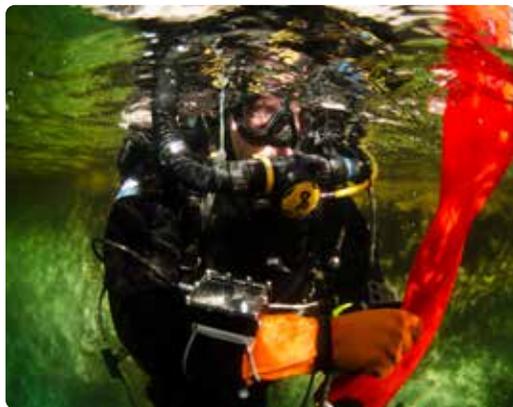


Annual Report **2019/20**



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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 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 2020.

Rebecca McLeod, PhD

Chairperson

Fiordland Marine Guardians

Chairperson's report



Tēnā koutou katoa

It is still quite difficult to fathom the year that Fiordland has had. The February 2020 floods and COVID-19's devastating impact on tourism have arguably resulted in Fiordland being one of the hardest hit regions in Aotearoa New Zealand this year. Whilst acknowledging the severity of the situation on individuals, families, businesses, and the wider community, these disasters also offer an opportunity to pause, consider, and be strategic about the future of this incredibly special place.

Before this unprecedented turn of events, the Fiordland community was increasingly concerned about the impact of overfishing, biosecurity issues, greater boat traffic in the southern fiords, cruise ships, and the intensity of tourism activity in Milford Sound/Piopiotaahi. It seemed we were on an upward trajectory of busyness and all that implies, with no sign of it abating. We were holding a tiger by the tail.

This is where the value of having a long-established and well-connected group like the Fiordland Marine Guardians becomes apparent. Whilst guided as always by our vision for Fiordland, we are working across several initiatives to ensure decisions are made in the best interests of the place. This includes working at the grass roots level – engaging with local recreational fishers and charter operators about fisheries sustainability, right up to the policy level – working closely with Environment Southland as they begin to form the revised Regional Coastal Plan for Southland.

Our recent trip into Milford Sound/Piopiotaahi is informing the way we engage with the Milford Opportunities Project. And, last, but by no means least, we are doing everything we can to highlight to central government the critical importance and urgency in increasing the effort of *Undaria* control in Te Puaitaha/Breaksea Sound.

My thanks and utmost appreciation to the Guardians, agency officials, and subject matter experts who support us in our work. It has been a tough year and we've had some difficult conversations, but we're all here for the right reason – to ensure Fiordland remains as incredible in the future as it is now. A special acknowledgement to the many people who have engaged with us over the last year – the concerns, values and ideas you've contributed are helping us in ways that cannot be measured.

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 science advisor, specialising in southern marine ecosystems, and has been involved with shaping New Zealand's Antarctic science programme. 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 for 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.



Jerry Excell

Guardian since 2007

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



Jonathan Clow

Guardian since 2012

Jonathan brings a wealth of maritime and management experience to the Guardians, having started out as a professional seafarer in the fishing industry followed by 15 years with the Royal New Zealand Navy as a Seaman Officer, and then five years as the Marine Manager and Safe Ship Manager for Real Journeys Ltd in Te Anau. Most recently, Jon has undertaken a change in career moving into the software industry as a software developer but remains in Te Anau and attached to the Fiordland (Te Moana o Atawhenua) Marine Area.



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. Kerri-Anne has been a resident of Te Anau for 17 years. She has spent much of that time contributing to projects within Fiordland National Park, including 10 years with the Fiordland Islands Restoration Programme for the Department of Conservation.



Mark Psychers

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.



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 DOC 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.



Stewart Bull

Guardian since 1995

Stewart has extensive knowledge of the customary uses of Fiordland, particularly customary fishing. He is the chair of the Oraka-Aparima Rūnaka and is the 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 Queens Service Medal for his services to conservation and Māori.

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

Allison Bockstruck

Fiordland Marine Guardians Secretariat
Ministry for the Environment (to December 2019)

Aurora Grant

Consents Manager
Environment Southland

Chloe Corne

Ranger Operations
Department of Conservation

Ciaran Thayer

Compliance Technical Officer
Environment Southland

Elizabeth Green

Senior Adviser, Long Term Programmes
*Biosecurity New Zealand
Ministry for Primary Industries*

Ian Coard

Deputy Regional Harbourmaster
Environment Southland

Lyndon Cleaver

Regional Harbourmaster/Maritime Officer
Environment Southland

Kathryn McLachlan

Policy Planner
Environment Southland

Mark Geytenbeek

Senior Fisheries Analyst – Inshore Fisheries Management
*Fisheries NZ
Ministry for Primary Industries*

Nicola Scott

Manager, Strategy and Stewardship
Ministry for the Environment

Richard Kinsey

Senior Ranger Operations
Department of Conservation

Robert Win

Marine Programme Leader
Environment Southland

Stephen Logie

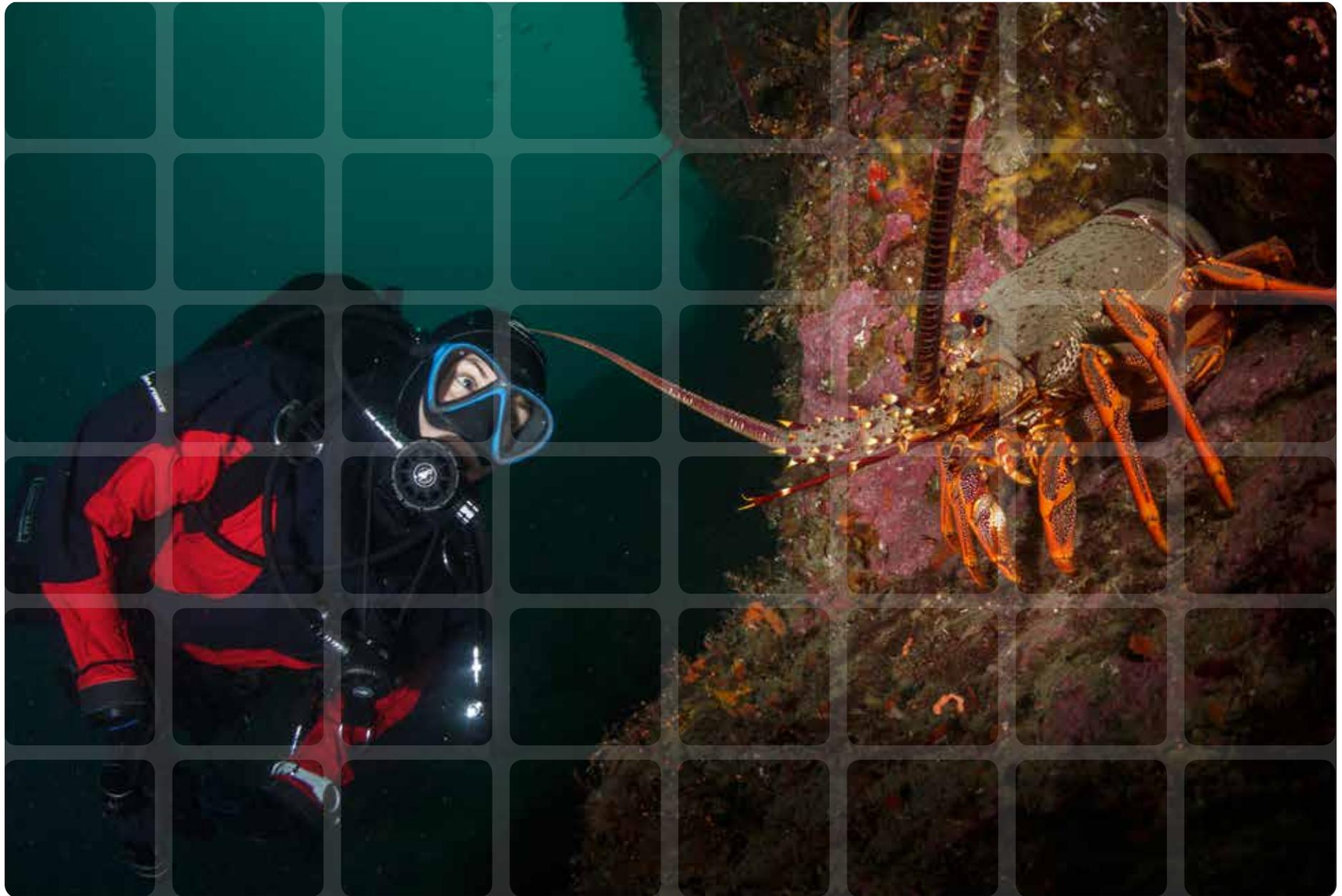
Chief Compliance Officer – MPI Compliance Directorate:
Southland
Ministry for Primary Industries

Tanith Robb

Senior Policy Planner
Environment Southland

Tony Preston

Principal Ranger Biodiversity
Department of Conservation



Our year in review

July 2019 – We launched a 12-month communications campaign in the Fishing Paper to raise awareness among recreational fishers about risks to the Fiordland Marine Area and the role of the Fiordland Marine Guardians.

August 2019 – We hosted a very productive and collaborative two-day workshop in Te Anau with representatives of the amateur charter vessel (ACV) sector, agency representatives, and Larnce Wichman (Chair of the Kaikoura Marine Guardians). Participants worked together to identify issues affecting fisheries sustainability and develop practical solutions.

The Guardians shared their story in a presentation to delegates at the Trans-Tasman Rock Lobster Association's conference in Queenstown and participated in the Boat Show Southland in Invercargill.

September 2019 – Guardians Rebecca McLeod, Mark Peychers, and Jerry Excell appeared in an episode of Ocean Bounty on TV3. This episode profiled fisheries in Fiordland, the Fiordland (Te Moana o Atawhenua) Marine Management Act, and the Fiordland Marine Guardians.

November 2019 – Together with the Kaikoura Marine Guardians we engaged with the Minister for Fisheries Stuart Nash on a briefing paper which outlined the options for sustainable fishery management by the ACV sectors in our regions.

We held our November meeting at Takutai o Te Titī Marae in Colac Bay. Professor Gary Wilson of GNS presented his research proposal “Leveraging NZ’s natural carbon sink” which is focused on the enormous volume of terrestrial carbon buried in the Fiordland (Te Moana o Atawhenua) Marine Area. Chris Thompson (Meridian) and Robyn Dunmore (Cawthron Institute) presented Meridian’s biological and physical monitoring results associated with the discharge of freshwater into Doubtful Sound/Patea from the Manapouri Hydroelectric Powerstation.

We thanked Secretariat Allison Bockstruck, who was leaving the Ministry for the Environment, for a great job done.

Rebecca McLeod shared the story of the Fiordland Marine Guardians with delegates of the New Zealand Coastal Society, in the keynote address at their annual conference.

January 2020 – Guardians Stewart Bull and Rebecca McLeod attended Fish Mainland’s public meeting on Stewart Island/Rakiura and showed support for the initiative.



February 2020 – Guardians Rebecca McLeod and Mark Peychers and Kaikoura Guardians' Chair Larncé Wichman met with senior managers of Fisheries New Zealand to discuss the recommendations from consultations with ACV operators in Fiordland and Kaikoura.

The fourth issue of our newsletter *Te Pania Kaitiaki o Ata Whenua* was released.

March 2020 – We hosted a two-day hui in Te Anau that focused on the experiences of recreational fishers who visit Fiordland independently, using their own vessels. Participants identified current and future issues facing fisheries sustainability within the Fiordland (Te Moana o Atawhenua) Marine Area and possible ways to protect these fish stocks in the future.

April 2020 – We grew increasingly concerned about the potential reduction in funds available for the *Undaria* containment programme in Fiordland due to the impact of COVID-19 on income from Environment Southland's Cruise Ship and International Visitor Levies, as well as the re-prioritisation of agency budgets. We are exploring options and continuing to work with agencies to develop a sustainable and long-term funding model for the programme.

May 2020 – We were invited to participate in several of the Milford Opportunities Project reference groups covering environmental interests, statutory and asset management organisations, and recreational and commercial park users. The project aims to develop a master plan for Milford Sound/Piopiotahi that will provide a world class visitor experience while upholding its World Heritage status and national park and conservation values.

The Guardians enthusiastically embraced Zoom meetings as an effective way to continue communicating and working together during the 'new normal' created by COVID-19.





Focus on fisheries sustainability

The Guardians have put considerable effort into investigating fishers' concerns about sustainability in the Fiordland (Te Moana o Atawhenua) Marine Area. As always, we place a high value on the experiences and knowledge of the Fiordland community, and work hard to facilitate community-led, proactive approaches that are informed by scientific information and the vast knowledge and experience of locals and regular visitors.

Engagement with charter operators

At a two-day workshop in August 2019, the Fiordland Marine Guardians worked with amateur charter vessel (ACV) operators to identify issues affecting fisheries sustainability and develop practical solutions. A parallel process was led by the Kaikoura Marine Guardians focused on ACV operations in Kaikoura.

Collectively, the ACV operators have immense knowledge and experience of the fisheries and areas, and we were extremely impressed with the leadership they demonstrated. There was unanimous agreement that many fish stocks inside the habitat lines are at risk throughout the Fiordland (Te Moana o Atawhenua) Marine Area, and that rapid action was required to halt their decline.

Following the workshops, the Fiordland and Kaikoura Marine Guardians advised the Minister of Fisheries that unconstrained expansion of ACV fleets in both regions is putting unsustainable pressure on fish stocks, and that stocks will continue declining to a critical level if recreational fishing and the ACV fleet continue unchecked.

We suggested ways to regulate growth of the ACV sector and limit its impact on recreational fish stocks, and to improve the accuracy and ease of catch reporting within the sector.

In response, Fisheries New Zealand has agreed to progress a trial of electronic reporting (and possibly position reporting) for ACVs. ACVs are already required to submit catch returns to Fisheries New Zealand; however, moving this to an electronic system will improve accuracy and make it easier for operators. ACV operators from Fiordland will be invited to take part in a trial of the new system to ensure it is effective and easy to use.

We hope that fish stocks will also improve as a result of a voluntary code of practice that moves fishing effort to the outer fiords and reduces fishing in the internal waters. Multi-day trips are the norm in Fiordland, so the industry promoting a culture of only 'fishing for a feed' to eat on-board could make a significant and positive impact to fisheries sustainability.

Engagement with recreational fishers

A growing number of fishers visit Fiordland independently, using their own vessels. It is critical that their knowledge, experience, and perspectives help shape future solutions for fisheries sustainability within the Fiordland (Te Moana o Atawhenua) Marine Area.

Consulting with such a large and dispersed group of people is challenging. As part of our response to concerns about fish stocks, we have been working hard to engage with independent recreational fishers, by working with the Fish Mainland working group, publishing articles in The Fishing Paper, and having conversations with many people who fish recreationally within the Fiordland (Te Moana o Atawhenua) Marine Area.

In March, we brought together a diverse focus group of 25 independent recreational fishers to identify current and future issues facing fisheries sustainability within the Fiordland (Te Moana o Atawhenua) Marine Area. We also discussed ways to protect these fish stocks over the next 20 years and into the future.

Recreational fishers identified three main issues: the lack of good recreational fishing data to support effective management; the decline of the overall fishing experience; and biosecurity threats due to pressure from climate change and increasing human interaction.

We will continue to progress our work in fisheries sustainability over the coming year by working with ACV operators, recreational fishers, and Ngāi Tahu Papatipu Rūnanga and whānui to develop and publicise options for the future, and encourage everyone to contribute to the conversation. We are looking for solutions that are future-focused and practical. Fiordland has always led the way with community-driven initiatives, and we are faced with an opportunity to tackle the thorny issue of fisheries sustainability before it is too late.

Support for Fish Mainland

With funding from the Nature Conservancy, Fish Mainland was officially launched in January to bring together and provide a voice for recreational fishers who are often under-represented when decisions are made regarding fisheries management.

We are very supportive of Fish Mainland, as their vision of fostering abundant fisheries aligns closely with our vision for Fiordland. We provided support and advice to Fish Mainland during its development and will continue to engage with them in the future.

National Blue Cod Strategy and reporting

Recreational bag limits for Fiordland will become more conservative when the National Blue Cod Strategy comes into force on 1 July 2020, with bag limits beyond the habitat lines decreasing from 20 to 10.

We support the introduction of a traffic light system that reflects the health of fish stocks and determines the bag limits, as it provides an agile response should stocks build or decline. For the system to be effective, there must be a robust and efficient way to monitor the level of fish stocks. We have been advocating for the development and roll out of a self-reporting system for recreational fishers. Ideally, this system will capture data on a range of species and provide a valuable evidence base to support our ongoing management of the Fiordland (Te Moana o Atawhenua) Marine Area.



Focus on Fiordland's future

We have worked on a number of issues which impact our vision of safeguarding Fiordland's precious marine environment for future generations to enjoy.

Regional Coastal Plan for Southland

As a statutory body the Guardians have been working closely with Environment Southland as they review the current Regional Coastal Plan and develop discussion papers for consideration by Council. Unfortunately, the initial momentum of the review has been slowed considerably by the impact of the COVID-19 pandemic. Our main concern with the current coastal plan is that there is a lack of teeth when it comes to assessing and managing the cumulative effects of activities and structures in the Fiordland (Te Moana o Atawhenua) Marine Area. This includes activities that occur on the surface (such as commercial charter boat operations) and structures such as barges, helicopter pads, and moorings.

Constraints must be placed upon commercial surface water activity so we can ensure "the marine environment and fisheries, be maintained or improved for future generations" as outlined in the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005. Twenty years ago, our original strategy recognised uncontrolled expansion of commercial operations as a potential future threat to Fiordland, and this concern remains relevant today. We are mindful of potential degradation of wilderness and intrinsic values, environmental and ecological impacts, and navigational safety.

There is a balance that we are seeking that maintains these factors whilst ensuring people can continue to use and enjoy the area for generations to come.

Milford Opportunities Project

The Milford Opportunities Project aims to develop a master plan for Milford Sound/Piopiotahi that will provide a world class visitor experience while upholding its World Heritage status and national park and conservation values.

The project's context, vision, and objectives were agreed as part of Stage One, completed in late 2018. Stage Two of the project is now underway and involves identifying and choosing which activities and options will best fulfil the project's objectives and vision.

We are participating in several project reference groups that impact on the Fiordland (Te Moana o Atawhenua) Marine Area, including environmental interests, statutory and asset management organisations, and recreational and commercial park users.

Biosecurity

We continue to focus on and advocate for proactive approaches to preventing, monitoring, and responding to marine biosecurity threats in Fiordland.

The Fiordland (Te Moana o Atawhenua) Marine Area is recognised nationally as New Zealand's crowning jewel and is globally unique. Most of it is still pristine, with fragile and irreplaceable ecosystems.

The protection of biodiversity is a key component of the Government's marine and ocean protection policies, yet currently there are insufficient resources to protect Fiordland's delicate marine environment from invasive species such as *Undaria*. Fiordland's pristine environment is at great risk unless urgent and long-term funding is made available for the containment and eventual eradication of *Undaria* and other biosecurity threats.

Under the Fiordland (Te Moana o Atawhenua) Marine Management Act, the Guardians' duty is to protect the area's precious marine environment on behalf of all New Zealanders, and we will continue to advocate strongly for the resources essential to achieving this.



Looking ahead – the next 12 months

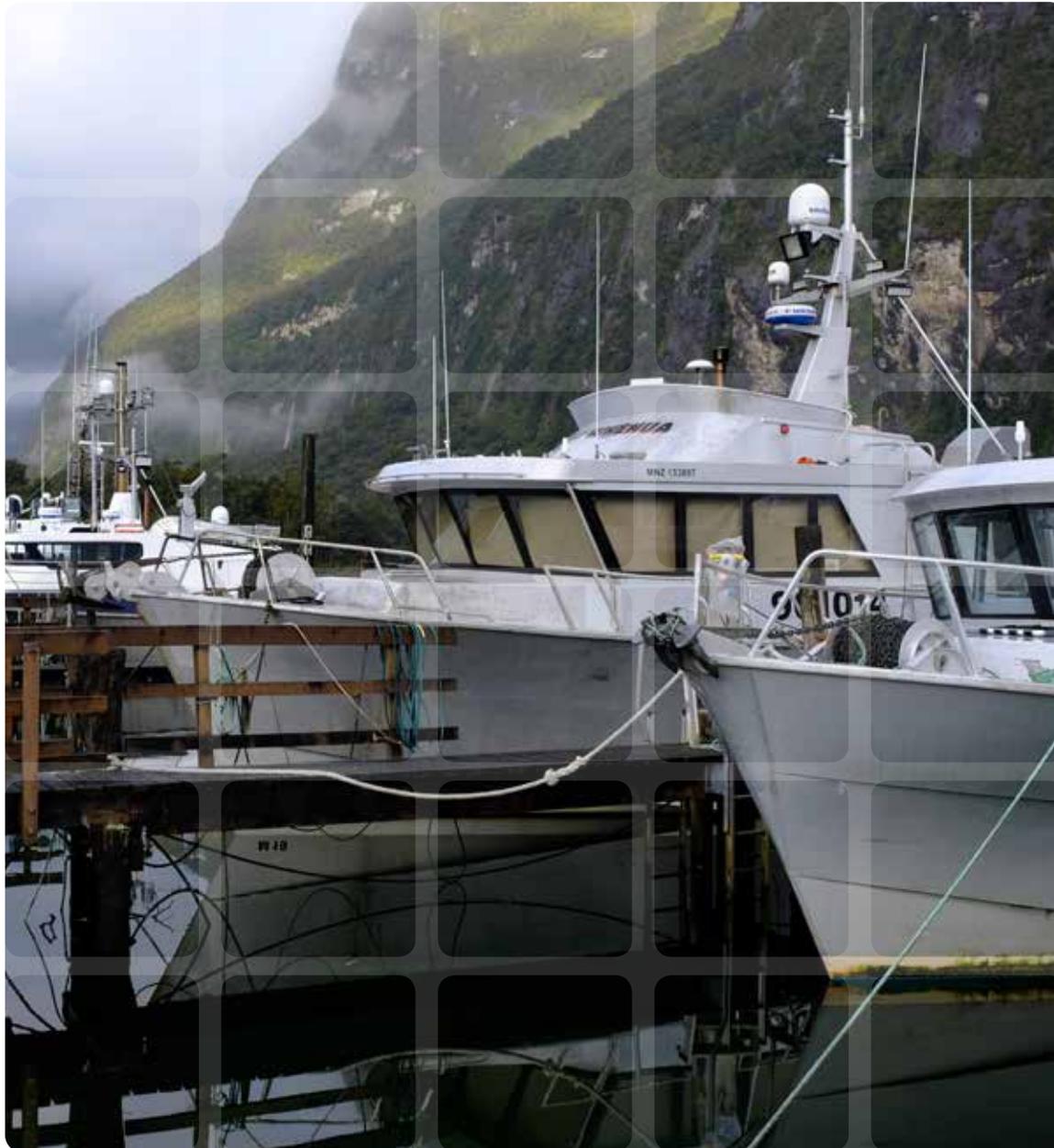
We have identified several workstreams for the year ahead, building on the body of work carried out this year. These workstreams are central to maintaining the Guardian's vision: that the quality of Fiordland's marine environment and wider fishery experience is maintained or improved for future generations to use and enjoy. By mid-2021 we plan to achieve the following.

Biosecurity: Our advocacy will have resulted in central government committing sufficient funding to ensure *Undaria* is not having a detrimental effect on the unique and fragile marine ecosystems in Fiordland. Environment Southland will be leading an *Undaria* control programme that is building new partnerships, providing employment, and supporting local businesses.

Fisheries sustainability: We will be preparing advice and recommendations for the Minister of Fisheries on initiatives to ensure sustainability of fish stocks in the Fiordland (Te Moana o Atawhenua) Marine Area. This advice will have been informed by those who visit Fiordland and have interests in recreational fishing. They will have engaged with us on this through focus groups and an online survey.

Visitor pressure: We will have provided considered input to two initiatives that will shape the future of the Fiordland Marine Area – the review of the Regional Coastal Plan for Southland, and the Milford Opportunities Project. The Regional Coastal Plan is a cornerstone document to support the sustainable management of the Fiordland (Te Moana o Atawhenua) Marine Area, and as such we will continue working hard to ensure the result is future proof as far as possible. The Milford Opportunities Project will present both opportunities and impacts for the Fiordland (Te Moana o Atawhenua) Marine Area. The next year will see this project advance through the formulation of ideas, engagement, and consultation to the crystallisation of a set of proposed plans and projects.

New Guardians: By mid-2021 we expect to have farewelled at least two of the Guardians and welcomed new members to the group.



Resource consents

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

These fell into three categories:

- (1) Non-notified, where we were identified as an affected party.
- (2) Notified, where we felt that the conditions contained in current legislation (such as the Regional Coastal Plan for Southland) sufficiently addressed any concerns.
- (3) Notified, where we provided a submission with recommendations for conditions that should be included in any consent granted.

These applications are listed in Environment Southland's report on page 23.

Meetings

Fiordland Marine Guardians general meetings

Four meetings involving Fiordland Marine Guardians and management agencies were held during the year.

23 August 2019	Environment Southland, Invercargill
27 November 2019	Takutai o Te Titi Marae, Colac Bay
27 February 2020	Environment Southland, Invercargill
25/26 May 2020	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. 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 sub-committees align with the requirements of the Fiordland (Te Moana o Atawhenua) Marine Management Act to develop plans and disseminate information on:

- **Biological monitoring** (Convenor: Richard Kinsey, Department of Conservation)
- **Biosecurity** (Convenor: Lizzy Green, Biosecurity New Zealand)

- **Communications and Engagement** (Convenor: Dr Kerri-Anne Edge Hill, Fiordland Marine Guardians)
- **Compliance** (Convenor: Stephen Logie, Ministry for Primary Industries).

The Guardian sub-committee and working group members are:

Jerry Excell – Review of Regional Coastal Plan for Southland

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

Stewart Bull – Monitoring, Biosecurity, Review of Regional Coastal Plan for Southland

Jon Clow – Communications and Engagement, Review of Regional Coastal Plan for Southland

Dr Kerri-Anne Edge Hill – Communications and Engagement, Monitoring, Review of Regional Coastal Plan for Southland

Peter Young – Monitoring, Biosecurity, Review of Regional Coastal Plan for Southland

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

Dr Rebecca McLeod* – Monitoring, Biosecurity, Review of Regional Coastal Plan for Southland.

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

Sub-committee meetings held during the past year included:

Biological monitoring sub-committee meeting

22 August 2019 Invercargill

Biosecurity sub-committee meeting

22 August 2019 Invercargill

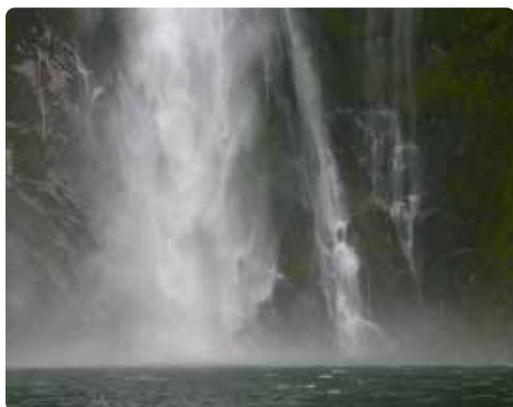
Communications sub-committee meeting

21 April 2020 Video conference

9 June 2020 Video conference

Compliance sub-committee meeting

11 July 2019 Invercargill



Agency reports



Ministry for the Environment

Role

The Ministry for the Environment administers the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005 (the Act). 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

Secretariat

In early 2020, we farewellled Allison Bockstruck, who had provided secretariat services to the Guardians since 2016, and Helli Ward, who had been providing policy support. These roles were filled in a temporary capacity; however, the outbreak of COVID-19 delayed the recruitment of a permanent replacement. We filled these roles in July 2020 with a single slightly expanded position to ensure appropriate resource and capacity were available to support the Guardians' work.

During this year we continued to provide secretariat support for four public Guardians' meetings, one strategy meeting of the Guardians, the development of the annual report, and other communications and administrative support as required.

Fiordland Marine Guardians appointments

The terms of four Guardians are due to end in October 2020. We helped the Minister for the Environment run an open public process for seeking nominations for these appointments; however, this process was delayed by the outbreak of COVID-19. It is expected that the Minister for the Environment will be able to make recommendations to the Appointments and Honours Committee in late 2020 or early 2021. The Act allows existing Guardians to continue in their roles until re-appointments or new appointments are made.

Looking ahead

Further Fiordland Marine Guardians appointments

The term of the Guardians' Ngāi Tahu representative is due to end in June 2021. We will work with Te Rūnanga o Ngāi Tahu and the Minister for the Environment to ensure Ngāi Tahu continues to be represented within the Guardians.



Department of Conservation

Role

The Department of Conservation 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. Since the Act was introduced, we have led the biological monitoring plan for the Fiordland (Te Moana o Atawhenua) Marine Area which encompasses all aspects of monitoring. It was developed to monitor the state of the marine environment and biological diversity, but also incorporates social monitoring to determine what people think of the Fiordland (Te Moana o Atawhenua) Marine Area.

Our statutory responsibilities within the area include managing Fiordland's 10 marine reserves, the protection of marine mammals on the coast, and the Fiordland National Park.

Achievements

We would like to acknowledge the testing year it has been for businesses close to Fiordland who rely on tourism within the national park and the Fiordland Marine Area, and fisheries exports. This year has truly been an '*annus horribilis*' with extreme flooding that severely damaged infrastructure in northern Fiordland and closed the Te Anau – Milford Highway followed by the impacts of COVID-19. Hopefully businesses affected will survive the tough times until things return to normal.

In spite of the obvious setbacks that have shaped much of our work this financial year, we have worked hard with our agency partners and the Guardians to deliver on our commitment to monitoring and developing our understanding of the Fiordland (Te Moana o Atawhenua) Marine Area. We have continued the vitally important biosecurity battle against *Undaria pinnatifida* and managed the challenges due to the impact of the February floods and COVID-19.

Projects we have been involved with this year include:

- A contract with the University of Otago to examine whether fish species can be identified using environmental DNA (eDNA).
- A contract with the University of Otago to look at Hāpuka/groper distribution in Doubtful Sound/Patea and Tamatea/Dusky Sound.
- A re-survey of some of the long-term monitoring sites throughout the fiords, including being able to return to the sites in Milford Sound/Piopiotahi for the first time since 2007.
- The continuation of the bottlenose dolphin monitoring in both Doubtful Sound/Pātea and Tamatea/Dusky Sound.

eDNA

This relatively new technology collects fragments of DNA from the water column and analyses what species are present. Fish for example are constantly losing pieces of their DNA in the form of scales, mucus, or faeces, which can be identified using molecular techniques.

eDNA is potentially a way of being able to understand species assemblages without physically seeing the animals. This has real benefits for more cryptic species that are hard to spot, or species that are nocturnal. The University of Otago is still preparing the report on this work, and we look forward to its findings.

Hāpuka/groper study

A postgraduate student from the University of Otago has been studying whether baited underwater video can be used to determine seven gill shark distribution in the fiords, and whether marine reserves have any impact on that distribution. Whilst collecting the video footage, a number of Hāpuka were observed, which prompted us to contract a pilot study to look at their abundance.

The results (which are based on a small sample size in relatively shallow water) indicate that these fish may well benefit from the protection of marine reserves, with the Moana Uta (Wetjacket Arm) Marine Reserve having an especially high encounter rate, and Five Fingers Marine Reserve (Tamatea/Dusky Sound) also having a higher encounter rate than a site outside the marine reserve.

This effect was not consistent across all of the marine reserves studied however.

In the future a more comprehensive study could provide some valuable insights into the abundance and distribution of Hāpuka throughout the Fiordland (Te Moana o Atawhenua) Marine Area.

Long-term monitoring resurvey

This year a team of DOC and contract divers visited 20 long-term monitoring sites ranging from Doubtful Sound/Patea to Milford Sound/Piopiotahi. The sites, initially picked in 2006/07, utilise divers to survey fish assemblages, invertebrates, seaweed, and habitat along 25 metre transects at two depths – 15 metres and 5 metres. The data collected in February is yet to be analysed but will add to previously collected data from 2006, 2007, 2010, 2013 and 2016.

Bottlenose dolphin population monitoring

The monitoring in both Doubtful Sound/Patea and Tamatea/Dusky Sound has been ongoing, with only two trips to each fiord this year due to the COVID-19 lockdown which prevented the summer trips going ahead. These trips have continued our partnership with the University of Otago and indicate both populations are currently stable. At December 2019, the University of Otago estimated the Doubtful Sound/Patea population was 67 individuals and the Tamatea/Dusky Sound population was 127 individuals. The funding for this monitoring is split between DOC, the University of Otago, and local tourism operators.

Undaria pinnatifida

We have continued efforts with Environment Southland, Biosecurity New Zealand (Ministry for Primary Industries), and the Guardians to control *Undaria* within Te Pūaitaha/Breaksea Sound and Taiari/Chalky Inlet. The situation in Northport, Taiari/Chalky Inlet is looking very promising with no further mature individuals discovered since the initial find in April 2019.

Te Pūaitaha/Breaksea Sound is a more frustrating situation with the discovery in April 2020 that *Undaria* has spread to the outer reaches of the Sound around Breaksea Island. However, if some form of control programme can continue it may be possible to limit the spread of *Undaria* southwards to Tamatea/Dusky Sound.

In addition to the control programme, we have been working hard with our agency partners and the Guardians to highlight the issues of *Undaria* in Fiordland to try and find additional funding to allow the programme to continue.

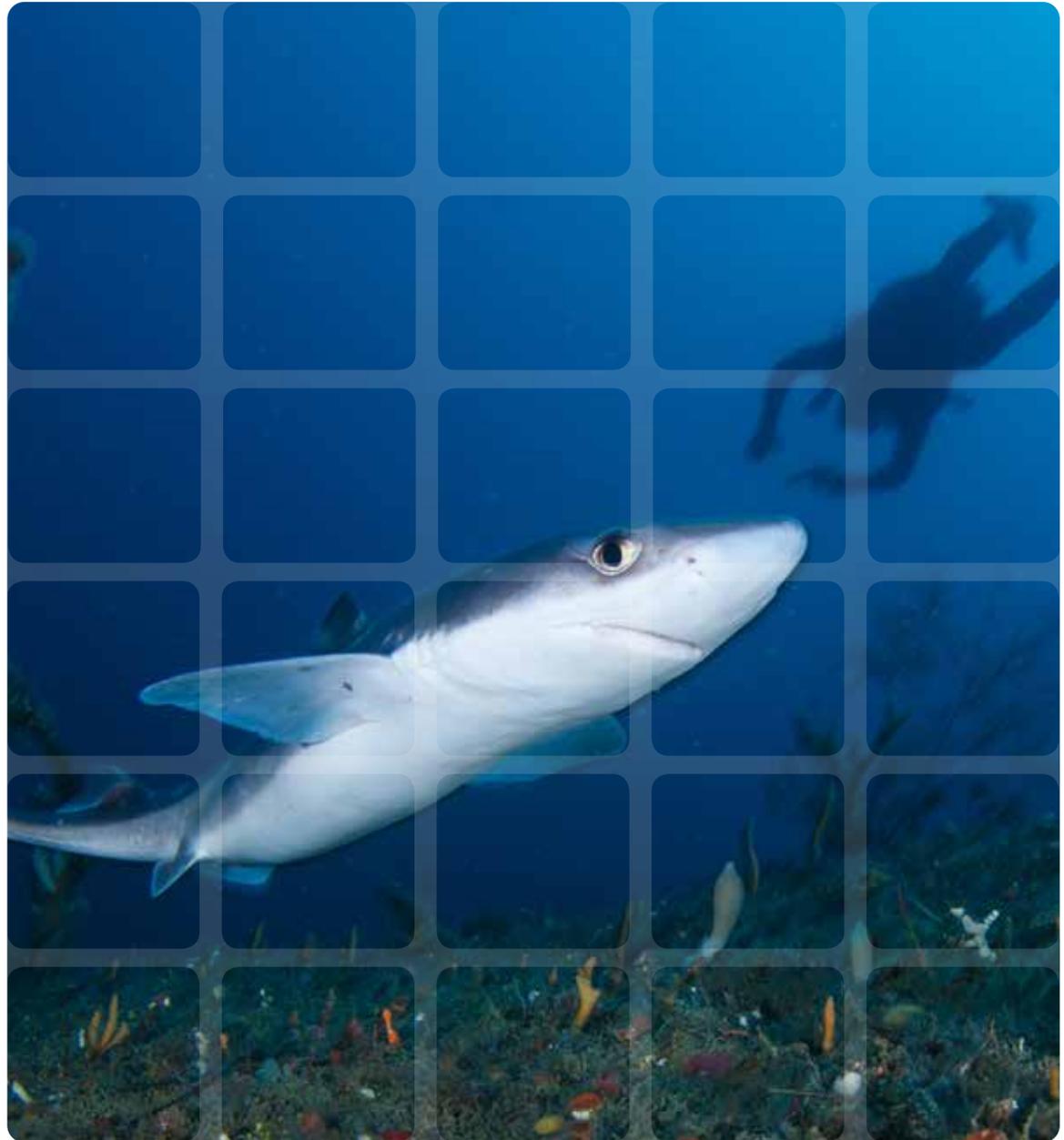
As with every year of the programme since it started in 2010, we would like to thank all those companies, contractors, staff, stakeholders, and interested parties who have supported the *Undaria* control programme. It would be impossible to do without you.

Looking ahead to 2020/21

A number of interesting projects are planned for 2020/21 including:

- dolphin and humpback whale monitoring
- biosystematics work with NIWA
- assisting Te Herenga Waka—Victoria University of Wellington with climate change monitoring
- finalising Fiordland's pou pou installations
- potentially facilitating research in Tamatea/Dusky Sound.

As always, we look forward to working with the Guardians on realising their vision for the Fiordland (Te Moana o Atawhenua) Marine Area and helping to protect such an amazing piece of Aotearoa New Zealand.





Environment Southland

Role

As a regional council, Environment Southland 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

Undaria pinnatifida incursion Te Puaitaha/Breaksea Sound

We have been working with the Department of Conservation (DOC), and Biosecurity New Zealand to transition the control of *Undaria* to a long-term programme as the *Undaria* population inside Te Puaitaha/Breaksea Sound is beyond eradication with technology.

Long-term control poses challenges. In the last year agencies have produced several reports, business cases, funding strategies, and held a workshop to investigate ways to fund and manage *Undaria* in the long term.

Due to COVID-19 and the loss of the cruise ship funding, the programme in Te Puaitaha/Breaksea Sound is being reassessed. Interim control work has been carried out every month (except during COVID-19 lockdown) to try to contain the population whilst the planning work continues.

In April 2020, two mature *Undaria* were reported growing on crayfish pot lines on the inner side of Breaksea Island (see map 1, page 24). This discovery was outside the known distribution of *Undaria* within Te Puaitaha/Breaksea Sound. A delimiting survey of the island and surrounding areas was completed in June 2020 with no new *Undaria* populations discovered. Follow-up surveys will be needed to determine if a population has established itself on Breaksea Island.

An Environment Southland-supported PhD project with the University of Otago investigating the feasibility of biomass removal as a control tool started at the end of 2019. Ten experimental plots were established, covering an area of 9173.5m², with 629.42kg of biomass being removed. Follow-up work is scheduled for the end of 2020 looking at the effects of the removal on the 10 experimental plots.

Undaria pinnatifida incursion Chalky Inlet

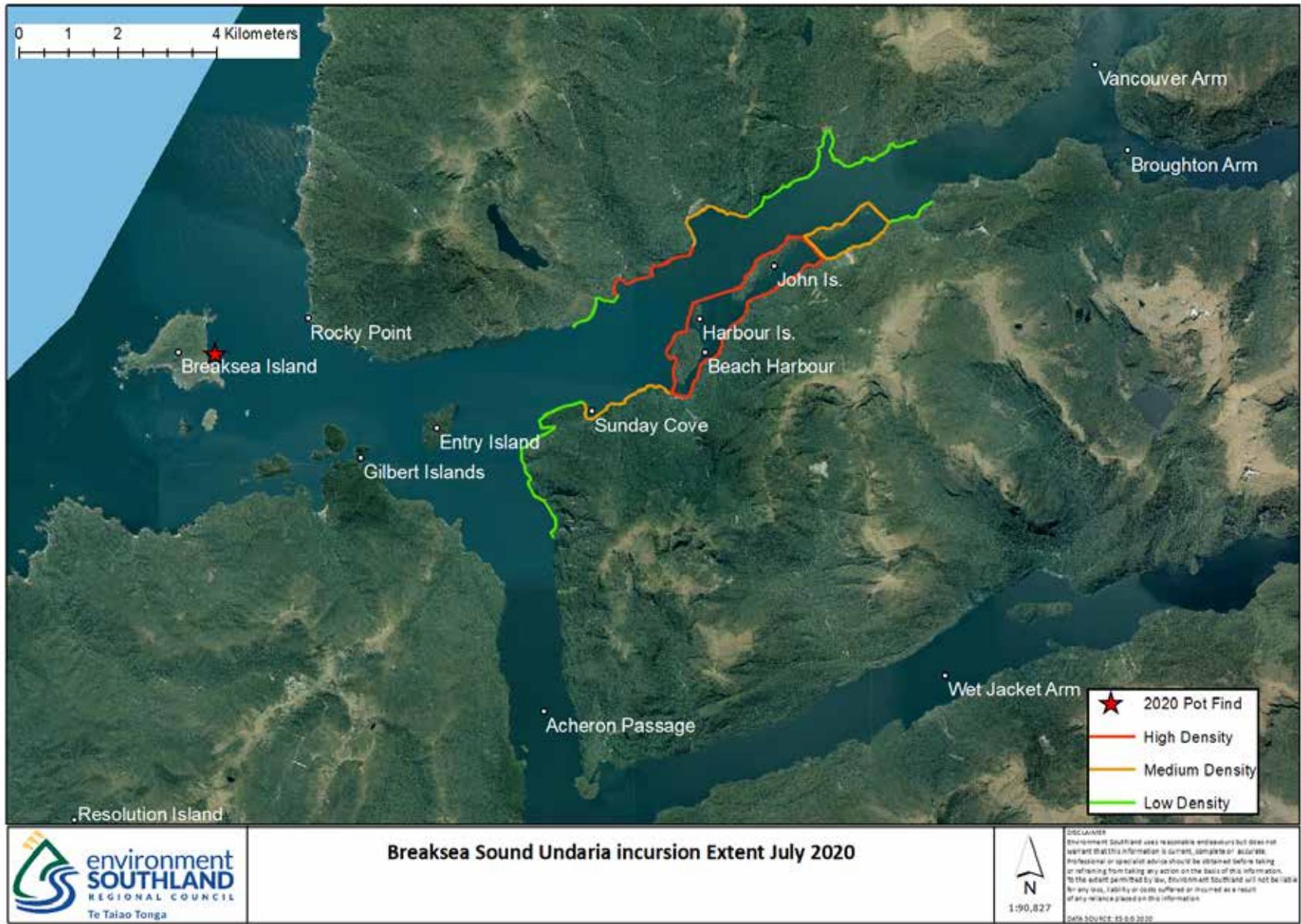
In April 2019 on a compliance trip, divers found one mature *Undaria* specimen and 10 plantlets growing on the wreck of the *Stella* in North Port, Taiari/Chalky Inlet. After completing a delimiting survey in June 2019, a further 29 immature plants were found growing on a mooring line from the *Stella* to the shore which was subsequently removed.

In the last year, monthly elimination survey trips have occurred in North Port and surrounding areas (see map 2, page 25). In July 2019, two further immature plants were located growing on the *Stella*. In October 2019, one immature plant was also found. Since then no further *Undaria* have been found (November 2019 – June 2020). Control trips are scheduled to take place monthly until the end of 2020.

Breaksea Sound Undaria Exemption Area

The Breaksea Sound *Undaria* Exemption Area has been in place for over a year with the removal of the controlled area notice. Compliance and communication activities are ongoing with users to ensure the exemption area rules are being followed.

Map 1: Te Puaitaha/Breaksea Sound, *Undaria* extent and cray pot find location, July 2020



Map 2: Taiari/Chalky Inlet, North Port *Undaria* Dive Search Area, July 2020



Southland Regional Marine Invasive Species Surveillance and Compliance Plan

An Envirolink grant was received by Environment Southland to develop a Southland Regional Marine Invasive Species Surveillance and Compliance Plan. This was completed in June 2020 with recommendations from the plan to be presented to Council to incorporate into the Long Term Plan in the 2020/21 financial year.

The Southland Regional Marine Invasive Species Surveillance and Compliance Plan recommends that Environment Southland:

- (1) Implements an annual monitoring plan for marine pests at high-risk sites in several areas throughout Southland (including Fiordland and Stewart Island/Rakiura), with surveys done in the spring of each year.
- (2) Implements a surveillance programme with a focus on spring and summer to check the hulls of predominantly in-water vessels for marine pests at all major harbours throughout Southland.
- (3) Considers implementing a Southland Pathway Management Plan requiring clean hulls for all vessels moving into or between harbours throughout the region.

- (4) Considers reviewing the status of the Asian Paddle Crab/*Charybdis japonica* and Australian droplet tunicate/*Eudistoma elongatum* in the Regional Pest Management Plan's exclusion programme since they are unlikely to be reproductive in the water temperatures in Southland.
- (5) Considers doing a risk assessment for the inclusion of the Carpet sea squirt/*Didemnum vexillum*, Light bulb ascidian/*Clavelina lepadiformis*, Vase and Pacific tunicates (*Ciona intestinalis*/*Ciona savigny*), and Devils tongue seaweed/*Grateloupia turuturu* as exclusion programme species as they are invasive species present in New Zealand and could thrive in Southland.
- (6) Considers doing a risk assessment for adding Japanese skeleton shrimp/*Caprella mutica* as a species for progressive containment since they are already present within Southland and present a potential risk to aquaculture operations.

Fiordland Marine Regional Pathway Management Plan

The Pathways Plan has now been in effect for 3 years, and one compliance trip was carried out in January 2020 in conjunction with DOC and Biosecurity New Zealand. Data from this trip, and the previous year's, suggest there has been a good adherence to the clean hull standards of the plan.

The uptake of the clean vessel passes in the last year was similar to that in 2018–19. At July 2020, there were 244 current passes with 136 passes applied for in 2020 (see table on page 27 for the breakdown comparison per month). In 2020, there has been a decrease in applications for clean vessel passes due to COVID-19 restrictions and unsettled spring and summer weather.

Clean vessel pass advertisements have been focusing on recreational and commercial users of Fiordland. A full-page advertisement in Professional Skipper magazine ran in August 2019, with radio adverts and interviews run throughout the year. Environment Southland is also working to contact marinas nationwide to remind them about the Fiordland Marine Pathway Management Plan and the importance of clean vessel passes.

Clean vessel pass statistics as at 17 July 2020

Breakdown of applications by month 2018–19	Breakdown of applications by month 2019–20
July 2018 – 3	July 2019 – 5
August 2018 – 13	August 2019 – 20
September 2018 – 13	September 2019 – 16
October 2018 – 11	October 2019 – 18
November 2018 – 15	November 2019 – 15
December 2018 – 20	December 2019 – 30
January 2019 – 35	January 2020 – 24
February 2019 – 31	February 2020 – 16
March 2019 – 49	March 2020 – 18
April 2019 – 31	April 2020 – 7
May 2019 – 35	May 2020 – 11
June 2019 – 16	June 2020 – 54
July 2019 – 5	July 2020 – 6
Current passes: 244	Applied for in 2020: 136

Compliance and marine biosecurity surveillance trips

In January 2020, an on-water patrol was completed in cooperation with DOC, the Ministry for Primary Industries, and Biosecurity New Zealand covering several southern fiords. Twenty-five vessels were intercepted and inspected. Of these, 23 received a hull inspection and seven vessels didn't have a clean vessel pass, including two recreational trailer boats. A summary of the vessel inspections is detailed in the table on the following page. Compliance with the plan has largely been good, with cost recovery only applied to five vessels moored in Doubtful Sound/Patea.

Unfortunately, the April 2020 compliance trip was cancelled due to the COVID-19 lockdown. Trips are scheduled for early 2021.



Vessel inspection record from January 2020 compliance trip

Date	Vessel number	Location	Origin	Vessel type	Clean vessel pass	Hull inspection	Action
6/01/2020	1	Blanket Bay, Doubtful Sound/Patea	Fiordland	Fishing vessel	Y	Y	
6/01/2020	2	Blanket Bay, Doubtful Sound/Patea	Fiordland	Fishing vessel	Y	Y	
6/01/2020	3	Gear Arm, Doubtful Sound/Patea	Fiordland	Syndicate vessel	Y	Y	
7/01/2020	4	Cuttle Cove, Rakituma/ Preservation Inlet	Fiordland	Recreational powerboat	N	N	Education
8/01/2020	5	Tamatea/Dusky Sound	Nelson	Charter vessel	Y	Y	
8/01/2020	6	Luncheon Cove, Tamatea/Dusky Sound	Bluff	Fishing vessel	Y	Y	
9/01/2020	7	Luncheon Cove, Tamatea/Dusky Sound	Bluff	Fishing vessel	Y	Y	
9/01/2020	8	Luncheon Cove, Tamatea/Dusky Sound	Fiordland	Syndicate vessel	Y	Y	
9/01/2020	9	East Cooper Island, Tamatea/Dusky Sound	Fiordland	Syndicate vessel	Y	Y	Hull fouling not to standard – education and follow-up letter
9/01/2020	10	Breaksea Island, Te Puaitaha/ Breaksea Sound	Bluff	Fishing vessel	Y	Y	

Date	Vessel number	Location	Origin	Vessel type	Clean vessel pass	Hull inspection	Action
9/01/2020	11	Stevens Cove, Te Puaithaha/ Breaksea Sound	Stewart Island	Fishing vessel	Y	Y	
9/01/2020	12	Second Cove, Te Puaithaha/ Breaksea Sound	Fiordland	Syndicate vessel	Y	Y	
9/01/2020	13	Second Cove, Te Puaithaha/ Breaksea Sound	Fiordland	Syndicate vessel	Y	Y	
10/01/2020	14	Blanket Bay, Doubtful Sound/Patea	Fiordland	Syndicate vessel	Y	Y	
10/01/2020	15	Blanket Bay, Doubtful Sound/Patea	Southland	Recreational powerboat	N	N	Education
10/01/2020	16	Deep Cove, Doubtful Sound/Patea	Fiordland	Charter vessel	Y	Y	
10/01/2020	17	Deep Cove, Doubtful Sound/Patea	Fiordland	Charter vessel	Y	Y	
10/01/2020	18	Deep Cove, Doubtful Sound/Patea	Fiordland	Charter vessel	Y	Y	

Date	Vessel number	Location	Origin	Vessel type	Clean vessel pass	Hull inspection	Action
10/01/2020	19	Deep Cove, Doubtful Sound/Patea	Fiordland	Recreational powerboat	N	Y	Education and minimum cost recovery
10/01/2020	20	Deep Cove, Doubtful Sound/Patea	Fiordland	Recreational powerboat	N	Y	Education and minimum cost recovery
10/01/2020	21	Deep Cove, Doubtful Sound/Patea	Fiordland	Recreational powerboat	N	Y	Education and minimum cost recovery
10/01/2020	22	Deep Cove, Doubtful Sound/Patea	Fiordland	Fishing vessel	Y	Y	
10/01/2020	23	Deep Cove, Doubtful Sound/Patea	Fiordland	Passenger vessel	Y	Y	
10/01/2020	24	Deep Cove, Doubtful Sound/Patea	Fiordland	Recreational vessel	N	Y	Education and minimum cost recovery
10/01/2020	25	Deep Cove, Doubtful Sound/Patea	Fiordland	Recreational vessel	N	Y	Education and minimum cost recovery

Harbourmaster activities

A new safety management system and framework covering the remainder of Fiordland and Stewart Island/Rakiura was developed and completed in June 2019. This system includes the existing Milford Sound/Piopiotaahi and Cruise Ship Safety Management System, and is consistent with the NZ Port and Harbour Marine Safety Code. This system also provides risk assessments and mitigations for commercial operations in Fiordland and Stewart Island/Rakiura.

A newly established very high frequency (VHF) repeater site on Mt Grono, Doubtful Sound/Patea has been completed and now provides stand-alone VHF coverage for that immediate area. The site will be linked through to the southern network starting at Tamatea/Dusky Sound, when the weather is more favourable after winter.

The 2019/20 cruise season saw 31 cancellations from a total of 135 scheduled visits, mainly due to the COVID-19 response and significant weather events that occurred in the Fiordland region.

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 have regard to.

The Guardians may also make submissions on publicly-notified applications or attend pre-hearing meetings and hearings for which they have provided submissions.

The consents team saw an increase of applications seeking temporary changes to commercial surface water permits in Milford Sound/Piopiotaahi and Doubtful Sound/Patea due to the closure of the Te Anau – Milford Highway in February 2020.

For the year 1 July 2019 to 30 June 2020, the Council received and processed the following 21 applications for 27 activities in the Fiordland (Te Moana o Atawhenua) Marine Area:

- **Environment Southland Biosecurity Division (APP-20191756)**
To discharge and use biocide-chlorine to coastal waters and land to control and kill invasive non-indigenous marine species throughout the coastal marine areas within Southland.
- **Excell – Ernest N and David A (APP-20202195)**
To store fuel, place structures, and occupy space within the coastal marine area of Blanket Bay, Doubtful Sound/Patea, Fiordland.
- **Fiordland Cruises Limited (APP-201180-V3)**
To carry out a commercial surface water activity in the waters adjacent to Doubtful Sound/Patea, Fiordland – temporarily operate up to 31 x 2 hr day cruises per month until 30 June 2020.
To undertake commercial surface water activities in the coastal marine area at Doubtful/Patea and Te Awa-o-Tū/Thompson Sound, Fiordland.
- **Fiordland Discovery Limited (APP-203872-V2)**
To carry out commercial surface water activities in Fiordland, from Yates Point to Puysegur Point to temporarily operate additional overnight cruises in Doubtful Sound/Patea.
- **Fiordland Expeditions Limited (APP-20202008)**
To undertake commercial surface water activities in the coastal marine area at Doubtful Sound/Patea, Fiordland.
- **Fiordland Outdoors Company Limited (APP-20202162)**
To undertake a commercial surface water activity, namely a water taxi service, on the internal waters of Fiordland.
- **Go Orange Limited (APP-20201878)**
To carry out commercial surface water activities in the coastal marine area adjacent to the Fiordland National Park from Yates Point to Puysegur Point, Doubtful Sound/Patea, Fiordland.
To carry out commercial surface water activities, namely to operate guided kayaking trips in Doubtful Sound/Patea, Milford Sound/Piopiotaahi, and Southern Fiords – temporarily increase number of groups and one day trips.
- **Real Journeys Limited (APP-20201876)**
To carry out commercial surface water activities in the coastal marine area adjacent to the Fiordland National Park from Yates Point to Puysegur Point, Doubtful Sound/Patea, Fiordland.

To preferentially occupy part of the coastal marine area with a swing mooring at Harrison Cove, Milford Sound/Piopiotaahi – variation to condition 3 to enable the mooring to be occupied and for the vessel occupying the mooring to be left unattended; from 24 March 2020 until COVID-19 Alert Level permanently reduces to level 2.

- **Legacy Fishing Charters Limited (APP-20191595)**
To undertake commercial surface water activities in the coastal marine area, Fiordland.
- **Cruising Milford Sound Limited (APP-202505-V2)**
To undertake commercial surface water activities within the internal waters of Milford Sound/Piopiotaahi, Fiordland – variation to increase passengers and crew.
- **Fiordland Expeditions Limited (APP-20202009)**
To exclusively occupy three swing moorings located in Blanket Bay, Doubtful Sound/Patea, Supper Cove, Tamatea/Dusky Sound, and Precipice Cove, Kaikiekie/Bradshaw Sound, Fiordland.
- **Te Anau Helicopter Services Limited (APP-I-20191743)**
To install a heli barge and undertake the landing and taking off of aircraft from the barge structure at Cooper Island, Fiordland.
- **The Alpine Group Limited (APP-20169909-V1X)**
To undertake commercial surface water activities including back country trips and day trips in the Fiordland marine area from Yates Point to Puysegur Point.
- **The Alpine Group Ltd and Stephen William Day (APP-I-20191762)**
To make changes to an existing structure and occupy the coastal marine area at Cascade Cove, Tamatea/Dusky Sound, Fiordland.
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.
- **Fiordland Expeditions Limited (APP-20202007)**
To carry out commercial surface water activities, namely the operation of the vessel Tutoko II from Yates Point to Puysegur Point, Fiordland.
- **The Alpine Group Limited (APP-I-20169909-V1)**
To undertake commercial surface water activities including back country trips and day trips in the Fiordland marine area from Yates Point to Puysegur Point – variation to condition 1.
- **Hancox – Carey and Tracey (APP-20202220)**
To occupy the coastal marine area with a mooring at Deep Water Basin, Milford Sound/Piopiotaahi.
- **Descend Limited (APP-300912-V1 20171460-V1)**
To carry out commercial surface water activities in Milford Sound/Piopiotaahi, namely to operate a small vessel for scuba diving.
- **Fiordland Marine Limited (APP-20191847)**
To occupy part of the coastal marine area with a slipway and cradle at Deep Cove, Doubtful Sound/Patea, Fiordland.
- **Milford Power Holdings Limited (APP-20191733)**
To take 2,700,000 litres per day surface water from the Bowen River for hydroelectric power generation.
- **Real Journeys Limited (APP-200125 97049 301896 300538-V1)**
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 including Foveaux Strait – increase number of trips per month for a period of six months.
To undertake commercial surface water activities in the internal waters of Fiordland; namely to operate a tourist vessel in Doubtful Sound/Patea – Patea Explorer – variations in progress to AUTH-97049, AUTH-301896 and AUTH-300538.

Consent compliance

The Consent Compliance Department undertook a number of compliance activities in Fiordland. The wastewater treatment plant in Deep Cove was inspected and audited, and whitebait stands in Martins Bay and Big Bay were inspected in November 2019. Commercial Surface Water Permit holders have been receiving reminder letters to help increase compliance with reporting of commercial activities in Fiordland.

Looking ahead

Marine biosecurity

In the next year, Environment Southland are looking to implement a sufficiently-funded long-term *Undaria* control (Te Puaitaha/Breaksea Sound) and elimination (Taiari/Chalky Inlet) programme with the following vision:

Over the ten-year period to 2030, the Fiordland Undaria Alliance will limit the spread and mitigate the impact of Undaria, and evaluate and report programme effectiveness, in order to maintain and improve the quality of Fiordland's marine environment and fisheries for future generations to use and enjoy.

As part of the Environment Southland Long Term Plan process, it is hoped funding will be secured to implement (and address where possible) all recommendations from the Southland Regional Marine Invasive Species Surveillance and Compliance Plan. Two compliance trips are planned at the beginning of 2021. Communications will be ongoing with radio, newspaper, and print articles and advertisements planned.

Consents

Due to concerns recently raised by the Guardians and the delay of the Coastal Plan review, consents we will be undertaking a review of commercial surface water allocation in the Fiordland (Te Moana o Atawhenua) Marine Area, to better inform cumulative effects for consent processing decisions.

Harbourmaster

Looking ahead, the maritime team will continue to work on providing effective VHF and navigation safety coverage and support in the compliance and biosecurity areas of Fiordland.

Consent compliance

Plans for the 2020–21 year include auditing of the wastewater treatment plants in Deep Cove and Milford Sound/Piopiotaahi and inspections of whitebait stands in Martins Bay and Big Bay. We will continue to encourage a high level of compliance with the conditions of current resource consents in Fiordland.





Ministry for Primary Industries
Manatū Ahu Matua



Ministry for Primary Industries

The Ministry for Primary Industries (MPI) 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 that support the sustainable development of New Zealand's primary industries including on fisheries and aquaculture management
- 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 the 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 that protects the environment and resources from biological risk and supports sustainable fisheries management.

This 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 responses, and co-ordinating recovery and long-term management activities.

Achievements

Fiordland Marine Biosecurity Plan 2015/16–2020/21

We continued to take the lead on implementing the Fiordland Marine Biosecurity Plan 2015/16–2020/21, together with partner agencies and the Guardians.

The Biosecurity 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 Biosecurity Plan address the full spectrum of the biosecurity system: reduction, readiness, response, recovery, and resilience.

Key biosecurity achievements under this plan over the last year include:

- *Vessel hull inspections*: 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 Fiordland (Te Moana o Atawhenua) Marine Area. These monthly inspections looked for the presence of marine pests, and assessed the vessel’s antifoul condition and level of general marine growth. When marine pests were detected, they were removed (if not of a high density) and the vessel owner was advised of what action to take before their next visit to the area.
- No routine monthly inspections took place from May to October 2019; however, vessels owners were still able to request an inspection before taking their vessel to the Fiordland (Te Moana o Atawhenua) Marine Area. No inspections took place during COVID-19 Alert Levels 3 and 4.
- Clean hull messaging was advertised on the MetService app and marine pages from October 2019 to April 2020.
- We participated in the January 2020 joint-agency compliance and marine surveillance patrol by providing support to the inspections of vessel hulls, high risk anchorages, and structures for marine pests. Our staff also helped communicate marine biosecurity messaging and implement the Fiordland Marine Pathway Management Plan.

- Marine biosecurity inspections on these patrols continue to be an effective way to help prevent future marine pests becoming established in Fiordland.
- We contributed to the annual 2019 Interagency Compliance Working Group meeting to discuss future compliance and marine biosecurity surveillance activities.
- We participated in the Southland Boat Show in August 2019. The main aim was to promote marine biosecurity measures encouraging boaties to ensure vessel hulls and gear are free of marine pest fouling.

Future management of *Undaria* in Te Puaitaha/Breaksea Sound and Taiari/Chalky Inlet

Since 2010, we have been working with Environment Southland and DOC on the long-term management of *Undaria* in Te Puaitaha/Breaksea Sound and Taiari/Chalky Inlet where *Undaria* was found in April 2019. The agencies have carried out regular elimination activities at Taiari/Chalky Inlet, and since July 2019 have found no *Undaria* there. While this elimination programme is looking promising, the agencies were concerned to hear about the recent discovery of two mature *Undaria* specimens growing on pots near Breaksea Island, outside the current known distribution of *Undaria* in Te Puaitaha/Breaksea Sound. While no *Undaria* was detected during a recent dive survey near Breaksea Island, we are currently working with the Guardians and other agencies to understand what this find means and the options for preventing further spread from Te Puaitaha/Breaksea Sound.

Further information on [Fiordland marine biosecurity](#) can be found on our website.

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 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 high-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 last year, four new-to-New Zealand species and eight non-indigenous species range extensions were detected including:

New-to-New Zealand

- red alga *Fushitsunagia catenata* from Lyttelton Harbour
- red alga *Pachymeniopsis lanceolata* from Lyttelton Harbour
- ascidian *Agnezia* sp. from Opuia Marina
- red alga *Kapraunia* sp. from Wellington Harbour that has a biosecurity status of cryptogenic (unknown origin)

Range extensions

- Mediterranean fanworm *Sabella spallanzanii* from Otago Harbour
- red alga *Grateloupia subpectinata* from Wellington and Lyttelton harbours
- amphipod *Caprella scauroides* from Opuia Marina
- bryozoan *Celleporaria nodulosa* from Port Taranaki
- amphipod *Jassa slatteryi* from Tauranga Harbour
- decapod shrimp *Lyasmata californica* from Waitemata Harbour
- crab *Pyromaia tuberculata* from Nelson Harbour.

Other detections of note

During the summer 2020 survey of Lyttelton Harbour, 10 Mediterranean fanworm *Sabella spallanzanii* were detected and removed for disposal to landfill. This detection rate is significantly greater compared to recent surveys. Tube length suggests relatively recent recruitment and it is unknown whether this recruitment has come from any remnant Lyttelton population after the 2009 removal programme or is the result of a new infection.

Other key marine pest species, such as the Asian kelp *Undaria* and 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.

To map the current nationwide distribution of any marine species mentioned see the [Marine Biosecurity Porthole website](#).

What's new?

The [annual report](#) for the 2019–20 field seasons is available on our website.

MPI recently released the following technical advice on biofouling surveys for domestic vessels:

- [Conduct of in-water biofouling surveys for domestic vessels](#)
- [Conduct of land-based biofouling surveys for domestic vessels](#).

This guidance is not MPI policy, rather it is to help MPI and our stakeholders make informed decisions about the assessment of hull cleanliness in the context of New Zealand's domestic biofouling pathway management approach.

The online citizen science project Marine Metered Squared (MM²) has launched a new [resource page](#), featuring the *kina* biosecurity video. This is part of a collaborative project between MM² and Biosecurity New Zealand to improve the public's knowledge about what to do if you see something strange down at the beach, or anywhere in general. This online resource can be incorporated into school biodiversity or biosecurity programmes.

Updated instructions on how to use the marine biosecurity portal mapping function can be found on the [Marine Biosecurity Porthole website](#).

An [atlas of all New Zealand's biosecurity surveillance programmes](#) has been created which includes the marine programme.

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

The Craft Risk Management Standard (CRMS) for Biofouling has been in force since 15 May 2018. We have continued to ensure the requirements and how to comply are clear to stakeholders and internal parties within MPI.

During the 2019/20 cruise season, all cruise vessels visiting ports not approved as places of first arrival were 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 management actions which will be undertaken by the vessel operator to manage biosecurity risks before arrival and during the cruise season and are approved by MPI before the vessel's arrival to New Zealand.

We have put a large amount of effort into ensuring all cruise vessels visiting ports not approved as places of first arrival, such as Fiordland, appropriately manage the biosecurity risks associated with these port calls. During the 2019/20 season, all but one cruise vessel showed compliance with their CRMPs; the vessel that was found to be non-compliant was directed out of New Zealand territorial waters until the fouling had been managed.

An [operational research project](#) will begin soon with a focus on refining MPI's approach to vessel risk assessment. Ships will be randomly selected to take part in the survey and will undergo a dive inspection and answer questions about biofouling. The aim is to build a profile of vessels that are most likely to be contaminated with foreign marine species, putting us in a better place to target vessels that require further investigation.

The CRMS team has presented findings from the implementation of the CRMS at several meetings, including the Top of the South Marine Biosecurity Partnership meeting in August 2019, and the Australia, New Zealand and Pacific Islands (ANZPAC) Workshop on Biofouling Management for Sustainable Shipping in Melbourne, Australia, in October 2019. At the ANZPAC meeting, team members also participated in workshops with international biofouling regulators to promote consistency in biofouling regulation.

The CRMS team attended the Sub-committee for Pollution Prevention and Response (PPR7) meeting of the International Maritime Organization (IMO) in February 2020, to represent New Zealand in the initiation of the review of the IMO's Biofouling Guidelines. At PPR7, the Sub-committee approved the formation of a correspondence group to undertake the review of the guidelines before the next meeting. The CRMS team is part of this correspondence group and is currently working on a submission to the third phase of the review.

The CRMS team has also been providing guidance and feedback on an international industry standard for in-water cleaning, which is being developed by the Baltic and International Maritime Council.





Fisheries New Zealand

Tini a Tangaroa

Fisheries management

Role

Fisheries New Zealand 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

Together with the Guardians we have had a productive year of engagement with the Fiordland recreational sector, with two workshops held. An informative, facilitated amateur charter vessel workshop was co-hosted in August 2019 where local operators met with the Guardians and Fisheries New Zealand staff to better understand and manage the impact of increasing amateur charter vessel operations in the Fiordland (Te Moana o Atawhenua) Marine Area. In March 2020, another facilitated workshop with recreational fishers was held to gain a deeper understanding of the values, behaviours, and aspirations of recreational fishers for the Fiordland (Te Moana o Atawhenua) Marine Area.

These engagement processes were very ably managed by the Guardians and the output of these workshops will lead to a variety of fisheries management workstreams. For example, an electronic reporting trial is being developed for the amateur charter vessel fleet in cooperation with the Fiordland and Kaikoura Marine Guardians.

The first stage of the [National Blue Cod Strategy](#) recommendations have been brought into force. There are some significant changes to the Fiordland blue cod fishery, for catch limits in the outer fiords and a new requirement to land blue cod in a measurable state. The Guardians have been involved throughout the development of the strategy and have updated the *Beneath the Reflections* user guide to communicate these changes.



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 six Fishery Officers enforce the Fisheries Act 1996 and fisheries regulations by conducting routine surveillance patrols and vessel inspections, carrying out investigations and intelligence analysis across commercial, recreational, and customary fishing.

Since the establishment of the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005, the Southland Chief Compliance Officer 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 and Environment Southland Compliance Officers 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.

A local MPI Fisheries Compliance representative regularly attends Guardians' meetings, providing report updates of all relevant fisheries compliance matters, including detected non-compliance and any emerging risks.

Achievements

Introduction of electronic catch and geospatial position reporting

From mid-2019, new digital monitoring legislation came into force, which requires all inshore commercial fishing fleet operators to change from paper-based catch reporting to a new electronic catch reporting regime. This has been coupled with mandatory geospatial position reporting by all registered fishing vessels to provide real time fish catch event reports and vessel tracking data.

From the outset, Southland Fishery Officers have been kept busy, helping the 160 Southland-based commercial fisher clients transition to the new electronic reporting regime. This has not been without its challenges, owing to the newly developed technology, range of device capabilities and software, inexperienced user error, intermittent device failures, and the isolated and challenging working environment, which requires expensive satellite connectivity to be able to send the electronic reports in on a daily basis.

Despite the challenges, the new 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.

Fiordland Interagency Compliance Working Group Meeting

In July 2019, MPI, DOC, and Environment Southland Agency Compliance and Biosecurity Officers met for an annual Interagency Compliance Working meeting at Environment Southland. The meeting was facilitated by the local MPI Chief Compliance Officer. The 10 agency officers attending were joined by Guardian Peter Young, whose presence and insightful input was most helpful and well received. After debriefs of the past year's multi-agency patrols and any notable incidents detected, discussion focused on patrol forward planning and resource availability for the year ahead.

On behalf of the Guardians, Peter urged the agencies to increase the number of compliance trips throughout the peak activity months, along with suggesting an increased compliance presence by intercepting returning recreational fishers and boaties at Deep Cove, Manapouri and Milford. This would include Environment Southland Officers carrying out pest pathways checks of visiting boats and operators to enforce clean vessel passes, and Fishery Officers enforcing the fishing rules by checking returning recreational fisher boats and fish catch. Peter pointed out that the fiords were now busy beyond the traditional January to April period, with charter and recreational trailer boat trips now carrying on into May and June, and post-winter boating and fishing activity now picking up in November and December.

Southland Boat Show 2019

Local MPI Fisheries Officers, Fisheries New Zealand staff, and Biosecurity New Zealand marine pest advisors hosted an MPI exhibition stand at the biannual Southland Boat Show. As in past years, provision was made for a Fiordland Marine Guardian to join the MPI agency team to engage and promote the Guardians' role with the public.

Multi-agency compliance and marine biosecurity seaborne patrols

In mid-January 2020, a team of Compliance Officers from MPI, DOC and Environment Southland conducted a successful multi-agency seaborne patrol utilising the Department of Conservation *GV Southern Winds*.

The 5-day patrol took in seven fiords between Te Awa-o-Tū/Thompson Sound and Rakituma/Preservation Inlet, including six marine reserves. Sixteen vessels were boarded and inspected, including six commercial fishing vessels, six amateur-fishing charter vessels, and four recreational craft that included two large syndicate vessels, a houseboat, and a trailer vessel. Seventy-one people were encountered, engaged in a mix of fishing, diving, and cruising. Fishing rules compliance was excellent, with no major breaches detected requiring infringement action.

A second multi-agency compliance and biosecurity seaborne patrol planned to take place in autumn was cancelled due to the COVID-19 pandemic. The level 3 and 4 restrictions dramatically curtailed the usually busy boating, fishing, and diving activity which takes place during the annual deer hunting roar in March and April. The pandemic disruption temporarily gave Fiordland's inshore fish stocks some welcome respite.

Throughout the year, Fishery Officers routinely carried out port landing vessel inspections at Milford Sound/Piopiota, Riverton, and Bluff – predominantly of commercial fishing vessels returning from the Fiordland fishing grounds. This mainly involves 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 is correctly reported, using electronic reporting and geospatial position reporting devices.

There are two significant commercial offence investigation matters relating to Fiordland about to go before the Court or under active investigation, with potential charges pending.

A planned deployment of the MPI Fisheries patrol vessel and three Fishery Officers into the Doubtful Sound/Patea 3-fiord complex, was cancelled due to the adverse weather event which hit Fiordland and Southland over the long Waitangi weekend. The storm led to a state of Civil Emergency being declared across the province, including closure of the Milford Road due to major slips and flood damage.

COVID-19 live CRA8 rock lobster Chinese export market disruption

Due to the COVID-19 pandemic breaking out in China, the Chinese Government halted all imports in January 2020, including New Zealand live rock lobster imports. Up until this date, a considerable number of Southland CRA8 fishermen had been busy catching and landing live rock lobsters to supply the Chinese New Year festival season (25 January – 8 February) when demand is high. The Chinese live market shutdown caused major financial and industry disruption, with many Fiordland CRA8 fishers, caught up in holding live rock lobsters in their coff storage pots at sea. Local onshore CRA8 export facilities were also left holding live fish inventory that was unable to be airfreighted to China.

Over the course of three days in late January, Southland Fishery Officers contacted all 64 CRA8 vessel operators and five Southland based CRA8 export licensed fish receivers to determine the extent and amount of live rock lobster being held. This revealed 25 CRA8 permit holder/vessel operators involving 27 different CRA8 fishing vessels, were collectively holding approximately 47 tonnes of live CRA8 rock lobsters held in coff holding pots at sea. This was verified by submitted electronic catch reporting data for cross check analysis. A high proportion of the coffed rock lobster catch had been taken off Fiordland and was still being held on the Fiordland coast.

In early February, on advice from Fisheries New Zealand and the NZ Rock Lobster Industry Council, the Hon Stuart Nash, Minister of Fisheries, gave the go-ahead for MPI Fisheries Compliance Officers to authorise the orderly return of live rock lobsters held in holding pots, back into the inshore waters where they were originally taken from. This was subject to the rock lobster being assessed as likely to survive. In the emergency circumstance, Schedule 6 provisions of the Fisheries Act 1996 were used, allowing authorised fishers to report fish releases on their electronic reporting devices using code X, which did not require the returned fish to come off the fishers Annual Catch Entitlement holding. In addition, after biosecurity assessment and approval, Fishery Officers supervised the authorised return to the sea of a further 1100kg greenweight of rock lobster from one Te Anau licensed

fish receiver live tank facility. Live fish were trucked back into Milford and successfully released north of Milford Sound/Piopiotaahi.

Recreational fishing resumes post COVID-19 restrictions lifting

Following extensive Milford Road repairs and the lifting of COVID-19 movement restrictions, Milford Sound/Piopiotaahi received a burst of recreational boating activity during late May and June. During Queen's Birthday weekend, three Fishery Officers deployed to Milford Sound/Piopiotaahi with the MPI trailer patrol vessel, conducting 38 mainly on-water recreational fishing boat party inspections over four days.

Disappointingly, eight fishing offences were detected, involving fishers predominantly from the Queenstown-Lakes District area, who were intercepted returning into Milford Sound/Piopiotaahi. Two boat parties were found in possession of female rock lobsters in full egg unlawful state, while another three person party had exceeded the rock lobster daily limit. Other offences included possession of undersize blue cod, using unmarked cray pots, and an unmarked dahn line. The offending fishers received infringement notices and for the less serious breaches, warning notices were issued.

In addition, three commercial CRA8 fishing vessels were inspected, without incident, along with checking numerous recreational and commercial pots set outside of Milford Sound/Piopiotaahi, in the Anita and Fox Bays area.

New recreational blue cod regulations

Following the delayed Cabinet announcement in late May 2020 of the new nationwide blue cod fishing amateur regulation amendments, local MPI Fisheries Compliance staff have been working with Fisheries New Zealand to update and print new *Recreational Fishing Rules Fiordland* brochures, together with revised MPI website and Fishing Rules App information, incorporating the new blue cod rules that take effect on 1 July 2020.

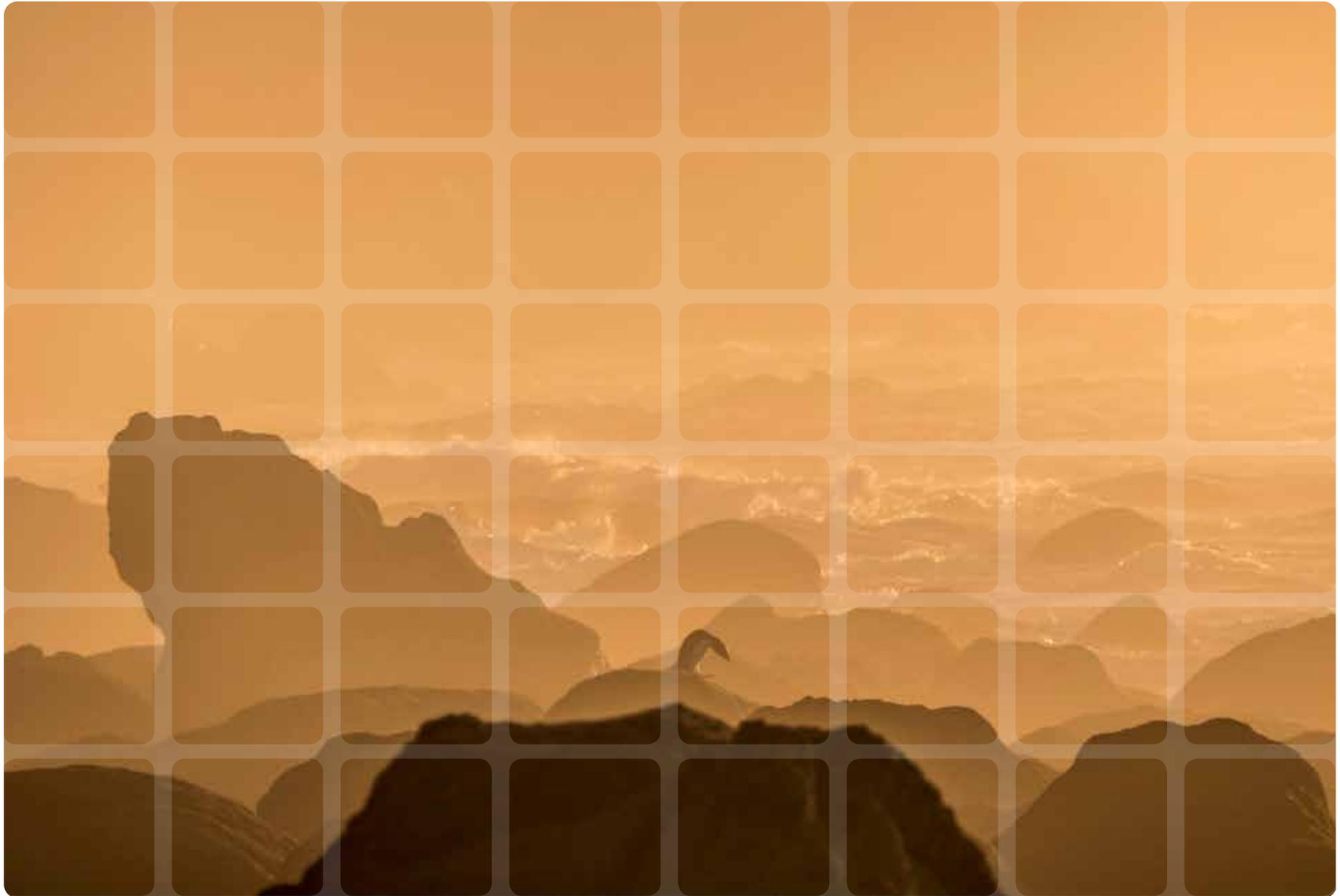
Looking ahead

Over the coming year we will continue working with Environment Southland and DOC on the *Undaria* elimination at Taiari/Chalky Inlet and reviewing control activities at Te Puaitaha/Breaksea Sound, given the recent discovery of two mature *Undaria* specimens on pots near Breaksea Island. We will also continue to work with all Fiordland partners to implement the Biosecurity Plan recommendations.

From 1 July 2020, MPI Fishery Officers will be involved in distributing the new blue cod rules information that now applies to the South West Blue cod management area, which includes the Fiordland (Te Moana o Atawhenua) Marine Area. This includes contacting and liaising with Fiordland amateur-fishing charter fleet operators, commercial fishers, and recreational fishers to provide compliance advice and carrying out boat inspections to reinforce and bed in the new rules.

The rule changes include a new daily limit of 10 (reduced from 20), with no accumulation still applying, and a new measurable state requirement, where blue cod must be landed either in a whole or gutted state. The only exception is that blue cod can be filleted on board a vessel if it is to be immediately eaten on board the vessel. Within the Fiordland (Te Moana o Atawhenua) Marine Area, recreational fishers can lawfully possess the daily 10 blue cod limit, when transiting through the designated internal fiord waters (where lower limits apply) to land their catch at either Milford Sound/Piopiotahi or Deep Cove, Doubtful Sound/Patea.





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This year's cover image is provided by Fiordland Charters.



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.

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