MARLBOROUGH DISTRICT COUNCIL
15 SEYMOUR STREET
PO BOX 443, BLENHEIM 7240
NEW ZEALAND

TELEPHONE (0064) 3 520 7400
EMAIL mdc@marlborough.govt.nz
WEB www.marlborough.govt.nz

26 January 2024

Record No: 2416419
File Ref: D050-001-E01
Ask For: Nicole Chauval

Notice of Committee Meeting – Thursday 1 February 2024

A meeting of the Environment & Planning Committee will be held in the Council Chambers, 15 Seymour Street, Blenheim on Thursday, **1 February 2024 commencing at 9.00 am.**

BUSINESS

As per Agenda attached.

MARK WHEELER
CHIEF EXECUTIVE

MARLBOROUGH DISTRICT COUNCIL

Meeting of the ENVIRONMENT & PLANNING COMMITTEE to be held in the Council Chambers, District Administration Building, Seymour Street, on THURSDAY, 1 FEBRUARY 2024 commencing at 9.00 am

Committee	Clr G A Hope (Chairperson) Clr B A Faulls (Deputy) Clr S J Arbuckle Clr A R Burgess Clr R J Innes Clr B J Minehan Clr T P Sowman Mayor N P Taylor Mr S Harvey (Rural Representative) Iwi Representative (to be advised)
Departmental Head	Mr H Versteegh (Environmental Science and Policy Group Manager) and Ms G Ferguson (Consents and Compliance Group Manager)
Staff	Nicole Chauval (Committee Secretary)

In Public

Public Excluded

1. Apologies

No apologies received.

2. Declaration of Interests

Members are reminded of the need to be vigilant to stand aside from decision making when a conflict arises between their role as a member and any private or other external interest they might have.

3. Hearing Sub-Committee and or Commissioner Decisions

(also refer to separate attachment)

1. Hearing Sub-Committee Decisions dated 28 April 2023 (U220377) and (U220451), and Hearing Sub-Committee Hearings held on 6 September 2023 (U22093) and 14 September 2023 (U220480)

Full copies of the Decisions are **separately attached** to the Agenda.

A summary of these Decisions follows:

Schedule of Resource Hearing Sub-Committee Decisions

Pages	Date	Subject	Decision
1 - 20	No hearing held	Brian and Dorothy Margaret Fitzpatrick - Application for Resource Consent - Subdivision - 25 Goodman Street, Blenheim (U220377)	**GRANTED** Subdivision to subdivide Lot 1 DP 340181 into three allotments.
21 - 39	No hearing held	DKNZ Enterprises Limited - Application for Resource Consent - Subdivision - 25D Goodman Street, Blenheim (U220451)	**GRANTED** Subdivision to subdivide Lot 5 DP 340181 into two allotments.
40 - 67	6 September 2023	Okiwi Bay Limited - Application for Resource Consent - Land Use (Activity) - Croisilles Road, Okiwi Bay (U220933)	**GRANTED** Land Use (Activity) for undertake earthworks and indigenous vegetation clearance to construct a 4700 metre long combined walking and mountain biking track from Kaimiko Stream Bridge up to Croisilles Road in Okiwi Bay on the site legally described as Lots 4, 6, 7 and 9 DP 556072.
68 - 87	14 September 2023	Verdo's Pellets and Grain Limited - Application for Resource Consent - Land Use (Activity) - 117 Wakamarina Road, Canvastown, Havelock (U220480)	**GRANTED** Land Use (Activity) to establish and operate a commercial activity (including an office) and light industrial activity involving storing, processing, packaging and the sale/supply of pellets and grain for animal consumption on Lot 17 DP 6171; and retrospective consent to authorise the installation of four grain silos on stands and a generator, all located less than 1.5 metres from the south and east property boundaries respectively on Lot 17 DP 6171.

2. Hearing Commissioner Hearings held on 17 March 2023 (U220478), 27-28 April 2023 (U200980), 11 May 2023 (U220749) and 10 November 2023 (U220736)

Full copies of the Decisions are **separately attached** to the Agenda.

A summary of these Decisions follows:

Schedule of Resource Hearing Commissioner Decisions

Pages	Date	Subject	Decision
88 - 105	17 March 2023	Ngati Rarua Settlement Trust - Application for Resource Consent - Land Use (Activity) - Horton Street, Blenheim (U220478)	**REFUSED** Land Use (Activity) to construct and operate a 24-hour, 7 day per week self-service car wash facility on Part Section 15 SO 7431; and to undertake soil disturbance on a potential HAIL site that does not meet Regulation 8(3)(c) and (d) of the NES for Contaminated Soil on Part Section 15 SO 7431.
106 - 199	27-28 April 2023	Marberry Estate Limited - Application for Resource Consent - Land Use (Land Disturbance), Land Use (Activity) and Land Use (River Surface and Bed Activity) - Kaiuma Bay, Pelorus Sound (U200980)	**GRANTED** Land Use (Land Disturbance), Land Use (Activity) and Land Use (River Surface and Bed Activity) to carry out earthworks to facilitate harvesting of commercial forest on Sec 4 Block IV Wakamarina SD, Lot 4 DP 4859, Lot 23 DP 435865, Part Section 2 SO 525, Lot 20 DP 435865, Lot 18 DP 435865, Lot 5 DP 9642, Lot 4 DP 9642, Lot 1 DP 534215, Lot 22 DP 435865, Lot 29 DP 435865, Part Section 3 Block IV Wakamarina SD, Lot 30 DP 435865, Sec 3 Block VIII Wakamarina SD, Lot 2 DP 4860, Lot 28 DP 435865; to harvest commercial forestry on Sec 4 Block IV Wakamarina SD, Lot 4 DP 4859, Lot 23 DP 35865, Part Section 2 SO 525, Lot 20 DP 435865, Lot 18 DP 435865, Lot 5 DP 9642, Lot 4 DP 9642, Lot 1 DP 534215, Lot 22 DP 435865, Lot 29 DP 435865, Part Section 3 Block IV Wakamarina SD, Lot 30 DP 435865, Sec 3 Block VIII Wakamarina SD, Lot 2 DP 4860, Lot 28 DP 435865; and to construct temporary drift deck stream crossings on Sec 4 Block IV Wakamarina SD, Lot 4 DP 4859, Lot 23 DP 435865, Part Section 2 SO 525, Lot 20 DP 435865, Lot 18 DP 435865, Lot 5 DP 9642, Lot 4 DP 9642, Lot 1 DP 534215, Lot 22 DP 435865, Lot 29 DP 435865, Part Section 3 Block IV Wakamarina SD, Lot 30 DP 435865, Sec 3 Block VIII Wakamarina SD, Lot 2 DP 4860, Lot 28 DP 435865.

200 - 219	11 May 2023	New Zealand Motor Caravan Association Inc - Application for Resource Consent - Land use (Activity) and Subdivision (Allotment Creation) - 63 Freeths Road, Mount Pleasant (U220749)	**REFUSED** Land use (Activity) and Subdivision (Allotment Creation) to subdivide Lot 5 DP 340181 into two allotments, and to operate a short term stay motor caravan park for a maximum of 80 motorhomes and caravans (including tow vehicles) for New Zealand Motor Caravan Association's members on the new Lot 1 of the subdivision, and where vehicles and fencing will be located close to protected notable trees on the site legally described as *Lot 2 DP 2470 MB58/31)*.
220 - 250	10 November 2023	Pure Exploration Limited - Application for Resource Consent - Land Use (Activity), Land Use (River Surface or Bed Activity), Land Use (Land Disturbance), Discharge (to Land) - Head of Endeavour Inlet, Queen Charlotte Sound (U220736)	**GRANTED** Land Use (Activity), Land Use (River Surface or Bed Activity), Land Use (Land Disturbance), Discharge (to Land) to continue to operate a camping ground to accommodate a maximum of 20 people on Part Section 1 Block XII Gore SD; to install a pipe over an unnamed intermittently flowing watercourse on Part Section 1 Block XII Gore SD (Grid reference 1698823E 5451055N NZTM); to undertake excavations associated with the installation of a wastewater pipeline and crossing supports within 8 metres of an unnamed intermittently flowing watercourse on Part Section 1 Block XII Gore SD; and to discharge treated domestic wastewater to land from a new onsite wastewater system on Part Section 1 Block XII Gore SD.

4. Kelp Restoration in Tōtaranui/Queen Charlotte Sound

(The Chair) (Report prepared by Katie Littlewood) **E325-000-002**

Purpose of Report

1. Inform and update the committee on the progress of the kelp restoration project occurring in Tōtaranui /Queen Charlotte Sound.

Executive Summary

2. University of Auckland researchers have been studying the effects of kina *(Evechinus chloroticus)* barrens on the health of kelp and rimurimu forests in Tōtaranui/Queen Charlotte Sound.

3. The project is led by Professor Nick Shears and his team (Dr. Caitlin Blain (postdoctoral fellow), Dr. Kelsey Miller (postdoctoral fellow), Dallas Lafont (PhD student)) at the University of Auckland in partnership with Te Ātiawa o Te Waka-a-Māui and supported by Marlborough District Council, SLR Consulting and Port Marlborough.

4. Marlborough District Council's Nautical and Coastal Science team have been involved in this project via "in-kind" donations and fieldwork assistance.

5. After 1.5 years of monitoring four experimental sites, the research team has observed some degree of recovering rimurimu at all sites; the extent and rate of this recovery is variable, likely in relation to reef location and environmental conditions.

RECOMMENDATION

That the information be received.

Background/Context

6. Kina *(Evechinus chloroticus)* is an endemic species found in shallow waters around Aotearoa New Zealand. Kina are herbivorous grazers, feeding on a variety of important kelp and rimurimu species, often causing 'kina barrens' (areas that have been completely cleared of seaweeds and kelp due to over grazing). Kina found on kina barrens remain small and typically have poor roe condition.

7. Kina barrens are increasing in size and extent across Aotearoa due to overfishing of their natural predators such as Snapper, Blue cod and Crayfish, as well rapid reproduction rates due to warming waters.

8. Kelp and rimurimu are foundational species, critical for ecosystem function and health. They play several roles including sequestering carbon, supporting grazer diets, and creating habitat for numerous marine species.

9. The loss of kelp and rimurimu biomass across the Marlborough CMA is likely due to a proliferation of kina (due to the loss of many of their predators), sea temperature rise triggered by climate change, and sedimentation. The loss of kelp and rimurimu can lead to a decline in biodiversity and ecosystem productivity.

10. The Kelp Restoration project established four trial sites across Tōtaranui/Queen Charlotte Sound to examine how excessive kina grazing inhibits kelp and rimurimu recovery and growth across a range of environmental conditions through the Sound.

11. In May 2022 approximately 34,000 kina were removed from these four sites, and the research team have conducted surveys every 2-3 months to remove any new kina that have spread from neighbouring barrens into the trial sites.

Image 1: November 2023 Dive Team (from left to right): Kelsie Miller (UoA), Caitlin Blain (UoA), Robyn Dunmore (SLR Consulting), Katie Littlewood (Marlborough District Council) and Dallas Lafont (UoA).

Assessment/Analysis

12. All sites have seen an increase in rimurimu, ranging from an average of 10% more canopy cover at Tahuahua/ Blackwood Bay to 67% at Motuara Island. Kelp species have been recovering well at Motuara Island, and a few juvenile kelp individuals have also been observed at Meretoto/ Ship Cove where none were found previously.

13. The differences in rate and extent of kelp and rimurimu recovery seen between sites are most likely associated with environmental conditions, such as low water motion, sedimentation, and warming ocean temperatures slowing the recovery.

14. Removals of kina across the four sites were carried out every 2-3 months to mitigate reinvasion of the experimental area. The need for this additional effort indicates that kina removal on its own as a restoration tool is not efficient long-term, as it does not address the underlying issue of the lack of kina predators. Further support and action are required for a long-term, sustainable recovery.

Image 2: Map of four experimental sites around Queen Charlotte Sound: Tahuahua/ Blackwood Bay, Oruwairua/ Blumine Island, Meretoto/ Ship Cove, and Motuara Island

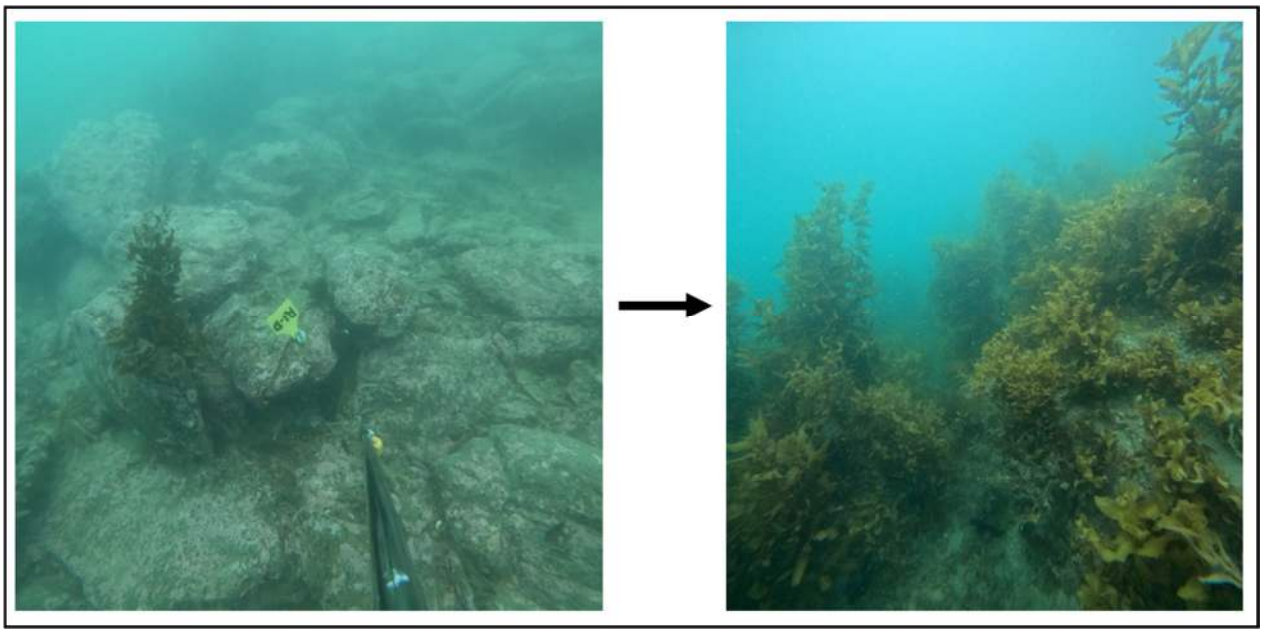


Image 3: Changes in reef habitat at Ship Cove from May 2022 (left) to December 2023 (right)

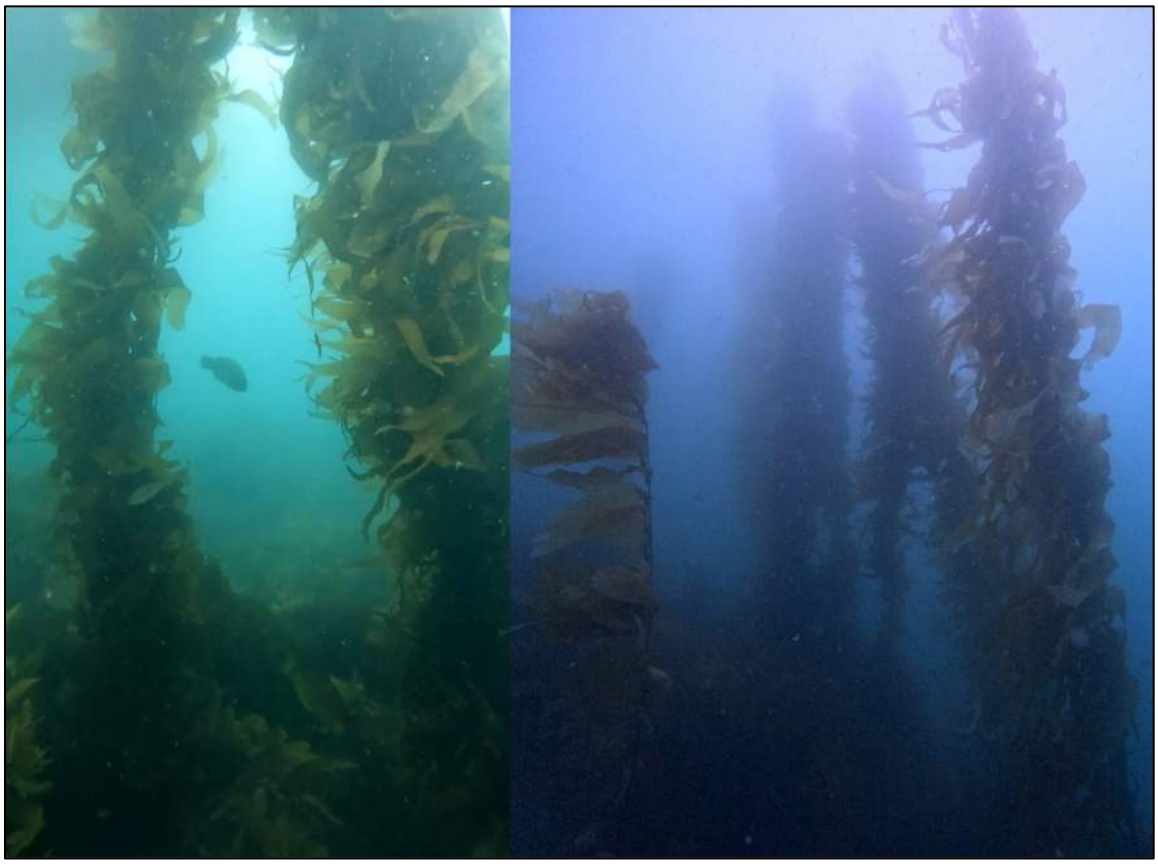


Image 4: Hundreds of the charismatic Giant Kelp have been found returning to and flourishing in the experimental site at Motuara Island.

Next steps

15. While the next steps in this research are currently limited due to time and funding, the team hopes to continue maintaining and monitoring these sites as recovery is still ongoing. May 2024 marks two years since the initial kina removal and would be the target date for the next round of kelp and rimurimu surveys.

16. The continuation of this research investigating how kina limit kelp and rimurimu recovery in Tōtaranui/Queen Charlotte Sound, and monitoring patterns in subsequent recovery provides insights necessary to future strategies, timelines, and goals targeting kelp and rimurimu restoration.

Presentation

A short presentation will be given by Dallas Lafont from the University of Auckland. (15 mins)

Author	Katie Littlewood, Principal Coastal Scientist
Authoriser	Hans Versteegh, Environmental Science and Policy Group Manager

5. Green Lipped Mussel Restoration in Te Tauihu/ Top of the South Island

(The Chair) (Report prepared by Katie Littlewood) **E325-000-002**

Purpose of Report

1. Inform and update the committee on the progress of the green lipped mussel restoration project occurring in Te Hoiere/Pelorus Sound.

Executive Summary

2. Auckland University's Emilee Benjamin and two PhD students Altan Ni Mhurchu and Luke Johnston, in partnership with NIWA, local marine farmers, iwi, The Nature Conservancy, and Ministry of Primary Industries (MPI), are working to identify the best ways to restore wild mussel beds in Te Tau Ihu, with the last four years primarily focused on Te Hoiere/ Pelorus Sound.

3. The Marlborough District Council's (MDC) Nautical and Coastal Science Team have been involved in this project via funding support and fieldwork assistance since the project was established in 2019.

4. Mussel restoration occurring in Te Hoiere/Pelorus Sound has proved exciting results. Not only are the deployed mussels surviving on the seabed, but they are also building habitats for other marine organisms. Additionally, within the first 13 months after deploying mussels on the seabed there are two times more seaweeds, four times more blue cod, and higher amounts of invertebrates, such as sea cucumbers, compared to adjacent habitats.

RECOMMENDATION

That the information be received.

Background/Context

5. Historically, wild, green-lipped mussels were gathered direct from the Sounds' seabed and shorelines. Land-use changes and over-harvesting have contributed to the reduction of these natural beds since the 1970's.

6. Marlborough remains a highly productive, green-lipped mussel region, but that productivity now comes from farmed mussels. With hundreds of farms throughout the Sounds, this region rightfully calls itself the 'Green-lipped Mussel Capital of the World'.

7. Wild shellfish beds, such as green lipped mussels, are critical for proper ecosystem function. Mussels act as building blocks in coastal environments and are important for overall ecosystem health. They provide habitats for marine life and aid in suspended sediment filtration and removal.

8. The goal of this project is to examine the potential to restore green-lipped mussels (Perna canaliculus), in Te Hoiere/ Pelorus Sound, to understand how to overcome barriers to natural mussel recovery in this area.

9. The mussel restoration work has brought together a community of people that are all interested in restoring the seabed and expanding natural mussel populations. The collaboration and teamwork are continuing to expand across Te Tauihu.

Assessment/Analysis

10. Working with Aquaculture industry, the team have successfully deployed over 50 tonnes of farmed mussels and 24 tonnes of mussel shell material (that otherwise would have gone to landfill) onto the seafloor in various trial locations in Te Hoiere/Pelorus Sound.

11. The team have monitored mussel and overall ecosystem health in the newly reseeded beds for over the last four years, which has shown that:

    a) In most places in Te Hoiere/Pelorus Sound where mussels are restored to the seafloor they survive well, indicating the habitat is still suitable for supporting wild mussel beds.

    b) Where mussels are restored in Te Hoiere/Pelorus Sound, there are significant associated ecosystem benefits, as evidenced by a rapid increase in the abundance of fish and seafloor creatures in the vicinity.

    c) There is very limited recruitment of young mussels into restored mussel beds after three years, suggesting there is a bottleneck for natural recruitment that needs to be resolved if mussel restoration is going to be successful long-term.

    d) Natural mussel shell material from aquaculture can be returned to the marine environment to aid mussel restoration by consolidating a muddy seabed to provide a firmer substrate for establishing restored live mussels.

Next steps

12. The initial project ran for three years, we are extending the project for three more years and have added two more PhD students to our team. The wider community collective supporting the project has developed a project plan which will build on this previous valuable knowledge and aims to:

    a) Increase the effectiveness of mussel restoration by developing methods for harnessing natural recruitment into mussel beds in the Marlborough Sounds.

    b) Assess the efficacy of recycling mussel shell from aquaculture to enhance biodiversity and stability of seafloor habitats with accumulated sediment from run off.

    c) Extend the application of mussel restoration methods developed for enclosed waters of the Pelorus Sound/Te Hoiere so they are effective in open coastal waters of Golden Bay/Mohua and Wakapuaka Taiapure at Delaware Bay.

Presentation

A short presentation will be given by Dr Emilee Benjamin (15 mins)

Author	Katie Littlewood, Principal Coastal Scientist
Authoriser	Hans Versteegh, Environmental Science and Policy Group Manager

6. Te Hoiere Project – DOC Ngā Awa Monitoring Programme

(also refer separate report available on Council's website)

(Clr Faulls) (Report prepared by Heli Wade) **E355-021-01-001**

Purpose of Report

1. To provide an update on the Department of Conservation (DOC) Ngā Awa fresh water monitoring Programme in Te Hoiere Project Catchment

Executive Summary

2. Te Hoiere Project promotes collective action towards enhancing and protecting freshwater quality and biodiversity in the Te Hoiere Project area. The Project objectives activate local landowners, community members, partner agencies and organisations to work together to revitalise the catchments environment, economy and the socio-cultural landscape.

3. Additional to central restoration funds, in kind support and grants, the Department of Conservations National Ngā Awa river restoration programme is a key DOC funding stream that supports Te Hoiere Project outcomes.

4. The Ngā Awa programme promotes partnerships and a whole-catchment approach to restore the biodiversity of 14 rivers in New Zealand, from mountains to sea, including Te Hoiere/Pelorus River.

5. As a part of this national programme, Te Hoiere catchment benefits from funding for mitigation actions and partnership support, as well as the support of DOC's national technical advisory teams and national freshwater biodiversity monitoring programme resources.

6. In 2021- 2022 DOC's Ngā Awa fresh water monitoring programme, measured ecosystem integrity of public conservation land (PCL) and waters in Te Hoiere. Environmental monitoring data was collected at 11 sites in Te Hoiere catchment. Three high-level categories of data were collected - aquatic life, habitat and water quality - to measure integrity.

7. An ecosystem is considered to be healthy and have 'integrity' when it hosts all the native plants and animals typical of the area, and when ecological processes are functioning well. In other words, ecological integrity measures the health of an area by considering how native, pristine, diverse and resilient it is.

8. Based on this study the aquatic life scores in Te Hoiere on PCL suggest there is high biodiversity across the sites. Similarly, the habitat, and water quality measures were generally indicative of pristine conditions in the upper catchment.

9. This study provides important context to Te Hoiere Project's restoration efforts and aspirations. It proves that the upper catchment environments are generally in reference state and are worth protecting. The downstream land and freshwater management decisions supported by Te Hoiere Project will benefit the wider catchments ecological integrity. Healthy waterways, protected and restored riparian margins and wetlands will improve the resilience of the catchment and therefore support the pristine state of the upper catchment and Te Hoiere headwaters in the years to come.

10. The monitoring also compliments the State of the Environment freshwater monitoring programme undertaken by Council. The information collected helps to build on our foundation knowledge base and provides a useful baseline index of ecosystem health.

RECOMMENDATION

That the information be received.

Background/Context

11. The DOC Ngā Awa monitoring programme collects data on plant and animal communities and habitat characteristics at a range of monitoring locations throughout the catchments being restored under the programme. Its objective is to provide data to enable a robust status and trend assessment of the ecological integrity of focus catchments to aid in directing and assessing the effectiveness of restoration actions.

12. This report is a part of three technical documents describing what DOC have learned to date from monitoring in Ngā Awa River catchments (the monitored catchments were; Te Hoiere, Waikanae and Waipoua). The report is intended as a technical resource that can be referenced in relation to other catchment initiatives and contribute to the development of "user guided report cards" for each catchment and to give guidance for next steps for further monitoring.

13. For monitoring season 2021, team members from the National Freshwater Monitoring Team sampled two of the eleven sites and in 2022 DOC engaged Cawthron Institute to collect data at further nine sites at headwaters of the catchment. Cawthron were also contracted to analyse the data on behalf of the programme.

Assessment/Analysis

14. The results presented provided evidence that areas within PCL in upper Te Hoiere catchment are generally in excellent condition and can be used to assess efforts being made to restore other areas of the catchment (Eveleens R, Kelly L. 2023).

15. Aquatic life scores suggest there is healthy biodiversity across the sites in Te Hoiere catchment. Some sites had lower scores (or no score) for the fish index of biotic integrity (F-IBI) due to a lack of fish, which is likely a result of these sites having relatively high elevation, possible natural barriers and being a substantial distance inland. The survey site reaches harboured a significant number of At Risk and threatened native freshwater fish taxa, with half of the species caught belonging to these threat classes (Eveleens R, Kelly L. 2023).

16. Macroinvertebrate communities were generally indicative of pristine or reference conditions, although two sites displayed slightly lower MCI scores. Most of the macroinvertebrates (approximately 65%) could not be assigned to a threat class due to taxonomic resolution issues or lack of information.

17. Megainvertebrates were only observed at two sites, with both kōura and shrimps caught during electric fishing. Freshwater mussel surveys did not detect any mussels.

18. The survey found low periphyton biomass results. Bryophytes were present at two sites, with no threatened bryophyte species found.

19. A diverse array of habitat types were recorded across the survey sites. Most sites had more than three meso-habitats available for a range of organisms. Discharge was biased towards low-flow sites, but this reflects both the survey intent to sample all stream orders present and the size of the waterways present within PCL in Te Hoiere catchment. Substrate stability spanned from moderate to high, with most sites being highly stable.

20. Deposited fine sediment cover was low. This, accompanied by a diverse range of substrate size classes at most sites, indicates good habitat availability for macroinvertebrates and fish, with low infilling of the interstitial spaces. Pesticide residue was not detected at any of the sites tested.

21. Water quality parameters were excellent or good at most sites, with the exception of DRP, which was elevated within the Wakamarina sub-catchment, likely reflecting the underlying geology. Visual clarity was good or excellent at most sites, although it could not always be assessed due to the size of the waterway.

22. When compared with other recent monitoring of streams and rivers in or near PCL, sites displayed good values for macroinvertebrate indices and visual clarity, but poorer values for nutrient

concentrations relative to other sites in the Ngā Awa river restoration programme and NFMP. (Eveleens R, Kelly L. 2023).

Next steps

23. Repeated sampling will enable assessment of changes over time. The areas of Te Hoiere catchment in PCL effectively remain in reference condition but are likely to be affected by changes in temperature and rainfall patterns arising from climate change. As a result, the wide-ranging dataset collected and presented here offers a baseline to inform future analyses of temporal change if similar monitoring was repeated.

24. Future monitoring could examine the upstream extent of migratory fish distributions to determine the extent of species habitat within PCL in Te Hoiere catchment, as some migratory fish species present at low elevation sites were not found at higher elevations.

25. Combining the data presented here with other monitoring efforts (MDC state of the environment monitoring) within the lowland and more modified parts of the Te Hoiere catchment could help to identify areas under particular stress and inform decision-making around restoration efforts and the achievement of environment outcomes.

Presentation

A short presentation will be given by Heli Wade, followed by short presentation by Laura Kelly, Cawthron Institute (15 minutes).

Attachment

Attachment 1 – Eveleens R, Kelly L. 2023. Ngā Awa Monitoring Programme: Te Hoiere catchment reporting 2021–22. Nelson: Cawthron Institute. Cawthron Report 3970. Prepared for Department of Conservation is available on Council's website via the following link https://www.marlborough.govt.nz/your-council/meetings

Author	Heli Wade, Te Hoiere Project Manager
Authoriser	Alan Johnson, Environmental Science & Monitoring Manager

7. Tory Channel/Kura Te Au Currents and Tides

(Clr Innes) (Report prepared by Jake Oliver) **H100-001-01**

Purpose of Report

1. To demonstrate the significant advances made toward understanding the complexity of current flows in the Tory Channel Current/Kura te Au and Queen Charlotte Sound/Tōtaranui and provision of this data in real time to ships to support safe navigation.

2. The report draws attention to the project progress since the last presentation on the MDC Tory Channel/Kura te Au Currents and Tides project.

Executive Summary

3. Until recently information on the strengths of the currents in and around Tory Channel were known to be significant. Risk assessments had demonstrated that the actual currents and expected currents are not always aligned.

4. The currents pose risks to the safety of shipping, this is visible through the incident records of groundings and near groundings in the channel.

5. A model has been developed to determine the currents present and forecast within the channel.

RECOMMENDATION

That the information be received.

Background/Context

6. The Tory Channel/Kura te Au provides the most direct sea route from Queen Charlotte Sound/Tōtaranui to Cook Strait/Rau Kakakawa and has long been used by ferries, ships and other vessels transiting to and from Picton.

7. Tidal and current conditions in Tory Channel/Kura te Au are significant with currents up to 7 knots (13 km/h) having been confirmed in full flood conditions. These currents add complexity to the challenge of navigating safely in this narrow and winding channel.

8. That the risk these currents pose to the safety of shipping is visible in the incident record. Specifically, in the last twenty years there have been at least five serious grounding or near grounding incidents at the Tory Channel/Kura te Au entrance involving a large ferry or another type of ship.

9. The most recent ship grounding was the grounding of the Cruise Ship Azamara Quest in January 2016. The subsequent Transport Accident Investigation Commission report pointed to navigators having a low level of understanding of tidal conditions in the channel.

10. Risk assessments of Tory Channel/Kura te Au have identified that published current and tide predictions do not always align with what is experienced on site. This means that mariners cannot be certain of the conditions that will be experienced until they have entered the channel.

11. Scientific analysis has revealed why uncertainty as to the expected tidal flows exists. Specifically, current flows in the channel are dominated by a tidal signal, which can be predicted with high accuracy, but there is often a non-tidal component present too, which significantly modulates the timing of the tidal flow reversals and the strength of the ebb and flow phases.

12. The MDC Nautical and Coastal team have established a novel solution to provide real-time guidance on the flow conditions at the entrance. The underlying concept is based on quantifying the water level

gradients within Tory Channel/Kura te Au, which is the key driver for its flows. By blending high-resolution hydrodynamical model simulations and real-time water level observations, a hybrid system to nowcast and short-range forecast (1-3 hours) the currents at any location in the Channel has been implemented.

13. The ‘as built’ solution described here was only possible on account of the detailed bathymetric data collected during the HS51 multibeam survey of Queen Charlotte Sound/Tōtaranui undertaken in 2016/17.

14. Following two rounds of validation of the model and further machine learning, a high level of confidence has been gained in the output data for the project. A product has been developed to enable the visualisation of the data and for users to understand the movement of the currents within the channel.

Next steps

15. To publish the model visualisation of the data on the MDC website.

Presentation

A short presentation will be given by Jake Oliver, Harbourmaster (15 minutes).

Author	Jake Oliver, Harbourmaster
Authoriser	Hans Versteegh, Environmental Science and Policy Group Manager

8. Spatial Tools for Land Management

(Clr Burgess) (Report by Matt Oliver) **E355-004-008**

Purpose of Report

1. To provide an update on development of GIS-based spatial tools for land management.

Executive Summary

2. Following the procurement of two significant datasets (LiDAR and radiometrics) a series of geospatial tools has been developed.

3. The resulting mapping datasets are considered data-driven compared to legacy data which was generally created subjectively by expert observers.

4. Spatial tools have been developed in several fields including Natural Hazards, Land Use/Cover, Erosion Vulnerability and Water Quality/Environmental Risks.

5. Spatial tools have been developed using readily available methodologies and software. This will enable their development elsewhere more easily in future.

6. The Te Hoiere Project has played a major role in obtaining external funding to complete this work.

RECOMMENDATION

That the information be received.

Background/Context

7. Council and LINZ partnered in 2020 to procure LiDAR across the entire province. This data has now been delivered as reported previously.

8. In 2017 Council obtained a Radiometrics dataset across much of the province.

9. Combining both of these datasets existing legacy data and water quality monitoring data can result in improved understanding of landforms, erosion risk and natural hazards. This understanding can be used to implement better practice or regulatory measures.

10. The Te Hoiere Project has provided a vehicle to trial and implement a series of geospatial data tools. These aim to provide guidance to landowners and Council land management staff at a finer scale than previously available.

Spatial Tool Creation

11. Geospatial data is typically held as ‘raster’ (images) or ‘vector’ (points or lines) files. The data within these files can be used in calculations to create novel interpretations of the basic data.

12. These calculations can be used to understand the relationships within or between data sets. The resulting maps are considered ‘data-driven’. This compares to the legacy mapping Council holds that is typically created by subjective assessment by experts.

13. The use of empirical data means statistical analysis is possible. This allows an understanding of the level of error contained within the mapping. Legacy mapping can contain no such understanding.

14. Legacy mapping was typically completed at coarse scale of 1:250,000 to 1:50,000 (1cm^2 on a 1:50,000 map = 25ha). Data-driven mapping can be produced at a much finer scale. However, the

scale is limited to the coarsest data input. Maps produced from only LiDAR can theoretically be as fine as 1m pixels (approx.1:2000 scale) although this scale is usually too fine and 'noisy'. Maps produced using Radiometrics are limited to 50m pixels (1:100,000) as this is the scale of the source data set. In data-driven geospatial mapping however, it is possible to compare two maps of different scales and obtain useful information. As an example, a fine-scale LiDAR slope map can be compared to a coarse scale radiometrics erosion risk map to identify small areas of steep slope that may have higher erosion risk (Figure 1). This way, geospatial mapping can be applied at property scale to help landowners make better decisions on land use or natural hazard risk.

15. Verification of spatial datasets is crucial to ensure they adequately represent the landscape. This typically involves creation of a draft data set and subsequent ground-truthing in the field or using expert panels to check the data. An expert panel was used to verify the land use dataset described below.

Spatial Tool Examples

Natural Hazards

16. LiDAR can be used to determine slope and catchment area. These can be combined to derive Melton ratio, a measure of landslide risk. This has been reported on to previous committees.

17. LiDAR can identify landform features such as archaeological works, historic landslides, changes in land shape caused by erosion or human earthmoving, changes in river morphology, differential heights of river terraces amongst multiple other features. These can be used to identify potential hazards from flooding, landslides, human activity, rainfall etc.

Land Use

18. Land use and land cover both play an important role in determining natural hazard and environmental risks. Some land uses/covers can be protective and reduce risks, others can exacerbate the risks.

19. Land use/cover can change rapidly with consequent changes in risk level. The classic example is exotic clear-fell forestry. This land use is protective and reduces erosion risk for much of its production cycle but at harvest and for a 'window of vulnerability' following harvest, the risks can increase. Other changes in land use/cover in Marlborough include a change from pastoral /arable farming to viticulture with a likely reduction in environmental risks to groundwater resulting.

20. Current landuse mapping is provided by the Land Cover Database (LCDB) at a 1:50,000 scale. This is updated on roughly five yearly intervals nationally. Production typically uses satellite imagery and can take up to two years.

21. Recently Council procured a new land use map as part of work required under the NPS-FM. This map is a 2023 version and held as GIS files. Rather than relying on satellite imagery to update the data, feedback from information received by Council such as consent application, land management activity etc can be used. Thus it can be readily updated inhouse and could be opened to public feedback for updating as well.

22. Other forms of land cover mapping can be performed using spatial modelling. One such model includes an assessment of forest cover on an annual basis using Google Earth Engine and historic satellite imagery (Figure 2). Utilising this in council's planning processes could permit forecasting on forest harvesting and enable regulation or in-catchment coordination of harvesting to reduce environmental impacts.

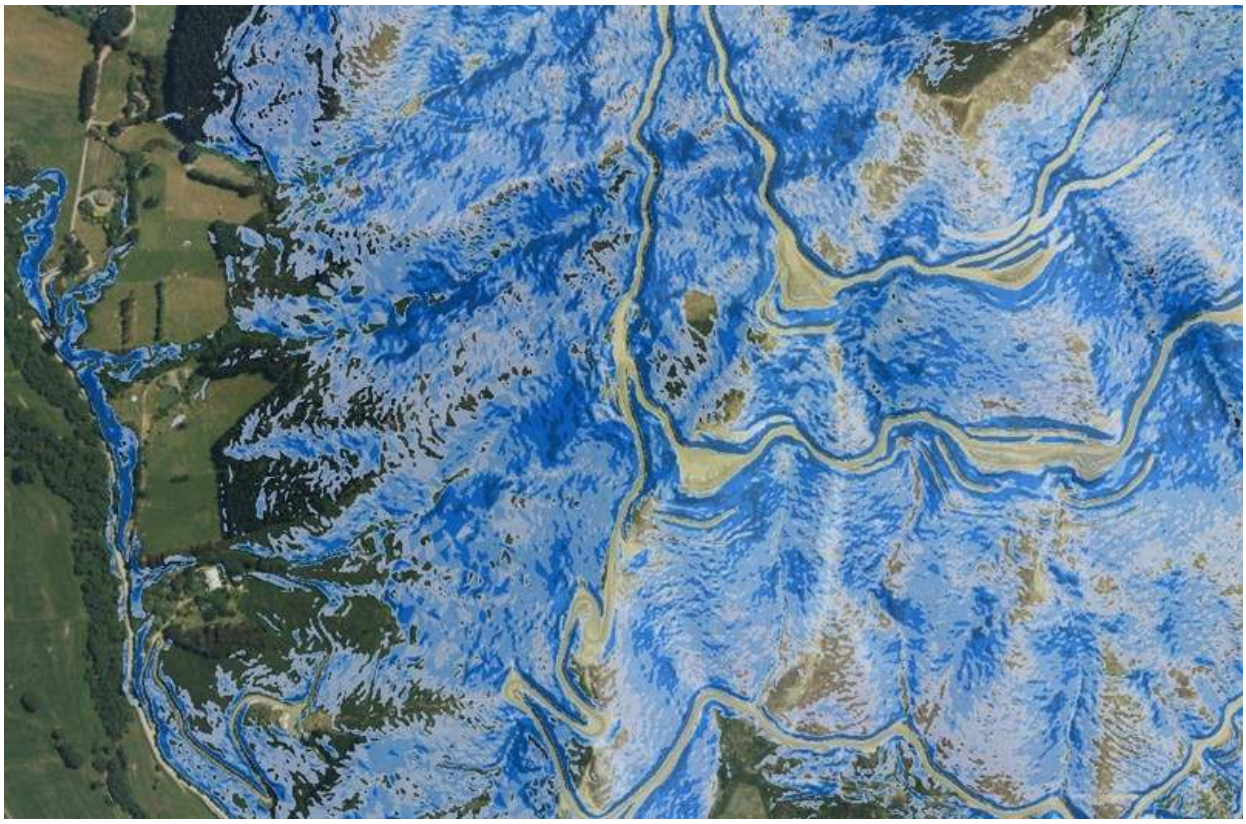
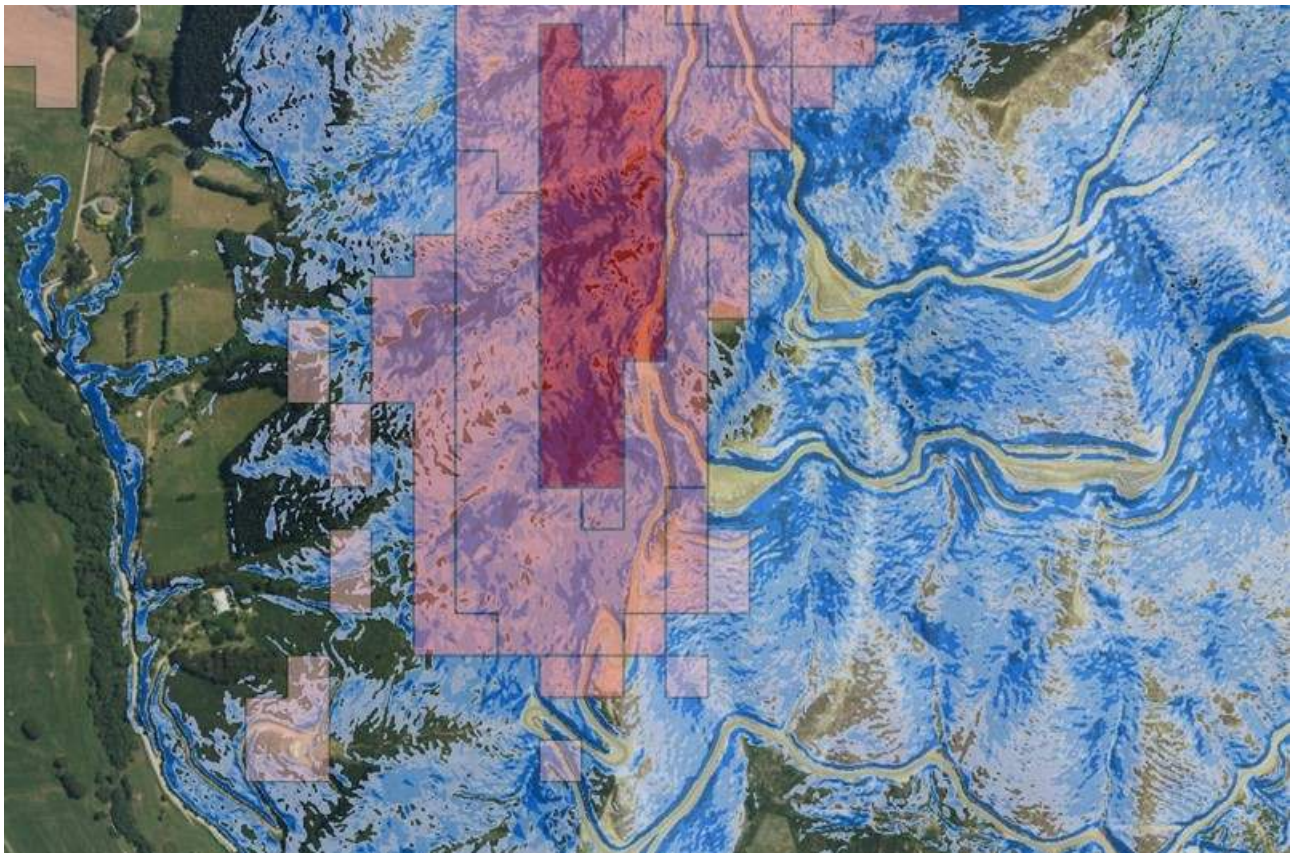


Figure 1: Top: a forestry block in the Pelorus River area with a 1m resolution (1;2000 scale) LiDAR slope map overlaid. Slope key in top left corner. Note the very fine "noisy" delineation of slope.



Bottom: A draft erosion risk data layer derived from 50m resolution Radiometrics data overlaid on the slope map. Compare the pixel size between the two layers. Areas where very high erosion risk occur on steep slope arrowed in blue. Note tracking across steep slopes with very high erosion risk (green arrow).

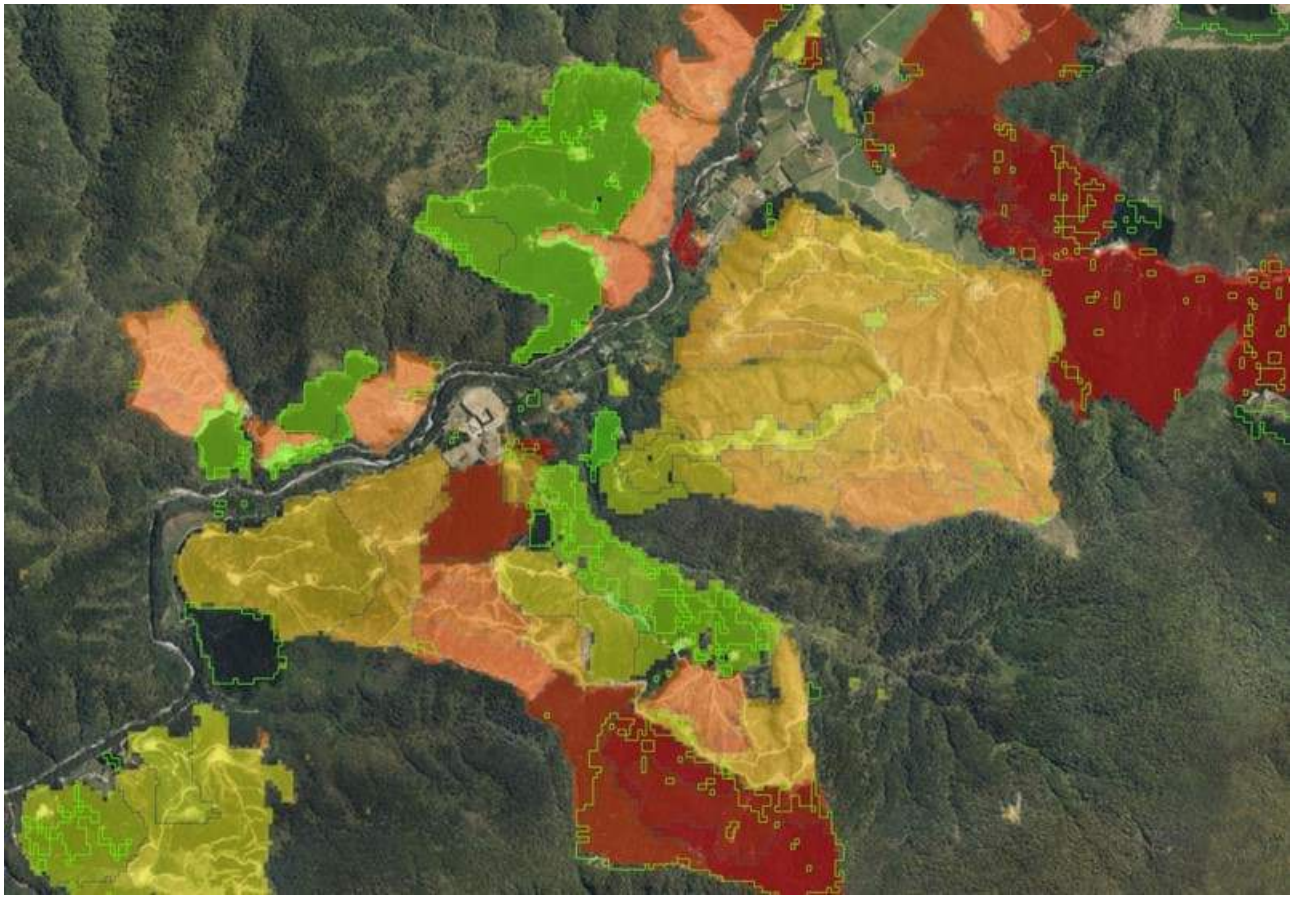


Figure 2: A Google Earth Engine model of forest harvesting in the Wakamarina Valley. Coloured areas indicate year of harvest, green outlines indicate where forest has been added since 2000. A model such as this could be adapted to forecast likely harvest dates for forestry and implement catchment management methods to minimise environmental impact.

Erosion Vulnerability

23. Erosion risk is a function of slope, underlying geology/soils, vegetation, land use and an erosive force such as water or wind. While it is not possible to reliably forecast the impact of the erosive forces, some assessments can be made of the other factors using geospatial data.

24. Slope and vegetation height are easily derived from LiDAR. Land use can be derived as above. Radiometrics can provide a guide on geology and soil. Flow paths (where waterflow converge and erosive power increases) can be mapped using LiDAR.

25. Combining these data can enable determination of vulnerability to erode and this can be mapped.

26. A map of erosion vulnerability could be used both to guide landowners in land management decisions but also (with adequate verification) to underpin regulatory measures intended to reduce erosion or sediment production.

Water Quality/ Environmental Risks

27. Council holds extensive water quality monitoring records from its long-term monitoring work. While this information is essentially ‘end-of-pipe’ data, it can be combined with other spatial data sources to assist with modelling likely sources of water quality issues.

28. Very accurate delineation of waterways and their surrounding catchments can be performed with LiDAR and can replace less accurate national datasets such as REC riverlines.

29. In combination with other spatial data sets such as soil mapping, erosion vulnerability, land use/cover and gathered data such as catchment condition surveys to identify land that may produce environmental contaminants.

30. As all of these datasets are digital in nature, they can provide base data to a water quality model. Such a model can be used to forecast future states for waterways such as what could be the expected level of a contaminant under varying rainfall conditions, or what improvement could be expected if water quality mitigations are put in place.

31. Lidar can be utilised to derive how 'connected' a parcel of land is to the nearest waterway. Connectivity is an extensively studied concept internationally and uses LiDAR to create measurements of a sub-catchment's area, slope and vegetative cover. This assesses the 'power' of the catchment to push contaminants past downstream resistance. Steep catchments with short defined channels can more quickly transport contaminants directly to a receiving environment and are considered highly connected. Low slope catchments that discharge onto floodplains are less connected. Connectivity can be used to prioritise sub-catchments for mitigation works.

Te Hoiere Project Role

32. The Te Hoiere Project has played a key role in the recent development of spatial tools at Council.

33. The exemplar nature of the project with its intention to demonstrate the potential for collective catchment action at landscape scale has enabled trialling of novel spatial methodologies and techniques.

34. Most of the methods used have been demonstrated elsewhere or in the GIS literature. The Te Hoiere Project seeks to demonstrate that these tools can be put to practical use in catchments at relatively low expense using readily available software following their development. This has attracted funding from both Ministry for the Environment and from DOC.

35. The downside of working within the Te Hoiere Project framework is that the resultant datasets only cover this area of interest. Where Council funding has permitted, and where it makes sense to do so, datasets have been produced across the entire region. An example of this is the base erosion vulnerability data K-means classifications. The statistical analysis required for this work meant that processing the entire radiometric dataset including, Te Hoiere and the rest of the Sounds and South Marlborough along with the Nelson area provided a much more coherent and cost-effective result for all areas (Nelson City Council funded their portion of this work). However, the further processing required to make many datasets workable across the rest of Marlborough is yet to be completed.

Next steps

36. Continue development and verification of the datasets described.

37. Create field-capable versions of key datasets for use by Catchment Care Officers on their tablets in the field. Create open access versions for public use and feedback.

38. Expand the coverage beyond the Te Hoiere Project area where catchments have an identified need. Under the NPS-FM (as it currently stands) Catchment Context, Challenges and Values documents will identify the catchment issues that need to be addressed. Appropriate spatial tools to address and prioritise these can then be implemented.

39. Funding to complete this work will be required in some instances however, Council has sought to develop in-house capability during this process. Where a layer is required outside of the Te Hoiere Project area, in many cases, Council will have the ability to create these itself.

Closing remarks

40. The funding for this work has largely been sourced externally via LINZ, Ministry for the Environment, Ministry for Business, Innovation and Employment (Envirolink Grants), and Department of Conservation.

41. LINZ contributed $961,000 for LiDAR procurement and Council contributed $271,000.

42. For spatial tool development:

    a) Ministry for the Environment contributed approx. $180,000 toward spatial layer development via various funding sources.

    b) Ministry for Business, Innovation and Employment contributed approx. $60,000 in Envirolink grants for the Melton ratio modelling and validation.

    c) Department of Conservation has contributed toward the river geomorphology and connectivity work to the value of approx. $60,000.

    d) Council contributions to spatial tools have come as in-kind contributions and approx. $30,000 allocated from existing budgets.

43. This work is the product of many contributors:

    a) Council GIS Staff- Malcolm Jacobsen, Matt Henderson and Vlad Sibagatulin.

    b) University of Canterbury- Dr Mark Bloomberg and Dr David Palmer (Melton Ratio).

    c) University of Auckland- Dr Jon Tunnicliffe and Thomas Wood (River Geomorphology and Connectivity).

    d) Land and Water Science- Dr Lisa Pearson (Land Use Mapping and Erosion Vulnerability).

    e) Biospatial Ltd- Andrew McDonald and Duncan Kervell.

Presentation

A short presentation will be given by Matt Oliver (20 minutes).

Author	Matt Oliver, Senior Environmental Scientist Land Resources
Authoriser	Hans Versteegh, Environmental Science and Policy Group Manager

9. Top of the South Marine Biosecurity Partnership

(Clr Faulls) (Report by Jono Underwood) **E315-004-002-01**

Purpose of Report

1. To provide an update to the Committee on recent changes that have occurred in relation to the Top of the South Marine Biosecurity Partnership (TOSMBP).

Executive Summary

2. The TOSMBP is one of the longer running inter-agency biosecurity initiatives established in 2008.

3. After a re- fresh in relation to the initiative and some other developments in 2023, a new contractor – Boffa Miskell Ltd – has been engaged to deliver coordination services for the TOSMBP.

4. As part of the other developments, Greater Wellington Regional Council have come on-board as a fourth Council partner.

RECOMMENDATION

That the information be received.

Background/Context

5. The Top of the South Marine Biosecurity Partnership (TOSMBP) has been operating since 2008 when agencies chose to work together on what was at the time, a new area of biosecurity management to operate in [marine biosecurity].

6. The model has operated unchanged for over 15 years whereby a contractor delivers coordination services across the TOS. This contract has been jointly funded by the three TOS councils and Biosecurity New Zealand (to varying degrees). The TOSMBP was also guided by a Strategic Plan drafted by the then contractor.

7. The main purpose of the partnership programme is to provide advocacy and education to better manage invasive marine species, their impacts and risk pathways.

8. Over that time, each agency (particularly the councils) have developed and are now implementing their own marine biosecurity programmes with the ongoing support of partners and the coordination contractor.

9. With Greater Wellington Regional Council (GWRC) showing an interest in joining the partnership, coupled with a market process required in 2023 for the coordination contract, the agencies took the opportunity to take a fresh look at the initiative, including the breadth of the core agency partners.

10. The interest from GWRC was very welcome given the high degree or maritime connectedness between recreational vessel hubs in the Wellington region and the Marlborough Sounds in particular.

Moving forward

11. During the preparation of the Request for Proposals (RFP), GWRC confirmed that they had secured base funding to join the TOSMBP. As a result, GWRC was included in the preparation of the RFP and subsequent assessment.

12. A succinct summary of the situation in Wellington, after being considered by the Council there, was covered in the Dominion Post on 11 August 2023 (article link here).

13. The now four Councils and Biosecurity New Zealand agreed that the main factors moving forward included:

    a) As part of modernising communications and engagement, also place a greater emphasis on engagement with mana whenua iwi led by the partner agencies, supported by the coordination contractor where appropriate.

    b) Shifting the regular mode of operation to more of a forum style format rather than the former 'committee' format.

    c) Ensure the coordination contractor places greater emphasis on supporting all partners achieving the best they can whatever their role is (i.e., an agency, an industry body, a marine service provider).

14. As a result of the RPF process, Boffa Miskell Ltd was successful in being awarded the coordination contract for the next period through to 30 June 2026. A biosecurity project team from within Boffa Miskell led by Kane McElrea will oversee the TOSMBP coordination contract.

Next Steps

15. Council's marine biosecurity programme will continue under the Regional Pest Management Plan Exclusion programme for Mediterranean fanworm, strongly supported by Marlborough Marinas in relation to risk screening.

16. There will naturally be a settling in period for the new coordination contractor, however 2024 will continue to see all partners working closely together to continually seek improvement. There will also be a significant amount of support directed toward GWRC by the coordination contractor, the TOS Councils and Biosecurity New Zealand as they shape up their own core regional programme for Wellington.

Presentation

A short presentation will be given by Jono Underwood (10 minutes).

Attachment

Attachment 1 – TOSMBP Newsletter 20 December 2023 Page [23]

Author	Jono Underwood, Biosecurity Manager
Authoriser	Alan Johnson, Environmental Science & Monitoring Manager

Attachment 1

No images? Click here

Top of the South Marine Biosecurity Newsletter

Meri Kirihimete and welcome to the last newsletter for 2023. In this summer edition, you can read about:

- News and updates from the Top of the South Marine Biosecurity Partnership
- Meet the new TOS coordination team
- Exotic caulerpa: how can you help?
- Take part in a recreational boater survey
- Where to find more information and who to contact

News and updates

Thank you

The TOS councils and Biosecurity New Zealand, along with all of our supporters, would like to express our sincere thanks and gratitude to the former TOS Coordination team: Peter Lawless, Barrie Forrest, Charmayne King and the wider support team. We want to acknowledge the foundational work you have delivered, your support, hard work, and dedication over the past 12+ years.

In your capacity as the TOS Coordination team, you have supported the councils' biosecurity teams, aquaculture industry and countless others across Te Tau Ihu and more recently Wellington. Your contributions have built marine biosecurity understanding, capacity, and just an all-around appreciation of what can be done.

Peter Lawless. Photo credit RNZ / Tracy Neal

Welcoming Greater Wellington Regional Council

The TOS Marine Biosecurity Partnership aims to bring together partners that have a passion and responsibility to protect the marine environment from the impacts of invasive species.

The Partnership has recently welcomed Greater Wellington Regional Council to the Partnership. With the high level of connection across the Cook Strait, this undertaking will reinforce and enhance all the work programmes, to support and improve the marine biosecurity management in the top of the south and in the Wellington Region.

We look forward to continuing working together with our partners, the local aquaculture industry, port companies, mana whenua and other stakeholders in 2024, and we wish you a safe and joyful holiday season.

Meet the new TOS Coordination team

Boffa Miskell has been awarded the TOS Coordination role for the next three years. A dedicated project team has been established to provide project coordination services.

The new Coordination team will build on the successful foundations created, while bringing new ideas and a wide range of experiences and scientific understanding of marine biosecurity, to support the TOS partners and stakeholders.

Kane McElrea will take on the lead Coordinator role and will lead the project team. With over 15 years' experience in biosecurity, Kane will use his knowledge of marine biosecurity threats, innovations, solutions and legislation, along with existing relationships with the councils' and central government, to strengthen the Partnership's relationships and marine biosecurity management.

The wider project team also includes dedicated communication and engagement specialists, marine science advisors, expert biosecurity project managers and coordinators, and an experienced biosecurity dive team.

Summer surveillance programme

This summer, our divers will be out inspecting vessel hulls across Tasman, Nelson and Marlborough. Hotspots include Abel Tasman National Park, all of the Nelson area and Marlborough Sounds.

Why does my vessel need to be surveyed?

Marine pests hitchhike on dirty hulls! There are rules in place to protect our coastlines from unwanted marine pests. These surveys ensure there are no marine pests on your vessel.

What can you expect?

When out and about, our diving team may undertake a 5 minute snorkel survey to inspect the hull of your vessel for any marine pests and hull biofouling. You will also be asked some basic information about your vessel. If your vessel is deemed to have a biosecurity risk, MPI and/or the relevant council will be contacted and will arrange a follow-up.

What can you do prepare?

Register your vessel

Register your boat on the Marine Vessel Portal (MVP). The MVP is a key tool in marine biosecurity management and will speed up the survey process.

Marine Vessel Portal

Ensure your boat is pest free

It's good seamanship not to let fouling build up beyond a light slime layer. Make sure you clean dirty hulls and niche areas, bilge water and all equipment.

For guidance on how to keep your hull and equipment clean, visit www.marinepests.nz

Exotic caulerpa: how can you help?

What to do if you find something that looks like exotic caulerpa

Get the latest advice from the Biosecurity New Zealand website about what to do if you find exotic caulerpa (*Caulerpa brachypus and Caulerpa parvifolia)* on your anchor, anchor chain or fishing gear.

If you find exotic caulerpa, please report it to the MPI Exotic Disease and Pest Hotline on 0800 80 99 66 or online at report.mpi.govt.nz.

Remember - Out at on the water? See weed? Bag it. Bin it.

Click here for more information about exotic caulerpa

A survey for moored boat owners

The arrival in New Zealand of marine pests like Mediterranean fanworm (*Sabella spallanzanii)* has highlighted the importance of hull hygiene, however it is clear there are challenges involved in keeping a boat clean and well maintained.

What is the survey about?

As a boat owner, you have likely heard the message about maintaining a clean hull to stop introduced marine organisms from spreading. We want to know more about what motivates you, what obstacles you face, and the considerations that guide your decisions.

We encourage you to take part in this survey, as findings will help to:

- develop approaches to limit the spread of introduced marine organisms on the hulls of vessels and to overcome the challenges that make it more difficult;
- improve services and messages to support public understanding of marine biosecurity.

This survey is part of a research programme funded by the Ministry of Business, Innovation and Employment. The survey was developed by researchers based at Scion and the Cawthron Institute with support from Yachting New Zealand (YNZ) and the New Zealand Marina Operators Association (NZMOA).

Click below to take the survey and go into the draw to win a $250 voucher!

Recreational Boater Survey

If you have any questions or would like to contact the research team about the survey, please email rec.vessels@cawthron.org.nz.

Reporting marine pests

If you have found an unusual animal or plant in the marine environment, please report it to the MPI Exotic Disease and Pest Hotline on 0800 80 99 66 or online at report.mpi.govt.nz.

For general marine biosecurity enquiries, please contact councils' customer service centre. They operate a 24/7 phone service.

- Marlborough District Council **03 520 7400**
- Nelson City Council **03 546 0200**
- Tasman District Council **03 543 8400**
- Greater Wellington Regional Council **0800 496 734**

Alternatively, for non-urgent matters,
email info@marinebiosecurity.co.nz.

Top of the South Marine Biosecurity Partnership

Contact us at info@marinebiosecurity.co.nz

Preferences | Unsubscribe

10. Water Resources Update – January 2024

(Clr Burgess) (Report prepared by Charlotte Tomlinson) **E320-001-001**

Purpose of Report

1. To provide an update on the current state of water resources as of mid/late January 2024.

Executive Summary

2. Low rainfall has been recorded in Blenheim every month since June, with 14.2 mm recorded in December 2023. Low rainfall and warm temperatures in Blenheim have led to a moisture deficit of -136 mm in December, which is much higher than the December average of -91 mm. Low rainfall-runoff has led to lower river flows over recent months, and reduced recharge to groundwater.

3. Flaxbourne River restrictions began early this year, with Class A restrictions in place since mid-November, about a month earlier than is typical. The Awatere River has thus far had intermittent Class C restrictions in place.

4. The Wairau River had baseflow in the lower quartile by mid-November. Class C water takes were restricted intermittently throughout December, and again since 9 January. Without rain, there is an average period of 10 days from when Class C restrictions begin to when Class B restrictions are met.

5. Groundwater levels are all in the lower quartile for mid-summer 2023/24, with the exception of the deeper layers in the Southern Valleys and the Waikakaho Valley. Low rainfall runoff has limited recharge since July 2023, with the lowest groundwater levels occurring in the Recharge and Springs sectors of the Wairau Aquifer.

6. Compliance Monitoring communicate with water take consent holders in a variety of ways, including pre and post-irrigation season newsletters, letters to all new consent holders, and email/Antenno notifications of irrigation status. Ultimately it is the consent holder's responsibility to engage with the resources provided by MDC to determine their water availability.

7. There may be some rain on the way for late January, although dry conditions are expected to continue on the Wairau Plains and in the Awatere Valley.

8. All information in this agenda item is current to 17 January. The presentation will include a close to real-time update of water resource availability and projections.

RECOMMENDATION

That the information be received.

Background/Context

9. Rainfall has been below average in Blenheim (representative of the Wairau Plains) every month since June. Total rainfall in Blenheim from the 1 July 2023 to the end of 2023 was 153 mm. In an average year, about 300 mm of rain would have been recorded in the same time period, and at the same time last year over 500 mm of rain had fallen. Low rainfall-runoff has led to lower flows in rivers, and reduced recharge to groundwater over the last 6+ months.

10. On the Wairau Plains, evapotranspiration generally exceeds rainfall from September onwards, leading to a moisture deficit. However low rainfall since June 2023 meant the moisture deficit began in July, a few months earlier than usual. For example, December recorded 14.2 mm of rainfall, which is just 29% of the long-term average for December. Additionally, the mean temperature in December was 18.1°C, which is 1.2°C above the long-term average. Warmer temperatures increase evapotranspiration,

which along with low rainfall led to a moisture deficit in Blenheim of -136 mm in December, much higher than the average of -91 mm.

11. Since late November, there has been very little available soil moisture on the Wairau Plains – although this is not unusual. By the end of December, shallow soil moisture at Grovetown Park had declined to 15.5%.

12. When soil moisture falls to minimum levels, pasture and crop growth cease and growers rely on irrigation input to maintain productivity. Small amounts of rainfall are quickly lost to evapotranspiration, so do little to replenish soil moisture.

13. We have been in the El Niño phase of the El Niño Southern Oscillation (ENSO) since September 2023, and it is virtually certain to continue through to March. The last El Niño phase was in 2015/2016. El Niño typically brings stronger and more frequent winds from the west over summer, elevating the risk for dry conditions to the east. However, the weather patterns observed since September have not always matched those of a classic El Niño. For example, we saw heavy rainfall in the eastern North Island in November. NIWA have explained that global ocean temperatures are unusually warm this year, contributing to global circulation patterns not associated with a typical El Niño. It is important to note that while ENSO has an important influence on the climate, it accounts for less than 25% of the variance in seasonal rainfall and temperature in New Zealand. An El Niño phase does not necessarily mean there will be an east coast drought, but it is one factor to consider.

River Status

14. Flaxbourne River baseflow has been in the lower quartile since early September. Mean flow for December was 20 l/s compared to an average December flow of 160 l/s. Class A water restrictions have been in place since mid-November. The timing of these restrictions is similar to the onset of restrictions in the summer of 2015/16. The average onset for Class A water restrictions is towards the end of December.

15. After higher than average baseflow through winter, Awatere River baseflow dropped to below average in early October and has been declining since. Baseflow moved into the lower quartile as of early December. Mean flow in December was 6.14 m^3/s, which is 47% of the December long-term mean flow. Class C shutoffs have been intermittent from mid-December. Localised thunderstorms often occur in the Awatere over summer, and while these short bursts of rainfall do raise the river flow briefly, these events generally cause high turbidity in the river making it unsuitable for irrigators to take water. Looking at 35 years of flow records, Class B water users have been fully restricted in six of those years for a median period of 19 days, although this has varied between 5 and 54 days in total. During these years, Class A water would have been rationed (a percentage of total water take would have been permitted). To date, the Awatere Class A has never been completely restricted.

16. Wairau River baseflow was low throughout winter, limiting recharge to the aquifer below. Flows increased somewhat over spring, but by mid-November baseflow was again in the lower quartile. Class C water takes (mean daily flow under 30 m^3/s) were restricted on and off throughout December, and more recently from January 9. Once Class C restrictions begin and without rain in the catchment, it will be an average of 10 days until Class B restrictions begin (mean daily flow under 15 m^3/s). When Class B restrictions begin there is again a 10-day average period (with no rainfall) until Class A restrictions are met (mean daily flow below 8 m^3/s). Analysing 64 years of flow record, 85% of years have Class B restrictions, on average beginning in the first week of February. The median length for Class B shutoff is 23 days but has varied between 1 and 59 days. About 30% of years have a period where Class A water takes are also restricted, generally beginning in late February. The median length for Class A shutoff is seven days but has varied between 1 to 63 days.

17. The Rai River baseflow was below average but within the middle 50% of data throughout spring. North-westerly weather systems caused higher than average rainfall in December, raising baseflow into the upper quartile by the end of 2023. Mean flow in the Rai was 16 m^3/s in December, compared to a long-term December average of 11 m^3/s.

Groundwater Status

18. With the exception of deeper layers in the Southern Valleys and the Waikakaho River Valley, groundwater levels for all other aquifers lie within the lower quartile for mid-summer 2023/24. This is based on data from real time MDC state of the environment permanent monitoring sites.

19. The Southern Valleys and the Waikakaho River Valley aquifer levels are in the upper quartile. The deep Southern Valleys levels are high due to low usage rather than high recharge, as the overlying land sources most of its irrigation water from the Southern Valleys Irrigation Scheme (SVIS).

20. The lowest observed groundwater levels occur in the Recharge and Spring sectors of the Wairau Aquifer. Low rainfall-runoff since July 2023 are the main cause of the low levels, as they have limited recharge. Warm temperatures and strong winds exacerbate this by increasing demand from irrigators, the municipal supply, and industry. Low levels are also exacerbated by the declining aquifer trend due to the historical drop in Wairau riverbed levels reducing the recharge rate.

21. Low levels in the Wairau Aquifer have flow-on effects to the flow in Spring Creek, which is groundwater derived. Gauged flows were in the lower percentile leading up to Christmas.

22. Levels are also close to the lowest on record for mid-summer in the Riverlands Aquifer. This aquifer is demand driven with less climate influence. Electrical conductivity in the aquifer is also the highest observed for this time of year, but well within the threshold triggering restrictions.

23. The Rarangi Shallow Aquifer is recharged by rainfall and runoff from the surrounding hills. Rainfall has been lower than average since July 2023 (October being the exception), and as a result groundwater levels have been in the lower quartile since mid-August. The aquifer tends to drain through summer.

Compliance Monitoring Role

24. Compliance monitoring communicate with water take consent holders in a variety of ways, some of which have been newly implemented over the last 12 months.

25. New consent holder letters are sent out providing information on the new resource consent, a copy of the Resource Consent decision document, and the contact information to send any queries to MDC.

26. A pre-irrigation newsletter is sent out, including information on resource consent requirements such as water meter verifications, ensuring meters are working correctly and all information is up to date.

27. Antenno notifications – consent holders have the option to sign up to receive irrigation status notifications via Antenno alerts. In some instances group e-mails are sent out, especially when a large FMU is affected. An alert or email is sent when a river reaches shut-off level. It does however remain the consent holder's responsibility to ensure that they check the MDC irrigation status webpage to determine their water availability.

28. A post-irrigation newsletter is sent, informing the consent holder the importance of ensuring the Resource Consent conditions have been met for the season, all readings are in and compliant, any leaks/technical issues have been advised, water meter verifications are up to date and consent holders that only provide annual readings have done so. The post irrigation letter also includes information on crop change and the impacts, this advises the consent holders that if there has been a change of use or that they intend to change the use in the future that they must notify council and that a replacement permit is required to reflect the change in water allocation due to the crop type. The amount of water allocated in the new permit is determined using Irricalc assessment and the water availability for that specific FMU.

Outlook

29. The NIWA NZ Drought Index (NZDI) currently has values of 1.1 and 1.2 for Northern and Southern Marlborough respectively. The index is based on four common indicators of drought: the Standardised Precipitation Index, the Soil Moisture Deficit, the Soil Moisture Deficit Anomaly, and the Potential Evapotranspiration. Values above 1.5 indicate drought conditions.

30. Rainfall in Marlborough is forecast to be normal or below normal through to March, with the possibility of rain in the last week of January through to early February.

31. The NIWA/MPI drought forecasting dashboard shows that over the 35 days from the 14 January to 17 February, the Wairau Plains and Awatere Valley are likely to continue to be dry but unlikely to experience drought.

Tools

32. Up-to-date rainfall, river flow, irrigation and aquifer status can all be viewed online through the MDC Environmental Data platform: https://hydro.marlborough.govt.nz/.

33. Monthly Water Resource updates are also published on the MDC website: https://www.marlborough.govt.nz/environment/hydrology

34. NIWA also have a number of useful tools available online, including the Soil Moisture Deficit, which is updated every other day: https://niwa.co.nz/climate/nz-drought-monitor/droughtindicatormaps/soil-moisture-deficit-smd

35. The NZ Drought Index shows current dry and/or drought conditions nationwide: https://niwa.co.nz/climate/information-and-resources/drought-monitor

36. The NIWA/MPI drought forecasting dashboard provides an outlook of rainfall and drought risk over the next 35 days: https://shiny.niwa.co.nz/drought-forecast/

37. MPI also have a webpage 'Dealing with drought conditions' for farmers and growers: https://www.mpi.govt.nz/funding-rural-support/adverse-events/dealing-with-drought-conditions/.

Next steps

38. If dry weather is prolonged, and eventuates into drought, resulting in further water restrictions and impacts on production, a further update can be given at the 14 March Environment Committee meeting.

39. A dry weather group may be formed within council to discuss matters related to water restrictions and impacts on the local community and industry.

Presentation

A short presentation will be given by Charlotte Tomlinson (15 minutes).

Author	Charlotte Tomlinson, Environmental Scientist – Hydrology Contributors: Peter Davidson, Senior Environmental Scientist – Groundwater and Sadie Harris, Environmental Protection Officer
Authoriser	Alan Johnson, Environmental Science & Monitoring Manager

11. Appeals on PMEP Variation 1: Marine Farming

(The Chair) (Report prepared by Pere Hawes) **M100-11-002-07**

Purpose of Report

1. To inform the Committee of the process for managing appeals made to the Environment Court on PMEP Variation 1: Marine Farming (Variation 1) and to report on progress with resolving those appeals.

Executive Summary

2. 32 notices of appeal on Variation 1 were lodged with the Environment Court.

3. Council has proposed a format, structure and timing for formal mediation on Variation 1 appeals to the Court and to the parties. Court directions will follow.

4. In the meantime, progress is being made to resolve appeals through informal mediation. Consent memoranda have been submitted to the Court to resolve, in full or in part, six appeals with respect to aquaculture management areas (AMA). Another two proposals to settle appeals on AMA are with the appellants and discussions continue with two further appellants.

RECOMMENDATION

That the report be received.

Appeals received

5. The Variation 1 Hearings Panel publicly notified their decision on 19 May 2023.

6. The Environment Court received 32 notices of appeal. The list of appellants is shown in Attachment 1. Most of the appellants are marine farmers or represent marine farming interests. The full notices of appeal are available on the Council website: https://eservices.marlborough.govt.nz/programmes/ListProgrammeEvents?id=5682424. There is a total of 678 discrete appeal points.

7. Most of the appeals comprise one or more of three distinct categories of subject matter:

   - Appeals on the management framework (objectives, policies, methods and rules);
   - Appeals on inclusion of specific AMA on Schedule 1;[1]
   - Spatial appeals relating to the aquaculture management area (AMA) overlay. These typically relate to the non-provision of AMA, propose options for relocating of lines from inappropriate farms and/or seek adjustments to the boundaries of the AMA.

8. This breakdown is being used to propose a structure for formal mediation.

[1] Those seeking to reconsent Schedule 1 farms are required to assess effects on the benthic environment as a matter of control. Many farms included on Schedule 1 are located in parts of the coastal marine area that have not had the benefit of multi-beam echosounder survey.

Environment Court Process

9. The Environment Court manages all appeal processes in accordance with their Practice Note 2023. There are typically three options. The matters subject to appeal can be resolved between the parties (informal mediation), they may be resolved through Court assisted mediation (formal mediation), or they may proceed to Court hearing (in which case the Environment Court determines the outcome). Appellants may also withdraw their notice of appeal.

10. In accordance with Council's Instrument of Delegation, any agreed settlement between the parties achieved through mediation must be approved by either the Manager of Environmental Policy or the Manager of Environmental Policy, Science and Monitoring, or otherwise deferred back to the Committee. The Managers are required to consult with the Chair as part of the process of reaching agreement.

11. An agreement to resolve appeals from either formal or informal mediation is referred to as a "consent memorandum". If the Court agrees to the mediated agreement, it confirms the agreement by way of a Court decision called a "consent order".

12. The Court issued a minute on 23 August 2023 instructing the Council to propose a structure for mediation of Variation 1 appeals. In response, Council emphasised that it needed to better understand the relationship between the Variation 1 appeals and outstanding PMEP appeals (A significant number of original PMEP appeal points made by marine farmers were placed on hold during the relevant mediation pending the decision on Variation 1).

13. Council provided a final response to the Court on 22 December 2023 proposing a format, structure and timing for formal mediation (see below for further details).

MEP Appeals Version

14. In accordance with Clause 16B of the First Schedule of the RMA, the provisions of Variation 1 have been merged with the PMEP. This means that the provisions of Variation 1 can be accessed from the Appeals Version of the PMEP. As for the substantive PMEP provisions, provisions of Variation 1 subject to appeal are specifically identified. The Appeals Version of the PMEP is available on the Council website: https://www.marlborough.govt.nz/your-council/resource-management-policy-and-plans/proposed-marlborough-environment-plan/decisions-on-the-pmep/appeal-process/appeals-version-of-the-pmep.

15. The Appeals Version of the PMEP will continue to be updated on an ongoing basis as appeals on Variation 1 are resolved and consent orders are issued by the Environment Court.

Approach to Resolution of Appeals

16. Council has proposed formal mediation commences on the management framework appeal points only at this point in time. This mediation would occur in March and April this year. A pause in the mediation schedule has then been recommended to allow parties to consider the implications of any mediated outcomes on the management framework on spatial AMA based appeals. In late June 2024, Council would propose a mediation schedule for the spatial appeals (and potentially for outstanding and related PMEP appeals). Council and parties now await Court directions with respect to this proposal.

17. A work programme is now in place for the Schedule 1 appeals and, as such, no mediation is proposed for these appeals. See below for report on progress on this work programme.

18. Matters discussed during mediation are confidential to the parties to allow discussions to occur on a without prejudice basis. For this reason, it is not possible to update the Committee on progress with resolution of the specific appeal points or the detail of the resolution. As per the Council delegation, the Chair of the Environment and Planning Committee will be briefed about the general course of the mediation to date and on the specific agreed outcomes from that mediation.

19. In an initial response to the Environment Court, Council also advised the Court that it intended to undertake informal discussions on appeals where there were no or few S274 parties. See below for a report on progress on these appeals.

Progress with Resolution of Appeals

20. As set out above, effort to date has focussed on informal discussions on appeals where there were no or few S274 parties. These have tended to be spatial appeals relating to specific AMA. The discussions have been positive.

21. To date, agreement has been reached to resolve, or partially resolve, six appeals. Consent memoranda have been prepared in each case and were submitted to the Environment Court during November and December last year.

22. Proposals to resolve other appeals or appeal points are with two appellants.

23. Discussions are continuing with two further appellants.

24. A workstream with respect to the Schedule 1 appeals is underway. This involves expert input into determining what benthic information will be necessary to satisfy Council as to the potential effects on the benthos from the siting of a marine farm. A report from the technical experts is expected by March 2024.

25. All consent orders that are issued will be incorporated into the PMEP Appeals Version.

Next Steps

26. After submitting the case management memorandum, Council and parties are awaiting Court directions with respect to Council's proposed format, structure and timing for mediation.

27. In the meantime, Council will pursue resolution of four further appeals, as detailed in this report, through informal mediation of Variation 1 appeals.

28. Progress with the resolution of appeals on Variation 1 will continue to be regularly reported to the Committee through future agenda items.

Author	Pere Hawes, Manager Environmental Policy
Authoriser	Hans Versteegh, Manager of Environmental Policy, Science and Monitoring

Attachment 1

Lodgment #	Appellants
ENV-2023-CHC-38	Kuku Holdings Limited
ENV-2023-CHC-39	Vincent Smith
ENV-2023-CHC-47	Clova Bay Residents Association Incorporated
ENV- 2023-CHC-48	Kenepuru and Central Sounds Residents Association Incorporated
ENV- 2023-CHC-49	Apex Marine Farm Limited
ENV- 2023-CHC-50	Aroma (N.Z.) Limited and Aroma Aquaculture Limited
ENV- 2023-CHC-51	Jonathan Tester and Ciaran Hughes
ENV- 2023-CHC-52	Talleys Group Limited
ENV- 2023-CHC-53	Canantor Mussels Limited, KPF Investments Limited & Parkhurst Enterprises General Partner Limited
ENV- 2023-CHC-54	Shane McCarthy
ENV- 2023-CHC-55	Port Gore Partnership and Slade King & King Limited
ENV- 2023-CHC-56	Carl Elkington, Tui Elkington, Shane McCarthy, Talleys Group Limited, Kapua Marine Farms Ltd, Aroma (N.Z.) Limited & Aroma Aquaculture Limited
ENV- 2023-CHC-57	Kapua Marine Farms Limited
ENV- 2023-CHC-58	P H Redwood & Company Limited & PHR Processing Limited
ENV- 2023-CHC-59	KPF Investments Limited & United Fisheries Limited
ENV- 2023-CHC-60	Ngāti Rārua Ātiawa Iwi Trust Board
ENV- 2023-CHC-61	Marine Farming Association Incorporated & Aquaculture NZ
ENV- 2023-CHC-62	Marine Farming Association Incorporated
ENV- 2023-CHC-63	Clearwater Mussels Limited
ENV- 2023-CHC-64	David Hogg & PB Partnership
ENV- 2023-CHC-65	MacLab (NZ) Limited & MacLab (NZ) Marine Assets Limited
ENV- 2023-CHC-66	Marlborough Aquaculture Limited
ENV- 2023-CHC-67	Te Rūnanga o Kaikōura and Te Rūnanga o Ngāi Tahu
ENV- 2023-CHC-68	Ngāi Tahu Seafood Resources Limited
ENV- 2023-CHC-69	Robert & Simon Pooley
ENV- 2023-CHC-70	Scott Madsen Family Trust

Lodgment #	Appellants
ENV-2023-CHC-71	Helen Tester, Ronald Bothwell & Rosemary Bothwell
ENV-2023-CHC-72	Tory Channel Aquaculture Limited
ENV-2023-CHC-73	Sanford Limited
ENV-2023-CHC-74	Hori (George) Elkington
ENV- 2023-CHC-76	Ayakulik Limited

12. Appeals on the PMEP

(The Chair) (Report prepared by Pere Hawes) **M100-09-01**

Purpose of Report

1. To inform the Committee of progress with resolving appeals made to the Environment Court on the PMEP.

Executive Summary

2. 51 notices of appeal on the PMEP were lodged with the Environment Court.

3. Scheduled Environment Court mediation on all topics has now been completed.

4. Good progress has been made in resolving appeals. Consent orders have been received from the Court resolving all appeals in Topic 2: Water Allocation and Use and Topic 13: Water Quality.

5. There are two consent memoranda currently being considered by the Court.

6. Aquaculture interests have withdrawn a significant number of appeal points subsequent to the public notice of the Variation 1 decision. Work is ongoing to consider the relationship between outstanding PMEP appeals, and the Variation 1 decision and appeals.

7. With the gazettal of the NPS for Indigenous Biodiversity, parties are considering how the NPS direction may influence appeals placed on hold pending that gazettal.

RECOMMENDATION

That the report be received.

Background/Context

8. The PMEP Hearings Panel publicly notified their decision on the PMEP on 22 February 2020.

9. The Environment Court received 51 notices of appeal. The list of appellants is shown in Attachment 1. The full notices of appeal are available on the Council website: https://www.marlborough.govt.nz/your-council/resource-management-policy-and-plans/proposed-marlborough-environment-plan/decisions-on-the-pmep/appeal-process/appeals-received. There were a total of 1307 appeal points.

10. The Environment Court manages all appeal processes in accordance with their Practice Note 2023. There are typically three options. The matters subject to appeal can be resolved between the parties (informal mediation), they may be resolved through Court assisted mediation (formal mediation), or they may proceed to Court hearing (in which case the Environment Court determines the outcome). Appellants may also withdraw their notice of appeal.

11. In accordance with Council's Instrument of Delegation, any agreed settlement between the parties achieved through mediation must be approved by either the Manager of Environmental Policy or the Manager of Environmental Policy, Science and Monitoring, or otherwise deferred back to the Committee. The Managers are required to consult with the Chair as part of the process of reaching agreement.

12. An agreement to resolve appeals from either formal or informal mediation is referred to as a "consent memorandum". If the Court agrees to the mediated agreement, it confirms the agreement by way of a Court decision called a "consent order".

13. Given the number of appeal points (1307), the resolution of appeals has been a focus of the work programme of the Environmental Policy Group for the past three years and continues to be so. However, given the progress with the resolution appeals documented in previous reports to the Committee, being able to make the PMEP operative or operative in part is getting closer. It is anticipated that this step will occur this calendar year.

MEP Appeals Version

14. An appeals version of the PMEP has been produced, identifying provisions that are subject to appeal. This is available on the Council website: https://www.marlborough.govt.nz/your-council/resource-management-policy-and-plans/proposed-marlborough-environment-plan/decisions-on-the-pmep/appeal-process/appeals-version-of-the-pmep. The PMEP Appeals Version is being updated on an ongoing basis as appeals are resolved and consent orders are issued by the Environment Court.

Progress with resolution of appeals

15. To date, 16 appeals have been resolved in full and five appeals have been withdrawn. The status of all appeals is recorded in Attachment 1. There are a total of 35 notices of appeal remaining.

16. Progress with resolution of appeals by topic is included in Attachment 2. Most outstanding appeal points fall within the natural character, landscape or indigenous biodiversity topics. The majority of these appeal points are now linked to appeals on Variation 1. Some appeal points in the indigenous biodiversity topic were on hold pending the gazettal of the NPSIB. The NPSIB has since been gazetted, and the parties are reassessing their positions to establish whether progress can now be made.

17. A total of 52 consent orders have been issued by the Environment Court.

18. Since the last report to the Environment and Planning Committee on 16 November 2023, eight additional consent orders have been issued by the Court. Importantly, these include resolution of all appeals on the water allocation and use topic and the water quality topic.

19. Two further consent memoranda have been submitted to the Environment Court for its consideration in that time.

20. At this point in time, only nine appeal points are to be heard by the Environment Court, likely in two fixtures.

21. Where there are outstanding appeal points, either workstreams are in place to progress resolution or the appeal points are on hold pending other processes. The details are set out below.

Environment Court Mediation

22. Matters discussed during mediation are confidential to the parties to allow discussions to occur on a without prejudice basis. For this reason, an update on progress with resolution of the specific appeal points or the detail of the resolution is unable to be provided to the Committee as part of this agenda item. As per the Council delegation, the Chair of the Environment and Planning Committee was briefed about the general course of the mediation to date and on the specific agreed outcomes from that mediation.

23. The mediation process is overseen by an Environment Court Commissioner.

24. Environment Court mediation has now been completed for all 22 topics. In total, there were more than 80 days of mediation over a period of two and a half years.

25. All consent orders issued by the Environment Court referenced in this report can be accessed here: https://eservices.marlborough.govt.nz/programmes/ListProgrammeEvents?id=2621046#info-2677877.

26. As recorded above, all consent orders are incorporated into the PMEP Appeals Version.

Natural Character

27. Mediation on the Natural Character Topic has involved lengthy mediation and discussions between the parties since February 2021, as set out in previous reports to the Committee.

28. The outstanding appeal point on the natural character overlays as they apply in Cook Strait has been resolved. A consent memorandum was submitted to the Court on 13 December 2023. A consent order is now pending.

29. Appeals on Policies 6.2.1 and 6.2.2 have now been resolved and a consent memorandum has been submitted to the Court. A consent order was issued by the Court on 31 October 2023.

30. Many of the remaining appeal points in the Natural Character Topic are on hold pending the outcome of Variation 1 appeals (see below).

Indigenous Biodiversity

31. Mediation on the Indigenous Biodiversity has involved lengthy mediation and discussions between the parties since June 2021, as set out in previous reports to the Committee.

32. There are outstanding appeal points in this topic that were deferred pending the gazettal of the National Policy Statement for Indigenous Biodiversity (NPSIB). The NPSIB was gazetted on 7 July 2023 and it came into effect on 4 August 2022. There are proposals (put forward by Council) currently in circulation with the parties to resolve the outstanding appeal points.

33. There was one outstanding matter for indigenous vegetation clearance rules to be resolved relating to clearance in the Coastal Living Zone. Following further informal mediation, this appeal point has been resolved. A consent memorandum was lodged with the Environment Court on 25 September 2023. A consent order was issued by the Court on 31 October 2023.

34. Further mediation on appeals to Appendix 3, criteria for ecological significance, occurred on 17 May 2023. There remain differences between some of the parties, but discussions continue. Those discussions include the effect of the NPS, which also contains criteria for ecological significance for terrestrial environments. The Court has allowed the parties further time to consider the implications of the NPSIB. It is likely that the parties will seek further mediation on one outstanding point.

35. As previously reported, evidence has been exchanged for the appeal point related to King Shag habitat and Important Bird Areas that was not resolved through mediation. Friends of Nelson Haven and Tasman Bay are seeking a consenting regime apply to bottom trawling and dredging in the Marlborough Sounds Important Bird Area. The parties are awaiting Court directions regarding the timing of a hearing.

Transportation

36. There are two outstanding matters in this topic: Managing reverse sensitivity effects adjoining State Highway and the Main North Line rail; and Policy 13.15.2 (which manages adverse effects on marine transportation).

37. There is an active workstream on the Waka Kotahi and KiwiRail appeals related to managing reverse sensitivity effects adjoining State Highway and the Main North Line rail and good progress is being made.

38. The appeal on Policy 13.15.2 is linked to appeals on Variation 1 appeals (see below).

Natural hazards

39. The outstanding appeal point in this topic relates to the status of maimai. The appellant has now confined the relief requested to one location. The outstanding appeal point is on hold pending the outcome of another non-RMA planning process that applies to that location.

Waste and discharge of contaminants to land

40. The only outstanding appeal point in this topic relates to the discharge of stormwater to land. There is an ongoing workstream seeking to resolve this appeal point.

Forestry

41. The remaining two appeal points are on hold pending the outcome of discussions considering the influence of the NPS for Indigenous Biodiversity on outstanding Topic 5 appeals (see above). The proposals highlighted above for the Indigenous Biodiversity topic may influence the outcome of these appeal points.

Coastal

42. The only remaining appeal in this topic is on coastal occupancy charge provisions. The appellants, the Marine Farm Association/Aquaculture NZ and New Zealand Kind Salmon and Council were able to reach agreement on the relief sought. This would have seen the charges included within the PMEP for certainty. The charges would be based on the background material that was prepared for the notification of the PMEP. The S274 parties do agree with the methodology by which charges are set. Timetabling directions were issued by the Court and all evidence has been exchanged between the parties and submitted to the Court. The parties are awaiting Court directions regarding the timing of a hearing.

Water Quality

43. As set out in previous reports to the Committee, all appeal points on this topic were either resolved at mediation or subsequently resolved through further discussions between the parties.

44. All but five appeal points were resolved at mediation. A consent memorandum was lodged with the Environment Court on 11 July 2023. A consent order was issued by the Court on 31 October 2023.

45. The resolution of the five outstanding appeal points was previously reported to the Committee and the relevant consent memoranda were submitted to the Court. The relevant consent orders were issued by the Court on 1 November 2023.

Water Allocation and Use

46. All appeal points were resolved at mediation. A consent memorandum was lodged with the Environment Court on 19 July 2023. A consent order was issued by the Court on 31 October 2023.

Other topics

47. Mediation has previously resolved all appeal points for the following topics: Topic 1: Cultural Matters, Topic 11: Rural, Topic 12: Air Quality, Topic 14: Soil Quality and Land Disturbance, Topic 17: Energy, Topic 17: Climate Change, Topic 18: Nuisance, Topic 20: Zoning.

Relationship with Variation 1: Marine Farming

48. A significant number of appeal points made by marine farmers were placed on hold during mediation pending the notification of a decision on Variation 1. This was especially the case for appeal points in Topic 3: Natural Character, Topic 4: Landscape and Topic 5: Indigenous Biodiversity.

49. The decision on Variation 1 was publicly notified on 19 May 2023.

50. The Court issued a minute setting out a formal period by which appellants were to confirm appeals to be withdrawn or otherwise pursued. A comprehensive response was provided by Aquaculture Interests on 28 July 2023 and a significant number of PMEP appeal points were formally withdrawn.

51. Council subsequently prepared a case management memorandum on 11 August 2023 seeking further time to better understand the nature of the relationship between outstanding PMEP appeal points and Variation 1 appeals.

52. In response to a further Court minute dated 23 August 2023, the Council has proposed a structure to the mediation of Variation 1 appeals. However, Council has reiterated that it needs to better

understand the relationship between the Variation 1 appeals and outstanding PMEP appeals, and this requires engagement with the appellants.

53. On 15 September 2023, Aquaculture Interests updated their earlier advice and withdrew further PMEP appeal points. The number of outstanding PMEP related to Variation 1 is reducing.

54. Council provided a final response to the Court on how to conduct mediation on Variation 1 on 22 December 2023. It is possible that some outstanding PMEP appeals may be able to be mediated conjunctively with spatially appeals on Variation 1.

Next steps

55. A total of two consent memoranda are now with the Court for consideration. Any resulting consent orders issued by the Court will be reported to the Committee through future updates.

56. Informal mediation on outstanding matters is ongoing. The results will be reported to the Environment Court in accordance with the Court's directions.

57. A significant focus of future effort will be addressing the relationship between outstanding PMEP appeals and Variation 1 appeals.

58. With the gazettal of the NPS for Indigenous Biodiversity, parties are considering how the NPS direction may influence appeals placed on hold pending that gazettal.

59. Progress with the resolution of appeals will continue to be regularly reported to the Committee through future agenda items.

60. Given the good progress already made, an audit of outstanding appeals is underway to establish the extent of provisions that may be able to be made operative. The results of the audit will be reported to the Committee.

Author	Pere Hawes, Manager Environmental Policy
Authoriser	Hans Versteegh, Manager of Environmental Policy, Science and Monitoring

Attachment 1

Appellant		Environment Court Reference	Status
Dominion Salt Limited v Marlborough District Council		ENV-2020-CHC-21	Resolved
GJ Gardner v MDC		ENV-2020-CHC-31	Resolved
Timberlink New Zealand Limited v MDC		ENV-2020-CHC-30	Withdrawn
Talley's Group Limited v MDC		ENV-2020-CHC-32	Resolved
Nelson Marlborough Fish and Game v MDC		ENV-2020-CHC-35	
Chorus New Zealand Limited and Spark New Zealand Trading Limited v MDC		ENV-2020-CHC-37	Resolved
Okiwi Bay Ratepayers Association v MDC		ENV-2020-CHC-38	Resolved
Te Rūnanga a Rangitāne o Wairau v MDC		ENV-2020-CHC-39	Resolved
Minister of Conservation v MDC		ENV-2020-CHC-42	
Aroma (N.Z.) Limited and Aroma Aquaculture Limited v MDC		ENV-2020-CHC-45	
Te Rūnanga o Kaikōura and Te Rūnanga o Ngāi Tahu v MDC		ENV-2020-CHC-46	
McGuinness Institute v MDC		ENV-2020-CHC-48	Resolved
Matthew Burroughs Broughan v MDC		ENV-2020-CHC-52	Resolved
Port Marlborough New Zealand Limited v MDC		ENV-2020-CHC-49	
Trustpower Limited v MDC		ENV-2020-CHC-50	
The New Zealand King Salmon Co. Limited v MDC		ENV-2020-CHC-51	
Jennifer Susan Cochran v MDC		ENV-2020-CHC-53	Resolved
One Forty One (previously Nelson Forests) v MDC		ENV-2020-CHC-54	
Colonial Vineyard Ltd v MDC		ENV-2020-CHC-59	Withdrawn
Villa Maria Estate Limited v MDC		ENV-2020-CHC-61	Withdrawn
New Zealand Transport Agency v MDC		ENV-2020-CHC-56	
Transpower New Zealand Limited v MDC		ENV-2020-CHC-68	
Royal Forest and Bird Protection Society of New Zealand Incorporated v MDC		ENV-2020-CHC-64	
KiwiRail Holdings Limited v MDC		ENV-2020-CHC-57	
J V Meachen v MDC		ENV-2020-CHC-69	
Te Runanga o Ngati Kuia Trust v MDC		ENV-2020-CHC-70	Resolved
Brentwood Vineyards Limited and others v MDC		ENV-2020-CHC-66	Resolved
BP Oil New Zealand Limited, Mobil Oil New Zealand Limited and Z Energy Limited v MDC		ENV-2020-CHC-72	Resolved
Horticulture New Zealand v MDC		ENV-2020-CHC-72	
Rebecca Light v MDC		ENV-2020-CHC-79	Resolved
East Bay Conservation Society		ENV-2020-CHC-78	

Appellant		Environment Court Reference	Status
Incorporated v MDC			
Minister of Defence v MDC		ENV-2020-CHC-76	
Levide Capital Ltd v MDC		ENV-2020-CHC-65	Withdrawn
Delegat Limited v MDC		ENV-2020-CHC-75	Resolved
AJ King Family Trust and SA King Family Trust v MDC		ENV-2020-CHC-73	
Environmental Defence Society Incorporated v MDC		ENV-2020-CHC-67	
Federated Farmers of New Zealand v MDC		ENV-2020-CHC-58	
Sanford Limited v MDC		ENV-2020-CHC-60	
Friends of Nelson Haven and Tasman Bay Inc		ENV-2020-CHC-33	
Omaka Valley Group Inc		ENV-2020-CHC-34	Resolved
Heritage New Zealand Pouhere Taonga		ENV-2020-CHC-36	Resolved
HARO Partnership		ENV-2020-CHC-40	
KPF Investments Limited and United Fisheries Limited		ENV-2020-CHC-41	
Te Ātiawa o Te Waka-a-Māui Trust		ENV-2020-CHC-43	Withdrawn
Beleve Limited, RJ Davidson Family Trust and Treble Tree Holdings Limited		ENV-2020-CHC-44	
Goulding Trustees Limited and Shellfish Marine Farms Limited		ENV-2020-CHC-47	
Clearwater Mussels Limited and Talley's Group Limited		ENV-2020-CHC-55	
Oldham and Others		ENV-2020-CHC-62	
Apex Marine Farm Limited		ENV-2020-CHC-63	
Marine Farming Association Incorporated and Aquaculture New Zealand		ENV-2020-CHC-74	
Just Mussels Ltd, Tawhitinui Greenshell Ltd and Waimana Marine Ltd		ENV-2020-CHC-77	

Attachment 2

Topic	Status
1: Cultural Matters	Completed: All appeals resolved
2: Water Allocation and Use	Completed: All appeals resolved
3: Natural Character	Substantial progress. Some appeal points on hold pending Variation 1 appeals.
4: Landscape	Substantial progress. Some appeal points on hold pending Variation 1 appeals.
5: Indigenous Biodiversity	Substantial progress. Some appeal points on hold pending Variation 1 appeals. Matters related to NPSIB now being addressed.
6: Public Access and Open Space	One remaining appeal point
7: Heritage Resources	Completed: All appeals resolved
8: Natural Hazards	One remaining appeal point
9: Urban Environments	Completed: All appeals resolved
10: Coastal Environments	One remaining appeal point. Appeal point to be heard by the Court.
11: Rural Environments	Completed: All appeals resolved
12: Air Quality	Completed: All appeals resolved
13: Water Quality	Completed: All appeals resolved
14: Soil and Land Disturbance	Completed: All appeals resolved
15: Waste & Discharges to Land	Two remaining appeal points on one sub-topic
16: Transportation	Three remaining appeal points on two sub-topics
17: Energy & Climate Change	Completed: All appeals resolved
18: Nuisance effects	Completed: All appeals resolved
19: Utilities	Majority of appeal points resolved
20. Zoning	Completed: All appeals resolved
21: Forestry	Two remaining appeal points on one sub-topic. On hold pending NPSIB (see Topic 5).
22: Miscellaneous	One remaining appeal point

13. National Policy Statement for Freshwater Management – Post Election

(The Chair) (Report prepared by Sarah Pearson) **M100-14-05-02**

Purpose of Report

1. To provide an update on the new coalition Government's intention regarding the National Policy Statement for Freshwater Management 2020 (NPSFM 2020).

Executive Summary

2. The Essential Freshwater package was introduced by the Labour Government in late 2020 and created additional requirements for Councils in respect of freshwater management and protecting freshwater ecosystem health. This included substantial changes to the NPSFM that the Council is required to give effect to through the Proposed Marlborough Environment Plan (PMEP).

3. In late 2023 the new coalition Government released two coalition agreements which confirmed pre-election party positions that changes would be made to current freshwater legislation.

4. Both agreements confirmed the NPSFM 2020 is to be replaced with the process expected to take between 18 to 24 months, including a robust and full consultation process with all stakeholders including Iwi and the public.

5. The original statutory deadline for councils to give effect to the NPSFM 2020 through notification of a freshwater plan change was 31 December 2024. In mid-December 2023 the Government announced that councils would be given an extra three years, until 31 December 2027, to notify freshwater plan changes which would provide time to replace and start implementation on the new NPS-FM.

6. The change to the statutory deadline was undertaken through the Resource Management (Natural and Built Environment and Spatial Planning Repeal and Interim Fast Track consenting) Bill, via changes to Section 80(A)(4)(b) of the Resource Management Act 1991 (RMA). This Bill was passed on the 24 December 2023.

7. At the time of writing the only actual change to the NPSFM 2020 is the extension to the deadline for notifying plan changes now required by December 2027. There has been no further information of what a replacement NPS-FM will look like. As such staff will continue to progress appropriate workstreams relating to freshwater.

8. The direction of Council's NPSFM work programme is however likely to change within the next two years. Staff will continue to closely monitor Government information on the NPSFM review and provide updates to the committee when changes occur.

RECOMMENDATION

That the report be received.

Background/Context

9. In late 2020 the previous Labour Government released its Essential Freshwater package which created additional requirements for all councils in respect of freshwater management and protecting freshwater ecosystem health. This included a new NPSFM 2020 that the Council is required to give effect to through a variation to the PMEP.

10. In late November 2023 the new coalition Government released two agreements: one between the New Zealand National Party and the New Zealand First Party and the other between the New Zealand

National Party and the Act Party. Both agreements confirmed pre-election party positions that changes would be made to the current freshwater statements and regulations.

11. The National Party and New Zealand First Party agreement detailed that the NPFM 2020 and the National Environmental Standards for Freshwater would be replaced to better reflect the interests of all water users.

12. The National Party and the Act Party agreement provided slightly more detail with the replacement of the NPSFM 2020 to rebalance Te Mana o te Wai to better reflect the interests of all water users, and to allow district councils more flexibility in how they meet environmental limits and seek advice on how to exempt councils from obligations under the NPSFM 2020 as soon as practicable.

13. The statutory deadline to give effect to the NPSFM 2020 through notification of a freshwater plan change was 31 December 2024. However, the coalition agreements confirmation of the replacement of the NPSFM raised concerns across all regional and unitary councils particularly around the requirements to continue to meet the deadline.

14. In early December 2023 Council wrote to Ministers Honourable Penny Simmonds and Honourable Chris Bishop highlighting the uncertainty that the coalition agreements had raised regarding ongoing priority of resource commitments to implementing the NPSFM 2020, encouraging the ministers to give attention to resolving this uncertainly especially in light of the statutory deadline being only a year away.

15. A Government press release on the 14 December 2023 announced, “that work on the NPS-FM replacement would start immediately with the process being expected to take between 18 to 24 months and include a robust and full consultation process with all stakeholders including iwi and the public.”

    Government takes first steps towards pragmatic and sensible freshwater rules | Beehive.govt.nz

16. The release also indicated that “to avoid unnecessary costs and compliance duplication for councils, Cabinet had decided to remove the requirement for councils to implement freshwater plans by the end of 2024.” Councils would be given “an extra three years, until 31 December 2027, to notify their freshwater plan changes and provide time to replace and start implementation on the new NPS-FM”.

17. It was indicated that this change to the statutory timeline would be done via provisions included in the Natural and Built Environment and Spatial Panning Repeal Bill which the Government had indicated would be undertaken prior to Christmas.

18. On the 24 December 2023 the Resource Management (Natural and Built Environment and Spatial Planning Repeal and Interim Fast Track consenting) Bill was passed. The Bill’s explanatory note included *“The Bill also extends the RMA freshwater planning deadline in order to provide time to replace the National Policy Statement for Freshwater Management 2020.”* This was done through changes to Section 80A(4)(b) of the RMA which replaced *“31 December 2024”* with *“31 December 2027”.*

    Resource Management (Natural and Built Environment and Spatial Planning Repeal and Interim Fast-track Consenting) Bill 8-1 (2023), Government Bill – New Zealand Legislation

Council’s NPSFM Work Programme

19. Prior to the confirmed coalition Government’s position on the NPSFM 2020 and as reported to previous committee meetings, Council staff were actively undertaking a work programme to notify a variation to the PMEP by the 31 December 2024 to give effect to the NPSFM 2020.

20. Currently the only actual change to the NPSFM 2020 is an extension to the deadline for notifying plan changes now required by December 2027. There has been no further information of what a replacement NPS-FM will look like. As such staff will continue to progress appropriate workstreams relating to freshwater.

21. A full assessment on which workstreams will continue is being done, and a revised work programme is expected to be presented to the Environment and Planning Committee in April 2024. It is hoped that in the intervening period further directions or guidance may be given by the Government.

22. At the end of 2023 staff had just completed the second round of community engagement which sought to confirm Freshwater Management Unit (FMU) values and get feedback on proposed FMU visions and environmental outcomes. The submission period closed on 15 December 2023 and staff are currently collating and reviewing the 50 submissions that were received. Details of these submissions will be presented to the Environment and Planning Committee in March 2024.

23. The extension of time is seen as a welcome opportunity in regard to continuing the ongoing work with Marlborough Iwi. This will enable a fuller understanding of māturanga Māori and Māori freshwater values, Iwi visions, and cultural monitoring which is hoped to lead to the development of robust frameworks to include within the PMEP.

24. Despite the uncertainly relating to what a replacement NPSFM might look like, regionally there is much scientific work being done to advance knowledge about our local freshwater and its ecosystems, an example being the Wairau Aquifer Project. Again, this time extension is seen as a benefit to provide further opportunity to complete such projects so that policy decisions can be made on up-to-date scientific information.

25. The work programme review will look to assess the current NPSFM 2020 requirements to those that are within the PMEP and are regionally important, aligning with the Council's duty under the RMA to sustainably manage our freshwater resources. Focus will be on continuing to improve our knowledge in the science space and take advantage of the time extension to continue to build our relationships with Marlborough iwi and working together to maintain and improve where necessary our freshwater management in both water quality and quantity.

Next steps

26. Staff will continue to collate, review and analyse submissions to the second round of community engagement, undertake a review of the NPSFM work programme and continue with planned hui with Marlborough Iwi.

27. The direction of Council's NPSFM work programme is likely to change in the next two years, Staff will continue to closely monitor Government information on the NPSFM review, liaise with the Ministry of Environment as needed, and report to this Committee when changes occur.

Author	Sarah Pearson, Strategic Planner
Authoriser	Pere Hawes, Manager of Environmental Policy

14. New Zealand King Salmon Compliance Monitoring 2022/2023

(Clr Minehan) (Report prepared by Claire Frooms) **U140294; U140295; U140296; U160675; U150081; U040217; U040412; MFL001**

Purpose of Report

1. The purpose of this report is to provide the Environment and Planning Committee with an overview of the compliance levels achieved by the New Zealand King Salmon (NZKS) Marine Farms in the Marlborough Sounds following monitoring conducted by Cawthron Institute and SLR in 2022/2023.

Executive Summary

2. This report details the compliance assessments made at NZKS's marine farms in the Marlborough Sounds. Nine farms were reported on, six of which have relevant monitoring resource consent conditions. Of these two were found to be non-compliant; two were technically non-compliant and two were compliant. There was a marked improvement in the levels of compliance at the farms overall in this latest monitoring period.

3. This report details the compliance levels with the quantitative monitoring of the Enrichment Stage (ES), Environmental Quality Standards (EQS) and the copper and zinc levels at the farms.

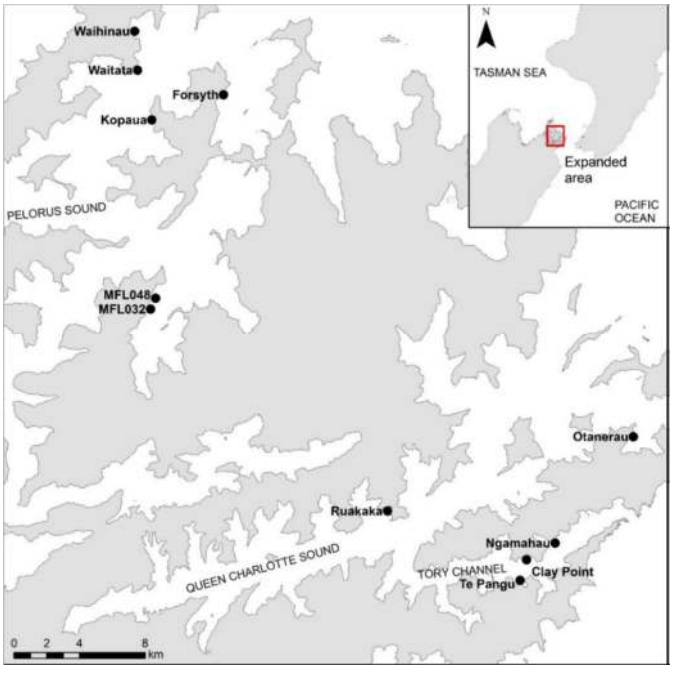
RECOMMENDATION

That the information be received.

Background/Context

4. NZKS is the principal finfish farming company in the Marlborough Sounds and currently has consent to operate finfish farms at 11 sites in the Region (Figure1). Nine of these sites were active at some point during the 2022/2023 monitoring period. The remaining two sites were fallowed.

5. Figure 1: Location of the New Zealand King Salmon consented areas for salmon farming in the Marlborough Sounds.



6. Each of these finfish farms requires a coastal permit to occupy and operate in a public space.

7. This item covers the monitoring results from annual monitoring at nine existing locations: Forsyth Bay; Waihinau Bay; Ruakaka Bay; Otanerau Bay (low flow farms) and Clay Point; Te Pangu Bay; Ngamahau; Waitata Reach; Kopaua (high flow farms).

8. The two farm locations at Crail Bay were not occupied in 2022/2023, no monitoring is required by resource consent and no voluntary monitoring was conducted.

9. Whilst all nine of the monitored marine farms have resource consents, not all provide conditions requiring monitoring. NZKS voluntarily monitor the Waihinau, Ruakaka and Otanerau Bay farms as their consents have no monitoring requirement in relation to their discharges. The extent of this voluntary monitoring changed and a full assessment of compliance with the BMP was not possible due to the reduced information provided by the consent holder.

10. In late 2014 the Benthic Standards Working Group agreed to the BMP to manage farms within environmental limits. The objectives of the BMP guidelines include:

    a) To develop a standardised and accepted protocol to assess environmental compliance;

    b) To support environmentally responsible and profitable aquaculture;

    c) To minimise impacts on the environment and thereby minimising risks to biodiversity and associated ecosystem processes;

    d) To ensure sustainable management.

11. The Cawthron Institute environmental monitoring reports provide information for each of the High Flow farms on the biochemical and biological state of the seabed, and the nutrient status of the water column. Copper and zinc levels in the seabed sediments are also measured.

12. SLR provided monitoring reports for each of the low flow farms to determine compliance with the farms consent conditions. These were granted prior to development of the BMP-Benthic guidelines. Compliance with the BMP has not been assessed for these farms.

Enrichment Stage Conditions

13. Enrichment of the seabed is caused by fish waste and uneaten fish food falling onto the seabed. The state of the seabed was assigned an enrichment stage (ES) score by Cawthron Institute. Some of the resource consents set out a maximum permitted ES or Environmental Quality Standard (EQS) level. Where there is a conflict between the BMP and resource consent conditions, the resource consent conditions prevail.

14. The BMP guidelines adopt a quantitative enrichment stage scale to characterise the benthic state. The guidelines specify an industry operational goal of ES ≤ 5.0 within the zone of maximal effect (“ZME”). An ES of 5.0 is described as very high enrichment.

15. Enrichment causes changes in the types and number of organisms which inhabit the sediments. Excessive levels can harm seabed life as oxygen is depleted and anaerobic processes take over.

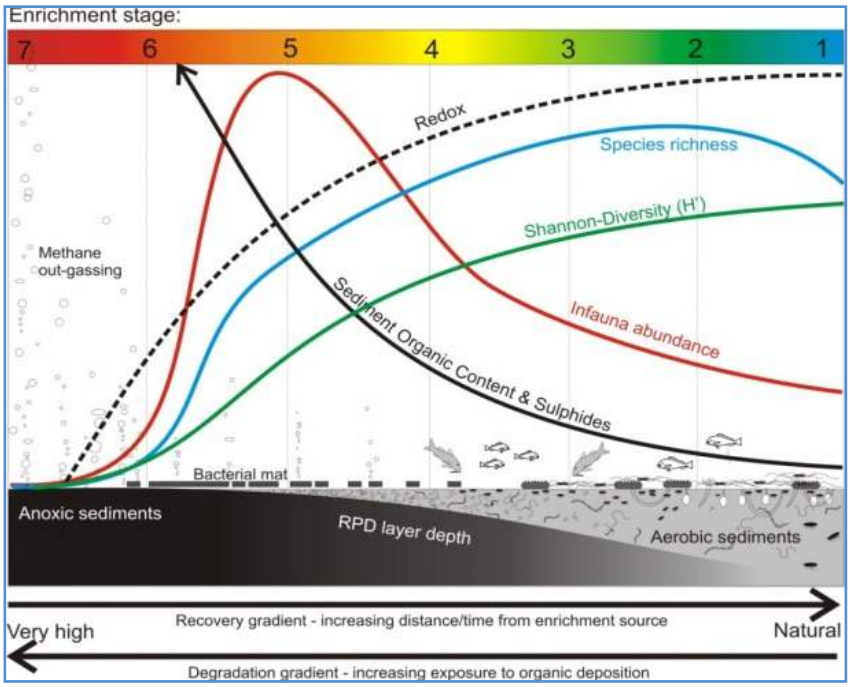
16. The NZKS finfish farms are broadly divided into “low flow” (<10 cm/s) and “high flow” (>10cm/s) sites.

17. Farms in low flow environments receive greater concentrations of organic material beneath the pens than higher flow farms where particles are more widely dispersed. This makes managing low flow farms challenging as the seabed can be overwhelmed and stop assimilating organic material even under low levels of feed discharge.

18. Figure 2 shows a stylised depiction of a typical enrichment gradient experienced at low flow sites (from Keely, 2013), showing generally understood responses in commonly measured environmental variables (species richness, infauna abundance, sediment organic content and sulfides and redox).

Apparent Redox Potential Discontinuity depth (aRPD) and prevalence of bacteria (*Beggiatoa* sp.) mats and methane / HS out-gassing also indicated. The gradient spans from pristine conditions on the right (ES = 1.0) to highly enriched azoic conditions on the left (ES = 7.0).

19. Figure 2: Enrichment stages



20. In order to achieve compliance with resource consent conditions at some of the marine farms full compliance with the EQS must be achieved. This includes the quantitative ES score at each zone and also qualitative standards at each zone, as shown in Table 1.

21. Table 1: EQS requirements for Waitata Reach Marine Farm

Zone	Compliance Monitoring Location	EQS
Zones 1 & 2 – beside and beneath the net pens	Measured beneath the edge of the net pens – "Pen" Stations on **Figure 3**	ES≤ 5.0 No more than one replicate core with no taxa (azoic), No obvious, spontaneous out-gassing (H_2S/methane), Bacteria mat (*Beggiatoa)* coverage not greater than localized/patchy in distribution.
Zone 3 – near to the net pens	Measured at the Zone 2/3 Boundary Stations on **Figure 3**	ES≤ 4.0 Infauna abundance is not significantly higher than at corresponding "Pen" Station Number of taxa >75% of number at relevant / appropriate reference Station(s)
Zone 4 – outside the footprint area	Measured at the Zone 3/4 Boundary Stations on **Figure 3**	ES < 3.0 Conditions remain statistically comparable with relevant / appropriate reference Station(s)

22. Monitoring results provided by Cawthron Institute in relation to the High Flow sites show that the farms are in compliance with both resource consent conditions and BMP guidelines in relation to the overall ES levels.

23. Monitoring at the low flow sites was carried out by SLR. Changes in reporting only allows a comparison with the last year's results as the reports and analysis does not follow BMP guidelines. Compliance with the BMP for the low flow farms is therefore not assessed this year.

24. Figure 3: General descriptions and primary environmental characteristics for the seven enrichment stages as outlined in the BMP Guidelines

Table 3: General descriptions and primary environmental characteristics for the seven enrichment stages (see Keeley et al. 2012 a,b). HF = High Flow sites (mean mid-water current speeds ≥ 10 cm.s^{-1}), LF = Low Flow sites (< 10 cm.s^{-1}).

ES	General description		Environmental characteristics
1.0	***Pristine end of spectrum.*** Clean unenriched sediments. Natural state, but uncommon in many modified environments	LF	Environmental variables comparable to an unpolluted / un-enriched pristine reference station.
		HF	As for LF, but infauna richness and abundances naturally higher (about 2 × LF) and %organic matter (OM) slightly lower.
2.0	***Minor enrichment.*** Low-level enrichment. Can occur naturally or from other diffuse anthropogenic sources. 'Enhanced zone.'	LF	Richness usually greater than for reference conditions. Zone of 'enhancement' – minor increases in abundance possible. Mainly a compositional change. Sediment chemistry unaffected or with only very minor effects.
		HF	As for LF
3.0	***Moderate enrichment.*** Clearly enriched and impacted. Significant community change evident.	LF	Notable abundance increase; richness and diversity usually lower than reference station. Opportunistic species (i.e. Capitellid worms) begin to dominate.
		HF	As for LF
4.0	***High enrichment.*** Transitional stage between moderate effects and peak macrofauna abundance. Major community change.	LF	Diversity further reduced; abundances usually quite high, but clearly sub-peak. Opportunistic species dominate, but other taxa may still persist. Major sediment chemistry changes (approaching hypoxia).
		HF	As above, but abundance can be very high while richness and diversity are not necessarily reduced.
5.0	**Very high enrichment.** State of peak macrofauna abundance.	LF	Very high numbers of one or two opportunistic species (i.e. Capitellid worms, nematodes). Richness very low. Major sediment chemistry changes (hypoxia, moderate oxygen stress). Bacterial mat usually evident. Out-gassing occurs on disturbance of sediments.
		HF	Abundances of opportunistic species can be extreme (10 × LF ES 5.0 densities). Diversity usually significantly reduced, but moderate richness can be maintained. Sediment organic content usually slightly elevated. Bacterial mat formation and out-gassing possible.
6.0	***Excessive enrichment.*** Transitional stage between peak abundance and azoic (devoid of any organisms).	LF	Richness and diversity very low. Abundances of opportunistic species severely reduced from peak, but not azoic. Total abundance low but can be comparable to reference stations. %OM can be very high (3–6 × reference).
		HF	Opportunistic species strongly dominate, with taxa richness and diversity substantially reduced. Total infauna abundance less than at stations further away from the farm. Elevated %OM and sulfide levels. Formation of bacterial mats and out-gassing likely.
7.0	**Severe enrichment.** Anoxic and azoic; sediments no longer capable of supporting macrofauna with organics accumulating.	LF	None, or only trace numbers of infauna remain; some samples with no taxa. Spontaneous out-gassing; bacterial mats usually present but can be suppressed. %OM can be very high (3–6 × reference).
		HF	Not previously observed — but assumed similar to LF sites.

25. Table 2: Enrichment stage / Benthic conditions results summary for Zone of Maximum Effects (ZME)

Low Flow Sites					
Waihinau (Flow 8.4 cm/s)	**2021/2022 Result Benthic conditions assessment**	**2022/2023 Result Benthic conditions assessment**	**Estimated increase/decrease in ES from previous year**	**RC Benthic Condition Compliance**	**BMP Compliance**
Zone 1	Bacterial mats were observed at both pen stations (50-60% coverage). Outgassing was observed upon disturbance. Sediments were considered to be anoxic but no samples were azoic.	No samples were considered to be azoic. Benthic communities were assessed as being diverse. No evidence that macrofaunal communities were highly impacted.		N/A	Not assessed
Comment	Very limited sampling and assessments at Waihinau (rapid assessment approach) mean that the 2022/23 assessment is not a full and conclusive comparison with previous years but is not required by resource consent conditions.				
Ruakaka (Flow 3.7 cm/s)	**2021/2022 Result Benthic conditions assessment**	**2022/2023 Result Benthic conditions assessment**	**Estimated increase/decrease in ES from previous year**	**RC Benthic Condition Compliance**	**BMP Compliance**
Zone 1	No bacterial mats or outgassing observed. Sediments were not considered to be anoxic. No samples were considered to be azoic. Zinc levels were elevated.	Benthic community structure indicated highly impacted environments with small areas of seabed approaching azoic.		N/A	Not assessed

Comment	Very limited sampling and assessments at Ruakaka (rapid assessment approach) mean that the 2022/23 assessment is not a full and conclusive comparison with previous years but this is not required by resource consent conditions.				
Forsyth (Flow 3.0 cm/s)	**2021/2022 Result Benthic conditions assessment**	**2022/2023 Result Benthic conditions assessment**	**Estimated increase/decrease in ES from previous year**	**RC Benthic Condition Compliance**	**BMP Compliance**
Zone 1	Some samples were indicative of anoxic conditions and one station included >20% azoic samples.	One parameter reached highly impacted, sediments contain a range of benthic infauna taxa and conditions were not azoic. There is a clear gradient of change with distance.			Not assessed
Comment	Forsyth Bay Farm was fallowed in July 2022 as a management response to the 2021/2022 monitoring results.				
Otanerau (Flow 6.0 cm/s)	**2021/2022 Result Benthic conditions assessment**	**2022/2023 Result Benthic conditions assessment**	**Estimated increase/decrease in ES from previous year**	**RC Benthic Condition Compliance**	**BMP Compliance**
Zone 1	No azoic or anoxic samples were collected. Some patchy bacterial mat cover. Outgassing observed upon disturbance. Zinc concentrations were elevated.	No azoic or anoxic samples were collected. Zinc concentrations were elevated.	No distinguishable change		Not assessed
Comment					

High Flow Sites				
Clay Point (Flow 19.6 cm/s)	**Enrichment stage (95% CI)**			
	2022/2023 Result	**Increase/decrease in ES from previous year**	**RC Condition Compliance**	**BMP Compliance**
Pen 1	4.4 (0.2)		≤ 5.0	≤ 5.0
Pen 2	3.4 (0.2)		≤ 5.0	≤ 5.0
Pen 3	3.8 (0.2)		≤ 5.0	≤ 5.0
Waitata (Flow 17.6 cm/s)	**Enrichment stage (95% CI)**			
	2022/2023 Result	**Increase/decrease in ES from previous year**	**RC Condition Compliance**	**BMP Compliance**
Pen 1	3.5 (0.3)		≤ 5.0	≤ 5.0
Pen 2	2.5 (0.1)	No change	≤ 5.0	≤ 5.0
Pen 3	3.3 (0.7)		≤ 5.0	≤ 5.0
Kopaua (Richmond) (Flow 15.7 cm/s)	**Enrichment stage (95% CI)**			
	2022/2023 Result	**Increase/decrease in ES from previous year**	**RC Condition Compliance**	**BMP Compliance**
Pen 1	4.2 (0.3)		≤ 5.0	≤ 5.0
Pen 2	3.7 (0.2)		≤ 5.0	≤ 5.0
Pen 3	3.3 (0.9)		≤ 5.0	≤ 5.0
Ngamahau (Flow 21.1 cm/s)	**Enrichment stage (95% CI)**			
	2022/2023 Result	**Increase/decrease in ES from previous year**	**RC Condition Compliance**	**BMP Compliance**
Pen 1	3.1 (0.1)		≤ 5.0	≤ 5.0
Pen 2	2.8 (0.1)		≤ 5.0	≤ 5.0
Pen 3	2.4 (0.3)		≤ 5.0	≤ 5.0
Te Pangu (Flow 15 cm/s)	**Enrichment stage (95% CI)**			
	2022/2023 Result	**Increase/decrease in ES from previous year**	**RC Condition Compliance**	**BMP Compliance**
Pen 1	4.4 (0.1)		≤ 5.0	≤ 5.0
Pen 2	3.9 (0.2)		≤ 5.0	≤ 5.0
Pen 3	4.3 (0.1)		≤ 5.0	≤ 5.0

Copper and Zinc Conditions

26. Copper and zinc can accumulate in sediments beneath finfish farming operations. Copper is the principal active agent in antifouling paints that may be applied to underwater structures. Salmon feed contains zinc as an additive for fish health, leading to its discharge in faecal matter and uneaten feed.

27. These metals do not breakdown overtime; nor are they utilised by biota at rates which would attenuate over fallowing timescales. Metals may reduce in sediment overtime through resuspension and dispersion.

28. NZKS consents granted since 2014 include conditions on copper and zinc monitoring and limits based on Interim Sediment Quality Guidelines (ISQS) of the Australian and New Zealand Environment and Conservation Council (ANZECC (2000)). These are the same standards recommended in the BMP guidelines; therefore compliance of copper and zinc levels below all nine marine farms has been assessed solely in accordance with these ANZECC ISQS concentrations.

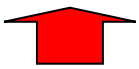
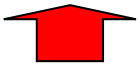
29. Table 3: ANZECC (2000) Interim Sediment Quality Guideline concentrations for copper and zinc (mg/kg

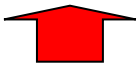
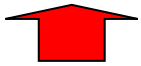
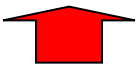
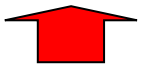
	ISQG-Low	ISQG-High
Copper	65	270
Zinc	200	410

30. There was a general trend of increasing copper and zinc levels, particularly at the low flow farms.

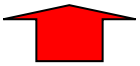
31. Overall compliance was achieved with resource consent conditions governing copper and zinc levels at the farm.

32. Table 4: Copper and Zinc Levels

Low Flow Sites				
Waihinau (Flow 8.4 cm/s)	**Copper and Zinc Levels**			
	2021/2022 Result	**Increase/decrease in results from previous year**	**RC Condition compliance**	**BMP Compliance**
Copper	Overall Pen average 26 mg/Kg		N/A	Compliant
Zinc	Overall Pen average 210 mg/Kg		N/A	Non-compliant with ISQG-Low
Ruakaka (Flow 3.7 cm/s)	**Copper and Zinc Levels**			
	2022/2023 Result	**Increase/decrease in results from previous year**	**RC Condition compliance**	**BMP Compliance**
Copper	Overall Pen average 111 mg/Kg		N/A	Non-compliant with ISQG-Low
Zinc	Overall Pen average 480 mg/Kg		N/A	Non-compliant with ISQG-High

Forsyth (Flow 3.0 cm/s)	Copper and Zinc Levels			
	2022/2023 Result	Increase/decrease in results from previous year	RC Condition compliance	BMP Compliance
Copper	Overall Pen average 49.17(±4.12) mg/Kg		N/A	Compliant
Zinc	Overall Pen average 413.3 (±24.1) mg/Kg		N/A	Non-compliant with ISQG-Low
Otanerau (Flow 6.0 cm/s)	**Copper and Zinc Levels**			
	2022/2023 Result	**Increase/decrease in results from previous year**	**RC Condition compliance**	**BMP Compliance**
Copper	Overall Pen average 158 (±35) mg/Kg		N/A	Non-compliant with ISQG-Low
Zinc	Overall Pen average 415 (±22) mg/Kg		N/A	Non-compliant with ISQG-Low

High Flow Sites				
Clay Point (Flow 19.6 cm/s)	**Copper and Zinc Levels**			
	2022/2023 Result	**Increase/decrease in results from previous year**	**RC Condition compliance**	**BMP Compliance**
Copper	Overall Pen average 11 mg/Kg		Compliant	Compliant
Zinc	Overall Pen average 116.7 mg/Kg		Compliant	Compliant

Waitata (Flow 17.6 cm/s)	Copper and Zinc Levels			
	2022/2023 Result	Increase/decrease in results from previous year	RC Condition compliance	BMP Compliance
Copper	Overall Pen average 7.2 mg/Kg		Compliant	Compliant
Zinc	Overall Pen average 41.8 mg/Kg		Compliant	Compliant
Kopaua (Richmond) (Flow 15.7 cm/s)	**Copper and Zinc Levels**			
	2022/2023 Result	**Increase/decrease in results from previous year**	**RC Condition compliance**	**BMP Compliance**
Copper	Overall Pen average 7.3 mg/Kg		Compliant	Compliant
Zinc	Overall Pen average 84.3 mg/Kg		Compliant	Compliant
Ngamahau (Flow 21.1 cm/s)	**Copper and Zinc Levels**			
	2022/2023 Result	**Increase/decrease in results from previous year**	**RC Condition compliance**	**BMP Compliance**
Copper	Overall Pen average 4 mg/Kg	No Change	Compliant	Compliant
Zinc	Overall Pen average 35.3 mg/Kg		Compliant	Compliant
Te Pangu (Flow 15 cm/s)	**Copper and Zinc Levels**			
	2022/2023 Result	**Increase/decrease in results from previous year**	**RC Condition compliance**	**BMP Compliance**
Copper	Overall Pen average 10.7 (±14.6) mg/Kg		Compliant	Compliant
Zinc	Overall Pen average 153.2 (±15.7) mg/Kg		Compliant	Compliant

Further Compliance Assessment

33. Resource consents for the individual marine farms also detail a number of other conditions, relating to both environmental impacts and otherwise. Compliance with consent conditions has been assessed using Council's compliance scoring where each is determined to be either: Unable to assess; Compliant; Technically Non-Compliant; Non-Compliant; or Significantly Non-Compliant.

34. Table 5: Summary of overall compliance with resource consent conditions at high flow sites.

High Flow Sites				
Clay Point (Flow 19.6 cm/s)				
Benthic Standards	Copper & Zinc	Water Column	WQS	Sampling & reporting requirements
Compliant	Compliant	Compliant	Complaint.	Compliant
Waitata (Flow 17.6 cm/s)				
Benthic Standards	Copper & Zinc	Water Column	WQS	Sampling & reporting requirements
Compliant	Compliant	Compliant	Compliant	Technically non-compliant – Annual report was provided late.
Kopaua (Richmond) (Flow 15.7 cm/s)				
Benthic Standards	Copper & Zinc	Water Column	WQS	Sampling & reporting requirements
Compliant	Compliant	Compliant	Compliant	Technically non-compliant – King Shag surveys have been carried out but were not provided to Council within the three months as required. The Annual report was provided late.
Ngamahau (Flow 21.1 cm/s)				
Benthic Standards	Copper & Zinc	Water Column	WQS	Sampling & reporting requirements
Non-compliant – Infaunal abundance was significantly higher at zone 3 than corresponding pen station.	Compliant	Compliant	Compliant	Technically non-compliant – Tha annual report was provided late. Some sampling took place in September rather than August (as per MEMAMP).
Te Pangu (Flow 15 cm/s)				
Benthic Standards	Copper & Zinc	Water Column	WQS	Sampling & reporting requirements
Non-compliant – Bacterial mat coverage below pen 1 was in exceedance of the EQS (patchy-major).	Compliant	Compliant	Compliant	Compliant

Summary

35. Nine Marlborough Sounds New Zealand King Salmon marine farms were assessed during this monitoring period and as a result some non-compliances with resource consent conditions were identified.

36. The overall compliance assessment of all nine farms generated two non-compliant and two technically non-compliant marine farms. The technical non-compliances were both extremely minor in nature and no enforcement action was taken in relation to these.

37. The two non-compliances were not considered to be significant. Each of the two non-compliances were a result of a single breach of benthic environmental standards and neither was accompanied by a breach in overall ES level. Council's Compliance QA Peer Review panel recommended a formal warning in relation to these non-compliances and this was issued to the New Zealand King Salmon Company.

38. The remaining farms were either compliant or had no relevant resource consent conditions.

Presentation

A short presentation will be given by Claire Frooms (15 minutes).

Attachment

Attachment 1 – NZKS Compliance Snapshot Page [63]

Author	Claire Frooms, Compliance Monitoring Team Leader
Authoriser	Gina Ferguson, Consents & Compliance Group Manager

Attachment 1

New Zealand King Salmon Benthic Compliance Monitoring

2022/23 Snapshot

MARLBOROUGH DISTRICT COUNCIL

KEY POINTS

9 Salmon Farms Monitored

9 Farms operated during the 2022/23 monitoring period

5 High flow sites monitored

4 Low flow sites monitored

0/9 Significantly non-compliant

2/9 Non-compliant with resource consent conditions

2/9 Technically non-compliant with resource consent conditions

5/9 compliant with resource consent conditions

5/5 sites with copper and zinc resource consent parameters were compliant with these parameters

1 Formal warning issued for non-compliance

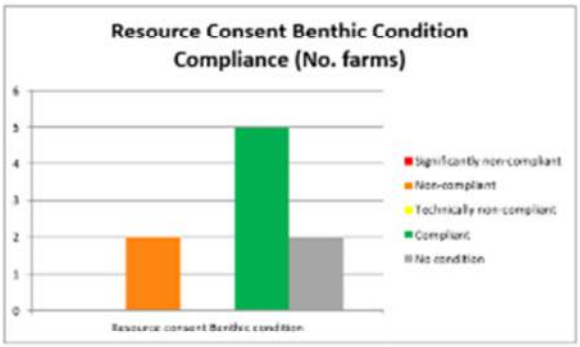
Snapshot of the 2022/23 benthic monitoring

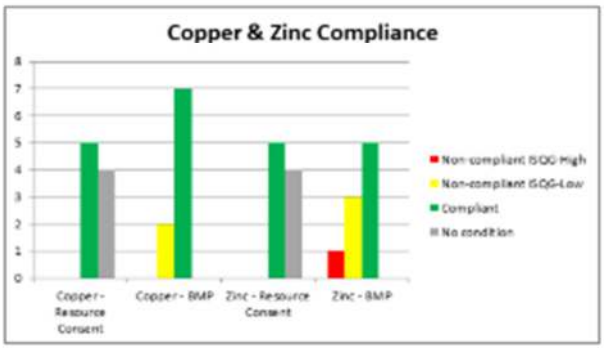
New Zealand King Salmon (NZKS) currently has consent to operate finfish farms at 11 sites in the Marlborough Sounds. Nine farms were active and were monitored in 2022/23. The remaining sites were fallowed.

The Cawthron Institute provide reports for each high flow farm on the biochemical and biological state of the seabed, the nutrient status of the water column and the copper and zinc levels in the seabed.

SLR Consulting Ltd provide similar reports for the low flow farms.

Whilst all nine of the monitored marine farms have resource consents, not all have conditions requiring monitoring. Those farms without such conditions are analysed following the Best Management Practice Guidelines for Salmon Farms in the Marlborough Sounds ("the BMP") and compliance was assessed against these guidelines.
The BMP guidelines provide an adaptive management response for dealing with instances of non-compliance.
These guidelines for management response have been followed by New Zealand King Salmon.





For More Information

For more information on compliance and enforcement monitoring undertaken by Marlborough District Council, contact the Environmental Protection Group

Phone: 03 520 7400
Email: monitoring@marlborough.govt.nz
Website: www.marlborough.govt.nz

MARLBOROUGH DISTRICT COUNCIL

15. Animal Control Sub-Committee

(Clr Faulls) **D050-001-A04**

1. The minutes of the Animal Control Sub-Committee meeting held on 16 November 2023 are **attached** for ratification by the Committee.

RECOMMENDATION

That the minutes of the Animal Control Sub-Committee meeting held on 16 November 2023 be ratified.

MARLBOROUGH DISTRICT COUNCIL

Minutes of a Meeting of the
ANIMAL CONTROL SUB-COMMITTEE
held in the Koromiko Room, Seymour Street, Blenheim on
THURSDAY, 16 NOVEMBER 2023 commencing at 1.10 pm

Present
Clrs B A Faulls (Chairperson), B J Minehan and T P Sowman

In Attendance
Jamie Clark (MDC Animal Control – Contract Manager), Emyr Butler (Team Leader - RMA Enforcement & Investigation) and Nicole Chauval (Committee Secretary)

Apologies
That the apology for non-attendance from Gina Ferguson be noted.

ATTENDANCE: Maighan Watson, Council's Projects & Contracts Manager and Robert Hutchinson, Council's Reserves & Amenities Officer were present for the following item.

1. Dog Parks; Discussion for the Blenheim Dog Park

Maighan Watson and Robert Hutchinson provided the following update on the Blenheim Dog Park:

a) Consenting process is almost complete. Have been waiting on some detailed designs in regard to the furniture, shelters, parking and toilet facilities.

b) Aerials of the park and surrounding area were tabled and Robert Hutchinson explained the layout.

c) Marking up for the carpark/driveway, where the toilet will sit and size of carparks is being completed.

The toilet location has changed as a consent would not have been granted in it's original position as it's construction would have required breaking the protective membrane/capping.

d) Decision has been made to seal the carpark. A consent will be required to take the storm water to the river.

e) Poles for dog park fence. Two options were presented - wood or metal and members agreed on wood.

Consent will be given to drive the poles in rather than dig them in as driving won't break the membrane. This was done for the Renwick Dog Park.

Members were happy with the other design details on the plan but noted their preference for native plantings in the park.

Robert Hutchinson raised that the ground may further settle which could see some movement of structures.

f) Power, water and sewerage have been organised and once consent is received progress with the detailed design can commence.

Once all consents have been approved Maighan Watson will provide the Committee with an further update. Decisions will then need to be made on types of plantings, equipment etc.

ATTENDANCE: Robert Hutchison and Maighan Watson withdrew from the meeting at 1.22 pm at the conclusion of the above item.

2. Introduction of Additional Item

Clrs Faulls/Minehan:
That the following additional item be considered for reason of the urgent nature of the business and insufficient time being available to include the item on the original Agenda.

In Public Excluded:

- **Letter – Dog Complaint**

Carried

3. Decision to Conduct Business with the Public Excluded

Clrs Faulls/Minehan:
That the public be excluded from the following parts of the proceedings of this meeting, namely:

- **Letter – Dog Complaint**

The general subject of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter and the specific grounds under Section 48(1) of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution are as follows:

General Subject of each matter to be considered	Reason for passing this resolution in relation to each matter	Ground(s) under Section 48(1) for the passing of this resolution
Letter – Dog Complaint	**In order to protect the privacy of natural persons, as provided for under Section 7(2)(a).**	**That the public conduct of the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding exists under Section 7 of the Local Government Official Information and Meetings Act 1987.**

4. Matters arising, action items & update from previous minutes – 23 August 2023.

Actions

	Description	Notes
1.	Work with Glyn Walters to create a responsible cat ownership press release that encourages de sexing and micro chipping of cats. Include information on microchipping dogs.	This is on hold after discussions with the Mayor who has been communicating with 4 Pawz. A release will be made when petition presented to Mayor sometime in the future.
2.	Continue to monitor Central Government in respect of cat management.	Ongoing Tasman District Council are proposing a Cat Management Bylaw and are currently seeking feedback.
3.	Invite Susanne Owen, SPCA, to the 16 November meeting.	SPCA didn't attend today's meeting. Invite to attend meeting in 2024.
4.	Invite Jacki Jenkins (Maataa Waka	On agenda

	Description	Notes
	Animal Control – Education Officer) to the 16 November meeting.	
5.	Indication from Maighan Watson on a possible timeframe for when the Blenheim Dog Park issues will be resolved.	On agenda

5. Bylaws

- No issues at present

6. Contractor

1.1 Staff

- Current staff level for the contract is:
  - Manager .....x 1
  - Team Leader .....x 1
  - Field Staff .....x 3
  - Relief Field Staff .....x 1
  - Administrators .....x 2
  - Education Officer .....x 1

1.2 New staff

- Field staff: Rachel Palmer (recently appointed)
- Admin Staff: Emma McMillan start 9 October 2023

1.3 Patrol Hours

- Target YTD 320
- Actual YTD 342.95

7. Review fees

- No change anticipated at this time but is dependent on whether there is an increase in the contract price. The budget split is likely to stay at 80/20, is on the agenda of the LTP Working Group meeting scheduled for 28 November 2023.

8. Dog Registration Update

- Current numbers

9. Education Update

Year to date from the 1 July 2023			
Primary School Preschools	**Teenagers Adults**	**Public Events**	**Presentations Total**
14	0	0	14

In response to a query regarding Maataa Waka (Animal Control) attending public events, Jamie Clark advised that when time and staffing allow Maataa Waka do join in with other events and usually with other groups to minimise costs.

10. Microchipping Update

Current numbers

- **Microchipped Total:..... 8598**
- **Not microchipped: 504**
    - **Non working C2: 474**
    - **Old dog: 30**
    - **Police Dog: 1**
- **Unaccounted for not chipped:..... 59**

11. Infrastructure – Pound

- Nothing to report

12. Signage update

- New signage is gradually being implemented to replace existing signs. Officers on patrol identify areas that require signage or replacement signage. A signage audit is proposed for January/February 2024.

- Havelock Domain – Following the passing of a community member, who had advocated for signage at the Domain, the Havelock community have taken this up and are working with Parks and Open Spaces to identify a suitable area at the Domain.

13. SPCA Update

- Susanne Owen was invited but unable to attend due to staff shortage. Jamie Clark to re-invite to attend in 2024.

14. Cat Management

- Nothing to report

15. General Business

15.1 Meeting dates for 2024 to be organised, suggested coinciding with the Environment & Planning Committee.

ATTENDANCE: Clr Faulls withdrew from the meeting at 1.44 pm at the conclusion of the above item and Clr Sowman assumed the Chair.

ATTENDANCE: Jacki Jenkins (Education officer Maataa Waka Animal Control) and her dog Sammy joined the meeting at 1.45 pm.

16. Maataa Waka Animal Control

Jacki Jenkins provided members with information on what is covered in the dog education programme that she presents to schools and Clued Up Kids.

Members were advised that at the conclusion of the sessions drink bottles are given to the kids. Supplies of the bottles are low and it would be appreciated if some more could be ordered as they are a really positive take away for the kids. Additional resources would also be appreciated, Jacki is making some herself but further resources would be great.

It was suggested that Jacki Jenkins speak with the Contract Manager to ascertain the resources currently held by the Contractor for Education and see what other resources would be useful in getting the safe dog message across.

Jamie Clark advised that after every school visit a survey is sent out and the feedback is always extremely positive.

There be no further business the meeting closed at 2.10 pm.

Actions

	Description	Person Responsible	Time frame
	Invite Susanne Owen, SPCA, to the next Animal Control meeting in 2024.	Jamie Clark	In time for attendance at the next meeting.
	Organise meeting dates for 2024 suggested coinciding with the Environment & Planning Committee.	Nicole Chauval	Completed
	Order additional supply of drink bottles for Dog Education Officer.	Jamie Clark	As soon as practical.
	Jacki Jenkins to speak with the Contract Manager to ascertain the resources currently held by the Contractor for Education and what other resources would help in presenting the programme.	Jamie Clark	As soon as practical.

16. Information Package

RECOMMENDATION

That the Regulatory Department Information Package dated 1 February 2024 be received and noted.

17. Decision to Conduct Business with the Public Excluded

Decided That the public be excluded from the following parts of the proceedings of this meeting, namely:

- **Sub-Committee Minutes (Public Excluded Sections)**

The general subject of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter and the specific grounds under Section 48(1) of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution are as follows:

General subject of each matter to be considered	Reason for passing this resolution in relation to each matter	Ground(s) under Section 48(1) for the passing of this resolution
Minutes and Committee Reports	**As set out in the Minutes and Reports**	**That the public conduct of the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding exists under Section 7 of the Local Government Official Information and Meetings Act 1987.**