Natural Hazards

Information Sheet

The Proposed Lower Hutt District Plan is open for submissions until 5pm on 4 April 2025. You can find out more at: https://haveyoursay.huttcity.govt.nz/proposed-district-plan

The District Plan is the rulebook for land use and development that helps us manage infrastructure constraints and natural hazards, respond to climate change and protect the environment and our historic and cultural taonga. It sets out what is permitted and where, and what needs resource consent.

This information sheet is designed to assist you in understanding more about Natural Hazards and how it may relate to your property.

Why are Natural Hazards included in the Proposed District Plan?

Lower Hutt is susceptible to a wide range of natural hazards, which can result in damage to property and buildings, and lead to a loss of human life.

The Resource Management Act 1991 identifies the management of significant risks from natural hazards as a matter of national importance. The Proposed District Plan is required to be prepared in accordance with this, and includes provisions to manage significant risk from the following natural hazards:

- Flooding
- Fault rupture
- Liquefaction
- Slope instability (refer to the Slope Assessment Overlay information sheet for more detail)
- Coastal inundation, including from sea level rise, and
- Tsunami

Where are Natural Hazard susceptible areas located?

Natural hazard susceptible areas are shown as overlays in the Proposed District Plan maps. Each area is assigned either a "High", "Medium" or "Low" hazard ranking, according to the probability of the hazard occurring and its potential destructive force.

For example, all liquefaction susceptible areas identified in the Proposed District Plan are in the "Liquefaction Hazard Overlay", which has a low hazard ranking. Whereas areas which are particularly susceptible to land rupture in an earthquake, are shown in the Fault Location Area which has a high hazard ranking.

With regards to flood hazard, areas which have a forecast 1% probability of being subject to flooding in any given year are identified in the Proposed District Plan. These are mapped as either "High" (Stream Corridor), "Medium" (Overland Flow Path) or "Low" (Inundation Area) hazard areas depending on the expected depth and speed of floodwater in any given area in the modelled flood event.

How have natural hazard susceptible areas been identified?

The Fault Location Area tracks the major known earthquake fault line in Lower Hutt, based on the best available information from GNS Science. The Fault Location Area widens (the Uncertain areas) and narrows (the Well Defined areas) which reflects the degree of confidence in the fault line location in any given area.

The identification of flooding and coastal hazard susceptible areas is based on modelling which has been undertaken to best practice standards, and which has been peer reviewed by external experts.

The modelling incorporates predictions of the effects of climate change on the frequency and intensity of natural hazard events.

More information on flood modelling which has informed the Proposed District Plan is available here; https://www.huttcity.govt.nz/property-and-building/stormwater-model.

Technical assessments for natural hazard modelling can be viewed here; https://www.huttcity.govt.nz/council/district-plan/district-plan-review/section-32-evaluation-reports-and-technical-assessments.

What can I do with my property if I am in a natural hazard susceptible area?

The Proposed District Plan manages natural hazards in relation to

- Activities most sensitive to hazards (such as new dwellings),
- Activities potentially sensitive to hazards (such as commercial activities), and
- Activities least sensitive to hazards (such as non-habitable accessory buildings).

Provisions controlling land use and development in relation to natural hazards are based on the sensitivity of the activity to natural hazards, as well as the ranking of the hazard (high, medium, low). The following matrix illustrates this general approach (please note for some activities in some natural hazard areas, a different activity status than is shown in the table may apply).

	Hazard Ranking		
	Low	**Medium**	**High**
Activities least sensitive to natural hazards	PER	PER	PER
Activities potentially sensitive to natural hazards	CON	RDIS	DIS
Activities most sensitive to natural hazards	RDIS	DIS	NC

PER = Permitted activity, CON = Controlled activity, RDIS = Restricted discretionary activity, DIS = Discretionary activity, NC = Non-complying activity.

Activities most sensitive to natural hazards which are located in high hazard areas may need resource consent as a Non-complying activity. For example, a new dwelling located in the High Flood Hazard Overlay.

Activities least sensitive to natural hazards may not require resource consent, even if located in some high hazard areas. For example, a garage located in the Fault Location Area.