

RESOURCE MANAGEMENT NEW ZEALAND

NZARM BROADSHEET

ISSUE 44 - AUGUST 2023

***THE ROAD TO RECOVERY - RESEARCH
FOR CYCLONE RECOVERY***

***CATCHMENT CONTEXT, CHALLENGES AND
VALUES***

NZARM MENTORING PROGRAMME

FW-FP CERTIFIER AND AUDITOR PROGRAMME

PILOT NATIONAL TRAINING COURSE

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CONTENTS

- 3 WELCOME**
- 4 NICOLA MCHAFFIE PAST PRESIDENT – THANKS FOR YOUR SERVICE!**
- 5 THE ROAD TO RECOVERY - BALLANCE**
- 7 THE YEAR IN TAIRAWHITI - WHAT HAVE WE LEARNT?**
- 10 INTEGRATED RESEARCH FOR CYCLONE RECOVERY**
- 13 NZARM MENTORING PROGRAMME**
- 14 INTEGRATING CATCHMENT CONTEXT, CHALLENGES AND VALUES (CCCV) INTO FRESHWATER FARM PLANS**
- 15 FRESHWATER FARM PLAN CERTIFIER AND AUDITOR PROGRAMME LIVE IN WAIKATO AND SOUTHLAND**
- 17 NZFAI AND FARM ASSURANCE IN THE RED MEAT AND WOOL SECTOR**
- 18 NZARM AND KMR PILOT NATIONAL TRAINING COURSE**

WELCOME TO THE AUGUST 2023 ISSUE OF THE BROADSHEET

Peter Manson – Interim President



Welcome to the August edition of NZARM's Broadsheet.

Front of mind for practitioners throughout the country is Freshwater Farm Plan implementation. However, for many affected by Cyclone Gabrielle, even six months after the event, it is still in recovery mode. As we work with landowners who face both these pressures, it is heartening to see the underway initiatives – some of which are reported in this issue. The FWFP roll-out dates have been pushed out for some regions affected by Gabrielle, which is a relief for them and means that they will be able to pick up the pace from the learnings of those who are first up.

The Ballance article provides an excellent piece of practical guidance for advisers and landowners. There is some comfort in knowing that silt can be remediated using the right approach. However, even brighter is the quote, 'This is not the new normal'. Read on for more.

Manaaki Whenua has responded quickly to the cyclone event by collecting data that adds hugely to the knowledge of landscape erosion. The immensity of rainfall and its effects on the land are described, along with a discussion of a model which predicts the likely effects of climate change on the land and water. A salutary statement that 'much of the landscape in the worst-affected areas has effectively been 'reset' by Gabrielle in the worst-affected areas may draw some comment from our LUC experts – have some LUC unit descriptions changed?

Karl Erickson provides a nice insight into the new factors that must be considered when preparing Fresh Water Farm Plans and the challenges involved. The techniques used to address these will evolve and will differ between regions. His comment is a great starting point for further input and debate from NZARM members.

The achievements of KMR to date, its unique model and the power of the strong yet diversified partnership are evident. After only a year and a half of business, the number of approved suppliers and advisers is impressive. The NZARM and KMR pilot national training course was a great success, and the report is inspiring. This project is looking to be a national leader in its approach and scale of operations.

Finally, NZARM Conference organisers are excited about the programme that is being developed. Christchurch, 31 October – 2 November is not far away, and early bird registrations are open now!

Peter Manson
Interim NZARM President

NICOLA MCHAFFIE PAST PRESIDENT – THANKS FOR YOUR SERVICE!

Matt Highway NZARM CEO



It's hard to believe that nearly a decade has flown by since I first worked with Nicola McHaffie. Back then, she was already deeply entrenched in the Dairy Sector, tirelessly working to elevate its environmental impact through the creation of guidance, training, and innovative farm planning programs.

Around nine years ago, Nicola took her first step into the New Zealand Association of Resource Management (NZARM), and it didn't take long for her to make a mark. A shining moment was her key role in the 2015 NZARM conference in the picturesque Waikato region.

Nicola's journey with NZARM led her to a position on the executive committee soon after the 2015 conference. Fast forward to 2020, and she was duly elected as the President of NZARM. In the ensuing years, Nicola would prove her mettle by guiding us through a maze of novel challenges.

During her tenure as President, Nicola steered us through a few uncharted waters. NZARM welcomed its first-ever CEO, embraced contracted services, which enabled NZARM to coordinate a response to the Intensive Winter Grazing issues of the time. Notably, Nicola was the driving force behind the successful collaboration with MfE for the capability project's co-design. This period of transformation also saw NZARM adopting an entirely fresh and robust operational framework.



Nicola presenting the lifetime member award to Stan Braaksma at the 2022 conference

Nicola's influence in agriculture and environmental practices extended beyond NZARM. Her journey included moving from DairyNZ to the Hawkes Bay Regional Council, then Pāmu, and culminating in her current role as Group Sustainability Manager at Ovation.

I'm super proud to have worked alongside Nicola and what she has achieved. On behalf of NZARM, we thank you for the effort you have brought to the organisation and the impact you have helped create.

WELCOME TO OUR NEW NZARM MEMBERS

Alice Wilson
Sacha Yanke
Sarah Fisher
Marnie Mannering
Tegan Arnold
Elizabeth Kenney
Sue McConnochie
Campbell McCowan
Samuel Fox

Jolene Francis
Tom Harding
Hannah Ritchie
Kelly Maxwell
Shona Oliver
Jazmine Burgess
Genevieve Smith
Georgia Clements
Lyn Carmichael
Jenna Besseling

Cid Wilkie
Joanna Wilson
Simon Webb
Emma Reeves
Sarah Nicholson
Pete Huggins
Stacey Wills
Alison Bailey
Steve Pickles

THE ROAD TO RECOVERY

BALLANCE IS SUPPORTING FARMERS TO GET THEIR BUSINESSES BACK ON TRACK.

Following this year's extreme weather events, many farmers across the North Island are hard at work getting their businesses back on track.

Given the massive impact of these events, Ballance has been helping by providing funding and advice, and sharing knowledge.

As farmers move past the response phases, many are in various forms of recovery mode and ticking off a list of important jobs.

For pastoral farms, the first step to recovery is about restoring operational control and grazing management, as a prelude to recovering pasture and animal productivity. For farms with hill slips, aerial mapping showing the percentage of bare ground post-cyclone can be very helpful for planning ahead.

So that impacts do not extend more than needed and key activities in the farming calendar can still be met, medium term key objectives are to mitigate further losses in production, and as much as possible, ensure what's required to secure next season's production outcomes and revenue.

The priorities for recovering a farm business after extreme weather events are in many ways similar to those of land development. Once the urgent needs to protect people, animals and assets are over, the focus can turn to getting critical farm infrastructure back in place.

Over \$1 million for the Rural Support Trust

Ballance has funded a relief package to provide on the ground support to those affected by this year's extreme weather events.

On behalf of Ballance shareholders, we donated \$1 million to the Rural Support Trust to provide support to help people on their recovery journey. Ballance also matched any donations made by staff.

Tips for farm business recovery

- To restore control of animal intakes and pasture management, and effectively utilise the feed you are growing, focus first on critical farm infrastructure including access, stock water and fencing.
- Focus on the more productive areas first for subdivision, soil fertility and potentially reseeded. Flatter areas will grow more than steep hills, and are typically more cost-effective to develop.
- Re-establish feed supply demand balance using the usual tactics, keeping an eye on the future to ensure any changes to subdivision or management don't leave you vulnerable to spring deficits, for example.
- Don't ignore undamaged pastures – these are best placed for immediate growth. Use phosphorus and sulphur to optimise production and nitrogen to provide short term tactical feed.
- As much as practical, take the actions required to protect future revenue streams to minimise overall impact on business.
- Rather than focusing on completing all tasks to the highest standards, be realistic about what is needed and what is achievable. Something functional might be perfectly adequate for now.
- The good news is that this year's weather events are unlikely to be the new normal, according to NZ weather and climate researcher Professor James Renwick. Remember that there's always a way through adversity, and you might come out the other end stronger, wiser, and more confident about the future.

Pasture recovery after flooding

While remaining optimistic this year's events aren't the new normal, understanding the pasture recovery process means you'll feel better prepared to make decisions if you're ever in the firing line.

Pasture recovery after flooding depends on the depth of flood sediment (which can contain silt, sand, clay and gravel). With the huge amount of sediment after cyclones Hale and Gabrielle, machinery and contractors have often not been available, so broadcast sowing of ryegrass or oats with fertiliser has been a common and successful option, with the aim to sow permanent pasture as stage 2.

Flooding can be classified as minor (little to no flood sediment), moderate (sediment up to 25 cm deep) or severe (sediment 25 cm or more deep).

Pasture with less than 5 cm of silt covering it will probably survive if water drains away within 3 days. However, pasture covered by sediment won't survive and needs to be regrassed/resown.

Flood sediment less than 25 cm deep can be incorporated into the soil, but it can be very difficult to do so if sediment is deeper than this. In both cases, where possible, sand and gravel should be removed and any debris such as trees mounded up and burnt.

As flood sediment is generally of low fertility, soil testing is important. Testing of the silt deposited in flood areas is important to understand its physical make up as well as pH and fertility level.

To date nearly all have been high in pH (7.8 to 8.2) and low in fertility level, meaning a long road of building up fertility is needed. If sediment is going to be incorporated into the soil, soil testing should occur afterwards.

The method for incorporating flood sediment into the topsoil depends on its depth. Sediment 5-10 cm deep can be incorporated via cultivation, while sediment 10-25 cm deep can be deep ploughed back into the soil. To avoid soil damage, it is important to wait until soil is dry enough before putting any machinery on the land.

It is likely that soil testing will reveal that the soil is deficient in some nutrients, so capital applications of phosphorus and potassium and regular additions of nitrogen may be required to support the new pasture.

Depending on the depth and composition of the flood sediment, perennial grass/clover, a short term ryegrass or ryegrass/clover mix or forage oats can be sown.

Pasture will need post-emergence nitrogen applications to support growth, and once established, grazing and/or mulching will help to build up organic matter.



THE YEAR IN TAIRAWHITI - WHAT HAVE WE LEARNT?

Kerry Hudson - Gisborne District Council

At the beginning of 2023, Tairāwhiti had experienced its wettest year in 2022, with reports of over 4 metres of rain in some areas, twice the annual rainfall.

Would 2023 be better: early January saw Hale, and then along with the remainder of the North Islands East Coast, we had Gabrielle. We continue to have heavy rainfall events, and our region continues to be saturated, and disruption to access, infrastructure, and farmers and growers is ongoing, and incomes are suffering as a result.

Having been here in Cyclone Bola in 1988, what are the similarities? Bola was the last of several significant rains over a decade, some widespread and others localised: 1977, 1980, 1981, 1982 and 1985. The feeling was these events would become more prevalent with high-intensity rains becoming common, yet it was almost 20 years before we had another significant event.

Predictions are now that these events will continue and increase in regularity and intensity, and recent patterns would confirm this. We no longer talk about the 1988 event but the January 2023 rainfall.

At Bola, we had significantly less plantation forestry, the state conservation forests had been planted, and harvesting was about to begin (1989 at Mangatu Forest). The commercial forest has been established in some areas but was some time from harvesting.

Significant soil erosion occurred across the region with massive aggradation of sediment on our valuable alluvial flats. Like our recent events, the Flood Control Schemes in the Waipaoa Catchment were held, although, at Bola, the Te Karaka Flood Control Scheme was only partially constructed.

I was in close contact with two brothers in the Tolaga Bay area at Bola. One farmed alluvial flats near the Uawa River, experienced huge stock losses, and had a thick layer of sediment across most of his property: short-term devastation but, in the long term, back to full production with livestock and cropping reasonably quickly. In contrast, his brother in the hill country had few stock losses and a lot of fence damage but large-scale erosion: short term, all right, but long term, the property was devastated by the erosion and plantation forestry was established.

At this time, the Catchment Board had been establishing willow and poplar in hill country in gullies and eroding slopes. Post Bola, some areas required catchment treatments with closed canopy vegetation but supported by intensive gully and riparian planting as had occurred in the Crown Forests in sensitive areas. Ongoing willow and poplar plantation on farmland was more necessary than ever.

Image 1: Pauariki; however, pole planting assistance was unavailable and did not return until after the millennium.



Post Bola, a range of planting schemes to afforest land commenced. A large area of hill country was afforested. Plantation species were established on a wide range of land types with no provision for gully and riparian rehabilitation. Council became involved in a large number of projects, including combinations of land treatments.

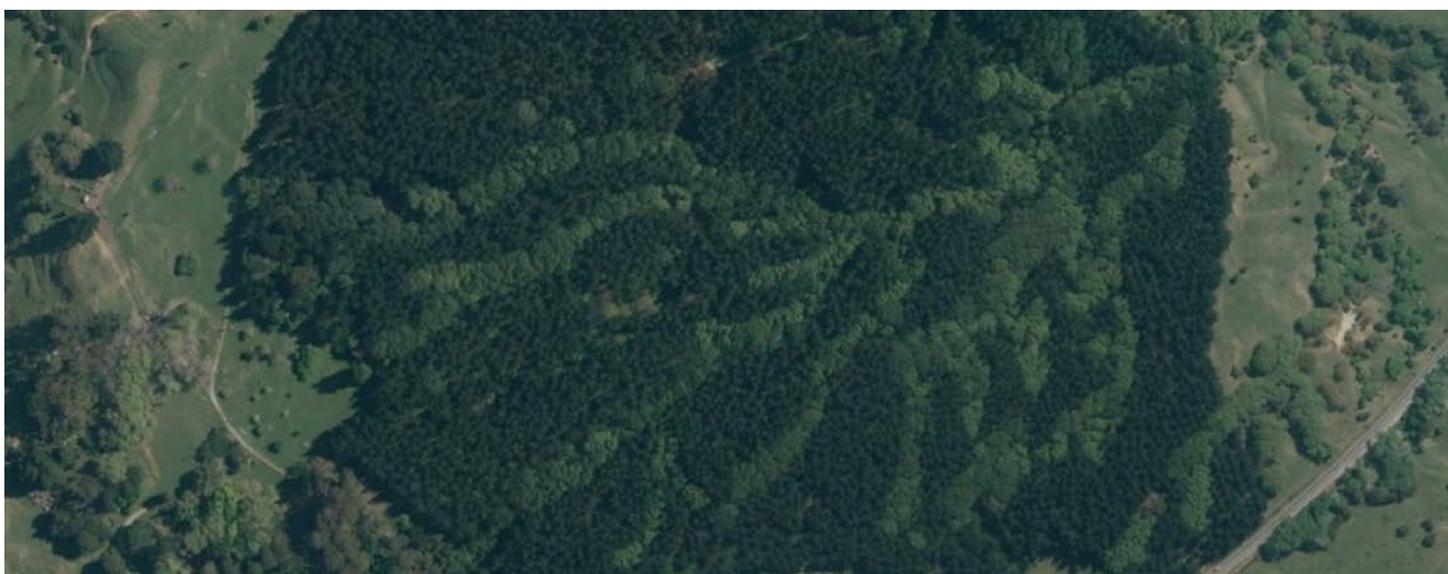


Image 2 Waiorongomai: plantation species on stable land and managed reversion on eroding vulnerable land.

Forest harvesting has progressed rapidly, with large areas of land exposed to the window when land is vulnerable to soil erosion and slash generation.

We need to return to managing gullies and waterways. This will be expensive, high risk and will not happen quickly. There is a lot of woody debris in the waterways and slope movement where whole trees will continue to enter gullies, streams and rivers.

The solutions are available, and these need to be progressed. There is no one solution, but various interventions are required moving forward. These require case-by-case consideration and need to focus on all land uses.



8 *Image 3: Busbys*



**NZARM CONFERENCE
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31 OCTOBER - 2 NOVEMBER

INTEGRATED RESEARCH FOR CYCLONE RECOVERY

Manaaki Whenua Landcare Research

For around 4 days from 12 February 2023, Severe Tropical Cyclone Gabrielle caused significant flooding and damage across northern and eastern regions of the North Island. Gabrielle's effects were felt over a very wide area, including Northland, Auckland, Coromandel, Waikato, Bay of Plenty, Gisborne, and Hawke's Bay.

As the clean-up continues it is becoming clear that much of the landscape in the worst-affected areas has effectively been 'reset' by Gabrielle. It has affected substantial areas of natural and regenerating ecosystems, productive land (including farm, orchard, forestry, and vineyard operations), much vital infrastructure, and many rural and urban settlements.

Manaaki Whenua will have significant immediate and long-term contributions to make to the recovery from the cyclone. One of the most urgent early research responses is to update vital satellite, LiDAR, and optical imagery to discover exactly how landscapes and catchments have changed.

As part of this early response we have made available our expertise in big data analysis and interpretation to support ministries and agencies such as regional and local councils that have an immediate role to play. This work includes assisting GNS Science's response to the cyclone focused on mapping landslides from high-resolution satellite imagery.

We were already involved with a project with Hawke's Bay Regional Council to map landslides following a heavy rainfall event in March 2022. The new regional LiDAR will be used to update our data on landslide susceptibility, landslide-debris mapping, erosion mapping, land characterisation, cultural mapping, and vegetation cover mapping.

As initial response gives way to longer-term recovery, Manaaki Whenua will draw on a large body of integrated research knowledge and data that encompass economic, social, environmental, cultural, and policymaking aspects to ensure relevant, resilience-building research.

We have a current Ministry of Business, Innovation and Employment (MBIE) Endeavour research programme of direct relevance to the devastating soil loss and silt deposition caused by Gabrielle. 'Smarter Targeting of Erosion Control' (STEC), now in its final year, is a pivotal research programme that has significantly improved understanding of spatial and temporal patterns of soil erosion, sediment-related water quality, sediment mitigation, and modelling. The most recent STEC outputs include high-resolution geospatial modelling of shallow landslide susceptibility to better inform targeting of mitigation measures, catchment-based sediment 'fingerprinting' (determining where eroded sediments originated), understanding the sediment contributions of large, slow-moving landslides, and modelling the likely patterns of soil erosion and sediment transport under future climate change (see below).

Led by Manaaki Whenua researchers Dr Chris Phillips and Dr Hugh Smith, STEC includes researchers from NIWA, Massey and Canterbury Universities, and international collaborators from KU Leuven, INRAE, University of Salzburg, and Bern University of Applied Sciences in Switzerland. Our partners include Whanganui iwi (Tamaūpoko Community Led Trust) and Rangitāne o Manawatū. TEC has been supported throughout by Northland, Waikato, Horizons, and Hawke's Bay Regional Councils, Auckland Council, Environment Southland, the Ministry for the Environment, the Ministry for Primary Industries, Our Land & Water National Science Challenge, and Federated Farmers.

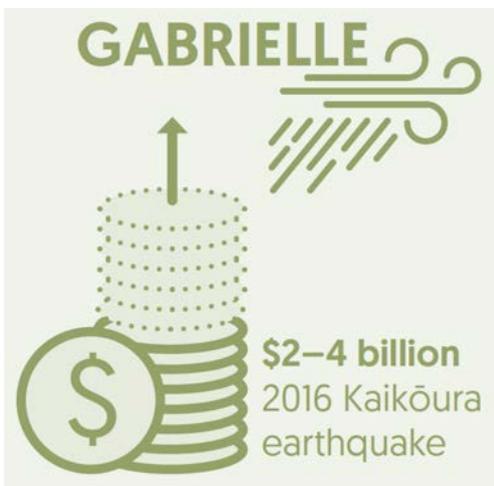
We offer research expertise in forestry slash management, weed management (weeds may spread onto newly exposed soils), and in wildlife, plant population, and disease modelling as the affected areas recover. Our mapping capabilities will be needed to assess changes in the landscape's carbon stocks through loss of woody vegetation and carbon-rich soil.

In another relevant Endeavour research programme, we are working to understand whether biomass and soil carbon stocks in rural landscapes can be enhanced by the planting or natural regeneration of small clusters of trees, matched with soil and climate conditions.

Our social scientists are also well positioned to help build back better after Gabrielle. We can help to analyse the social and economic impacts of the cyclone, including how change is managed and the inter-related, intergenerational resilience of communities, economies, and biodiversity.

In two Endeavour-funded social research programmes already underway, we are unlocking effective decision-making for land managers, and seeking to identify and demonstrate how kaitiakitanga practices (which might include economic opportunities) achieve biodiversity regeneration, cultural revitalisation, and community well-being.

With soils across much of the North Island already saturated from an unusually wet summer, including Cyclone Hale a few weeks earlier, the rapid, unrelenting rainfall of Gabrielle could not be absorbed. The saturated soils triggered shallow landslides in the steep, erodible hill country, displacing millions of tonnes of sediment across a range of land uses – pastoral farming, plantation forestry, native forest, and native scrub. The worst-hit areas were the Hawke's Bay and Gisborne regions.



Gabrielle by the numbers

According to the Ministry of Foreign Affairs and Trade, Cyclone Gabrielle was New Zealand's costliest non-earthquake natural disaster to date, with economic losses currently expected to exceed the \$2 billion to \$4 billion losses of the 2016 Kaikōura earthquake. It was also the deadliest since Cyclone Giselle in 1968.

Weather station data showed that, in places, Gabrielle also brought record rainfall intensities. In the Pōrangahau catchment monitored by Hawke's Bay Regional Council, twice as much rain fell during the most intense 24-hour rainfall period of Gabrielle than during the most intense 24-hour period of Cyclone Bola in 1988. Huge rainfall totals were also recorded elsewhere in the region: Glengarry, near Napier, had 546 mm of rain, 400 mm of which fell in just 12 hours, and 568 mm fell at Raparapaririki in the ranges of Gisborne. NIWA reported that during Gabrielle, Whangārei had its wettest February day on record and Napier its second wettest.

A tool for solving landscape-scale problems

LUMASS – the Land Use Management Support System developed by Manaaki Whenua – is a data-driven decision-support tool that allows complex land-use planning problems, such as those created by the large-scale landscape modifications of Cyclone Gabrielle, to be mapped and solved.

By integrating data from different science domains, LUMASS enables stakeholders such as regional or local councils to run scenarios to define optimum land-uses at a variety of scales (a landscape, a catchment, a whole region). Desirable outcomes, constraints and trade-offs can be specified, for example the aim of minimising greenhouse gas emissions, or meeting National Policy Statement guidelines for fresh water, or to identify areas suitable for specific agricultural uses.

Current work with LUMASS explores its use for developing climate change adaptation pathways.

River catchment planning for future climate change

To develop effective management plans for river catchments, policymakers and catchment managers need to account for how climate change might affect soil erosion and river sediment loads. However, there has been no published, quantitative assessment of national-scale changes in erosion or suspended sediment loads anticipated under future climate for Aotearoa New Zealand.

To address this gap, Manaaki Whenua's Dr Andrew Neverman and colleagues, in collaboration with AgResearch and NIWA and with funding from the Our Land and Water National Science Challenge's Whitiwhiti Ora programme, have produced Aotearoa New Zealand's first national assessment of the potential impact of climate change on erosion and suspended sediment loads.

As part of the project, future erosion and sediment loads were estimated for mid-century (2040) and late century (2090) based on projected changes in climate and hydrology. Changes in suspended sediment loads were modelled under four potential future atmospheric CO₂ concentrations, with associated changes in rainfall intensities and amounts.

The results of this modelling, published in the international journal *Geomorphology*, show that up to 28% of the North Island and 8% of the South Island are estimated to experience a two-fold or greater increase in average annual sediment supplied to the channel network by late century.

Exploring the impacts of climate change on Māori

In October 2021, Ngā Pae o te Māramatanga and Manaaki Whenua released a report offering new guidance for te ao Māori on climate change adaptation and mitigation. *He Huringa Āhuarangi, he Huringa Ao: A Changing Climate, a Changing World* was produced by a multidisciplinary Māori research team working across many research institutions and led by Manaaki Whenua's Dr Shaun Awatere.

Using a novel kaupapa Māori risk assessment approach to climate change, the report synthesised the latest climate change research through a Māori lens, and identified the potential impacts, implications, mitigation and adaptation strategies for whānau, hapū, iwi, and Māori business. *He Huringa Āhuarangi, he Huringa Ao* predicts that Māori well-being across all four key domains – environment, Māori enterprise, healthy people, and Māori culture – will be moderately affected by 2050. By 2100 the risks to ecosystems are likely to show severe impact, compromising many aspects of Māori well-being.

Further developments in incorporating a Māori world view into issues of climate change are discussed in the article [Māori frameworks needed to recloak the whenua](#).

NZARM MENTORING PROGRAMME

NZARM has established a mentoring programme for members to support both career progression within the sector and the development of professional skills and capabilities in this specialised area of work. Mentoring provides a customised, development process for individuals and uses what is the best learning resource the sector has – its own people.

The purpose of the programme is

- To provide increased levels of personal and professional support for those working in the sector.
- To support career progression within the sector to retain valuable skills and knowledge.
- To enhance networking and encourage the sharing of practice across organisations.
- To build technical skills and capabilities across the sector.
- To provide the opportunity for people to develop leadership skills and their ability to coach and mentor others.

What is the role of a mentor?

The mentor's role is to help their mentee succeed. Mentoring is a relationship in which an experienced person (the mentor) assists another (the mentee) to achieve their potential or move towards personal, professional, or career goals.

How will it work?

The mentoring programme will be available for NZARM members through an application process.

Mentors will be NZARM members and either currently in resource management roles or retired. Mentors may be people at any stage of their career who feel they can contribute to the purpose of the programme.

Mentees will signal their development needs on application and any preferences for mentors based on bios supplied by the mentors.

Both mentors and mentees will attend short training sessions to provide them with the tools and skills they need to succeed. The training workshops will be live, online workshops delivered via Zoom during working hours. The mentor training is a 2 hour, practical workshop and comes with a digital toolkit for mentors. The mentee training is 1.5 hours and will enable mentees to make the most of the opportunity. These workshops also provide a great opportunity for networking.

Mentors and mentees will be matched by the mentoring co-ordinator based on their development needs, preferences and possibly geography. Mentors typically have some distance from the mentee's day to day work environment so they have the neutrality to provide an objective perspective and avoid any conflicts of interest.

Interested in being a part of the programme?

Please email the mentoring programme coordinator Eliza Burt-Priddy eliza@element.org.nz for more information and to sign up.

INTEGRATING CATCHMENT CONTEXT, CHALLENGES AND VALUES (CCCV) INTO FRESHWATER FARM PLANS - LETTING THE CATCHMENT TELL THE STORY...

Karl Erickson - Environment Southland



Freshwater farm plans are set to become a regulatory requirement for all farming operations over 20 hectares in 2023. The Ministry for the Environment (MfE) is setting up a farm plan certification and auditing structure to enable oversight of farming activities via a freshwater farm plan (FWFP). Underpinning the FWFPs is the concept of Catchment Context, Challenges and Values (CCCV). CCCV describes vulnerabilities in a catchment's water quality, its areas of importance, and the sites and species valued by tangata whenua and shows how farm actions can give affect upholding catchment values. Incorporating catchment context in freshwater farm plans is a key component of the FWFP system. Environment Southland, alongside Te Ao Mārama is tasked with providing the CCCV information to farm plan developers.

How to apply Catchment Challenges, Context and Values (CCCV) to Freshwater farm plans - What can be done?

A key focus in integrating CCCV in the Southland region is to provide clarity in helping FWFP developers identify the risks that exist both in the catchments landscape and in the effect of management practices applied on those landscapes. We use physiographic information to help to explain how contaminants move through certain zones and which preferred pathway they take to enter receiving environments. From this farm-specific information, inherent and management risks can be identified, and the appropriate actions can be planned. Mātauranga information, including cultural sites and species of significance, also informs potential actions taken that uphold the mātauranga (Māori knowledge) and CCCV values. Additionally, science work identifies the catchment's main contaminants to prioritise and inform action plans. By combining physiographic information with priority contaminant(s) to focus on, a farm's action plan can have a direct give effect to the CCCV.



CCVC also provides farm plan developers with an inventory of potential on-farm actions that can address contaminant loss at the farm scale, showing how each individual mitigation action contributes to better outcomes for the receiving environment of the catchment. A key objective is to provide the CCCV information in a way that is easy to understand and easy to incorporate into existing farm plans. Farmers, rural professionals and certifiers would then be able to refer to the relevant catchment context information when designing and certifying freshwater farm plans. Over time, this collated catchment context information could become a one-stop-shop for farmers to understand their catchment's values and the related prioritisation of actions needed at the farm level.

Future Scope

Over time, CCCV will need to be updated to reflect new objectives, regulatory requirements and achievements within the catchment. ES is also required to facilitate the creation of Catchment Action Plans (CAP) or Hauora plans, and the CCCV tie neatly into this work. Hauora planning is central to ES's Water and Land plan and plan change tuatahi. Hauora plans are essentially catchment action plans, and perhaps CCCV provides a good starting point for the wider Hauora context.

FRESHWATER FARM PLAN CERTIFIER AND AUDITOR PROGRAMME LIVE IN WAIKATO AND SOUTHLAND

AsureQuality

In June 2023, the Resource Management (Freshwater Farm Plan) regulations were released, outlining the certification and audit requirements for freshwater farm plans. These regulations specify that plans must be certified within 18 months of applying in each region and re-certified every five years. Audits will be required within 12 months of initial certification.

Starting from August 1st, freshwater farm plan regulations have started to be rolled out in Southland and Waikato. Farmers within those parts of the region where the regulations have come into effect will be developing plans to submit for certification within 18 months.

AsureQuality Certifier and Auditor Appointment Process Management

To enable the certification and auditing steps, regional and unitary councils require a number of skilled certifiers and auditors (initially in Southland and Waikato). AsureQuality were appointed to develop the process for people to become certifiers and auditors of freshwater farm plans. Certifiers will assess whether a farm plan meets certification requirements, while auditors will ensure farms comply with their certified freshwater farm plans.

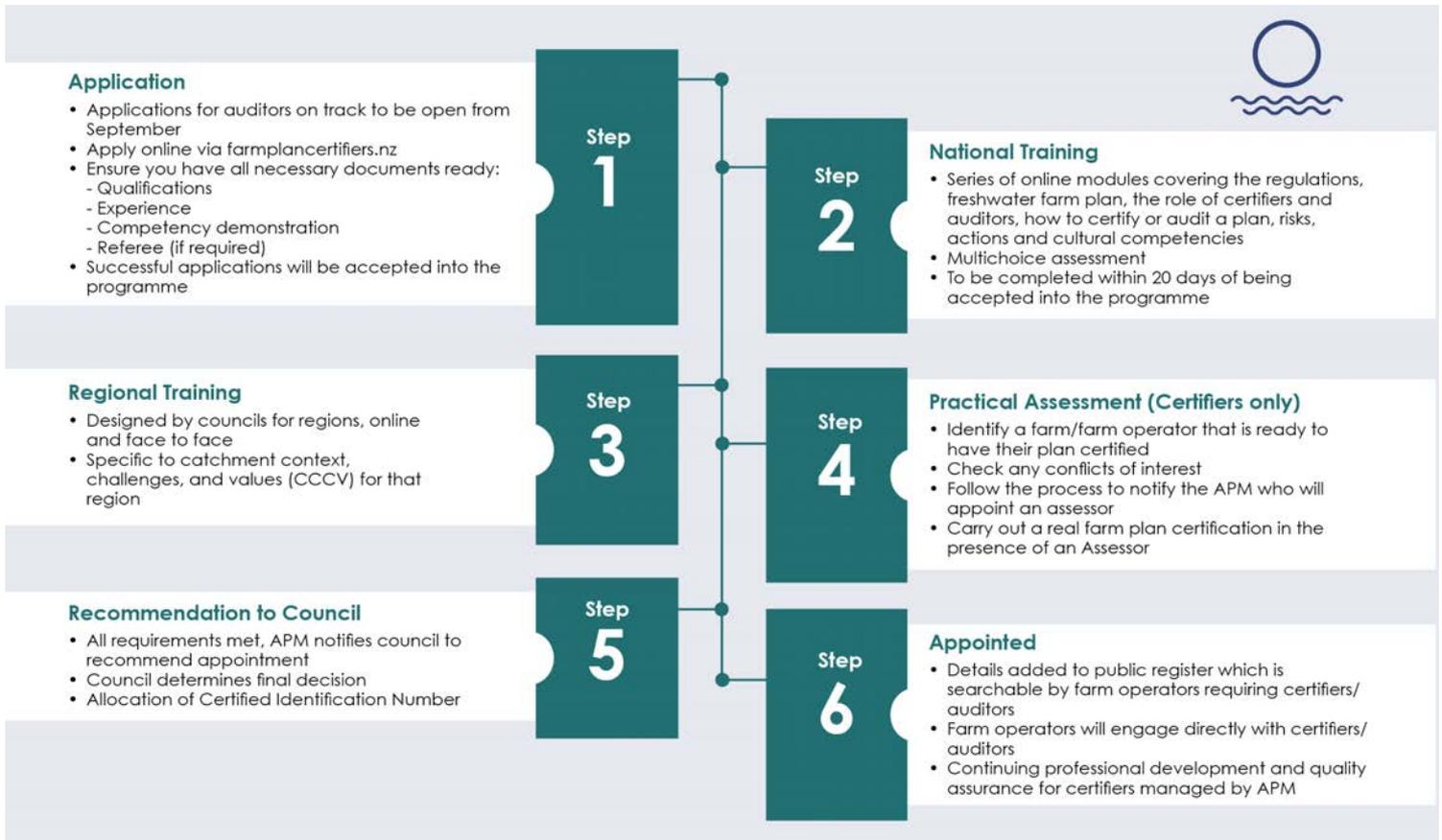
As the Appointment Process Manager (APM), the AsureQuality team manage the certifier and auditor appointment process on behalf of councils. This includes:

- the appointment application process, training services and on-farm practical assessments
- application assessments and recommending applicants for certifier and auditor appointment to the council if an applicant meets the criteria for appointment
- maintaining a national register of appointed certifiers and auditors
- quality assurance activities for the appointment system
- continued practice national requirements for certifiers and auditors
- all disputes and complaints related to certifiers and auditors.

Farmplancertifiers.nz

On 1 August a new website, farmplancertifiers.nz, was launched which includes details about the programme, pre-requisites, training, the application form as well as FAQs.

The appointment process for certifiers and auditors includes six key steps which are outlined below:



Initial rollout and ongoing improvements

Certifier applications are now open for Waikato and Southland, and applications for additional regions will follow as the regulations come into effect within those regions. Auditor applications are on track to open from September 2023.

"During the design of the certifier and auditor appointment programme, we have held discussion groups and workshops to capture feedback and input to ensure the best experience possible for people," describes AsureQuality User Experience Lead Trish Rankin. "We will continue to collate feedback over the initial rollout phase (Aug-Dec 2023) to improve the application process and ensure a nationally consistent programme."

New Zealand has highly competent and passionate rural professionals working with our farm operators, and the AsureQuality team is committed to supporting applicants to become appointed as freshwater farm plan certifiers and auditor appointment programme.

Keep up to date

- Subscribe via the website farmplancertifiers.nz or email farmplancertifiers@asurequality.nz for more information.

NZFAI AND FARM ASSURANCE IN THE RED MEAT AND WOOL SECTOR

QCONZ

New Zealand Farm Assurance Programme (NZFAP) and NZFAP Plus are the red meat and wool sector's quality assurance programmes. The purpose of the two programmes is to provide confidence and certainty to consumers around the world that produce from New Zealand's sheep, beef and deer farms is authentic, genuine and safe. The two standards provide assurances regarding integrity, traceability, animal health and welfare, people, farm and natural resources, and biosecurity.

The two programmes are voluntary and are run nationwide. They were developed under the Red Meat Profit Partnership, an initiative driven by a partnership between the New Zealand red meat sector and MPI. Both programmes are now owned and managed by New Zealand Farm Assurance Incorporated (NZFAI). NZFAI has approximately 45 members representing the majority of this sector. Under their guidance, NZFAP certifications have grown to over 8,100 farms, and another 500 farms are working towards or have achieved NZFAP Plus certification.

Late in 2022, NZFAI made the decision to seek competitive tenders regarding the provision of audit services for the programmes. From that process, Quality Consultants NZ (QCONZ) will replace AsureQuality as the Conformity Assessment Body. QCONZ began delivering NZFAP Plus audits in April, and from August 1, they will begin contacting farmers new to the programme to set up audit bookings. For farms already in the NZFAP programme, QCONZ will commence audits from October 1 as they become due in their three-year cycles.

At the same time, NZFAI has also been developing a digital platform with the express desire of making the audit process smoother on-farm. It will allow farmers to upload evidence ahead of the audit, enabling a document review prior to the farm visit, subsequently reducing audit time on-farm.

NZFAP and NZFAP Plus - New Zealand's National Farm Assurance Programmes

Our seal of origin delivers trusted and authentic ORIGIN, TRACEABILITY, FOOD SAFETY and ANIMAL WELFARE standards to our global consumers.



NZARM AND KMR PILOT NATIONAL TRAINING COURSE

Kaipara Moana Remediation

Living our values as a Jobs for Nature programme, Kaipara Moana Remediation (KMR) hosted a two-day wānanga at Te Ātiu Creek, Taporapora, in July 2023. Around 25 KMR Field Advisors and a number of partners came together for practical training on wetlands and soil erosion risk management, interwoven with mātauranga Māori approaches.

The training was developed through KMR's partnership with the New Zealand Association of Resource Management (NZARM), which has developed a programme to build capability and capacity across the Freshwater Farm Plan advisors.

The training involved practical learning and assessment as well as teaching out in the field to complement group work and presentations. While the course was aimed at beginner and intermediate rural professionals, it also added specific Tai Tokerau and Auckland context for Kaipara Moana Remediation Field Advisors working across the seven major river systems and nine eco-districts in the 600,000-hectare (6,000km²) Kaipara Moana catchment.

Justine Daw, KMR's Pou Tātaki attended the workshop and felt the aroha and support for those starting out in nature-based careers. "A year and a half into operations, KMR has accredited 28 local businesses and 21 nurseries and trained 53 people as KMR Field Advisors to work with landowners and support them to take action to protect and restore the Kaipara Harbour". \$10.3m of KMR sediment reduction projects have been completed or are underway, creating an estimated 180,000 hours of new work. "We are now helping KMR Field Advisors to take the next step on the journey to becoming freshwater farm planners. It's really rewarding to see the wider KMR team growing and learning together".

Matt Highway, CEO of New Zealand Association of Resource Management, said "It was a great event to be a part of and to see this partnership with KMR and NZARM start to deliver on-the-ground results. Everyone was positive, and excited to learn, and it's great to see people beginning to understand the real work that goes into land management. We look forward to scaling such events across the country".





Ministry for the Environment (MfE) co-funds the KMR with \$100m over 6 years through the Jobs for Nature scheme. Ilka Pelzer, MfE's Lead Analyst for the Kaipara Moana Remediation Programme came along to experience how the KMR and NZARM partnership work leads into growing people while growing trees. "This was Jobs for Nature funding in action – building capacity and capability in people and in communities."



Katie Owen, Senior Analyst, was positive that the course offered practical learning with Te Ao Māori woven throughout, and created a space to build trusted relationships, remember history, and think about applying lessons for the future. "We can all come together with our different perspectives and roles, but it is our joint purpose of protecting Te Taiao for future generations which binds us together in this mahi."

The pilot courses will now be reviewed and further developed for wider application and roll-out around the country. Those participating in the training will be invited to join the national register of freshwater farm planners that NZARM is developing, to access personalised learning and training support.

Background

The Kaipara Moana Remediation Programme ("KMR") is an initiative between Kaipara Uri (Ngā Maunga Whakahii o Kaipara, Te Rūnanga o Ngāti Whātua, Te Uri o Hau), Northland Regional Council, Auckland Council, and the Ministry for the Environment to improve the health and wellbeing of Kaipara Moana (Kaipara Harbour). KMR was established in October 2020 through a memorandum of understanding which commits the Crown to providing up to \$100 million of Jobs for Nature grant funding for six years, with matched funding from councils, landowners and other sources.

NZARM BROADSHEET
August 2023



NEW ZEALAND
ASSOCIATION OF
RESOURCE
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