# SECTION 42A REPORT

Report on submissions and further submissions

# Topic: Chapter 23 - Natural Hazards

Report prepared by: Alex Bell

Dated: 7 June 2024

# TABLE OF CONTENTS

1	. Intro	duction	5
	1.1	Qualifications and Experience	5
	1.2	Code of Conduct	5
	1.3	Conflict of Interest	5
	1.4	Preparation of this report	5
2	So	cope of Report	6
	2.1	Matters addressed by this report	6
	2.2	Overview of the chapters	6
	2.3	Statutory Requirements	6
	2.4	Procedural matters	7
3	С	onsideration of submissions received	7
	3.1	Overview of submissions	7
	3.2	Structure of this report	7
4	Ar	nalysis and recommendations	7
	4.1	Topic 1: Submissions seeking retention of provisions as notified	7
	4.2	Topic 2: Overview and general comments	8
	4.3	Topic 3: NH-O1 – Ensure communities are resilient from natural hazar 13	~ds
	4.4	Topic 4: NH-O1 – Ensure communities are resilient from natural hazar	-ds
	4.5	Topic 5: NH-P5.	15
	4.6	Topic 6: New Policies	18
	4.7	Topic 7: Construction of park facilities	20
	4.8	Topic 8: NH-R5 - Additions to an existing building, or construction of a	Э
	new b	uilding housing a sensitive activity	21
	4 9	Topic 9: NH-R6 - Farthworks	23

	4.10	Topic 10: NH-R7 – Accessory Buildings in the High Risk Flood Zone	25
	4.11	Topic 11: NH-R11 – Earthworks in Building Platform Suitability Area	Α
	and B	25	
	4.12	Topic 12: New Rule - KiwiRail Holdings Limited	27
	4.13	Topic 13: New Rule - New Zealand Defence Force	28
	4.14	Topic 14: Amendment to the planning maps	29
5	Cond	clusion	30
Д	PPENDIX	1 RECOMMENDED AMENDMENTS	31
А	PPENDIX	2 SECTION 32AA EVALUATION	34

# List of submitters and further submitters addressed in this report

Submitter no	Submitter name	Abbreviation
46	Federated Farmers	FF
56	The Fuel Companies	TFC
16	Fire and Emergency New Zealand	FENZ
10	Waikato Regional Council	WRC
21	New Zealand Defence Force	NZDF
24	Ministry of Education	MoE
32	Horizons Regional Council	HRC
34	Ayush Mudaliar	Ayush
39	Firstgas	FG
51	KiwiRail Holdings Limited	KiwiRail
FS05	Federated Farmers	FF
FS18	Omya New Zealand Limited	Omya
FS09	Kainga Ora	КО
FS26	Waikato Regional Council	WRC
FS23	Te Nehenehenui	TNN

# 1. Introduction

# 1.1 Qualifications and Experience

- 1. My name is Alex Bell. I am employed by the Waitomo District Council as the General Manager Strategy and Environment.
- 2. I hold the qualifications of Bachelor of Laws, Graduate Diploma in Environmental Planning and am completing my Post Graduate Diploma in Environmental Planning from the University of Waikato.
- 3. I have been employed in legal and planning roles in private practice, central government and local government for approximately 10 years. I have been employed by Council as the General Manager Strategy and Environment since June 2021. In this role I am responsible for the Proposed Waitomo District Plan proceeding through the process under Schedule 1 of the RMA and the administration of the Operative Waitomo District Plan.

#### 1.2 Code of Conduct

- 4. I confirm that I have read the Code of Conduct for Expert Witness in the Environment Court Practice Note 2014 and that I have complied with it when preparing this report. Other than when I state that I am relying on the advice of another person, this evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.
- 5. I am authorised to give this evidence on the Council's behalf to the Proposed District Plan hearings commissioners.

## 1.3 Conflict of Interest

6. I confirm that I have no real or perceived conflicts of interest.

# 1.4 Preparation of this report

- 7. This report considers the submissions and further submissions that were received in relation to the Chapter 23 Natural Hazards. This chapter manages land use in areas subject to risk from natural hazards outside of the coastal environment.
- 8. The data, information, facts, and assumptions I have considered in forming my opinions are set out in my evidence. Where I have set out opinions in

my evidence, I have given reasons for those opinions. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

# 2 Scope of Report

# 2.1 Matters addressed by this report

- 9. This report is prepared in accordance with Section 42A of the Resource Management Act 1991 (RMA). This report considers submissions and further submissions that were received by the Council in relation to the provisions of Chapter 23 Natural Hazards within the Proposed Waitomo District Plan (PDP).
- 10. Other effects and activities are addressed various Section 42A reports.

# 2.2 Overview of the chapters

11. The natural hazard provisions seek 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.

# 2.3 Statutory Requirements

12. The PDP has been prepared in accordance with the Council's functions under the RMA, specifically section 31, Part 2 and the requirements of sections 74 and 75, and its obligation to prepare, and have particular regard to, an evaluation report under section 32. The section 32 report which addresses this Chapters sets out how the relevant national policy statements, national environmental standards, provisions of the Waikato Regional Policy **Statement, the Manawatū**-Whanganui One Plan, the Maniapoto Environmental Management Plan, the Waikato Tainui Environment Management Plan 2018 and Te Ture Whaimana o Te Awa o Waikato - The Vision and Strategy for the Waikato River have been assessed and considered.

## 2.4 Procedural matters

13. At the time of writing this Section 42A report there have not been any prehearing conferences, clause 8AA meetings or expert witness conferencing in relation to submissions on this topic.

# 3 Consideration of submissions received

## 3.1 Overview of submissions

14. A total of 30 submissions and 7 further submissions were received on the natural hazards chapter.

# 3.2 Structure of this report

- 15. Given the relatively low number of submissions and further submissions received on this chapter, the Section 42A report is structured by submissions that have requested retention of the provisions as notified, and then those seeking relief thereafter.
- 16. The assessment of submissions generally follows the following format: submission information; relief sought by the submitter, the recommendation and if required, any amendments to the plan.

# 4 Analysis and recommendations

# 4.1 Topic 1: Submissions seeking retention of provisions as notified

17. All five of the submissions received on these provisions sought retention of the provisions as notified, and no submissions were received opposing alternate relief, or further submissions received.

Submission no	Submitter	Support / in part / oppose	Plan provision	Relief sought	Recommendation
32.03	Horizons Regional Council (Horizions)	Support	NH-O5	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,	Accept

				but submission supports NH- P12.	
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

- 18. The relief sought by the submitters to retain these provisions as notified, is accepted.
- 19. <u>Section 32AA:</u> No changes are recommended as a result of these submissions. A section 32AA evaluation is not required.
- 4.2 Topic 2: Overview and general comments
- 20. Five submissions and one further submission were received on the overview of the chapter and terminology used throughout it.

Submission no	Submitter	Support / in part / oppose	Plan provision	Relief sought	Recommendation
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	Accept in part

		I	I		
				consider and address	
				flooding in areas that	
				are not mapped.	
10.61	WRC	Amend	General	Amend the wording	Reject
			comment	of paragraph 3 on	
			_	page 2 to:	
			page 2	1 3	
			page 2	"Building Platform	
				Suitability Area C	
				which is the floo	
				<del>dplain area in Te</del>	
				<del>Kūiti and P iopio</del>	
				<del>identified on the</del>	
				<del>planning maps</del> <del>for</del>	
				100 year ARI events	
				<del>(current climatic</del>	
				<del>conditions) with</del>	
				rainfall projected to	
				a 2120 future time	
				horizon based on	
				RCP 8.5. It is also	
				the floodplain area	
				<del>identified in</del>	
				<del>Waitomo Valley</del>	
				<del>Road which is the</del>	
				extent of a 1%	
				AEP flood event	
				with future climate	
				<u>change</u> rainfall	
				projections of RCP	
				8.5 identified on the	
				planning maps in Te	
				<u>Kuiti and</u> <u>Piopio</u> ."	
				Create another	
				layer specifically	
				for the Waitomo	
				Valley flood	
				modelling, with	
				the following	
				description:	
				"the floodplain	
				<u>identified</u> in the	
				<u>Waitomo Valley by</u>	
				<u>a qualitative</u>	
				assessment."	
				Or alternatively,	
				state at the	
				beginning of	
				0 0	
				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.	
FC00 01	Volace On	Cupport			Doloot
FS09.01	Kainga Ora	Support		Allow with	Reject
		in part		amendments	
10.62	WRC	Amend	General	Reword paragraph 5	Reject
			comment	to:	

			page 5	"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"	
10.63	WRC	Amend	General comment	Change all references to "100-year ARI" to 1% AEP (Annual Exceedance Probability).	Reject
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

- 21. The Waikato Regional Council (WRC) request that amendments be made to the terminology used throughout the chapter. They consider there may be some be some inconsistencies in the terms used and request a definition for 'flood management' and 'protection works'. They also ask that this plan includes provisions that consider flooding in areas that are not mapped.
- 22. This submission is accepted in part, as it is agreed that definition could be provided for 'flood management' and 'protection works'. WRC may wish to provide some suggested definitions ahead of the hearing as neither term are defined in the National Planning Standards, the Waikato Regional Policy

Statement (WRPS) or in the One Plan. The WRPS does however refer to 'flood and drainage infrastructure', which may be a preferable term if the region wishes to ensure consistency of terminology.

- 23. It is not clear what terminology that the WRC considers is inconsistent in the chapter, and it would be useful if this could be provided at the hearing. As noted in the coastal environment section 42A report, it is accepted that terminology is inconsistent across plans and policy documents in New Zealand. There is nothing mandated at a national or regional level which directs how hazard areas are named, how they are defined (with the exception of the WRPS's high-risk flood zones), described and identified on maps. Even within the Waikato region, the result is a plethora of hazard areas named inconsistently, defined and identified inconsistently and mapped using different symbology.
- 24. The advice received in the hazards reports and mapping undertaken by Tonkin and Taylor, used the terminology adopted in the plan. There is significant reluctance to amend any definition in a way that might be inconsistent with the parent scientific assessment which underpins this chapter. Even a change in terminology could add confusion when plan users are trying to navigate this complex topic. The reports are attached below for reference:

https://www.waitomo.govt.nz/media/qsebyc44/landslide-susceptibility-report-phase-1-sept-2019.pdf

https://www.waitomo.govt.nz/media/55xdsdmf/te-kuiti-and-piopio-flood-modelling-report-december-2019.pdf

- 25. WRC's submission point on having provisions that consider and address flooding outside of mapped areas is managed through the subdivision process (i.e. site suitability and hazard assessments that are undertaken for all subdivisions), which includes reference to section 106 of the RMA. The plan cannot impose rules relating to flooding for areas that are not mapped, as there would be no trigger for a land use consent and no clarity for landowners regarding consenting requirements.
- 26. WRC request that the explanation for Building Platform Suitability Area C is amended as set out below and another layer is created specifically for the Waitomo Valley flood modelling, with the following description: "the floodplain identified in the Waitomo Valley by a qualitative assessment."

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 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."

- 27. Or alternatively the plan states 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 Kūiti and Piopio. WRC are concerned that the explanation in its current form insinuates that the Waitomo modelling was undertaken in the same way as the Te Kūiti and Piopio modelling, which is not accurate.
- 28. The plan does clearly state that Area C is mapped using two separate datasets and it seems duplicative to add another mapping layer simply because the datasets were identified using different methods. However, the recommended amendment would read:

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  $\underline{by}$  a  $\underline{gualitative}$  assessment.

- 29. <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.
- 30. WRC have also sought that all references to average recurrence interval (ARI) be changed to 1% AEP. Once again, this terminology has specifically been used to align with the analysis and the terms used in the Tonkin and Taylor report. It would be useful if the submitter could clarify at the hearing why there is need to change the terminology so that the Commissioners are able to fully assess the effect of any alterations on plan users.
- 31. Horizons Regional Council have requested that the plan be amended to clarify the outcome of the modelling and whether or not the 1% AEP takes into account the 8.5 RCP in the High Risk Flood Zone provision which would more closely resemble the policy intent of the Horizon One Plan's 0.5% AEP. It is considered that this submission can be accepted, as the modelling did take into account the 8.5 RCP in the High Risk Flood Zone and the report was reviewed by WRC at the time.
- 32. <u>Section 32AA:</u> No further changes are recommended as a result of these submissions. A section 32AA evaluation is not required.

# 4.3 Topic 3: NH-O1 – Ensure communities are resilient from natural hazards

33. Two submissions were received on this objective.

Submission no	Submitter	Support / in part / oppose	Plan provision	Relief sought	Recommendation
24.22	Ministry of Education (MoE)	Support with amendment	NH-O1	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.	Reject
32.01	Horizons	Support	NH-O1	No specific decision sought, but submission supports NH-O1.	Accept

#### Analysis and recommendations

- 34. NH-O1 seeks 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. The Ministry of Education have sought an amendment to this Objective by adding "while recognising that some activities have a functional or operational need to be located in the natural hazard zones".
- 35. NH-O1 is considered to provide an encompassing overview of the management of natural hazard risks. The Ministry's point is noted however as this chapter does not provide a specific policy to enable consideration about the functional and/or operational need of an activity locating in a hazard area. On balance, this is likely to be a useful addition as a policy

rather than an objective, to enable more thorough consideration of this issue. It also allows the inclusion of additional wording to test whether the activity might be more appropriately located outside of the hazard area. The proposed new policy could be worded:

- NH-PX The operational need 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.
- 36. As the submission from Horizons seeks the retention of NH-O1 as notified, this submission is accepted.
- 37. <u>Section 32AA:</u> See Appendix 2.
- 4.4 Topic 4: NH-O1 Ensure communities are resilient from natural hazards
- 38. Two submissions were received on this objective.

Submiss ion no		Support / in part /	Plan provision	Relief sought	Recommendation
		oppose			
16.19	Fire and Emergency New Zealand (FENZ)	Support in part		Include reference to the Fire Plan for Waikato, <b>Ngā</b> Tai ki te Puku in the overview of the chapter.	Reject
32.02	Horizons	Support		No specific decision sought, but submission supports NH-O4.	Accept

#### Analysis and recommendations

39. NH-O4 seeks to improve response to and recovery from natural hazard events by encouraging community awareness and use of information and methods contained in community response plans. Fire and Emergency New Zealand have requested that reference is made to their Waikato Fire Plan (Ngā Tai ki te Puku) in the overview section. Although, FENZ have submitted against this objective, it appears that the requested amendment is to the chapter's overview. It is considered that while the fire plan is an excellent resource for the community (and meets the intended purposes of NH-O4), an amendment to the overview is not required. This document is relevant

<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.

to civil defence responses and fire control powers under the Fire and Emergency New Zealand Act 2017 rather than to the management of subdivision, use and development of land. Also, there are a number of community response plans that have been prepared by various organisations, and it would not be appropriate to only acknowledge one.

- 40. As the above submission is rejected, the submission from Horizons requesting that the objective be retained as notified is accepted.
- 41. <u>Section 32AA:</u> No changes are recommended as a result of these submissions. A section 32AA evaluation is not required.

# 4.5 Topic 5: NH-P5

42. Two submissions and one further submission have been received in relation to this policy.

Submission no	Submitter	Support / in part / oppose	Plan provision	Relief sought	Recommendation
56.07	The Fuel Companies	Support in part	NH-P5	Amend clause (1) of Policy NH-P5 as follows:	Accept
				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	
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	Reject

				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.	
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

43. NH-P5 seeks to manage earthworks, excavation and filling of land within hazard areas. The Fuel Companies have sought the following amendment to NH-P5.1:

In Building Platform Suitability Area C, ensuring that the potential adverse effects of <u>land disturbance</u> <u>earthworks</u> activities on flood storage capacity, overland flows and run-off volumes on surrounding properties and infrastructure, are avoided or mitigated;

- 44. It is considered the requested amendment should be made to NH-P5.1. The policy should not refer to land disturbance which is defined as meaning: 'the alteration or disturbance of land (or any matter constituting the land including soil, clay, sand and rock) that does not permanently alter the profile, contour or height of the land'. The policy is in fact interested in activities which do permanently alter the profile, contour or height of the land. Indeed, the rules refer to 'earthworks' rather than 'land disturbance'. Earthworks is defined as meaning: 'the alteration or disturbance of land, including by moving, removing, placing, blading, cutting, contouring, filling or excavation of earth (or any matter constituting the land including soil, clay, sand and rock); but excludes gardening, cultivation, and disturbance of land for the installation of fence posts'.
- 45. Additionally, the governing sentence of NH-P5 refers to earthworks. As such, 'earthworks' is a much more appropriate term for the policy and the proposed amendment would ensure consistency with the rule provisions. It noted that NH-P5.4 also refers to land disturbance (the only other use of this term in the chapter), and therefore requires similar amendment. The recommended changes would read:

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 <u>earthworks</u> <u>land disturbance</u> activities on flood storage capacity, overland flows and run-off volumes on surrounding properties and infrastructure, are avoided or mitigated; and

. . . . . . .

- 4. In Building Platform Suitability Areas A and B, ensuring <u>earthworks</u> <del>land</del> disturbance activities which require a resource consent are designed and supervised by an appropriately qualified and experienced geoprofessional; and
- 46. <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.
- 47. WRC have requested an amendment to NH-P5.2 so that flood protection activities are provided for in the High Risk Flood Zone. It is considered that the relief sought in this submission is provided for in the policy framework through NH-P8: Provide for flood management/protection works and drainage works undertaken by regional and local authorities.
- 48. Additionally, flood management/protection works and drainage works in all hazard areas are permitted activities (NH-R3) where these are undertaken

by the Waikato or Manawatū-Whanganui Regional Councils, Waitomo District Council or on their behalf by an approved contractor.

# 4.6 Topic 6: New Policies

49. One submission was received requesting the addition of a new policy by Fire and Emergency New Zealand.

	ubmis ion no	Submitter	Support / in part / oppose	Plan provision	Relief sought	Recommendation
1	6.18	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:  (a) Access for emergency service vehicles.  (b) Provision of and access to emergency firefighting water supply.  (c) Separation and management of vegetation (with regard to slope, aspect, management regimes and use of less flammable vegetation), and  (d) The design and materials of any buildings.  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	Reject
					building platforms and forest and bush areas.	

50. Fire and Emergency New Zealand (FENZ) request the following additional policies are included:

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:

- (a) Access for emergency service vehicles,
- (b) Provision of and access to emergency firefighting water supply,
- (c) <u>Separation and management of vegetation (with regard to slope, aspect, management regimes and use of less flammable vegetation), and</u>
- (d) The design and materials of any buildings.

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.

- 51. It is considered that the matters in these two policies relating to access for emergency service vehicles and firefighting water supply are appropriately managed in this plan by provisions in the subdivision chapter, in each zone and in the transport chapter (for example SUB-R20, RLZ-R27, TRAN-R18). The design and materials for buildings is managed under the Building Act 2004.
- 52. This leaves the matter of buffer setbacks/separation and management of vegetation (with regard to slope, aspect, management regimes and use of less flammable vegetation). It is not clear how Council would identify an area as being 'subject to elevated fire risk'. Would Council have the legislative scope through a district plan to identify these areas? There is no objection in principle to considering a policy provision on this matter provided the proper scope is available. Potentially a more broad policy could be possible to at least elevate the matter in the minds of developers. An example could be:

NH-PX When locating building platforms on a site, manage wildfire risk by considering:

- 1. New vegetation with regard to slope, aspect, management regimes and planting less flammable vegetation and;
- 2. The maintenance of appropriate buffers between new building platforms and existing forest and bush areas.

- 53. Feedback on this matter from FENZ is welcome. In the interim it is recommended that the submission point is rejected.
- 54. <u>Section 32AA:</u> No changes are recommended as a result of these submissions. A section 32AA evaluation is not required.

# 4.7 Topic 7: Construction of park facilities

55. One submission and one further submission have been received on this rule.

Submis sion no	Submitter	Support / in part / oppose	Plan provision	Relief sought	Recommendation
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:	Reject
				● 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.	
FS18.03	Omya	Neutral		Omya would like to be engaged in the outcome/decision of this submission point.	Reject

## Analysis and recommendations

- 56. NH-R4 manages the construction of park facilities in a hazard area in all zones. WRC have requested an advice note be added to NH-R4, which requires WRC to be notified of any activities proposed to be undertaken in the area below, along the Mangaokewa River through the Te  $K\bar{\bf u}$ iti township.
- 57. WRC note that the defined area is a constructed flood protection asset that WRC is responsible for maintaining. Therefore, WRC must be notified of any works or activities occurring within this area to ensure that the integrity and

function of the asset is maintained. This will ensure WRC has the opportunity to assess the application and provide comments. WRC note that they would like to start conversations with Council to reach an understanding on how to collaborate to manage the Mangaokewa River in and out of Te  $K\bar{\bf u}$ iti.

58. It is agreed that management of flooding in this area is paramount in the first instance. First and foremost, it is considered that an amendment is needed to this provision to specify who can construct the park facilities. 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 has the effect of restricting the parties that can construct buildings in this area to either WRC or the Council. The amendment would read:

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

- 59. Then, a method for communication needs to be established between the two parties. Particularly those departments within each Council responsible for flood management (WRC) and park facilities (WDC). This does not require an amendment to the plan but rather a memorandum of understanding or similar.
- 60. <u>Section 32AA:</u> See Appendix 2.
- 4.8 Topic 8: NH-R5 Additions to an existing building, or construction of a new building housing a sensitive activity

61. Three submissions have been received on this rule.

Submis sion no	Submitter	Support / in part / oppose	•	Relief sought	Recommendation
10.65	WRC	Amend		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:  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	Accept

## Analysis and recommendations

- 62. NH-R5 controls additions to an existing building, or construction of a new building housing a sensitive activity where the site is located in the Building Platform Suitability Area C in all zones.
- 63. WRC have requested an amendment to NH-R5.3(i) to change the floor level from 0.5 to 500mm to be consistent with SUB-R19.3. As these rules closely relate to one another, it is considered that this is a useful amendment and could read as follows.

NH-R5 Additions to an existing building, or construction of a new building housing a sensitive activity

- 3. Any new building housing a sensitive activity must achieve:
- (i) A finished floor level located 500 mm 0.5 m above the 1% AEP flood level, where this level taken from the bottom of the floor joists; or
- (ii) Where concrete, the top of the finished floor level must be at least 500 mm 0.5 m above the 1% AEP flood level;
- 64. The Fuel Companies have sought an amendment to the title of Rule NH-R5 as follows:
  - Non-habitable accessory buildings or shipping containers, and Aadditions to an existing building, or construction of a new building housing a sensitive activity
- 65. It is agreed that this amendment assists with the interpretation of the provisions contained in NH-R5.

66. Section 32AA: It is considered that the amendment proposed by WRC to NH-R4.3(i) assists in providing consistency with application across the plan and is consistent with the subdivision chapter. Similarly, the change to the title of NH-R6 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.

# 4.9 Topic 9: NH-R6 - Earthworks

67. Four submissions have been received on this rule.

Submis sion no	Submitter	Support / in part / oppose	Plan provision	Relief sought	Recommendation
24.23	MoE	Support with amendme nt	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

#### Analysis and recommendations

68. NH-R6 provides for earthworks where the site is located in the Building Platform Suitability Area C in all zones. The Ministry of Education have sought the addition of a further matter of discretion as follows:

NH-R6 Earthworks

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
- (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; and
- (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.
- 69. It is considered that the additional matter of discretion specified above is a useful addition, 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 above in para 35 which relates to operational and functional need.
- 70. <u>Section 32AA:</u> See Appendix 2.
- 71. WRC considers that NH-R6 does not give consideration to the size of the building platform and the associated displacement of floodwaters. The impacts of displacement on adjacent properties needs to be understood to ensure that development is resilient to natural hazard risk (in alignment with objective HAZ-O1 and policy HAZ-P1 of the WRPS).
- 72. The rule is self-limiting insofar as it restricts the volume of earthworks and by default, the size of the building platform. Other than for sensitive activities, for all other earthworks, 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. Additionally, earthworks must not exceed a maximum height of 0.2 m of filling above natural ground level and a maximum depth of excavation of 0.5 m below natural ground level.
- 73. It is acknowledged that a community facility or marae could locate in this hazard area and have its earthworks provided for under NH-R6.1. However, these larger activities are likely to trigger the need for a consent in any event. Additionally, it is noted that the Building Act ensures that stormwater cannot be impeded onto another property. It is considered that the rule as notified is appropriate in terms of managing the effects in this hazard area.

# 4.10 Topic 10: NH-R7 - Accessory Buildings in the High Risk Flood Zone

74. One submission and one further submission have been received on this rule.

Submis sion no	Submitter	Support / in part / oppose	•	Relief sought	Recommendation
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

75. NH-R7 controls accessory buildings in High Risk Flood Zones. WRC have requested that NH-R7.2 is amended to state that no hazardous materials may be stored in farm buildings without a floor. NH-R7.2 permits farm buildings that do not have a floor subject to zone requirements. It is considered that while the storage of hazardous materials is largely controlled by legislation (i.e. Hazardous Substances and New Organisms Act 1996) and industry standards, the proposed amendment by WRC is appropriate, as this matter is not covered elsewhere in the plan.

## NH-R7 Accessory Buildings

- 2. Farm buildings that do not have a floor <u>and do not store hazardous</u> <u>materials</u> are permitted subject to zone requirements; and
- 76. <u>Section 32AA:</u> See Appendix 2.

# 4.11 Topic 11: NH-R11 - Earthworks in Building Platform Suitability Area A and B

77. One submission has been received on this rule.

Submissi on no	Submitter	Support / in part /	Plan provision	Relief sought	Recommendation
011 110		oppose	provision		
24.24	MoE	Support with amendmen	NH-R11	Add to NH-R11 a new clause (h) as follows:	Accept
		t		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.	

78. NH-R11 controls earthworks in building platform suitability area A and B in all zones. The Ministry of Education have sought the addition of a further matter of discretion as follows:

#### NH-R11 Earthworks

Activity status where compliance is not achieved in BPS-A: DIS Activity status where compliance is not achieved in BPS-B: 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 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
- (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.
- 79. It is considered that the additional matter of discretion specified above is a useful addition, as there are circumstances where an activity has a functional or operational need to be located within the Building Platform Suitability Area A or B. This amendment is in line with the new policy

provision proposed above in para 35 which relates to operational and functional need.

80. <u>Section 32AA:</u> See Appendix 2.

# 4.12 Topic 12: New Rule - KiwiRail Holdings Limited

81. One submission and three further submissions were received on this Rule.

Since   New File   New File   Amend to add new rule as follows: Applying to all Hazard considered in the network utilities   Special Property   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:   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 and alternative locations for the regionally significant infrastructure; and any positive effects of locating the regionally significant infrastructure at this location: and   the application infrastructure at this location: and   the application infrastructure at this location: and   the application infrastructure to be efficiently recovered after a hazard event, and the operational need or	Submis sion no		Support / in part / oppose	Plan provision	Relief sought	Recommendation
I functional need for the activity	51.35	Holdings Limited		New rule	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: 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 at this location; and the ability for the regionally significant infrastructure at this location; and the ability for the regionally significant infrastructure to be efficiently recovered after a hazard event; and	considered in the network utilities

			to be established in this location.	
FS26.03	WRC	Support with amendme nts	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.
FS23.24 9	Te Nehenehen ui	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.

82. This matter will be considered in the network utilities chapter.

# 4.13 Topic 13: New Rule - New Zealand Defence Force

83. One submission and no further submissions were received on this additional rule request.

Submis sion no	Submitter	Support / in part / oppose	Relief sought	Recommendation
21.09	NZDF		Add a new permitted activity rule specific to temporary military training activities as follows:  NH- RX: Buildings associated with Temporary Military Training Activities in a Hazard Area Activity status: PER Where:  1. The building or structure is in place for a maximum period of 31 consecutive days (excluding set up and pack down activities).  2. No permanent structures are constructed (unless	Accept
			the building or structure and its use comply with all other permitted activity	

84. The submitter requests a new permitted activity rule to enable temporary military training activities in hazard areas. Temporary military training activities (TMTAs) are permitted in this plan under the provisions of TEMP-R7. A temporary building should not trigger the hazard rules in any event, however it is possible that TMTAs could inadvertently be captured by rule NH-R9 'construction of all other buildings'. Just in case, an amendment to this rule is proposed to make it clear that the rule is not intended to capture temporary activities. The amendment would read:

NH-R9.	Construction of all other buildings			
	le does not apply to buildings associated d activities provided for in TEMP - Table 1	Activity status where compliance is not achieved: N/A		

85. Section 32AA: See Appendix 2.

# 4.14 Topic 14: Amendment to the planning maps

86. One submission and no further submissions were received on this request to amend the planning maps.

Submissio n no	Submitter	Support / in part / oppose	Plan provision	Relief sought
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.

#### Analysis and recommendations

87. The submitter requests an amendment to the planning maps to change the proposed Building Platform Suitability Area C identification in Piopio (lower Moa Street) as they consider it does not reflect the current environment and does not reduce adverse effects of potential activities. The submitter has not provided an amended map showing the boundaries of Building Platform Suitability Area C as they consider should apply to Piopio or technical information to support this change.

- 88. The mapping of Building Platform Suitability Area C is based on the technical advice received from Tonkin and Taylor. The link to the report which sets out the analysis is below:
  - https://www.waitomo.govt.nz/media/55xdsdmf/te-kuiti-and-piopio-flood-modelling-report-december-2019.pdf
- 89. The submitter may wish to provide further technical analysis at the hearing to enable clarity on why they consider the building platform suitability layer should be amended. In the interim it is recommended that the submission is rejected.
- 90. <u>Section 32AA:</u> No changes are recommended as a result of these submissions. A section 32AA evaluation is not required.

# 5 Conclusion

91. This report provides an assessment of submissions received in relation to the natural hazards chapter. It is considered that the submissions should be accepted, accepted in part or rejected as set out in the tables in this report. It is recommended that the natural hazards chapter is amended as set out in Appendix 1 for the reasons discussed in the report above. It is considered that the amended provisions will be efficient and effective in achieving the purpose of the RMA (particularly for any for changes recommended to objectives), the relevant objectives of this plan and other relevant statutory documents, for the reasons set out in the section 32AA evaluations undertaken and included in this report.

# APPENDIX 1 RECOMMENDED AMENDMENTS

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 <u>by a qualitative assessment</u>.

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 <u>earthworks</u> <del>land disturbance</del> activities on flood storage capacity, overland flows and run-off volumes on surrounding properties and infrastructure, are avoided or mitigated; and

......

4. In Building Platform Suitability Areas A and B, ensuring <u>earthworks</u> <del>land disturbance</del> activities which require a resource consent are designed and supervised by an appropriately qualified and experienced geoprofessional; and

#### NH-PX

The operational need 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.

NH_P/	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

3. The activity is undertaken by the Waikato or Manawatū-Whanganui Regional Councils. Waitomo District Council or on their behalf by an approved contractor; and

4. Any addition to an existing building is a discretionary activity.

Activity status where compliance is not achieved: DIS

NH-R5 Additions to an existing building, or construction of a new building housing a sensitive activity

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

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

#### NH-R6 Earthworks

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
- (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; and
- (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.

#### NH-R7 Accessory Buildings

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

NH-R9.	Construction of all other buildings	
Activity status: NC		Activity status where compliance is not achieved: N/A

Note: This rule does not apply to buildings associated with permitted activities provided for in TEMP - Table 1 - Activities Rules

#### NH-R11 Farthworks

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

# APPENDIX 2 SECTION 32AA EVALUATION

# Section 32AA

A full section 32AA assessment will be provided for the changes proposed to this Chapter before the hearing.