



Date: 6 October 2023  
To: Hilary Samuel, Taupō District Council  
From: Rowan Sapsford, ROAM Consulting  
Subject: Plan Change 41: Removal of Fault lines – Response to Minute 7 of the Independent Hearing Panel

## Purpose

The purpose of this memo is to respond to questions raised by the Independent hearing panel in Minute 7 relating to Plan Change 41 (PC41) to the Taupō District Plan (TDP). Specifically, this memo responds to para 9 a-f.

I have been asked to respond to these queries as the author of the Section 42a report for PC41. I have set out this response below. In preparing my response I have sought advice from the Taupō District Council Senior Policy Advisor Aiden Smith and also Heather Williams, Taupō District Council Resource Consents Manager.

## Response to Panel Questions

In responding to the questions posed in Minute 7, I have set out the question for context using the minute para reference. I have set out my response for each question following.

### 1. How does the proposed approach differ from how other Councils manage the risks from fault lines? Is this approach considered to be a common approach?

Appendix One contains a brief summary of the regulatory approach taken by other district plans throughout the country. The district plans reviewed were selected by the presence of active faults as identified on the New Zealand Active Faults Database (<https://data.gns.cri.nz/af/index.html>). Districts were prioritised that had similar characteristics to the Taupō District in respect to large areas of rural land with some larger settlements. It should be noted that the review simply looked at what was mapped and regulated, it did not look at the nature or extent of the data that informed any mapped areas or the S32 assessments etc that underpinned the district plan response. The assessment did not look at the wider policy framework.

I do note that the majority the plans recently reviewed do map fault lines and fault hazard areas and regulate activities within these areas. Often regulation is applied on the basis of the sensitivity of that activity to the risk posed by the hazard. A notable (due to its proximity to the Taupō District) exception of this approach is Rotorua Lakes District which has not mapped fault lines in their plan. Most of the older plans reviewed did not map or regulate activities within fault line hazard areas. They do however map other natural hazards and regulate activities in those areas.

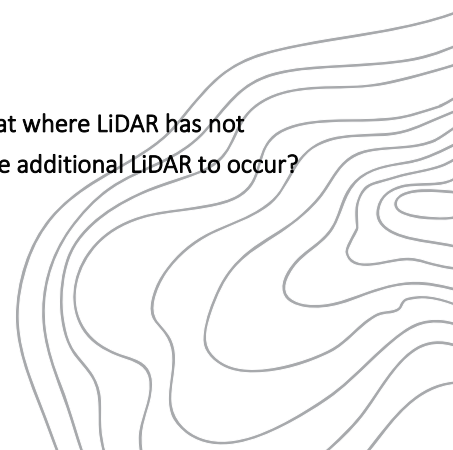
On the basis of this assessment, the approach taken by Taupō District Council is not a common approach when compared to the more contemporary district plans in the wider country.

### 2. Has the whole of Taupō district been mapped by LiDAR? If not – how certain are you that where LiDAR has not been flown regarding the identification of fault lines? Is there a work programme for the additional LiDAR to occur?

ROWAN SAPSFORD  
T : 021 744 957  
E : rowan@roamconsulting.co.nz

MARION ROSS  
T : 021 544 715  
E : marion@roamconsulting.co.nz

Taupō, New Zealand  
WWW.ROAMCONSULTING.CO.NZ



In addition to the areas identified in the GNS 2020 Report<sup>1</sup> Council has for some time held LiDAR data for all urban areas in the district (where development is envisaged). Since that mapping was done (in the last year or two) Waikato Regional Council ran LiDAR for the Waikato region, which included the whole of Taupō District. This latest LiDAR data has not, however been turned into fault mapping data.

For those rural areas where faults have not been mapped in the GNS 2020 Report, the best information that Taupō District Council (TDC) has on the location of fault lines are the Fault Awareness Areas that are proposed to be removed from the TDP via PC41. Sections 3.4 and 3.5 of the GNS 2020 Report discuss some of the gaps in that older data, including incorrectly mapped faults and faults which were not mapped. In this case, the risk of acting is that keeping the old information in the plan may create a perception that the areas identified are the totality of faults within the District which would be an incorrect assumption.

TDC has no plans at present, to contract GNS to develop fault mapping of rural areas using the new LiDAR data. This decision has been made on the basis that:

- The urban areas and rural areas where development is expected, are covered.
- If there is significant rural development planned, it would go through a structure plan change / plan change, or resource consenting process and the developer would be required to identify how it is managing the hazard risk – for example by mapping the fault avoidance zones using the available LiDAR data and avoid those areas. The current availability of LiDAR data should make that reasonably easy for the developer to contract from GNS or similar.
- It is appropriate that the developer bears these costs and doesn't require any Council involvement.

**3. How are the risks of earthquakes managed through subdivision controls in the operative plan? (as stated in the s32 Evaluation Table 1, Option 2, fourth column)?**

In developing this response, I have had input from Heather Williams the TDC Resource Consents Manager.

For controlled subdivision, TDC relies on section 106 of the Resource Management Act and specified matters of control. S106 (1) (a) enables the council to refuse to grant a subdivision or grant one with controls if there is a significant risk from natural hazards. This is applied in both urban and rural areas. S106 (1) (a) allows TDC consent staff to request geotechnical assessments for any building platforms that are proposed as part of a subdivision application. All hazard information that the Council holds can be used to inform such a request.

Within the Operative District Plan the assessment criteria for controlled activity rural subdivision, and 4b.4.1 and 4b.4.12 all mention natural hazards and require consideration of those matters. As an example, for the purposes of Rules [4b.3.1](#) (controlled rural subdivision) and [4b.3.2](#) (rural subdivision for infrastructure) the matters over which the Council reserves control for the purpose of assessment include:

- g. Any potential adverse effects from Natural Hazards, including flood inundation or erosion from the District's waterways and Lakes.

The general criteria set out in Rule 4b.4.1 includes reference to the design, density and layout of the development or subdivision, and any potential adverse effects from natural hazards.

4b.4.12 (Rural Subdivision - Discretionary) includes the following control:

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<sup>1</sup> Litchfield NJ, Morgenstein R, Villamore P, Van Dissen RJ, Townsend DB, Kelly SD. 2020. Active faults in the Taupō District. Lower Hutt (NZ): GNS Science. Consultancy Report 2020/31

- e. mitigates any adverse effects resulting from identified natural hazards or land contamination, including an assessment of any information provided by a suitably qualified person whose investigations are supplied with the subdivision application.

Within the Rural Environment, under the Operative District Plan, subdivision creating lots smaller than 10ha would be a discretionary activity. For discretionary and non-complying activities, S106 (1) (a) still applies and the policies in Section 3L, Natural Hazards, are also applied. The provisions in Section 3L are as follows:

**Objective 3L.2.1** *Protection of activities, development and life from the adverse effects of natural hazards.*

**POLICIES**

- i. *Control the design and location of activities and development within identified natural hazard areas, or areas which have significant potential to be affected by a natural hazard, to avoid or mitigate the effects of the natural hazard.*
- ii. *Manage the location, design, and type of new activities and development to avoid or mitigate the adverse effects of erosion, ground rupture and deformation, hot ground and land instability on development and the community.*

These provisions provide suitable guidance to consent staff to add subdivision controls (such as the location of buildings etc) and also refuse consent if required. Policy 3L.2.1.II refers specifically to ground rupture and deformation.

**4. Can you confirm that the Building Act / building consent process would be the sole mechanism for managing the risks associated with building in close proximity to the revised hazard area/fault lines. The term “primary” is used in the s32 evaluation under Option 3 on page 13. Primary potentially suggests more than one mechanism is available when in reality PC41 appears to be relying solely on the Building Act / building consent process.**

The Building Act process is set out in the evidence of Aidan Smith which was submitted as part of the package of Council reports prior to the hearing.

For one off consents for single complying buildings, reliance on the Building Act process, is the primary and potentially only mechanism that is applied. I say potentially as any prior subdivision process associated with the allotment may have required consideration of the fault risk under S106 (1) (a) or TDP policy.

For more complex land use consents that have Discretionary or Non-Complying activity status, the resource consent process, (i.e. s104) enables consideration of the Objectives and Policies in 3L of the TDP. These provisions are set out in my response to Question 3 and allow TDC to consider the risk posed by hazards and act accordingly.

**5. What is the role of the non-regulatory map layer?**

This is information which is shown on the TDC online District Plan mapping system, which is not associated with a rule in the District Plan. Regulatory map layers are zones etc. The role of this layer is to communicate council held communication which is relevant to land use planning etc.

**6. In developing PC41 it was identified that that under current law, once hazard maps are in the Taupō District Plan then they are not required to be on LIMs - but is this information precluded from being included in LIMS under that scenario?**

Section 44A (2) of the Local Government Official Information and Meetings Act 1987 reads as follows:

*The matters which shall be included in that memorandum are—*

- (a) *information identifying each (if any) special feature or characteristic of the land concerned, including but not limited to potential erosion, avulsion, falling debris, subsidence, slippage, alluvion, or inundation, or likely presence of hazardous contaminants, being a feature or characteristic that—*
- a. *is known to the territorial authority; but*
  - b. *is not apparent from the district scheme under the Town and Country Planning Act 1977 or a district plan under the Resource Management Act 1991:*

On review, it is my view that hazard information that is not contained in the District Plan is not required to be contained within a LIM, however it is not precluded from being so. So councils are able to include district plan hazard information in LIM's if they choose.

## Appendix 1 District Plan Assessment

District	Fault Hazard Areas Mapped?	Regulated Activities	Notes
Western Bay of Plenty District Plan	No		Faults not listed as a hazard
Whakatane District Plan	No		
Rotorua lakes Council District Plan	No		Natural hazard are matters of control or discretion. No reference to Faultline hazards
Tairāwhiti Resource Management Plan	No		
Hastings District.	No - but fault lines are shown in a map (Scale 1:500,000) in an appendix to the plan.		Rules do not apply to prevent or restrict land <u>use</u> activities in respect of these hazards where <u>building</u> standards are more appropriate to mitigate or minimise the hazard.
Tararua District Plan	No		
Manawatu District Plan	No		
New Plymouth District Plan	Yes	<p>NH-R11 Erection or relocation of a building, or alteration or addition to a building.</p> <p>Permitted if not used for living activities, RDIS if it is.</p> <p>NH-R14 <u>Subdivision of land that creates a new allotment(s)</u> – R Dis</p> <p>NH-R15 Hazard Sensitive activities Where the activity is an emergency service facility.- RDIS</p>	Proposed Plan

District	Fault Hazard Areas Mapped?	Regulated Activities	Notes
South Taranaki District Plan	No		
Horowhenua District Plan	No		
Combined Wairarapa Plan	Yes	<p>NH-R3 Any potentially hazard sensitive activity and associated buildings within moderate hazard areas and low hazard areas – if The activity is located within the fault hazard area - lower recurrence interval faults. Then RDA</p> <p>NH-R4 Additions to buildings within all hazard areas provided it does not increase the gross floor area of a hazard sensitive activity or potentially hazard sensitive activity by more than 20m<sup>2</sup>; if it does then RDA</p> <p>NH-R6 Any hazard sensitive activity and associated buildings within moderate hazard areas and low hazard areas is discretionary</p> <p>NH-R7 Any hazard sensitive activity and associated buildings within high hazard areas is NCA</p>	Draft Plan out for comment
Kapiti Coast District	Yes – Fault Avoidance Areas	<p>NH-EQ-R21 Buildings within FAA that comply with specified conditions including risk based matrix are permitted -if not then RDA</p> <p>NH-EQ-R22 Buildings that do not meet R21 and meet a series of risk based standards are RDA</p> <p>NH-EQ-R24 Any activity which does not comply with the standards in NH-EQ-R22 is discretionary</p>	Recently reviewed with plan adopted in 2021

District	Fault Hazard Areas Mapped?	Regulated Activities	Notes
		NH-EQ-R25 the location of high risk buildings within FAA are non-complying	
<b>Porirua District Plan</b>	<b>Yes</b> – Fault Rupture Zones identified – not fault lines – zones are up to 200m wide	<p>NH-R1 less hazard sensitive activities within a FRZ is permitted</p> <p>NH-R3 soft engineering measures are permitted</p> <p>NH-R4 Additions to existing buildings are permitted provided they do not establish a new sensitive activity and or increase the foot print by 20m<sup>2</sup> in med hazard areas and 30m<sup>2</sup> in high hazard areas. If so then RDIS</p> <p>NH-R6 Any Hazard-Sensitive Activity and Potentially-Hazard-Sensitive Activity and associated buildings in Low Hazard Areas in a Natural Hazard Overlay is RDA provided they are no closer than 20m from the FRZ otherwise discretionary.</p> <p>NH-R7 Any Hazard-Sensitive Activity and Potentially-Hazard-Sensitive Activity and associated buildings within the Medium Hazard Area in a Natural Hazard Overlay are discretionary</p> <p>NH -R8 Any Hazard-Sensitive Activity and Potentially-Hazard-Sensitive Activity and associated buildings within the Medium Hazard Area in a Natural Hazard Overlay are NCA.</p>	<p>Proposed Plan with FRZ's categorised as high, medium and Low hazards.</p> <p>Note that some FRZ's are high and low dependent on whether they are less or greater than 20m from the fault</p>
<b>Upper Hutt</b>	<b>Yes</b>	<p>NH-R1 Less Hazard Sensitive Activities within the Wellington Fault Overlay, High Slope Overlay and Mangaroa Peat Overlay are permitted</p> <p>NH-R2 Additions to a building in the Wellington Fault Overlay are permitted where the proposal meets standards relating to the size of the addition and sensitivity of the activity if not then RDA</p>	PC47 – Natural hazards

District	Fault Hazard Areas Mapped?	Regulated Activities	Notes
		<p>NH-R7 Potentially Hazard Sensitive Activities and Hazard Sensitive Activities in the Wellington Fault Overlay if on a currently vacant site and is on 'poorly constrained' areas of fault overlay – Controlled</p> <p>NH-R9 Additions to buildings where they don't comply with NH-R2 or are located on well-defined areas of named faults - RDA</p> <p>NH-R10 <i>Potentially Hazard Sensitive Activities and Hazard Sensitive Activities in the Wellington Fault Overlay where the building is not located on a vacant site and fault is uncertain - RDA</i></p> <p>NH-R23 <i>Potentially Hazard Sensitive Activities and Hazard Sensitive Activities in the Wellington Fault Overlay within a well defined fault – Non Complying</i></p> <p>Sub-Gen-R3 Subdivision that creates a building platform for a Potentially Hazard Sensitive Activities and Hazard Sensitive Activities in the Mangaroa Peat Overlay – RDA</p> <p>Sub-Gen-R5 Subdivision for a potentially hazard sensitive activity an hazard sensitive activities in the wellington fault overlay where the building platform is located within uncertain fault overlay – RDA</p> <p>Sub-Gen-R10 Subdivision for a potentially hazard sensitive activity an hazard sensitive activities in the wellington fault overlay where the building platform is located within certain fault overlay – Discretionary</p>	
Nelson City	Fault Hazard Overlay	RUr.60 Fault Hazard Overlay	Appears that data is not as accurate as TDC.



District	Fault Hazard Areas Mapped?	Regulated Activities	Notes
		<p>Erection, extension or alteration of a building within the Fault Hazard Overlay is permitted provided that</p> <p>a) where a fault trace can be identified and</p> <p>b) precisely located by reference to Council’s conditions book, subdivision files, site files, or GIS database, then the building is set back at least 5m from the fault trace.</p> <p>RUr.82.3 Subdivision of land within Hazard Overlay areas is a discretionary activity.</p> <p>REr.73.1 Erection, extension or alteration of a building within the Fault Hazard Overlay is permitted provided that: where a fault trace can be identified and precisely located by reference to the Council conditions book, subdivision files, site files, or GIS database, then the building is set back at least 5m from that fault trace.</p>	
<b>Marlborough Environment Plan</b>	<b>Yes</b>	None identified in proposed plan	Proposed Plan
<b>Hurunui District Plan</b>	<b>Yes</b>	<p>15.4.5 specified activities (inc. residential) within a hazard area are Discretionary</p> <p>15.4.6 Buildings of importance within fault zones</p>	
<b>Kaikoura District Plan</b>	<b>Yes – Fault Avoidance Overlay and Fault Awareness Overlay</b>	<p>NH-R5 The establishment of any new hazard sensitive building within a FAO is RDA</p> <p>NH-R9 Critical Infrastructure is permitted for existing to operate and maintain and RDA for new</p> <p>NH-R11 The change of use of any existing building that is not currently a hazard sensitive building to a hazard sensitive building within a hazard area is a RDA</p>	Proposed Plan

District	Fault Hazard Areas Mapped?	Regulated Activities	Notes
<b>Waimakariri District Plan</b>	<b>Yes</b> – Fault Awareness and Fault Avoidance	NH-R3 <b>Natural hazard sensitive addition to existing natural hazard sensitive activities</b> is permitted if does not result in new or additional sensitive activity and is not within a specified FAO otherwise NDA  NH-R12 natural hazard sensitive activities in Ashley FAO is Discretionary	Proposed Plan
<b>Selwyn District Plan</b>	<b>Yes</b> – Fault Avoidance Overlay, Fault Investigation Overlay and Fault Awareness Overlay	NH -REQ5  1. Activities within the Greendale fault avoidance overlay are non-complying  2. Activities within the Fault Investigation Overlay and Fault Awareness Overlay are RDA	
<b>Central Otago District Plan</b>	<b>Yes</b> – Active Geological Fault	Rule 4.7.5(i) Building on Land Subject to Hazards is NCA in Rural  Rural Standard 4.7.6.j No building (excluding fences) shall be located within an area identified on the planning maps as land subject to a hazard.  Rule 7.3.4 ii Subdivision of land subject to hazards in Res is discretionary  Rule 7.3.4 ii Buildings of land subject to hazards in Res is NCA	Operative District Plan – data is older fault mapping – 2015 at the latest
<b>Queenstown Lakes District Plan</b>	<b>No</b>	No rules with faults as a trigger,, however listed as matter of discretion for some activities.	Proposed Plan