



Fault hazard - Frequently asked questions

<http://www.nelson.govt.nz/environment/nelson-plan/natural-hazards/faults-line/>

1. What is fault rupture or deformation and how does it differ from general earthquake hazard?

Fault rupture or deformation is the permanent deformation of the ground surface along a fault (sometimes called fault trace or fault line), caused as the ground on either side of the fault moves sideways and/or up/down relative to the other side. This is a different hazard to earthquake shaking.

Fault rupture or deformation movements can cause significant damage to structures built across or close to a fault.

2. Why does Council produce fault hazard maps?

Councils are required by legislation to manage risks from natural hazards. Relevant legislation includes the Resource Management Act (RMA), Building Act, Local Government Act, and the Civil Defence and Emergency Management Act. Managing these risks requires assessment of the natural hazards, and identification of areas where they may occur.

Managing natural hazard risks ensures that development occurs in appropriate locations, and in ways that avoid or mitigate the risk. The first step in managing the risk posed by a natural hazard is assessing where the hazard may occur (which involves mapping).

3. What do the fault hazard maps show?

The maps associated with the latest fault assessment (by Beca in 2021) identify the areas around the active or potentially active faults in the region that could potentially deform or rupture the ground surface and are shown as a 'fault deformation overlay'. The overlay comprises:

- 'Existing section of fault rupture overlay' (i.e. areas that remain unchanged from the 2019 revision).
- 'Revised section of existing fault rupture corridor' (i.e. areas revised since the 2019 revision).
- 'Less defined section of the overlay' (i.e. where the location of the fault trace is less certain).

Identification of these areas is consistent with national guidance produced by Ministry for the Environment (MfE) in 2003.

You can download and read the latest report from our webpage:



nelson.govt.nz/natural-hazards/faults-line

4. What information is used to map the fault deformation overlay?

The latest fault hazard maps were generated as part of technical assessments undertaken by engineering geologists. A wide range of information and data sets were used including:

- Previous fault assessments completed for Council
- Existing resource consent data – including property assessments
- Field mapping of faults and geology outcrops
- Hill-shade model and digital elevation models generated from LiDAR
- Historic aerial photography
- New Zealand Geotechnical Database
- Published geological maps

5. Why is my property included in the fault hazard area when it has never been affected in an earthquake?

Councils are required to look at risk over a long time period to help inform decisions regarding future development and land uses. Fault rupture or deformation do not occur frequently, however they can cause harm to people and significant damage if buildings are located on or near a fault.

6. Why does the overlay have a different width in some areas?

The fault deformation overlay is produced using the information held on the faults at the time the overlay was produced. The width of the overlay depends on the inferred location of a fault, how much ground surface deformation has occurred in the past, the type and density of data (or combination of data sets) used and how accurate the data is considered to be.

7. Will being in the identified fault hazard area limit the ability to build a new house or extend an existing one on my property?

Anyone looking to carry out building or development on their land needs to ensure that they gain the necessary building and/or resource consent.

The NRMP rules still apply to any area that is identified in the current "Fault Hazard Overlay". Proposed building work would not



require resource consent if it is more than 5m from the identified fault.

However, if your property is located in a newly identified fault hazard area (and not within the existing NRMP "Fault Hazard Overlay"), the NRMP rules for activities within the Fault Hazard Overlay do not apply to your property.

However, fault hazard can be considered in some resource consent processes where natural hazards need to be considered more broadly. And, in the future, newly identified areas of Nelson that may be susceptible to faults are expected to be included into the NRMP, or into a new resource management plan.

You may still require building consent if you are thinking of carrying out any building work on your property.

8. Can my property still be subdivided if it's in the fault hazard area?

Subdivision requires resource consent. The rules for subdivision are contained in the Nelson Resource Management Plan. Natural hazards are taken into account when considering an application to subdivide land within areas susceptible to natural hazards, including faults.

9. Will this information go onto my Property File and Land Information Memorandum (LIM)?

Yes. Property files have been updated with this natural hazard information and a new LIM notation has been included.

10. What does the LIM notation say?

Fault Hazard

The Council holds a report (Revised Nelson Fault Deformation Overlay, 10 December 2021) that indicates this property, or part of this property, may be susceptible to fault deformation that could potentially deform or rupture the ground surface.

The data contained within the Revised Nelson Fault Deformation Overlay report has been generated at a regional scale (1:5,000 to 1:10,000). Therefore, the maps are indicative of areas where faults could potentially deform or rupture the ground surface within an individual site or property. To assess the specific fault hazard at any individual site or property, a site-specific assessment may need to be undertaken.

Further refinements to the geographic extent of the identified Fault Deformation Overlay may occur in the future, for example as the Nelson Resource Management Plan (NRMP) is updated. As a result,



the fault information recorded on the LIM for this property may be updated in the future.

A copy of the Revised Nelson Fault Deformation Overlay report, and previous reports on fault hazard, can be accessed online at <http://www.nelson.govt.nz/environment/nelson-plan/natural-hazards/> or by contacting the Planning Administrator on 5460200.

11. Can I get the LIM notation removed?

Under section 44A (2) (i) and (ii) of the Local Government Official Information Management Act (LGOIMA) councils are legally obliged to include this information on LIMs if it is not apparent from the District Plan (in Nelson’s case, the NRMP). However, once this information is included in an operative District Plan, the LIM notation may be removed.

12. What if I want to sell my property?

Any potential buyer can access the relevant land and property information files in relation to natural hazards. To find out more about requesting property files and fees involved (there is no fee if you are the property owner) please visit: nelson.govt.nz/requesting-property-files

Prospective buyers can also purchase a LIM from the Council. To find out more about obtaining a LIM and the fees involved, please visit: nelson.govt.nz/land-information-memorandum-lim-reports

13. Will this information affect my property value or insurance?

Council cannot advise property owners about any effect this information may have on your property values or insurance. We recommend property owners seek professional advice from a property valuation or insurance expert about any concerns regarding these matters.

14. Why have some properties been found to not be affected by fault hazard, when previous assessments have found that they are?

Our understanding of fault hazard in Nelson continues to evolve as new areas are assessed and we undertake more detailed studies of faults that we are already aware of. The latest assessment (by Beca, 2021) was able to more accurately identify the location of some sections of the fault traces than had been done previously. The increased certainty meant that the affected area could be reduced.



15. What if my property is included in the NRMP Fault Hazard Overlay, but the latest assessment shows that it is not subject to faults?

Until the NRMP is updated through a plan change or plan review process under the Resource Management Act, the existing Fault Hazard Overlay and associated provisions in the NRMP will still apply. However, if you require resource consent for an activity within the Fault Hazard Overlay, Council staff would take into account the latest assessment if it indicates that your property is not potentially susceptible to fault hazard.

16. What if my property has a LIM notation regarding fault hazard, but the latest assessment shows that it is not subject to faults?

Council has updated LIM notations with the new fault hazard information it holds, and we have removed notations from properties where the latest fault hazard assessment indicates they are no longer subject to fault hazard.

17. Will I be covered by the Earthquake Commission (EQC) if my property is affected by an earthquake?

EQC cover provides natural disaster insurance for residential homes and some areas of residential land after earthquakes, landslips, volcanoes, tsunami and hydrothermal activity. It also provides cover for storm flood damaged land.

For more information, please refer to EQC's website:
eqc.govt.nz/what-we-do/what-youre-covered-for

18. Where do I find information about what to do during an earthquake?

Civil defence information and advice on getting prepared can be found on the [Nelson Tasman Civil Defence Emergency Management](http://www.nelson-tasman.govt.nz/civil-defence) website.

19. What if a detailed fault assessment has previously been completed on my property and refinement of the current overlay does not reflect this?

If a more detailed site-specific assessment by a suitably qualified expert shows that a property is not susceptible to fault rupture or deformation, and this information is supplied to the Council, then that becomes additional information that is added to the property file. The LIM notation for fault hazard would remain, but both sets of information would be provided in the property's LIM.