# Frequently Ased Questions for Plan Change 8 (Natural Hazards) - Active Faults & Fault Rupture

# 1. I have received a letter about Plan Change 8 and Fault Rupture, what do I have to do?

You don't have to do anything. You may choose to find out more about Plan Change 8 and you may choose to make a submission on the plan change.

# 2. What is Plan Change 8?

Plan Change 8 is a proposed change to the Rotorua District Plan to improve how natural hazards are managed, including fault rupture on active faults.

Submissions can be made on Plan Change 8 until 8 September 2025.

After submissions close, there will be a chance to make further submissions to respond to submissions already made, followed by a hearing for those submitters that wish to be heard. A final decision will then be made on the plan change.

More information, including a summary of the plan change, the full Plan Change 8 proposal and evaluation (Section 32 Report), additional FAQs, and details on how to make a submission, can be found on the webpage for Plan Change 8: <u>rlc.net.nz/PlanChange8</u>.

# 3. What are active faults and fault rupture hazards?

The Rotorua District is vulnerable to seismic, geothermal and volcanic activity. As a result, it has many fault lines running through it. These are areas where the ground has ruptured in the past and that have potential to rupture again due to earthquakes. This potential for rupture, tearing the earth apart, represents a hazard to building and development, in addition to earthquake shaking, which is a risk everywhere.

# 4. How are active faults mapped in the Rotorua District?

Scientists have studied landforms and rock layers for signs of past fault movement. For most faults, this has been done only as a desktop study, but some have also been investigated in detail using trenching to expose layers of soil and rock (paleosismology).

In 2025, GNS Science reviewed fault mapping for Rotorua using information from high-resolution LIDAR data (light detection and ranging) and previous studies. The results were published in the New Zealand Active Faults Database. This database includes:

- Mapping of the estimated centre lines of the faults
- Buffer zones known as Fault Avoidance Zones (FAZs) to account for deformation and uncertainty.
- Attributes such as certainty of fault presence (definite, likely or possible)
- Recurrence intervals where sufficient data exists.

This 2025 mapping supersedes earlier 2010 GNS Science fault maps in the District Plan. Plan Change 8 proposes to remove these outdated maps.



Figure 1 Active Fault Buffers (FAZs) in the Rotorua District (Source: GNS Science, June 2025).

#### 5. How can I see where the identified faults are located relative to my property?

You can find fault mapping on GNS Science's website: <u>GNS Science - Active Faults Database</u>

RLC has also overlaid this mapping over property boundaries on a web-based viewer, which you can access from the plan change webpage: <u>rlc.net.nz/PlanChange8</u>. If you are having issues accessing this viewer email <u>policy.planning@rotorualc.nz</u>.

### 6. How much land is affected by fault mapping?

Approximately 11,500 hectares of land in the Rotorua District is within identified Fault Avoidance Zones in the 2025 GNS Science mapping. This represents about 4% of the district.

#### 7. What is Plan Change 8 proposing in relation to faults?

Plan Change 8 aims to improve clarity and consistency in managing fault rupture hazards by:

- Removing outdated fault maps from the District Plan
- Introducing the Fault Rupture Hazard Area where rules to manage faults would apply.
- Retaining existing rules for building and subdivision over faults but updating them to refer to the new Fault Rupture Hazard Area.
- Applying a consistent approach across the whole district, including the Lakes A Zone.

#### 8. Where is the Fault Rupture Hazard Area?

Plan Change 8 proposes to define this area as 'the area around an active fault trace that includes the likely area of fault rupture plus an additional width of at least 20m on either side to allow for secondary ruptures and uncertainty in the location of future deformation'.

The Fault Avoidance Zones identified in the New Zealand Active Faults Database assist to identify the Fault Rupture Hazard Area but may be supplemented with other information such as the results of trenching.

#### 9. What happens after I make a submission on Plan Change 8?

All submissions on Plan Change 8 will be summarised and publicly notified, giving people an opportunity to make further submissions (in support or opposition). A hearing will then be held on submissions and submitters can choose to present their views. A decisions will then be made and the decision will be publicly available and served on all parties who made a submission.

# 10. What can a landowner do if they are concerned about the accuracy of the fault mapping in the New Zealand Active Fault Database maintained by GNS?

GNS Science maintains the New Zealand Active Fault Database and updates this from time-to-time to reflect new information. If you believe the fault mapping affecting your property is inaccurate, you can submit site-specific evidence to GNS for consideration. Such evidence will likely need to come from a qualified geo-professional or fault expert. As a first step, consult an engineering or other consultancy with qualified geo-professionals or GNS.

# 11. Does fault information go on a LIM for my property?

Yes. Fault mapping from the New Zealand Active Faults Database is publicly available information on the GNS website and will also be included on Council's geyserview map viewer. Where fault lines or their buffers (FAZs) intersect a property, this information will be included on future LIMs (Land Information Memoranda), as required by law.

# 12. How do faults affect building work and applications for building consent?

If you are planning a new building (or an alteration affecting load-bearing or structural elements) over or near a mapped fault of their buffer (FAZs), this raises an issue of compliance with clause B1 (structure) of the Building Code. In this case, Council will require the following to support an application:

- A geotechnical assessment
- Structural engineering advice (if applicable).

These assessments must demonstrate that the building work complies with the Building Code. Ministry for the Environment guidance supports enabling building over faults only where the risks can be shown to be low, based on the past activity of the fault and the type of building work proposed. For example, geotechnical assessments have supported residential buildings within the FAZ on Spencer Road on the basis that the estimated frequency of movement on the fault near Spencer Road is low and this type of development is consistent with Ministry guidance. Where frequency of rupture cannot be demonstrated to be consistent with Ministry guidance for the type of development, building design could potentially be considered to reduce the risks.

Some types of minor building work may be exempt from requiring building consent, but all building work must still comply with the Building Code (section 117 of the Building Act 2004).

Further information is available in Council' brochure: <u>Building in a Fault Avoidance Zone – Guidance for</u> <u>Building in the Rotorua District</u>.

# 13. Is resource consent also required for building over a fault?

Yes, in many cases. Under existing rules (NH-R1 to NH-R3):

- New buildings in a Fault Avoidance Zone generally require resource consent.
- Replacing an existing building within the same footprint does not require resource consent.
- Low importance buildings such as sheds may also be exempt.

Plan Change 8 proposes to retain these rules but update them to refer to a defined 'Fault Rupture Hazard Area' instead of a mapped Fault Avoidance Zone. The application of the rules will also be extended to the Lakes A Zone.

# 14. What is the impact of fault on my property value?

The Council cannot provide advice on property values. If you have concerns, we recommend contacting a registered property valuer or real estate professional.

# 15. What is the impact of faults on my insurance?

We recommend reviewing your insurance policy and contacting your insurance provider. The Council cannot advise on insurance matters.

#### 16. How should I prepare for an earthquake event and the potential for fault rupture?

Anywhere could be impacted by a significant earthquake which could affect many buildings and houses as well as major infrastructure like water, roads, bridges, electricity, internet and cell phones. You should be prepared with an emergency plan, get away kit, and emergency survival items. For more information on what you should do, head to <u>www.getready.govt.nz/emergency/earthquakes/</u>

If you are concerned about fault rupture affecting buildings or structures on your property, speak with a qualified structural engineer about risk reduction options.