

**BEFORE THE INDEPENDENT HEARINGS PANELS APPOINTED TO HEAR AND MAKE  
RECOMMENDATIONS ON SUBMISSIONS AND FURTHER SUBMISSIONS ON THE NATURAL HAZARDS  
CHAPTER OF THE TE TAI POUTINI PLAN**

**UNDER**

Schedule 1 of the Resource  
Management Act 1991 (the Act)

**IN THE MATTER OF**

Hearing Submissions and Further  
Submissions on the Natural  
Hazards Chapter of the Te Tai o  
Poutini Plan

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**RIGHT OF REPLY OF  
JAMES GARY BEBAN  
NATURAL HAZARD CHAPTER  
13 MARCH 2025**

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## **INTRODUCTION**

- 1 My name is James Gary Beban and I am the co-author of the s42A report and supplementary evidence pertaining to the Natural Hazard Chapter.
- 2 This right of reply has been prepared in response to the evidence presented by submitters and the questions from the Commissioners at the Natural Hazards Chapter hearings held in October 2024 in Franz Josef, Westport and Hokitika.
- 3 This right of reply has been delayed as there was a need to complete the recommendations on the Coastal Hazards Variation (Variation 2) prior to completing the right of reply for the Natural Hazards Chapter. This is due to a number of the answers to the questions asked by the Commissioners being influenced by the submissions received and the corresponding recommendations on these submissions in relation to the Coastal Hazards Variation.
- 4 For the purposes of this right of reply, the responses will be themed around topics, as opposed to the order the questions were asked in. This is to assist with the ease of reading and to ensure a coordinated response to the various issues.

## **SCOPE**

- 5 We have been asked to confirm whether there is scope for the recommended changes that we have suggested to the Natural Hazards Chapter. We acknowledge that there are a substantial number of changes recommended. When making these recommendations, scope and natural justice is at the forefront of our minds.
- 6 In terms of scope, we believe there is sufficient scope for the recommended changes as there is a wide range of submissions on this chapter seeking:
  - Broad changes to simplify and make the chapter more workable (e.g. West Coast Regional Council, Buller District Council);
  - Changes to how hazards are mapped (e.g. EQC); and
  - Detailed changes to the wording of provisions.
- 7 In Appendix 1 we have attached a table that shows the scope of the submissions for the recommended changes we have made to the chapter.
- 8 While the recommended changes are extensive, they largely relate to the following:
  - Removal of natural hazards overlays and associated provisions from the plan;
  - Simplification of the frameworks (particularly in relation to fault hazards); and
  - Using consistent terms throughout the chapter to assist plan users.

In terms of natural justice, when recommending these changes, we have been careful to ensure that the proposed rule framework maintains or lessens the regulatory burden on property owners. For the vast majority of the rules, the regulatory burden is the same or less than what was notified. There are

instances, where we are of the view that new maps need to be added to the District Plan, particularly in relation to flood hazards and climate change. However, in the interest of natural justice we have not included these maps within our evidence in chief and have rather made a recommendation for a future plan change to address these matters.

9           However, there is one rule where the regulatory burden has increased. In the Flood Severe overlay, it is recommended that the activity status for new industrial and commercial activities is elevated from a Restricted Discretionary Activity to Non-Complying Activity. This change is recommended in direct response to the EQC submission which requested that the activity status for these activities be increased. This elevation is consistent with the general risk-based framework.

#### **FUTURE PLAN CHANGES**

10          During the Franz Josef hearing, it was requested that we provide a list of the future plan changes as recommended in the s42A report. The future plan changes we recommended are as follows:

- A plan change that updates the District Plan maps to ensure that climate change predictions are included in the Flood Hazard Overlays and that the threshold of water depth between the Flood Susceptibility Overlay and the Flood Severe Overlay is reviewed and potentially reduced from the current 2m of depth to 1.2m or less; and
- A plan change that recommends the inclusion of the GNS Science regionwide Slope Instability Risk assessment into the District Plan maps and introduces associated objectives, policies and rules.

11          Further below in this right of reply we are recommending one further plan change that would review how Natural Hazard Mitigation Structures are provided for in the Coastal Environment. Under the Coastal Environment Chapter any Natural Hazard Mitigation Structures that are located outside of areas of High or Outstanding Coastal Character are permitted activities. It is our view that there could be a misalignment in this approach with the New Zealand Coastal Policy Statement 2010, particularly in regards to hard engineering measures, and we therefore recommend further review.

#### **NEW ZEALAND COASTAL POLICY STATEMENT AND THE REGIONAL POLICY STATEMENT**

12          Commissioner McGarry has requested that we review the Regional Policy Statement to see if it gives effect to the New Zealand Coastal Policy Statement (NZCPS) 2010 in respect to natural hazards and hazard mitigation structures. I have undertaken this review and I am of the view that the RPS does not give full effect to the NZCPS. My rationale is as follows:

- There is no reference to risk within the policies and rather there is a focus on avoiding or mitigating adverse effects and on avoiding the need for protection work. The management of risk as required by the NZCPS is very different to the management of effects under the RPS;

- There is no reference to sea level rise or the changing impacts from natural hazards as a result of sea level rise in the RPS;
- The RPS does not provide any guidance on how to identify coastal hazards at a regional or local level;
- There is no discouragement of hard engineering structures within the coastal environment, or a preference towards soft engineering or green infrastructure measures;
- The RPS does not provide direction around how to ensure risk to peoples lives, the community and buildings does not increase from coastal hazards;
- The RPS does not provide any differentiation around how to treat existing developed areas (Policy 27 of the NZCPS) vs undeveloped areas (Policy 25 of the NZCPS); and
- There is no direction in the RPS policies around the rezoning of land, particularly for those areas at risk from coastal hazards.

**DEFINITIONS**

13 During the hearing, it was requested that the definitions of Hazard Sensitive Activity, Potentially Hazard Sensitive Activity and Less Hazard Sensitive Activity be reviewed to make sure that the activities that fall within these definitions reflect the activities and definitions used within the District Plan. I agree that the definitions of Hazard Sensitive Activity, Potentially Hazard Sensitive Activity and Less Hazard Sensitive Activity should use the same terms and refer to the same activities that are used throughout the District Plan. I therefore suggest the amendments to the definitions as provided below.

14 During the Westport Hearing, iwi raised concerns about Marae being individually listed in the definition of Hazard Sensitive Activities since it is already included in the definition of Community Facility. We agree that Marae by definition is included in the definition of Community Facility and therefore can be removed as a standalone item in the definition of Hazard Sensitive Activity. This change has been included in the revised definitions below.

<u>HAZARD SENSITIVE ACTIVITY</u>	<p><u>means buildings accommodating:</u></p> <p>a. <u>Residential Activity, including residential units, respite care, and rehabilitation housing</u></p> <p>b. <u>Visitor Accommodation and Worker Accommodation</u></p> <p>c. <u>Retirement Home Retirement Village</u></p> <p>d. <u>Healthcare Facility Healthcare and Medical Activities</u></p> <p>e. <u>Community Facility</u></p> <p>f. <u>Educational Facility</u></p>
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	<p><del>g.</del> <u>Marae</u></p> <p><del>hg.</del> <u>Critical Response Facility</u></p> <p><del>i.</del> <u>Visitor Accommodation</u></p> <p><del>ih.</del> <u>Sleep Outs</u></p> <p><del>ki.</del> <u>Childcare services, including kohanga reo</u></p>
<p><u>LESS HAZARD SENSITIVE ACTIVITY</u></p>	<p>means:</p> <p>a. <u>Buildings used for non-habitable purposes</u></p> <p>b. <u>Fences</u></p> <p>c. <u>Minor storage facilities</u></p> <p>d. <u>Parks facilities</u></p> <p>e. <u>Parks furniture</u></p> <p>f. <u>Buildings associated with primary production, including intensive indoor primary production</u></p> <p>g. <u>West Coast Regional Council monitoring structures</u></p> <p>h. <u>Buildings associated with port activities</u></p> <p>i. <u>Buildings associated with quarrying and mining activities</u></p> <p>j. <u>Decks</u></p> <p>k. <u>Buildings and structures associated with any other activity that is not identified as a Hazard Sensitive Activity or Potentially Hazard Sensitive Activity</u></p>
<p><u>POTENTIALLY HAZARD SENSITIVE ACTIVITY</u></p>	<p>means buildings accommodating:</p> <p>a. <u>Commercial Activity</u></p> <p><del>b.</del> <u>Commercial Service Activity</u></p> <p><del>eb.</del> <u>Crematoriums and Funeral Homes</u></p> <p><del>ec.</del> <u>Entertainment Facility</u></p> <p><del>ed.</del> <u>Food and Beverage Activity</u></p> <p><del>fe.</del> <u>Industrial Activities- Activity</u></p> <p><del>gf.</del> <u>Major Sports Facility Stadium Activity</u></p> <p><del>h.</del> <u>Offices</u></p> <p><del>ig.</del> <u>Retail Activities- Activity</u></p> <p><del>ih.</del> <u>Rural Industrial Activities</u></p>

**CHAPTER OVERVIEW**

- 15 During the hearing Mr Kennedy presented evidence and sought that a paragraph was added to the preamble to the natural hazards chapter that states:

*There is a considerable network of energy activities and infrastructure, including critical infrastructure, on the West Coast that services the communities spread throughout the region and into neighbouring regions. Such activities have been, and will continue to be, developed taking into account the local conditions. This includes consideration of, and design for, natural hazard occurrence. Given the topography and conditions on the West Coast practical risk management solutions are required to ensure maintenance and enhancement of the energy supply to the communities. A risk-based approach ...".*

- 16 Our rationale for not supporting this submission point is outlined in paragraph 194 of the s42A report, and I remain of the view that this rationale is still valid having heard Mr Kennedy’s evidence.

**OBJECTIVE 3**

- 17 Within his evidence presented at the hearing, Mr Kennedy sought that the word ‘other’ be added to NH-O3. We note that this change is not sought in Mr Kennedy’s submission. However, we consider that the requested change is within scope since it is well aligned with the change to the wording of NH-O3 requested by Manawa Energy in their submission (S438.060). I have considered both options and on balance prefer the wording proposed by Mr Kennedy. My rationale is that it is unlikely that new regionally significant infrastructure could ever meet the requirement of not increasing the risk to itself when located within the Severe Natural Hazard Overlay and therefore the initially proposed test was too onerous. Adding the word ‘other’ would change the focus of the objective to third party buildings. However, since we consider that this change should only refer to buildings, we recommend for the change to read “...*the risk to people and other buildings*” rather than “... *the risk to other people and buildings*” as proposed by Mr Kennedy. I therefore recommend the following change to Objective NH-O3:

<b>NH - O3</b>	To only locate <del>critical-regionally significant</del> infrastructure within <del>areas-of significant natural hazard-risk</del> <u>the Severe Natural Hazard Overlay</u> where there is <del>no reasonable alternative</del> <u>an operational or functional need to be located within this overlay</u> , and to design infrastructure so as not to <del>exacerbate natural hazard</del> <u>increase the</u> risk to people and <del>property</del> <u>other buildings</u> .
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**SECTION 85(2) AND THE FLOOD SEVERE AND EARTHQUAKE SEVERE OVERLAYS**

- 18 Upon reviewing the proposed provisions pertaining to the Earthquake Severe Overlay and Flood Severe Overlay, it has become apparent that there is an issue around reasonable use

of vacant sites within these overlays. Policy NH-R6 contains an ‘and’ test, which means all limbs of the policies needs to be met. This means that for any activity to be established on a site there needs to be an operational or functional need. The establishment of a residential dwelling on an existing vacant site would not meet this test. As such, this provides a very difficult pathway for owners of these properties to obtain a resource consent for what would be an anticipated use of the site, especially given the non-complying activity status of the rule.

19 In my view this has the potential to create an issue with Section 85(2) of the Act, in that the proposed framework could prevent the reasonable use of land and could thereby place an unfair and unreasonable burden on any person who has an interest in the land.

20 My view is that instead of addressing this issue through a change to NH-P6 and the subsequent rule framework, this issue is best addressed through a new policy and a new rule. The recommended wording of the new policy and rule is outlined below, noting that the renaming of the Coastal Hazards Overlays as recommended by the s42A report for Variation 2 is adopted for consistency:

<u><b>NH-PXX</b></u>	<p><u>Only allow for the construction of a single residential unit on an existing vacant site located within the Flood Severe Overlay, Earthquake Severe Overlay or Coastal Hazard Erosion and Inundation Overlay, where:</u></p> <ol style="list-style-type: none"> <li><u>1. Locating a residential unit on a site outside of the Flood Severe Overlay, Earthquake Severe Overlay or Coastal Hazard Erosion and Inundation Overlay is not a practicable option; and</u></li> <li><u>2. Mitigation measures are incorporated into the building to minimise the risk to life of the occupants and the structural integrity of the building in the event of a natural hazard to which the overlay relates.</u></li> </ol>
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<u><b>Restricted Discretionary Activities</b></u>	
<u><b>NH-RXX</b></u>	<u><b>The construction of buildings that will contain a residential unit within the Flood Severe Overlay, Earthquake Severe Overlay or Coastal Hazard Erosion and Inundation Overlay</b></u>

<p><b><u>Activity Status Restricted Discretionary</u></b></p> <p><u>Where:</u></p> <p>1. <u>It involves the construction of one residential unit on an existing vacant site that existed prior to 1 July 2022 where the residential unit is located within the Flood Severe Overlay, Earthquake Severe Overlay or Coastal Hazard Erosion and Inundation Overlay.</u></p> <p><b><u>Discretion is restricted to:</u></b></p> <p>a. <u>The location of the residential unit on the site and whether there are any other practicable locations on the site to locate the residential unit outside of the natural hazard overlay;</u></p> <p>b. <u>The mitigation measures incorporated into the residential unit to minimise the risk to life to the occupants and maintain the structural integrity of the building from the natural hazard which relates to the overlay; and</u></p> <p>c. <u>Within the Flood Severe Overlay and the Coastal Hazard Erosion and Inundation Overlay the incorporation of mitigation measures into the residential unit to allow for the building to be relocated due to the future risk presented to the building from natural hazards.</u></p>	<p><b><u>Activity status where compliance not achieved:</u></b></p> <p><u>Non-complying</u></p>
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## **FAULT HAZARD OVERLAY**

- 21 There was a significant amount of discussion in the hearing around the position of the Fault Hazard Overlay in the vicinity of 2261 Lake Brunner Road. The main areas of debate were in relation to the following topics:
- Location of the Fault Hazard Overlay; and
  - Consistency with the MfE Active Fault Guidelines 2003.
- 22 The location of the Fault Hazard Overlay on the property was disputed by Mr Harwood. Dr Robert Langridge of GNS Science outlined the methodology for determining the position of



the overlay, including in the location of 2261 Lake Brunner Road, first within his evidence and when appearing before the Commissioners.

- 23 Having heard the evidence of both Mr Harwood and Dr Langridge I consider that the mapping of the Fault Hazard Overlay in the vicinity of 2261 Lake Brunner Road aligns with the MfE Active Fault Guidelines. I did not hear any evidence which would justify a change of the location of the Fault Hazard Overlay from a planning perspective.
- 24 Mr Harwood suggested that there should be individual geotechnical and seismology testing within individual sites to determine the location of fault lines, prior to the overlays being placed within the District Plan. I am not aware of any Council that follows this methodology and undertakes site specific testing to determine the location of the Fault Hazard Overlays. The cost and time required for this level of testing would be prohibitive. In my experience, other Councils rely on experts (such as GNS Science) that identify the position of fault lines from a range of sources including the interpretation of LIDAR data and the findings of research projects and any individual geotechnical assessments that the Council will hold. This process is consistent with the approach undertaken on the West Coast and therefore I am of the view that the Fault Hazard Overlays are not invalidated due to there not being on-site testing.
- 25 I would also like to reiterate that the recommended revised objective, policy and rule framework more closely aligns with the MfE Active Fault Guidelines than what was notified in the Proposed District Plan and is consistent with other frameworks that are used around the country.
- 26 On this basis, I am not recommending any further changes to the provisions pertaining to active faults in response to the hearing evidence presented for 2261 Lake Brunner Road.

#### **FLOOD HAZARD PROVISIONS**

- 27 Mr O'Toole raised concerns and contested the need for minimum floor levels in Westport, given the approved flood hazard scheme and the anticipated construction that will provide protection to this town.
- 28 We understand that the construction of this scheme is still 3 to 5 years away from being completed. As such, until this scheme is completed, there is still a risk to new development from flooding, and therefore it is important that new development accounts for the flood risk until such a time that the Westport Flood Scheme is finalised. Once the Westport Flood Scheme has been constructed, it would be appropriate for the Council to remodel the flood hazard and to update the flood hazard maps via a plan change to ensure there is not undue regulatory burden on properties in respect to minimum floor levels or designing for a flood inundation depth that may have been alleviated by the construction of the flood hazard scheme.
- 29 Mr O'Toole further sought to have exclusions provided for recession planes, when increasing minimum floor height of residential dwellings in response to flood levels. We have addressed this issue within paragraph 214 of our s42A report, and we remain of the view that this issue

is best addressed through a separate review of the Residential Chapter (due to the implications on shading levels, privacy and overlooking etc.), rather than through the Natural Hazards Chapter.

30 At the hearing the Snodgrass Road submitters sought to remove any references to the Natural Hazard Overlays from Objective NH-O1 and to delete Objective NH-O2. We do not support this change for the following reasons:

- NH-O1 relates to the Severe Natural Hazard Overlays, which is where the risk to people and property is at its greatest. This objective sets a test of ensuring that the existing risk is maintained or reduced over time. This is a high threshold to achieve for development and this is supported by the policy and rule framework that seeks to discourage development in these areas. NH-O2 relates to any other Natural Hazard Overlays and sets a lower test for future development, where there is a requirement for projects to minimise (which means to reduce as far as practicable) the risk arising from new developments. If NH-O2 was removed, then it would set an unrealistically high test regarding risk reduction for new development in all natural hazard overlays.
- We also note that the vast majority of the properties within the Snodgrass Road area are not impacted by a Severe Natural Hazard Overlay (which is covered by Objective 1). The main property in Snodgrass Road that is impacted by a Severe Natural Hazard Overlay (being the Flood Severe Overlay) is 54 Snodgrass Road, with approximately 40% - 50% of the property impacted by this overlay. As such, for those properties in Snodgrass Road not impacted by a Severe Natural Hazard Overlay, any resource consent application would be assessed under NH-O2 and the relating policies and rules.

31 The Snodgrass Road submitters further sought to amend NH-P6 (formally NH-P10) by removing the term avoid and the reference to the overlays. For similar reasons as outlined above in relation to NH-O1 and NH-O2 I do not support this change. I also note that the vast majority of Snodgrass Road is within the Westport Hazard Overlay and therefore is covered by NH-P9 (formerly NH-P13).

32 Within his evidence, Mr Kennedy sought further changes to NH-P6 (formally NH-P10). Specifically he sought to remove the reference to Regionally Significant Infrastructure (RSI) from limb (b) and place it within limb (c). I partially support this change, in that I agree that Regionally Significant Infrastructure should be included in limb (c) but I do not agree it should be removed from limb (b). My rationale for this is as follows:

- The definition of Hazard Sensitive Activities includes Critical Response Facilities, which in turn include a number of activities that are Regionally Significant Infrastructure. As such, there needs to be some consideration of the impact of locating these activities within a Severe Natural Hazard Overlay, and this policy provides the guidance to assist decision makers on this matter.

- The absence of Regionally Significant Infrastructure from limb (c) is an omission. It is important that development within the Flood Severe Overlay does not increase the risk to Regionally Significant Infrastructure and this needs to be reflected within the policy.

33 On this basis, I proposed that NH-P6 (formerly NH-P10) is amended as follows:

<b>NH - P106</b>	<p>Avoid <u>subdivision, use and development</u> <del>of</del> <u>for Potentially Hazard Sensitive and Hazard s</u><del>Sensitive a</del>Activities <u>within the Coastal Severe Hazard and Flood Severe and Earthquake Severe Hazard overlays unless it can be demonstrated that <del>where</del>:</u></p> <p>a. The <u>activity-subdivision, use or development</u> has an operational <u>and or</u> functional need to locate within the hazard area; and</p> <p>b. <del>That the</del> <u>activity-subdivision, use or development</u> incorporates mitigation <u>measures that minimise the of risk to life, property and the environment, and there is significant public or environmental benefit in doing so</u> <u>people, buildings and regionally significant infrastructure; and</u></p> <p>c. <u>In the Flood Severe Overlay the risk to people, and buildings and regionally significant infrastructure on adjacent sites is not increased as a result of the activity proceeding.</u></p>
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34 Mr Kennedy sought further changes to NH-P8 (formerly NH-P12) that would provide further clarification to the term ‘on-site infrastructure’ through adding either on-site services or ancillary infrastructure or services. The rationale for the change is that if plan users were to look at the definition of infrastructure, then this does not capture all the services used to service a subdivision/building. While I appreciate Mr Kennedy’s point on this matter, I am not in agreement with him. In my experience, on-site infrastructure tends to have the plain understanding of water, wastewater, stormwater, electricity and telecommunications. On this basis, I am of the view that providing further clarification to the term on-site infrastructure in the context of NH-P8 (formerly NH-P12) is not needed.

35 The Snodgrass Road submitters sought to have additions up to 25m<sup>2</sup> – 50m<sup>2</sup> permitted without needing to comply with the minimum floor level. I do not support this change. The proposed rule framework that applies to Westport Flood Hazard Overlay allows for additions of any scale as a permitted activity, providing the minimum floor level is met. It is important that future additions are designed to address the inundation levels associated with the Westport Flood Hazard Overlay, otherwise there will be an unacceptable increase in risk from inundation over time. I also note the evidence from the Snodgrass Road submitters around the differing topography along the length of Snodgrass Road, which changes the risk to individual properties, with some sites having the potential for deeper inundation than others, which may have little or no inundation. In my view, the proposed permitted activity

rule provides the requested flexibility to address this issue since the required floor levels respond to the level of inundation - if properties have little or shallow inundation depths, then the minimum floor level requirements will be minimal. Conversely this permitted activity condition also provides more flexibility for when the water depths are greater. On this basis we do not recommend changing the permitted activity rule pertaining to the Westport Hazard Overlay.

36 The Snodgrass Road submitters sought further changes to NH-R1 to allow for easier reconstruction. In particular, the submitters sought to allow for reconstruction to occur within 5 years as opposed to the 3 years currently proposed within the rule. We have been asked to provide further discussion on whether 3 or 5 years would be more appropriate. This was also raised by Mr Kennedy in the context of a Alpine Fault earthquake.

37 We acknowledge the evidence from the submitters that it can take time to fix residential dwellings on the West Coast due to the smaller skill pool, and the time taken to sort insurance issues. However, when setting this timeframe, we relied on the recent experience from Buller District Council that the vast majority of the houses were fixed within 3 years of the Westport floods. Given the magnitude of this flood event, and the number of properties that were impacted, I am not convinced that 5 years is a more appropriate timeframe. However, to give some relief to the submitters and in recognition of the West Coast market (as well as the potential for much larger natural hazard events such as the Alpine Fault), I have recommended the period of time for which this rule applies is increased to 4 years after the natural hazard event. I further recommend changes to clarify that the 4 years apply from the date of the natural hazard event that gives rise to the damage to the building occurring.

38 I note the discussion from the Commissioners around this rule and whether the commencement date should be from when the site is cleared, given the case law around the Christchurch earthquake. I am uncomfortable with the clearance of the site being the trigger for the timeframes to start since the demolition and removal of remaining dwellings would not necessarily be recorded and there could be debate around the commencement time of this rule. To this effect, I believe the date of the natural hazard event is a much easier date for parties to understand.

39 I would also note that this rule does not remove existing use rights. This means that if a residential dwelling is demolished after the natural hazard event, then the existing use rights provisions would still apply - providing the dwelling was built to the same scale, form and intensity as what previously existed. As such, proposed rule NH-R1 does not conflict with Section 10 of the Resource Management Act.

40 In his evidence Mr Kennedy sought to amend the heading for Rule NH-R1 to refer to buildings for "Hazard Sensitive" and "Potentially Hazard Sensitive" activities, but not Less Hazard Sensitive Activities as these are a permitted activity in the areas covered by the rule. For the purposes of ensuring there is a consistency in the wording in the rules, I believe there is merit in making this change as it assists plan users with understanding what types of building this rule applies to. While this is technically a narrowing of scope in terms of the buildings

covered by this rule, I agree with Mr Kennedy that buildings containing Less Hazard Sensitive Activities are not disadvantaged by this change as they are a permitted activity in the Natural Hazards Overlays. As such, I have recommended that the title of the rule is changed and the term *Less Hazard Sensitive Activities* is removed.

41 The suggested amended wording to rule NH-R1 is as follows:

<p>NH- R1</p>	<p><del>Reconstruction and</del> Replacement of Lawfully Established Buildings for <del>Less Hazard Sensitive Activities</del>, <u>Potentially Hazard Sensitive Activities and Hazard Sensitive Activities</u> in <del>all</del> Natural Hazard Overlays <del>in all</del> Natural Hazard Overlays</p>	
<p><b>Activity Status Permitted</b></p> <p>Where:</p> <ol style="list-style-type: none"> <li>1. This is the <del>reconstruction</del>/replacement of a <del>building</del> lawfully established <u>building at the time of notification of the Plan</u>; and</li> <li>2. The building has been destroyed or substantially damaged due to fire, <del>natural disaster or Act of God</del> or a <u>natural hazard event and is located in the Flood Susceptibility, Earthquake Susceptibility, Land Instability, Hokitika Coastal or Westport Hazard Overlay; and</u></li> <li>3. <del>The destroyed/damaged building is reconstructed or replaced within 2 years in the Westport Hazard, Coastal Severe and Flood Severe Overlays</del> <u>If the building is to contain a Potentially Hazard Sensitive or Hazard Sensitive Activity and is within the Flood Susceptibility, Hokitika Coastal, or Westport Hazard Overlay, then the replacement building complies with the minimum floor level requirement of the specific Natural Hazard Overlay Rules; and</u></li> <li>4. The destroyed/damaged building is <del>reconstructed or</del> replaced within <del>5</del> <u>3</u> 4 years <u>after the date of the natural hazard event which caused the damage or destruction to the building</u> <del>in all other natural hazard overlays</del>; and</li> <li>5. <del>The reconstructed/replaced building is similar in character, intensity and scale to</del></li> </ol>	<p><b>Activity status where compliance not achieved:</b></p> <p>Refer to specific Natural Hazard Overlay Rules <u>where standards 1-3 are not complied with.</u></p> <p><u>Discretionary where standards 4 or 5 are not complied with.</u></p>	

<p><u>the building that it replaces. The gross floor area of the replacement building is the same, or smaller than the building that was destroyed.</u></p>	
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42 Mr Hofmans sought changes to NH-R5 (new) in respect to the Flood Susceptibility Overlay, where he sought the elevation from Permitted Activity status to Restricted Discretionary Activity status, as opposed to the currently proposed Discretionary Activity status. This issue was raised within the submissions and therefore there is scope to address this matter. Through the questioning, the Chair has asked for some matters of discretion to be put forward for this rule due to the succinct nature of the issues at hand. I have given this matter further consideration and I believe that it can be appropriate for this rule to elevate to a Restricted Discretionary Activity status as opposed to a Discretionary Activity status. My suggested revised wording for the rule is as follows:

<u>NH - R5</u>	<u>Additions to Existing Buildings and New Buildings containing Potentially Hazard Sensitive Activities or Hazard Sensitive Activities in the Flood Susceptibility Hazard Overlay</u>	
<p><b><u>Activity Status: Permitted</u></b></p> <p><u>Where:</u></p> <ol style="list-style-type: none"> <li><u>1. Any new buildings or additions for Potentially Hazard Sensitive Activities have a minimum finished floor level of 300mm above a 1% annual exceedance probability flood event.</u></li> <li><u>2. Any new buildings or additions for Hazard Sensitive Activities have a minimum finished floor level of 500mm above a 1% annual exceedance probability flood event.</u></li> </ol>	<p><b><u>Activity status where compliance not achieved:</u></b></p> <p><u>Discretionary</u></p> <p><u>Restricted Discretionary Activity</u></p> <p><b><u>Discretion is restricted to:</u></b></p> <ol style="list-style-type: none"> <li><u>1. The risk to people and buildings on the site from the 1% Annual Exceedance Probability Flood and the mitigation measures to reduce this risk.</u></li> <li><u>2. The risk to people and buildings on adjacent properties from the 1% Annual Exceedance Probability Flood, and the mitigation measures to reduce this risk.</u></li> <li><u>3. The impacts of the building on the conveyance of flood waters, including any potential for flood waters to be blocked or diverted onto adjacent properties.</u></li> </ol>	

## HARD ENGINEERING MEASURES

- 43 Mr Barr raised concerns that limb (d) of NH-P3 was unnecessarily narrowed through the inclusion of the terms “planned and funded”, with his rationale being, that emergency works undertaken in response to a natural hazard event may not be planned or funded, but are still needed and they should get the benefit of this policy. This was also raised by the Snodgrass Road submitters as they viewed these words as preventing the ability for alternative funding sources to be considered for hazard mitigation works.
- 44 I am in agreement with Mr Barr and the Snodgrass Road submitters on this point. The intent of the policy is to allow for natural hazard mitigation works to occur, when these are undertaken by a Statutory Agency or their nominated contractor, including works that may be needed in response to a natural hazard event. As such, I am in agreement to remove the words “planned and funded” from limb (d) of Policy NH-P3.
- 45 Mr Barr and the Snodgrass Road submitters further sought to have the term ‘*Natural Hazard Overlays*’ removed from policy limb (d) of NH-P3 and the Commissioners sought further clarification on this point. The impact of removing the term ‘*Natural Hazard Overlays*’ from this limb of the policy, is that the policy would then apply anywhere where natural hazard mitigation works is required. Through this process, Mrs Gunnell and myself have recommended to remove several natural hazard overlays, and we are also aware of research that shows there are additional natural hazard risks in respect to slope stability that are not currently shown in the District Plan. The reason we are recommending the removal of several natural hazard overlays is not because there is no risk from these hazards, but because the science that has been used to inform these overlays is not sufficiently robust for land-use planning purposes. Therefore the rule as currently worded would not support natural hazard mitigation works outside of identified overlays even if there is an acknowledged risk but that risk is not shown in the District Plan, simply due to a mapping methodology robustness issue. On this basis, I would recommend the term Natural Hazard Overlay is removed from this policy, to allow this this policy to be cast more widely and apply region wide to where there is a risk from natural hazards.
- 46 Commissioner McGarry asked Mr Barr whether the term acting on their behalf should be added after the words nominated contractor. Mr Barr was of the view that this would be helpful in terms of completing the policy. I am in agreement and I believe the addition of this term makes it clearer to plan users that nominated contractors can only be working on behalf of the Statutory Agency to get the benefit of this policy. On this basis, I have recommended for this change to be made to the policy.
- 47 Commissioner McGarry also sought clarification as to whether the term existing needed to be removed from limb (d) in respect to risk. I am in agreement that the term existing should be removed, and instead the policy should just focus on reducing risk. This is because natural hazard events (such as flooding) can change the risk profile to communities (for example through the change of position of a river or stream). Technically by only referencing existing risk, the policy is not responding to situations where the risk profile may increase, and

therefore warrant natural hazard mitigation works. To address this issue, I support removing the term existing from limb (d) of the policy.

<p><b>NH - P3</b></p>	<p>When managing natural hazards:</p> <ul style="list-style-type: none"> <li>a. Promote the use of natural features, <u>natural systems</u> and appropriate risk management approaches in preference to hard engineering solutions in mitigating natural hazard risks; and</li> <li>b. Avoid increasing risk to people, <del>property and the environment and buildings</del>; while</li> <li>c. Recognising that in some circumstances hard engineering solutions may be the only practical means of protecting <del>existing</del> communities and <del>critical regionally significant infrastructure</del>;</li> <li>d. <u>Enabling planned and funded natural hazard mitigation works within the Natural Hazard Overlays where these works are being undertaken by a Statutory Agency or their nominated contractor acting on their behalf and these will decrease the existing risk to people's lives and wellbeing, buildings and regionally significant infrastructure.</u></li> </ul>
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48 Mr Brass has raised concerns that there has been an increase in the permitted level of works allowed for under NH-R2 as a result of the inclusion of the following permitted activity condition:

*Where the change is greater than 10% an assessment undertaken by a suitably qualified Chartered Professional Engineer, confirming that the natural hazard mitigation structure does not increase the natural hazard risk to other properties or any other lawfully established natural hazard mitigation structure, is provided to the relevant District Council 10 working days prior to works commencing.*

49 I am in agreement with Mr Brass on this matter. The notified version of the NH-R3 used the following permitted activity condition:

*It is accompanied by an assessment undertaken by a Chartered Professional Engineer, confirming that the natural hazard mitigation structure does not increase the natural hazard risk to other properties or any other lawfully established natural hazard mitigation structure, is provided to the relevant District Council 10 working days prior to works commencing.*

50 I could not find any submissions that provide sufficient scope for the recommended changes and therefore I propose that the wording in NH-R2 is changed back to what was notified. This change means that any upgrades over 10% to the overall dimensions, orientation,



height or length of the structure from the originally lawfully established structure would require resource consent.

51 The amended wording is provided below:

NH - R2	Repairs, Maintenance and <del>Operation of any</del> <u>Upgrades to</u> Existing Natural Hazard Mitigation Structures	
<p><b>Activity Status Permitted</b></p> <p>Where:</p> <ol style="list-style-type: none"> <li>1. The structure has been lawfully established;</li> <li><del>2. Earthworks and land disturbance is the minimum required to undertake the activity;</del></li> <li><del>3. There is no change to the design, texture, or form of the structure;</del></li> <li><del>4. The materials used are the same as the original, or most significant material, or the closest equivalent provided that only cleanfill is used where fill materials are part of the structure; and</del></li> <li><del>5. There is no reduction in public access;</del></li> <li><del>3. The works are being undertaken by a Statutory Agency or their nominated contractor; or</del></li> <li><del>4. There is no change of more than 10% to the overall dimensions, orientation, height or length of the structure from the originally lawfully established structure; and</del></li> <li><del>5. Where the change is greater than 10% It is accompanied by an assessment undertaken by a suitably qualified Chartered Professional Engineer, confirming that the natural hazard mitigation structure does not increase the natural hazard risk to other properties or any other lawfully established natural hazard mitigation structure, is provided to</del></li> </ol>	<p><b>Activity status where compliance not achieved:</b></p> <p>Discretionary</p>	

the relevant District Council 10 working days prior to works commencing.

**Advice Notes:**

1. Where any natural hazard mitigation structure is also located in another Overlay Chapter area as identified on the planning maps and in the Schedules 1-8 then resource consent may be required under the relevant Overlay Chapter rules.
2. A West Coast Regional Council resource consent may be required under the West Coast Regional Land and Water Plan and/or Regional Coastal Plan.

52 In respect to Rule NH-R3 (formerly NH-R4), Mr Brass raised concerns that there are no controls around the size of Natural Hazard Mitigation Structures within or outside of the Coastal Environment. Similar concerns have been raised by Commissioner McGarry in respect to the requirements of the NZCPS and whether there needs to be some constraints placed around the size of Natural Hazard Mitigation Structures in the Coastal Environment. I have reviewed the submissions and I am unable to find any submission point which seeks to place a limit on the footprint of Natural Hazard Mitigation Structures. However, I do note that Department of Conservation seeks to have new Natural Hazard Mitigation Structures as a Restricted Discretionary Activity (though the submission does not seek to limit the size of Natural Hazard Mitigation Structures). As such, I am of the view that given the wording of the notified rule there is not sufficient scope to limit the footprint of Natural Hazard Mitigation Structures under Rule NH-R3 (formerly NH-R4).

53 Our approach for Natural Hazard Mitigation Structures, including those in the Coastal Environment first required us to work through the Coastal Hazards Variation. As we worked through this variation, the right of reply for the Coastal Environment Chapter was submitted to the Commissioners. Within this right of reply, natural hazard mitigation structures are a permitted activity, unless they are in an area of High or Outstanding Coastal Character. We have taken the position, that it is largely the role of the Coastal Environment Chapter to control the activity status of Natural Hazard Mitigation Structures within the Coastal Environment and not the role of the Natural Hazards Chapter.

54 I am supportive of the questions from Commissioner McGarry and Mr Brass and I share a similar view that the NZCPS requires a stronger consideration of Natural Hazard Mitigation Structures, particularly hard engineering structures, within the Coastal Environment, not just those in areas of High or Outstanding Coastal Character. However, I am somewhat bound by the Coastal Environment Chapter in this regard. It is my understanding that the Department of Conservation did not challenge the activity status of hazard mitigation structures within

the Coastal Environment Chapter, so there were scope challenges for the author of this chapter. On the basis of the above, I do consider that a plan change is needed to review and potentially amend the provisions for Natural Hazard Mitigation Structures in the Coastal Environment to ensure a greater consistency with the NZCPS requirements.

55 While I have been reviewing proposed NH-R3 (formerly NH-R4), and the associated submissions, I found we had recommended a change to the rule which I am unable to find any scope for. As such, I am recommending that permitted activity condition 4 is reinstated to this rule. This permitted activity condition states:

*It is accompanied by an assessment undertaken by a Chartered Professional Engineer confirming that the natural hazard mitigation structure does not increase the natural hazard risk to other properties or any other lawfully established natural hazard mitigation structure, and this assessment is provided to the relevant District Council 10 working days prior to works commencing.*

56 The suggested revised wording to NH-R3 (formerly NH-R4) is therefore as follows

NH - R43	New Natural Hazard Mitigation Structure
<p><b>Activity Status Permitted</b></p> <p>Where:</p> <ol style="list-style-type: none"> <li>The structure is located outside of any Overlay Chapter area identified in Schedules 1-8;</li> <li><del>Earthworks and land disturbance is the minimum required to undertake the activity</del> <u>The structure is constructed by a Statutory Agency or their nominated contractor;</u></li> <li>There is no reduction in public access;</li> <li><u>It is accompanied by an assessment undertaken by a Chartered Professional Engineer confirming that the natural hazard mitigation structure does not increase the natural hazard risk to other properties or any other lawfully established natural hazard mitigation structure, and this assessment is provided to the relevant District Council 10 working days prior to works commencing.</u></li> </ol> <p><b>Advice Note:</b></p>	<p><b>Activity status where compliance not achieved:</b></p> <p><b>Refer to relevant Overlay Chapter rules</b></p> <p>Where standard 1 is not complied with.</p> <p><b>Discretionary</b></p> <p>Where standard 2-43 is not complied with.</p>

<ol style="list-style-type: none"> <li>1. A West Coast Regional Council resource consent may be required under the West Coast Regional Land and Water Plan and/or Regional Coastal Plan.</li> <li>2. Natural Hazard Mitigation Structures constructed in the Coastal Environment, or within the Riparian Margins of Waterbodies or within areas identified in Schedules 1 - 8 will be subject to the provisions in the relevant Overlay Chapters.</li> <li>3. If the Overlay Chapters don't provide for this activity then NH-R43 prevails.</li> </ol>	
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**GREEN INFRASTRUCTURE**

57 Ms Pull within her submissions has suggested a change to Objective NH-O4 to replace the term 'Natural Systems and Features' with the term 'Green Infrastructure'. The term green infrastructure is defined by the National Planning Standards as:

*means a natural or semi-natural area, feature or process, including engineered systems that mimic natural processes, which are planned or managed to:*

- a. provide for aspects of ecosystem health or resilience, such as maintaining or improving the quality of water, air or soil, and habitats to promote biodiversity; and*
- b. provide services to people and communities, such as stormwater or flood management or climate change adaptation*

58 This definition is more broad than the term 'natural systems and features' that is used currently in the proposed wording to Objective NH-O4. However, since the term green infrastructure is a defined term in the National Planning Standards and since natural systems are captured by this definition, I believe it is appropriate to replace the term natural systems and features with the term green infrastructure in Objective NH-O4. The suggested revised wording for Objective NH-O4 would therefore be:

<b>NH - O4</b>	<p><del>To ensure the role of hazard mitigation played by natural features that minimise impacts of hazards including wetlands and dunes is recognised and protected.</del></p> <p><u>Natural systems and features Green Infrastructure that reduce the susceptibility of people, buildings, and regionally significant</u></p>
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	<u>infrastructure to damage from natural hazards are created, retained, or enhanced.</u>
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59 There are two consequential changes to using the term ‘green infrastructure’ in Objective NH-O4. These are as follows:

- A definition of green infrastructure needs to be included in the definitions section of the District Plan. This definition would be the same definition that is in the National Planning Standards:

*means a natural or semi-natural area, feature or process, including engineered systems that mimic natural processes, which are planned or managed to:*

- a. provide for aspects of ecosystem health or resilience, such as maintaining or improving the quality of water, air or soil, and habitats to promote biodiversity; and*
- b. provide services to people and communities, such as stormwater or flood management or climate change adaptation*

- An amendment to NH-P3 so that the terms natural features and natural systems are removed and replaced with the term green infrastructure. This is to ensure the policy using the same wording as the objective.

<b>NH - P3</b>	<p>When managing natural hazards:</p> <ol style="list-style-type: none"> <li>a. Promote the use of <del>natural features, natural systems</del> <u>Green Infrastructure</u> and appropriate risk management approaches in preference to hard engineering solutions in mitigating natural hazard risks; and</li> <li>b. Avoid increasing risk to people, <del>property and the environment and buildings</del>; while</li> <li>c. Recognising that in some circumstances hard engineering solutions may be the only practical means of protecting <del>existing</del> communities and <del>critical regionally significant infrastructure</del>;</li> <li><u>d. Enabling planned and funded natural hazard mitigation works within the Natural Hazard Overlays where these works are being undertaken by a Statutory Agency or their nominated contractor and these will decrease the existing risk to people’s lives and wellbeing, buildings and regionally significant infrastructure.</u></li> </ol>
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60 Ms Pull also sought that the terms ‘created, retained or protected’ are replaced with ‘recognised and protected’. I am not in full agreement with this requested change. The

rationale for the requested change is that it better aligns with the wording in Section 6 of the Act.

61 Given the change in wording in the objective and policy to green infrastructure, I am of the view that this now includes works that would not fall within Section 6 matters, as it allows for engineered solutions that mimic natural processes. However, I am also of the view that this objective also captures some Section 6 features such as wetlands. On this basis, I am suggesting a hybrid approach, where the words created, retained and enhanced are retained, but the term protected is also added to this Objective. This ensures greater consistency of the objective wording with Section 6 of the Act. The suggested wording to the Objective is as follows:

<b>NH - O4</b>	<p><del>To ensure the role of hazard mitigation played by natural features that minimise impacts of hazards including wetlands and dunes is recognised and protected.</del></p> <p><u>Natural systems and features Green Infrastructure that reduce the susceptibility of people, buildings, and regionally significant infrastructure to damage from natural hazards are created, retained, <del>or</del> enhanced and protected.</u></p>
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#### NATURAL HAZARD – RULE NH-R12

62 Within Ms Pull’s evidence and subsequent appearance at the hearing she sought changes to Rule NH-R12, with the following matters of discretion to be added:

- a. *If there is need for the building as a critical response facility*
- b. *If the proposed activity will cause adverse effects on overlays identified in Schedules 1-8.*

63 I have addressed these matters within my right of reply dated 4 October 2024, paragraphs 14 - 19. Having listened to Ms Pull, my views as outlined in this right of reply remain unchanged.

#### SUBDIVISION

64 Through his questions on the rebuttal evidence the Chair sought clarification in response to issues raised by Mr Kennedy, stating that the matters of control relating to subdivisions would be the same (when they did not relate to the suggested changes we have made to the natural hazard aspects of this rules) as what was recommended in the subdivision hearing stream. I can confirm that if the panel was to accept the recommendations from the reporting officer on the suggested changes to SUB-R6, and SUB-R8, then the natural hazard changes would be additional to these. These matters would also apply to the suggested new Rule SUB-RX, and we have updated the wording in this proposed rule to reflect this and the wider structure of the subdivision chapter.

<b><u>SUB-RX</u></b>	<b><u>Subdivision to create building platform(s) for Less Hazard Sensitive Activities in in the Flood Susceptibility, Earthquake Susceptibility, Land Instability, Coastal Alert, Coastal Setback, Hokitika Coastal, Westport, Coastal Severe, Flood Severe, or Earthquake Severe Hazard Overlay</u></b>	
<p><b><u>Activity Status Controlled</u></b></p> <p><b><u>Matters of Control:</u></b></p> <p><u>a. Risk to people, buildings and regionally significant infrastructure from the proposal and any measures to mitigate those risks.</u></p> <p><u>b. The location and design of proposed buildings, vehicle access, and regionally significant infrastructure in relation to the natural hazard.</u></p> <p><u>c. The size, design, shape, location and layout of allotments.</u></p> <p><u>d. The provisions of infrastructure and services for transport, drinking water, wastewater and stormwater, telecommunications and energy.</u></p> <p><u>e. The adequacy of water supply for firefighting.</u></p> <p><u>f. The requirement for financial contributions as outlined in Rules FC – R1 to FC – R12.</u></p> <p><u>g. The provision of esplanade reserves or strips and the need for access to be provided to any esplanade reserve or strip created.</u></p> <p><u>h. The provision of easements.</u></p>	<p><b><u>Activity status where compliance not achieved:</u></b></p> <p><u>N/A</u></p>	

**ANNOTATED CHANGES TO THE CHAPTER**

65 Attached to this evidence are updated versions of the Natural Hazards Chapter, Subdivision Chapter and Definitions in respect to the changes made in light of the planning evidence received. As part of updating these changes, we have also included the submission points that have resulted in our suggested changes to the chapter.

## **SECTION 32AA**

### **Effectiveness and Efficiency**

66 I consider the recommended changes to the Natural Hazards provisions are more efficient and effective than the notified provisions. The proposed changes largely provide additional clarity to the provisions and will make the plan provisions easier to implement by the plan users, while still achieving the purpose of the Act and the outcomes sought by higher order direction.

67 I consider the proposed new policy and rules pertaining to the Flood Severe and Earthquake Severe Overlays allows for a more efficient plan as it prevents sites that have been created with the intention of being used to accommodate a residential development being blighted so that they cannot be used for this intended purpose. However, the framework still ensures that the residential dwelling incorporates mitigation measures to ensure there is still management of the associated risk. This is more effective at implementing higher order direction as it ensures the residential unit is still constructed in a manner that reflects the natural hazard risk.

### **Costs and Benefits**

68 The recommended changes to the provisions do not create any additional costs as they do not increase the regulatory burden on any party from what was notified.

69 There are no significant financial benefits arising from the majority of the proposed amendments on any party as they are largely administrative and improve plan usability, as opposed to making significant policy changes that have wider benefits.

70 There are significant financial benefits arising from the new policy and rules pertaining to the Flood Severe and Earthquake Severe Overlays. The new framework provides a pathway for existing vacant sites at the time of plan notification to be constructed upon, while still ensuring that the natural hazard risk is addressed. This prevents members of the community owning properties that are unable to accommodate a residential unit.

### **Risks of Acting or Not Acting**

71 The risk from not acting is small for the majority of the proposed changes as they are largely administrative and designed to improve plan usability or plan readability, However, if the changes were not made then it would not prevent the provisions from being able to be implemented.

72 There is significant risk of not acting in relation to the new policy and rules pertaining to the Severe Flood Hazard and Severe Earthquake Overlays. If this change is not made, then those vacant sections that exist at the time of the plan notification may not be able to accommodate a new residential unit due to the tests that exist in policy NH-P6. The proposed amendments address this issue.

73 There are no identifiable risks from acting.



### **Decision About the Most Appropriate Option**

74 We are of the opinion that the amendments proposed are the most appropriate way to achieve the objectives of the plan, and higher order direction compared to those notified.

Signed

A handwritten signature in blue ink, appearing to read "James W.", with a stylized flourish at the end.

James Beban

13 March 2025