## Before the Hearings Panel At Waimakariri District Council

Under	Schedule 1 of the Resource Management Act 1991
In the matter of	the Proposed Waimakariri District Plan
Between	Various
	Submitters
And	Waimakariri District Council
	Respondent

Council s42A Officer's Preliminary Response to written questions on the Natural Hazards Chapter on behalf of the Waimakariri District Council

Date: 25 July 2023

## **INTRODUCTION:**

- 1 My full name is Andrew Peter Willis. I am a planning consultant engaged by the Council to support the development of the Natural Hazards Chapter.
- 2 The purpose of this document is to respond to the list of questions published from the Hearings Panel in response to my s42 report.
- 3 In preparing these responses, I note that I have not had the benefit of hearing evidence presented to the panel at the hearing. For this reason, my response to the questions may alter through the course of the hearing and after consideration of any additional matters raised.
- 4 I also note that given the timing of these questions, my preliminary responses in some instances have not been informed by consideration of evidence or legal submissions lodged with the Council following the issuing of my s42A report. Where I have considered such evidence, I have recorded this within the preliminary answers below.
- 5 Following the conclusion of this hearing, a final right of reply document will be prepared outlining any changes to my recommendations as a result of evidence presented at the hearing, and a complete set of any additions or amendments relevant to the matters covered in my s42A report.
- 6 I am authorised to provide this evidence on behalf of the District Council.

Date: 25 July 2023

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Paragraph or Plan reference	Question
Overarching	Please provide an updated version of Appendix A which footnotes each recommended amendment to the Chapter to a specific submission point(s).
	Officer Response
	Having read the evidence I anticipate further changes to the chapter will be recommended. I will provide a complete updated version of Appendix A which footnotes each recommended amendment to the chapter to a specific submission point in the Council's right of reply.
Para 74	Would another way of phrasing this be "there is no more than a minor increase in the risk from flooding on surrounding properties and the net"?
	Officer Response
	Yes. That is consistent with the intention of the change. I note this matter has been raised in evidence by ECan. I agree that the word 'increase' is required.
Para 100	Would there be any consequence of renaming the recommended "high hazard area" to "high flood hazard area"?
	Officer Response
	This was originally proposed in the Proposed Plan to both be more descriptive of the hazard being managed and to differentiate it from the CRPS definition which was considered problematic. This could be changed as proposed, however the definition would need to remove the reference to coastal erosion if focused only on flooding. This could be done as coastal erosion is not predicted to occur in the

Paragraph or Plan reference	Question
	District for the next 100 years and the definition change would be within scope of the ECan [316.54] submission.
Para 104	How will this recommendation (i.e. to remove mapped high hazard flood areas) assist readers of the Plan to understand whether/and to what extent their properties are affected (noting that many Councils have quite sweeping overlays that appear to be quite generic)?
	Officer Response For clarity, I am <u>not</u> recommending this as a change, rather the discussion in this paragraph is in response to a submission from Summerset [207.3] requesting the high hazard areas be mapped. Not mapping high hazard areas in the plan does provide less certainty to readers, however, the chapter refers to a GIS viewer outside of the plan that identifies likely high hazard areas. The advantage of not mapping high hazard areas is that this can be determined via a flood assessment certificate using the most-up-to- date information available. This can account for changes in modelling inputs, such as from stormwater infrastructure changes and land raising (such as occurred at Beachgrove and Waimak Junction). The flood assessment certificate approach is a cheap (circa \$100 – \$150) and effective way of getting an accurate flood assessment. I note that Kainga Ora has provided evidence on mapping hazards within the district plan.
Paras 147, 152	Did you consider whether any consequential amendments were required to the relevant policies as a result of changing "low" to "unacceptable". If not, can you please set out whether you think amendments should occur, and why. If you did, please explain why you did not think amendments should occur. If you consider amendments should occur, is there available scope to do so?

Paragraph or Plan reference	Question
	Officer Response
	I did consider whether consequential policy amendments were required. A number of policies such as NH-P2(4), NH-P3(1), NH- P4(1), NH-P5(2), NH-P6, NH-P7(2), NH-P8 also refer to 'low' risk. As stated in paragraph 152, what is considered 'unacceptable' can be determined by the policies, rules and matters of discretion collectively. The policies provide direction for accessing what is 'unacceptable', and for the identified policies above, this is generally where risk is identified as being more than 'low'. I accept that 'low' itself is not always certain as it is a matter of assessment, but the policies are further refined by the suite of rules and assessment matters. I also note that hazards analysts have standardised methodologies for undertaking risk assessments to determine the level of risk for a given hazard and that this level is often categorised as low, medium or high. I therefore consider the use of the word 'low' is appropriate language at the policy level. If the word 'unacceptable' was used then the policies would provide less guidance as someone would still need to determine what is unacceptable.
Para 160	Would another way of phrasing new clause 2 be "avoids or mitigates natural hazard risk in the existing urban environment where any increased risk to life and property is unacceptable?"
	Officer Response Yes. I consider this alternative wording will achieve the same outcome.
Para 163	You state: "policy NG-O2(10 is intended to apply to critical infrastructure, which is included in the broader definition of 'infrastructure'".

Paragraph or Plan reference	Question
	Please explain how critical infrastructure is included in the broader definition of infrastructure, given infrastructure is defined in the RMA.
	Officer Response
	In this paragraph I was referring to infrastructure generally, rather than the RMA definition. I agree that the RMA definition of infrastructure would not include some of the examples of critical infrastructure and that this paragraph is misleading.
Para 167	Taking into account your answer to the above question, do you recommend any amendments to the title and chapeau of NH-O2? If so, is there scope to do so?
	Officer Response
	Infrastructure in the title and chapeau of NH-O2 is intended to refer to the plain ordinary English language meaning, rather than the defined term. This is not uncommon in objective drafting. However, I appreciate that this can cause confusion so I recommend that the title and chapeau also refers to critical infrastructure, similar to the changes proposed in clause 1.
Para 184	Can you please explain what it is that the effects of climate change are to be recognised and provided for in?
	Officer Response
	The effects of climate change include increased storm intensity (including increased precipitation and storm surges) and sea level rise. These effects need to be recognised and provided for in the flood modelling and management of fresh water flooding and sea water inundation. In addition, advice indicated that the District will

Paragraph or Plan reference	Question
	become dryer and hotter, with correspondingly increased risk of wild fire. The provisions responding to this risk recognise and provide for climate change effects (although note my suggested changes to the shelterbelt setback rule and policy later).
Para 246	Should NH-P9.d be amended to replace "significant" in line with your recommended amendments in response to ECan [316.49]. If so, is there scope to do so?
	In addition, do you consider the recommended changes will remove the specificity from the policy to the point where it provides little in the way of actual guidance, i.e.
	the mitigation works do not involve the construction of private flood mitigation measures such as stopbanks, or floodwalls to protect new hazard sensitive activities as these works could result in significant residual risk to life or property if they fail.
	Officer Response
	Having discussed this with Mr Bacon, I am comfortable with the wording as proposed, noting that resource consent is required for private schemes as a discretionary activity generally, and non-complying in the coastal food assessment overlay. If the Panel prefer the replacement of 'significant' as indicated then I consider there is scope under the MoE [277.28] submission which seeks to make private flood mitigation schemes restricted, not prohibited.
	In terms of removal of specificity, my proposed amendments remove the reference to private schemes, which is inconsistent with the rules. I consider the remaining text is still useful to guide assessment of private schemes under a consent pathway.

Paragraph or Plan reference	Question
Para 315	You state: "using the term 'redevelopment' could imply that it is acceptable to reinstate a damaged building".
	Please explain this statement in terms of your understanding of how s10 and s30(1)(c) of the RMA are applied to existing buildings.
	Officer Response
	My comments relate to what I think ECan's concerns are. S10 allows a property to be reinstated via existing use rights. Under s30(1)(c) Regional Councils have the control of the use of land for the identified purposes in subclauses i to iv, including for the avoidance or mitigation of natural hazards.
	I consider reinstatement is not necessarily the same thing as redevelopment. My understanding of ECan's concerns is that the policy may support redevelopment more broadly than reinstatement. I note section 10(3) which states that this section does not apply if reconstruction or alteration of, or extension to, any building to which this section applies increases the degree to which the building fails to comply with any rule in a district plan or proposed district plan. This RMA section is consistent with my understanding of ECan's concerns.
Para 319 and amended chapter NH-P16	In light of your recommended amendment to removed "redevelopment" from the policy, does the heading of NH-P16 also need to be amended?
	Officer Response
	This was considered, however the policy is broader than simply relocation and as such it would not work to simply delete the word 'redevelopment' from the title. I consider it could be amended to the following or similar:

Paragraph or Plan reference	Question
	"Land use change and relocation in natural hazard overlays"
Para 331	In relation to Federated Farmers submission, is carbon forestry addressed by being included in the definition of woodlot?
	Officer Response
	Yes, it would appear so as the definition of 'woodlot' includes carbon sinks.
Para 345	Please explain how this policy would be applied in practice.
	Officer Response
	NH-P19 is a policy that applies to natural hazards that are not already covered in the chapter. Other natural hazards not expressly covered in the policies include severe winds, rising groundwater, drought, ground shaking from earthquakes, coastal erosion and tsunami. It is an encouragement policy that can be applied as part of a fully discretionary or non-complying resource consent application. For example, it may be relevant where high density elderly persons housing is proposed in an area subject to tsunami, such that the applicant is encouraged to demonstrate that evacuation options and resilience has been considered. It is also useful to refer to for activities that do not trigger resource consents. It is modelled on CRPS Policy 11.3.5 – general risk management approach.
Paras 404, 405 and 409	You have stated that you consider the Kaikoura rule could be ultra vires and the Selwyn rule is uncertain. We have reviewed your s32AA evaluation in Table C8. Please provide a further evaluation of why the proposed new wording in para 409 is the most appropriate means of achieving the objective. Please also explain how this rule would be applied in practice to determine compliance.
	Also, is there scope to add reference to the 0.5% AEP event?

Paragraph or Plan reference	Question
	Officer Response The proposed earthworks changes are contained in Table C8 of the s32AA, beginning on page 144 of the s42A report. An amended track changed version of Table C8 is attached in Appendix 1 to this report.
	Regarding application, in practice, the rule could be subject to professional input to determine if compliance is being achieved, similar to many regional council rule conditions that authorise permitted activities where adverse effects are not created. In addition, the rule could be applied when a nuisance or adverse effect is created and a complaint has been made to the Council. The Council may seek a retrospective consent is applied or or may apply an abatement notice.
	Regarding scope, ECan have submitted on this approach seeking amendments to improve its application when dealing with flood displacement / flow path disruption. While the ECan submission does not specifically seek the inclusion of 0.5% AEP, it is a solution that responds to the relief sought, i.e. better management of flood water displacement / flowpath disruption, targeting the rule to the effect being managed. As such, it is arguably within scope. I note that ECan is presenting evidence on the inclusion of the 0.5% AEP figure.
Para 453	What is the rationale behind shelterbelts having to be set back 30m from a boundary, but woodlots (which includes carbon forestry) only need to be 10m? Would larger areas of trees not have a greater impact than shelterbelts in this regard? The s32 Report does not appear to address the approach proposed. What are potential impacts on the efficiency of a farm property requiring shelterbelts to

Paragraph or Plan reference	Question
	be 30m off boundaries when they are traditionally located on
	boundaries?
	Officer Response
	I agree that the setback distances for shelterbelts and woodlots from boundaries are inconsistent. The issue has arisen due to different setback requirements for different purposes in the GRUZ and natural hazards chapters, the specific requirements of the NES for plantation forestry and the scope for changes enabled through the submissions.
	It is not unusual to have different required setbacks for structures, or in this case vegetation, in a zone chapter as opposed to a district wide chapter for specific purposes, such as to manage impacts on outstanding landscapes, waterways, or in this case natural hazards.
	Having reviewed the evidence received from Federated Farmers and Horticulture NZ on this matter and noting their comments on farm production efficiency, I now consider it appropriate (and simpler) to remove the shelterbelt and woodlot site and road boundary setback requirements from the natural hazards chapter, and rely on the woodlot setback requirements in the GRUZ chapter. For clarity, this recommendation means that shelter belts would be permitted in respect of fire management, with NH-R7(1)(a) and (b) being deleted, leaving only clause 2 managing woodlots and shelterbelts in specified location for ice hazards. Policy NH-P18 would need to be amended accordingly to remove references to wildfire. I consider the amendments to NH-P18 are in scope as a consequential change and in any case, I note that Federated Farmers [414.96] sought to delete NH-P18 as they were concerned about its approach to managing wildfire and ice hazards.
Para 478	Is the addition of (c) in scope?

Paragraph or Plan reference	Question
	Officer Response
	While ECan did not submit on the definition of 'upgrading', the submission was clear that it was seeking to better provide for the ongoing operation of its flood schemes. The addition of clause c to the definition of 'upgrade' responds to this request. As such, I consider it is within the scope of the requested relief.
Para 490	Would another option be to amend the definition of "soft engineering natural hazard mitigation" to explicitly exclude "earth engineered bunds"?
	Officer Response
	Yes, that option would also be acceptable and is probably cleaner as it avoids the need to include an exception in NH-R10(1).
Para 637	By deleting the reference to cultural matters, do you consider there is sufficient transparency and cross referencing for readers of the Plan to be aware that the cultural aspects will be picked up in the SASM Chapter?
	Officer Response
	Yes I do as the introduction identifies that other district wide provisions might apply and I also note that the SASM provisions are mapped, so these requirements will come up when a property is searched through the property search function on the planning maps.
Amended Chapter	Is the amendment to clause 1 correctly recorded?
NH-P14	

Paragraph or Plan reference	Question
	Officer Response If you are referring to 'not' critical infrastructure, this is supposed to be 'non' critical infrastructure. I note ECan has picked up this mistake in its evidence. The mistake arose because the policy had already been amended (via RMA Schedule 1 s16) and it was changed from what was now correct, back to being wrong.
Amended Chapter NH-MD1	Please consider whether the use of "redevelopment" in 2.e. is consistent with your recommended amendment to NH-P16.
	Officer Response NH-MD1 is intended to apply outside of coastal areas. Matter of discretion NH-MD4 applies in coastal areas, and does not refer to 'redevelopment'.

## Appendix 1 - S32AA Revised Table C8

*Table C 8: Assessment of efficiency and effectiveness – Changes to the earthworks approach* 

Recommended Amendments to Provisions:		
Replacement of an arbitrary 0.25m filling threshold to manage flow path		
disruption and flood water displacement with a requirement to not exacerbate		
flooding on other properties.		
Costs		Benefits
Costs should reduce as the proposed		Benefits should increase as the
provision will not result in over capture		proposed provision will capture filling
of activities that have no adverse		of less than 0.25m if it has an adverse
effects.		effect.
Efficiency	The proposed provision is more accurate than using an arbitrary	
	threshold and so is more efficient. However, compliance is less	
obvious and may sometimes require technical expertised determine.		mes require technical expertise to
Effectiveness	The provision is more targeted to the adverse effects and	
	therefore should be more effective. However, it does require an	
	element of judgement in its application which may undermine its effectiveness. <u>Because of this required judgement, it is</u>	
	acknowledged that it may sometimes be applied retrospectively	
	if flood water displacem	ent or disruption is identified as
	occurring after a development, which thereby reduces its	
	effectiveness as a rule.	
Summary		
The proposed alternative approach to filling is more accurate and targeted than		
using an arbitrary threshold and therefore more efficient and effective if applied		
accurately in advance of earthworks. However, given the need to exercise		
judgement as part of determining if the rule applies, this may reduce its certainty		
and therefore effectiveness in some instances. Overall, the proposed amended		
approach is considered to be better than the proposed approach.		