

PLAN CHANGE 34 FLOOD HAZARD

In Chapter 3I Natural Hazards, Introduction update 3I.1ii Flooding as follows:

ii FLOODING

Inundation can occur as the result of water flowing over the top of riverbanks and flooding adjoining land; ~~inflows exceeding outflows from the the capacity of a lake being exceeded and flooding lakeshore properties; and of properties being located in ephemeral waterways. Settlements adjacent to the Waikato and Hinemaiaia River; the Tauranga Taupō River, the Tongariro Rivers, the Tokaanu Stream, the Kuratau River and the Whareroa Stream and Lake Taupō along with other smaller river systems, for example, the Kinloch, Waitahanui, Hinemaiaia, Tauranga Taupō, Waimarino, Waitaka, Tokaanu and Kuratau Rivers can be affected by flooding. Other waterbodies in the district can flood but have not been included in flood modelling as they:~~

- ~~are spring fed so not as susceptible to flood flows, or~~
- ~~have a small catchment area, or~~
- ~~are located in areas where there are relatively few people, limited property at risk and outside future growth areas.~~

In some areas mitigation measures such as stopbanks exist and allow the use and occupancy of the flood ~~plane plain~~ at an acceptable level of risk. ~~These have been identified as defended areas. For the Tauranga Taupo River the defended areas, identified on the planning maps, are defended up to 2% AEP. For the Tongariro River the defended areas, identified on the planning maps, are defended up to 1% AEP. However, activities need to recognise that there is still a hazard when the capacity of the stopbanks is exceeded.~~

Insert the following text before Objective 3I.2.1

The following objectives and policies apply to all natural hazards except flooding. Objectives 3I.2.3 and 3I.2.4 apply to flood hazard areas.

Delete the word “flooding” from policy 3I.2.1ii

Delete the following text “Earthworks may alter the direction and intensity of a flood event by diverting floodwaters or altering drainage functions, while” from the third sentence of the second paragraph under 3I.2.2 Explanation

Insert the following text before Objective 3I.2.3:

Objective 3I.2.3 seeks to keep people safe in a 1% annual exceedance probability flood. Objective 3I.2.4 seeks to keep buildings and infrastructure safe in a 1% annual exceedance probability flood.

OBJECTIVE

3I.2.3 Keep people safe during a flood event with an annual exceedance probability of 1% and ensure that emergency services remain able to operate.

POLICIES

- i. Ensure that communities are informed of the potential flood hazard (including residual risks) that may affect them.
- ii. Avoid locating new buildings (excluding those associated with infrastructure) and major additions to existing buildings (excluding those associated with infrastructure) in high flood hazard areas due to the risk to people’s lives from flood waters and building debris.
- iii. Control the design of new buildings and minor additions in low and medium flood hazard areas to keep people safe.
- iv. Control the design of minor additions to existing buildings in high flood hazard areas. This acknowledges the existing investment on the site but recognises the overriding need to keep people safe.

- v. Control the design of major additions to existing buildings in low and medium flood hazard areas. This acknowledges the existing investment on the site but recognises the overriding need to keep people safe.
- vi. Avoid locating new assembly care and community care activities for vulnerable people in high flood hazard areas.
- vii. Manage the location and design of new assembly care and community care activities for vulnerable people in low and medium flood hazard areas to keep people safe. This includes the ability for people to be evacuated.
- viii. Avoid locating new emergency services in high flood hazard areas.
- ix. Manage the location and design of new emergency services in low and medium flood hazard areas to ensure their ability to operate in a flood event.
- x. Avoid subdivision that creates intolerable risk in high flood hazard areas. The location of building platforms within high flood hazard areas is considered to be intolerable.

OBJECTIVE

- 3l.2.4 Buildings and infrastructure are located and designed to ensure continued operation and to avoid structural damage during a flood event with an annual exceedance probability of 1%.

POLICIES

- i. Avoid locating new buildings (excluding those associated with infrastructure) and major additions to existing buildings (excluding those associated with infrastructure) in high flood hazard areas given the likelihood of structural damage.
- ii. Control the design of new buildings and major additions to existing buildings in low and medium flood hazard areas to avoid structural damage during significant flood events.
- iii. Provide for minor additions to existing buildings in low and medium flood hazard areas in recognition of the investment in the existing buildings and site works.
- iv. Provide for, infrastructure (and buildings that enclose that infrastructure), and subdivision for infrastructure that is not vulnerable to flood risk or has a functional requirement to be in a flood hazard area.
- v. Avoid infrastructure (and buildings that enclose that infrastructure), and subdivision for infrastructure, that is vulnerable to flood risk in a flood hazard area.

Delete the words "such a minimum floor levels in identified flood prone areas" from Method 3l.3iii

Delete method 3l.3xv

Renumber method 3l.3xvi to 3l.3xv

DISTRICT WIDE RULES

Delete the words "flood inundation or" from the assessment criterion d to rule 4e.2.1 (Any building on or above ground within a Foreshore Protection Area is a discretionary activity.) so it reads "d. The potential for erosion from the District's waterways and lakes"

Remove the existing rules in section 4e.9 Flood Hazard Area (rules 4e.9.1 and 4e.9.2) and insert the following:

These rules apply to the flood hazard areas marked on the district plan maps.

NOTE. There are no rules that apply to the defended areas. These areas are identified on the district plan maps for information purposes only.

New Buildings

- 4e.9.1 Any new building (excluding those associated with infrastructure) in a low or medium flood hazard area is a **permitted activity** provided the floor level is 300mm above the identified maximum flood level.
- 4e.9.2 Any new building (excluding those associated with infrastructure) in a low or medium flood hazard area which does not comply with the standard in rule 4e.9.1 is a **restricted discretionary activity**, with Council's discretion being restricted to:
- a. The degree to which building, structural or design work to be undertaken can avoid the effects of the flood hazard.
 - b. The nature of the activity, its intended uses including whether the use is temporary or permanent and the degree to which people are put at risk as a result of the activity.
- 4e.9.3 Any new building (excluding those associated with infrastructure) in a high flood hazard area is a **non-complying activity**.

Major Additions

- 4e.9.4 Any major addition to an existing building (excluding those associated with infrastructure) in a low or medium flood hazard area is a **permitted activity** provided the floor level of the addition is 300mm above the identified maximum flood level.
- 4e.9.5 Any major addition to an existing building (excluding those associated with infrastructure) in a low or medium flood hazard area which does not comply with the standard in rule 4e.9.4 is a **restricted discretionary activity**, with Council's discretion being restricted to:
- a. The degree to which building, structural or design work to be undertaken can avoid or mitigate the effects of the flood hazard.
 - b. The nature of the activity, its intended uses including whether the use is temporary or permanent and the degree to which people are put at risk as a result of the activity.
- 4e.9.6 Any major addition to an existing building (excluding those associated with infrastructure) in a high flood hazard area is a **non-complying activity**.

Minor Additions

- 4e.9.7 One minor addition to an existing building at the date this rule becomes operative (excluding those associated with infrastructure) in a low, medium or high flood hazard area is a **permitted activity** provided the floor level of the addition is not lower than the existing floor level.
- 4e.9.8 Any minor addition to an existing building (excluding those associated with infrastructure) in a low, medium or high flood hazard area which does not comply with the standard in rule 4e.9.7 is a **restricted discretionary activity**, with Council's discretion being restricted to:
- a. The degree to which building, structural or design work to be undertaken can avoid or mitigate the effects of the flood hazard.
 - b. The nature of the activity, its intended uses including whether the use is temporary or permanent and the degree to which people are put at risk as a result of the activity.

Assembly care or community care activities

- 4e.9.9 Any new assembly care or community care activity in a low or medium flood hazard area is a **restricted discretionary activity** with Council's discretion being restricted to:
- a. The degree to which building, structural or design work to be undertaken can avoid or mitigate the effects of the flood hazard.
 - b. The nature of the activity, its intended uses including whether the use is temporary or permanent and the degree to which people are put at risk as a result of the activity.

- c. The ability to evacuate during a flood event.

4e.9.10 Any new assembly care or community care activity in a high flood hazard area is a **non-complying activity**.

Emergency services activities

4e.9.11 Any new emergency service activity in low or medium flood hazard areas is a **restricted discretionary activity** with Council's discretion being restricted to:

- a. The degree to which building, structural or design work to be undertaken can avoid or mitigate the effects of the flood hazard.
- b. The nature of the activity, its intended uses including whether the use is temporary or permanent and the degree to which people are put at risk as a result of the activity.
- c. The ability of emergency services vehicles to operate from the site during a flood event.

4e.9.12 Any new emergency service activity in a high flood hazard area is a **non-complying activity**.

Subdivision

Note: Refer to the underlying environment rules for subdivision in low and medium flood hazard areas.

4e.9.13 Subdivision of land in a high flood hazard area, is a **restricted discretionary activity** provided that:

- i. building platforms are identified outside high flood hazard areas, and
- ii. recorded through a consent notice on the Computer Freehold Register of the newly created allotments.

With Council's discretion being restricted to:

- a. The design of the subdivision to allow access to the site during a flood event.
- b. The recording of the height of the building platforms through a consent notice.

EXCEPTION:

Rule 4e.9.13 will not apply to subdivision for the purposes of infrastructure, access lots, adjustment of boundaries, or legal protection in perpetuity of Significant Natural Areas.

4e.9.14 Subdivision of land in a high flood hazard area which does not comply with standard i. or ii. in rule 4e.9.13 is a **non-complying activity**.

EXCEPTION:

Rule 4e.9.14 will not apply to subdivision for the purposes of infrastructure, access lots, adjustment of boundaries, or legal protection in perpetuity of Significant Natural Areas.

4e.9.15 Subdivision providing for infrastructure in a high flood hazard area is a **restricted discretionary activity** with Council's discretion being restricted to:

- a. The location and design of the infrastructure and buildings that enclose the infrastructure.
- b. Whether the infrastructure is a lifeline utility.
- c. Whether the infrastructure can continue to operate during and after a flood event.

Infrastructure

The provisions of the National Environmental Standards for Telecommunication Facilities prevail over the following Infrastructure rules.

4e.9.16 Any maintenance or upgrading of existing or the construction of new:

- below ground infrastructure and buildings that enclose them,
- stormwater infrastructure and buildings that enclose them,
- roads,
- marina facilities and buildings that enclose them,
- hydro electricity generation activities and buildings that enclose them, or

- electricity transmission activities
in any flood hazard area is a **permitted activity**.

For rule 4e.9.16 electricity transmission activities mean part of the national grid of transmission lines and cables (aerial, underground and undersea, including the high-voltage direct current link), stations and sub-stations and other works used to connect grid injection points and grid exit points to convey electricity throughout the North and South Islands of New Zealand.

4e.9.17 Any maintenance or minor upgrading of existing above ground infrastructure (and buildings that enclose them), in any flood hazard area is a **permitted activity**.

For the purpose of rules 4e.9.16 and 4e.9.17 “maintenance” means all activities associated with the protective care and monitoring of infrastructure, in order to arrest the processes of decay, structural fatigue, erosion or dilapidation.

For the purpose of rule 4e.9.17 “minor upgrading” means structure improvement, repair and replacement of worn or technically deficient parts of the infrastructure and accessory buildings and structures of similar character and scale.

4e.9.18 Any new above ground infrastructure (and buildings that enclose them), in any flood hazard area, that does not comply with rule 4e.9.16 is a **restricted discretionary activity** with the matters of discretion restricted to:

- a. The location and design of the infrastructure and building.
- b. Whether the infrastructure is a lifeline utility.
- c. Whether the infrastructure can continue to operate during and after a flood event.

DEFINITIONS

Add the following definitions to section 10 of the District Plan

Annual Exceedance Probability (AEP) - means the probability of a certain design flood flow being equalled or exceeded in any year. A 1% AEP design flood flow has a 1% or 1 in 100 chance of being equalled or exceeded in any year.

Assembly care activity - means a building or use where a large degree of care and service is provided. For example an early childhood education and care centre, college, day care institution, centre for handicapped persons, kindergarten, school or university.

Community care activity - means a residential building or use where a large degree of assistance or care is extended to the principal users. There are two types:

- Unrestrained: where the principal users are free to come and go such as a hospital, old peoples home or health camp.
- Restrained: where the principal users are legally or physically constrained in their movements such as a borstal or drug rehabilitation centre, aged care where substantial care is extended, a prison or hospital.

Defended areas - are areas which would normally flood in a 1% AEP flood event but are protected from flooding by a flood protection scheme managed by the Waikato Regional Council.

Emergency services - means Police, Fire, Ambulance Service, Coastguard, Civil Defence and Emergency Management facilities and welfare centres.

High flood hazard area - is the area where floodwaters in a 1% annual exceedance probability flood are likely to significantly impede the manoeuvrability or stability of the average person and damage to property is likely to be widespread and structural, including instances where buildings have been raised above the 'flood level'. These areas are shown on the planning maps as high flood hazard areas (red). These areas are defined by:

- i) the depth of flood waters exceeds one metre; or
- ii) the speed of flood waters exceeds two metres/second; or

iii) the flood depth multiplied by the flood speed equals or exceeds one.”

Lifeline Utility - means entities named or described in Part A, or that carries on a business described in Part B of Schedule 1 of the Civil Defence and Emergency Management Act 2002 and their associated essential infrastructure and services.

Low flood hazard area - is the area where floodwaters in a 1% annual exceedance probability flood are unlikely to impede the manoeuvrability or stability of the average person and damage to property is likely to be non-structural and mainly due to inundation and deposition of sediment. These areas are shown on the planning maps as low flood hazard areas (yellow). These are areas where:

- i) the depth of flood waters is one metre or less; or
- ii) the speed of flood waters is one metre/second or less; or
- iii) the flood depth multiplied by the flood speed is less than 0.5.

Major addition - means any addition to the gross floor area that exceeds 15m².

Marina facilities - means boat ramps, jetties, berth poles, access structures, lights, street furniture, facilities associated with water circulation, power and water supply points for berths and security cameras, fencing and gates.

Maximum flood level - is the maximum depth of inundation as a result of either lake or river flooding.

Medium flood hazard area - is the area where floodwaters in a 1% annual exceedance probability flood are likely to start to impede the manoeuvrability or stability of the average person and damage to property is unlikely to be structural provided that weak points such as windows and doors are retained above flood level. These areas are shown on the planning maps as medium flood hazard areas (orange). These are areas where:

- i) the speed of flood waters is greater than one metre/second but equal to or less than two metres/second; or
- ii) the flood depth multiplied by the flood speed is equal to or greater than 0.5 and less than one”

Minor addition - means any addition to the gross floor area that is equal to or less than 15m².