## Carbon Neutral NZ Trust, Kerikeri Branch PDP Hearing 13 Natural Hazards on June 24, 2025

Thank you for the opportunity to address you again at this Hearing 13 on Natural Hazards.

As you know, our charitable community group, Carbon Neutral NZ Trust, focuses on climate change awareness and action.

Climate change is inextricably linked to natural hazards, and its effects are becoming increasingly severe and frequent.

Three years ago, in our Proposed District Plan (PDP) submission, we raised significant concerns about numerous risks including flooding, particularly in flood-prone areas.

We argued that housing developments in these areas should be prohibited.

While we supported the re-zoning of the KiwiFresh property, we also highlighted the flooding risks associated with it.

KiwiFresh's application includes mitigation plans, but Tonkin & Taylor's report (21 May 2025) questions whether these plans are sufficient.

During our preparation of the Kerikeri-Waipapa Spatial Plan, we became acutely aware of the extreme flooding risks in Waipapa, especially during weather bombs—events that can bring 300, 400, or even 500 mm of rainfall within 24 hours.

Five rivers flow into Kerikeri with the Kerikeri and Puketorara Rivers being the largest.

<Puketotara River, Whiriwhiritoa Stream, Waipekakoura River, and Maungaoarerua River>

In April, we experienced three heavy rainfall events with up to 100 mm of rain, causing mild flooding in some places.

These events were a stark reminder of what could happen during more severe weather bombs combined with storms.

Such events could cause massive damage and destruction in Waipapa, particularly due to the barrier of State Highway 10, which has only three under-dimensioned culverts.

Large areas would be impacted, including numerous commercial and industrial buildings that have been built in recent years in this natural flood zone.

Those developments exacerbate the problem with their impermeable roofs, parking grounds, and raised building platforms, which act like islands in a flood.

It's important to note that the NRC's flood risk maps are outdated. New LIDAR maps are expected soon, which will provide more accurate data.

We have also learned that the NRC Kerikeri River Catchment Liaison Committee has been working on a flood mitigation plan since 2012.

Their proposal includes a K3A dam on the Kerikeri River, approximately 2.5 km upstream from Waipapa to control the water flow during severe storm events.

In 2024, PK Engineering developed an even larger concept: a 110-acre Lake Waipapa on a low-quality, flood-prone paddock farm at the corner of State Highway 10 and Puketotara Road. The concept involves digging a lake and using the soil to build a dam.

Both the K3A dam and Lake Waipapa concepts include the creation of a large lake to manage water flow, with added benefits such as

- hydro-energy generation
- water reserves for townships and irrigation
- recreational opportunities like water sports and aquatic life.

These plans have been presented to FNDC, NRC, and MPs, but no action has been taken, despite the urgent need to address the tremendous risk.

While these flood mitigation plans are not directly part of this Hearing, they would have a significant impact on the PDP.

Once the flooding risks west of State Highway 10 are resolved, more land will become available for development on the eastern side, particularly the KiwiFresh land, which is essential for the long-term expansion of Kerikeri.

For that reason we strongly supported the inclusion of Option F into the Spatial Plan, which Council agreed last week conditionally.

We are aware that the KiwiFresh re-zoning application will be considered at Hearing 15 B, but the Tonkin & Taylor report, which also references these and other natural hazards, is enclosed in the documents filed for this Hearing 13.

As laymen, we cannot judge the best solution for these flooding risks, but we urgently highlight the need for action.

We support the precautionary approach outlined in the PDP, but we also believe that immediate action is needed to address these risks.