File Ref: C230-001-M02 Record No: 22130079



Minutes for Meeting of the Sounds Advisory Group held at the Chateau Marlborough on Monday, 20 June 2022 commencing 9.30 am

Present: Clr Faulls, Clr Taylor, Monyeen Wedge, Ross Withell, Margot Ferrier (DOC), Vic Koller, Ken Roush, Steve Murrin (Marlborough Roads), Darren Crawford (FENZ), Charlotte Wood (Top of the South Neighbourhood Support – Marlborough Area Coordinator), Eric Jorgensen.

Via Zoom: Attending via Zoom – Poneke Rene, Ned Wells, Emma Hopkinson-Young, Jodi Milne, Tim Greenhough, and Linda Booth.

MDC Staff Attending: Alan Johnson, Oliver Wade, Matt Oliver, Heli Wade, Louise Walker, Bernadette Brooklands (Secretary).

1. Welcome -

- **2. Apologies:** Lynley Perkins, Clr Oddie, Rob Schuckard, Ian Shapcott (Te Ātiawa Manawhenua Ki Te Tau Ihu Trust), Dave Hayes, Rick Osbourne.
- **3. Correspondence:** Resignation of Rob Schuckard from the French Pass Residents Association. The resignation letter has been emailed to group members.

4. Confirmation of minutes 14 February 2022

 The minutes of 14 February 2022 were taken as read however Eric Jorgensen did have some changes to his section of the previous minutes. This has been noted.

5. Actions from the previous meeting

	Action	Person Responsible	Outcome
1.	What causes the red tide toxin?	Alan Johnson/Jodi Milne	Ongoing
2.	To follow up the salmon farming best practice guidelines that are currently being reviewed by Government.	Gina Ferguson	Ongoing
3.	Link the Nakuta Bay & Waikawa Residents Association with Eric Jorgensen on ungulate control.	Clr Faulls/Clr Taylor	Completed
4.	Add the Waitaria Hall 2018 TOR comments to the minutes	Bernadette	Completed
5.	Invite FENZ in the Sounds – (Chris Hayles - Chief Rural Fire Officer).	Clr Faulls	Completed. See Item 7
6.	Remote transfer stations across the whole Sounds. Invite Alec McNeil.	Alan Johnson	Ongoing
7.	Emissions Report for members to read.	Alan Johnson	Ongoing
8.	Add Climate Change to next Agenda.	Bernadette	Completed

	Action	Person Responsible	Outcome
9.	Portage update.	Clr Faulls	Ongoing
10.	Moetapu Bay Resident's Association would like updated information on what the future road repairs involve.	Steve Murrin	See Item 2
11.	Provide the mussel restoration projects report to the group.	Ned Wells	Ongoing

Action Point 1

What causes the red tide toxin? (Jodi Milne)

Ongoing matter. Action point noted for next meeting.

Action Point 2

To follow up the salmon farming best practice guidelines that are currently being reviewed by Government (Fisheries NZ)

Not discussed today. Noted as an action point for next meeting.

Action Point 3

Link the Nakuta Bay & Waikawa Residents Association with Eric Jorgensen on ungulate control. (Clr Faulls/Clr Taylor)

Completed

Action Point 4

Add the Waitaria Hall 2018 TOR comments to the minutes (Bernadette)

Completed also see Item 12

Action Point 5

Invite FENZ in the Sounds – (CIr Faulls)).

• Completed. Darren Crawford attending today. See Item 7.

Action Point 6

Remote transfer stations across the whole sounds (Alan Johnson)

• CIr Taylor noted that this is under review and has been noted as an action point for our next meeting.

Questions/answers

- Monyeen advised that at peak times the jetty area in Picton is crowded and residents find it can be difficult to drop off their rubbish when area is busy.
- The waste review will be linked to the Central Governments review on all types of waste. This will
 then be a consultation process through the Annual Plan. The first report will be back with Council at
 the end of this year.
- Linda requested all communities be advised.

Action Point 7

Emissions Report for members to read (Alan Johnson)

• Ongoing. The report will be sent out when approved by Council. Action point noted.

Action Point 8

Portage Update (Clr Faulls)

• Water testing being carried out in Portage Bay to try and fix the issue there. The Council Compliance team are now able to go to Portage to complete testing. This is still an ongoing issue.

Questions/answers

CIr Faulls to go back to the Compliance team for a further update. Action point noted.

Action Point 9

Moetapu Bay Residents Association would like updated information on what future road repairs involve (Steve Murrin)

Completed. See Item 2 and Appendix 2 for the Marlborough Roads update.

Action Point 10

Provide the mussel restoration projects report to the group (Ned Wells)

 Ongoing. The project will be completed at the end of June and the report will be uploaded to the MFA website. See Item 8.

1. MPI Update (Jodi Milne – MPI) – via zoom

- A new staff member, Vikki Ambrose has been recruited for the Nelson office. Jodi will introduce her at our next meeting.
- Jodi spoke of the Sustainability Review (See Appendix 1 for the PowerPoint presentation on the Sustainability Review Consultation).
- View the blue cod document here and the snapper document here
- The following information is from the MPI website –

Fisheries New Zealand is consulting on proposed changes to sustainability measures for a range of fish stocks as part of the October 2022 sustainability round. We invite feedback from tangata whenua, stakeholders, and the public on these proposed changes.

About the proposed changes -

Fisheries New Zealand reviews catch limits for selected stocks twice a year. This is consistent with the requirement that Fisheries New Zealand ensures the sustainable use of fisheries resources. In this round Fisheries New Zealand is consulting on changes to catch limits, allowances and deemed values for 20 different fish stocks around the country, and on standalone deemed value changes for an additional 5 fish stocks.

The proposals for each stock in this round were assessed:

- in the context of the relevant statutory requirements
- using the best available information, including the latest scientific information on the status of the stocks and tangata whenua and stakeholder input.

Full details are in the consultation documents. We have also prepared a summary of the proposals

On-board cameras –

Between 2022 and 2024, up to 300 commercial fishing vessels will have on-board cameras installed. The Government will spend \$68 million on the programme.

All inshore vessels using these fishing methods will have cameras installed:

- surface longline
- bottom longline
- purse seine
- Danish seine

Cameras will also be installed on -

- trawl vessels less than or equal to 32 metres in length except those targeting scampi
- set net vessels greater than or equal to 8 metres in length.
- Cameras are not required on -
 - deepwater trawl vessels

- inshore vessels that fish low volumes
- vessels with more selective fishing methods that pose less risk to protected species.
- On-board camera regulations -

<u>Fisheries (Electronic Monitoring on Vessels) Regulations 2017 – NZ Legislation</u>

Fisheries (Electronic Monitoring on Vessels) Amendment Regulations 2020 – NZ Legislation

For information about the initial proof of concept, privacy provisions, and other matters, refer to:

The 2019 proof of concept for the rollout of on-board cameras

Who to contact?

If you have questions about on-board cameras for commercial fishing vessels, email onboardcameras@mpi.govt.nz

Questions/Answers

- Jodi spoke of the Best Practice Review for aquaculture to also include a SAG representative. Eric will
 make further enquiries with MPI.
- If anyone needs a printed copy of the reports that Jodi has on her presentation, please email Bernadette and she will advise Jodi.
- Jodi encouraged members to provide written submissions on the catch limits. This ends on Friday 22 July 2022.
- Eric spoke on the need for SAG members to come together and submit a written submission on these limits and change of date. Eric to draft a submission on behalf of the group. It was noted by Clr Taylor that it needs to be clarified first regarding what Council's stand on this is. Action point noted for Alan Johnson to confirm Council's position on the group making a submission.
 - o It was noted after the meeting that SAG is unable to formally prepare submissions, however discussion and coordination of viewpoints is encouraged by members. Submissions can be promulgated based on individual members of SAG representing their own communities (if your individual Associations agree), otherwise they can be individual private submissions.
- It was noted that all community groups should be made aware of this submission. Making your submission. See below for information from MPI website on how to make a submission.

Fisheries New Zealand invites you to make a submission on the proposals set out in the consultation documents, using the submission form template. Submissions close at 5.00 pm on Friday 22 July 2022.

Submissions form [DOCX, 74 KB]

Email your completed form to FMsubmissions@mpi.govt.nz

While we prefer email, you can post written submissions to:

2022 Sustainability Review Fisheries Management Fisheries New Zealand PO Box 2526 Wellington 6140 New Zealand.

If you require hard copies of the consultation document or any other information, email FMsubmissions@mpi.govt.nz

Note that consultation on East Coast tarakihi commenced earlier on 7 June and submissions on tarakihi close at 5.00pm on Tuesday 12 July 2022.

2. Marlborough Road Update – (Steve Murrin)

- See Appendix 2 for Marlborough Roads update presentation.
- Moetapu Bay Residents Association would like updated information on what future road repairs involve – the works should be completed by Christmas. See Appendix 2 for the timeline.

- From Marlborough District Council media release to see full article on the MDC website, Click Here
- Representatives from Waka Kotahi, Marlborough Roads Recovery Team and Marlborough District Council met with members of the Kenepuru community at Waitaria Bay hall and the Portage Hotel. The Government through Waka Kotahi will fund 95 percent of the cost of this recovery, which is approximately \$81M of the \$85.3M total cost.
- The Water Tank Slip was programmed for after Easter, so that there were no hard closures during the areas busy season.
- The three other complex sites, RP 12.8 500m before Mahau Road, the Torea underslip and Portage Heights, have been programmed to occur one after another from late June to early December.
 - New reflective stands will be put on the road out to Te Aumiti/French Pass and Bulwer. This is a new trial to investigate if they are sturdier than the previous stands.
 - Torea Bay jetty has been given the green light for repairs.
- Where to find information -
 - Sign up to the Antenno app to receive notifications on your phone.
 - Read the <u>programme of works and road access</u>
 - Check the Civil Defence Emergency Management map for road access restrictions.
 - Phone: 0800 213 213 or 03 520 8024, between 8.00 am 5.00 pm, Monday to Friday.
 - Email: recovery@marlboroughroads.com
 - https://www.marlborough.govt.nz/services/alerts?itemCategory=roads
 - The nzta.govt.nz/projects/marlborough-roads-recovery/ website gives details of roading projects, updates, road closures and photographs of work being done.
 - https://www.nzta.govt.nz/

Questions/Answers

- CIr Faulls thanked Steve for all the mahi he and his team do for the area. The Road to Recovery
 projects have been as big as the Christchurch earthquake roading repairs. CIr Faulls passed her
 condolences to Steve and his staff in relation to the fatal Te Hoiere accident.
- It was asked if the culverts can be cleared more regularly at Moetapu Bay. Steve did advise that if the community notice a branch in a culvert, they can remove it themselves rather than having to wait for the roading crew.
- It was asked when the funding from the February floods will come through. Steve advised the funds are yet to be received.
- Linda asked if the spoils taken into Harvey Bay camp area will be cleared away by DOC or Marlborough Roads. Steve advised it is Marlborough Roads responsibility and it is on their radar. Margot from DOC advised that it has been wet which has delayed work. Steve from Marlborough Roads will put up signage for the area.

3. Te Hoiere Project Update (Heli Wade – Te Hoiere Project Manager) – via Zoom

- See Appendix 3 for PowerPoint presentation.
- Heli gave an update on the Te Hoiere Project work and Jobs for Nature Project. Te Hoiere now have a logo which incorporates the values of the project. See PowerPoint for logo design and new project branding.
- The Te Hoiere Project group will be scoping for new community representatives to join the group.
- No Whio were located by the ranger and his specialised trained dog in the upper Te Hoiere/Pelorus in March.
- The June newsletter will be out shortly for the community groups.

4. Coastal Science Update (Oliver Wade – MDC)

- The new coastal scientist Pauline Mitterwallner has started at Picton. She has come from Wellington.
- Harbourmaster Luke Grogan has resigned and is now at Port Marlborough. Link to MDC website
 article on our new Harbourmaster Jake Oliver <u>Click Here</u>
 Action point to invite Pauline and Jake to our next meeting.
- Queen Charlotte/Tōtaranui and Pelorus/Te Hoiere water testing and monitoring is ongoing.
- Auckland University are currently conducting a kina removal project in the Sounds area. This has
 culled 3-4 tonnes of kina from four sites in Queen Charlotte Sound/Tōtaranui. There will be ongoing
 monitoring to see if the algae are restored. There will be some planting of juvenile algae later in the
 year. Port Marlborough and Te Atiawa were advised and have been supporting the Auckland
 University's project.
- Another ongoing project is the Sustainable Seas project with Eric Jorgensen and the Coastal Science team and the Te Hoiere Project.

Questions/Answers

- The four kina removal sites are at Meretoto/Ship Cove, Motuara Island, Oruawairua/Blumine Island, and one near Ruakāka Bay. See link below for the MDC Environment Committee meeting for further information.
- Monitoring in Pelorus around the salmon farms it was asked if the salmon farms should be conducting their own monitoring, or should it be the Councils role? Council do monitor however the monitoring is for the water temperature and water quality, not the welfare of the fish. This is an MPI function.
- The King Salmon Compliance Report and the Significant Marine Site Report are listed under the Environment Committee link. To view the reports, see the 15 June 2022 Environment Pack.
 https://www.marlborough.govt.nz/your-council/meetings?item=id:2g1ed0zwl17q9ssek8dg
 See link for MDC reports https://www.marlborough.govt.nz/environment
- It was asked about the findings on Parchment Worms in Queen Charlotte Sound/Tōtaranui. The Parchment Worm has increased in numbers. This is the same worm found in the Auckland region. It is unclear how it has made its way to the Sounds. The impact of the worms is that it colonises in soft sand areas. The worm lives inside the soft tube and worms have been found on reef areas. When the worms are found in larger numbers, they tend to attract fish, so they appear to create their own community however, being found in the reef areas is of concern.
- It was asked if the worm was affecting the numbers of fish. It was noted that there is no way to prove this at this stage.
- Oli asked if the members could email him and advise what they would like him to speak about at the future meetings. Action point noted. Oliver.Wade@marlborough.govt.nz
- Monyeen asked if there was an update on the water quality issues in Lochmara. Action Point noted to enquire with the Council Compliance Team for an update.



Image 1: Parchment Worms

5. Reconnaissance Report on Landslides and Catchment Susceptivity to Debris Flow (Matt Oliver – MDC)

- See Appendix 4 for copy of the presentation.
- Matt presented his report on the 17 July 2021 storm event and debris flow analysis.
- GNS report is online. https://www.gns.cri.nz/Home/About-Us/Corporate-Documents/Annual-Reports
- The maps in the presentation will be available for professional use on the MDC SmartMaps Pro website. These maps are for information purposes only. Landowners contemplating developments should consult an appropriately qualified professional to assess debris flow risk on their site.

A break was taken for lunch with the meeting resuming at 1.13 pm

6. Environmental Policy Update – Marine SNA Framework (Louise Walker - MDC)

- See Appendix 5 for copy of presentation and the link the MDC Environment Committee for 15 June 2022 for further information, https://www.marlborough.govt.nz/your-council/meetings
- Approval has been sought to proceed with a variation to include sites identified as Ecologically Significant Marine Sites (ESMS). The PMEP currently identifies 142 ESMS and those existing sites are from surveys and data collected prior to 2016. The variation will propose the inclusion of sites identified since 2016. See Appendix 5 for details on the planning framework and process.
- Louise discussed what is an ecologically significant marine site and gave the Tory Channel/Kura Te Au as a subsite example. Louise explained the category rating, buffer area, current ecologically significant marine and marine habitat sites and how these sites were identified.

Questions/Answers

- The finalised form should be available by September. Once finalised it will be presented to the Planning, Finance and Community Committee for approval.
- Who is the expert panel? Specialist from Council, DOC and external people.
- If you see anyone fishing in a marine reserve, you can report it to MPI and DOC with support of evidence such as GPS location, photographs, and the name of the boat.
- It was asked is there a way to get the SmartMaps on GPS to show the location of marine reserves. It was also suggested that having the SmartMaps on SwellMap and other similar apps would enable vessel users to see the locations. Action point noted to speak to MDC IT team if this can happen.

7. FENZ (Darren Crawford – Senior Advisor Readiness and Recovery)

- See Appendix 6 for copy of the presentation.
- Darren spoke to the eight areas of change, strategic priorities, wildfire risk, tools available, fire danger predictions, fire behaviour modelling, the Pigeon Valley and Lake Ohau fires, safeguarding your property, the importance of low flammability plants, escape routes and evacuation plans, how can communicates be safe and early warning future potential.
- Darren described the forest fire risk in the Sounds and what plants are more of a fire risk such as gorse, tussock, rank grass, manuka, kanuka and young pines.
- See the 'check it's alright' website for videos from the fire service.
 https://www.checkitsalright.nz/reduce-your-risk/protecting-your-home-and-livestock
- FENZ are working on developing a risk score for communities which will be presented to the affected communities. This is from the Clarence River up to Marlborough and over to Tasman.

Questions/Answers

- CIr Faulls asked if it would be helpful to give FENZ a list of community groups within the Sounds area. FENZ also noted that community groups could provide the risk factors for their own community to FENZ. Action point noted to compile a list for FENZ.
- Linda Booth asked what FENZ and the Council are doing to work collaboratively together. Action point noted that Clr Faulls and Darren will liaise with Linda Booth outside of this meeting forum.

- Linda Booth also questioned how FENZ will cover all these areas and how do people in the communities receive communications when they have limited and poor internet connections. If there is a fire the power goes out. It was noted due to the expanse of the Sounds area, it is not always possible for FENZ to be everywhere, and the community will need to rely on their own local volunteer brigade.
- CIr Faulls introduced Charlotte Wood (Top of the South Neighbourhood Support Marlborough Area Coordinator) who also works alongside FENZ and Marlborough Emergency Management, Police, St John and community groups. Charlotte is now based in the community center in Alfred Street. See contact details below. To learn more about Neighbourhood Support, call 08004neighhbours, view their website or contact Charlotte.

Charlotte Wood
Marlborough Area Coordinator
Room 4, 25 Alfred St, Blenheim 7201
M 021 573 936 P 0800 TS NS GO / 0800 87 67 46
E charlotte@neighbourhoodsupport.nz
W Top of the South Neighbourhood Support

8. MFA Update (Ned Wells)

 The King Shag third year report is nearly completed. You can view the King Shag reports here https://www.marinefarming.co.nz/king-shag-project/

Action point noted to share with the group once report is complete.

- Contact Ned regarding algae bloom if you need further information on <u>03 578 5044</u> or <u>ned@marinefarming.co.nz</u>
- See report on the retrofit of all float clips to be mechanical here https://www.marinefarming.co.nz/site_files/24792/upload_files/blog/OurenewsJune.pdf?dl=1
- Staff have been busy with the MMP reviews.

9. DOC Update (Margot Ferrier)

Biodiversity

- Staff worked with the Marlborough Sounds Restoration Trust to control ungulates (goats, pigs and deer) on the northern side of Queen Charlotte Sound/Tōtaranui between Mistletoe Bay and Endeavour Inlet. The large majority of the funding came from private landowners, and this covered most of the Public Conservation Land in the area as well. A combination of aerial shooting using thermal imaging and follow up ground hunting was used. Based on the success of this operation, it is expected that other communities will want to do this as well. Most of DOC's involvement was in logistical support such as boat transport and in running the contract with the contractors.
- Another 16 deer have been shot on Oruawairua/Blumine Island and most of these animals have arrived there in the last 18 months.
- A team, which included two Ngāti Kuia reps, undertook frog monitoring on Nukuwaiata (one of the Chetwode Islands). Unfortunately, the forecast rain did not quite eventuate and so not as many frogs were visible, but the surprise was a sighting of a forest gecko. This was only the second recorded sighting on this island.
- Ngāti Koata launched a virtual reality site which features Moawhitu on Rangitoto ki te Tonga/D'Urville
 Island where there is a long running wetland restoration partnership. Viewers can travel back to prehuman times as well as projecting forward beyond the current time to get an idea of what this area has
 looked and will look like. The site is a good example of collaboration between the many partners
 involved at Moawhitu. The video can be seen at Experience the world of Moawhitu Roto.
- Weed work has been done on the North Brother Island. This mainly involves control of mallow and involves a component of rope access work which some staff are trained to do. There are usually four visits per year to do this work.
- Another surprise occurred in Ronga Reserve in Rai Valley when staff were carrying out privet control and came across several Powelliphanta snails that are now uncommon in this area.

Heritage and Visitors

- Recent high rainfall has resulted in the Kahikatea Flat Campsite at Pelorus Bridge being closed several times in the last month. Momorangi Bay (as well as Pelorus Bridge and Te Aumiti/French Pass amongst others of our camps) has been busy with users of the new DOC Campsite Passes and is currently undergoing drainage and electrical maintenance and upgrades.
- The ongoing road repairs on the Kenepuru Sound Road continue to disrupt camper access.
 Marlborough Roads however have been very obliging when it comes to arrangements for getting staff through to maintain facilities, including the Queen Charlotte Track. We have been using the Torea Road more frequently for access into this area with our LUV to transport staff to Cowshed Bay and the Queen Charlotte Track.
- The Cowshed Bay campsite is under the spotlight at the moment as staff figure out the future of the lower toilet block and camping area which has been closed due to the sewage dispersal field becoming waterlogged. A cost benefit process is underway to look at options for the future.
- The end of the Queen Charlotte Track at Anakiwa now has a Nga Haerenga/NZ Cycle Trails branded sign in place to reinforce the branding of the track as one of New Zealand's Great Ride. This signage is consistent at all New Zealand Great Rides across the country.

Community

- Another successful Biodiversity Forum was held with a good attendance online from members of many of the Marlborough conservation community groups.
- Several staff attended the Future of Work conference aimed at providing insights for young people into potential careers. Conservation Dog, Tahi was the star. Tahi and his handler are new staff based in the Waitohi/Picton office who have national DOC roles in pest control.
- Harvey Bay Campsite Rai Valley Conservation Kids did a great planting effort last month to help with the repair work Marlborough Lines is doing after needing to use the camp for road spoil.

Myrtle Rust

- Myrtle Rust is present in Marlborough and can be found in many places especially in and around Pelorus Bridge, the Rai Valley and places such as Davies Bay on the Queen Charlotte Track.
- See Appendix 7 for the signage that DOC plan to install at Pelorus Bridge and Davies Bay and which
 may appear elsewhere in time where needed. It has useful information on what to do to reduce the
 spread.
- Below is some additional information to show how to identify it, how to report it and how to reduce the spread.
- Report myrtle rust when you find it with the iNaturalist app you can download onto your Smart
 phone This is how all reports go in, including from DOC staff so do not contact DOC directly to report
 it.



Image 2: iNaturalist app

- Myrtle Rust's yellow spores stick to everything. See Appendix 7 for pictures of the rust. Check
 yourself and gear for Myrtle Rust spores regularly. Clean everything that gets yellow spores on it to
 prevent spread yourself, clothes, tools, phones, glasses, etc.
- Eco-source new plantings from uninfected source populations. Fungicide use can prevent but cannot cure. Species at the most risk: Ramarama, rōhutu, maire tawake, and some pōhutukawa.
- Trimming, pruning and track cutting activities, check trees before trimming to see if they are infected, and if you find infected plants, report them. Trim them last and clean equipment after. Try to time trimming for cold months whenever possible.

Visit <u>www.myrtlerust.org.nz</u> for more resources like: <u>How-to-remove-infected-myrtle-plants-and-safely-dispose-of-the-waste.pdf (myrtlerust.org.nz)</u>
 See Appendix 7

Ungulate Control Projects

- For those interested in setting up a community ungulate control project and for guidance with this Marlborough Sounds Restoration Trust are the experts and can assist with consultation and past learnings. They have the overview of the Queen Charlotte Sound/Totaranui Operation and will be guiding communities in this.
- Please contact them directly at info@soundsrestoration.org.nz or for more information see their website Marlborough Sounds Restoration Trust They are happy to provide support with community meetings to ensure everyone is well informed and can make decisions about the control based on facts and previous experience.

Questions/Answers

- Ungulate control funds have been raised by the Moetapu Bay community to the sum of \$20 thousand dollars. Vic would like to have a community meeting at the Linkwater Hall with Clr Faulls and DOC to encourage the community and find the means to carry out pest control.
- Linda noted that there is a wattle issue in the Duncan Bay area. It was noted that community groups will need to seek their own funding from the community to fund wattle issues.

10. Waters Update (Councillors)

- CIr Taylor spoke on the update. The draft water services bill has been released for public submissions. See the Bill on the Government website. CIr Taylor advised members to read the Bill and make comments for their community's interest.
- https://www.parliament.nz/en/pb/sc/make-a-submission/document/53SCFE_SCF_BILL_124081/water-services-entities-bill
- MDC have joined with 30 other Councils for their views.

https://www.lgnz.co.nz/reforms/three-waters/

https://www.marlborough.govt.nz/your-council/three-waters-reform-proposals

Questions/Answers

- The time frame for the submission period is 22 July.
- Monyeen would like the 3 Waters to be discussed at the upcoming Picton Regional Forum so
 the community can be made aware of the submission deadline. Action point for Clr Taylor to
 bring this up in general business at the next Picton Regional Forum.

Community Reps Update – SAG members

Rangitoto ki te Tonga/D'Urville Island - Poneke Rene

Nil

Kenepuru & Central Sounds Residents Association (KCSRA) - Ross Withell

- Use of barges for stock removal is not ideal so the sooner the Kenepuru Road reopens the better.
- Ross advised that he has sprayed a patch of Chilean needle-grass. Alan Johnson advised that he contact the MDC Biosecurity team to advise them.

Sounds Integrated Management Group - Eric Jorgensen

• Eric spoke to the RMA reforms and Strategic Planning Act in the context of there being an opportunity (need) to make some progress in that frame and also supporting implementation of MEP. Eric said that continuing to develop the characterisation work did commence (though now stalled) through the Aquaculture chapter of the plan, would be a sensible place to start and such a process could bring together different stakeholders and sectors to at least characterise "where are we now"; a foundational piece of work in determining where we want to go.

Moetapu Residents Association (Mahau Sound Outward Bound) - Vic Koller

- The committee formed the subcommittee to source the funds for the deer culling in the area for \$20 thousand dollars.
- Pest control continues with the assistance of volunteers.
- The holiday season rubbish removal was discussed again for Kenepuru Road with the illegal dumping of rubbish.

Marine Farming Associations – Ned Wells

Nil further to add.

Queen Charlotte Residents Association - Monyeen Wedge

- Is there a way the Council can do a water quality test prior to the holiday makers arriving at peak times?
- See LAWA website which has updates on water quality for swimming. https://www.lawa.org.nz/explore-data/swimming/
- See MDC website for Improvements at Recreational Bathing Sites
 https://www.marlborough.govt.nz/your-council/latest-news-notices-and-media-releases/media-releases?item=id:2ifhd8m7u1cxbyadid2y
- Monyeen spoke of the need to educate visitors to the bay and the Sounds in general about rubbish disposal. There is a family who are picking up rubbish and plastics off the beaches every day. They are the Rudkin family from near Portage and they have a very good Instagram site called ocean.grid.
- Port Underwood Residents Association Ken Roush
- Ken advised that he prefers to speak to his community group for their thoughts before a submission is completed regarding MPI Sustainability Review.

Forestry Representative - Rick Osbourne

Apology

Duncan Bay Residents Association - Linda Booth

 Spoke on the non-residents being given instructions on how to vote for Councillors in their holiday home area.

Outer Pelorus - Emma Hopkinson-Young

Nil

Central Pelorus (Hopewell) - Lynley Perkins

Apology

Okiwi Bay - Tim Greenhough

• Discussed the slowness of fixing the flood damage. Action point noted that Clr Faulls will follow up.

Ian Shapcott - Te Ātiawa Manawhenua Ki Te Tau Ihu Trust

Apology

12. TOR (Alan Johnson - MDC Environmental Science Manager)

Questions/Answers

- Clr Faulls advised that Rob Schuckard has resigned from the group.
- Clr Faulls asked members to report on any feedback in relation to the TOR.
- Alan also advised that iwi have also commented on the TOR. Te Ātiawa Manawhenua Ki Te Tau Ihu
 Trust are supportive of the group.

13. Climate Change – (Ongoing item)

• It was noted that the members are invited to make suggestions on specific topics they would like to hear about from Council.

See links below for the Council website on climate change.

- Emissions Report produced by Council can be given to members to read.
- MDC will be recruiting a climate change advisor.

https://www.marlborough.govt.nz/environment/climate/climate-change

National Environment Reporting Review <u>Improving Aotearoa New Zealand's environmental reporting</u> system - Ministry for the Environment - Citizen Space

Climate Report - from MDC website

https://www.marlborough.govt.nz/repository/libraries/id:1w1mps0ir17q9sgxanf9/hierarchy/Documents/Environment/Climate/Climate%20Impact%20Report/Climate Impact Report.pdf

Marlborough District Council also produces a Climate Impact Report in conjunction with Ian Blair, of Climate and Land Matters.

Contents -

- The immediate past
- The immediate forecast
- NIWA outlook

14. General Discussion (other Items)

Meeting dates for 2022

- 8 August 2022
- 14 November 2022

Next Meeting: 8 August 2022 - Location to be confirmed

The meeting finished at 3.39 pm

	Action	Person Responsible
1	Remote transfer stations across the whole Sounds. Invite Alec McNeil.	Alan Johnson
2	Clr Taylor to speak on the 3 Waters Submissions in general business at the next Picton Regional Forum.	Clr Taylor
3	Enquire with the Council Compliance Team for an update regarding water quality in Lochmara Bay.	Alan Johnson
4	Invite the new Coastal Scientist Pauline Mitterwallner and new Harbourmaster, Jake Oliver to our next meeting.	Oliver Wade/Alan Johnson
5	Compile list of community group contacts for FENZ.	Clr Faulls
6	Speak to Jono Underwood from Biosecurity at MDC for photo of myrtle rust.	Clr Faulls
7	Speak to Jono Underwood regarding wattles being spread by gravel movement from Marlborough Roads.	Clr Faulls/Clr Taylor
8	Speak to IT regarding SmartMaps showing marine reserves for members of the public.	Clr Faulls
9	Receive advise from Council if the group can make a written submissions on the catch limits. It was noted after the meeting that SAG is unable to formally prepare submissions.	Alan Johnson
10	CIr Faulls and FENZ to liaise with Linda Booth regarding communications in event of an emergency.	Darren Crawford

	Action	Person Responsible
		(FENZ)/Clr Faulls
11	Share the Mussel Restoration Report and the King Shag Report with group.	Ned Wells
12	Climate change update.	Alan Johnson/Ricard Conningham
13	Omissions Report for members to read.	Alan Johnson
14	Portage update.	Clr Faulls
15	What causes the red tide toxin?	Jodi Milne
16	To follow up the salmon farming best practice guidelines status for Resource Consent.	MPI
17	Follow up the slowness of flood damage clean up in Okiwi Bay.	Clr Faulls
18	Advise Oli Wade of relevant items of interest for future meetings.	All



Sounds Advisory Group Update

20 June 2022

Sustainability Review consultation

October 2022 sustainability round consultation is live:

Review of sustainability measures – October 2022 round | NZ
Government (mpi.govt.nz)

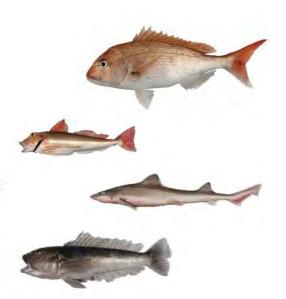
Submissions close at 5pm on Friday 22 July 2022.

In this round Fisheries New Zealand is consulting on changes to catch limits, allowances and deemed values for 20 different fish stocks around the country, and on standalone deemed value changes for an additional 5 fish stocks.



Key stocks of interest for Marlborough Sounds

- Snapper, red gurnard, rig (combined paper) – including seeking wider feedback on a proposal to increase MS bag limit from 3 – 6 per fisher
- Blue cod including seeking feedback on extending the closed season.





General Fisheries Management Updates

In May this year the government confirmed the details on the wider rollout of cameras on inshore fishing vessels (<u>On-board cameras for commercial fishing vessels | Fishing and aquaculture | NZ Government (mpi.govt.nz)</u>). The roll out of cameras is part of a wider Fisheries Change Programme to:

- strengthen and modernise the way we manage our fisheries
- ensure the sustainability of New Zealand's fisheries.

More detail on the Fisheries Change Programme is on the website (<u>Fisheries Change</u> Programme | Fishing and aquaculture | NZ Government (mpi.govt.nz)).

Please let me know if you would like any information printed and sent.



Inshore Fisheries Management Update

New staff member based in Nelson (Vikki Ambrose).

Vikki will be part of our Coastal Planning team that works closely with Councils on marine matters.

Vikki also has an interest in ecosystem-based fisheries management and will be contributing to our community engagement work, including the SAG.



Ngā mihi

Contact us for more information: Jodi Milne 03 545 8773 Jodi.Milne@mpi.govt.nz





MARLBOROUGH ROADS RECOVERY

Programme of Works



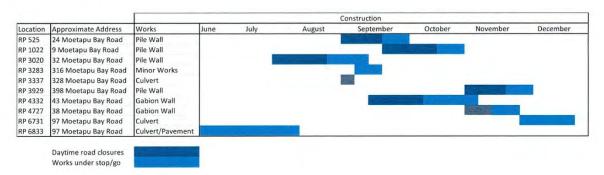


https://www.nzta.govt.nz/projects/marlborough-roads-recovery/



Moetapu Bay Road

Timeline



Information correct as at 20.06.22. Timings are subject to change due to weather, Covid and other unforeseen impacts.

TE HOIERE/PELORUS PROJECT

'Haere, kakea te ara poka hou' 'go and ascend the newly trodden path'







Project Brand

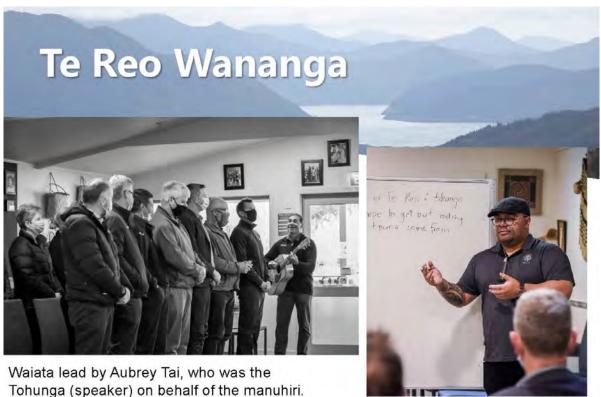




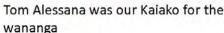
Te Reo Wananga



The Pōwhiri at Te Hora to welcome manuhiri to the Marae was very special. Photo by Melissa Banks



Photos by Melissa Banks

















DOC funding



Conservation Dog Tui surveying for Whio in the Te Hoiere Catchment March 2022. Photo by Glen Newton



Ruapaka Wetland restoration area highlighted in yellow

Planting and community events



Appendix 4 - Reconnaissance Report on Landslides and Catchment Susceptivity to Debris Flow (Matt Oliver – MDC)



Landslides in the Sounds

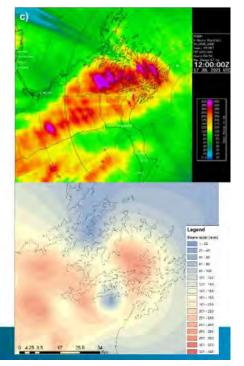
Summary of:

GNS 17 July 2021 storm report UC Debris flow analysis report

Matt Oliver- Environmental Scientist Land Resources Sounds Advisory Group 16 May 2022

17 July 2021 Storm

- 54 hour event
- · Measured rainfall max 314mm
- · Rain Radar indicates 400-500mm
- · Very widespread event
- · Rainfall intensity up to 24mm/hr
- ARI 48hrs- ranged from <10 to >250yrs
- · So a big storm.





Landslide Damage

- Large number of landslides reported
- · Some very large
- · MDC & GNS response
 - Joint reconnaissance flight
 - Joint ground inspections

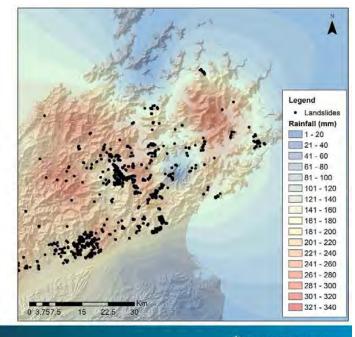






GNS Report

- GNS offered its services for free.
- Data contributes to national Rainfall Induced Landslide Model
- · Report covers
 - landslide distribution,
 - field assessments of property damage
 - landslide characteristics



MARLBOROUGH DISTRICT COUNCIL

Only Mariborough

Landslide Characteristics

· Source: -

Volume: ~2000 m³

- Material: saturated sandy colluvium

TCs, overhanging material

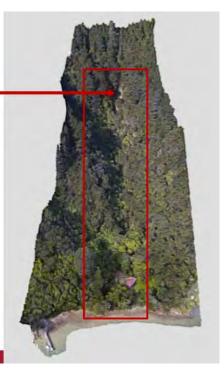
· Debris:

Volume: ~15000 m³

- H/L: 0.5

Max debris height: 2 m

% inundated: 44%Catchment area: ~8 ha







Debris Flow Analysis

- Work started before 17 July 2021
- University of Canterbury and Scion Research
- Debris flows known to be largest sediment delivery mode
- Can we predict LOCATIONS of potential debris flows?



Only Marlborough

Debris flow research

- Uses Councils recent LiDAR
- Measures catchment height and area
- · Determines "Melton Ratio" R
- R>0.6 = Debris flow susceptible catchment
- NO statement on WHEN



Only Marlborough

Melton ratio = Relative Relief Ratio Melton ratio (R) = $H_b A_b^{-0.5}$

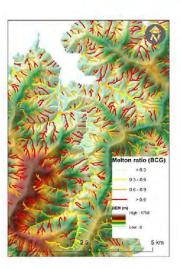
H_b: basin relief (difference between maximum and minimum elevations in the basin)

A_b: total area of the basin

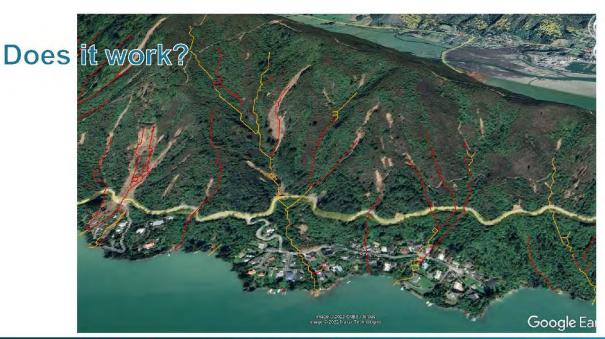
Example: Alpine Baldy, South Fork Skykomish Top Elev.: Bottom Elev.: Area: R 1,584 m 464 m 2,351,050 m² = (1584 - 464) * (2,351,050)^{-0.5} = 0.73

Source: Melton, M. A. (1965), The geomorphic and paleoclimatic significance of alluvial deposits in southern Arizona. The Journal of Geology, 1-38.





https://www.kingcounty.gov/services/environment/water-and-land/flooding/maps/river-landslidehazards/mapping-methodologies.aspx, downloaded 1 March 2021.





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Implications



Implications

- Objective guide to where catchments can propagate debris flows
- · NO understanding of other causative effects
- · Cannot assess hazard or risk.
- Where mapped, catchments should be inspected by qualified professionals to assess hazard and risk.



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Key points- Both reports

- Small catchments can generate damaging debris flows
- We know the likely locations now
- · Don't know WHEN.
- · Further work coming





Ecologically Significant Marine Sites (ESMS) Variation

OVERVIEW

- APPROVAL HAS BEEN SOUGHT TO PROCEED WITH A VARIATION TO INCLUDE SITES IDENTIFIED AS ESMS THAT ARE NOT YET LISTED IN THE PMEP
- THE PMEP CURRENTLY IDENTIFIES 142 ESMS
- THOSE EXISTING SITES ARE FROM SURVEYS AND DATA COLLECTED PRIOR TO 2016
- THE VARIATION WILL PROPOSE THE INCLUSION OF SITES IDENTIFIED SINCE 2016

What is an Ecologically Significant Marine Site?

- ESMS are sites and subsites that support rare, unique or special indigenous biodiversity features and are situated in the coastal marine area.
- In order to achieve ESMS status, sites are rated against a predetermined criteria:
 - Identification Criteria: (a) representativeness; (b) rarity; (c) diversity and pattern; (d) distinctiveness;
 - Management Criteria: (e) size and shape; (f) connectivity/ ecological context; (g) sustainability; and (h) adjacent catchment modifications.
- A subsite is a distinct area and an ESMS in its own right. Subsites identified with same ID number have the same values and are located in a cluster.

(see appendix 3 PMEP for further details)

Tory Channel – subsite example



Category rating

• The ESMS are also graded in terms of their sensitivity to disturbance – providing them with a category rating.

Category	Disturbance description	Examples	Score
٨	Very sensitive: Site supports species, habitats or communities that cannot tolerate anthropogenic impacts (e.g. nutrient enrichment, sedimentation, pollution, colonisation by invasive species, anchoring, all forms of trawling and dredging).	Bryozoans mounds/field, sponges garden, tubeworm mounds, eelgrass bed, rhodolith bed, soft tubeworm bed.	100
В	Sensitive: Site supports species, habitats or communities that can tolerate low level of elevated turbidity, enrichment, invasive species or pollution. Can tolerate low-level anthropogenic seabed disturbance due to the nature of the substrata, community, species and/or hydrodynamic regimes (i.e. tolerant of occasional recreational anchoring). Not tolerant of dredging and trawling.	Benthic algae bed, elephantfish egg laying, hydroid field, burrowing anemones, horse mussel bed, shellfish bed, shrimp burrows, brachiopod bed, algal forest, rocky reef.	50
c	Robust and/or not known: Site supports species, habitats or communities that can tolerate high turbidity, enrichment, pollution or invasive species; and/or site not known to support sensitive or very sensitive attributes. Can be tolerant of anchoring, dredging and trawling.	Shell or coarse substrata, high energy shore, short-lived species/communities, drift macroalgae.	0

Davidson, R.J.; Richards, L.A.; Rayes, C.; Scott-Simmonds, T. 2020. Significant marine site survey and monitoring programme (survey 6): Summary report 2019-2020. Prepared by Davidson Environmental Limited for Marlborough District Council. Survey and monitoring report number 1023

Buffer area

 The category rating is also used to determine the buffer and this in calculated in conjunction with a threat multiplier

Threat level Location type Descriptio		Description	Multiplier
A	Effects are likely	Physical disturbance: offshore, and/or sites accessible to dredging and/or trawling. Other: sites exposed or near threats (i.e. source of sediment, near human development, regularly human activity).	2
	Effects are unlikely	Physical disturbance: sites close to shore and/or protected by physical barriers or legislation (e.g. reef structure, marine reserve). Other: sites well removed from threats or located at remote locations.	1

Buffer zone calculation (for each site type multiply the scores from each table above)

Sensitivity category	Threat level	Scores	Buffer (m)
A	A	100 x 2	200
A	0	100 X 1	100
В	A.	50 x 2	100
В	8	50 x 1	50
C	A.	0×2	0
C	8	0x1	0

Davidson, R.J.; Richards, L.A.; Rayes, C.; Scott-Simmonds, T. 2020. Significant marine site survey and monitoring programme (survey 6): Summary report 2019-2020. Prepared by Davidson Environmental Limited for Marlborough District Council. Survey and monitoring report number 1023

Current Ecologically Significant Marine Sites

- Council's Environmental Science team run an ESMS programme in order to identify sites.
- 129 sites were originally identified through a report published in September 2011.
- Annual surveys are undertaken to identify new sites or boundary changes to existing sites
- An expert panel is convened each year to review those recommendations.



Ecologically Significant Marine Habitats

https://www.marlborough.govt.nz/environment/coastal/ecologically-significant-marine-habitats





Expert Panel Review of Significant Site Monitoring list 2015 (PDF, 1.2MB) Expert Panel Review of Significant Site Monitoring list 2016 (PDF, 975.4KB) Expert Panel Review of Significant Site Monitoring list 2016 (PDF, 975.4KB)

Expert Panel Review of Significant Site Monitoring list 2017 (PDF, 1.2MB)

Expert Panel Review of Significant Site Monitoring list 2018 (PDF, 629.5KB)

Expert Panel Review of Significant Site Monitoring list 2019 (PDF, 828.5KB)

Expert Panel Review of Significant Site Monitoring list 2020 (PDF, 688.2KB) Significant Marine Sites Report 2020 Monitoring Update (PDF, 6.6MB) Significant Marine Sites Report 2021 Monitoring Update (PDF, 6.8MB) Monitoring results from 2015 Queen Charlotte Sound (PDF, 5MB) Protocol for assessing significance at new and existing sites (PDF, 1.2MB)
Protocol for monitoring and survey of significant sites (PDF, 1.2MB)
Biogenic habitats in the Marlborough Sounds 2010 (PDF, 5.6MB)

Expert Panel Review of Significant Site Monitoring list 2020 (PDF, 688.2KB)

Ecologically Significant marine habitat monitoring reports

Ecologically Significant Marine Sites Inventory report 2011

Cover (566KB) Introduction (1.1MB)

Part 2 - Important Species: Birds and Mammals (2.2MB)
Part 2 - Important Species: Fish and Invertebrates (1,4MB)
Part 3 - Sites: Area 1 (620.2KB)

Part 3 - Sites: Areas 5-9 (1.6MB)

ESMS identification process?

- •A survey and monitoring report is completed, including recommendations for new inclusions or amendments to existing sites.
- ·ESMS are further categorised based on their susceptibility to benthic disturbance

Expert Panel

- The Expert Panel meets to review the recommendations from the survey report.
- •The Panel produce their own report approving or refusing the recommended sites.
- Determine areas for survey for the next year.

Committee

•The Expert Panel report is presented to Council's Environment Committee.

Inclusion

- •The sites are proposed for inclusion in the PMEP.
- The variation process commences.

What does the ESMS status mean in relation to the PMEP?

- Identification under the ESMS programme does not equate to PMEP status. A formal process, such as a variation, is required.
- The PMEP currently includes recommended sites from the 2011 report through to the 2016 report.
- The ESMS plan status provides protection to sites with significant indigenous biodiversity values and it does this in a couple of ways:
 - By providing a planning framework
 - Online visibility through location mapping in Smartmaps

Planning Framework

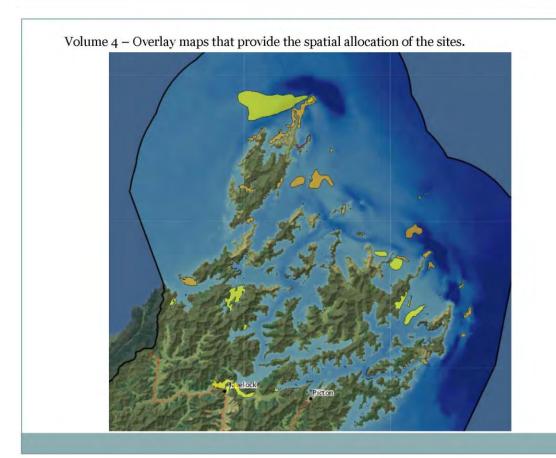
- The plan policies provide us direction on how we manage our interaction with the environment. For ESMSs, policies require:
 - o identification of sites
 - o ongoing protection and enhancement
 - o management of human activities at those location
- Rules give effect to those policies by restricting activities such as those that may cause damage to the benthic environment.

 Volume 3 of the PMEP - Appendix 3 contains the criteria and Appendix 27 lists category A and B sites

Category A - Ecologically Significant Marine Sites Buffer distance 100 1.5 2.13 2.24 2.6 200 3.7 100 4.11 100 4.25 100 4.9 100 6.1 100

Appendix 27 (currently under appeal)

Site ID	Site name	Buffer distance			
1.42	Motuanauru Island Boulder Bank	200			
1.7	Inner Greville Harbour/Whararikii	N/A			
1.8	Greville Harbour/Wharariki Channel	100			
21	North West D'Urville Island Coast	100			
2.10	Trio Bank	200			
2.12	Penguin Island Coastline	100			
2.15	Clay Point	100			
2.16	Te Aumiti/French Pass	100			
2.18	Paparoa Point	100			
2 20	Chetwode Islands	100			
2.22	Goat Point	100			

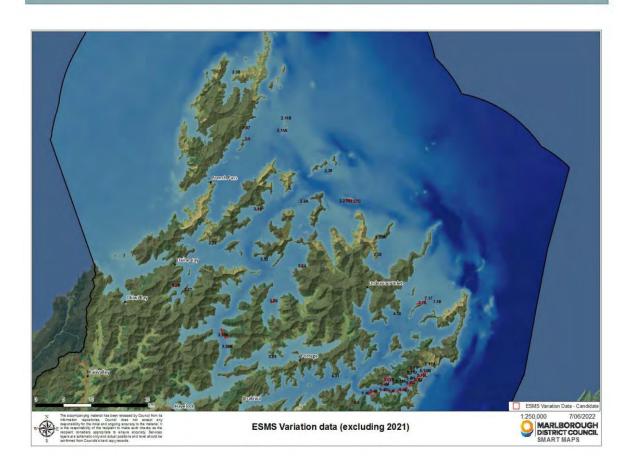


What will the variation propose?

The draft changes include:

- 19 new sites and 46 new sub-sites
- 28 boundary adjustments to existing sites
- 8 category changes
- Plus additional sites based on the 2020-2021 report

Numbers are approximate only



What is the process?



- Approval sought through the Environment Committee to proceed with variation.
- · Finalise the list of new sites, amendments to existing sites and any other changes required that will form the variation

Prepare

• Draft a Section 32 report (essentially an evaluation report to determine the most appropriate way to achieve the purpose of the RMA.)

Consult

- · Council is required to consult with various crown agencies, tangata whenua and customary marine title groups.
- Council would also like to engage with relevant industry and advisory groups.

What is the process?

- The final version of the variation will be provided to the Planning, Finance and Community Committee for content approval and approval to proceed with public notification.
- Confirm The variation is then publicly notified.

Hearing

Schedule 1, RMA then specifies the process, which involves submissions and further submissions prior to a hearing being held (reflective of the process for the PMEP hearings).

Meretoto/Ship Cove and Motuara

- Variation to include Meretoto/Ship Cove (including Motuara) as a heritage resource in the PMEP.
- If you would like further information on this variation, please contact Louise Walker.

Email: Louise.walker@marlborough.govt.nz | Phone: 03 5207400

Appendix 6 - FENZ (Darren Crawford - Senior Advisor Readiness and Recovery)



Whakaratonga Iwi – Serving Our People | fireandemergency.nz

Proud History, Bright Future

- On 1 July, 2017 Fire and Emergency New Zealand was created with the amalgamation of New Zealand Fire Service, National Rural Fire Authority and 38 Rural Fire Authorities.
- All these organisations have brought a proud history of serving our communities into Fire and Emergency New Zealand.
- · Our future is:
- · One unified, nationwide service
- Better support for volunteers
- Expanded mandate
- Strong community engagement
- Fairer, more consistent funding



Whakaratonga lwi – Serving Our People | fireandemergency.nz

-

The 8 Areas of Change

Strategy-led

We will set a clear direction for how we and our partners can make a difference for New Zealand communities now and in the future. Everyone will know their role in delivering our strategy, and we will measure how effective we have been.

Learning organisation

We will actively seek information about what we do and don't do well, look torward to what we could do better, and look outside to what others do better, ensuring we continuously embed improvements and changes.

Inclusive and dynamic people system

We will build a different organisation for our people (employees, volunteers and contractors). Building a shared identity, and a diverse and industry culture, will create an engaged organisation that values and recognises as broader set of people, skills and capabilities. We will recruit and support our people to decolor the capabilities we need to best serve our communities.

Empowered decision-making

We will consistently make our decisions oloser to the communities we serve. Everyone will know what decisions they own and are accountable for, and will be supported to make these decisions in line with the organisation's broader direction.



Transparency of investment, cost, and value

We will be transparent about our investment, including what our services cost, and the value that we deliver to our communities. We will communicate this as part of levy-setting.

Insight from intelligence

We will collect, analyse and share data.

Community focus

We will be externally focused and recognise the community voice in the way that we work with them and the things that we prioritise. We will recognise that communities are not all the same, and work in partnership with them to build resilience.

Risk reduction

Formalising the way we proactively reduce-risk will help pervent harm by targeting a wider range of risks within our statutory mandale, and through working more proactively with communities and partners to jointly manage and reduce risk. We will use evidence to influence government and partners, target the cause of risk, and measure the impact we are having.

Whakaratonga lwi – Serving Our People | fireandemergency.nz

Our Strategic Priorities | Our National Strategy is centred around five strategic priorities:



What do we need to do?

- Help commaribles to identify, assess and manage their own raks and plan for emergencies for emergencies. Work wath communities, partners, and focal groups to best under stand their recognitions, capacifities, and local risks. Have a batter uncertainding of recounts our local or my days even seed and how to work with them than emergency.

What does success look like?

Communities

Fire and Emergency

- Fire and Emergency
 helps communities take responsibility and
 manage their own risks,
 supports communities by recognising
 differences, diversity, and local risks, and
 has strong relationships with
 communities and aligns approaches to
 local customs and practices.



- Focus on stronger collaboration.

- We recognise the value of partnering with others and have complementary services that meet communities needs.
- Communities and sector partners seek and value our expertise. We understand our role in the emergency management sector, where we lead or support others.
- We have clear guidelines for engaging with stakeholders
- Dur people understand our approach and how they fit in:

- Butic a respectful, inclusive, silverse cub in evitere our people are well equipped to do this jobs, valued and violed fairly. Insue our behaviour reflects our values and held each other to account. Support readom ways of thinding and working including flectionly the our roles with a support of the property of the property our acceler well for their roles with contractions of the property of main and develop leaders at all levels.

- Follow that quartics and use intermetion appropriately at all levels to inform decision installing. Develop for forty purpose solutions, systems, tooks are training and enforcings our people solutions, systems, tooks are training and enforcings our people for use threat particular and enforcing our people for use threat people solutions, and access and use it is easily, accurate, and access and use it is easily, a face good reporting and training and training catalants felta as understand force we are commerciated the benefits of shall vie do. Work with carriers, agencies and. Work with carriers, agencies and support collaborative ways of working and contribute to shared position.

- We have fit-for-purpose systems and processes to capture, store and share data and information.

- data and information available as the right time for those who need it. Our information helps cur people make good decisions. We under stand risk, use resources where they are needed and provide an evidence base for our decisions. Our data are information systems are integrated.

Keeping pace with change

- Look at how we can invest in change now and in the future. Understand now new capabilities and investments will affect our people, systems, training and culture.

- Follow principles of good governance when deciding how to invest. Consider broader effects of changes on our assets, capabilities, partners and scakeholders.

- Cur l'accipations are appropriate to our societ.

 Cur capatheties local risis, and des l'accipation de l'acc

Wildfire Risk in Nelson





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Natural Factors that Effect Fire Behaviour

- Aspect
- High Risk vegetation
- Gorse
- Tussock
- Rank Grass
- Manuka/Kanuka
- Young Pines
- Bracken
- Altitude
- · Wind strength and direction

- Fuel classifications
- Medium
- Heavy

• Fine

- Vertical fuel layering and
- Composition ground ladder crown
- Topography -gully's
- Vegetation curing
- Temperature
- Relative humidity
- Climate change



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- · Location of buildings and infrastructure
- Spark introduction
 - Hot work
 - Roadside work
 - Agricultural contracting and activities
 - · Careless or deliberate
- Lack of defensible spaces and property maintenance



7

Tools Currently Available to Us

- PUBLIC EDUCATION evacuation plans defensible spaces – understanding your environment – fire smart behaviour – plant species selection
- LEGISLATION AND FIRE CONDITION MONITORING fire permitting – hazard removal – fire season status – fire danger predictions and spark hazard broadcasting - fire behaviour modelling



FIRE

Nelson Mariborough Risk Reduction Team Nelson Fra Station 1 Sis acester Street, Nelson, 7010 Phone 37 Add-2100

Spark Hazardous - Nelson Marlborough Fire Danger Prediction

Monday, 21 March 2022

Spark Hazardous Guideline VI.8 Should Be used to determine what equipment to carry and what activity restrictions ago

Location	Monday 21-Mar Forecast FFMC	Monday Forecast Grass Curing	Morday forecast Guldalina leval	Tuesday 22-Mar Forecast FFMC	Tuesday Forecast Grass Curing	Tuesday Forecast Guidaline lave
			Nelson Tasman Area			
treison City - Netron Ren US	43	45	Green	31	45	Green
Walmea Basin -	11	45	Groen	8	4/	Gillen
Motueka Valley - (NF Foromon ROMS)	10	85	Green	13	45	Green
Motuoka Riwaka (Metuoka Riwata NW)	23	70	Green	26	70	. Green
Murchison - (Murchison acces)	32	50	Sizzen	24	30	Green
Lakes - ISt Amount RAWS	5.3	45	Ceten	22	45	Green:
Golden Bay - Hakake Aprodusen, SAMO	29	45	essen	18	45	Gleen
Rai Valley - Bai Yallay MAWSI	45	40	Evitter	28	W	Green
North bank - (Teneralin)	45	.90	Curren	12	30	Streets
South bank - Janescown RAWS)	35	70	(atten	11 -	40	Green
Mid Awatere - (IAIL Austrie Saler RSVS)	49	50	Green	20	50	Green
Lower Walrau - Junes Williau RXVIS	76	50	Green	23	.50	Green
Awatere Valley - (Awatere Velley 10(05)	93	-30	Green	23	40	Green
Ward - Ware Minst	74	40	Green	15	40	Glean

To access a pictorial map view of the spark hazardous levels go

nd/A escation issues when on the sould Manneson in

Whakaratonga lwi – Serving Our People | fireancemergency.nz





Nelson Mariborough Fire Danger Predictions Phone 83 Md-1:00
Monday, 21 March 2022

We are operating off Fire Guidelines for Forestry Operations V 1.12

Location	Monday 21/03/2022 Forecast BUI	Monday FWI Forecast	Monday Forecast Guideline Level	Tuesday 22/03/2022 Forecast BUI	Tuesday FWI Forecast	Tuesday Forecast Guideline Leve
		Ne	Ison Tasman Area			
Hira / Maitai - (Hira RAWS)	13	0	Green	3	.0	Green
Eastern Hills - (Anisond Valley RAWS)	24	0	Green	6	0	Green
Moutere / Dovedale - Dovedale RAWS)	16	0	Green	3	0	Green
Coastal - (Nelson Aero M5)	21	0	Green	8	0	Green
Motueka Riwaka (Motueka Riwaka NW)	12	0	Green	3	.0	Green
Motueka Westbank - (3/g Policiroro 2 RAWS)	8	0	Green	2	0	Green
Golden Downs - (Western Boundary RAWS)	17	0	Green	7	0	Green
Murchison • (Murchison RAWS)	38	0	Green	30	0	Green
St Arnaud - (St Arnaud RAWS)	32	0	Green	18	0	Green
Golden Bay - (Takaka Aerodrome RAWS)	4	0	Green	2	.0	Gréen
Rai Valley - (Rai Valley RAWS)	24	0	Green	6	0	Green
North bank - (Onamulus) RAWS	35	0	Green	11	0	Green
South bank - (Landsdown	32	0	Green	10	0	Green
Mid Awatere - (Mid Awatere Valley RAWS)	53	1	Stor.	17	0	Green
Koromiko - (Koromiko RAWS)	52	2	Blue	16	0	Green

Fire behaviour modelling

Extreme Fire Risk Day

FFMC	DMC	DC.	ISI	BUI	FWI	TEMP	RH	DIR	WSp	RN24	GC%
89	113	514	8.7	113	25	26	38	200	19	0	90
		P	hase 1	Phase 2	Phase 3		Phase 4	Phase 5		Phase 6	
Time		13:0	00 - 14:00	14:00 - 15:00	15:00 - 16:00		16:00 - 17:00	17:00 - 18:00		18:00 - 19:00	
Interval length			1:00	1:00	1:00		1:00	1:00		1:00	
Initial spread index			10	10	10		10	10		10	
Rate of spread (m/h)			4,038	4,038	4,038		4,038	4,038		4,038	
Available fuel load (t/ha)			23	23	23		23	23		23	
Head fire intensity (kW/m)		-	17,257	47,257	47,257		47,257	47,257		47,257	
Flame length (m)			11	11.	11		11	11		11	
Type of fire		S	urface	Surface	Surface		Surface	Surface		Surface	
Head spread (m)			4,038	8,076	12,114		16,152	20,190		24,227	
Back spread (m)			1,213	1,213	1,213		1,213	1,213		1,213	
Total spread (m)			5,251	9,289	13,327		17,365	21,403		25,441	
Back spread rate (m/h)			1,213	1,213	1,213		1,213	1,213		1,213	
Backing fire intensity (kW/m)		- 1	14,200	14,200	14,200		14,200	14,200		14,200	
Fire area (ha) 502		502	1,572	3,	235	5,492	8,3	43	11,787		
Perimete	er length (m)			11,149	19,722	28,295		36,868	68 45,441		54,014
Perimete	er growth rate	(m/h)		8,573	8,573	8,573		8,573	8,573		8,573



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2400 Hectares destroyed



Took one month to extinguish at a cost of 13-15 Million Dollars



Began from a spark created by Agricultural contracting

We are used to seeing these types of wildfires overseas but now we are seeing large scale fires in New Zealand

And fires outside of the traditional season - snow

Very real large wildfire danger in Nelson – Tasman - Marlborough $$^{\rm 11}$$



Safeguarding your property



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The Importance of Low Flammability Plants with Samuel Whitelock



It may be a little known fact that legendary NZ rugby player, Samuel Whitelock, has a Bachelor of Science majoring in Plant Science. Which is why we have partnered with him to spread the word about how low flammability plants can help defend your home and property from wildfire.

https://www.checkitsalright.nz/reduce-your-risk/protecting-your-home-and-livestock

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Demonstrating Plant Flammability with Samuel Whitelock



It may be a little known fact that legendary NZ rugby player, Samuel Whitelock, has a Bachelor of Science majoring in Plant Science. Which is why we have partnered with him to spread the word about how low flammability plants can help defend your home and property from wildfire. In this video, Samuel demonstrates plant flammability using the 'Plant BBQ' at Lincoln University.

https://www.checkitsalright.nz/reduce-your-risk/fire-resistant-plants

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St Arnaud/Lake Rotoiti Readiness actions

Actions

- Defensible spaces
- · Education around plant species
- · Relationship with DOC
 - Fire breaks
 - Evacuation of DOC camps and sites
 - Camp host training
 - Communication systems
- · Green waste burned collectively
- · Community woodchipper
- Evacuation plan
- · Metal fire buckets for storage of ash

Challenges

- · Remote location
- · No early warning at night
- · Small resident population



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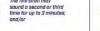
17



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Do not delay. Leave straight away if ordered to evacuate

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- Fire-fighting will be secondary to evacuation
- These large-scale fires are either extinguished by weather or they run out of fuel
- Early warning is key to survival



How can Communities be Safe?

- Be aware of the environment around them and the risks that come with it
- Being fire smart within their own property
- Collaborate with the community alongside FENZ and other agencies
- Be prepared evacuation routes grab bags include animals in your plan have a meeting place
- Think about smoke hazard



HAVE AN EVACUATION PLAN AND ENSURE EVERYONE IN THE HOUSE UNDERSTANDS IT

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Smoke and Thermal Detection





Myrtle rust risk area

Myrtle rust is a fungus that can kill our taonga myrtle plants like ramarama, rātā, rōhutu, pōhutukawa, mānuka and kānuka.

The rust appears on myrtle plants as a yellow powder.



Help protect our native forests

Always **clean your gear** before and after visiting. Myrtle rust has **yellow, powdery spores** that are easily spread on your clothing, boots, cameras and bags.

Reduce the risk of spreading the disease

- Stay on the track to avoid brushing against plants.
- Check for yellow spores on your skin and gear.

If you see or suspect myrtle rust

- Don't touch it myrtle rust spreads easily.
- Report it take photos and upload them to iNaturalist.nz

If you have yellow spores on you

- 1. Put the affected gear in your bag to contain the spores.
- 2. Clean your gear with soap and water to remove and kill the spores.

Visit myrtlerust.org.nz for full cleaning instructions.







New Zealand Government





How to remove infected myrtle plants and safely dispose of the waste

This document provides advice for landowners who choose to remove infected myrtle plants on their properties. Please note that **there is no requirement to remove infected plants.**However, landowners with infected myrtles on their property have the choice to remove these plants if they choose. If you choose to remove your infected plant you can use the method on the following pages. Larger trees may need the assistance of an arborist. Infected myrtle plant material can be taken to local landfills as general waste, as long as the following process has been completed.

If you find myrtle rust for the first time and it hasn't previously been found in your region please call the MPI Biosecurity Hotline (0800 80 99 66).

What you will need for removing plants

- Hairspray
- Large rubbish bags
- Disposable gloves
- · Methylated spirits or bleach
- · Change of clothes or overalls
- Secateurs and or saw
- Water
- Paper towels

Identification

Identify that the tree is in the Myrtle family. This can be done by using the myrtle rust reporter app, through the NZ Plant Conservation network or using MPI's Myrtle Rust ID Guide.

Common New Zealand myrtles include:

- Pôhutukawa
- Rātā
- Kānuka, Mānuka and tea tree
- Ramarama
- Lilly pilly
- Feijoa
- Willow myrtle
- Gum trees/Eucalyptus
- Bottle brush
- Guava



New Zealand Government



Identify that the infection is myrtle rust.

- · Don't touch it
- If this is the first time you have seen what you think is myrtle rust call the MPI Exotic
 Pest and Disease Hotline immediately on 0800 80 99 66. The MPI Biosecurity Hotline
 can help you identify if it actually is myrtle rust. Many diseases or other natural causes
 look similar to myrtle rust, but often aren't it.
- If you have a camera or phone camera, take clear photos, including the whole plant, the whole affected leaf, and a close-up of the spores or affected area of the plant.

The process for removing an infected plant

 Put on gloves and an outer layer that you are able to wash after the removal of the plant.

Overalls are a good option.



 Apply the Hairspray to the infected plant and allow it to dry – this may take 10-20 minutes.

It is important to make sure that all the spores on the infected plant are well covered with hairspray. When the hairspray dries this will contain the spores on the leaves for removal.



Cut the branches with secateurs or a saw to dismantle the whole plant bit by bit.

If it is a really small plant, simply place the bag over the plant and either dig it out in one piece or cut the trunk to remove it.

If you have a large tree and limited infection over the entire tree you could use this protocol to remove an infected branch all the way back to the trunk rather than removing the entire tree.



Prepared by Scion for Biosecurity NZ, August 2018

4. Place the cuttings into a large black rubbish bag, ensuring that you can still seal the bag at the top. 5. Tip 1 L of water into the bag and seal the bag tightly (this is approximately a jug of water or a large drink bottle full). 6. Outer clothing or overalls should be taken off and placed into a bag. This can be taken home and washed normally in a hot or cold wash with detergent. 7. Clean all equipment you have used: this can be done by wiping the equipment with methylated spirits. A 5% bleach concentration bath can also be used, equipment will need to be soaked for 20 minutes then rinsed and dried. If you do not have methylated spirits or bleach then wash equipment in water with detergent and leave to dry.

 Leave the bag for 3-4 weeks in a sunny spot to kill any spores inside, turning the bag every week



 After 3-4 weeks the plant material can be sent to the local landfill in the bag as general waste or buried on site in your garden.

Do not open the bag as it could contain bacteria that could be harmful to human health such as *Legionella* that causes legionnaires disease.

