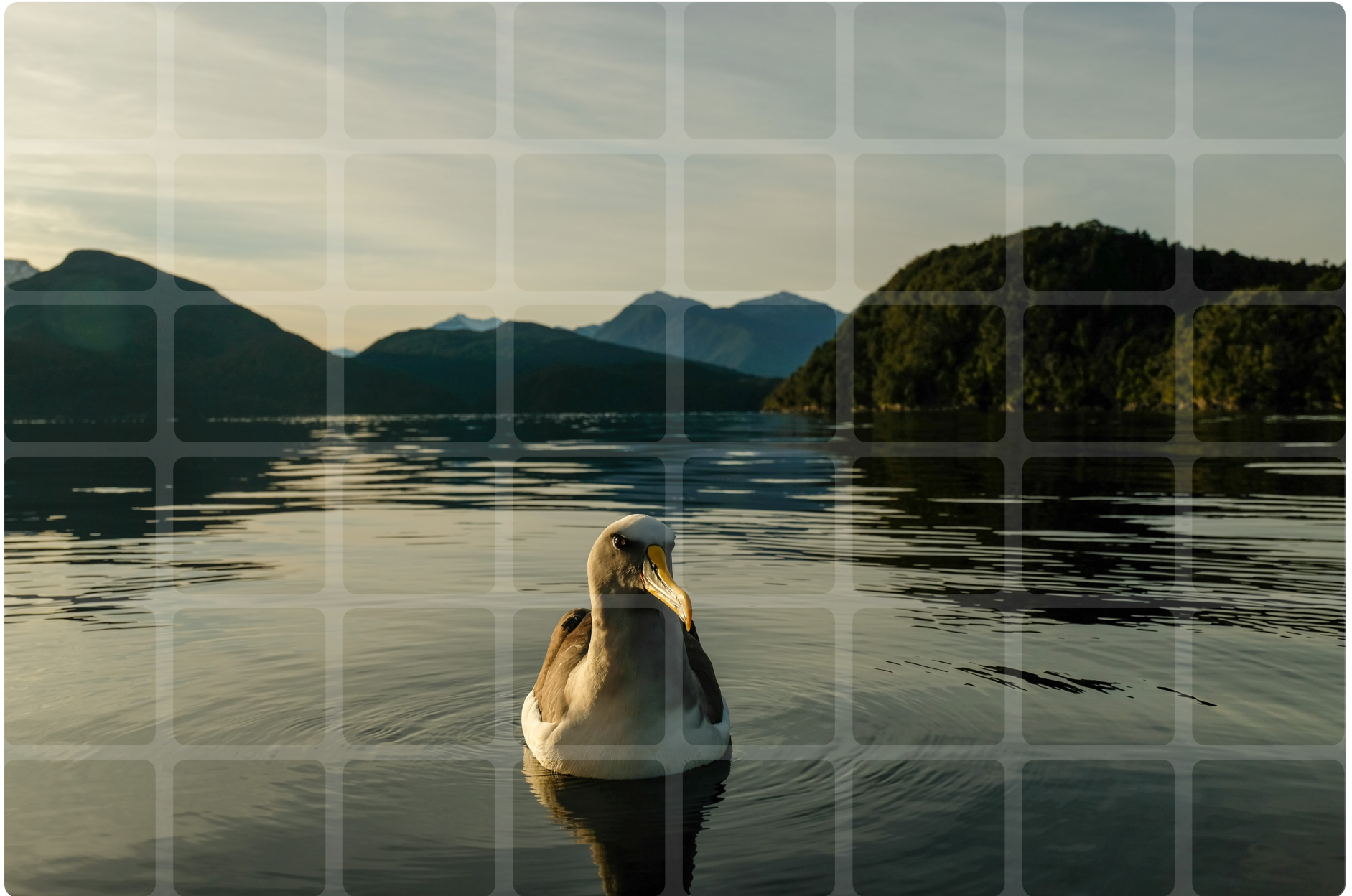
Monitoring sub-committee meeting

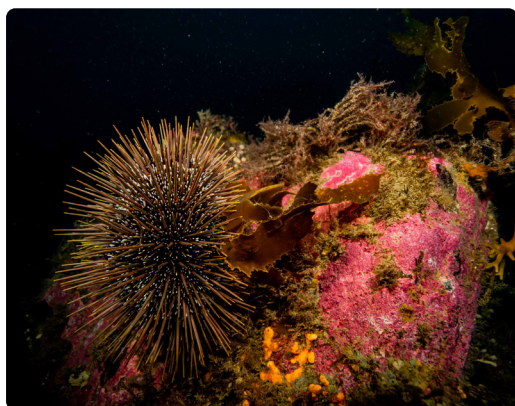
23 February 2022 Video conference

Communications sub-committee meetings

22 February 2022 Video conference

31 March 2022 Video conference





Agency reports



Ministry for the Environment

Role

The Ministry for the Environment – Manatū Mō Te Taiao administers the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005. In this capacity, we provide secretariat support to the Fiordland Marine Guardians and support the Minister for the Environment in fulfilling their obligations under the Act.

Achievements

New Guardians appointed

On 1 July 2021, the Minister for the Environment, Hon David Parker, appointed two new Guardians, Gavin Tayles and John Cushen. Both have a deep connection with the Fiordland Marine Area, and a keen desire to preserve it for future generations to enjoy. They have both been inducted and welcomed into the Guardians' group and have brought new perspectives and contributions to the Guardians' work over the past year.

Update of user guide

This year we supported the Guardians to update and reprint their popular *Beneath the Reflections* user guide. It now incorporates new fishing information, as well as updated maps and information about new moorings that boat users need to be aware of. It will continue to be a valuable resource for those using the Fiordland Marine Area.

Looking ahead

Appointment of Guardians

The appointment terms for three of the eight current Guardians will expire on 31 October 2022. We have begun an appointment process on behalf of the Minister for the Environment and expect the Minister to make appointments in late 2022.



Department of Conservation

Role

The Department of Conservation (DOC) – Te Papa Atawhai has been one of the key agencies associated with the Fiordland Marine Guardians since the inception of the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005. Under the Act, we lead the biological monitoring plan for the Fiordland (Te Moana o Atawhenua) Marine Area (FMA). The plan covers how we will monitor the state of the marine environment and its biological diversity, as well as additional elements such as social monitoring.

In addition to the role that DOC plays with the Guardians, we are responsible for managing our statutory responsibilities within the FMA, most importantly:

- Marine Reserves Act (Fiordland has 10 marine reserves)
- Marine Mammal Protection Act 1978 and Protection regulations 1992
- National Parks Act (for the Fiordland National Park).

Achievements

DOC has felt both the economic and social impacts of COVID-19 in the 2021/22 financial year, with several local projects losing funding and reduced staff capacity. Unfortunately, this resulted in the marine monitoring budget for the FMA being lost for the year and several projects not being completed. The most important of these was the planned re-survey of the long-term biological monitoring sites throughout the FMA.

The impacts of COVID-19 have also prevented agency/Guardians meetings being held in person, with a switch to online meetings making communication more challenging. However, this has not diminished the Guardians' dedication and ability to work on the key issues associated with Fiordland. The Department would like to acknowledge each of the Guardians for the amount of work they have achieved and the advice they have provided under very trying circumstances.

Although DOC has had reduced capacity in 2021/22, we have still been able to carry out some interesting and important projects that help us to manage our responsibilities in the FMA.

Undaria

The *Undaria* programme in Fiordland appears to be moving in a positive direction with some significant additional investment.

As part of DOC's Jobs for Nature programme, a NZ\$2 million biomass removal contract was awarded to Environment Southland (ES) and work started in Te Puaiahua/Breaksea Sound in October 2021. We would like to congratulate ES and all those involved in a highly successful first field season, providing work to a number of local unemployed people and removing tonnes of *Undaria* from Te Puaiahua/Breaksea Sound.

The containment programme that has been run by DOC, ES and Biosecurity NZ (MPI) since 2010 continued this year and is proving to be successful at keeping *Undaria*

within the boundaries of Puaiahua/Breaksea Sound and a small area in Northport, Taiari/Chalky Inlet.

With the addition of the Jobs for Nature programme and a tool development programme being funded by Biosecurity NZ, it is hoped that the size of the infestation in Te Puaiahua/Breaksea Sound can be reduced and that long-term management plans can be made.

The control work in Taiari/Chalky Inlet has been very successful, as no mature *Undaria* has been found since April 2019. The programme is moving into a new surveillance phase, which is less intensive but still provides agencies the ability to detect any future growth.

DOC remains committed to this work, and along with ES and Biosecurity NZ, we would like to thank all the contract divers, students, operators and local companies who have helped in any way with the project.

Fiordland humpback whale survey

The annual Fiordland humpback whale survey took place in November 2021. DOC and University of Auckland staff spent six days surveying the area between Te Awa-o-Tū/Thompson Sound and Tamatea/Dusky Sound. There were 39 sightings of at least 31 humpback whales; with 34 biopsy samples and 28 fluke photos collected for identification.

The data collected over the last four years of the five-year programme will help DOC to identify the origin of the migrating whales and inform future management plans.

Bottlenose dolphin monitoring from June 2021 to May 2022

The long-term bottlenose dolphin monitoring projects in Doubtful Sound/Patea and Tamatea/Dusky Sound continued this year in partnership with DOC, the University of Otago, the New Zealand Whale and Dolphin Trust and with funding from Fiordland tourism operators. Three trips were carried out at each location across the year (winter, spring and summer) to collect information on the population and rates of calf survival.

Data analyses carried out by University of Otago researchers show that dolphin numbers have increased in the past year in Doubtful Sound/Patea, following a small population decline in 2020, with an estimated 62 individuals and 5 new calves. Population size in Tamatea/Dusky Sound appears to be stable, with an estimated 121 dolphins in the population this year and 6 new calves born. The data collected from these long-term dolphin monitoring projects are of great value for DOC in understanding fluctuations in the populations, so that they can be managed accordingly.

In addition to the standard long-term bottlenose dolphin population monitoring, PhD student Leah Crowe and Waikato Senior Lecturer Jenni Stanley have deployed several acoustic recording devices in the fiords. The acoustic recorders have been positioned throughout the southern fiords to pick up marine mammal presence, with an additional, more complex array in Taumoana (Five Fingers Peninsula) Marine Reserve to record the soundscape of the reserve.

Sponge bleaching – Victoria University

In 2021/22, the South Island experienced one of the hottest and driest summers for a very long time, which brought very warm sea temperatures to the fiords. The La Niña conditions raised the water temperatures by up to 5 degrees Celsius, negatively affecting the cup sponge *Cymastella lamellate* which is common in the fiords. Millions of individual sponges appear to have been bleached throughout the FMA. The bleaching problem was identified by Dr James Bell from Victoria University of Wellington, following a Fiordland research trip by one of his students.

Bleaching events like these have never been recorded in Fiordland before and certainly not at this magnitude. It is worrying that the effects of a warming climate are beginning to appear in such a remote location and it is further proof that isolated areas are not immune to large-scale impacts. DOC is keen to put in place some way of monitoring future climate-related events.

Fiordland monitoring plan

One of DOC's responsibilities under the Act is to lead on the biological monitoring of the FMA. This year, DOC has been able to work on developing an updated monitoring plan which encompasses the biological priorities for the FMA both within the marine reserves and the wider fiords.

We are hopeful that the plan will be completed in the coming year and will help guide the future direction of DOC's monitoring.

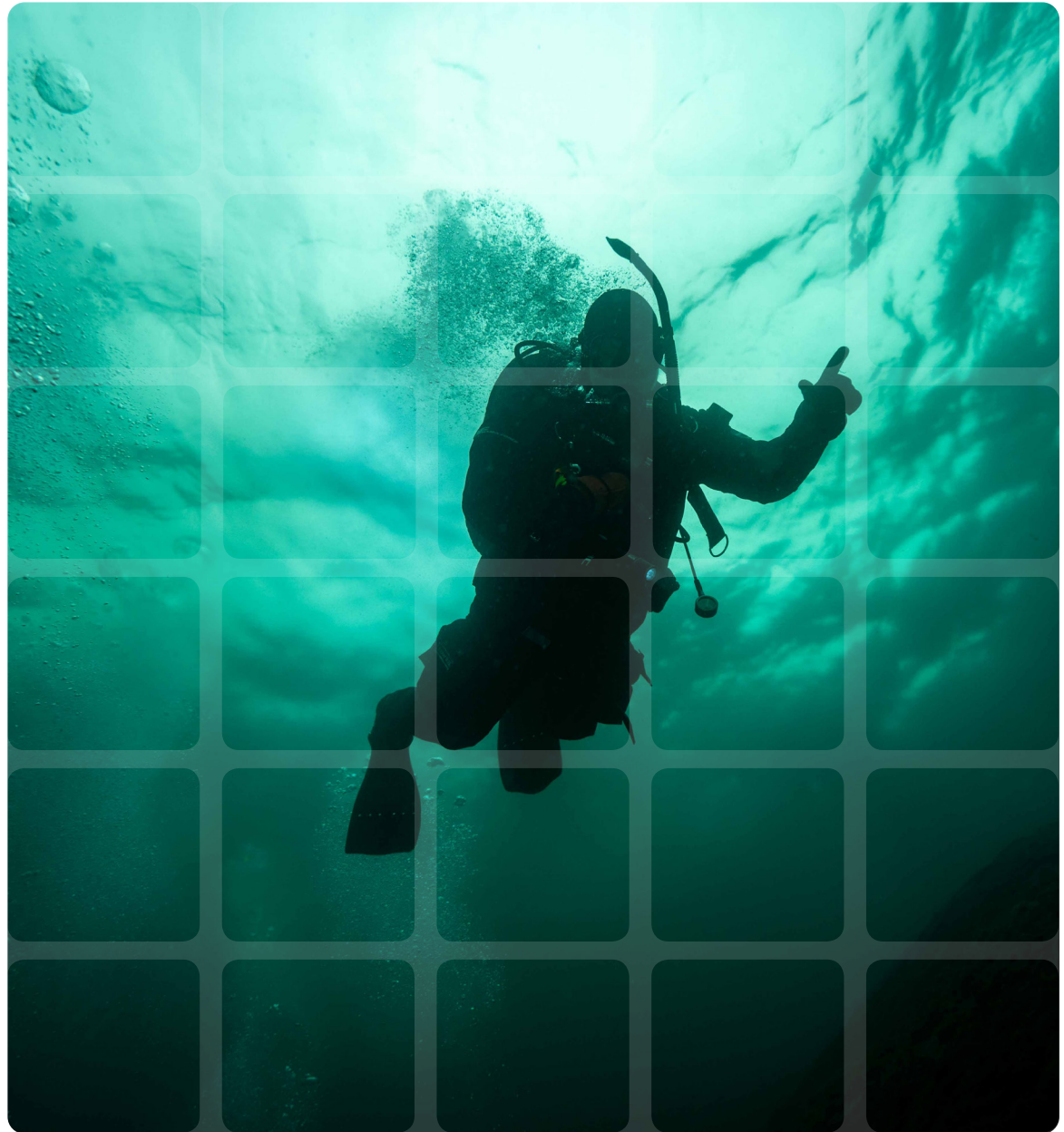


Looking ahead

DOC has the following activities planned for 2022/23:

- re-survey the long-term biological monitoring sites to gain further information on how our marine reserves and the fiords in general are doing
- monitor marine mammals in Fiordland and keep working with the local operators on managing our populations of dolphins
- finalise a clear plan/strategy for future monitoring of the FMA that will help to guide our priorities
- continue to work with the Guardians, Environment Southland and iwi on the Southland Coastal Plan review
- keep working on containing and removing *Undaria* from Te Puaitaha/Breaksea Sound and Taiari/Chalky Inlet.

It is an ongoing privilege to work with the Guardians and representative agencies in Fiordland to realise the vision for the Fiordland (Te Moana o Atawhenua) Marine Area and to protect such an amazing piece of Aotearoa.





Environment Southland

Role

As a regional council, Environment Southland – Te Taiao Tonga is responsible for the sustainable management of Southland's natural resources – land, water, air and coast – in partnership with the community. Environment Southland has an important role to play in managing Southland's coastal marine area including marine biosecurity, navigational safety, and managing consents (and their compliance) within the Fiordland marine environment. This role is most successful when we work in collaboration with other key agencies and organisations.

Achievements

Marine biosecurity

Environment Southland, the Department of Conservation (DOC) and Biosecurity New Zealand have continued working to control and prevent the spread of *Undaria* within the Fiordland Marine Area. A key focus for this year was the Jobs for Nature Fiordland *Undaria* control programme which involved a significant biomass removal effort in Te Puaiahua/Breaksea Sound.

Te Puaiahua/Breaksea Sound: Containment programme

In the past year, nine containment trips were undertaken in Te Puaiahua/Breaksea Sound. Several *Undaria* specimens were found and controlled throughout the year, but no range expansion was detected outside the containment area.

Taiari/Chalky Inlet: Elimination programme

Inspections in Taiari/Chalky Inlet have continued and no *Undaria* has been found since October 2019. It is intended that monitoring in Taiari/Chalky Inlet will continue at a reduced frequency until 2024.

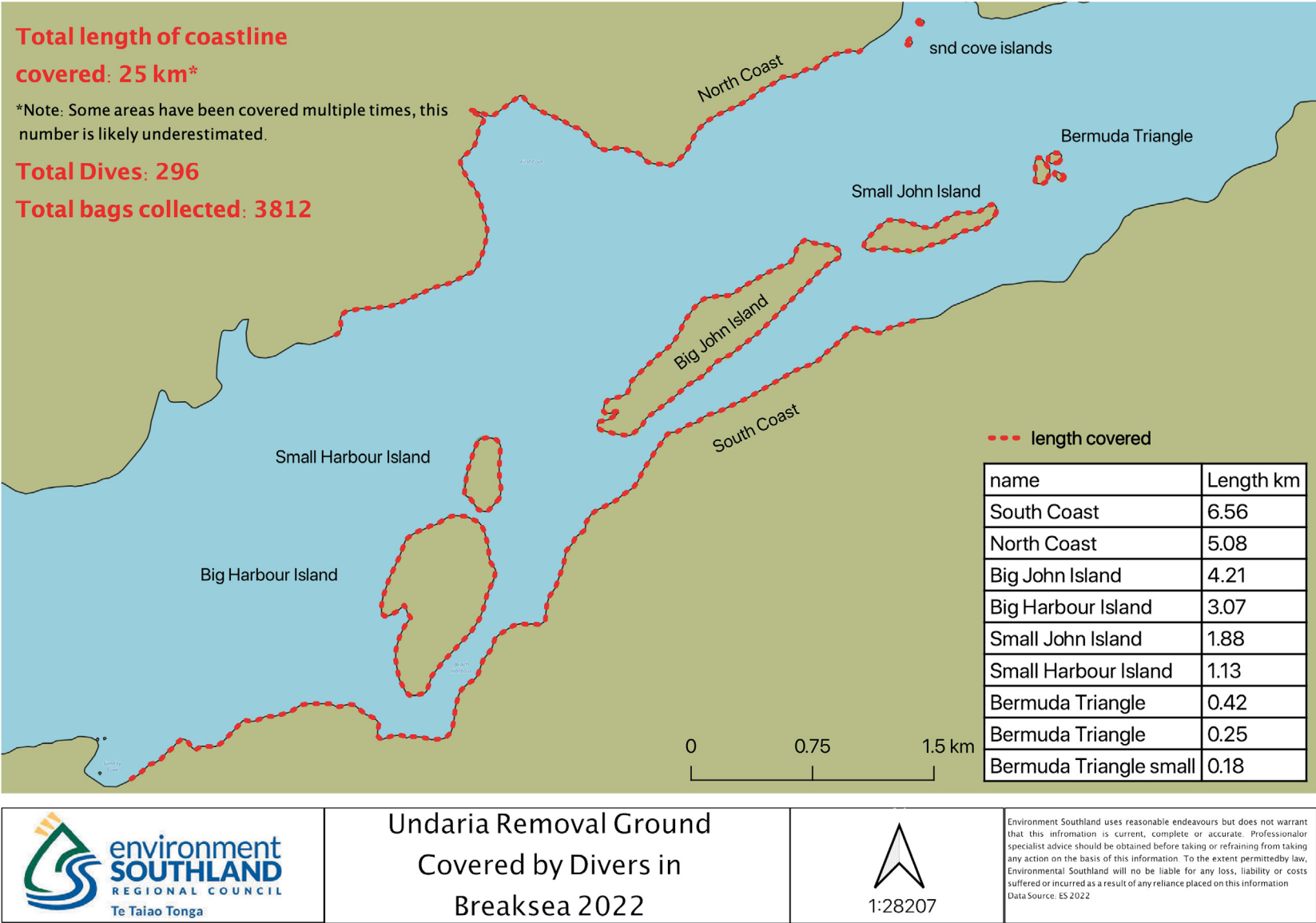
Fiordland Undaria control programme

The first year of the Jobs for Nature Fiordland *Undaria* control programme was an incredible success, with the team overcoming a significant range of challenges to meet the key milestones. Highlights include:

- a team of 13 local community members were recruited, many of whom had no previous dive experience. The team were all trained to scientific Certificate Of Competence standard
- the team surveyed and removed 30,000 kilograms of *Undaria* from over 25 kilometres of coastline in Te Puaiahua/Breaksea Sound (see map, page 28). Several of the high-density areas were targeted multiple times
- approximately 3,650 hours of work was provided to local Southland businesses and an additional 1,650 hours of work to COVID-19-affected contractors from around New Zealand
- the divers have been skilled up and are now working on compliance and containment trips. They've assisted DOC with some local freshwater work that required a team of qualified scientific divers and they have assisted Environment Southland with a marine pest incursion at Stewart Island/Rakiura.



Taiari/Chalky Inlet, North Port *Undaria* Dive Search Area, July 2020



Clean vessel passes

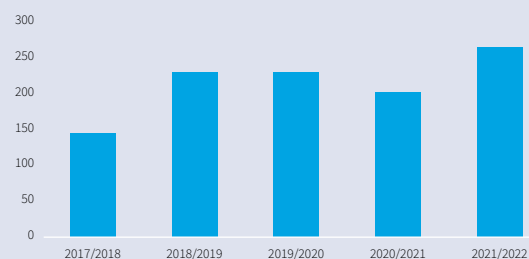
Clean vessel pass (CVP) applications have increased in 2021/22, with a total of 260 applications, compared to 203 the previous year (see graph below).

CVP advertisements were run for Enviroweek in January and March. Advertisements were also placed in social media, the Otago Daily Times, the Southland Express and in the Boaties magazine/website which is visible throughout the year.

Marine biosecurity compliance and surveillance

Two Fiordland compliance trips were scheduled this year; however, due to COVID-19, only one was undertaken. No marine pests were found on any vessels or structures and there was generally a high level of compliance. A total of 23 vessels were boarded; all had current CVPs, except for 2 which had expired and 4 that did not. A further 13 vessels were inspected in Deep Cove, Doubtful Sound/ Patea; 8 had current CVPs and 5 required follow-ups.

Annual applications of clean vessel passes



Harbourmaster

It was a quiet year for the maritime team in Fiordland over the 2021/22 period, with maritime borders closed to cruises and reduced tourist numbers. Significant repairs were undertaken on the Tamatea/Dusky Sound and Wednesday Peak VHF repeater sites as a result of lightning strikes. Phase two of the planned installation of automatic identification system onto repeater sites to track vessels in Fiordland has been deferred to a later date.

Identified risks to maritime safety in Milford Sound/ Piopiotahi has seen Harbourmaster Directions updated to restrict vessels to a stand-off distance of at least 50 metres from the main waterfalls, following two separate occasions where debris ejected from a waterfall struck a vessel. Thankfully, no one was hurt or injured on either occasion.



Resource consents

Under the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005, the Guardians provide advice on resource consents to Environment Southland, which Council must then consider during the decision-making process. The Guardians may also make submissions on notified applications or attend pre-hearing meetings and hearings for which they have provided submissions.

For the year 1 July 2021 to 30 June 2022, the Council received and processed the following 26 applications in the Fiordland (Te Moana o Atawhenua) Marine Area:

* not yet decided
 ** application returned as incomplete
 *** withdrawn

- **The Wilderness Tonic Company Limited (APP-20222043) *****
 To undertake commercial surface water activities in the CMA at Kaipo Bay, Fiordland.
- **Department of Conservation (APP-20222135) ***
 To disturb the coastal marine area by installing a one-kilometre wheelchair-access walking track at Milford Sound/Piopiotahi.
- **Department of Conservation and Heritage New Zealand (APP-20211475)**
 To disturb the foreshore for the removal of a cannon in Taiari/Chalky Inlet, Fiordland.
- **Excell Fishing Company Limited (APP-20222080) ***
 To erect two pontoon structures, disturb the foreshore and exclusively occupy the coastal marine area at Deep Cove, Doubtful Sound/Patea.
- **Gravity Fishing Limited (APP-20221926) ***
 To undertake commercial surface water activities in the coastal waters from Yates Point to Tamatea/Dusky Sound, Fiordland.
- **Leah M Crowe and Jenni Stanley (APP-20221881)**
 To occupy the coastal marine area with temporary moorings for deployment of scientific instruments for research activities in Fiordland.
- **Puysegur Holdings Limited (APP-20211642) ***
 To occupy a landing barge and mooring at Kisbee Bay, Cromarty, Rakituma/Preservation Inlet, Fiordland.
- **Real Journeys Limited (APP-20211612)**
 To carry out a commercial surface activity in Milford Sound/Piopiotahi – the operation of the vessel *Sinbad*.
- **Real Journeys Limited (APP-20181939-V1)**
 To carry out a commercial surface water activity in the coastal marine area of Milford Sound/Piopiotahi – substituting the *Fiordland Navigator* vessel for the *Milford Mariner*.
- **Real Journeys Limited (APP-20221951) ***
 To carry out commercial surface activities in the coastal marine area Milford Sound/Piopiotahi – using the vessel *Milford Wanderer*.
- **Real Journeys Limited (APP-20221947) ***
 To undertake commercial surface water activities in the coastal marine area adjacent to the Fiordland National Park from Yates Point to Puysegur Point, Foveaux Strait/Te Ara-a-Kiwa and Stewart Island/Rakiura Coastal Waters – using the vessel *Milford Wanderer*.
- **Real Journeys Limited (APP-20211580)**
 To operate a commercial tourist vessel – the *Milford Monarch* – for day trips in Milford Sound/Piopiotahi.
- **Real Journeys Limited (APP-20211395) ***
 To carry out commercial surface activities in the coastal marine area adjacent to the Fiordland National Park with one vessel of approximately 36 metres with up to 414 passengers, plus crew, for day trips in Milford Sound/Piopiotahi.

- **Real Journeys Limited (APP-20211700) *****
To install, maintain and exclusively occupy part of the coastal marine area with a mooring at Brokenshore Bay, Rakituma/Preservation Inlet.
- **Real Journeys Limited (APP-20211699)**
To install, maintain and exclusively occupy part of the coastal marine area with a mooring at Cascade Cove/Te Unu-o-Momotu, Tamatea/Dusky Sound.
- **Real Journeys Limited (APP-20211586)**
To install, maintain and exclusively occupy part of the coastal marine area with a mooring at First Arm/Taiparipoto, Doubtful Sound/Patea.
- **Real Journeys Limited (APP-20211585) ***
To undertake commercial surface water activities in the coastal marine area with a vessel approximately 36 metres with up to 450 passengers, plus crew, for day trips inside a line from Stripe Point to St. Anne Point within Milford Sound/Piopiota.
- **Real Journeys Limited (APP-20221882) ***
To undertake commercial surface water activities in the coastal marine area from Yates Point to Puysegur Point, Fiordland, and the coastal waters of Stewart Island/Rakiura including Foveaux Strait.
- **Southern Discoveries Limited (APP-20211781)**
To carry out surface water activities in Milford Sound/Piopiota, namely to operate the vessel *Lady Bowen*.
- **Southern Discoveries Limited (APP-20211783)**
To carry out surface water activities in Milford Sound/Piopiota, namely to operate the vessel *Pride of Milford*.
- **Southern Discoveries Limited (APP-20211758)**
To carry out surface water activities in Milford Sound/Piopiota, namely to operate the vessel *Spirit of Milford*.
- **The Alpine Group Ltd and Stephen William Day (APP-20211565)**
To place three moorings on the seabed, to use the moorings for securing a structure, namely a barge, and to occupy space within the coastal marine area for the structure number A5220 at Cascade Cove, Tamatea/Dusky Sound, Fiordland.
- **Rewi James and Jana Davis (APP-20211493)**
To install and occupy part of the coastal marine area with a mooring at Deepwater Basin, Milford Sound/Piopiota, Fiordland.
- **Fiordland Discovery Limited (APP-20211516) *****
To undertake commercial surface water activities in the coastal marine area in the internal waters of Fiordland.
- **Deep Cove Outdoor Education Trust (APP-20221865) ***
To discharge up to 50,000 litres of treated sewage effluent per day into coastal waters, at the Meridian wharf at Deep Cove, Doubtful Sound/Patea.
- **Meridian Energy Limited (APP-20211640) ***
To occupy the coastal marine area with an existing jetty at Deep Cove, Doubtful Sound/Patea, Fiordland.

Consent compliance

The Resource Management team monitors compliance with consented activities. This includes desktop assessments of reports. Inspections of structures within the Fiordland Marine Area are undertaken every three years and were not undertaken in 2020/21. Whitebait stands in Big Bay were inspected. Environment Southland receives and investigates public complaints.

Looking ahead

Marine biosecurity

In the coming year, Environment Southland's focus will be continuing the success of the two-year Jobs for Nature dive programme. Communications, compliance and containment work will be ongoing, and the agencies aim to finalise the 10-year plan for biosecurity in the Fiordland Marine Area.

Harbourmaster

A proposed increase in maritime resourcing will help with increased regulatory capability and presence in Fiordland.

Resource consents

On 18 July 2022, a proposed plan change of section 16.2 to the operative Regional Coastal Plan for Southland was publicly notified in accordance with clause 5(1) of Schedule 1 of the Resource Management Act 1991. The plan change was developed in response to concerns raised by staff, tangata whenua and stakeholders (including Fiordland Marine Guardians) regarding increasing levels of commercial surface water activity in the Fiordland coastal marine area.

The intent of the change is to strengthen provisions relating to the management of commercial surface water activities in the Fiordland coastal marine area, until limits or appropriate management methods are developed through the ongoing wider Regional Coastal Plan review.

Proposed rule 16.2.1 contained in the plan change took immediate legal effect upon public notification under section 86B(3)(a) of the Resource Management Act. This means that all applications for replacement permits and new applications for commercial surface water activities will be assessed under both the proposed rule and the operative rule. The weight given to proposed objectives and policies versus operative objectives and policies will be determined on a case-by-case basis depending on application content and timing and status of the respective provisions.

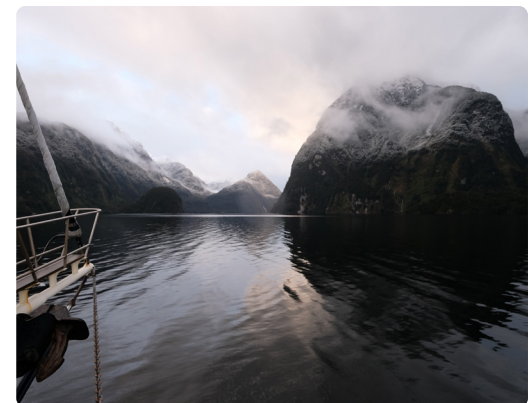
As a result of the strengthened provisions in the plan change, it is likely that in future, there will be an increase in the number of applications that are limited or publicly notified. The Consents team will continue to work with tangata whenua, the Guardians and other organisations with statutory responsibilities in the coastal environment by factoring the advice received on applications into our decision-making process. This includes regular ongoing attendance of Consents staff at Guardians meetings, and workshopping of issues as required.

Consent compliance

Environment Southland will continue to undertake desktop assessment of reports required by consent holders and respond to public complaints as they arise.

Regional Coastal Plan review

Staff continue to work on the wider Regional Coastal Plan review and intend to brief the new Council. After this, staff would like to brief the Guardians on the timeframes and remaining policy questions that need answering.







Ministry for Primary Industries
Manatū Ahu Matua



Ministry for Primary Industries

The Ministry for Primary Industries (MPI) – Manatū Ahu Matua and our four branded business units (Biosecurity New Zealand, Fisheries New Zealand, Food Safety New Zealand, and Forestry New Zealand) help to grow and protect New Zealand's primary industries. Our role is to maximise export opportunities and improve sector productivity, increase sustainable resource use, and protect New Zealand from biological risk. For the Fiordland (Te Moana o Atawhenua) Marine Area, we:

- provide policy advice and programmes (including on fisheries and aquaculture management) that support the sustainable development of New Zealand's primary industries
- provide whole-of-system leadership of New Zealand's biosecurity system
- purchase science services to maintain the effective management of New Zealand's fisheries.

We work to ensure fisheries and other resources are managed sustainably, using a 'voluntary, assisted, directed, enforced' approach to compliance. Education and informing public and stakeholders are essential to ensuring effective voluntary compliance.



Biosecurity New Zealand

Ministry for Primary Industries
Manatū Ahu Matua

Biosecurity

Role

Biosecurity New Zealand is responsible for leading the development and maintenance of the biosecurity system. This system protects the environment and natural resources from biological risk and supports sustainable fisheries management. Our leadership role includes bringing national developments in marine biosecurity tools, response, management and policy to the attention of the Guardians. The Readiness and Response Services Directorate is responsible for leading this work; teams include advisers who are preparing for and managing biosecurity responses, coordinating incursion recovery, and long-term pest management activities.

Biosecurity New Zealand has been one of the key agencies associated with the Fiordland Marine Guardians since the inception of the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005. Under the Act, we lead the biosecurity plan for the Fiordland (Te Moana o Atawhenua) Marine Area. The plan takes a 'pathways' approach to biosecurity, where management tools that aim to reduce or prevent the spread of pests can be applied to pathways or parts of pathways. The activities set out in the plan address the full spectrum of the biosecurity system: reduction, readiness, response, recovery and resilience.

Achievements

Biosecurity New Zealand has once again enjoyed working with the Guardians and agency partners on marine biosecurity issues relating to the FMA. An exciting new project has been initiated along with the continuation of our important long-term work.

Undaria in Te Puaitaha/Breaksea Sound and Taiari/Chalky Inlet

Since 2010, Biosecurity New Zealand has been working with Environment Southland and DOC on the management of *Undaria* in Te Puaitaha/Breaksea Sound and Taiari/Chalky Inlet, where *Undaria* was found in April 2019. No *Undaria* has been found in Taiari/Chalky Inlet since October 2019, and while this elimination programme is looking promising, we continue to seek advice from the *Undaria* Technical Advisory Group (established in 2021) to ensure our attempt of local elimination is a success.

The biggest highlight of the past year was seeking research funding to pilot a suppression tool on *Undaria* in Te Puaitaha/Breaksea Sound. In March, MPI ran an open tender request for proposals to seek suppliers who could adapt or enhance an existing tool or method to suppress or eliminate *Undaria* from Fiordland. The preferred supplier was selected in June. This project will run for two years and complement existing *Undaria* activities such as the Jobs for Nature biomass removal and containment work.

Review of the Fiordland Marine Biosecurity Plan

Biosecurity New Zealand has continued to lead the implementation of the Fiordland Marine Biosecurity Plan 2015/16–2020/21 (the Plan), together with partner agencies and the Guardians. In March 2022, we contracted a review of the Plan.

The revised plan is now known as the Fiordland (Te Moana o Atawhenua) Marine Biosecurity Strategy 2022–32 and sets out seven goals for the next 10 years to guide the actions of the Fiordland Marine Guardians, the management agencies and stakeholders, to reduce the risk of marine pests adversely affecting Fiordland's special marine environment. A five-year Operational Plan that identifies key operational activities to help deliver the goals of the Strategy was also developed.

Hull inspections in Bluff and Stewart Island/Rakiura

Biosecurity New Zealand contracted work to undertake in-water hull inspections for marine pests on moored vessels based in Bluff and at Stewart Island/Rakiura that are known to travel to the FMA. These inspections occurred monthly (except for July to September 2021, and May and June 2022) and looked for the presence of marine pests and assessed vessels' antifoul condition and level of general marine growth. When marine pests were detected, they were manually removed (if not of a high density) and the vessel owner was advised of what action to take before their next visit to Fiordland. *Undaria* was the only marine pest to be found on vessels during these inspections.

Hull inspections in the FMA

Biosecurity inspections of hulls continue to be an effective way to help prevent future marine pests becoming established in the FMA. We participated in the April 2022 joint-agency compliance and marine surveillance patrol by providing support for in-water inspections of vessel hulls, high-risk anchorages, and structures. Our staff also helped communicate marine biosecurity messaging and implement the Fiordland Marine Pathway Management Plan.

Fiordland messaging on MetService

Fiordland clean hull messaging was advertised on the MetService website's marine pages and the MetService app from October 2021 to April 2022.

Southland Boat Show 2021

Our staff participated in the Southland Boat Show in August 2021. The main aim was to promote marine biosecurity messaging and encourage boaties to ensure vessel hulls and gear are free of marine pest fouling.

User guide reprint

Biosecurity New Zealand updated the marine biosecurity information in the 2022 *Beneath the Reflections* user guide review.

Targeted marine pest surveillance

As part of the National Marine High-risk Site Surveillance programme, MPI undertakes biannual surveys (winter and summer) in 12 locations around Aotearoa New Zealand (including the South Island ports of Bluff, Dunedin, Lyttelton, Picton/Waikawa and Nelson).

This programme aims to achieve early detection of new unwanted marine pests in some of New Zealand's busiest, and therefore highest-risk locations – namely ports and marinas of first arrival for international vessels. Undertaking surveillance in the Port of Bluff has benefits to the Fiordland (Te Moana o Atawhenua) Marine Area, such as the early detection of new and emerging marine pests that may pose a threat to this region.

Over the past year, nine non-indigenous species range extensions were detected by this programme including:

Opua

- ascidian *Ciona savignyi*
- fish *Omobranchus anoliis*

Napier

- ascidian *Didemnum vexillum*
- crab *Pyromaia tuberculata*
- nudibranch *Polycera hedgpethi*
- alga *Grateloupia turuturu*

Waitematā Harbour

- ascidian *Clavelina lepadiformis*
- bryozoa *Thalamoporella californica*

Nelson

- ascidian *Polyandrocarpa zorritensis*.

Other key marine pest species, such as the Mediterranean fanworm *Sabella spallanzanii*, Asian kelp *Undaria* and the clubbed tunicate *Styela clava* continue to be detected at South Island ports. Vessels arriving to Fiordland from such ports, including those in the North Island, are at risk of transporting these and other marine pests to the fiords.

If you want to map the current nationwide distribution of any marine species mentioned see the [Marine Biosecurity website](#).

Enforcement of the Craft Risk Management Standard for Biofouling on vessels arriving from overseas

The Craft Risk Management Standard for Vessels (CRMS:Vessels (2018)) and the Craft Risk Management Standard for Biofouling on vessels arriving to New Zealand (CRMS:Biofoul) have been reviewed and merged into one document. The proposed draft Craft Risk Management Standard for Vessels (CRMS:Vessels (2022)) was out for public consultation from 30 June to 29 August 2022.

One of the key changes in the proposed draft CRMS:Vessels (2022) is the addition of new information requirements around vessel biofouling inspection reports. Evidence of hull biofouling has been one of the main issues since implementation of the CRMS:Biofoul. MPI receives a broad range in the quality of reports. Without a clearly defined baseline requirement for reporting, MPI's decision-making is slowed down and industry must deal with uncertainty, costs and delays. By creating a standard of reporting, these issues are likely to be reduced, which will result in a lower marine biosecurity risk.

Other key changes, such as the creation of a separate category for cruise vessels, are explained in the [Risk Management Proposal for the Craft Risk Management Standard: Vessels](#).

Alongside the proposed CRMS:Vessels (2022) is the proposed draft [Operational Code: Vessel Biofouling Inspection Provider Approval Scheme](#). This is a voluntary scheme being set up to aid industry in achieving the vessel biofouling inspection reporting requirements in the proposed draft CRMS:Vessels (2022). While it won't be mandatory for vessel biofouling inspection reports to be produced by MPI-approved providers, it is likely that industry will select MPI-approved providers due to the assurance that the report they provide will meet the CRMS:Vessels (2022) requirements. The proposed document is explained in detail in the [Discussion Document for the Operational Code: Vessel Biofouling Inspection Provider Approval Scheme](#).

Cruise season is due to recommence for the first time since early 2020. MPI have been engaging with the cruise industry since early this year to ensure that our requirements are still understood and being prepared for. All cruise vessels visiting ports not approved as places of

first arrival are required to apply for and operate under an MPI-approved Craft Risk Management Plan (CRMP) to meet the requirements of the CRMS:Biofoul. CRMPs outline the specific management actions which will be undertaken by the vessel operator to manage biosecurity risks before arrival and during the cruise season. They must be approved by MPI before the vessel's arrival to New Zealand. All cruise vessels visiting ports not approved as places of first arrival, such as Fiordland, are required to apply for and operate under an MPI-approved CRMP.

In April 2022, the Invasive Species team attended the Subcommittee for Pollution Prevention and Response meeting of the International Maritime Organization, to represent New Zealand in the review of the IMO's Biofouling Guidelines. Over the past year, the CRMS team was part of Correspondence Group on Review of the Biofouling Guidelines, working to guide and influence the review of the guidelines and provide recommendations to the subcommittee. The correspondence group will be re-established for its final year and will report back to Subcommittee for Pollution Prevention and Response next year.





Fisheries New Zealand

Tini a Tangaroa

Fisheries management

Role

Fisheries New Zealand – Tini a Tangaroa continues to be committed to the sustainable management of New Zealand's fisheries resources. Our long-term goal is New Zealanders maximising benefits from the use of fisheries within environmental limits. In line with this goal, the Guardians are charged with providing advice and recommendations to management agencies and Ministers for the Fiordland (Te Moana o Atawhenua) Marine Area.

Achievements

Following a series of recreational fishing workshops, Fisheries New Zealand has contributed to and supported the Guardians to develop a proposal to change amateur fisheries regulations for the FMA. The proposal was presented to the Minister for Oceans and Fisheries in October 2021, with permission given in early 2022 for Fisheries New Zealand to consult on the Guardians' proposal.

Public consultation will include a series of public drop in sessions at locations around the bottom of the South Island. A decision paper based on public submissions will be presented to the Minister for final decisions. This work is progressing well and is in tandem with the continued engagement work the Guardians are doing with both Fiordland commercial fishers and amateur-fishing charter vessel fleet operators.

There have also been ongoing developments with the National Blue Cod Strategy. This is in response to the blue cod rule changes introduced from 1 July 2020, with a technical amendment being made to the Fisheries (Amateur Fishing) Regulations 2013. This related to the accumulated catch of blue cod in the Fiordland (Te Moana o Atawhenua) Marine Area and should be in place by the end of 2022.



Ministry for Primary Industries
Manatū Ahu Matua



MPI Fisheries compliance

Role

The MPI Compliance Directorate is responsible for delivering compliance inspection services and investigations across fisheries, animal welfare, biosecurity, food, forestry, and other legislation that MPI administers.

At a regional level, the MPI Fisheries Compliance team based in Invercargill works closely with Fisheries New Zealand Inshore team advisors to deliver agreed-upon fisheries compliance services within the Southland and Fiordland coastal water areas. A team of seven Fishery Officers enforce the Fisheries Act 1996 and fisheries regulations by conducting routine surveillance patrols and vessel inspections, undertaking investigations and intelligence analysis across the commercial, recreational, and customary fishing sectors. Fishery Officers apply a range of sanctions for detected offences that include education, advice, directions, warnings, infringement notices, and prosecutions for more serious matters.

Since the establishment of the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005, the Southland District Team Leader has coordinated the MPI Fisheries Compliance contribution, and the shared delivery of an Integrated Compliance Plan, in collaboration with the Department of Conservation and Environment Southland. As a result, MPI Fishery Officers work closely with DOC Compliance Rangers, ES Compliance Officers and biosecurity staff when the need arises, to optimise agency enforcement activities. This can include joint-agency

seaborne patrols and the sharing of information to assist directed enforcement by either one, or a combination of the agencies. As a result of past *Undaria* pest seaweed detections, marine biosecurity compliance, together with marine pest dive surveillance of vessels, structures, moorings and anchorage sites, continues to be a major joint-agency focus, requiring the collaboration and input of all three compliance agencies.

The Southland MPI District Team Leader, or a delegated Senior Fishery Officer representative regularly attend Guardians meetings, providing report updates on all relevant fisheries compliance matters, including detected non-compliance and any emerging risks.

Achievements

Southland Boat Show 2021

In August 2021, local MPI Fishery Officers, Fisheries New Zealand staff from Dunedin, and Biosecurity New Zealand marine pest advisors from Wellington ran an MPI exhibition stand at the biannual Southland Boat Show. The MPI stand was co-located alongside the Fiordland Marine Guardians stand, with the complementary shared focus of raising awareness of the Fiordland fishing rules and marine biosecurity precautions.

Commercial set-netters convicted on set-netting offences inside Tamatea/Dusky Sound

In November 2021, an MPI Fisheries prosecution was successfully concluded in the Invercargill District Court, with the conviction and sentencing of a Riverton commercial fishing company and the company's vessel skipper.

The MPI investigation was initiated when evidence of multiple set-net offences was uncovered from analysis of electronic reports and geospatial position reporting data inside Dusky Sound/Tamatea, Fiordland.

Offences included breaching section 181 of the Marine Reserves Act 1971 by twice fishing inside the Taumoana (Five Fingers Peninsula) Marine Reserve. This involved setting shark gill nets that extended 80 metres inside the reserve, two related counts of using set nets in excess of the 1,000 metres maximum set-net length regulation applying to inside fiord waters, and one charge of unlawful shark finning. Both defendants pleaded guilty and were convicted on four charges each, three of which were representative charges dating back to set-netting offences that took place in 2019 and 2020. The company received an NZ\$18,000 fine and the skipper a NZ\$6,700 fine, along with the forfeiture of a fishing vessel and fishing gear, which was returned to the owner on payment of a NZ\$10,600 redemption fee. As a result of the convictions, both the company and vessel skipper have met with MPI officers and taken active steps to try and prevent any prohibited area reoffending.

Multi-agency compliance and marine biosecurity patrols

In mid-October 2021, Southland MPI Fisheries Officers conducted a successful fisheries surveillance patrol, utilising the Department of Conservation *GV Southern Winds*. The six-day patrol covered eight fiords between Te Awa-o-Tū/Thompson Sound to as far south as Rakituma/Preservation Inlet and return, including surveillance coverage of five marine reserves. Twenty vessels were intercepted,

boarded and inspected, including five commercial fishing vessels, eight amateur-fishing charter vessels, one cruise vessel, one syndicate vessel and five recreational fisher trailer boats. Additionally, several barges and structures were checked, together with shore party inspection visits to Kisbee Lodge and four DOC huts.

This resulted in contact with 141 people, who were primarily engaged in a mix of fishing, diving, deer stalking, and cruising. Amateur fish-catch inspections involved predominantly rock lobster and blue cod, with lesser quantities of groper, sea perch, tarakihi, butterfish, blue moki, school shark, and small amounts of shellfish. Pleasingly, fisheries compliance behaviour was exceptionally good with just four separate detected commercial fisher electronic reporting breaches for enforcement follow-up action, together with one amateur-fishing charter vessel return reporting issue breach.

In November 2021, Operation Toroa involved the Southland Fishery Officer team, a New Zealand Defence Force NH90 helicopter, and crew from 3 Squadron RNZAF Ohakea, carrying out two days of aerial surveillance patrolling along the Fiordland coast. A large stretch of Fiordland was covered between Awarua Point in the north, to Sand Hill Point in the south, with aerial sweeps inside each fiord to locate vessel activity. In two instances, commercial fishing vessels were found to be operating without working GPR units. Both vessels were subsequently contacted about their GPR device malfunctions. Along with overflying several recreational boats, several charter fishing vessels

were sighted and observed inside the fiords to later validate against the reported fishing positions provided in their activity catch returns.

In April 2022, a multi-agency team of Compliance and Biosecurity Officers from MPI (including Biosecurity New Zealand), DOC and ES, conducted a seaborne patrol over six days utilising the Department of Conservation *GV Southern Winds*. The patrol covered eight fiords between Te Awa-o-Tū/Thompson Sound to as far south as Rakituma/Preservation Inlet, including five marine reserves.

Overall, 22 vessels were intercepted, boarded and inspected, including two commercial fishing vessels, eight amateur-fishing charter vessels, two syndicate vessels, two visiting sailing yachts, and eight recreational fisher trailer boats. In addition, several unmanned vessels, barges and structures were checked, together with shore party inspection visits to Kisbee Lodge and three DOC huts. In total, officers were in contact with 121 people, primarily engaged in a mix of fishing, diving, deer stalking, and cruising. Amateur fish-catch inspections involved mainly rock lobster and blue cod, with lesser quantities of groper, sea perch, tarakihi, trumpeter, barracouta, wrasse, kingfish, southern bluefin tuna, and pāua.

Several amateur fisheries infringement offences were detected. These included recreational take of rock lobster in excess of the six-lobster per-person daily limit, possession of pāua meat on a charter vessel while carrying

underwater breathing apparatus, and several instances of recreational fishers being in possession of filleted blue cod that was not for immediate consumption.

During the patrol, in-water vessel hull dive inspections were carried out by an ES Biosecurity Officer diver and a Biosecurity New Zealand diver, along with marine pest surveillance dives on wharf structures, high-use moorings and anchorages, in search of invasive marine pests. Above the water, ES officers checked for clean vessel pass compliance and provided biosecurity advice.

Throughout the year, Fishery Officers routinely carried out port landing vessel inspections at Milford Sound/Piopiotahi, Deep Cove, Riverton and Bluff – predominantly of commercial fishing vessels returning from the Fiordland fishing grounds. This mainly involved inspections of CRA8 rock lobster, pāua and kina, blue cod, set-net, and longline fishing operators, checking to ensure both commercial catch landings and recreational crew catch was correctly reported, using electronic reporting and GPR devices. Several patrols to Milford Sound/Piopiotahi conducting boat ramp inspections detected a range of mainly blue cod and rock lobster offences involving undersize blue cod and unmeasurable-state blue cod, and divers with non-compliant catches of accumulated rock lobsters that were not labelled to identify the taker, or separated to verify when caught.

Fisheries New Zealand fishing rules signage

In October and December 2021, new Fisheries New Zealand-branded recreational fishing rules signs were installed throughout the FMA. Two generic signs were designed for use; one to cover Milford Sound/Piopiotahi and the northern fiords and the second dedicated to Doubtful Sound/Patea, Te Awa-o-Tū/Thompson Sound and fiords to the south. The MPI signage initiative was requested by the Guardians' Communications sub-committee to alert visiting recreational fishers and boaties who arrive by sea or slip into Fiordland via Milford Sound/Piopiotahi and Deep Cove without checking the fishing rules before visiting.

Bluff fishing company detected processing kina in Fiordland has MPI charges dismissed

Following a Judge-alone trial in the Invercargill District Court, a Bluff-based commercial fishing and processing company and its owner/sole director had all 13 charges dismissed in a reserved decision released by Judge Walker on 22 December 2021. The alleged offending dated back to a commercial kina (SUR5) diving trip, over 12 days in 2018 in Tamatea/Dusky Sound.

The MPI investigation case primarily involved alleged reporting offences of making false or misleading statements in unloading dockets and purchase invoices in relation to live kina caught over multiple days in the Tamatea/Dusky Sound area that was processed on board the fishing vessel, in a major departure from accepted

industry practice. At the time of the alleged offending, the company's fishing vessel was not licensed or included as a part of the licensed fish receiver processing premises. The company was charged with seven offences, while the owner/sole director faced six charges. The company faced six Fisheries Act charges of making a false or misleading statement on a prescribed record; and one commercial fishing regulation offence charge of being a commercial fisher, failing to ensure kina remained in an unshelled state before it was delivered to the processing factory or first point of sale.

Owing to the legal precedents set, MPI has subsequently lodged a 'question of law' appeal in relation to the dismissed charges, which was heard in the Invercargill High Court on 26 July 2022 before Justice Rob Osborne. Justice Osborne indicated that he would take some time to consider the respective appeal submissions before releasing his reserved decision.

Bluff fishing company convicted for pāua sale record-keeping offence

In a separate prosecution case, the same Bluff fishing company was convicted by Judge Walker on 10 March 2022 and fined NZ\$3,750 for a Fisheries Recordkeeping Regulations charge of failing to complete a sales invoice in relation to 123 kilograms of live pāua that was landed by the company and sold the same day to another fish dealer business.

Commercial electronic catch and geospatial position reporting

Since mid-2019, digital monitoring legislation now requires all inshore commercial fishing fleet operators to use e-logbook catch reporting devices, replacing the previous daily paper-based catch reporting and end-of-month paper return provided to FishServe. Under contract to MPI, FishServe receive and manage the data used by Fisheries New Zealand. E-logbook reporting has been coupled with mandatory GPR by all registered fishing vessels to provide real-time fish-catch event reports and vessel position-tracking data.

The Southland Fishery Officer team is constantly kept busy, in both monitoring and helping the 150-plus Southland-based commercial fisher clients to use, understand and comply with electronic reporting requirements. Implementing and bedding-in the new electronic reporting regime has not been without its hitches and challenges. On top of COVID-19 pandemic disruptions to export markets and freedom of movement, the main challenges of the new electronic reporting regime included the varying levels of fisher uptake in adapting to new technology, the range of device hardware and software capabilities, and unforeseen device limitations, confounded by intermittent device failures, along with inexperienced user error.

The isolated and challenging Fiordland working environment requires expensive satellite connectivity to enable fishers to transmit their daily electronic reports to meet reporting requirements. Despite the challenges, the electronic reporting regime has considerable benefits, enabling real-time analysis of catch effort, disposals and landing data, along with more accurately recording where the actual fishing occurred.

New changes to national recreational combined daily bag limits for finfish

On 5 May 2022, new amateur fishing regulation changes approved by the Minister for Oceans and Fisheries came into effect following a review of recreational daily bag limits for finfish. The urgent review was triggered by the Coromandel community and iwi uproar over excessive and unconstrained exploitation of pink maomao finfish, which was a 'discovered market' by a group of trailer boat fishers from the greater Auckland area. Pink maomao and a range of bycatch fish species previously had no daily species limit and were not included in regional combined bag limits.

The revised combined daily bag limits for finfish now include all finfish species, including those with individual species limits and those species that were not previously listed within regional combined bag limits. North Island recreational fishers are subject to a combined daily bag limit maximum of 20 finfish per day.

In the south-east and Southland fishery management areas, a maximum combined finfish bag limit of 30 fish still applies, with all finfish species now included in the combined finfish bag limit; except for several specified bait species, and two freshwater eel species, which have their own six-eels-per-person freshwater eel bag limit.

Southern bluefin tuna are now included within the daily bag limit with a daily limit of one per person. Albacore and other pelagic tuna species are also now included within the combined finfish bag limit of 30, whereas before 5 May, there was no daily species limits applying to these migratory species.

In addition to the combined daily bag limit, recreational fishers can also take a combined maximum of 50 baitfish per person, per day. This applies to any combination of the following named bait species: anchovy, jack/horse/Chilean mackerel, koheru/scad, pilchard, piper/garfish, slender/stout sprat, and yellow-eyed mullet.

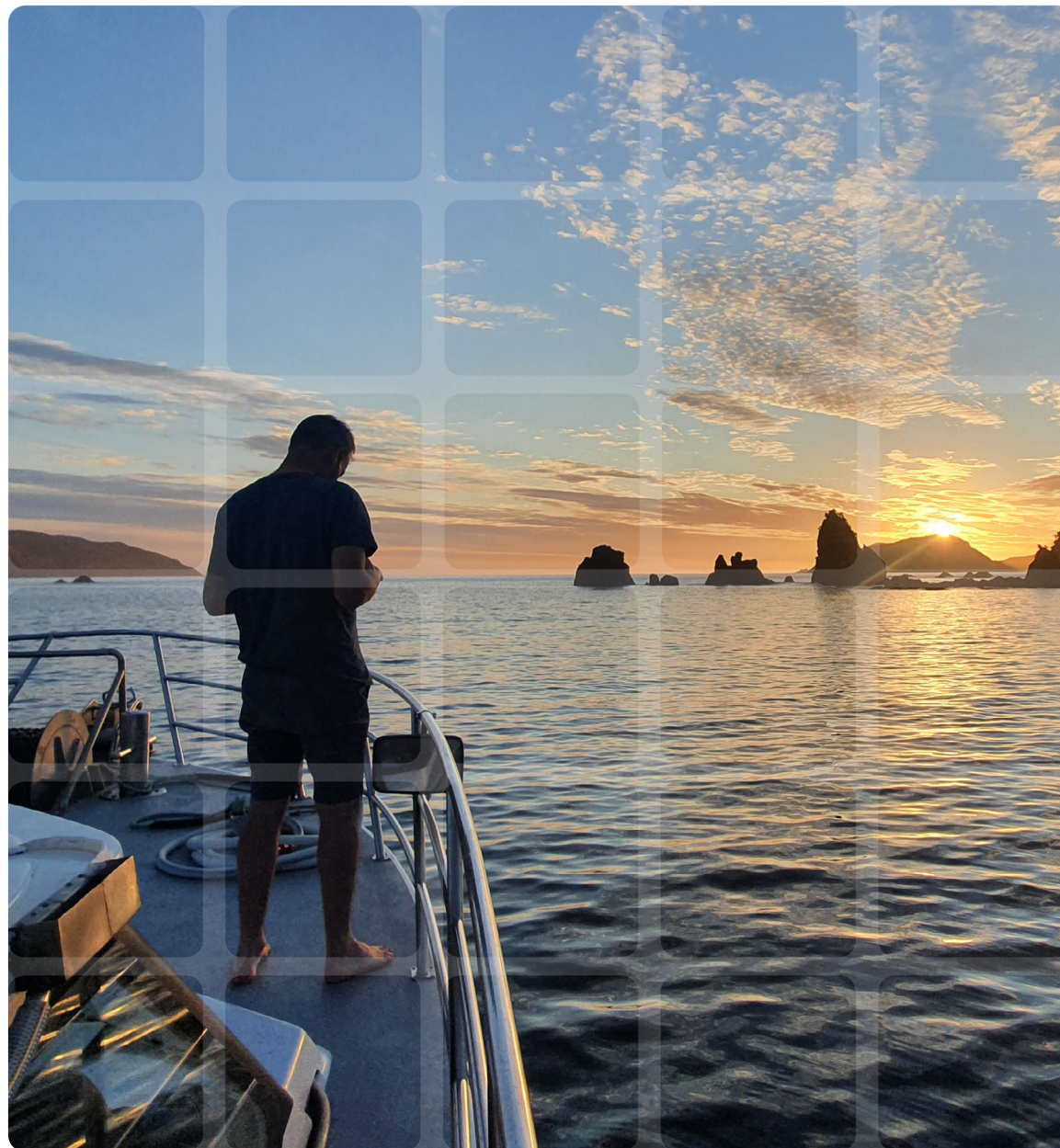
Looking ahead

Undaria in Fiordland

Over the coming year, Biosecurity New Zealand will continue working with Environment Southland and DOC on the *Undaria* elimination at Taiari/Chalky Inlet and long-term management of *Undaria* in Te Puitaha/Breaksea Sound, with a particular focus on using the Technical Advisory Group when needed and managing the contract for the *Undaria* suppression tool. We will also continue to work with all Fiordland partners to implement the Fiordland Marine Biosecurity Strategy and its associated operational activities.

Amateur fishing regulation changes

Following consultation in August/September 2022, MPI Fisheries New Zealand staff will prepare an analysis of public submissions and prepare advice to the Minister for Oceans and Fisheries on changes to the recreational fishing rules in the Fiordland (Te Moana o Atawhenua) Marine Area. Changing regulations has several steps, including obtaining Cabinet sign-off. Once signed-off, any new amateur fishing regulations should come into effect in mid-2023.





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This year's cover image is provided by Zac Penman.



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

Fiordland Marine Guardians
PO Box 213
Te Anau 9640

info@fmg.org.nz
www.fmg.org.nz

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