Te Kaunihera o Te Tairāwhiti
GISBORNE
DISTRICT COUNCIL

24 September 2026

Maraea Cookson

81a Kanakanaia Road

Te Karaka

Response to Maraea Cookson Regarding the Te Karaka Stopbank Upgrade

Tēnā koe Maraea,

I refer to your letter dated 14 September 2026 regarding your property at 81 Kanakanaia Road and your concerns about the potential effects of the proposed Te Karaka Stopbank Scheme.

I understand that you have raised three principal concerns:

- That Waikohu Hill (Hill) which forms part of your property is impacted by the proposed stopbank scheme;
- That the proposed stopbank may alter floodwater behaviour in a way that could increase erosion along the side of the Hill on your property; and
- That aspects of the design and assessment process may have implications for your property, including groundwater considerations.

I address each of these concerns below.

Impacts of the Te Karaka Stopbank Scheme

You have identified engineering principles and flood-related processes relating to the use of natural topography, levee tie-ins, and erosion mechanisms. Those materials demonstrate that, in some circumstances, stopbanks may be designed to connect to natural features such as hills or areas of high ground.

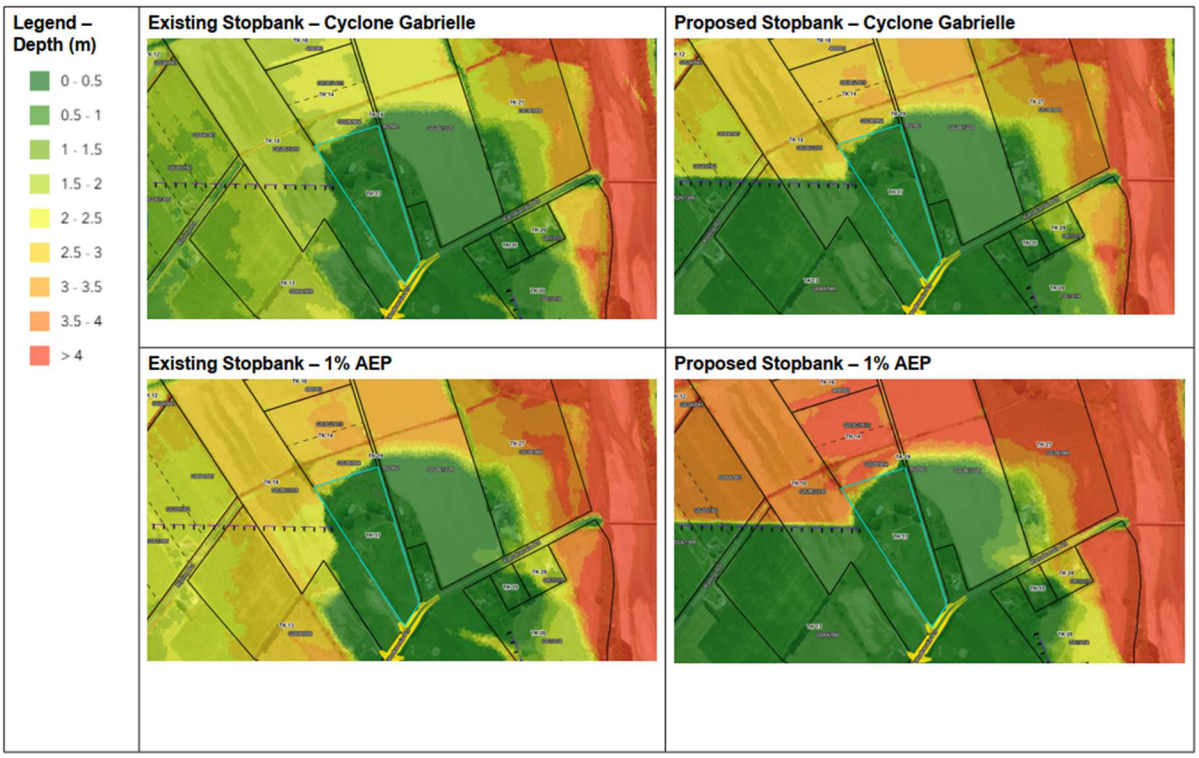
Firstly, the proposed stopbank does not encroach onto your property. Secondly, the fact that a natural landform may provide incidental topographical benefits during a flood event does not mean there is an increased impact to the property.

I can confirm that the Hill does not form part of the Te Karaka Stopbank Scheme in a manner that would give rise to an entitlement to compensation. The following explains the modelling which supports this:

Flood Depth

The flood depth modelling indicates that there is very little difference in flooded area when comparing the current day scenario (existing stopbank) with the future scenario (proposed stopbank), under both the Cyclone Gabrielle and 1% AEP scenarios.

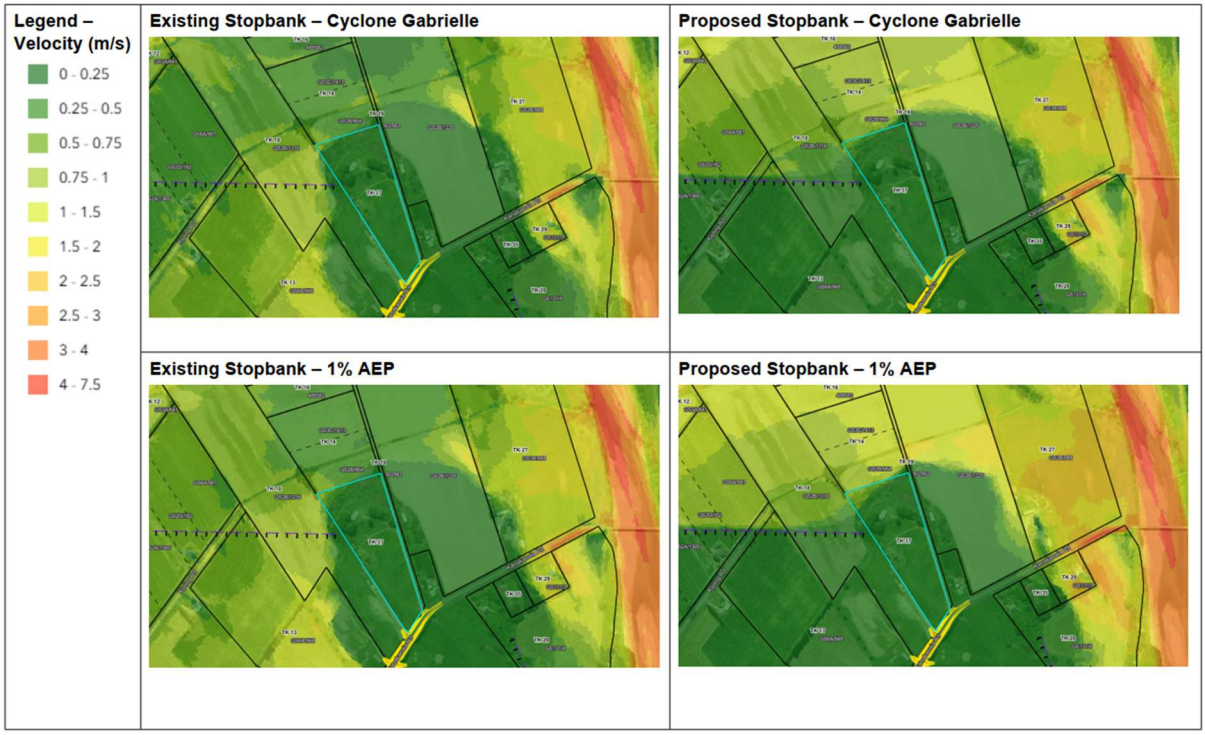
Put simply, a small area in the Northwestern corner of your property is already under water in a current day scenario and will still be under water in the future scenario in both a Gabrielle sized event and a 1%AEP event. The following modelling evidences this:



Flood velocity

The velocity modelling similarly indicates that floodwater velocities in the vicinity of the Hill remain relatively low in both a current day and future event. This means there is little to no change resulting from the proposed stopbank.

As shown in the figure below, the area in and around your property is generally characterised by low flood velocities (0-0.75m/s as shown by the dark green to yellow/light green colour):



Erosion Concerns

The material you have referred to describes engineering risks that may arise where a stopbank is directly tied into a hill or where a hill forms part of the stopbank system.

The flood modelling undertaken, as set out above, does not indicate that your property becomes a concentrated flow path or a location where flood velocities materially increase as a result of the proposed works. To the contrary, the modelling shows that there is little to no increase in flood velocities on or around the Hill and so erosion concerns are not supported by the evidence.

Groundwater

You have also referred to the geotechnical investigation report, noting that groundwater was not encountered during site investigations, and have identified bores that you understand to exist on your property.

While bores may exist on your property, the proposed stopbank works are not located on your property and are not expected to affect bores or groundwater conditions beneath your property.

Further, construction of the proposed stopbank itself involves minimal excavation below ground level. Although some excavation will be required for ancillary works, including drains and borrow pits, these activities are not expected to give rise to groundwater effects of any significance.

Next steps

For the reasons set out above, we do not accept that the proposed stopbank will adversely affect your property.

As you are aware, Council did not oppose your letter being accepted as a late submission to the Independent Hearing Commissioners in relation to the Te Karaka Flood Scheme Upgrade application. The issues you've raised will be considered further through that process.

Dean Foote
Senior Project & Floodplain Engineer