NATURAL HAZARDS – NH

Overview

The Gore District is exposed to a variety of *natural hazards* which can impact on people, property, *infrastructure* and the wider *environment*. These include flooding, liquefaction and earthquakes. Changes in *land* use or intensification of development can exacerbate the risks of hazards by increasing the likelihood or severity of their *effects*. *Climate change* is also likely to influence the frequency and range of some hazards on an on-going basis.

Planning for hazards can reduce the potential for loss of life and injury, damage and destruction of property, and negative impacts to our natural, social, cultural, economic and built *environments* and well-being. A key concept to manage the risk of *natural hazards* are the four "Rs"; Reduction, Readiness, Response, Recovery. Reduction aims to mitigate or avoid the risks of hazards and is the primary outcome sought by the District Plan in respect of *natural hazard* management. A risk-based approach to planning for *natural hazards* includes three key principles:

- Gathering accurate *natural hazard* information.
- Avoiding significant *natural hazard* risks when undertaking greenfield development and *subdivision*.
- Managing and mitigating the risk in areas already developed or subdivided.

Flood protection measures such as flood banks built and maintained by the Regional Council help protect the communities within the Mataura River floodplain. However, flood banks have design limitations and cannot provide absolute protection. Future high rainfall events are expected to increase in intensity and scale in the future and it is highly likely these will test the extent of the current flood protection. Retreating from the hazard is not an immediate solution for existing developed communities, such as Gore and Mataura, so planning for subdivision, use and development that recognises the degree of risk within these areas is necessary to manage the adverse *effects* on people and property. [1]

Natural Hazards refer to all overlays identified within the District Planning Maps as Natural Hazards. While areas of potential liquefaction are shown, the District Plan provisions are only relevant to consideration of subdivision. [2] Liquefaction is primarily managed ~~via~~ under the Building Act ~~with the exception of subdivisions, high density developments and critical infrastructure which are addressed through this chapter.~~ while the construction and maintenance of defences against water may require resource consent from Environment Southland. [3]

Telecommunication infrastructure is a regulated activity under the National Environmental Standard for Telecommunication Facilities and is exempt from complying with the provisions in this chapter.[4]

~~Actual or Potential Inundation refers to all overlays identified under this subheading within the District Planning Maps.~~

[1] Decision 44, paragraph 3.3.8
[2] Consequential to Decision 44, paragraph 5.6.4
[3] Decision 44, paragraph 5.11.2
[4] Decision 44, paragraph 5.11.2

Objectives

NH-O1 Identify and manage the risks associated with *natural hazards* to human health, property, *infrastructure* and the wider *environment*.

NH-O2 The risks associated with *natural hazards* and their impact on people, property and the *environment* are recognised and avoided or mitigated, including the likely long-term *effects* of *climate change*.

NH-O3 ~~Ensure new~~ New subdivision and development for sensitive activities ~~are not only located~~ is avoided in areas where the natural hazard risk ~~is,~~ creates a danger to people and property and where it is not practical, the adverse *effects* are:

1. ~~adequately~~ appropriately managed to mitigate the hazard e*ffect* on people and property; and
2. not exacerbated beyond the ~~on other~~ *site*.[5]

NH-O4 ~~Regionally significant~~ Unless there is an *operational need* or *functional need*, locate *critical infrastructure* ~~is located~~ outside hazard risk areas. ~~where practicable.~~[6]

NH-O5 Protect, and where practical enhance, natural features that have the *effect* of reducing *natural hazard* risk.

Policies

NH-P1 Adopt a precautionary approach and use best available information when assessing the risk from *natural hazards*.[7]

NH-~~P1~~P2 Identify and map areas subject to *natural hazards*, taking into consideration the *effects* of *climate change* and ~~updated information~~ the best available information, and apply through zoning and rules, a risk-based approach to the management of *subdivision*, use and development based on the following:

1. the type of *natural hazard* that applies; ~~and~~
2. the level and severity of risk from *natural hazards*, ~~preventing risk to people and managing risk to property;~~[8] ~~and~~
3. the sensitivity of activities to loss of life or damage to property from a *natural hazard*; and
4. the ability for communities to recover after a *natural hazard* event.

[5] Decision 44, paragraph 4.2.5
[6] Decision 44, paragraph 4.3.3
[7] Decision 36, paragraph 7.3.2
[8] Decision 44, paragraph 5.1.6

NH-P~~2~~3[9] ~~Manage the use, development and subdivision of land in all mapped~~ Within areas mapped as subject to Actual or Potential Inundation Areas~~, with the exception of the Stopbank Protection Areas by~~:

~~1. ensuring that the activity is not likely to result in significant damage in a flood event; and~~

~~2. maintaining the functioning of the flood plain, and not displacing water onto other properties;~~

~~5. ensuring adverse effects on people, cultural values, and property are avoided or mitigated; and~~

~~6. ensuring increased risk on other sites is avoided; and~~

~~7. requiring the identification of suitable buildable areas, for example via building platforms, at the time of subdivision.~~

1. As part of any *subdivision* require assessment of the flood risk identifying and providing for areas where future development should be:
   (a) avoided; ~~and~~
   (b) managed, including the location of suitable *building* platforms; and
   (c) enabled;
2. Require *hazardous substance* storage to be resilient to inundation; ~~and~~
3. Have regard to the ability of people within *buildings* to evacuate safely and in a timely manner in the event of a *natural hazard* event;
4. Require a minimum floor level above the 0.5% AEP design flood level for *buildings* used for *sensitive activities*;
5. Locate and design *buildings* to avoid significant damage in a flood event;
6. Consider the off-*site effects* of any development or change in *ground level*, including
   (a) on the functioning of the flood plain;
   (b) the impact of displacing or diverting *water* onto other *land* or into waterways; and
   (c) potential risks to the safe and efficient operation and function of *critical infrastructure*. and
7. Limit the extent and location of any future development to avoid the need for new or upgraded public hazard mitigation works to mitigate the *natural hazard*.

[9] Decision 44, paragraph 5.4.5

~~NH-P3 Avoid *subdivision*, use and development and *critical infrastructure* within the "Mataura River Floodway", unless it can be demonstrated that the risks of the *natural hazard* can be mitigated so that:~~

~~1. in the event of a *natural hazard*, there is likely to be no loss of life or serious injury and any built development is not likely to suffer significant damage or loss; and~~

~~2. it will not require new or upgraded public hazard mitigation works to mitigate the *natural hazard*; and~~

~~3. it is not likely to exacerbate the potential *effects* of the *natural hazard* on *adjoining land* or surrounding *land*; and~~

~~4. will not result in adverse *effects* to *water* quality due to storage of *hazardous substances* in the *floodway*; and~~

~~5. it would not exacerbate adverse *effects* on mahinga kai on the event of a flood hazard.~~[10]

NH-P4 Avoid new *subdivision*, use and development within the Mataura River Floodway, while recognising:

1. the *functional need* and locational need for *critical infrastructure* to locate there, subject to adopting a built design that avoids as far as practical impeding the flow of *water* in the *river*;

2. *natural hazard* mitigation works to mitigate the *natural hazard* and activities that reduce flood risk;

3. recreational use and *temporary activities* undertaken within the Mataura River and its margins;

4. the need to undertake maintenance, provide protection to, and upgrade, bridges and other existing s*tructures* located within the Floodway;

5. gravel removal within the Floodway is a necessary activity to maintain *river* flows; and

6. the importance of *mahi*nga *kai* and customary activities to *mana whenua*.[11]

NH-P5 ~~Identify and map areas subject to stopbank protection and~~ Within areas mapped as Flood Bank Mitigation Area:

1. As part of *any subdivision*, require assessment of the flood risk identifying and providing for areas where future development should be:

   (a) avoided;

   (b) managed, including the location of suitable *building* platforms; or

   (c) enabled;

2. Require *hazardous substance* storage to be resilient to inundation;

3. Have regard to the ability of people within *buildings* to evacuate safely and in a timely manner in the event of a *natural hazard* event;

[10] Decision 44, paragraph 5.4.5
[11] Decision 44, paragraph 5.4.5

4. Require a minimum floor level above the 0.5% AEP design flood level for *buildings* used for *sensitive activities*;

5. Avoid damage to any Flood Bank *structure* when undertaking development, including any *earthworks*; and

6. ~~Encourage~~ Adopt non-regulatory methods to inform the community of the risk and appropriate response in event of flood bank failure. [12]

NH-~~P4~~P6 Avoid locating any ~~*residential unit*~~ *sensitive activity* or other asset of high value between any *water body* and any *defence against water* designed or used to contain floodwater from that *waterbody*, unless ~~that asset has~~ there is a *functional need* or *operational need* to be in that location.

NH-~~P5~~P7[13] Manage *subdivision*, use and development in areas subject to risks of slope instability and subsidence ~~and high liquefaction risk~~ to ~~demonstrate the appropriateness of the *site* for *subdivision*, use or development in a way that can~~ avoid or mitigate hazard risks to people and property.

NH-~~P6~~P8 Avoid the placement of *critical infrastructure* in identified and mapped areas subject to natural hazards ~~areas at risk from *natural hazards*~~ unless:

1. there is ~~no reasonable alternative due to the~~ an *operational* need or *functional need* for the location; ~~and~~
2. it will be designed to ~~maintain its integrity and~~ function to the fullest possible extent, even though this may be at a reduced level, during and after a *natural hazard* event, ~~or~~ and [14]can be readily re-instated after a *natural hazard* event; and
3. any significant adverse *effects* on people, ~~cultural values, and~~ property ~~will be avoided,~~ cultural values listed in MW-1.2 can be avoided, remedied or mitigated.[15]

NH-~~P7~~P9 Encourage the use, maintenance and enhancement of natural features and buffers such as riparian planting to manage the risks of *natural hazards* on people, property, and the *environment*.

~~NH-P8 Identify and map areas subject to stopbank protection and encourage non-regulatory methods to inform the community of the flood risk as a result of stopbank failure.~~[16]

~~**Notes**~~[17]

~~**Note 1**~~	~~**Provisions in Other Chapters**~~
	~~The provisions in this chapter apply in addition to the provisions of the other chapters in the District Plan and the plan should be read as a whole. This chapter also implements other chapters in the District Plan that do not have specific rules such as Sites and Areas of Significance to Māori and Mana Whenua.~~

[12] Decision 44, paragraph 5.9.2
[13] Decision 44, paragraph 5.6.4
[14] Decision 44, paragraph 5.7.6
[15] Decision 44, paragraph 5.7.3
[16] Decision 44, paragraph 5.4.5
[17] Decision 44, paragraph 5.11.1

~~Note 2~~	~~Environment Southland Consents may be required~~
	~~The construction and maintenance of *defences against water* may require resource consent approval from Environment Southland.~~

Rules

NH-R1	The maintenance of existing *defences against water*	
All Zones	**Activity status:** Permitted Where: 1. Pre-existing legal *access* to ~~waterways~~ *waterbodies* for *mahinga kai* activities is retained. 2. No increase in scale (*height*, length or width) is proposed.	**Activity status where compliance is not achieved:** Restricted Discretionary **Matters of discretion:** 1. Ecological impacts on in-*stream* or *stream*-adjacent indigenous wildlife. 2. Impacts on Ngāi Tahu cultural values~~, including those~~ listed in the MW-~~2.3.~~1.2

~~NH-R2~~	~~Buildings used for sensitive activities within areas subject to actual or potential inundation~~	
~~All Zones~~	~~**Activity status:** Permitted~~ ~~Where:~~ ~~1. Any new building or building addition must have a minimum floor level above the 0.5% AEP design flood level, unless otherwise directed by the Southland Regional Council planning department.~~ ~~Except that:~~ ~~(a) This rule does not apply to areas in the mapped Stopbank Protection Area.~~ ~~*Note: Regional Council recommendations take precedence over NH-R2.*~~	~~**Activity status where compliance is not achieved:**~~ ~~Restricted Discretionary~~ ~~Matters of discretion:~~ ~~1. Suitable methods to mitigate the hazard risk.~~ ~~2. The functional need and/or operational need to be located the building or structure in this location.~~ ~~3. Nature and extent of hazard risk to people, Ngāi Tahu cultural values and property~~

NH-R2	**The *addition* to existing *buildings* used for *sensitive activities* within areas subject to Actual and Potential Inundation and the Flood Bank Mitigation Area**	
All Zones	**Activity status:** Permitted **Where:** 1. Any habitable room must ~~shall~~ have a minimum floor level above the 0.5% AEP design flood level; and 2. No additional *residential units* are created.	**Activity status where compliance is not achieved:** Restricted Discretionary **Matters of discretion:** 1. The flood *effect* from a 0.5% AEP event. 2. Flood *effects* on people and property or displacement of flood *waters* onto adjacent *sites*; 3. Evacuation of properties during a 0.5% Annual Exceedance Probability flood event.
NH-R3	**The construction of new *buildings*, including conversion of existing *buildings*, within the Flood Bank Mitigation Area.**	
All Zones	**Activity status:** Permitted Where: 1. The finished floor level for any *habitable room* must ~~shall~~ be above the 0.5% AEP flood design level or in the case of converting an existing *building*, must ensure the finished floor level of all *habitable rooms* are above the 0.5% AEP design flood level. 2. No more than one *residential unit* is created on the *site*.	**Activity status where compliance is not achieved:** Discretionary
NH-R4[18]	**Construction of an *accessory building* used for *primary production* within Areas Subject to Actual or Potential Inundation**	
General Rural and Rural Lifestyle Zones	**Activity status:** Permitted Where: 1. The *building* is for a non-habitable use; 2. The *building* is no greater than 500 m^2 in floor area;	**Activity status where compliance is not achieved:** Restricted Discretionary **Matters of discretion:**

[18] Decision 44, paragraph 6.6.3

	3. The *building* is *setback* a minimum 10 meters from any *residential building*; and 4. The *building* is *setback* a minimum 10 metres from any flood protection asset or hydraulic control structure.	1. The risk to people and property from the displacement or diversion of flood waters; 2. The incorporation of design methods to mitigate the hazard risk; 3. The ability to avoid adversely affecting existing flood protection assets and *structures*.[19]
NH-~~R4~~R5[20]	**Activities within the Mataura River Floodway, other than *earthworks* and *land disturbance*** **Activity status:** ~~Non-Complying~~ Permitted Where: 1. The following activity is undertaken: (a) ~~new *structures* or *building*~~ *mahinga kai* and *customary activity*; (b) ~~critical infrastructure~~ *recreational* activity (c) *temporary activity*, subject to compliance with Rules TEMP-R1, TEMP-R4, TEMP-R5, TEMP-R6, TEMP-R7, TEMP-R10 or TEMP-R11; ~~Sensitive activities~~ 2. The activity does not use any structure, other than a temporary structure such as a tent. **Except:** This rule does not apply to: (i) *critical infrastructure; or* (ii) *defences against water.*	**Activity status where compliance is not achieved:** Non-Complying
Mataura River Floodway		
~~EW-R13~~ NH-R6[21]	***Earthworks* and *land disturbance* within areas subject to ~~Natural Hazards (Flooding)~~ Mataura River Floodway, Actual or Potential Inundation and Flood Bank Mitigation Area,**	

[19] Decision 44, paragraph 6.6.3
[20] Decision 44, paragraph 6.4.2
[21] Decision 37, paragraph 5.7.12

~~Areas subject to Natural Hazards (Flooding)~~ All Zones	**Activity status:** Permitted Where: 1. The work is not undertaken within the Mataura River Floodway; and 2. The work is not undertaken on the *river* side of a ~~stopbank~~ flood bank. 3. The activity is undertaken within the mapped: (a) ~~Stopbank Protection Area~~ Flood Bank Mitigation Area; or (b) Actual or Potential Inundation area and the cut depth or fill *height* (measured vertically) does not exceed 0.6 metres; and 4. All Earthworks Standards are complied with.	**Activity status where compliance is not achieved with NH-R4(3), or NH-R4(1) or NH-R4(2) for *critical infrastructure*, or with EW-S1, EW-S2, EW-S3, EW-S4, or EW-S5: ~~EW-R13(3)~~:** Restricted Discretionary **Matters of discretion:** 1. The potential to create new or exacerbate existing *natural hazards*, impact natural drainage patterns, redirect overland flow paths or flood flows. 2. *Effects* on *water* quality. 3. Sediment and erosion *effects* and management. ~~4. Impacts on Ngāi Tahu cultural values, including those listed in MW-2.3.~~ 54. The matters of discretion of any infringed Standard(s). 5. Effects on indigenous biodiversity and ecological connection. 6. Vehicle movements to and from the area related to the *earthworks* and controls to manage adverse *effects* on traffic safety and amenity. **Activity status where compliance is not achieved with NH-R4(1) or NH-R4(2), other than for *critical infrastructure*, or with EW-S6: ~~EW-R13(1) or EW-R13(2)~~:** Non-Complying
NH-R7	**The construction of new *buildings*, including conversion of existing *buildings* within areas subject to Actual and Potential Inundation excluding Flood Bank Mitigation Area and Mataura River Floodway**	
All Zones	**Activity status:** Restricted Discretionary Where: 1. The *building* platform is located outside of the *river* or *stream* channel;	**Activity status where compliance is not achieved for *buildings* containing non-*sensitive activities*:** Discretionary

	2. The finished floor level for any new *building* must be above the 0.5% AEP flood design level; 3. The finished floor level of any *habitable room* when converting an existing *building* must be above the 0.5% AEP flood design level; and 4. No more than one *residential unit* is created within that part of the *site* subject to Actual or Potential Inundation. **Matters of discretion:** 1. The flood effect from a 0.5% AEP event for non-*sensitive activities*. 2. Flood effects on people and property or displacement of flood *waters* onto adjacent *sites*; 3. Evacuation of properties during a 0.5% Annual Exceedance Probability flood event.	**Activity status where compliance is not achieved for *buildings* containing *sensitive activities*:** Non-Complying
NH-R8	**The establishment of *critical infrastructure* on land subject to Actual or Potential Inundation and the Mataura River Floodway**	
All Zones	**Activity Status:** Discretionary	
NH-~~R3~~R9	**The construction of new or extended *defences against water***	
All Zones	**Activity Status:** Discretionary	
NH-~~R5~~R10	***Buildings* or *structures* located on the *river* side of a ~~stopbank~~ flood bank**	
All Zones	**Activity Status:** Non-complying Where: 1. The activity involves constructing new *buildings* or *structures*, or additions to an existing *building* or *structure* on the *river* side of a Southland Regional Council ~~stopbank~~ flood bank	

	Except this rule does not apply to *critical infrastructure or defences against water.*[22]
~~**NH-R6**~~	~~**The establishment of *critical infrastructure* on *land* subject to a high or very high risk of liquefaction**~~
~~**All Zones**~~	~~**Activity status:** Non-Complying~~ [23]

[22] Decision 44, paragraph 6.4.4
[23] Decision 44, paragraph 6.5.2