



Mackenzie
DISTRICT PLAN REVIEW
TOMORROW'S MACKENZIE
KA AWATEA HŌU

Section 42A Report Part A: Plan Change 28 – Contaminated Land, Hazardous Substances, Natural Hazards and Hydro Inundation

Variation 1 to Plan Change 26

Variation 1 to Plan Change 27

Hazards and Risks

Reply Report

Author: Meg Justice

Date: 19 June 2025

1. Purpose and Scope of Report

1. The purpose of this Reply Report is to outline where my recommendations on PC28 Hazards and Risks have altered, as a result of the questions arising from the Hearing Panel, submitter evidence or matters traversed at the hearing, or through expert conferencing. It also addresses other matters arising in submitter evidence or during the course of the hearing where I consider further comment may be of benefit to the Hearing Panel, or in response to questions identified by the Hearings Panel in the course of the hearing. As such, other than where stated in this Reply Report, my opinions and recommendations remain as set out in the Section 42A Report¹ and in the Response to Minute 6².

For the avoidance of doubt, where I do not comment further, this is not because I have not carefully considered matters raised in any evidence and in the presentations made by submitters. Rather, I am not persuaded that there is a need to alter my recommendations from that in the Section 42A report, and my reasoning has not changed from what is set out within that report.

2. Format of Report

2. This report is structured on a by submitter basis. For the reasons noted above, it does not however traverse all matters/topics discussed at the hearing.
3. A full set of the changes recommended to provisions are contained in **Appendix 1** to this Report, incorporating recommendations made in the Section 42A Report, the Response to Minute 6, the agreed changes in the two Joint Witness Statements³ (JWS), and in this Reply Report. Changes recommended in the Section 42A Report are shown by way of strikeout and underlining. Changes recommended in the Response to Minute 6 and in this Reply Report are shown by way of red strikeout and red underlining. Changes previously recommended to be deleted but now recommended to be reinstated are shown in red without underlining. Changes previously recommended to be added but now recommended not to be included are shown in red strikethrough with black underlining. Footnoted references to the relevant submitter(s), and where applicable, submitter evidence, identify the scope for each recommended change. For completeness, **Appendix 2** contains the mapping change recommended in the s42A report.
4. Where required, an evaluation under s32AA of the RMA is undertaken of any further changes recommended.

¹ Section 42A Report: Plan Change 28 Part A - Hazards and Risks, 24 April 2025

² Section 42A Reporting Officers' Response to Hearings Panel Questions, 20 May 2025.

³ Joint Witness Statement: Planning Experts for Canterbury Regional Council and Mackenzie District Council, 11 June 2025; Joint Witness Statement: Planning Experts Meridian Energy Limited, Genesis Energy Limited and Mackenzie District Council, dated 6 June 2025

3. Canterbury Regional Council

Natural Hazards Chapter - NH-R5 Natural Hazard Mitigation Works

5. The evidence of Ms Tutty and Ms Irvine sought changes to the Natural Hazards Chapter provisions. Ms Irvine's evidence sought a permitted activity status for new natural hazard mitigation works undertaken by regional and territorial authorities. The Panel requested that Ms Irvine consider a more nuanced approach to the permitted activity rule for managing natural hazard mitigation works (NH-R5). In her Supplementary Statement of Evidence (dated 6 June 2025), Ms Irvine provided amendments to NH-R5, which are set out below:

Table 1: Suggested amendments to NH-R5 by Ms Irvine. Note Ms Irvine's changes are made to the notified NH-R5 and not the s42A report version of NH-R5

<u>Rule</u> <u>NH-R5</u>	<u>Natural Hazard Mitigation Works</u>	
<u>All zones</u>	<p>Activity Status: PER</p> <p>Where:</p> <p>The works are:</p> <ol style="list-style-type: none">1. <u>The maintenance of operation of any existing natural hazard mitigation works, or</u>2. <u>The upgrading or establishment of any new natural hazard mitigation works administered by a Regional Council or Territorial Authority that is required for preventative or remedial measures in response to active erosion or flooding, and are limited to works that maintain or reinstate the pre-existing level of protection.</u> <p>Note: The <u>earthworks</u> provisions in <u>Earthworks</u> any other Chapter shall not apply to any activity permitted under NH-R5.1.</p>	<p>Activity status when compliance is not achieved with R5.1-R5.2: RDIS</p> <p>Matters of discretion are restricted to:</p> <ol style="list-style-type: none">a. <u>NH-MD2</u>
<u>All zones</u>	<p>Activity Status: RDIS</p> <p>Where:</p> <p>The works are:</p> <ol style="list-style-type: none">3. <u>The establishment of any new natural hazard mitigation works</u>	<p>Activity status when compliance is not achieved with R5.3: DIS</p>

	<p><u>administered by a Regional Council or Territorial Authority.</u></p> <p><u>Matters of discretion are restricted to:</u></p> <p><u>a. NH-MD2</u></p>	
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6. Based on the evidence of Ms Irvine and Ms Tutty, I agree that a more permissive approach for natural hazard mitigation works is appropriate, when these works are undertaken by a regional or territorial authority. However, I consider the draft wording for rule NH-R5.2 provided by Ms Irvine is unclear, and that it would be difficult to determine whether or not an activity achieves this permitted activity standard. I consider that the rule can be simplified to provide for the development of natural hazard mitigation works. My suggested wording for this rule is set out in **Appendix 1**.
7. I do not agree with Ms Irvine's suggested amendment to the Note in rule NH-R5. This amendment would significantly change the rule and no analysis of the effects of this change have been provided by Ms Irvine. I consider it appropriate for the provisions that manage earthworks activities that are within the Earthworks Chapter to be exempt from rule NH-R5, in order for NH-R5 to be effective. However, I consider it appropriate that the provisions of other District Wide Matters Chapters apply to natural hazard mitigation works in addition to rule NH-R5. This will ensure that, for instance, the SASM, Historic Heritage, Natural Character and Natural Features and Landscapes Chapters are relevant if the natural hazard mitigation works are located in an area within the overlays/sites which are identified in these chapters. The matters that are protected and managed via these chapters are matters of national importance under s6 of the RMA. These matters sit alongside the requirement to manage the significant risks from natural hazards (s6(h)). I therefore consider it is important that potential adverse effects of these matters are able to be considered alongside the benefits of the natural hazard mitigation works via a resource consent process (if the relevant rules on these District Wide chapters cannot be complied with). For clarity, I do not consider that the underlying Zone Chapter provisions will be applied to natural hazard mitigation works because rule NH-R5 is an activity specific rule that provides only for natural hazard mitigation works, and this rule will therefore override any less specific rules (for instance rules that manage buildings or structures) in the Zone chapters. The change I suggest for this Note is set out in **Appendix 1**, and I also consider it necessary for the Advice Note within the Introduction of the Earthworks Chapter to be amended to state that the Earthworks Chapter does not apply to rule NH-R5. This change is also set out in **Appendix 1**.
8. The recommended change to NH-R5 changes the Discretionary activity status for new and upgrades to existing natural hazard mitigation works undertaken by parties other than regional and territorial authorities, to Restricted Discretionary. I consider that this activity status is appropriate for works that assist to achieve a matter of national importance (s6(h)) and I consider that the matters of discretion in NH-MD2 are appropriate to enable consideration of all relevant adverse environmental effects.

Recommendation

9. I recommend, for the reasons given above, that:

- Rule NH-R5 is amended to provide for new natural hazard mitigation works undertaken by a regional or territorial authority as a permitted activity, and to exclude activities undertaken under this rule from complying with the earthworks provisions in the Earthworks Chapter;

10. NH-R5.3 is deleted so that all natural hazard mitigation works that are not a permitted activity are a restricted discretionary activity.

- The Advice Note within the Introduction of the Earthworks Chapter is amended to state that the Earthworks Chapter does not apply to rule NH-R5.

11. The recommended amendments are set out in **Appendix 1**.

12. In terms of s32AA, the changes I have recommended to rule NH-R5 are a more appropriate way to give effect to the purpose of the RMA, in particular section 6(h) and section 7(b) which require the management of significant risks from natural hazards and the efficient use of natural and physical resources. The change will continue to enable the protection of the District's outstanding natural landscapes and features, historic heritage and sites of significance to Māori.

Natural Hazards Chapter & Critical Infrastructure Definition

13. Ms Tutty sought several changes to the NH Chapter in her evidence. I have set out the changes sought in Table 2 below, along with a discussion of the changes I agree with and those that I do not agree with:

Table 22: Assessment of changes sought by Ms Tutty

Amendments sought by Ms Tutty (in red)	Assessment
Amend clause b. of the <i>Critical Infrastructure</i> definition: b. Telecommunication and r <u>Radio</u> communications networks <u>and</u> <u>telecommunication installations and networks</u> <u>(excluding those which are regulated by the</u> <u>NESTF, as well as poles and antennas)</u>	For the reasons set out in Ms Tutty's evidence, I agree that this addition is appropriate in part. I do not consider that the words 'installations' and 'as well as poles and antennas' are necessary in this definition. I consider that poles and antennas are part of telecommunications networks. I also consider that the term 'telecommunications networks' includes all telecommunications 'installations', so the word 'installations' is not required in the definition.

<p>Amend the definition of <i>Natural Hazard Sensitive Building</i>:</p> <p>...</p> <p>Excludes:</p> <p>Any attached garage or detached garage that is not a habitable room That part of an aircraft hangar that is not a habitable room</p>	<p>I do not agree that this amendment is necessary. As discussed at paragraph 70 of the s42A report, the effects associated with flood water entering a garage, which is not a habitable room, is considered acceptable and does not justify the potential costs associated with raising the finished floor level of a garage. In addition, the Flood Hazard Assessments requires finished floor levels to be stipulated. Depending on the finished floor level stipulated in the Flood Hazard Assessment, issues may arise with forming a vehicle access into a garage.</p>
<p>Amendment sought to the Introduction to the NH Chapter:</p> <p>The provisions in this chapter apply in addition to the provisions of the other chapters in the District Plan. Earthworks, buildings and structures Activities that will divert water including floodwaters to a river, lake or artificial watercourse to alleviate surface flooding may require resource consent under the Canterbury Land and Water Plan.</p>	<p>I do not agree with this amendment. I understand that any diversion of water is managed by regional authorities, as set out in s14 of the RMA. This sentence in the introduction is to alert plan users to these potential consent obligations. I consider Ms Tutty's suggested wording is complicated and is likely to be confusing of plan users.</p>
<p>Amendment to policy NH-P4</p>	<p>Addressed in JWS. For clarity, I have not amended the NH Chapter to include the change to this policy.</p>
<p>Amendment to policy NH-P5</p>	<p>Addressed in JWS. For clarity, I have not amended the NH Chapter to include the change to this policy.</p>
<p>New rule - exacerbation of flooding on other properties</p>	<p>Addressed in JWS. For clarity, I have not amended the NH Chapter to include a new rule to address exacerbation of flooding on other properties.</p> <p>In addition, the Earthworks Chapter includes matters of discretion that enable flooding effects of earthworks, that require</p>

	resource consent, to be addressed. Refer EW-S1(b), EW-S2(e) and EW-S3(b). For completeness, I recommend that an amendment is made to rule EW-R3 to include 'flooding' in matter of discretion (b) to ensure that potential flooding effects of earthworks that require consent under this rule are addressed.
NH-R5 Natural Hazard Mitigation Works	Addressed in paragraphs 5-11 of this reply.
Amendment to the name of the Liquefaction Overlay: Liquefaction <u>Assessment</u> Overlay	I agree with this change as it more accurately reflects the nature of this overlay. Changes to the District Plan Maps, the Subdivision Chapter and the Natural Hazards Chapter have been made to reflect this amendment, refer Appendix 1 .
Amendment to the name of the Fault Hazard (Critical Infrastructure) Overlay: Fault Hazard (Critical Infrastructure) <u>Assessment</u> Overlay	I agree with this change as it more accurately reflects the nature of this overlay. Changes to the District Plan Maps, the Hazardous Substances Chapter and the Natural Hazards Chapter have been made to reflect this amendment, refer Appendix 1 .
Amendment to the name of the Fault Hazard (Subdivision) Overlay: Fault Hazard (Subdivision) <u>Assessment</u> Overlay	I agree with this change as it more accurately reflects the nature of this overlay. Changes to the District Plan Maps, the Subdivision Chapter and the Natural Hazards Chapter have been made to reflect this amendment, refer Appendix 1 .

14. The changes I am recommending arising from Ms Tutty's evidence are set out in **Appendix 1**.

Recommendation

15. I recommend, for the reasons given above, that:

- The definition for Critical Infrastructure is amended to include telecommunications networks that are not provided for under the NESTF;

- The naming of the overlays is amended in the District Plan Maps as follows: Liquefaction Assessment, Fault Hazard (Critical Infrastructure) Assessment and Fault Hazard (Subdivision) Assessment Overlays;
- The matters of discretion in Earthworks Chapter EW-R3 are amended to include ‘flooding’;
- Consequential amendments are made to every instance where the Liquefaction, Fault Hazard (Critical Infrastructure) and Fault Hazard (Subdivision) Assessment Overlays are referred to in the Mackenzie District Plan.

16. The recommended amendments are set out in **Appendix 1**.

17. The scale of the changes does not require a s32AA evaluation because they are minor changes, and the changes do not alter the general intent of the provisions.

4. Opuha Water Limited

Natural Hazard Chapter – Rule NH-R5 - Natural Hazard Mitigation Works

18. The evidence of Ms Crossman on behalf of Opuha Water Limited (OWL) sought an amendment to Natural Hazards Chapter rule NH-R5 which manages the maintenance, operation, upgrading and development of new natural hazard mitigation works. Ms Crossman sought that an additional clause be added to the permitted activity rule to provide for *“the maintenance, operation, upgrade, or new natural hazard mitigation works undertaken in accordance with a rule in the Canterbury Land and Water Regional Plan or a resource consent and/or approval granted by the Canterbury Regional Council”*⁴ as a permitted activity. Ms Crossman also sought an amendment to discretionary activity NH-R5.5 to ensure that natural hazard mitigation works that are permitted under the Canterbury Land and Water Plan (CLWP) or have resource consent from ECan, are exempt from this rule.

19. In her Supplementary Statement, Ms Crossman provided responses to questions from the Panel, which assisted to understand the nature and scale of the natural hazard mitigation works undertaken by OWL, and the concerns they have with a possible duplication of rule NH-R5 with rules in the CLWP.

20. Following receipt of Ms Crossman’s Supplementary Statement, the Panel sought responses to the following questions from Ms Justice:

- a. Is rule NH-R5 intended to address RMA s9 matters outside the beds or lakes and rivers so as to avoid duplicating the RMA s13, 14 and 15 functions of CRC within the beds of lakes and rivers?
- b. If the answer is NO, what is the justification for duplicating CRC’s role?
- c. If the answer is YES, should that be made clear in rule NH-R5?

⁴ Evidence of Ms Crossman, 16 May 2025, paragraph 2.3

21. Response: Yes, rule NH-R5 is intended to address RMA s9 matters “Restrictions on the Use of Land”, and the rule is not intended to apply to beds of lakes and rivers, which are activities addressed in s13 of the RMA, that are managed by rules in regional plans.
22. In order to make it clear to plan users that NH-R5 does not apply to activities in, on, under, or over the bed of a river or lake, I recommend that a note is included within the introduction section of the Natural Hazards Chapter that states: *This chapter does not apply to earthworks within the beds of lakes and rivers, which are managed under the regional planning framework.* I also recommend that a similar note is added to the Introduction of the Earthworks Chapter. Recommended wording for the note is set out in **Appendix 1**. I do not consider that the note should be included within the Rule NH-R5 because this may be interpreted to suggest that, because other rules in the MDP do not have a corresponding note, then the other rules do apply to the beds of lakes and rivers.
23. I do not consider that the amendment to rule NH-R5 sought by Ms Crossman is necessary, because NH-R5 will not apply to the beds of rivers and lakes and will therefore not duplicate rules in the CLWP. However, the changes I have recommended to NH-R5 in relation to the supplementary statement by Ms Irvine changes the activity status for upgrades to and for new natural hazard mitigation works, when the works are undertaken by parties other than regional and territorial authorities, from discretionary to restricted discretionary activities. This change may address the submission by OWL in part.

Recommendation

24. I recommend, for the reasons given above, that:
 - The Introduction of the Natural Hazards Chapter and the Earthworks Chapter is amended to include an explanatory note to clarify that the rules do not apply to activities in, on, under, or over the bed of a river or lake.
25. The recommended amendments are set out in **Appendix 1**.
26. The scale of change does not require a s32AA evaluation because it is a minor change, and the change does not alter the general intent of this rule.

5. Meridian

27. Ms Ruston sought changes to the Hydro Inundation Chapter, the Natural Hazards Chapter and the Hazardous Substances Chapter in her evidence. In relation to the other changes sought by Ms Ruston, I have set out the changes sought in Table 3 below, along with a discussion of the changes I agree with and those that I do not agree with.
28. The changes sought by Ms Ruston to the Airport Special Purpose Zone (AIRPZ) Chapter are also addressed by Mr Boyes in his Reply Report. Mr Boyes has recommended that the rules suggested by Ms Ruston for the AIRPZ would be more appropriate in the Hydro Inundation Chapter, and Mr Boyes has drafted suitable rules for this chapter, which are set out in his reply report. ‘Staff Accommodation’ and ‘Aviation Related Visitor Accommodation’ are provided for

as permitted activities in the AIRPZ where the site is also within the Hydro Inundation Hazard Overlay, provided rules AIRPZ-R4 and AIRPZ-R5 (respectively) are complied with. Where AIRPZ-R4/R5 is not complied with, the activity status defaults to Discretionary (in the notified AIRPZ Chapter). Ms Ruston has sought that the activity status be changed from Discretionary to Non-Complying for these two activities via amendments to rules AIRPZ-R5 and AIRPZ-R5. I consider that changing the activity status for 'Staff Accommodation' and 'Aviation Related Visitor Accommodation' in the AIRSZ, where the site is also within the Hydro Inundation Hazard Overlay to Non-Complying is appropriate, as this aligns with the activity status for visitor accommodation in the same zone and overlay (in HI-R3). Ms Ruston has also sought that the activity status for Residential Units/Activities that are not permitted activities in the AIRPZ (where also in the Hydro Inundation Hazard Overlay) is changed from Discretionary to Non-complying (via an amendment to AIRPZ-R3). I do not consider that this change is necessary, as this change does not align with the activity status for Residential Units in the Hydro Inundation Chapter, as set out in rules HI-R1 and HI-R2. The recommended amendments to the Hydro Inundation Chapter, are set out in **Appendix 1** of this reply report.

Table 33: Assessment of changes sought by Ms Ruston

Amendments sought by Ms Ruston (in red)	Assessment
Amendment sought to rule HI-R1	<p>Addressed in JWS. The provisions that are agreed by all parties subject to the JWS have been included in the updated Hydro Inundation Chapter attached in Appendix 1.</p> <p>I recommend a minor correction to the JWS version of NH-S1(b) to ensure consistency with the terminology used in this standard. My recommended amendment is shown with double underline below:</p> <p class="list-item-l1">b. <u>The building and/or activity is located on land that is within a Low Hydro Inundation Hazard Area where "Low Hydro Inundation Hazard Area" means those areas that result from any dam breach that are subject to inundation where the water depth (metres) x velocity (metres per second) is less than or equal to 1, or where depths are less than 0.5 metres; and</u></p>

	<p>In addition to the re-drafted rule HI-R1 which is set out in Appendix 1, Meridian has produced a plan that shows which parts of the Hydro Inundation Hazard Overlay are within areas affected by Genesis's infrastructure, and those affected by Meridian's infrastructure. This Plan is intended to sit outside of the Mackenzie District Plan and will be used to assist Mackenzie District Council planners. It will be used to direct people using rule HI-R1 to the appropriate hydro electricity generation asset owner to complete the Hydro Inundation Hazard Assessment required in rule HI-R1 and NH-S1. This plan is attached to this reply in Appendix 3. Contact details for the respective hydro electricity generation asset owners will also be provided to Council.</p>
New rule HI-R1A	<p>Addressed in JWS. The provisions that are agreed by all parties subject to the JWS have been included in the updated HI Chapter attached in Appendix 1.</p>
<p>Amendment sought to objective HAZS-O2:</p> <p>HASZ-O2 Sensitive Activities <u>Reverse Sensitivity Effects on Major Hazard Facilities</u></p> <p>Reverse sensitivity effects of sensitive activities on existing major hazard facilities are managed, and unacceptable risks to the sensitive activity are avoided.</p>	<p>I agree in part with Ms Ruston that objective HAZS-O2 could be more clearly worded. I have discussed this matter in the Section 42A Reporting Officers' Response to Hearings Panel Questions, dated 20 May 2025, row 97. Objective NH-O2 seeks to protect existing (once they are established) major hazard facilities from reverse sensitivity effects resulting from sensitive activities locating too close to the major hazard facility.</p> <p>To improve the clarity of this objective, I recommend the following amendment to the objective title to assist with its interpretation:</p> <p>HASZ-O2 <u>Sensitive Activities in proximity to Major Hazard Facilities</u></p>

	<p><i>Reverse sensitivity effects of sensitive activities on existing major hazard facilities are managed, and unacceptable risks to the sensitive activity are avoided.</i></p>
<p>Amendments sought to objective NH-O2:</p> <p>NH-O2 Critical Infrastructure, Major Hazard Facilities and Specific Buildings in Natural Hazard Overlays</p> <ol style="list-style-type: none"> 1. Critical infrastructure is <u>not</u> located <u>in areas of high natural hazard risk unless there is a functional need or operational need to be at the location;</u> 2. <u>If there is a functional need or operational need to be within areas of high natural hazard risk the critical infrastructure must, as far as practicable, be and</u> designed to be <u>as</u> resilient to the effects of natural hazards <u>as-possible, while achieving the objectives of the critical infrastructure;</u> <p>...</p>	<p>I agree with Ms Ruston that the amendment to objective NH-O2 is appropriate. I agree that the word “possible” should be replaced with “as far as practicable”, because it may be possible to design to a certain level of resilience; however associated costs may prohibit the critical infrastructure from being able to be established. Use of the word ‘practicable’ ensures that consideration of costs is factored into implementation of this objective.</p>
<p>Amendments sought to policy NH-P8:</p> <p>NH-P8 Fault Hazard Risk to Critical Infrastructure and Specific Buildings</p> <ol style="list-style-type: none"> 1. Critical Infrastructure only locates within the Fault Hazard (Critical Infrastructure) Overlay where: <ol style="list-style-type: none"> a) there is a functional need or operational need to locate in that environment; and 	<p>I agree with the amendment to policy NH-P8.2 sought by Ms Ruston as the amendment assists to clarify the outcome sought by the policy.</p>

<p>b) the infrastructure is designed to be resilient to surface fault rupture hazard as far as is practicable.</p> <p>2. Critical infrastructure, major hazard facilities, education facilities or visitor accommodation activities only locate within the Fault Hazard (Critical Infrastructure) Overlay where:</p> <p>a) the building can be designed to manage the risks <u>resulting from a surface fault rupture hazard</u> to people and property, and buildings on adjoining sites, to an acceptable level.</p>	
<p>Amendments sought to the definition of Critical Infrastructure:</p> <p><u>critical infrastructure (in relation to Natural Hazards Chapter only)</u></p> <p>Those necessary facilities, services, and installations <u>and infrastructure which are critical or of significance to either New Zealand, Canterbury, or Mackenzie, which if interrupted, would have a significant effect on communities within the District, Canterbury region or wider populations and which would require immediate reinstatement.</u> <u>This includes any structures that support, protect or form part of critical infrastructure.</u> Critical infrastructure includes:...</p>	<p>I understand that Ms Ruston has requested the deletion of the qualifier '<u>(in relation to Natural Hazards Chapter only)</u>' because she has sought changes to the Notable Trees Chapter that would include reference to 'critical infrastructure'. I understand that Ms Spalding, who is the s42A author for the Notable Trees Chapter, is not recommending that the amendment to that chapter is accepted. I also consider that the qualifier is useful to ensure the definitions that apply to other groups of infrastructure, for instance 'regionally significant infrastructure' are not confused with 'critical infrastructure', or the implementation of the Utilities Chapter. Therefore, I do not consider that this amendment to the definition is required.</p> <p>I do not consider the inclusion of the sentence '<u>This includes any structures that support, protect or form part of critical infrastructure</u>' is necessary. No examples of the types of structures that are currently, in Ms Ruston's view, excluded from the definition that would be included if this sentence was added, have been provided. I consider that any structures that 'form part</p>

	of critical infrastructure' will already be captured by the definition. It is not clear to me what types of structures would 'support or protect' critical infrastructure, that are not already part of the critical infrastructure. In my view the s42A report version of the definition is clear, and the additional sentence is not required.
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29. The changes I am recommending to the Hydro Inundation Chapter, the Natural Hazards Chapter and the Hazardous Substances Chapter are set out **Appendix 1**.

Recommendation

30. I recommend, for the reasons given above, that:

- Rule HI-R1 is redrafted to be more user friendly, and a new rule included is the Hydro Inundation Chapter to manage camping grounds and community facilities within the Hydro Inundation Hazard Overlay and where they are within the GRUZ;
- Objective HASZ-O2 is amended to clarify the outcome sought by this objective;
- Objective NH-O2 is amended to change the word 'possible' to 'practicable';
- Policy NH-P8 is amended to clarify the types of risks that are managed via this policy.

31. The recommended amendments are set out in **Appendix 1**.

32. The scale of changes to HAZS-O2, NH-O2 and NH-P8 do not require a s32AA evaluation because it is a minor change, and the change does not alter the general intent.

33. In terms of s32AA, the changes I have recommended to HI-R1 and the additional rule HI-R1A, which apply in the GRUZ, are a more appropriate way to give effect to the purpose of the RMA, in particular section 6(h) which requires the management of significant risks from natural hazards, and the NPS-REG. The changes to rule HI-R1 will make this rule easier to implement. The addition of the clause in rule HI-R1, requiring consideration of the Population at Risk, reflects the fact that the Potential Impact Classification for some parts of the hydro electricity generation schemes has changed since the hydro inundation provisions were included in the Mackenzie District Plan. The additional clause will ensure possible reverse sensitivity effects on the scheme will continue to be managed. The addition of a new Hydro Inundation Chapter rule (HI-R1A) that applies in the GRUZ is limited in scope, and will manage risks to people via the management of new camping grounds and community facilities, where located within the hydro inundation hazard overlay.

6. Question from Panel

Hydro Inundation Hazard Overlay - note

34. The Panel has requested that I consider wording for a note to be attached to the Hydro Inundation Hazard Overlay, in the Mackenzie District Plan Maps.
35. I consider that a note may be useful to assist with understanding the nature of this overlay. I suggest the following sentence is added to the Hydro Inundation Hazard Overlay in the District Plan map key:

Hydro Inundation Hazard Overlay — represents areas that could be flooded in the unlikely event of failure of any of the dams and canals associated with the Waitaki Power Scheme. While the likelihood of a structural failure of a dam or canal is very low, the consequences could be serious for people, property and the environment.

36. The suggested words are taken from the evidence of Mr W Veale of Damwatch, paragraphs 49 and 47.⁵

Recommendation

37. I recommend, for the reasons given above, that:
 - A note is included in the District Plan maps key to provide more detail about the nature of the Hydro Inundation Hazard Overlay.
38. The recommended amendment is set out in **Appendix 1**.
39. The scale of change does not require a s32AA evaluation because it is a minor change, and the change does not alter the general intent of the Hydro Inundation Hazard Overlay.

⁵ Statement of Evidence of William Veale on behalf of Meridian Energy, dated 9 May 2025.