Flood Risk in Motueka Catchment
Workshop Summary Notes

Shedwood Hall, Tapawera, 28 May 2026

More than 120 people from across the Motueka Catchment came together for a half-day workshop on flood risk, how the river system is behaving and changing, and how the community and agencies can respond together.

Introductory and Scene Setting

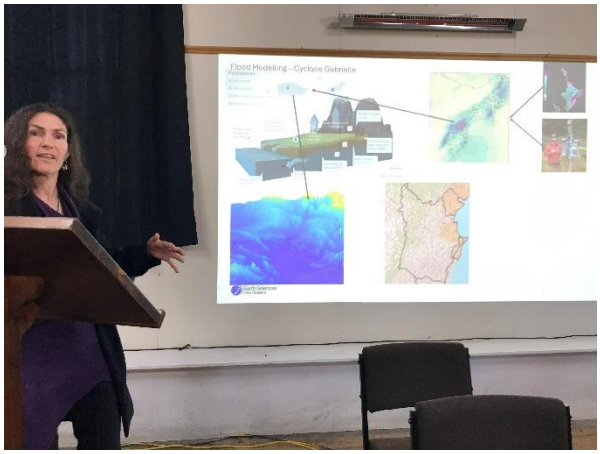
The day was facilitated by Heather Collins and opened with a welcome from Neil Deans of Ngāti Koata and a karakia. A strong theme throughout the day was that local knowledge and scientific knowledge both matter, and that working together is essential. Participants were asked to consider:

- Is this the same flood problem the community has always faced, or is it changing, and how?

- How should the community respond?
- How can limited resources be targeted well?

People were encouraged to listen openly and respectfully, share experiences, and think about what resilience looks like for families, farms, businesses, and the wider catchment.

Presentation: Dr Emily Lane, Principal Scientist, NIWA/Earth Sciences



Emily shared the long history of flooding in the Motueka Catchment, including the "earth flood" of 1877 and other significant events. She made the following key points:

The hazard is changing, not just recurring:

- **Record-breaking events.** Motueka's recorded flood history runs from 1887; the June 2025 flood is now the largest on record, and historic newspaper accounts (e.g. 1929) show floods clustering in close succession.
- **Increasing rainfall intensity:** A warmer atmosphere holds more moisture, increasing short-duration, localised rainfall intensity. Warmer seas and marine heatwaves raise both the likelihood and intensity of cyclones reaching New Zealand; one modelled Cyclone Gabrielle track ran directly into Tasman.
- **Compounding factors.** Saturated ground, wind, drought-to-flood swings and tidal influence increasingly need to be modelled together rather than separately.

The human and relational dimension is central

- **Community trauma is real and ongoing.** Emily referenced Dr Holly Thorpe's Cyclone Gabrielle work on health and wellbeing impacts and the Wairewa case studies) pointing to hidden costs — health, insurance, lost accommodation, hard personal decisions and the long tail of recovery.
- **Trust and "spirals."** Community–council relationships were described as either downward spirals (low trust, less achieved) or upward ones (trust, momentum). Several speakers see the relationship as strained, especially since the old catchment-board era ended.
- **Social connectedness builds resilience.** Communities that know each other recover better; simple local connection was seen as protective.

The recording of her talk can be found here.

Discussion following Emily's presentation

The discussion opened with a question challenging Emily's reference to climate change. From there, the conversation moved across several themes:

Gravel and action on the river – Many participants shared examples where gravel build-up had worsened flood impacts. – There were repeated questions about why extraction levels have changed and what is planned. – Frustration about "not enough being done" came through strongly.

Rainfall intensity and how it is changing. – Sea-surface temperature baselines and what "normal" means. – Whether combined modelling of saturated ground, wind, and rainfall could explain last winter's sequence of events.

Flood thresholds and climate change – People asked at what point a flood becomes catastrophic in Motueka. – Emily noted that intensities are increasing, raising the likelihood of larger events.

Engineering vs natural river behaviour – Questions about whether gravel removal reliably reduces flood pressure. – Emily noted this varies by location: sometimes it increases capacity, sometimes it shifts flow or increases erosion risk.

Local knowledge and downstream effects – Participants emphasised long-term observations of the river. – Others noted that actions in one reach can have unintended consequences downstream.

Limits of engineering – Participants asked whether rivers can ever be engineered not to flood in major events. – The consensus: very large floods will always spread onto the floodplain and overtop stopbanks, so planning needs to consider where flooding and overtopping is least harmful.

Emotional and relational impacts – People spoke about trauma, anxiety when it rains, and the cumulative stress of repeated events. – Emily's comments about downward and upward spirals in community–council relationships resonated strongly.

Presentation: Dean Palmer – Local Hop Grower, Hinetai Hops.

Dean spoke from two decades of farming beside the river, noting that others in the room had lived with the river even longer. He described how past floods — including the 1983 event that covered the whole terrace — shaped how they think about protecting infrastructure on the lower terrace. Over time, they trialled different approaches and learned from each event.

Community organising and engagement with Council

Dean outlined how a group of landowners began organising in August 2022 after repeated flooding. Over the next 18 months they engaged with Council, with mixed success. In June 2023 they presented formally to the TDC Operations Committee, raising concerns about gravel build-up and the increasing flood risk to Tapawera.

He described gravel extraction as under-used, calling it one of the most cost-effective tools available because it can increase channel capacity. He also supported revegetation as a long-term solution and acknowledged the ongoing tension between engineering priorities and ecological requirements.

Reflections on the 2025 flood response

Dean said the emergency response was fast and effective: crews got into the rivers quickly, clean-up work happened promptly, and infrastructure repairs were completed quickly or were still underway. He expressed appreciation for this.

His concern was what happens after the emergency phase. He questioned whether the same pace and cost-effectiveness could continue under normal regulatory settings, and whether the current river management framework is workable or affordable.

Practical actions on the farm

Knowing that floodwater would overtop stopbanks, Dean's team inserted trees at an angle to trap debris before it reached the hop garden. This worked: debris collected in the planted area, water stayed for around 30 hours, but they didn't lose anything.

He also observed that vegetated and long-grass sections of the stopbank held together better than bare grass, reinforcing the value of vegetation for stability.

Key learnings

Dean highlighted three main points:

1. **Engage as a community** and contribute regularly to council processes.

2. **Action on your own land matters**, including planting margins and vegetating stopbanks.
3. **River management rules need to change** as the current framework is not affordable or workable.

Discussion following Dean's presentation

Dean's presentation prompted a strong response from the room. The discussion moved across several connected themes:

Support for changing river management rules – When a participant asked for a show of hands, a large number of participants — possibly a third or more — indicated support for Dean's view that current rules and the global rivers consent are not workable or affordable. – People expressed frustration that recovery work often only happens after a flood, even when it is essentially preparation for the next event.

Gravel extraction and its impact – A number of participants shared examples where gravel removal had reduced flood impacts on their properties. – Others described gravel bars pushing water into banks, eroding margins, and leaving rivers more exposed. – Several people questioned why gravel extraction is limited, and why it is not used more consistently as a tool.

Constraints on private action – Some landowners said they felt prevented from protecting their own properties, even when they believed they could act responsibly. – Others described difficulty navigating rules, consents, and compliance processes, and a sense of being "stuck" between wanting to act and not wanting to breach regulations.

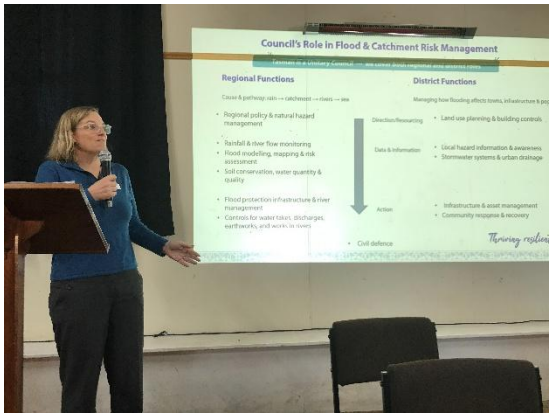
Practical actions for smaller landowners – A smaller landowner asked how those without large farming operations could prepare. – Dean suggested strategic planting, targeting margins rather than blocking flow paths, and working with neighbours so people can act together.

Forestry slash and erosion – Participants raised concerns about slash damage during the June floods, including threats to infrastructure and riverbanks. – Some questioned species choices on vulnerable soils and the legacy of past planting incentives.

Emotional and community impacts – One participant described feeling traumatised by the sound of rain on the roof. – Others spoke about the ongoing stress of repeated flooding, insurance challenges, and uncertainty. – There was a strong desire for local

knowledge to be taken seriously, with many emphasising that people living beside the river often see changes long before they appear in official reports.

Presentation - Mirka Parker and Alastair Clement – Tasman District Council - Head of Land Management, Catchments and Environment, and Team Leader Hazards and Geomorphology



Mirka outlined Council's responsibilities and the complexity of managing flood risk in a large region with a small rating base of less than 24,000 ratepayers. She emphasised that:

- Council cannot remove risk from every property.
- Communities cannot engineer their way out of the whole problem.
- Solutions need to be developed collectively.
- Good information is essential for sound decisions.
- Gravel removal is one useful tool when used in the right place at the right time.
- Plans are shaped by community input, affordability, and acceptable levels of risk.

Alastair highlighted tools such as the Natural Hazards Map Viewer, environmental dashboards, and the developing flood alert system.

Discussion following Mirka's presentation

Discussion moved across several themes after Mirka and Alastair's presentations:

Scale of the challenge and funding constraints – Participants acknowledged the complexity of managing flood risk across a large region with a small rating base. – Several people said they wanted clearer communication about what can realistically be achieved with current resources.

Range of tools and approaches – Some asked whether **buy-back of flood-prone land** should be considered in the long term. – Others emphasised the need to keep testing a wide range of tools — gravel management, planting, vegetation control, and nature-based solutions — to find the right action in the right place.

Forestry species and land use – Participants raised concerns about the legacy of past incentives that encouraged pine planting on vulnerable soils. – There were questions

about whether different species should be used in areas now exposed by windthrow and erosion.

Community involvement and communication – A recurring theme was the need for more regular, proactive communication from Council. – People said they want to understand the reasoning behind decisions, the costs involved, and the level of protection that can be expected. – Several participants asked for clearer guidance on what landowners can do without triggering compliance issues.

Information and decision-making – Participants expressed interest in better access to modelling, hazard information, and the data that informs Council decisions. – Some noted that clearer, shared information would help reduce confusion and build trust.

Lunch break

Everyone stopped for a yummy lunch put on by Friends of Tapawera School at 1pm.

Afternoon Workshop Discussions

After thanking the speakers, facilitator and all those who supported the event, participants chose questions to explore at their table groups with notes taken and reporting back to the whole group facilitated by Heather.





Key questions included:

What information do you need to understand flood risks to you, your family, and your livelihood?

People consistently asked for clear, accessible, and practical information about rivers, flooding, and decision-making. There is a desire to capture and preserve local knowledge so it isn't lost over time. Key needs included:

Understanding the river system

- Plain-language explanations of how the Motueka and its tributaries behave as a dynamic, linked system
- Clear descriptions of different types of flooding (e.g., debris floods, channel-capacity issues)
- Integrated, catchment-wide approaches rather than piecemeal fixes

Better data and mapping

- Up-to-date flood maps, flow information, and modelling outputs
- Easier access to historical data and new technology (e.g., sensors, aerial imagery)
- Information on planned management for specific rivers or margins (e.g., Motupiko)

Practical guidance for landowners

- Clear advice on what can be done on private property
- Information tailored for newcomers to flood-affected land
- Support on how to respond to insurance loss

Roles, processes, and decision-making

- Straightforward explanations of Council roles, processes, and responsibilities
- Clear communication about what TDC has proposed in its Annual Plan
- Simple, transparent explanations of gravel management: methods, impacts, costs, and how decisions are made

Engagement and communication

- More focused meetings on specific issues
- Better integration of scientific knowledge and local knowledge
- Early-warning system information and how to sign up

Who needs to be involved and what further workshops are needed?

Participants emphasised that flood resilience is a shared responsibility – "we are all in this together". Participants identified a wide range of people and organisations who need to be involved:

- TDC, Iwi, Neighbours and landowners, Long-term residents, Community groups and welfare organisations, Local businesses, Civil Defence, Trusted local leaders, Growers and farmers, contractors, Community collectives

There was strong support for locally facilitated meetings, workshops, field days in different parts of the catchment, followed by opportunities to bring representatives together for wider planning. This should include togetherness, sharing, listening, different perspectives and knowledge, including:

- Civil Defence processes and who does what in an emergency – 4 R's
- Gravel management and river management generally
- Forestry slash
- Plant species and vegetation management – right tree, right place and pruning.
- Fencing and bank protection
- Field days, including visits to Dean Palmer's property, Motupiko, spots along river.
- Information sharing on adaption plans and options for people

Actions to reduce flood risk and live safely beside our rivers

Participants identified a wide range of short, medium, and long-term actions, from practical on-farm measures to whole-catchment approaches.

Short term (within 12 months)

Strengthen engagement and support

- Improve engagement and collaboration between TDC, farmers, iwi, and the wider community
- Provide more support to those directly affected by flooding, including individual visits
- Improve communication during emergencies, including clearer alerts and establishing an emergency hub
- Make rainfall and flow thresholds easier to understand

Improve understanding of risk and mitigation options

- Identify where floods have occurred and are likely to occur, and make this information **easily accessible**
- Highlight **priority areas** for targeted action
- Increase monitoring at key bridges

Practical on-farm and river actions

- Identify gravel build-ups and other obstructions causing immediate problems, and remove or reduce them where appropriate (targeted, science-based)
- Explore economic uses for extracted gravel
- Reduce silt and sediment in floodwaters
- Increase riparian planting, with funding to support it
- Reduce forestry slash, especially near roads and waterways
- Provide clear guidance on what landowners can do without consents
- Support landowners to stabilise banks and repair damage
- Share resources such as fencing equipment

Medium term (2–5 years)

Improve land and water management

- Develop buffers between forestry and roads/waterways; improve forestry practices to reduce debris
- Expand riparian buffers, including strategic planting and pruning
- Improve soil management to increase filtration across land uses
- Improve drainage and overland flow paths

Slow and spread water

- Explore ways to slow water in small streams (e.g., woody debris, leaky weirs)
- Investigate designated spillways and other options that give the river more room

Strengthen planning and decision-making

- Create a catchment gravel management plan involving community, TDC, scientists, and local expertise
- Identify where interventions will have the most impact (e.g., planting, bunds, gravel extraction, secondary flow paths, wetlands, stopbanks)
- Improve access to modelling and hazard information

- Clarify permitted activities and compliance pathways
- Encourage sub-catchment groups to develop shared plans
- Provide more field days and practical demonstrations
- Improve understanding of flood zones to guide future building decisions

Long term (5+ years)

Nature-based and strategic solutions

- Develop wetlands and upstream forests to reduce peak flows
- Consider long-term land-use planning that avoids development in high-risk areas
- Explore buy-back options or rating adjustments for high-risk floodplain land

Strengthen community and infrastructure

- Ensure community facilities are resilient
- Continue building strong community networks and knowledge-sharing
- Work with forestry to ensure best practice, including potential transition away from pine

Whole-catchment planning

- Develop an integrated catchment plan that brings together engineering, ecology, land use, and community priorities

Themes across all timeframes

Participants emphasised the importance of:

- Clear communication
- Shared understanding of science and local knowledge
- Community involvement in shaping decisions

Closing Reflections

To close the day, Heather invited participants to reflect on the workshop and share a few final thoughts with the whole room. She asked questions such as “What’s one thing that surprised you?”, “What are you taking away from today?”, and “What feels most important as we move forward?” People offered a wide range of reflections — some practical, some emotional, and many grounded in what they’ve seen and dealt with over the years. Across the reflections, several themes stood out:

- the depth and importance of local knowledge and how valuable it is to hear directly from others who have lived beside the river for decades
- the strong desire for more community-led spaces and conversations
- the need for clearer, shared information about gravel, flood behaviour, and river management
- the importance of community involvement in shaping future decisions, and the existing frustrations that the community isn't currently involved.
- the value of combining science with what people see happening on their land
- the emotional and financial toll of repeated flooding
- the need for planned, proactive, whole-of-catchment approaches rather than reactive
- the value of having everyone in the same room — community members, council staff, iwi, technical experts, and people from across the catchment — and expressed a strong desire for more opportunities like this to come together, share knowledge, and build understanding.

These closing reflections reinforced the central message of the day: flood resilience in Motueka will depend on strong relationships, good information, and a community that continues to work together.

Dana Carter of MCC indicated that notes and resources from the workshop will be sent out to everyone, and that MCC will continue to support community-led conversations and actions and help connect people with information, resources, and each other as we work together on next steps. Participants were provided with an information pack of resources to take away with them.

Neil Deans finished with a karakia.