## Waitomo District Council

Hearing on submissions on the Proposed Waitomo District Plan

# Report and Decisions of the Independent Hearing Commissioners

Decision Report:

Chapter 23. Natural Hazards

19 June 2025

Commissioners

Greg Hill (Chair)

Wikitōria Tāne

Allan Goddard

Phil Brodie

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#### 1. Introduction

- 1. This Decision Report relates to all the submissions received by the Waitomo District Council (Council) on Chapter 23 Natural Hazards. This includes related provisions within the Proposed Waitomo District Plan (PDP) such as Definitions (Chapter 9).
- 2. The chapter seeks to manage land use in areas that are subject to risks from natural hazards outside of the coastal environment. In accordance with the two regional policy statements, this chapter adopts a risk-based approach to natural hazard management which requires management of activities based on the level of risk and whether the risk is considered acceptable or intolerable. Identifying and understanding the scale and likelihood of a natural hazard event and its likely consequences, is central to the risk-based approach. The risk that a natural hazard poses to the community depends on its nature, magnitude and extent, the anticipated frequency of occurrence and the vulnerability of the environment to the hazard.

#### 2. Hearing arrangements

- 3. The hearing was held in person and online on 16 and 17 July 2024 in Council's offices at 15 Queen Street, Te Kuiti. All of the relevant information pertaining to this hearing (i.e., Section 42A Reports, legal submissions and evidence) is contained on Council's website.
- 4. The following parties submitted on this Chapter.

Submission No	Submitter
46	Federated Farmers
56	The Fuel Companies
16	Fire and Emergency New Zealand
10	Waikato Regional Council
21	New Zealand Defence Force
24	Ministry of Education
32	Horizons Regional Council
34	Ayush Mudaliar
39	Firstgas
51	KiwiRail Holdings Limited
FS05	Federated Farmers
FS18	Omya New Zealand Limited
FS09	Kainga Ora
FS26	Waikato Regional Council
FS23	Te Nehenehenui

5. The Panel heard from Ms Sarah Knott, Mr Luis Alejandro Cifuentes and Mr Rick Liefting on behalf of the Waikato Regional Council (WRC) at the hearing on 16

July 2024 in relation to this Chapter. No other submitter evidence was presented to the panel on this Chapter.

#### Submitter evidence

- 6. In their verbal evidence and in response to questions from the Panel, **the WRC's** witnesses presented the following:
  - Review the naming terminology used throughout the chapter and updating to ensure consistency. WRC proposed that the following terminology and definitions from the WRC Regional Asset Management Plan (RAMP) and Infrastructure Strategy 2024-74 are included in the plan:
    - o Annual exceedance probability;
    - o Embankment;
    - o Flood;
    - o Flood Risk Management;
    - o Flood Infrastructure;
    - o Level of Service:
    - o Risk Threshold:
    - o Stopbank; and
    - o Average Return Interval.
  - Mr Liefting considered that the base data and best practice guidance used by the natural hazard assessments to inform the plan was now outdated and considers that new information will soon be available that should be reflected in the plan's provisions. Mr Liefting proposed three options regarding the use of the current data to the Panel:
    - o Retaining natural hazard data, but acknowledging data is superseded and ensuring a clear process for using new/updated information.
    - o Remapping and amending natural hazard data.
    - o Removing mapped natural hazard data from the plan and referring to mapped data outside of district plan.
  - Mr Liefting requested that the plan be amended to include provisions that
    consider and address flooding in areas that are not mapped. Mr Liefting
    requested that the plan is amended to ensure additions to an existing
    building, or construction of a new building housing a sensitive activity is
    constructed to manage risk from natural hazards.
  - Mr Liefting sought that Building Platform Suitability Area C be amended on the grounds that the wording in the plan did not clarify whether the modelling is for the current climate or for an RCP 8.5 climate. Additionally, he stated that more clarity was needed regarding the Waitomo Valley flood modelling to specify that the floodplain was identified using a qualitative assessment.

- All references to "100-year ARI" were amended to 1% AEP (Annual Exceedance Probability) to be consistent with the Waikato Regional Policy Statement.
- Amend NH-R5.3(i) and (ii) to state 500mm instead of 0.5m and that this
  measurement be applied from the bottom of the fixed floor level for
  concrete foundations to be consistent with NZS 4404:2010, and to use the
  term building platform level as opposed to finished floor level in this rule.
- 7. The other submitters on this Chapter did not appear at the hearing. However, it is noted that they either submitted evidence accepting the recommendations in the Section 42A Report, or have accepted the further amendments in the Section 42A Addendum or the reasons why their relief sought was rejected.

#### 4. Panel decision

- 8. Having considered the submissions and evidence presented, the Panel acknowledged the general support for the PDP's amended provisions.
- 9. The Panel agrees with the aim of the Chapter, which is to manage land use and development in areas that are subject to risks from natural hazards outside of the coastal environment. The panel found that:
  - It is necessary to ensure that communities are resilient to the risks that natural hazards pose on people, property, infrastructure and the environment by providing for subdivision, use and development of land only where these risks are avoided or appropriately mitigated.
  - That any new subdivision, use and development in Hazard Areas where it
    will increase the risk to or vulnerability of people or communities should
    be avoided, and require that site specific hazard assessments are
    undertaken as appropriate and ensure that where risk becomes
    intolerable, development is avoided.
  - Manage land use to minimise the potential adverse effects of climate change, including applying the precautionary approach where there is incomplete information.
- 10. In considering the request from Mr Liefting that the terminology and definitions from the WRC RAMP and Infrastructure Strategy 2024-74 be included in the Plan, the Panel considers that the addition of definitions for Annual Exceedance Probability, Stopbank and Average Return Interval should be included as they would be useful additions for Plan users. However, the majority of the other definitions are not suitable for the reasons provided in the Section 42A addendum, which the Panel agrees with.
- 11. In considering the request from Mr Liefting regarding the base data and best practice guidance used by the natural hazard assessments to inform the plan, the Panel notes that this request did not form part of WRCs original submission. However, the Panel considers that district plans can only be developed with the best information that they have available when being developed and that any future improvements in information should be provided for by way of a future plan change. Therefore, the Panel agrees with the recommendation in the Section 42A Addendum that the plan should proceed on the basis of the natural hazards

- dataset that is currently available, and that any future improvements to the dataset should be provided for by way of a future plan change.
- Mr Liefting requested that the Plan be amended to include provisions that consider and address flooding in areas that are not mapped. The Panel does not consider that this amendment is appropriate, as: there would be no trigger for a land use consent; no clarity for landowners regarding consenting requirements; and likely to be procedurally unfair as most property owners would not be unaware of the introduction of such a rule by a general submission.
- 13. In his evidence, Mr Liefting stated that development (additions or new building housing a sensitive activity) could occur on existing, appropriately zoned land subject to natural hazards that is outside of a mapped hazard zone and does not require a subdivision consent. Mr Liefting requested that the plan is amended to ensure additions to an existing building, or construction of a new building housing a sensitive activity is constructed to manage risk from natural hazards.
- 14. The Panel considers that it is not clear from the evidence submitted or during the verbal evidence at the hearing how the submitter sought this relief to be applied (i.e. as an amendment to this Chapter, or the subdivision chapter). The Panel notes that there is an existing process for subdivision that requires a site suitability and hazard assessment to be completed, which includes an assessment in terms of section 106 of the RMA. This process has the effect of determining whether land is suitable for development or not, and what site specific measures need to be put in place to address natural hazards.
- 15. The Panel also notes that, the policy framework in each zone provides that new development is designed and located to manage significant risks from natural hazards. In the residential zone RESZ-P21 requires adequate assessment of the natural hazard risk to be undertaken prior to the establishment of new development, noting some areas may not be appropriate for development if the natural hazard risk, particularly flooding and land instability issues, cannot be appropriately managed. Similarly, this provision is contained in RLZ-P6, RLZ-P7, SETZ-P18, COMZ-P8, TOUR-P10 and INZ-P8. Appendix 1 also identifies the hazard information requirements for resource consent applications. Therefore, the Panel agrees with the recommendation in the Section 42A Addendum that adequate provision has been made to assess natural hazards outside of the mapped areas.
- 16. The Panel notes and agrees with the recommendation in the Section 42A addendum regarding the evidence submitted by Mr Liefting on the need for amendments to the Building Platform Suitability C definition contained in the Overview for the Chapter.
- 17. The Panel notes and agrees with the recommendation in the evidence submitted by Mr Liefting that all references to "100-year ARI" were amended to 1% AEP (Annual Exceedance Probability) to be consistent with the higher order policy document (Waikato Regional Policy Statement).
- 18. The Panel notes the requests from Mr Liefting in relation to rule NH-R3(i) and (ii). The Panel notes the agreement in the Section 42A addendum regarding the change from 0.5m to 500mm and measurement from the bottom of the finished floor level for concrete foundations. However, the Panel does not agree with the request to change fixed floor level to building platform level, as fixed floor level is a widely used and understood term in the planning and building industry, so it would not be appropriate to use another term, which could ultimately lead to confusion for plan users.

19. Otherwise, unless stated in the Panel decision above, the Panel has elected to adopt the recommendations in the Section 42A Report and the Section 42A Addendum Report on this chapter.

#### 5. Conclusion

- 20. The Panel accepts the recommendations in the section 42A reports and where noted above, the evidence filed by the submitters. The reasons for this are those set out in the section 42A reports, the evidence, and provided in this Decision; collectively forming the section 32AA assessment informing this Decision.
- 21. Overall, the Panel is satisfied that the provisions of the chapter, as amended, will provide a suitable framework for managing land use and development in areas that are subject to risks from natural hazards outside of the coastal environment.
- 22. The Panel accepts, accepts in part, or rejects the submissions as set out in the Section 42A Report and the Section 42A Addendum.

For the Hearing Panel

Greg Hill, Chair

Dated: 19 June 2025

6. Appendix 1 - Submitter Table

## Natural Hazards - Submission points in order of s42A report

Submission no	Submitter	Support/in part/oppose	Plan provision	Relief sought	Recommendation
32.03	Horizons Regional Council (Horizions)	Support	NH-05	No specific decision sought, but submission supports NH-O5.	Accept
56.06	The Fuel Companies	Support	NH-P4	Retain Policy NH-P4 as notified.	Accept
32.04	Horizons	Support	NH-P11	No specific decision sought, but submission supports NH-P12.	Accept
32.05	Horizons	Support	NH-P12	No specific decision sought, but submission supports NH-P13.	Accept
32.06	Horizons	Support	NH-P13	No specific decision sought, but submission supports NH-P11 which acknowledges the presence and potential impact of natural hazards outside these defined areas and appears to signal an adaptive management approach.	Accept
10.60	Waikato Regional Council (WRC)	Amend	General chapter comment	Review the naming terminology used throughout the chapter and updating to ensure consistency. Provide definitions for: Flood management Protection works Include overall provisions that consider and address flooding in areas that are not mapped.	Accept in part
10.61	WRC	Amend	General comment – page 2	Amend the wording of paragraph 3 on page 2 to:  "Building Platform Suitability Area C which is the floodplain area in Te Küiti and Piopio identified o n t	Accept in part

Submission no	Submitter	Support/in part/oppose	Plan provision	Relief sought	Recommendation
			PI OVISION	he planning maps for 100 year ARI events (current climatic conditions) with rainfall projected to a 2120 future time horizon based on RCP 8.5. It is also the floodplain area identified in Waitomo Valley Road which is the extent of a 1% AEP flood event with future climate change rainfall projections of RCP 8.5 identified on the planning maps in Te Kuiti and Piopio."  Create another layer specifically for the Waitomo Valley flood modelling, with the following description:  "the floodplain identified in the Waitomo Valley by a qualitative assessment."  Or alternatively, state at the beginning of paragraph three that Building Platform Suitability Area C is made from two separate datasets, one for the Waitomo Floodplain and one for Te Kuiti and Piopio.	
FS09.01	Kainga Ora	Support in part		Allow with amendments	Reject
10.62	WRC	Amend	General comment – page 5	Reword paragraph 5 to: "In Te Kūiti and Piopio, Building Platform Suitability Area C is the 100 year average recurrence interval (ARI) 1% annual exceedance probability"  Amend the wording of "for current climate conditions with rainfall projected to a 2120 future horizon based on RCP of 8.5"	Accept in part
10.63	WRC	Amend	General comment	Change all references to "100-year ARI" to 1% AEP (Annual Exceedance Probability).	Accept

Submission no	Submitter	Support/in part/oppose	Plan provision	Relief sought	Recommendation
32.07	Horizons	Support	High Risk Flood Zone	Amend the Proposed District Plan to clarify the outcome of the modelling and whether or not the 1% AEP takes into account the 8.5 RCP in the HRFZ provision which would more closely resemble the policy intent of the One Plan's 0.5% AEP.  And  Any alternative or consequential amendments to achieve the outcomes sought.	Reject
24.22	Ministry of Education (MoE)	Support with amendment	NH-01	Amend NH-O1: risks are avoided or appropriately mitigated., while recognising that some activities have a functional or operational need to be located in the natural hazard zones.  And  Any consequential amendments required to give effect to the matters raised in this submission.	Accept in part
32.01	Horizons	Support	NH-O1	No specific decision sought, but submission supports NH-O1.	Accept
16.19	Fire and Emergency New Zealand (FENZ)	Support in part	NH-O4	Include reference to the Fire Plan for Waikato, Ngā Tai ki te Puku in the overview of the chapter.	Reject
32.02	Horizons	Support	NH-O4	No specific decision sought, but submission supports NH-O4.	Accept
56.07	The Fuel Companies	Support in part	NH-P5	Amend clause (1) of Policy NH-P5 as follows:  1. In Building Platform Suitability Area C, ensuring that the potential adverse effects of land disturbance earthworks activities on flood storage capacity,	Accept

Submission no	Submitter	Support/in part/oppose	Plan provision	Relief sought	Recommendation
				overland flows and run-off volumes on surrounding properties and infrastructure, are avoided or mitigated; and	
FS23.264	Te Nehenehenui	Oppose		Te Nehenehenui seeks to enhance the protection and maintenance of its people and taonga within the taiao as guided by Ko Tā Maniapoto Mahere Taiao – Maniapoto's Environmental Management Plan.  Where submission points do not align with this, or have the potential to negatively impact on iwi, hapu, whanau cultural values, sites, and all taonga within TNN area of interest, TNN opposes and requests that Waitomo District Council consider this when finalising the review.	Reject
10.64	WRC	Amend	NH-P5.2	Amend the policy to read "In the High Risk Flood Zone avoiding earthworks unless the natural hazard risk can be adequately avoided, remedied or mitigated; and, unless for flood protection purposes".	Reject
16.18	FENZ	Support in part	Objective and policy framework - general	Add new policy specific to wildfire as below, or to a similar effect:  NH-P14 In areas assessed or identified as being potentially subject to elevated fire risk, ensure that an appropriate design and layout, including a buffer area or setback is provided for new subdivision and development, and the following matters are considered:  • Access for emergency service vehicles, • Provision of and access to emergency firefighting water supply,	Accept in part

Submission no	Submitter	Support/in part/oppose	Plan provision	Relief sought	Recommendation
				<ul> <li>Separation and management of vegetation (with regard to slope, aspect, management regimes and use of less flammable vegetation), and</li> <li>The design and materials of any buildings.</li> <li>NH-P15 Manage wild fire risk by making provision for water supplies and access to buildings for firefighting and appropriate buffers are maintained between new building platforms and forest and bush areas.</li> </ul>	
10.68	WRC	Amend	General comment - NHR4	Include an advice note after Rule NH-R4 requiring that WRC must be notified of any activities proposed to be undertaken in the area below, along the Mangaokewa River through the Te Kuiti township. The notification must allow appropriate time for WRC to assess the application. The advice note must cover the area between the following properties:  • Upstream extent Property Valuation ID: 0588473300 (X 1790312, Y 5754572 NZTM Coordinate System); and  • Downstream extent Property Valuation ID: 0581128801 (X 1787630, Y 5756978 NZTM Coordinate System) within in the Lower Waikato Waipa Control Scheme Section A works area.	Reject
FS18.03	Omya	Neutral		Omya would like to be engaged in the outcome/decision of this submission point.	Reject
10.65	WRC	Amend	NH-R5.3.i	Amend this rule to state 500mm rather than "0.5" to be consistent with Rule SUB-R19.3.	Accept
16.20	FENZ	Support	NH-R5	Retain as notified.	Accept
56.08	The Fuel Companies	Support in part	NH-R5	Amend the title of Rule NH-R5 as follows:	Accept

Submission no	Submitter	Support/in part/oppose	Plan provision	Relief sought	Recommendation
				NH-R5. Non-habitable accessory buildings or shipping containers, and additions to an existing building, or construction of a new building housing a sensitive activity	
24.23	MoE	Support with amendment	NH-R6	Add to NH-R6 a new clause (h) as follows:  Activity status where compliance is not achieved: RDIS Matters over which discretion is restricted.  h. If the earthworks will enable an activity that has a functional or operational need to be located within the Building Platform Suitability Area C  And  Any consequential amendments required to give effect to the matters raised in this submission.	Accept
39.50	Firstgas	Support	NH-R6	Retain NH-R6 as notified.	Reject
56.09	The Fuel Companies	Support	NH-R6	Retain Rule NH-R6 as notified.	Reject
10.66	WRC	Amend	NH-R6	Amend and revise Clause 1 so that it addresses the size of the building platform and the associated displacement of floodwaters. Further, we recommend removing Clause 2.	Reject
10.67	WRC	Amend	NH-R7.2	Amend the rule so that it states that no hazardous materials may be stored in farm buildings without a floor, or consider adding a rule in Chapter 22 – Hazardous Substances that reflects this.	Accept in part
FS05.31	Federated Farmers	Support	NH-R7.2	Amend the rule so that it states that no hazardous materials may be stored in farm buildings without a floor, or consider adding a rule in Chapter 22 – Hazardous Substances that reflects this.	Accept

Submission no	Submitter	Support/in part/oppose	Plan provision	Relief sought	Recommendation
24.24	MoE	Support with amendment	NH-R11	Add to NH-R11 a new clause (h) as follows:  Activity status where compliance is not achieved: RDIS  Matters over which discretion is restricted.  h. If the earthworks will enable an activity that has a functional or operational need to be located within the Building Platform Suitability Area A and B.  And  Any consequential amendments required to give effect to the matters raised in this submission.	Accept
51.35	KiwiRail Holdings Limited (KRH)	New	New rule	Amend to add new rule as follows; Applying to all Hazard overlays NH- RX Existing Regionally Significant Infrastructure - maintenance, replacement and upgrading Where: PER-1 The infrastructure is within 5m of the existing alignment or location; and  PER-2 The above ground footprint of the infrastructure is not increased by more than 10%;  Activity status where compliance not achieved: Restricted Discretionary  Matters of discretion are restricted to:	This matter will be considered in the network utilities chapter.

Submission no	Submitter	Support/in part/oppose	Plan provision	Relief sought	Recommendation
				any adverse effects arising from locating the regionally significant infrastructure in this location; and any potential adverse effects of diverting or blocking overland flow path(s), including upstream and downstream flood risks; and the effectiveness and potential adverse effects of any proposed mitigation measures; and alternative locations for the regionally significant infrastructure; and any positive effects of locating the regionally significant infrastructure at this location; and the ability for the regionally significant infrastructure to be efficiently recovered after a hazard event; and the operational need or functional need for the activity to be established in this location.	
FS26.03	WRC	Support with amendments		Include the new rule as drafted by KRH, but also include a requirement for consideration of new locations outside of flood/hazard areas (i.e., Discretionary activity status if in the existing location and/or controlled activity status in a new location outside of a hazard area).	This matter will be considered in the network utilities chapter.
FS22.17	Telcos	Oppose		Disallow the submission	This matter will be considered in the network utilities chapter.
FS23.249	Te Nehenehenui	Support in part		Support in part, where Indigenous Vegetation is removed, biodiversity offsetting must be provided for	This matter will be considered in the network utilities chapter.
21.09	NZDF	Amend	NH-RX	Add a new permitted activity rule specific to temporary military training activities as follows:	Accept

Submission	Submitter	Support/in	Plan	Relief sought	Recommendation
no		part/oppose	provision		
				NH- RX: Buildings associated with Temporary Military Training Activities in a Hazard Area Activity status: PER Where:  • The building or structure is in place for a maximum period of 31 consecutive days (excluding set up and pack down activities).  • No permanent structures are constructed (unless the building or structure and its use comply with all other permitted activity	
34.02	Ayush Mudaliar	Oppose	Building Platform Suitability Area C – Planning Map	Amend the proposed Building Platform Suitability Area C identification in Piopio (lower Moa Street) as it does not reflect the current environment and does not reduce adverse effects of potential activities.	Reject

7. Appendix 2 - Decisions Version of the Chapter

# Natural hazards | Ngā Mōrearea ā-

Taiao

#### Overview

The Waikato Regional Policy Statement requires an integrated and holistic approach to the management of natural hazards. The Manawat $\bar{\mathbf{u}}$ -Whanganui Regional Policy Statement seeks to avoid or mitigate the adverse effects of natural hazard events on people, property, infrastructure and the wellbeing of communities. Accordingly, this plan identifies areas where some types of new development must be avoided because of the risk from natural hazards. It also recognises that in some of these areas, there is already existing development. In these instances, the provisions seek to manage natural hazards through mitigation and adaptation measures so that the risk to people and property is not increased.

This chapter manages land use in areas subject to risk from natural hazards outside of the coastal environment. Natural hazards within the coastal environment (coastal erosion and flooding) are addressed in the coastal environment chapter. In accordance with the two regional policy statements, it adopts a risk-based approach to natural hazard management which requires management of activities based on the level of risk and whether the risk is considered acceptable or intolerable. Identifying and understanding the scale and likelihood of a natural hazard event and its likely consequences, is central to the risk-based approach. The risk that a natural hazard poses to the community depends on its nature, magnitude and extent, the anticipated frequency of occurrence and the vulnerability of the environment to the hazard.

In Waitomo district the more frequently occurring natural hazards are flooding, severe storms, drought, volcanic ashfall and land instability (land slips and subsidence). The lower reaches of the Awakino, Mokau, Mangapu and Marokopa Rivers and the Mangaokewa Stream are vulnerable to flooding, however ongoing river maintenance activities designed to increase the conveyance of floodwater and remove channel blockages, has reduced the flooding risk. The two primary sources of flooding are river generated, when high flows lead to the overtopping of the river banks, and surface ponding.

Droughts and severe storms also occur in the district with reasonable frequency. Climate change has the potential to exacerbate the risk of these natural hazards. The Ministry for the Environment projects that the effects of climate change on the district will include increased storm events (including extreme winds), higher annual rainfall and more frequent heavy rainfall events during the winter months. This can contribute to an increase in erosion, land instability and river flooding. For this reason, an allowance for the projected effects of climate change has been included in the 2D flood modelling of key risk areas within this district plan (Te K $\bar{\mathbf{u}}$ iti and Piopio).

In Te **Kūiti** and Piopio, Building Platform Suitability Area C is the 1% AEP (Annual Exceedance Probability) events for current climatic conditions with rainfall projected to a 2120 future time horizon based on a Representative Concentration Pathway (RCP) of 8.5. These areas were identified through detailed hydraulic 2D modelling. In Te **Kūiti**, High Risk

Flood Zone also been identified. These are areas within the flood plain where the depth of flood water in a 1% Annual Exceedance Probability (AEP) flood event exceeds 1 metre and the speed of flood water exceeds 2 metres per second, which is considered to put the community at an unacceptable (or intolerable) level of risk in terms of the potential for loss of life, injury or serious damage to property. Subdivision and new activities within the High Risk Flood zone are carefully regulated.

In the Waitomo Valley Road area, Building Platform Suitability Area C is the qualitative floodplain extent which was estimated based on hydraulic constriction at the Waitomo Valley Road bridge and site observations. In this way Building Platform Suitability Area C was developed, although it is recognised that the methodology in this area contains more uncertainty than the modelling for Te **Kūiti** and Piopio. As such, the plan identifies:

Building Platform Suitability Area C is comprised of:

- 1. **The floodplain area in Te Kūiti and Piopio** identified on the planning maps for 1% AEP events with rainfall projected to a 2120 future time horizon based on RCP 8.5.
- 2. The floodplain area identified in Waitomo Valley Road, estimated by a qualitative assessment.

The High Risk Flood Zone (HRFZ) which is the area identified on the planning maps in Te **Kūiti** that is subject to river or surface flooding during an event with an annual exceedance probability of no more than 1%, and during such an event:

- 1. The depth of flood waters exceeds one metre; or
- 2. The speed of flood waters exceeds two metres per second; or
- 3. The flood depth multiplied by the flood speed exceeds one.

Due to the slope gradient and land cover type, large areas of the western ranges have a very high landslide susceptibility. In Te Kūiti, the weak, clay-rich mudstone rocks (Mahoenui Group) are susceptible to changes in moisture content which can result in large-scale instability and shallower creep movement. While this type of land instability is caused by weak geology, steep geomorphology or seismic events, the primary trigger for landslide occurrence is prolonged or intense periods of rainfall. Other land instability types observed around Te Kūiti include toppling of the ignimbrites in steep areas and shallow down-slope movement of material that occurs along a surface of weakness. This plan maps and applies rules to Building Platform Suitability Areas A and B in Te Kūiti. Landslide susceptibility is a measure of an area's propensity to either generate, or be affected by landslides. Outside of these mapped areas, assessment matters are included in the subdivision rules that require site suitability, including the potential for the subdivision and consequential development to create new or exacerbate existing natural hazards, to be evaluated. As such, the plan identifies:

Building Platform Suitability Area A (BPS-A) which is the susceptibility area in Te **Kūiti** identified on the planning maps that has a high propensity to either generate, or be affected (inundated) by landsliding.

Building Platform Suitability Area B (BPS-B) which is the susceptibility area in Te  $K\bar{u}iti$  identified on the planning maps that has a medium propensity to either generate, or be affected (inundated) by landsliding.

While the district has a low risk of volcanic eruptions, our proximity to the Taupo Volcanic Zone means that there is a risk of ashfall. The area of ash deposition is dependent on the wind direction, weather conditions and the size of the eruption. Ashfall can disrupt services, damage infrastructure, affect water supplies and sometimes, ashfall can contain harmful toxic fluorine compounds. Less frequent natural hazards such as wildfires, volcanic eruptions and earthquakes do not require a district plan response. Wind and seismic loadings are controlled by the Council under the Building Act 2004. There are no active faults located in the district and there is a low percentage of unconsolidated sediments (one of the three factors used in identifying liquefaction risk), except in Te Kūiti where the proportion is much higher at 53%. However, given that the reduced seismic risk compared to neighbouring areas where numerous active faults are located, it is possible that the liquefaction hazard is also relatively low. Liquefaction areas have not been identified on the planning maps, however, provisions in this plan require assessment of this natural hazard in respect of subdivision or structure planning where a potential liquefaction hazard has been identified on a site.

### Objectives

Refer also to the relevant objectives in Part 2 District-Wide Matters

- NH-O1. Ensure that communities are resilient to the risks that natural hazards pose on people, property, infrastructure and the environment by providing for subdivision, use and development of land only where these risks are avoided or appropriately mitigated.
- NH-O2. Avoid new subdivision, use and development in Hazard Areas where it will increase the risk to or vulnerability of people or communities.
- NH-O3. Where new development is proposed in Hazard Areas, require that site-specific hazard assessments are undertaken as appropriate and ensure that where risk becomes intolerable, development is avoided.
- NH-O4. Improve response to and recovery from natural hazard events by encouraging community awareness and use of information and methods contained in Community Response Plans.
- NH-O5. Manage land use to minimise the potential adverse effects of climate change, including applying the precautionary approach where there is incomplete information.

#### Policies

Refer also to the relevant policies in Part 2 District-Wide Matters

- NH-P1. Provide for the relocation of existing buildings to a safer position on the same site or outside of a Hazard Area.
- NH-P2. With the exception of small additions to buildings and non-habitable accessory buildings without a floor, avoid locating new buildings in the High Risk Flood Zone because of the significant risk to people's safety and property.

- NH-P3. **Manage the increased risk to people's safety and property** resulting from additions to existing buildings located within the High Risk Flood Zone by:
  - 1. Limiting the additional ground floor area permitted; and
  - 2. Ensuring a range of risk reduction options are assessed including minimum floor levels with a freeboard suitable to the setting that will provide protection from flooding; and
  - 3. Avoiding large additions to existing buildings that would increase risk to people's safety and property.
- NH-P4. **Provide for people's wellbeing and changing circumstances within** Building Platform Suitability Area C by:
  - Enabling small additions to existing buildings housing sensitive activities;
     and
  - 2. Not placing increased requirements on accessory buildings and shipping containers used for non-habitable purposes; and
  - 3. Managing increased risk to people and property for medium to larger scale additions and new and relocated buildings housing sensitive activities by requiring compliance with minimum floor levels. Where compliance with minimum floor levels is not achieved a range of other risk reduction options will need to be assessed; and
  - 4. Providing for earthworks to create a building platform for a new building or addition to an existing building.
- NH-P5. Manage earthworks, excavation and filling of land within Hazard Areas by:
  - 1. In Building Platform Suitability Area C, ensuring that the potential adverse effects of earthworks activities on flood storage capacity, overland flows and run-off volumes on surrounding properties and infrastructure, are avoided or mitigated; and
  - 2. In the High Risk Flood Zone avoiding earthworks unless the natural hazard risk can be adequately avoided, remedied or mitigated; and
  - 3. Restricting the volume, depth and height of earthworks to avoid exacerbating or intensifying existing landslide susceptibility or generating the potential for landslide susceptibility to arise; and
  - 4. In Building Platform Suitability Areas A and B, ensuring earthworks activities which require a resource consent are designed and supervised by an appropriately qualified and experienced geo-professional; and
  - 5. In Building Platform Suitability Area A, reducing the risk of landslide from earthwork activities by carefully managing the location, volume and depth of excavation and fill and only allowing earthworks where:
    - (i) The soil type and density is appropriate; and
    - (ii) Measures to maintain slope stability are technically and economically achievable; and
    - (iii) Effects on adjoining properties and infrastructure can be avoided in the first instance, then remedied or mitigated.

Decisions Version

- NH-P6. Reduce the level of risk from new buildings and additions to existing buildings in Building Platform Suitability Area A by:
  - 1. Avoiding new buildings unless they can be relocated; and
  - 2. Ensuring additions to existing buildings do not exacerbate the level of risk.
- NH-P7. In Building Platform Suitability Area B, ensure any new or relocated building and any addition to an existing building is fully assessed so that the level of risk can be appropriately managed.
- NH-P8. Provide for flood management/protection works and drainage works undertaken by regional and local authorities.
- NH-P9. Avoid discharge of stormwater directly to ground in Building Platform Suitability Areas A and B unless:
  - 1. A geo-professional assesses the site as suitable for the proposed discharges; and
  - 2. Any adverse effects on the site and receiving environment can be appropriately mitigated.
- NH-P10. On land that is potentially prone to liquefaction, before new subdivision, use or development occurs, require an assessment by a geo-professional that reflects the type and scale of the activity, its overall vulnerability to the effects of liquefaction and the appropriate mitigation measures needed to reduce risk to an acceptable level.
- NH-P11. Provide for subdivision, use and development outside Hazard Areas where natural hazard risk has been appropriately assessed and can be adequately avoided, remedied or mitigated and does not transfer or exacerbate risk to adjoining properties.
- NH-P12. Increase resilience to the projected effects of climate change by:
  - 1. Requiring assessment for new development where relevant, that provides for 1% AEP events with rainfall projected to 2101-2120 according to the RCP 8.5 scenario; and
  - 2. Facilitating community discussion on adaptive pathways to manage the risks associated with climate change and incorporating them, where appropriate, into the district plan through plan changes; and
  - 3. Adopting a precautionary approach towards new subdivision, use and development where this may have potentially significant or irreversible adverse effects, but there is incomplete or uncertain information; and
  - 4. Providing sufficient setbacks from river margins when assessing new development; and
  - 5. Encouraging the incorporation of sustainable design measures including low impact stormwater management, urban design and green infrastructure; and
  - 6. Protecting the ability of natural defences such as natural floodplains, to provide natural hazard mitigation.

- NH-P13. So that communities can better respond to and recover from natural hazard events, enable access to information about hazards through:
  - 1. The provision of natural hazard technical information and mapping on the Council's website, the Waikato Regional Council Hazards Portal, this district plan and accompanying planning maps; and
  - 2. The provision of education, provision of information and community engagement; and
  - 3. Alignment with the work of other agencies including Iwi Authorities and the Waikato and Manawatū-Whanganui Regional Councils.
  - 4. Awareness and use of information and methods contained in Community Response Plans.
- NH-P14 The operational or functional need for the activity to be located within the Hazard Area<sup>1</sup> and whether any practicable and operationally feasible alternatives are available to avoid the activity occurring in the hazard area.
- NH-P15\_ To ensure that subdivision, use and development:
  - 1. Has regard to the risk of wildfire, including consideration of:
    - (i) Topographical features within the site and surrounding area; and
    - (ii) The maintenance of appropriate buffers between new building platforms and existing forest and bush areas; and
    - (iii) New vegetation with regard to slope, aspect, management regimes and planting less flammable vegetation.
  - 2. Incorporates measures to avoid or reduce the risk of wildfire where appropriate.

#### Rules

The rules that apply to activities in Hazard Areas are contained in the table listed below. To undertake any activity, it must comply with the rules listed in:

- NH Table 1 Activities Rules: and
- Any relevant provision in Part 2 District-Wide Matters; and
- Any relevant provision in Part 3 Area Specific Matters.

Where an activity breaches more than one rule, the most restrictive status shall apply to the activity.

Refer to <u>Part 1 - How the Plan Works</u> for an explanation of how to use this plan, including activity status abbreviations.

Note: See the rules in the <u>coastal environment chapter</u> for coastal hazards.

<sup>&</sup>lt;sup>1</sup> Hazard area means those areas identified on the Planning Maps as a:

<sup>(</sup>a) High Risk Flood Zone.

<sup>(</sup>b) Building Platform Suitability Area A.

<sup>(</sup>c) Building Platform Suitability Area B.

<sup>(</sup>d) Building Platform Suitability Area C.

#### Information requirements

All resource consent applications for land use activities or subdivision undertaken within or partially within a hazard area must provide the information required in <u>Appendix 1</u>.

#### The rules apply to all zones

Where there is a conflict between rules in this plan, the rules in this table prevail

NH-R1.

Relocation of an existing building in a hazard area

Activity Status: PER

Where:

- An existing building as at 20 October 2022
   which is threatened by a landslide or flood
   hazard may be relocated to a safer position on
   the same site or outside of a hazard area as a
   permitted activity; and
- 2. For the purposes of this rule, the minimum setback from road boundary requirement in the underlying zone does not apply.

Activity status where compliance is not achieved: N/A

NH-R2.

Park furniture, new access points or pedestrian accessways, walkways and cycleways in all hazard areas

Activity status: PER

Where:

 The activity is undertaken by the Waikato or Manawatū-Whanganui Regional Councils, Waitomo District Council or on their behalf by an approved contractor. Activity status where compliance is not achieved: RDIS

Matters over which discretion is restricted:

- (a) Whether the activity improves public access and /or acts to improve natural character and ecosystems; and
- (b) The location and extent of the works; and
- (c) Whether the activity would create new or exacerbate existing natural hazards.

NH-R3.

Flood management/protection works and drainage works in all hazard areas

Activity status: PER

Where:

 The activity is undertaken by the Waikato or Manawatū-Whanganui Regional Councils, Waitomo District Council or on their behalf by an approved contractor. Activity status where compliance is not achieved: DIS

NH-R4.

#### Construction of park facilities

Activity Status: PER

#### Where:

- 1. This rule applies to buildings only; and
- 2. Any building must be specifically designed to be readily relocated; and
- The activity is undertaken by the Waikato or Manawatū-Whanganui Regional Councils, Waitomo District Council or on their behalf by an approved contractor; and
- Any addition to an existing building is a discretionary activity.

Activity status where compliance is not achieved: DIS

The following rules apply to Building Platform Suitability Area C in all zones

NH-R5.

Non-habitable accessory buildings or shipping containers, and additions to an existing building, or construction of a new building housing a sensitive activity

Activity Status: PER

#### Where:

- Accessory buildings no more than 30 m<sup>2</sup> and shipping containers used for non-habitable purposes are permitted subject to zone requirements; and
- Subject to zone requirements, additions to an existing building housing a sensitive activity must not increase the ground floor area of the building by more than 15 m² in total over the lifetime of this plan commencing from (the operative date); and
- 3. Any new building housing a sensitive activity must achieve:
  - (i) A finished floor level located 500mm above the 1% AEP flood level, where this level taken from the bottom of the floor joists;
  - (ii) Where concrete, the bottom of the finished floor level must be at least 500mm above the 1% AEP flood level;

#### AND

 NH-R5.3 also applies to the establishment of shipping containers used for residential purposes. It does not apply to shopkeeper's dwellings in Te Kūiti CBD precinct (PREC5); and Activity status where compliance is not achieved: RDIS

- (a) Effects on existing overland flow paths, surface drainage patterns, flood storage capacity and runoff volumes; and
- (b) Effects on adjoining properties and infrastructure, including cumulative effects and the potential for the activity to create, transfer or intensify hazard risks on adjoining sites; and
- (c) Consideration of alternative locations; and
- (d) Consideration of the projected effects of climate change; and
- (e) Whether flood risk can be managed through appropriate building materials, foundation and building design, site layout, geotechnical setbacks, minimum floor levels, structural or engineering solutions; and
- (f) The ability to set an appropriate floor level for the addition; and
- (g) Any mitigation measures to reduce the risk to people's safety, well-being and property.

 Compliance with the finished floor level specified in NH-R5.3 must be demonstrated by a suitably qualified and experienced engineer.

Note: Also see SUB-S2.

NH-R6.

Earthworks

Activity Status: PER

#### Where:

 The earthworks are to create a building platform for a new building or addition to an existing building are permitted provided that the earthworks volume and filling height is only to the extent necessary to achieve compliance with NH-R5.3.

OR

- 2. For all other earthworks:
- (i) The maximum volume of filling above natural ground level must not exceed 20 m³ per site and or exceed a maximum cumulative volume of filling and excavation of 50 m³ per site over the lifetime of this plan commencing from (the operative date); and
- (ii) Earthworks must not exceed a maximum height of 0.2 m of filling above natural ground level; and
- (iii) Earthworks must not exceed a maximum depth of excavation of 0.5 m below natural ground level.

Activity status where compliance is not achieved: RDIS

Matters over which discretion is restricted:

- (a) The location, timing, design and density of soil disturbance and vegetation removal activities; and
- (b) Any measures necessary to rehabilitate the land following the completion of the activity;
- (c) The findings of any risk assessment; and
- (d) The method of sediment retention and sediment runoff control to be adopted; and
- (e) Effects on existing overland flow paths, surface drainage patterns, flood storage capacity and runoff volumes; and
- (f) Effects on adjoining properties and infrastructure, including the transfer of flooding risk; and
- (g) Mitigation proposed including compensatory storage, foundation design, site layout, geotechnical setbacks, the use, maintenance or enhancement of natural features or other flood management measures.
- (h) If the earthworks will enable an activity that has a functional or operational need to be located within the Building Platform Suitability Area C.

The following rules apply to High Risk Flood Zone (HRFZ) in all zones

NH-R7.

Accessory buildings

Activity Status: PER

Where:

 Accessory buildings no more than 30 m², used for non-habitable purposes that do not have a floor are permitted subject to zone requirements; or Activity status where compliance is not achieved: DIS

2.	Farm buildings that do not have a floor and
	do not store hazardous materials are
	permitted subject to zone requirements; and

The use of shipping containers within a HRFZ is a discretionary activity.

NH-R8.

Additions to an existing building

Activity Status: RDIS

#### Where:

1. An addition to an existing building must not increase the ground floor area of the building by more than  $15 \text{ m}^2$  in total over the lifetime of this plan commencing from (the operative date).

Matters over which discretion is restricted:

- (a) Effects on existing overland flow paths, surface drainage patterns, flood storage capacity and runoff volumes; and
- (b) Effects on adjoining properties and infrastructure, including cumulative effects and the potential for the activity to create, transfer or intensify hazard risks on adjoining sites; and
- (c) Consideration of alternative locations; and
- (d) Consideration of the projected effects of climate change; and
- (e) Whether flood risk can be managed through appropriate building materials, foundation and building design, site layout, geotechnical setbacks, minimum floor levels, structural or engineering solutions; and
- (f) The ability to set an appropriate floor level for the addition; and
- (g) Any mitigation measures to reduce the risk to people's safety, well-being and property.

Activity status where compliance is not achieved: NC

NH-R9.	Construction of all other buildings	
Activity Status: NC  Note: This rule does not apply to buildings associated with permitted activities provided for in TEMP - Table 1 - Activities Rules		Activity status where compliance is not achieved: N/A
NH-R10.	Earthworks	
Activity Status: NC		Activity status where compliance is not achieved: N/A

The following rules apply to Building Platform Suitability Areas A and B in all zones

NH-R11.

Earthworks

Activity Status: PER in BPS-B Activity Status: RDIS in BPS-A

#### Where:

- The maximum volume of filling must not exceed 20 m³ per site; and
- 2. Earthworks must not exceed a maximum height of 1 m of filling above ground level; and
- 3. Earthworks must not exceed a maximum depth of excavation of 1 m below ground level.

Activity status where compliance is not achieved in BPS-A: DIS

Activity status where compliance is not achieved in BPS-B: RDLS

Matters over which discretion is restricted:

- (a) The location, timing, design and density of soil disturbance and vegetation removal activities; and
- (b) Any measures necessary to rehabilitate the land following the completion of the activity; and
- (c) The method of sediment retention and sediment runoff control to be adopted; and
- (d) The findings of any geotechnical assessment; and
- (e) For new tracks and driveways, measures taken to follow the contour of the landscape and avoid large batter slopes or retaining walls; and
- (f) Measures to maintain slope stability or prevent exacerbation of any pre-existing deep-seated land instability; and
- (g) Effects on adjoining properties and infrastructure from subsidence or landslip as a result of the earthworks; and
- (h) Mitigation proposed to ensure the geotechnical and geological stability of the site following the completion of earthworks; and
- (i) If the earthworks will enable an activity that has a functional or operational need to be located within the Building Platform Suitability Area A and B.

NH-R12.

Additions to an existing building, or construction of all other buildings

Activity Status: DIS

Where:

 The application must be accompanied by an assessment undertaken by a suitably qualified and experienced geo-professional which Activity status where compliance is not achieved: NC

addresses the matters set out in Appendix 1;
and
2. In BPS-A all new buildings must be specifically designed to be able to be readily relocated.

#### Advice Notes:

Note: All earthworks must also comply with NATC-R4 and all buildings and structures, must also comply with NATC-R2. However, where there is a conflict between rules in this plan, the rules in this table prevail.

Note: See the rules in the <u>coastal environment chapter</u> for coastal hazards.

NH - Table 2 - Performance Standards

There are no Performance Standards

#### Appendix 3 - Section 32AA Evaluation 8.

23. A Section 32AA evaluation is only required for any changes that are proposed to the provisions of this plan since the original Section 32 evaluation report for the proposal was completed. The Section 32AA evaluation must be undertaken at a level of detail that corresponds to the scale and significance of the changes.

#### Whole Plan

- 24. The Waikato Regional Council requested that all references to "100-year ARI" were amended to 1% AEP (Annual Exceedance Probability). As this relief sought was accepted by the Panel it requires an amendment across the whole plan.
- 25. Section 32AA: It is considered that while this amendment will occur across the entire plan, a Section 32AA assessment is not required, as the change is simply a change in terminology, but does not have any change in effect (i.e. the effect of the terminology is the same, the terminology is simply being changed to be consistent with the Waikato Regional Policy Statement). Therefore, a Section 32AA assessment is not necessary due to the scale and significance of the change (which is nil apart from the terminology).

#### Definitions

The following definitions are to be added to Chapter 9:

- Annual Exceedance Probability (AEP) The probability of a storm event being exceeded in any one year.
- Stopbank An embankment adjacent to a river or watercourse, which retains floodwaters from flowing onto a floodplain.

Interval (ARI)

Average The average time period between an event of a certain size. An ARI and AEP are both terms to describe the probability of a certain size of event occurring. The table below provides the probability of certain size events and relationship between ARI and AEP.

ARI	AEP	In any 1 year period	In any 10 year period	In any 30 year period	In any 70 year period
50 years	2%	1 chance in 50	1 chance in 5.5 (18%)	1 chance in 2.2 (45%)	1 chance in 1.3 (76%)
100 years	1%	1 chance in 100	1 chance in 10 (10%)	1 chance in 4 (26%)	1 chance in 2 (51%)
200 years	0.5%	1 chance in 200	1 chance in 20 (5%)	1 chance in 7 (14%)	1 chance in 3.3 (30%)
500 years	0.2%	1 chance in 500	1 chance in 50 (2%)	1 chance in 17 (6%)	1 chance in 7.7 (13%)

#### Effectiveness and efficiency

26. It is considered that these definitions are beneficial to the effectiveness and efficiency of the Plan, as they provide useful guidance to plan users and are consistent with the WRPS.

#### Costs and benefits

27. On balance it is considered that there will not be an increase in costs due to the proposed amendments, as they are additional definitions which will provide benefits to plan users and are consistent with other higher order policy documents.

#### Risk of acting or not acting

28. It is considered that there is sufficient information to justify the changes above. If the changes are not made, it is considered that the provisions would not be consistent with the higher order policy documents that are required to be given effect to.

#### Decision about most appropriate option

- 29. The proposed amendment is considered to be the most effective means of achieving the objectives as it will:
  - Comply with higher order policy documents.
  - Enable the Council to fulfil its statutory obligations, including by supporting the health and safety of people.

#### Overview

Building Platform Suitability Area C which is the floodplain area in Te Kūiti and Piopio identified on the planning maps for 100 year ARI events (current climatic conditions) with rainfall projected to a 2120 future time horizon based on RCP 8.5. It is also the floodplain area identified in Waitomo Valley Road.

Building Platform Suitability Area C is comprised of:

- 1. The floodplain area in Te Kūiti and Piopio identified on the planning maps for 1% AEP events with rainfall projected to a 2120 future time horizon based on RCP 8.5.
- 2. The floodplain area identified in Waitomo Valley Road, estimated by a qualitative assessment.
- 30. <u>Section 32AA:</u> The proposed addition repeats information that is already contained in the plan in the preceding paragraphs. There is no change in relation to the extent of the mapped area or the resulting policy and rule framework as a result of this amendment. A Section 32AA evaluation is not required.

#### **New Policies**

NH-PX
The operational or functional need for the activity to be located within the Hazard Area<sup>1</sup> and whether any practicable and operationally feasible alternatives are available to avoid the activity occurring in the hazard area.

#### Effectiveness and efficiency

31. It is considered that this additional Policy will be beneficial to the effectiveness and efficiency of this Chapter. It enables more thorough consideration of the issue of the operational and functional need for activities to be located in hazard

<sup>&</sup>lt;sup>1</sup> Hazard area means those areas identified on the Planning Maps as a:

<sup>(</sup>a) High Risk Flood Zone.

<sup>(</sup>b) Building Platform Suitability Area A.

<sup>(</sup>c) Building Platform Suitability Area B.

<sup>(</sup>d) Building Platform Suitability Area C.

areas and whether any practicable and operationally feasible alternatives are available to avoid the activity occurring in the hazard area.

#### Costs and benefits

32. On balance it is considered that there will not be a change in costs or benefits due to the additional policy.

#### Risk of acting or not acting

33. It is considered that there is sufficient information to justify the changes above.

#### Decision about most appropriate option

- 34. The proposed amendment is considered to be the most effective means of achieving the objectives as it will:
  - Comply with higher order policy documents.
  - Enable the Council to fulfil its statutory obligations, including by supporting the health and safety of people.

#### NH-PX To ensure that subdivision, use and development:

- 1. Has regard to the risk of wildfire, including consideration of:
- (a) Topographical features within the site and surrounding area; and
- (b) The maintenance of appropriate buffers between new building platforms and existing forest and bush areas; and
- (c) New vegetation with regard to slope, aspect, management regimes and planting less flammable vegetation.
- 2. <u>Incorporates measures to avoid or reduce the risk of wildfire where appropriate.</u>

#### Effectiveness and efficiency

35. It is considered that this additional Policy will be beneficial to the effectiveness and efficiency of this Chapter as the amended policy would result in a more robust policy framework for fire risk management, would alert developers to fire risk considerations and enable Council to better take into account fire risk measures as part of the resource consent process.

#### Costs and benefits

36. On balance it is considered that there will not be a change in costs or benefits due to the additional policy.

#### Risk of acting or not acting

37. It is considered that there is sufficient information to justify the changes above.

#### Decision about most appropriate option

- 38. The proposed amendment is considered to be the most effective means of achieving the objectives as it will:
  - Comply with higher order policy documents.
  - Enable the Council to fulfil its statutory obligations, including by supporting the health and safety of people.

#### Existing policies

NH-P5. Manage earthworks, excavation and filling of land within Hazard Areas by:

- 1. In Building Platform Suitability Area C, ensuring that the potential adverse effects of land disturbance earthworks activities on flood storage capacity, overland flows and run-off volumes on surrounding properties and infrastructure, are avoided or mitigated; and
- 2. In the High Risk Flood Zone avoiding earthworks unless the natural hazard risk can be adequately avoided, remedied or mitigated; and
- 3. Restricting the volume, depth and height of earthworks to avoid exacerbating or intensifying existing landslide susceptibility or generating the potential for landslide susceptibility to arise; and
- 4. In Building Platform Suitability Areas A and B, ensuring land disturbance earthworks activities which require a resource consent are designed and supervised by an appropriately qualified and experienced geo-professional; and
- 5. In Building Platform Suitability Area A, reducing the risk of landslide from earthwork activities by carefully managing the location, volume and depth of excavation and fill and only allowing earthworks where:
  - (i) The soil type and density is appropriate; and
  - (ii) Measures to maintain slope stability are technically and economically achievable; and
  - (iii) Effects on adjoining properties and infrastructure can be avoided in the first instance, then remedied or mitigated.
- 39. <u>Section 32AA:</u> The proposed amendment to NH-P5.1 and the consequential amendment to NH-P5.4 assists in providing consistency between the policies and the rules and does not have a substantive effect on the application of the policy itself. It has no effect on the rule framework. No Section 32AA evaluation is required.

#### Rules

NH-R4.	Construction of park facilities	
Activity Status: PER		Activity status where compliance is not
Where:		achieved: DIS
This rule applies to buildings only; and		
2. Any building must be specifically designed to		
be readily relocated; and		
The activity is undertaken by the Waikato or      Manawatū-Whanganui Regional Councils.		
Waitomo District Council or on their behalf by		
an approv	<u>red contractor; and</u>	
,	ion to an existing building is a ary activity.	

#### Effectiveness and efficiency

40. It is considered that the amendment to this rule to specify who can construct the park facilities is necessary to make it expressly clear that only the listed approved parties would be permitted to do these works. In the other rules in this suite (NH-R2 - R4) it specifies that the activity must be undertaken by the Waikato or Manawatū-Whanganui Regional Councils, Waitomo District Council or on their behalf by an approved contractor. This amendment will ensure consistency across the Plan.

#### Costs and benefits

On balance it is considered that there will be a decrease in financial costs as park facilities will be able to be constructed as a permitted activity by the Waikato or Manawatū-Whanganui Regional Councils, Waitomo District Council or on their behalf by an approved contractor. This will reduce the compliance cost, allow for park facilities to be erected faster and provide a benefit to the community.

#### Risk of acting or not acting

42. It is considered that there is sufficient information to justify the changes above.

#### Decision about most appropriate option

- 43. The proposed amendment is considered to be the most effective means of achieving the objectives as it will:
  - Comply with higher order policy documents.
  - Enable the Council to fulfil its statutory obligations, including by supporting the health and safety of people.

The following rules apply to Building Platform Suitability Area C in all zones

NH-R5.

Non-habitable accessory buildings or shipping containers, and Aadditions to an existing building, or construction of a new building housing a sensitive activity

Activity Status: PER

#### Where:

- Accessory buildings no more than 30 m² and shipping containers used for non-habitable purposes are permitted subject to zone requirements; and
- Subject to zone requirements, additions to an existing building housing a sensitive activity must not increase the ground floor area of the building by more than 15 m² in total over the lifetime of this plan commencing from (the operative date); and

Activity status where compliance is not achieved: RDIS

- (a) Effects on existing overland flow paths, surface drainage patterns, flood storage capacity and runoff volumes; and
- (b) Effects on adjoining properties and infrastructure, including cumulative effects and the potential for the activity to create, transfer or intensify hazard risks on adjoining sites; and
- (c) Consideration of alternative locations; and
- (d) Consideration of the projected effects of climate change; and

- 3. Any new building housing a sensitive activity must achieve:
  - (i) A finished floor level located 0.5 500mm above the 1% AEP flood level, where this level taken from the bottom of the floor joists; or
  - (ii) Where concrete, the top bottom of the finished floor level must be at least 0.5 m 500mm above the 1% AEP flood level;

#### AND

- NH-R5.3 also applies to the establishment of shipping containers used for residential purposes. It does not apply to shopkeeper's dwellings in Te Kūiti CBD precinct (PREC5);
- Compliance with the finished floor level specified in NH-R5.3 must be demonstrated by a suitably qualified and experienced engineer.

Note: Also see SUB-R19.

- (e) Whether flood risk can be managed through appropriate building materials, foundation and building design, site layout, geotechnical setbacks, minimum floor levels, structural or engineering solutions;
- (f) The ability to set an appropriate floor level for the addition; and
- (g) Any mitigation measures to reduce the risk to people's safety, well-being and property.

44. Section 32AA: It is considered that a full Section 32AA assessment is not required, as the amendment is simply to ensure consistency in terms of terminology (i.e. 0.5m to 500mm) and the other amendment as to where the measurement for concrete foundations must be taken from is to correct an inconsistency with NZS 4404: 2010 Land development and Subdivision. Also, the amendment to the title of NH-R5 has the effect of clarifying what is contained in the rule itself. Neither amendment has any effect on the application of the rule. No Section 32AA evaluation is required.

NH-R6.

Earthworks

Activity Status: PER

#### Where:

- The earthworks are to create a building platform for a new building or addition to an existing building are permitted provided that the earthworks volume and filling height is only to the extent necessary to achieve compliance with NH-R5.3.
- 2. For all other earthworks:
- (i) The maximum volume of filling above natural ground level must not exceed 20 m³ per site and or exceed a maximum cumulative volume of filling and excavation of 50 m³ per site over the lifetime of this plan commencing from (the operative date); and

Activity status where compliance is not achieved: RDIS

Matters over which discretion is restricted:

- (a) The location, timing, design and density of soil disturbance and vegetation removal activities; and
- (b) Any measures necessary to rehabilitate the land following the completion of the activity; and
- (c) The findings of any risk assessment; and
- (d) The method of sediment retention and sediment runoff control to be adopted; and
- (e) Effects on existing overland flow paths, surface drainage patterns, flood storage capacity and runoff volumes; and

- (ii) Earthworks must not exceed a maximum height of 0.2 m of filling above natural ground level; and
- (iii) Earthworks must not exceed a maximum depth of excavation of 0.5 m below natural ground level.
- (f) Effects on adjoining properties and infrastructure, including the transfer of flooding risk; and
- (g) Mitigation proposed including compensatory storage, foundation design, site layout, geotechnical setbacks, the use, maintenance or enhancement of natural features or other flood management measures.
- (h) If the earthworks will enable an activity that has a functional or operational need to be located within the Building Platform
  Suitability Area C.

#### Effectiveness and efficiency

45. It is considered that the additional matter of discretion will be beneficial to the effectiveness and efficiency of this rule, as there are circumstances where an activity has a functional or operational need to be located within the Building Platform Suitability Area C. This amendment is in line with the new policy provision proposed to be added regarding the operational or functional need for the activity to be located within the Hazard Area and whether any practicable and operationally feasible alternatives are available to avoid the activity occurring in the hazard area.

#### Costs and benefits

46. On balance it is considered that the additional performance standard will reduce compliance costs, and provide a benefit to organisations that need to undertake earthworks in Building Platform Suitability Area C due to a functional or operational need.

#### Risk of acting or not acting

47. It is considered that there is sufficient information to justify the changes above and the change is consistent with higher order policy documents.

#### Decision about most appropriate option

- 48. The proposed amendment is considered to be the most effective means of achieving the objectives as it will:
  - Comply with higher order policy documents.
  - Enable the Council to fulfil its statutory obligations, including by supporting the health and safety of people.

The following rules apply to High Risk Flood Zone (HRFZ) in all zones	
NH-R7.	Accessory buildings

Activity Status: PER

Where:

1. Accessory buildings no more than 30 m², used for non-habitable purposes that do not have a floor are permitted subject to zone requirements; or

2. Farm buildings that do not have a floor and do not store hazardous materials are permitted subject to zone requirements; and

3. The use of shipping containers within a HRFZ is a discretionary activity.

#### Effectiveness and efficiency

49. It is considered that the amendment to the rule will be beneficial to the effectiveness and efficiency of this rule, as while the storage of hazardous materials is largely controlled by legislation (i.e. Hazardous Substances and New Organisms Act 1996) and industry standards it is necessary as this matter is not covered elsewhere in the Plan.

#### Costs and benefits

50. On balance it is considered that the change will reduce compliance costs as it clarifies that farm buildings that do not have a floor and do not store hazardous materials are able to proceed as a permitted activity.

#### Risk of acting or not acting

51. It is considered that there is sufficient information to justify the changes above.

#### Decision about most appropriate option

- 52. The proposed amendment is considered to be the most effective means of achieving the objectives as it will:
  - Comply with higher order policy documents.
  - Enable the Council to fulfil its statutory obligations, including by supporting the health and safety of people.

The following rules apply to Building Platform Suitability Areas A and B in all zones		
NH-R11 <u>Earthworks</u>		
Activity Status: PER in BPS-B	Activity status where compliance is not	
Activity Status: RDIS in BPS-A	achieved in BPS-A: DIS	
Where:	Activity status where compliance is not achieved in BPS-B: RDIS	
<ol> <li>The maximum volume of filling must not exceed 20 m³ per site; and</li> </ol>	Matters over which discretion is restricted:	

- Earthworks must not exceed a maximum height of 1 m of filling above ground level;
- Earthworks must not exceed a maximum depth of excavation of 1 m below ground level
- (a) The location, timing, design and density of soil disturbance and vegetation removal activities; and
- (b) Any measures necessary to rehabilitate the land following the completion of the activity; and
- (c) The method of sediment retention and sediment runoff control to be adopted; and
- (d) The findings of any geotechnical assessment; and
- (e) For new tracks and driveways, measures taken to follow the contour of the landscape and avoid large batter slopes or retaining walls; and
- (f) Measures to maintain slope stability or prevent exacerbation of any pre-existing deep-seated land instability; and
- (g) Effects on adjoining properties and infrastructure from subsidence or landslip as a result of the earthworks; and
- (h) Mitigation proposed to ensure the geotechnical and geological stability of the site following the completion of earthworks: and
- (i) If the earthworks will enable an activity that has a functional or operational need to be located within the Building Platform Suitability Area A and B.

#### Effectiveness and efficiency

53. It is considered that the additional matter of discretion will be beneficial to the effectiveness and efficiency of this rule, as there are circumstances where an activity has a functional or operational need to be located within the Building Platform Suitability Area C. This amendment is in line with the new policy provision proposed to be added regarding the operational or functional need for the activity to be located within the Hazard Area and whether any practicable and operationally feasible alternatives are available to avoid the activity occurring in the hazard area.

#### Costs and benefits

On balance it is considered that the additional performance standard will reduce compliance costs, and provide a benefit to organisations that need to undertake earthworks in Building Platform Suitability Area A and B due to a functional or operational need.

Risk of acting or not acting

55. It is considered that there is sufficient information to justify the changes above.

Decision about most appropriate option

- The proposed amendment is considered to be the most effective means of achieving the objectives as it will:
  - Comply with higher order policy documents.
  - Enable the Council to fulfil its statutory obligations, including by supporting the health and safety of people.

NH-R9.	Construction of all other buildings	
Activity status: NC  Note: This rule does not apply to buildings associated with permitted activities provided for in TEMP - Table 1 - Activities Rules		Activity status where compliance is not achieved: N/A

57. <u>Section 32AA</u>: It is considered that the addition of an advice note that does not have a material impact on the rule. A section 32AA evaluation is not required.