

Kerikeri-Waipapa River Working Group Record of Actions

Meeting held in the Kerikeri Sports Complex
Cnr Heritage Bypass & Waipapa Road, Kerikeri
on Thursday 16 April 2026, commencing at 10:00 am - 11:30 am

Tuhinga/Present:

Chairperson, NRC Councillor Joe Carr
FNDC Councillor, Ann Court
BayCare, John Dawn
Lower Puketotara and Kerikeri Catchment, Fred Terry
Upper Puketotara/Waiwhakarongaro Catchment, Murray Wright
Kerikeri Irrigation Company Representative, Tony Corcoran
Iwi Representative, Kipa Munro

I Tae Mai/In Attendance:

Full Meeting

NRC GM Community Resilience, Lousia Gritt (online)
NRC Rivers Manager, Joseph Camuso
NRC Rivers Project Manager, Meg Tyler
NRC Secretariat, Haylee Labelle
Water Technology – Principal Stormwater Specialist, Bertrand Salmi
Toby Kay (online)
Rolf Mueller-Glodde
Inge Bremer
Mike and Susanna Booth
Thomas Corbett – on behalf of Grant McCallum

Part Meeting

FDNC Acting General Manager – Policy and Planning, Tammy Wooster
(arrived 10.28am)

The meeting commenced at 10am with karakia by Kipa Munro.

Ngā Mahi Whakapai/Housekeeping (Item 1.0)

Ngā Whakapahā/Apologies (Item 2.0)

Moved (Carr/Court) Kelly Stratford, Steve Matene, Tyler Bamber, Bill Edwards

Record of Actions – 9 October 2025 (Item 3.1)

Presented by: Cr Carr

Moved (Munro/Carr)

Secretarial notes:

Joseph Camuso explained that the update of costings for the K3A Dam is part of the LTP project (Riley has been engaged to undertake), but progress is delayed due to pending geotechnical testing and lack of landowner permission for site access. The team is considering updating the schedule based on known volumes if necessary, but ideally, new geotechnical data is preferred.

Discussed whether David Booths property is serviced by the Kerikeri Irrigation Scheme, confirming that while the scheme is available at the front gate, their property has never utilised it.

Tony Corcoran advised the scheme is not near Kerikeri Irrigation so there will be no direct benefits.

Receipt of Action Sheet (Item 3.2)

Presented by: Cr Joe Carr

No further discussion as questions were answered by the presentation slides

Terms of Reference (Item 3.3)

Presented by: Cr Carr

Moved (Carr/Terry)

Secretarial notes: As this is the first meeting for the new triennium, a discussion was facilitated on updating the working group's membership, recommending the inclusion of representatives from Heritage New Zealand, the Kerikeri Waipapa business community, and FNDC planning staff, with suggestions for additional members and the need for government agency involvement.

The group agreed to recommend Bill Edwards (Heritage New Zealand) and a representative from the Kerikeri Waipapa business community for inclusion. The need for a formal FNDC planning staff member and a NZTA was also discussed as they have not been attending the meetings to date.

Suggestions were made to approach Jo Baguley, the daughter of a former representative for continued involvement, ensuring continuity and local knowledge within the group.

Agreed action points:

- **NRC Rivers Manager to approach Jo Baguley to invite her to join the party as a replacement for David Stewart Jones.**
- **NRC Rivers Manager to approach Bill Edwards regarding joining the working party as a member**
- **To add FNDC Infrastructure/Planning team member as a member on the working party**
- **NRC Rivers Project Manager to request a representative from NZTA to attend these meetings**

Presentation Slides (Item 3.4)

Presented by: Joseph Camuso and Meg Tyler

Secretarial notes:

Budget

Confirmed that there is no targeted rate for the catchment. Outlined the allocation of \$217,875 to undertake the catchment study, including significant investment in new LIDAR data and localised works, with Joe Camuso and Toby Kay detailing the technical application and peer review of the new data.

Explained that \$217,000 was allocated to the catchment, with \$154,875 earmarked for further investigations into the K3A Dam. The funding supports new LIDAR acquisition and other localised works.

New LIDAR data was flown specifically for this catchment, making it unique compared to others. The data and resulting models have been peer reviewed by two engineers familiar with the area to ensure reliability.

Flood Modelling Methodology and Results:

Toby and Bertrand presented detailed flood modelling for the Kerikeri and Waipapa catchments, discussing the impact of land elevation changes, model calibration, and the influence of development and zoning.

Explained that the flood model is calibrated against historical events to ensure accuracy, with sensitivity analyses conducted to understand the influence of LIDAR data and vegetation changes. The model incorporates both 2007 and 2025 LIDAR data to compare flood extents and levels.

Demonstrated that changes in land elevation, particularly from building platforms and industrial development, have altered flood extents and flow paths. The model shows both increases and decreases in flood risk depending on location, with some areas now better protected due to raised platforms.

Tammy Wooster inquired about how zoning and future development are integrated into the modelling. The team clarified that proposed rezoning scenarios are modelled, but assumptions are made due to unknowns about future mitigation measures and development specifics. The model does not account for all possible on-site runoff mitigation.

Acknowledged limitations, including incomplete data on private assets, pipes, and culverts, and the static nature of the model, which does not capture incremental development over time. They emphasised the importance of understanding these limitations when interpreting results.

The model provides outputs on flood depths, velocities, and hazard ratings, which are used to assess risk and inform planning decisions. The team noted that the model can be used to test various mitigation options and their impacts on flood risk.

Assessment of Flood Mitigation Options:

Toby presented a range of flood mitigation options under consideration, including the K3A Dam, spillways at Waipapa Industrial Estate and Puketotara Stream, culvert upgrades under the State Highway 10 and Waipapa Road, nature-based solutions like afforestation and leaky dams, and localised channel works, with the group discussing the technical details, expected impacts, and the process for shortlisting and cost-benefit analysis.

. The options are mapped and will be run through the model for impact assessment.

The team is evaluating large-scale afforestation and wetland creation in upstream catchments as alternatives or complements to engineered solutions. These are expected to mitigate regular flooding but may be less effective for extreme events.

Each option will be assessed for its impact on flood levels, extents, and flows, with shortlisted options undergoing cost-benefit analysis. The removal of an old hydroelectric intake weir was found to have negligible impact and is not being pursued further.

The group emphasised the need for ongoing consultation with stakeholders, including landowners and the wider community, especially for options with significant land or cost implications.

K3A Dam Detailed Assessment:

Toby led a comprehensive discussion on the K3A Dam, covering its technical design, flood mitigation benefits, operational considerations, risks, regulatory requirements, and the need for further geotechnical investigation and stakeholder engagement.

The K3A Dam is shown to reduce downstream flood extents and levels, with scenarios modelled for different outlet configurations. Throttling the outlet increases the area and number of buildings removed from the floodplain, with up to 201 hectares and 132 buildings affected in the most restrictive scenario.

The dam's effectiveness depends on outlet configuration, storage volume, and the ability to drain the reservoir within 48–72 hours to prevent adverse impacts on land use. Dual-purpose use for irrigation and flood detention is possible but not currently modelled.

Risks include uncertain costs, the need for staged geotechnical investigations, lack of current landowner support, and compliance with dam safety regulations, including breach scenario analysis and contingency planning for high-impact classification.

Whilst the dam would remove significant areas from the floodplain it introduces residual risk due to potential dam failure. Environmental impacts on river hydrology, fish passage, and vegetation must be considered, along with long-term operational and maintenance costs.

Further work includes completing model simulations, shortlisting options, developing concept designs, and conducting cost-benefit analysis. Funding for technical work is available, but construction funding and targeted rates require further discussion and public consultation.

Timeline:

Modelling of initial options by next week. A shortlist of the three concepts will be completed by July

Agreed action points:

- **Review the 2016 dam site investigations and reports (including Workman, Opus, and Riley reports) for relevant information to inform current decision-making**
- **NRC Secretariat to review the next meeting date of 27 August with a view to changing this to July based on when the shortlisted concepts are due**
- **The next meeting to have recommendations on the options provided by the experts in order to provide the working party with a direction to be supported.**

Whakamutunga (Conclusion)

The meeting concluded at 12.20pm with karakia by Kipa Munro

Unconfirmed