

Natural Hazards

Including: coastal erosion, coastal inundation, high flood hazard and flood ponding management areas and remaining floor level and fill management areas and slope instability management areas.

Why do we need to change?

New floor level and fill management areas (FLFMAs) - formerly known as flood management areas - were created for parts of the city late last year in stage one of the district plan review. They were based on flood modelling showing the likely effects of flooding in a major flood event - what we call a 1 in 200 year event - and established minimum floor levels and filling rules.

Further flood modelling data shows the likely effects of flooding in the central city and areas to the west of the main railway line in a major flood event.

There is also new technical information identifying high flood hazard areas across the district, where in an extreme event (a 1 in 500 year event) flood waters may potentially be deep enough to cause loss of life or injury. Development must be controlled in these areas.

Coastal hazards, including tsunami and areas vulnerable to coastal erosion and sea water inundation during storm events, have now been identified. While this coastal information is new to the district plan, it affects areas that are generally already known to have flooding potential.

Remaining slope instability rules (covering cliff collapse, rockfall and mass movement) for areas of the Port Hills and Banks Peninsula not included in stage one also need to be included. Rather than creating separate rules for these areas, the proposal refers to provisions in other chapters.

What are we trying to achieve?

Now that we have new technical information and have identified risk, we need to alert people to it and to act on it through the district plan. Like other communities, we need to plan and put in place measures now so we can reduce the risk from natural hazards. We want people to know about the range and scale of natural hazard events that can affect us and to consider all options for reducing the risk to people, property and infrastructure.

This starts with clear identification of all areas susceptible to risk from natural hazards so that people are aware of the risks and as a community we can consider an appropriate range of responses including mitigation. In extreme cases we could avoid these areas.

To find out more, please turn over

Want to find out more or got a question?

See more information at www.proposeddistrictplan.ccc.govt.nz
phone us at 941 8999 (0800 800 169 for Banks Peninsula callers)
or email us at dpreview@ccc.govt.nz

The proposed
**Christchurch
Replacement District Plan**

What we're proposing

- We've identified FLFMAs (previously called flood management areas) for parts of the district not already mapped (i.e. the central and western areas of Christchurch City, the Rural, Open Space and Specific Purpose Zones). New rules requiring raised floor levels for new buildings or additions aim to reduce flooding of new buildings and associated damage. Rules limiting excavation or filling of sites avoid transferring the flood risk to neighbouring properties and maintain the natural absorption of flood waters.
- New technical information means extended floor level and fill management areas and more restrictive rules for new buildings on land adjoining Te Waihora/Lake Ellesmere and Te Wairewa/Lake Forsyth, including Little River.
- There are rules to protect the natural functioning of ponding areas (such as in parts of Hendersons Basin, Hoon Hay Valley and Cranford Basin), including limits on excavating or filling in these areas. New rules expand existing rules to better protect ponding areas which are largely rural in character.
- High flood hazard areas are now identified over more of the district, with rules governing future use aimed at avoiding new buildings and subdivision.
- There are new rules on intensification of development (including new buildings and subdivision) in areas likely to be most susceptible to coastal erosion within the next 50 years (to 2065) or sea water inundation associated with a 1 in 50 year storm event. Less restrictive controls apply in areas identified as being susceptible to coastal erosion in the 50 to 100 year period (2065-2115); or to sea water inundation in a 1 in 100 year storm event. These areas are almost the same as FLFMAs (and already have FLFMA rules). The new rules assume a one metre sea level rise within the next 100 years. Provision is also made for existing buildings to be modified to reduce damage from coastal hazards. This could be lifting an existing building or modifying the foundations.
- The repair of earthquake damaged residential land in the residential zones has already been covered with rules covering filling and excavation, soil mixing, aggregate piers and the use of grout. Stage three extends this for the residential use of land in rural zones that are also within FLFMAs, to make it easier for filling and excavation to continue (within defined limits).
- Mapping of slope instability areas (covering cliff collapse, rockfall and mass movement) has been completed for those parts of the Port Hills and Banks Peninsula not covered in stage one of the review. This covers earthworks, new or upgraded infrastructure, and new farm buildings or tracks. Rather than creating separate rules for these areas, the proposal draws on the stage one natural hazards proposal.

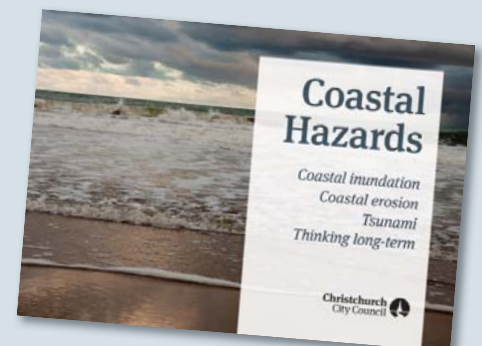
Other Council work relating to natural hazards

Natural hazard proposals in the district plan review are one part of the Council's response to the coastal hazards faced in the Christchurch district. Other projects addressing the risk from coastal hazards include:

- the Council's Land Drainage Recovery Programme, which is considering area-wide flood mitigation options
- the Infrastructure Strategy 2015 -2045 which identifies significant infrastructure issues for the next 30 years and options for addressing these issues
- the Natural Hazards Strategy and Resilience Strategy - both being developed in partnership with other agencies, to better prepare communities to respond to and recover from future hazard events.

A Coastal Hazards booklet has been produced and gives a plain English explanation of the different kinds of coastal hazards affecting Christchurch and Banks Peninsula, the need for long-term planning, and what all this might mean for people living in areas vulnerable to these hazards.

You'll find this booklet online at www.ccc.govt.nz/coastalhazards or you can pick up a copy at Council's civic offices in Hereford Street or at one of the district plan review drop-in sessions.



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