

Tena koutou, tena koutou, tena koutou ka toa.

I am here today to ask, with respect, that the town planning team consider redefining the west Taihape slip zone boundaries. Specifically, to make a change from 4 zones to 2 zones. **Number 1 being above Kaka Road and number 2 being below Kaka Road.**

I ask for this consideration so as to allow myself and others in our community to pursue appropriate residential development within the newly defined slip zones as above.

In support of this I suggest that the risk assessments undertaken by Rangitikei Council, Horizons and EQC, and the subsequent years after the monitoring and risk assessments have shown no movement or damage of significance in zone C and zone B.

Information relevant to reassessing and reconsidering the risk of each zone

Zone A

Incision is thought to be the triggering factor of the slip movement. The toe of the slip is incised by the Otaihape Stream. A new drainage system at the toe has had a dramatic impact on this. When first commissioned it was discharging 45,000 litres a day and although monitoring has now ceased the results showed flow reducing below 25,000 litres per day, and decreasing. Ground movement at the toe has currently ceased and the stability that this affords the other zones is significant. However the risk to the toe is relevant to rainfall, river level and speed of water movement in the stream and vegetation planting on the river banks.

Therefore **risk in this area I speculate would be considered high and could be a zone 2**

Zone C and with consideration to some of zone B

New works coupled with the work already undertaken by Council to further mitigate risk.

New stormwater controls have been put in place above Kiwi Road and issues in Paradise Terrace have been addressed.

Ongoing stormwater infrastructure and maintenance have been undertaken with recent upgrades (May 2021) (January 2022) of the stormwater culverts and drains interceding 36 and 34 Kaka Road. With further consideration to increase flow capacity with a riser and secondary culvert under Kaka Road leading to Otaihape stream if needed. Refer to the engineer's report.

Therefore **risks have decreased in area zone C and B which were always low but new controls and data of damages and slippage now bring it more in line with the risks in zone D. Therefore this could become a zone 1**

Future maintenance and as needed development of stormwater infrastructure (from all stakeholders including property developers) will continue to mitigate the slip hazards in Taihape. Some relevant controls for stormwater could perhaps be coupled to the consents process in the areas of zones B and C (zone 1).

The council town planners, engineering teams and Council must be commended in the risk management strategies and the mitigating drainage infrastructure works.

During the consideration of my request for change I ask that the Council and town planners compare our risks with the risks that other Councils and communities face. For example we have no coastal erosion, significant cliffs overhanging buildings, flood banks, reclaimed or low lying lands. Our risks are manageable and significantly less costly to mitigate than most areas, yet other areas that have these considerations still encourage development.

The west Taihape slip area is stable and manageable, so our community should take advantage of the fact that we have identified the risks and have taken sound, considered steps to mitigate them.

We have the opportunity to encourage development in this area and we have a pathway that has been employed by the council town planning team in its approach to the west Taihape slip **zone D**

The historical up-to-present-day movement to most of the west Taihape slip **Zone B** has been of minimal consequence to property. The movement that has occurred causing damages has been attributed to localised instability. The removal of vegetation and plantings, insufficient stormwater considerations during property development and uncontrolled overland water flows have had significant bearing on the property damages in this area. Stormwater controls can and have mitigated this risk.

Zone C With no recorded movement during the monitoring period and no damages of consequence to property for some 100 years, I ask why would we not treat this area as like zone D. **I have several examples in this area of homes still sitting on their original piles. In sound condition.**

Zone B With some prejudice towards Paradise Terrace area and the area below Kaka Road down to zone A has shown no significant movement to date since 2004 and no damages to property. **I have some excellent examples in this area of homes at 90 to 100 years old still sitting on their original piles.** *34 Kaka is a great example, it has original piles and all the doors and windows in all the rooms are still operating as new. This is the only home of this era in this condition I have ever seen in New Zealand*

For the community and Council to continue with the current level of restriction of property development in this area would be an affront to the information council has garnered through the monitoring process. When you consider the drainage works that have been completed and further stormwater developments and control considerations that any new developments would require we will be on a pathway to a successful thriving Town which is able to provide suitable newer housing.

I have referenced extensive documentation concerning the west Taihape slip zone, its behaviour and its risks.

With respect to all the producers and contributors to the geological investigations, risk assessments and previous works commissioned and undertaken by Council staff. I would like to acknowledge and thank these people for their time, energy and expertise.

Kia ora rawa atu

Regards
Lance Collier

Bibliography of references

Understanding our council response to the west slip zone

- **Rangitikei Council** - district plan August 2018
- **Rangitikei Council** - The historical documented submissions and decisions relating to the slip
- **Rangitikei Council** - The historical documented changes to the district plan
- **Rangitikei Council** - Photo of the West taihape landslide zone data and risk ratings

Understanding the risk and hazards in our area, references

- Update for hazard information for 2015, lifelines risks and responsibilities, GNS science consulting report 2016 S. **Dellow, B.J. Scott, E.R. Abbott, W.F. Ries, D.W. Heron, B. Lukovic**
- Impacts of Climate Change on Urban Infrastructure & the Built Environment. A Toolbox, general information on the causes of rainfall induced landslides, **G Dellow, GNS science**
- GNS science consultancy report 2009/142, the west Taihape landslide, review of slope stability hazards - **Chris Massey, Mauri McSaveney, GNS science. Kate Williams, Tonkin & Taylor. Laurie Richards, independent peer review.**

Understanding and assessing the land movement in the slip zone reference

- GNS science consultancy report 2009/142 - As above.

Understanding the risk and town planning to find a resolution to developing land in the slip zone, reference

- GNS guideline for assessing planning policy and consent requirements for landslide prone land, **compiled by W Saunders and P Glassey, series 7.**

I have attached the names of just a few supporting Rangitikei ratepayers who are like minded and supportive of the proposal to redefine the border of the slip zone and to demonstrate the community appetite for this change to occur.