#### WELLINGTON CITY COUNCIL

Hearing of Submissions and Further Submissions

on

**Proposed District Plan** 

**Report and Recommendations of Independent Commissioners** 

Hearing Stream 5

**Report 5B** 

**Natural and Coastal Hazards** 

Commissioners

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# **EXECUTIVE SUMMARY**

- This report (5B) addresses submissions on the Natural Hazards (NH) chapter and the coastal hazards provisions contained within the Coastal Environment (CE) chapter.
- 2. In Wellington, effective planning for natural and coastal hazards is critical as there are many areas of the City that are identified as being subject to some hazard risk. These risks include fault hazards, liquefaction hazards and flood hazards (including stream corridors, overland flowpaths and inundation areas). In the Coastal Environment, there are also tsunami and coastal inundation hazards that must be managed in proportion to the level of risk. While not currently addressed by the Natural Hazards (NH) or Coastal Environment (CE) chapters of the Plan, slope stability and landslide hazard risk has also been identified as a further risk where management is required.
- 3. The Introduction to the NH Chapter outlines that:

Wellington City is susceptible to a wide range of natural hazards, which can result in damage to property and buildings, and lead to a loss of human life. It is therefore important to identify areas susceptible to natural hazards and to avoid or manage subdivision, use, and development, relative to the natural hazard risk posed, to reduce the potential for damage to property and the potential for loss of human life.

- 4. The starting point of our evaluation on the PDP's natural and coastal hazards provisions is the direction provided under 6(h) of the Act to recognise and provide for the management of significant risks of natural hazards. We are also mindful of the direction in the NZ Coastal Policy Statement 2010 in respect of the management of coastal hazards. Another important consideration are the intensification directives of the NPSUD, with some of the City's centres for which intensification must be enabled also subject to significant natural hazards, including the City Centre.
- 5. Some of the natural and coastal hazards provisions are very restrictive depending on the level of risk and the precise location of any activity. In respect of high hazard risks the provisions reflect a generally 'avoid approach' to hazard risks while for low hazard risks, the provisions are more flexible with a 'minimisation approach' to the effects of hazard risk.
- A considerable number of submissions were received that either supported, opposed or, more frequently, sought changes to the natural and coastal hazards provisions that reflects, in our view, the overall public interest there is on the

management of these risks within the City, as well as infrastructural and development interests.

- 7. There were two primary areas of attention in relation to the NH chapter, being Fault Hazards and Flood Hazards. Changes to the Coastal Hazards provisions of the Coastal Environment chapter were also sought by a number of submissions.
- 8. For Fault Hazards, the management framework in the PDP as notified is complex, because of the differing approaches required to manage development, depending on location and the confidence levels of fault mapping. Our primary focus on this topic was to seek greater clarity and simplification of the rules. Discussions with the reporting officer and the technical advisers at the hearing resulted in further additional amendments being recommended. We also received a revised introduction providing further explanatory material to assist Plan users with what is a potentially confusing set of provisions, some of which are particularly constraining on land use and development.
- 9. As an outcome of the hearing process, we consider that the provisions as recommended are much improved, with better explanations. However, we still recommend that Council reconsider the framework for fault hazards further at a future time, with an aim to simplification, particularly terminology. In the meantime, we would also recommend the Council consider preparing some external guidance for Plan users on what is a complex technical and regulatory matter.
- 10. For Flood Hazards, we also had much discussion with officers and with submitters as to the workability of the provisions. As an outcome, we consider that, in relation to stream corridors and overland flowpaths, the recommended amendments are an improvement in what are the higher risk parts of the Flood Hazard Overlays.
- 11. We were particularly concerned about the provisions relating to inundation overlays, which have been mapped widely across many parts of the City, including areas with the potential for significant housing intensification. The regulatory framework for the inundation areas will have substantial ongoing implications for development, with resource consent required for practically any development in this overlay, requiring mandatory engagement with Wellington Water. In response, we enquired as to whether there could be a Permitted Activity rule to construct buildings containing a hazard sensitive activity in the Flood Hazard Overlay Inundation Area. The advice of reporting officer was that such a standard would be unable to appropriately manage potential flood water displacement effects on nearby

properties, noting that these properties are also likely to be hazard sensitive activities: i.e., residential activities are for the most part located in residential zones.

- 12. We have put careful thought into this matter, and reluctantly have had to accept that a resource consent process is necessary to be able to assess each proposal on a case-by-case basis. However, we would strongly advise that there be increased levels of guidance and a more user friendly method of ascertaining the 1% Flood Annual Exceedance Probability level, presumably with the assistance of Wellington Water. Ultimately, we would commend the Council work, together with Wellington Water, towards a refinement of the approach for managing development within inundation areas.
- 13. In respect of slope stability and landslide hazard risk, this can and should be managed by the Plan where the hazard risk is significant. However, as this hazard overlay was not included in either the draft Plan or the notified PDP, we agree that it would be both impractical and inappropriate from a natural justice perspective to introduce a landslide hazard response into the PDP at this point in the process.
- 14. There was some attention as to the Tsunami and Coastal Inundation overlays, particularly in relation to low level effects on large parts of the CBD. During the hearing, we had a number of concerns in respect of the clarity and workability of the provisions for managing development in these areas. As with the provisions for Fault and Flood Hazards, based on officer's advice, we are recommending a number of changes to the Coastal Hazards provisions to improve their effectiveness.
- 15. Subject to the above, as amended by the officer's in his final reply, we consider that the Coastal Hazard provisions are the most appropriate way to achieve the objectives of the Plan for managing the risks of natural hazards.

# 1. INTRODUCTION

- 1. Hearing Stream 5 focused on the provisions of the PDP that relate to natural hazards and coastal hazards, noise, subdivision, three waters and earthworks.
- 2. This Report (5B) is specifically in respect of natural hazards (NH) and the coastal hazards provisions contained within the Coastal Environment (CE) chapter being:
  - a) Natural Hazards:
    - i) Definitions
    - ii) Introduction
    - iii) Objectives NH-O1 NH-O5
    - iv) Policies NH-P1 NHP19
    - v) Rules NH-R1 NH-15
  - b) Coastal Hazards within the Coastal Environment Chapter:
    - i) Objectives CE-O5 CEO10
    - ii) Policies CE-P11 CE-P28
    - iii) Rules CE-R16 CE-R27
- Submitters collectively made 845 submission points in relation to the Natural Hazards and Coastal Hazards plan provisions contained within the Natural Hazards Chapter and Coastal Environment Chapter.
- 4. This report should be read in conjunction with three reports. Report 1A sets out the relevant statutory functions, considerations and requirements for the review of the District Plan, while Report 1B contains the findings on the overall Strategic Objectives within the Plan.
- 5. Report 5A is particularly relevant as it discusses specific matters considered at Hearing Stream 5 and includes an overview of the hearing including:
  - Procedural Directions
  - General approach to our evaluation
  - Hearing arrangements
  - Submitter appearances at the hearing

- 6. Hearing Stream 5 was the subject of five Section 42A Reports, with Mr Jamie Sirl being the author of the Natural Hazards and Coastal Hazards Report. On this topic we also received supporting evidence for the Council from:
  - Alistair Osborne (Flood Hazard Modelling)
  - Angela Griffin (Liquefaction)
  - Connon Andrews (Coastal Inundation)
  - Dr David Burbridge (Tsunami Risks)
  - Dr Nicola Litchfield (Fault Rupture)
  - James Beban (Natural Hazards Planning)
- 7. Mr Sirl identified what he considered were the key issues in contention:
  - a) The request for a more nuanced approach to fault rupture hazard that responds to the fault complexity of the various faults, likelihood of an event and hazard sensitivity of building and activities. A change in approach would likely impact development rights associated with sites within certain fault hazard overlays, whereas the PDP approach may not reflect existing knowledge of fault rupture hazard and related hazard risk;
  - b) Concerns with the inclusion of tsunami hazard overlays and associated provisions and whether the impacts of certain events require a land use planning response that directs the need for mitigation of effects of tsunami hazard;
  - c) Proposed amendments sought to the approach to flood hazard seeking a more permissive approach to provisions, on the basis that low-level inundation and relevant hazard risk can be managed through the incorporation of mitigation, where a more permissive approach may not appropriately manage potential damage to property and safety of people;
  - d) Ensuring that the approach to hazard management with respect to the Central Business District / City Centre Zone adequately recognises the significant existing investment in the area and the impracticality of the CBD being relocated, whilst ensuring that hazard risk is appropriately managed, particularly with respect to high hazard areas; and

- e) That the policy approach to addressing natural hazards is consistent with the RPS and RPS-Change 1.
- This report is structured to consider the submissions in the same order as Mr Sirl's Section 42A Report as follows:
  - Natural Hazards and Coastal Hazards Definitions
  - Natural Hazards General submissions
  - Natural Hazards Introduction
  - Natural Hazards Objectives
  - Natural Hazards Policies
  - Natural Hazards Rules
  - Coastal Hazards General submissions
  - Coastal Hazards Introduction
  - Coastal Hazards Objectives
  - Coastal Hazards Policies
  - Coastal Hazards Rules.

# 2. NATURAL HAZARDS DEFINITIONS

#### Definition – Coastal Hazard Overlay

- 9. We firstly acknowledge that CentrePort<sup>1</sup> sought to retain the definition of 'Coastal Hazard Overlays' as notified, noting that WIAL<sup>2</sup> opposed this submission to the extent it conflicted with WIAL's primary submission point to remove the application of the tsunami coastal hazard overlays.
- 10. In this regard, we note that Mr Sirl<sup>3</sup> recommended a change to the definition was required, in that the low, medium and high hazard areas referenced in the definition are not specifically mapped in the PDP. We agree that it would be clearer if the definition referred to the mapped extent of the relevant coastal hazards. The recommended amendments are:

COASTAL HAZARD OVERLAYS	Means the combined mapped extent within the District Plan of the Low Coastal Hazard Area, Medium Coastal Hazard Area and the
	High Coastal Hazard Area. following coastal hazards:
	<u>Tsunami, including sea level rise; and</u>
	<u>Coastal inundation including sea level rise</u>

11. We also agree with Mr Sirl that the definitions of 'Low Coastal Hazard Area' and 'Medium Coastal Hazard Area' could be clarified thus:

LOW COASTAL HAZARD AREA	means the mapped extent within the District Plan for the following coastal hazards: Tsunami – 1:1000 year inundation scenario <u>with 1m of Sea Level</u> <u>Rise</u>
MEDIUM COASTAL HAZARD	means the mapped extent within the District Plan for the following
AREA	coastal hazards:
	a. Sea Level Rise Coastal inundation with 1.43m of Sea Level
	Rise; or
	b. Tsunami – 1:500 year inundation scenario with 1m of Sea
	Level Rise.

<sup>&</sup>lt;sup>1</sup> Submission # 402.6

<sup>&</sup>lt;sup>2</sup> Further Submission # 36.16

<sup>&</sup>lt;sup>3</sup> Section 42A Report, at paragraph 70

#### **Definition – Community Scale Natural Hazard Mitigation Structures**

- We note that GWRC<sup>4</sup> sought to retain the definition for 'Community Scale Natural Hazard Mitigation Structures' as notified.
- 13. CentrePort<sup>5</sup> sought clarification on the relationship between matters covered in the definition of 'Natural Hazard Mitigation Works' and 'Community Scale Natural Hazard Mitigation Structures', particularly what is meant by community scale, and what activities are excluded from this. CentrePort<sup>6</sup> also sought to be included as one of the parties referenced in the definition of 'Community Scale Natural Hazard Mitigation'.
- 14. We agree with Mr Sirl<sup>7</sup> that the clarity sought by the submitter would best be achieved, while also addressing the existing inconsistencies across the Plan in relation to permitted works relating to natural hazard mitigation works and structures, if the 'Community Scale Natural Hazard Mitigation Structures' definition was deleted in its entirety. We agree that this change is within scope of the submission. Consequential amendments made to clarify the specific entities referred to in each of the relevant provisions are also supported.

#### **Definition – Green Infrastructure**

15. GWRC<sup>8</sup> sought to amend the definition of 'Green Infrastructure' to include an example, such as a constructed wetland, to assist plan users. We do not agree that this would assist in plan interpretation and note that the definition is taken from the National Planning Standards.

#### **Definition – Hazard Sensitive Activities**

- There were several submissions<sup>9</sup> seeking retention of the definition for 'Hazard Sensitive Activities' as notified.
- 17. New Zealand Motor Caravan Association<sup>10</sup> sought the inclusion of additional clarification in the definition of 'Hazard Sensitive Activities' by way of a set of criteria defining why and how an un-named activity may be sensitive, the removal of any reference to visitor accommodation, and a specific exclusion for campgrounds on the

<sup>&</sup>lt;sup>4</sup> Submission # 351.37

<sup>&</sup>lt;sup>5</sup> Submissions # 402.4 and 402.12

<sup>&</sup>lt;sup>6</sup> Submission # 402.11

<sup>&</sup>lt;sup>7</sup> Section 42A Report, at paragraphs 72-73

<sup>&</sup>lt;sup>8</sup> Submission # 351.39

<sup>&</sup>lt;sup>9</sup> Submissions # 350.2, 372.11 and 400.7

<sup>&</sup>lt;sup>10</sup> Submission # 314.4 and 314.5

basis that effects on them from hazards can be easily moderated through more specific site management efforts, as many of the activities are not permanently attached to the land (i.e. people can be moved easily and forewarned in the event of a potential risk or natural hazard).

18. We accept Mr Sirl's reasoning that this level of specificity is unnecessary as visitor accommodation involves people that may be at some form of risk, regardless of whether they are there temporarily or not.

#### **Definition – High Coastal Hazard Area**

19. CentrePort<sup>11</sup> sought the retention of the definition for 'High Coastal Hazard Area' as notified.

# Definitions – Less Hazard Sensitive Activities and Potentially Hazard Sensitive Activities

- 20. GWRC<sup>12</sup> sought the retention of the definition for 'Less Hazard Sensitive Activities' as notified.
- 21. The Oil Companies<sup>13</sup> sought that the definition of 'Less Hazard Sensitive Activities' is amended to clarify whether accessory buildings can be related to a Hazardous Facility.
- 22. We agree with Mr Sirl<sup>14</sup> that no change is necessary in this regard. Using a service station as an example, if an accessory building was used to store hazardous substances, then the accessory building could be considered to be part of the Major Hazard Facility. In this situation, the accessory building would be deemed to be a Hazard Sensitive Activity.
- 23. In regard to the submission from the Aggregate and Quarry Association<sup>15</sup> [303.13] who sought that the PDP provisions should not rule out quarries along the faults, we agree with the reporting officer that the position of 'quarrying' as either a less hazard sensitive or potentially hazard sensitive activity is unclear in the PDP. We therefore agree that the Plan should be clear that quarrying should not be excluded from operating in the faults by amending the definitions of less hazard sensitive or potentially hazard sensitive activity:

<sup>&</sup>lt;sup>11</sup> Submission # 402.15

<sup>&</sup>lt;sup>12</sup> Submission # 35.41

<sup>&</sup>lt;sup>13</sup> Submissions # 372.14-15

<sup>&</sup>lt;sup>14</sup> Section 42A Report, at paragraph 81

<sup>&</sup>lt;sup>15</sup> Submission # 303.13

LESS HAZARD SENSITIVE ACTIVITIES	<ul> <li>means the following land use activities:</li> <li>a. Accessory buildings used for non-habitable purposes</li> <li>b. Buildings associated with marina operations (above MHWS)</li> <li>c. Maritime emergency facilities</li> <li>d. Informal recreation activities and organised sport and recreation activities within the Sport and Active Recreation Zone, including those for maritime purposes in the Evans Bay Marine Recreation Area</li> <li>e. Parks Facilities</li> <li>f. Parks Furniture</li> <li>g. Quarrying Activities</li> </ul>
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POTENTIALLY HAZARD	means the following land use activities:
SENSITIVE ACTIVITIES	a. Buildings associated with primary production (excluding
	Residential Units, Minor Residential Units, Residential Activities,
	or buildings identified as Less Hazard Sensitive Activities, or
	Quarrying Activities)
	b. Commercial Activity
	c. Commercial Service Activity
	d. Community Corrections Activity.
	e. Entertainment Facility
	f. Food and Beverage Activity
	g. Industrial Activities
	h. Integrated Retail Activity
	i. Large Format Retail Activity
	j. Major Sports Facility
	k. Offices
	I. Retail Activities
	m. Rural Industrial Activities.

# Definition – Natural Hazard

24. FENZ<sup>16</sup> sought the retention of the definition for 'natural hazard' as notified.

#### **Definition – Natural Hazard Mitigation Works**

- 25. GWRC<sup>17</sup> sought the retention of the definition for 'Natural Hazard Mitigation Works' as notified.
- 26. CentrePort<sup>18</sup> considered that there was uncertainty as to the relationship between matters covered in the definition of Natural Hazard Mitigation Works' and what is covered in the definition of 'Community Scale Natural Hazard Mitigation. It sought further clarification, in particularly as to what is covered in the definition of 'Community

<sup>&</sup>lt;sup>16</sup> Submission # 273.11

<sup>&</sup>lt;sup>17</sup> Submission # 351.42

<sup>&</sup>lt;sup>18</sup> Submissions # 402.17-18

Scale Natural Hazard Mitigation'. We have discussed this matter above in relation to 'Community Scale Natural Hazard Mitigation' and recommended the deletion of the definition of 'Community Scale Natural Hazard Mitigation.

#### **Definition – Natural Hazard Overlays**

- 27. Kāinga Ora<sup>19</sup> considered that references to "*Natural Hazard Overlays*" should be removed and replaced by a newly defined term "*Natural Hazard Areas*". This reflects Kāinga Ora's position that 'Natural Hazard Overlays' (which, in the submitter's view, should comprise flood hazard mapping) should instead be included as non-statutory, information-only mapping layer that sits outside the PDP. Kāinga Ora also<sup>20</sup> sought that the definition of 'Natural Hazard Overlays' be amended.
- 28. We agree with Mr Sirl<sup>21</sup> that that using the term 'Natural Hazard Overlays' as the collective term for all of the individual natural hazard overlays is clearer and avoids any potential confusion regarding the difference between a natural hazard overlay and a natural hazard area. We note 'overlay' is the spatial layer term used in the National Planning Standards.

#### **Definition – Soft Engineering Natural Hazard Mitigation Works**

29. GWRC<sup>22</sup> sought the retention of the definition of Soft Engineering Natural Hazard Mitigation Works as notified.

#### Proposed definition – 1% Annual Exceedance Probability Flood

30. As outlined in paragraphs 264–266, we agree with the reporting officer that a definition for "1% Annual Exceedance Probability Flood" is required to support the various provisions that use this term.

# Proposed definition – Hard Engineering Natural Hazards Mitigation Works

31. GWRC, supported by WIAL<sup>23</sup>, noted that the term 'hard engineering' is defined in both the Regional Policy Statement (**RPS**) and the Natural Resources Plan (**NRP**). It considered that the inclusion of a definition for 'Hard Engineering Natural Hazard Mitigation Works' would align with the use of a specific definition of 'Soft Engineering Hazard Mitigation Works'. It therefore suggested a new definition for 'Hard

<sup>&</sup>lt;sup>19</sup> Submissions # 391.31 and 391.157, supported by Further Submission #36.14 and opposed by Further Submissions #69.7 and 70.53

<sup>&</sup>lt;sup>20</sup> Submissions # 391.36-37 opposed by Further Submissions #36.19-20, 84.54-55 and 70.48

<sup>&</sup>lt;sup>21</sup> Section 42A Report, at paragraphs 84-85

<sup>&</sup>lt;sup>22</sup> Submission # 351.48

<sup>&</sup>lt;sup>23</sup> Submission # 351.36, supported by Further Submission # 36.11

Engineering Natural Hazards Mitigation Works' that would align with the operative RPS and the NRP:

32. We agree that a definition will assist and note the need for consistency between the Natural Resources Plan (NRP) and the PDP. However, we also agree with Mr Sirl<sup>24</sup> that that this definition should be modified to better align with the structure of the existing definition for 'Soft Engineering Natural Hazards Mitigation Works' contained in the PDP. We recommend it read as follows:

techniques include groynes, seawalls, revetments or bulkheads.	NATURAL HAZARD MITIGATION WORKS	means engineering works that are designed to prevent erosion of land and use structural materials such as concrete, steel, timber or rock armour to provide a hard, inflexible edge at the land-water interface along rivers, shorelines or lake edges. Hard engineering techniques include grownes, seawalls, revetments or bulkheads.
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33. We also note that a consequential change, to improve the interpretive and administrative clarity concerning these provisions, is also recommended in line with Schedule 1, clause 99(2)(b) of the RMA by Mr Sirl. This would rename policy CE-P26 to 'Hard Engineering Natural Hazards Mitigation Works' and replace reference to 'hard engineering measures' with 'Hard Engineering Natural Hazards Mitigation Works', as well as an amendment to rule CE-R24 to align it with the definition. We agree that this is a pragmatic approach.

#### **Proposed definition – Minimise**

- GWRC<sup>25</sup> made a number of submissions seeking the inclusion of the term 'minimise' in objectives and policies in relation to natural and coastal hazards.
- 35. During the hearing, it became apparent that there was a need to review the use of the proposed term "*minimise*" and to confirm that its use aligned with the intended policy direction and the activity status of associated rules. We asked through Minute 33 that officers confirm, in relation to the natural hazards policies, whether there is a consistent use of "*minimise*" and "*reduced or not increased*", particularly in relation to the ensuing rules, as well as the use of "*operational need or functional need/requirement*".
- 36. In his Reply, Mr Sirl<sup>26</sup> produced Matrix Tables illustrating the relevant recommendations of the Section 42A Report and confirmed that there were two

<sup>&</sup>lt;sup>24</sup> Section 42A Report, at paragraphs 86-87

<sup>&</sup>lt;sup>25</sup> Submissions # 351.119-121, 351.124-125, 351.129-131, 351.133-134

<sup>&</sup>lt;sup>26</sup> Evidence in Reply paragraphs 9 to 12.

policies (NH-P3 and NH-P4) where a change from "*reduced or not increased*" to "*minimised*" was required over and above those already recommended to be changed. Overall, though, he considered that there was generally consistent terminology used. While there were no submissions on these two policies that specifically sought that relief, it would be inconsistent for these two policies to remain without the consistent change. Therefore, we agree to the out of scope recommendation of the reporting officer.

37. We agree that a definition is necessary for the avoidance of doubt about what minimise actually means in the context of natural and coastal hazards. We note the NRP has an equivalent definition, and therefore agree to the following additional definition.

<u>MINIMISE</u>	means for the purposes of the natural hazard and coastal hazard overlays, to reduce to the smallest amount reasonably practicable.
	Minimised, minimising and minimisation have the corresponding meaning

38. We are also mindful of Mr Sirl's advice that this definition should be expressly limited to applying to natural hazards unless a full review of the use of the terms minimise, minimised, minimising and minimisation throughout the entire Plan reveals that no unintended outcomes will occur as a result of a more widely applicable definition, and that there were relevant submissions which sought that relief.

# 3. NATURAL HAZARDS CHAPTER

#### 3.1 General Submissions on Natural Hazards

#### **General / Chapter-wide**

- 39. There were a range of submissions that made general comments on the Natural Hazards provisions without requesting any specific relief.
- 40. Restaurant Brands Limited<sup>27</sup> sought that the Natural Hazard chapter be retained as notified.
- 41. David Karl<sup>28</sup> submitted that whanau's homes should not be unnecessarily impacted by inaccurate modelling, but also that further development should not occur in areas that it should not. The submitter stated that there is emotional pain and significant costs linked to Council holding information that is not publicly available, and then requiring costly changes to building plans before providing approval. The submitter sought that hazard zoning be based on the best information available.
- 42. Victoria University of Wellington Students' Association<sup>29</sup> submitted that community resilience is an incredibly important factor in terms of natural hazard response, and sought that infrastructure facilitates bringing people together.
- 43. Jane Szentivanyi and Ben Briggs<sup>30</sup> submitted that natural hazards such as flooding, and slips are an important qualifying factor in determining future development.
- 44. Kāinga Ora<sup>31</sup> partially supported the inclusion of rules in relation to flood hazards, as well as the risk-based approach to the management of natural hazards. However, it sought amendments to the Natural Hazards chapter so that rules do not refer to static maps.
- 45. David Karl<sup>32</sup> sought that that objectives, policies and rules relevant to hazard zoning be drafted to ensure that the relevant hazard zones (as shown on a map) can most easily be updated to reflect new information.

<sup>&</sup>lt;sup>27</sup> Submission # 349.31

<sup>&</sup>lt;sup>28</sup> Submission # 309.2

<sup>&</sup>lt;sup>29</sup> Submission # 123.37

<sup>&</sup>lt;sup>30</sup> Submission # 369.12

<sup>&</sup>lt;sup>31</sup> Submissions # 391.154-155, opposed by Further Submissions #70.51 and 84.57

<sup>32</sup> Submission # 309.5

- 46. GWRC, supported by Toka Tū Ake EQC<sup>33</sup>, sought that WCC continue to work with it to discuss the City's flood hazards in relation to proposed intensification.
- 47. The Oil Companies<sup>34</sup> supported the intent of the Natural Hazard chapter as it seeks to protect people, property and infrastructure from natural hazards. The chapter's 'risk-based approach' is also supported as it seeks to manage effects from natural hazards by classifying activities and providing separate provisions for these activities, depending on their level of hazard sensitivity.
- 48. Taranaki Whānui<sup>35</sup> sought amendments that appropriately addressed concerns around ensuring that Taranaki Whānui can implement existing consents around Te Motu Kairangi / Miramar Peninsula, Mount Crawford, and Shelly Bay Taikuru without future impediment.
- 49. VicLabour<sup>36</sup> sought that the coastal inundation and tsunami provisions be retained with amendments to specific provisions and that Council start considering a programme of managed retreat.
- 50. Mary-Anne O'Rourke<sup>37</sup> submitted that there is a valid risk in the future from ratepayers who are unable to attain house insurance for council consented houses that have been built in known flood and tsunami prone areas, taking future class actions against the Council.
- 51. Avryl Bramley<sup>38</sup> sought a whole of city and suburb-by-suburb earthquake and Tsunami risk assessment around existing and proposed buildings to ensure that sufficient resources are likely to be available in the event of a major earthquake.
- 52. Mt Cook Mobilised<sup>39</sup> sought that water storage capacity be increased in the City in preparation for a major earthquake, and that the Natural Hazards chapter include provisions relating to emergency management in times of a major earthquake or natural disaster.
- 53. Property Council New Zealand<sup>40</sup> sought that natural hazards overlays be included in LIM reports.

<sup>&</sup>lt;sup>33</sup> Submissions # 351.27-28 and 351.118, supported by Further Submissions #70.17-20

<sup>34</sup> Submission # 372.88

<sup>&</sup>lt;sup>35</sup> Submission # 389.63, opposed by Further Submissions #79.5, 79.22 and 79.41

<sup>&</sup>lt;sup>36</sup> Submissions # 414.20-21

<sup>&</sup>lt;sup>37</sup> Submission # 195.1

<sup>38</sup> Submission # 202.2

<sup>&</sup>lt;sup>39</sup> Submissions # 331.8-9

<sup>40</sup> Submission # 338.6

- 54. Oyster Management Limited<sup>41</sup> sought that the PDP apply appropriate provisions to reflect the probability and limitations in mitigating risks of liquefaction and tsunami, and consistency in the approach to potentially hazard sensitive activities in the Natural Hazards and Coastal Hazards Overlays.
- 55. Oyster Management Limited<sup>42</sup> sought that the PDP recognise the benefits of existing investment in the CBD in relation to natural hazards and coastal hazards.
- 56. Kimberley Vermaey<sup>43</sup> submitted that that rules relating to additions in the Natural Hazards Overlay do not address alterations to existing buildings. The submitter considered that there is the potential for alterations to increase the risk from the conversion of non-habitable buildings, and there needs to be consideration as to whether it is appropriate to convert existing buildings, so as to ensure the rule frameworks are consistent with the additions framework.
- 57. We acknowledge these submissions, and we note Mr Sirl's detailed comments in relation to each matter within the Section 42A Report<sup>44</sup>. Many of the points raised are broadly related to other submissions on the detailed provisions, or relate to plan structure. We also note that, aside from Kāinga Ora and Oyster Management, we had limited additional evidence from these parties to consider. We therefore agree with the officers' reasoning in relation to these broader submissions.
- 58. There are also a number of general submissions that can be grouped by theme.

# **Natural Hazards and Infrastructure**

- 59. CentrePort, opposed by the Telcos and PowerCo Limited<sup>45</sup>, sought that Infrastructure Natural Hazards provisions are located within the Natural Hazards Chapter, and that the Plan be amended so that all Natural Hazards requirements are included in one chapter.
- 60. Mr Sirl noted that further submitters preferred that the infrastructure rules related to natural hazards be in the INF-NH sub-chapter, rather than the general Natural Hazards chapter, to keep the INF provisions largely self-contained in one location.
- 61. We agree that the location of Natural Hazards provisions within the Infrastructure chapter of the Plan is confusing, and on the face of it, duplicative, with provisions

<sup>&</sup>lt;sup>41</sup> Submissions # 404.8-9

<sup>&</sup>lt;sup>42</sup> Submission # 404.7

<sup>&</sup>lt;sup>43</sup> Submission # 348.5

<sup>&</sup>lt;sup>44</sup> At paragraphs 121 to 151

<sup>&</sup>lt;sup>45</sup> Submissions # 402.91-92, 401.94-95, opposed by Further Submissions #25.28 and 61.42

spread across several chapters. However, we must accept the reporting officer's advice<sup>46</sup> that the PDP provisions that manage the effects of hazards in relation to infrastructure are located in the Infrastructure chapter to comply with the requirements of the National Planning Standards - sections 7.5 and 7.28b. We also note that Section 7.10 of the National Planning Standards clearly requires that plan provisions relating to hazards relevant to the Coastal Environment are located in a Coastal Environment chapter. We therefore recommend that the CentrePort submission point be rejected.

#### **Flood Hazards**

- 62. Kāinga Ora<sup>47</sup> sought the deletion of natural hazard flooding overlays from the PDP, and that this information be held on non-statutory GIS maps. The submitter considered that including Flood Hazard overlays in the District Plan ignores the dynamic nature of flood hazards, and will create unnecessary additional cost and uncertainty for landowners and land developers. Kāinga Ora considered it appropriate to include rules in relation to flood hazards, but sought that the rules are not linked to static maps.
- 63. In their planning and corporate evidence, Ms Woodbridge<sup>48</sup> and Mr Liggett<sup>49</sup> for Kāinga Ora considered that including flood hazard mapping in a GIS viewer outside of the District Plan is a more appropriate option than including flood hazard mapping within the District Plan.
- 64. Ms Woodbridge considered this is the preferred method when the information held by Council is not sufficiently certain and consistent enough to provide the basis for a mapped District Plan overlay. Mr Liggett also highlighted that the benefit of flood hazard maps held outside of the District Plan is that they can be more easily updated to reflect new information and flood modelling, which enables development where the spatial extent of flood inundation areas has reduced due to flood mitigation works.
- 65. In the reporting officer's<sup>50</sup> view, the comparative unresponsiveness of the RMA planmaking process to new information was not reason enough to support removal of the flood mapping from the Plan. The current flood modelling and mapping aligns with

<sup>&</sup>lt;sup>46</sup> Section 42A Report, at paragraph 152

 <sup>&</sup>lt;sup>47</sup> Submissions # 391.19-20, 319.30 and 391.156, supported by Further Submissions #87.2, 107.38-39, 108.38-39 and opposed by Further Submissions #69.6, 70.44-46, 70.52, 80.32, 84.51-53, 84.58, 138.74, 138.75 and 39.5

<sup>&</sup>lt;sup>48</sup> Evidence of Victoria Woodbridge paragraphs 5.1-5.4

<sup>&</sup>lt;sup>49</sup> Evidence of Brendon Liggett section 4

<sup>&</sup>lt;sup>50</sup> Section 42A Report, at paragraph 156

best-practice methods and is based on the most robust information presently available.

- 66. Further, Mr Sirl considered that any benefit offered by a non-statutory flood hazard mapping approach was outweighed by the benefits of a statutory mapping approach which provides greater certainty for landowners and does not create any natural justice issue regarding updates to the modelling method and mapping outputs, which are able to be tested and challenged under the RMA process. Further, it offers a regionally consistent approach of including flood hazard mapping in District Plans for the Wellington Region.
- 67. We agree with the position of the reporting officer. In our view, there is greater certainty by mapping flood hazard areas in the Plan. If consent is triggered and there is dispute about accuracy, or if there is new or updated information, then this can be appropriately considered at that time. We recommend Kāinga Ora's submission on this point be rejected.
- 68. We heard from the Tyers Stream Group<sup>51</sup> at the hearing. The group supported the Natural Hazards chapter as it relates to the Tyers stream catchment but sought stricter rules to restrict buildings and infrastructure in areas covered by the Stream Corridor Overlay, the Overland Flow Path Overlay and the Ponding Overlay.
- 69. While we appreciate the matters raised about the conservation importance of the stream, we also consider that the provisions in a general sense appropriately consider the hazard risks in the flooding overlays that apply to the Stream. We do not recommend acceptance of this submission point.
- 70. Elliott Thornton<sup>52</sup> sought that that the permitted depth for access be set at 0.3m, consistent with the GWRC's Flood Hazard Modelling Standard, and where that standard is not met, a risk management approach is taken which could consider matters such as the duration of the flood hazard, velocity, the ability for emergency vehicle access, or ability to provide alternative access during a major flood event.
- 71. We agree with the reporting officer's<sup>53</sup> conclusion that, due to the stormwater conveyance function of much of the road network, the inundation depths and velocity will likely be the same or greater than on the adjacent property where it is proposed an access standard apply. It therefore seems counterintuitive to ensure safe access

<sup>&</sup>lt;sup>51</sup> Submissions # 221.28-29, opposed by Further Submissions #25.27 and 61.41

<sup>52</sup> Submission # 399.1

<sup>&</sup>lt;sup>53</sup> Section 42A Report, at paragraph 161

to the road which, in many cases, would experience a greater degree of flooding. We do not recommend acceptance of this submission.

- 72. GWRC, supported by Toka Tū Ake EQC<sup>54</sup>, considered it is important to identify areas subject to flooding hazard in the rural area, as well as in the residential and other zones. The submitter noted that currently the PDP does not provide any information on flooding hazards across the whole rural zone and considered that these areas will be subject to flooding which should be shown on the Plan. In response, it sought that the flood hazard overlays are amended to apply to the Rural Zone, with the overlay to be based on the regional flood hazard mapping (Regional Exposure Assessment 1% AEP RCP8.5 2101-2120 (arcgis.com)).
- 73. While we agree with what GWRC is seeking to achieve, we were advised that the reason for not initially including these areas in the PDP was due to the unavailability of flood hazard mapping for the rural catchments that was sufficiently robust. We agree that without robust information, together with a process of engagement with potentially affected property owners, rural flood hazard mapping cannot be included in the Plan at this time.
- 74. Kimberley Vermaey<sup>55</sup> sought that buildings with flood water depth of less than 0.5m in the Flood Hazard Overlay not require resource consents, subject to required minimum floor levels.
- 75. We accept the advice of the reporting officer<sup>56</sup> that on-site impacts of low-level flood inundation could be managed through a permitted standard requiring minimum floor levels for buildings in low flood inundation areas, and this would adequately mitigate the risk of damage to the new building. However, and relying on the advice of Mr Osborne, this would disregard the cumulative effects of flood water displacement on adjoining properties that could result from permitted development within low flood inundation areas.
- Mr Sirl also noted that the flood inundation mapping excluded inundation depths of 0
   0.05 m and does not identify the specific inundation depths. Consequently, we do not consider that a permitted standard should be introduced for new buildings in areas of low-level flood inundation.

<sup>&</sup>lt;sup>54</sup> Submissions # 351.29-30, supported by Further Submission #70.19

<sup>55</sup> Submission # 348.1

<sup>&</sup>lt;sup>56</sup> Section 42A Report, at paragraph 164

#### Land Stability

- 77. Toka Tū Ake EQC<sup>57</sup> sought that a landslide hazard overlay be included in the planning maps. It suggested that this overlay be linked to provisions that restrict development (through sensitive activities) implemented in high-risk areas.
- 78. Toka Tū Ake EQC<sup>58</sup> also sought that that objectives, policies and rules are developed in the Natural Hazards chapter to restrict hazard sensitive activities and potentially hazard sensitive activities in high-risk land located as a new landslide hazard overlay.
- 79. We agree with Mr Sirl<sup>59</sup> that slope stability and landslide hazard risk can and should be managed by the Plan where the hazard risk is significant. However, as this hazard overlay was not included in either the draft Plan or the notified PDP, we agree that it would be both impractical and inappropriate from a natural justice perspective to introduce a landslide hazard response into the PDP at this point in the process. A future plan change that has gone through due process through the First Schedule of the Act would be the most appropriate course of action to follow. We recommend that occur as soon as possible if there is sufficiently robust information available.

#### **Fault Hazards**

- 80. Toka Tū Ake EQC<sup>60</sup> sought that the term 'Fault Hazard Overlay' in the Natural Hazards chapter be changed to 'Fault Avoidance Zone' with confined, unconfined, distributed, and uncertain fault areas included as separate categories.
- 81. Aggregate and Quarry Association<sup>61</sup> sought that the PDP provisions do not rule out quarries along the fault line. We note that Mr Sirl recommended the addition of 'Quarrying Activities' to the definition of 'Less Sensitive Hazard Activities'.
- 82. Kimberley Vermaey<sup>62</sup> sought that where there is a poorer understanding of the fault location, less restrictive objectives, policies and rules should apply, and where there is a good understanding of fault location, there should be more restrictive objectives, policies and rules.
- 83. We did not hear from any of the above submitters, but we had a number of problems with the definitional aspects of fault hazards and the resultant regulatory framework.

<sup>&</sup>lt;sup>57</sup> Submission # 282.1, supported by Further Submission #84.126

<sup>&</sup>lt;sup>58</sup> Submission # 282.5, supported by Further Submission #84.127

<sup>&</sup>lt;sup>59</sup> Section 42A Report, at paragraph 165

<sup>&</sup>lt;sup>60</sup> Submission # 282.2 and 282.6

<sup>&</sup>lt;sup>61</sup> Submission # 303.13, opposed by Further Submission #112.33

<sup>&</sup>lt;sup>62</sup> Submission # 348.3

- 84. In our view, the position reached in the Section 42A Report on the Fault Hazard Overlay leads to a very complex set of provisions, as the Fault Hazard Overlay mapping also includes fault complexity categories (uncertain poorly-constrained, uncertain constrained, distributed, well-defined extended and well-defined) for each of the Fault Hazard Overlays. We were advised that the fault complexity categories reflected the current understanding of each of the faults (Wellington, Ohariu, Shepherds Gully and Terāwhiti) which comprise the Fault Hazard Overlays contained in the Plan. We were also advised that the intent of the provisions is to control the management of use and development that corresponds with the risk of fault rupture.
- 85. In evidence for WCC, Mr Beban<sup>63</sup> stated that:

I agree with the submitters that is it possible to refine the policies and rules pertaining to fault rupture, so that they reflect the known understanding of the position of the fault. The revised provisions are outlined in Appendix A of the s.42 assessment by Mr Sirl. The proposed amendments to the policies and rules reflect the known location of the faults and the return periods of the faults, as per the approach set out by the MfE guidelines. The approach has been modified to reflect the risk based approach under the Proposed District Plan. This means that instead of relying on the building code classification, it uses the approach to hazard sensitive activities, potentially hazard sensitive activities and least hazard sensitive activities.

The proposed approach seeks to have more restrictive provisions, where the fault has a shorter return period, the position of the fault is well known and the activity sensitivity is high. Conversely, the approach becomes more permissive as the above factors reduce. The revised approach is summarised in Tables 1 and 2 below:

<sup>&</sup>lt;sup>63</sup> Evidence of James Beban paragraph 6.6 and 6.7

#### Table 1 – Policy direction for the Fault Hazard Overlays

	Less Sensitive Activity	Potentially Sensitive Activity	Hazard Sensitive Activity
Wellington Fault Overlay and Ohariu Fault Overlay– Well defined or well defined extensions	Allow	Avoid	Avoid
Wellington Fault Overlay and Ohariu Fault Overlay – poorly constrained, uncertain constrained and distributed	Allow	Provide for	Provide for
Terawhiti Fault Overlay	Allow	Allow	Allow (with the exception to a limited number of activities)
Shepherds Gully Fault Overlay	Allow	Allow	Allow (with the exception to a limited number of activities)

# 86. Mr Beban also outlined the Activity Status within the Fault Hazard Overlays.

	Less Sensitive Activity	Potentially Sensitive Activity	Hazard Sensitive Activity
Wellington Fault Overlay and Ohariu Fault Overlay– Well defined or well defined extensions	Permitted	Non-Complying	Non-Complying
Wellington Fault Overlay and Ohariu Fault Overlay – poorly constrained, uncertain constrained and distributed	Permitted	Restricted Discretionary	Restricted Discretionary
Terawhiti Fault Overlay	Permitted	Permitted	Restricted Discretion (limited to named activities)
Shepherds Gully Fault Overlay	Permitted	Permitted	Restricted Discretion (limited to named activities)

Table 2 – Activity status for applications for the Fault Hazard Overlays

- 87. The explanation above assisted to some extent, particularly with rule interpretation.
   We still found that there was some confusion. In our minute 33<sup>64</sup>, we directed that the officers respond to various matters, including:
  - a) Whether further information and guidance around the provisions for the natural hazards risks relating to fault rupture can be provided (for example, in the Introduction) to assist in understanding the terminology and approach to managing activities: for example, by plain English descriptions of the technical terms, supported by graphics/maps to illustrate terms.
  - b) Consideration could be given to whether the mapping of fault overlays could be made more 'user friendly'.
- 88. In his Reply, Mr Sirl<sup>65</sup> conceded that it was apparent that additional clarity may be required with respect to the Fault Hazard Overlays and terms used in associated provisions.
- 89. He observed that the Fault Hazard Overlays reflected the Fault Avoidance Zones identified in the GNS fault report that contributed to the PDP as notified. The overlay is also a spatial tool that aligns with relevant directives in the National Planning Standards 2019 and is a term that has been used in the context of faults to align with the method (overlay) by which fault hazard information has been incorporated into and illustrated in the Plan.
- 90. After the Council Reply was received, we issued Minute 34 seeking a 'plain English' explanation of the Fault Hazard Overlay, which would be located in the Natural Hazards chapter Introduction section. We also sought confirmation about whether a simple diagram could be developed to explain how to understand the composition of the Fault Hazard Overlays.
- 91. In relation to a diagram, Mr Sirl<sup>66</sup>, relying on the advice of Dr Litchfield<sup>67</sup>, considered that having a diagram would represent an oversimplification of the Fault Hazard Overlays, which would cause confusion if included in the Plan, and could result in inaccurate identification of a fault deformation zone.

<sup>&</sup>lt;sup>64</sup> Questions xiv and xv

<sup>&</sup>lt;sup>65</sup> Statement of Evidence in reply of Jamie Sirl paragraphs 41 to 53

<sup>&</sup>lt;sup>66</sup> Further Statement of Evidence in reply of Jamie Sirl paragraphs 13 to 15

<sup>&</sup>lt;sup>67</sup> Further Statement of Evidence in reply of Jamie Sirl Appendix B

92. After receiving the advice of Dr Litchfield, Mr Sirl recommended that the following text be inserted into the Introduction of the chapter:

The Fault Hazard Overlays identify areas likely to experience fault rupture (breaking or buckling of the ground) in a large earthquake, and as such it is necessary to manage the risk to people and property in these Overlays.

The composition of each of the Fault Hazard Overlays (Wellington, Ohariu, Shepherds Gully, and Terāwhiti) differs. Where a fault is well-understood the overlay generally reflects a Fault Deformation Zone (areas identified by geologist as highly likely to experience breaking or buckling of the ground in a large earthquake) and a 20 m buffer, for example most of the Wellington Fault. Where a fault, or parts of a fault, is not well understood or is complex in its composition the overlay is comprised of multiple sections of Fault Deformation Zone, 20 m buffers and also areas of uncertainty where the Fault Deformation Zones are not known, for example the Shepherds Gully Fault.

The Fault Hazard Overlay mapping also includes fault complexity categories (uncertain poorly-constrained, uncertain constrained, distributed, well-defined extended and well-defined) for each of the Fault Hazard Overlays. The fault complexity categories reflect the current understanding of each of the faults (Wellington, Ohariu, Shepherds Gully and Terāwhiti) which comprise the Fault Hazard Overlays contained in the District Plan, and enable management of use and development that corresponds with the risk of fault rupture.

Many of the provisions associated with the Fault Hazard Overlays reference the need for buildings or activities to be located more than 20 m from the edge of the Fault Deformation Zone. The Fault Deformation Zone can only be identified by a suitably qualified and experienced geologist or geotechnical (or similar) engineer with geophysics experience.

93. We consider that this additional explanatory wording goes a long way to assisting with clarity on what is a potentially confusing set of provisions, some of which are particularly constraining on land use and development. We recommend its adoption to support the changes to the Fault Hazard mapping that introduce the fault complexities that we have also recommended be made. However, we would also recommend the Council consider preparing some external guidance for Plan users on what is a complex technical and regulatory matter.

#### Liquefaction Hazard Overlay

94. WIAL<sup>68</sup> opposed the Liquefaction Hazard Overlay to the extent that it covers the Airport Zone, and sought that the Liquefaction Hazard Overlay is removed from the Airport Zone. It considered that the engineering and design requirements of airport

<sup>&</sup>lt;sup>68</sup> Submission # 406.19, opposed by Further Submissions #44.181 and 70.83, and #406.26, opposed by Further Submissions #44.182 and 70.85

infrastructure, including the requirements under the CDEM to remain operational following a natural hazard event, mean that liquefaction and flood hazard inundation. cannot occur on site for operational reasons.

- 95. Mr Sirl<sup>69</sup> was of the view that all areas that are known to be susceptible to the natural hazards addressed in the PDP should be included in the relevant hazard overlay, regardless of whether there are requirements for natural hazard risks to be mitigated, in addition to the responsibilities of territorial authorities under the RMA.
- 96. Mr Sirl also advised that the overlay is informed by the liquefaction susceptibility report prepared by GNS Science Consultancy on behalf of Council, as outlined in the evidence of Ms Griffin. That report identifies that the part of the Airport where the liquefaction overlay applies is highly susceptible to liquefaction. Mr Sirl advised that the rules associated with the liquefaction hazard overlay only control activities related to emergency service facilities and so could be considered to have a minimal impact on the Airport's overall operation.
- 97. We agree with Mr Sirl, and note that Ms O'Sullivan<sup>70</sup>, the planner for WIAL, generally supported the position reached by the Section 42A Report with respect to WIAL's interest in the Natural Hazard and Coastal Environment (hazard only) chapters, with some refinements. These refinements suggested did not include the Liquefaction Overlay applying to the Airport.

#### **Overlays and Mapping**

- 98. Kāinga Ora<sup>71</sup> supported the mapping of other, non-flooding related natural hazards, such as liquefaction and fault hazard, to be incorporated into the PDP as these hazards are less subject to change.
- 99. WIAL<sup>72</sup> opposed the mapping of 'inundation areas' within the Airport Zone as ponding, such as that depicted on the PDP planning maps, does not occur within its landholdings. It sought the deletion of all Flood Hazard Overlays from the Airport Zone.
- 100. In response, Mr Sirl<sup>73</sup> relied on the evidence of Mr Osborne<sup>74</sup>, the Senior Hydraulic Modeller at Wellington Water Limited engaged to provide expert advice, who

<sup>&</sup>lt;sup>69</sup> Section 42A Report para 176

<sup>&</sup>lt;sup>70</sup> Evidence of Kirsty O'Sullivan paragraph 1.9

<sup>&</sup>lt;sup>71</sup> Submission # 391.21

<sup>&</sup>lt;sup>72</sup> Submission # 406.25, opposed by Further Submissions #44.184 and 70.85

<sup>&</sup>lt;sup>73</sup> Section 42A Report, at paragraphs 175, 176

<sup>&</sup>lt;sup>74</sup> Evidence of Alistair Osborne paragraph 42

confirmed that the flood modelling undertaken by Wellington Water predicted that areas of the Airport will flood, particularly where the piped stormwater network capacity will be exceeded and overflow from stormwater inlets occurs in a high rainfall event.

- 101. Mr Sirl acknowledged that the Airport has a duty under its CDEM functions to address natural hazard risks, on which basis he did not support the removal of the flood hazard overlay inundation area from the Airport Zone. We agree and note that there was no further discussion on this matter at the hearing.
- 102. Mr Sirl had also taken the advice of Mr Osborne<sup>75</sup> to inform a response to submissions relating to flood hazards for a number of site specific situations. We note that none of these submitters provided further evidence or appeared at the hearing.
- 103. Rod Halliday, opposed by Heidi Snelson<sup>76</sup>, submitted that the flood inundation and overland flowpath at 28 Westchester Drive is inaccurate, and that the presence of the Stebbings Dam upstream and concrete retaining wall structures holding up the road will prevent this hazard. Glenside Progressive Association<sup>77</sup> stated they are not in a position to comment on the veracity of this statement, but if any development is to take place, it is important that the lie of the land, including gullies, is accurately mapped, that these are not filled in during earthworks and that roads are planned to avoid them.
- 104. We accept the advice of Mr Sirl<sup>78</sup> that the overlay is an accurate representation of the flood hazard on this property for the reasons outlined in paragraphs 18 to 19 of Mr Osborne's evidence.
- 105. Oliver Sangster<sup>79</sup> opposed the inclusion of the Flood Hazard Inundation Overlay applying to 22B Glenside Road, on the basis that the mapping is inaccurate because it does not reflect the new (higher) ground level as a result of earthworks and retaining wall construction. He sought its removal.
- We agree with the officer's<sup>80</sup> advice that a reduction in the extend of the Flood Hazard
   Inundation Overlay, as it applies to 22B Glenside Road is appropriate.

<sup>&</sup>lt;sup>75</sup> Statement of Evidence of Alistair Osborne paragraphs 18-29

<sup>&</sup>lt;sup>76</sup> Submission # 25.3, opposed by Further Submission #24.4

<sup>&</sup>lt;sup>77</sup> Further Submission #4.10

<sup>&</sup>lt;sup>78</sup> Section 42A Report, at paragraph 191

<sup>79</sup> Submission # 112.6

<sup>&</sup>lt;sup>80</sup> Section 42A Report para192

- 107. David Karl<sup>81</sup> advised that ground levels were required to be raised by approximately
  1 metre during the construction of a house on 29a Trent Street, and sought that the flood hazard overlays are amended to reflect current ground-levels.
- 108. We agree with officers<sup>82</sup> that the Flood Hazard Inundation Overlay applying to 29a Trent Street should be amended to reflect current ground-levels that were not reflected in the Wellington Water flood modelling that informed the Flood Hazard – Inundation Overlay.
- 109. Singvest Group Limited<sup>83</sup> opposed the Flood Hazard Inundation Overlay applying to 154 Victoria Street and sought the removal of the Flood Hazard – Inundation Overlay from the property.
- 110. Mr Sirl<sup>84</sup> advised that he had checked the Flood Hazard Inundation Overlay and confirmed that it did not apply to 154 Victoria Street, Te Aro. No change is therefore required to respond to the submission.
- 111. Michael Thomas<sup>85</sup> submitted that 18 Campbell Street is significantly higher than the adjoining property at 16A Campbell Street and that any water would flow there, noting that 18 Campbell Street has a retaining wall along its western fence that would provide a barrier to flooding. He sought the removal of the Flood Hazard Inundation Overlay from 18 Campbell Street.
- 112. We were advised<sup>86</sup> that Mr Osborne disagreed that the Flood Hazard Inundation Overlay should be removed from 18 Campbell Street. In the absence of competing expert evidence, we accept his reasoning.
- 113. Southern Cross Healthcare Limited<sup>87</sup> sought the removal of the Flood Hazard Inundation Overlay and/or removal of the Flood Hazard – Overland Flowpath Overlay from 82, 84, 86, 88 and 90 Hanson Street, and that further investigation is undertaken regarding application of the flood hazard (inundation) overlay and Flood Hazard – Overland Flowpath around existing buildings on these properties.

<sup>&</sup>lt;sup>81</sup> Submission # 309.1

<sup>82</sup> Section 42A Report para193

<sup>&</sup>lt;sup>83</sup> Submission # 129.1

<sup>&</sup>lt;sup>84</sup> Section 42A Report para194

<sup>&</sup>lt;sup>85</sup> Submission # 219.1

<sup>&</sup>lt;sup>86</sup> Section 42A Report para 195

<sup>87</sup> Submission # 380.10

114. We were advised<sup>88</sup> that Mr Osborne disagreed that the Flood Hazard – Inundation Overlay should be removed from 82, 84, 86, 88 and 90 Hanson Street. Again, in the absence of any competing expert evidence, we accept his reasoning.

#### 3.2 Submissions on Natural Hazards Chapter

#### **Natural Hazards – Introduction**

- 115. The following submissions related to the introductory text of the NH chapter.
- 116. Oyster Management Limited<sup>89</sup> sought the retention of the natural hazard introduction as notified, and supported the introductory text to the extent that it takes an adaptation approach to natural hazards.
- 117. WIAL<sup>90</sup> sought the retention of the introduction as notified and supported the recognition of Wellington Airport within the introductory text.
- 118. WCC Environmental Reference Group<sup>91</sup> submitted in support of the Natural Hazards chapter's Introduction, including the risk framework, the use of both buildings and activities, and the three focus areas of people, property and infrastructure.
- 119. Council<sup>92</sup> sought amendments to the introduction to provide clarity and add detail in relation to sensitivity rating definitions as follows:

Amend the first sentence of paragraph one of the introduction under 'Hazard Sensitivity' as follows:

To assist with determining the consequences associated with natural hazards, buildings and activities have been allocated a sensitivity rating (see Definitions – <u>less hazard sensitive activities</u>, <u>potentially hazard sensitive activities</u>, <u>hazard sensitive activities</u>).

- 120. Council<sup>93</sup> also sought a minor correction to the spelling of 'Shepherd's Gully Fault Overlay', and consequential amendments to reflect this correction where referenced throughout the PDP.
- 121. We agree that these amendments to the Introduction provide useful clarification.

<sup>&</sup>lt;sup>88</sup> Section 42A Report, at paragraph 196

<sup>&</sup>lt;sup>89</sup> Submissions # 404.10 and 404.12

<sup>90</sup> Submission # 406.208

<sup>&</sup>lt;sup>91</sup> Submission # 377.55

<sup>92</sup> Submission # 266.65

<sup>93</sup> Submission # 266.66

- 122. Argosy<sup>94</sup> sought the deletion of the 'Natural Hazard Overlay' table in the Introduction and hazard rankings being attributed to the various natural hazards.
- 123. Fabric Property Limited<sup>95</sup> sought that the introduction to the Natural Hazards chapter be amended to delete the hazard rankings from the Natural Hazards Overlay table. In the event that the table is not removed, it alternatively sought that the Natural Hazards chapter introduction be amended to remove the 'High' hazard ranking for the Liquefaction Hazard Overlay.
- 124. The reporting officer<sup>96</sup> recommended rejection of the request to delete the hazard risk ranking table from the Natural Hazards Introduction section but supported amending the hazard ranking for liquefaction to 'low' consistent with the alternative relief sought by Fabric. We agree with the reporting officer's recommendations.
- 125. We note that Ms Carter<sup>97</sup>, the planner for Argosy, Oyster and Fabric, supported the reporting officer's recommendation to remove the Liquefaction Hazard Overlay from the 'High' hazard ranking, and to apply a 'Low' hazard ranking. We also support that change.
- 126. We have also discussed previously our concerns with the definitional aspects of Fault Hazards provisions and agree that the additional clarification on this recommended by officers is very useful at the front end of the chapter.

# Natural Hazards – Objectives

#### NH-O1 Risk from natural hazards

- 127. Argosy, CentrePort Limited, Oyster Management Limited, KiwiRail Holdings Limited and MoE, supported by Waka Kotahi<sup>98</sup> requested the retention of NH-O1 as notified.
- 128. WIAL<sup>99</sup> considered the risks from natural hazards should be avoided where they are intolerable, and that the concept of intolerability should be brought into this policy to better acknowledge that people, activities, property and infrastructure have varying levels of hazard tolerance. This was a consistent submission by WIAL across a number of objectives and policies. It sought that NH-O1 is deleted, or amended as set out below:

<sup>&</sup>lt;sup>94</sup> Submission # 383.19, opposed by Further Submission #70.1

<sup>&</sup>lt;sup>95</sup> Submissions # 425.9-10, opposed by Further Submissions #70.10-11

<sup>&</sup>lt;sup>96</sup> Section 42A Report, at paragraphs 208-210

<sup>&</sup>lt;sup>97</sup> Evidence of Janice Carter paragraphs 12,13

<sup>&</sup>lt;sup>98</sup> Submissions # 383.23, 402.96, 404.13, 408.93 and 400.44, supported by Further Submission #103.50

<sup>&</sup>lt;sup>99</sup> Submission # 406.209, opposed by Further Submission #70.91

#### NH-O1 (Risk from natural hazards)

Subdivision, use and development in the Natural Hazard Overlays <u>do not create an intolerable level</u> of reduces or does not increase the risk to people, property, and infrastructure.

- 129. GWRC<sup>100</sup> sought that NH-O1 be amended to have regard to Objectives 19 and 20 and Policies 51 and 52 of the RPS-Change 1, replacing the words "*reduce or do not increase*" with "*minimise*". As with the submission of WIAL, above, this was a consistent submission by GWRC across a number of objectives and policies.
- 130. GWRC submitted that minimise be defined as "as low as reasonably practicable (ALARP)", which is in line with standard risk-based hazard management approaches. Consequently, it considered that this leaves room for reduction as far as practicable but is a clearer signal than "reduce or do not increase", as it actively looks to bring down the risk in the design and planning of a development.
- 131. Considering these submissions in the wider context of the use of consistent terminology, Mr Sirl<sup>101</sup> was of the opinion that NH-O1 should be amended to only apply to high hazard areas and that the objective is amended to clarify that the outcome relates to the level of natural hazard related risk present in the existing environment, as opposed to the risk being introduced by a proposed activity.
- 132. Following his recommended amendments to NH-O1, Mr Sirl was of the view that an additional objective that specifically addresses the outcome sought in relation to hazard risk in low and medium hazard risk areas is necessary, and that this objective should direct that hazard risk in low and medium risk areas is required to be *"minimised*", with an associated definition for 'minimise', meaning as low as reasonably practicable, introduced into the Plan.
- 133. There was no further discussion on this at the hearing. While broadly in accordance with the submissions who sought change to the intent of the provisions we consider that splitting the objective is an appropriate thing to do. This would focus NH-O1 on high hazard areas, where subdivision, use and development reduce or do not increase the risk. Whereas for low and medium hazard areas, the objective seeks to minimise the risk in the new NH-O2. This will significantly increase the clarity of the policies and the rules.

 <sup>&</sup>lt;sup>100</sup> Submission # 351.119, supported by Further Submission #70.21 and opposed by Further Submissions
 #107.10 and 108.10
 <sup>101</sup> Output to the support of the suppor

<sup>&</sup>lt;sup>101</sup> Section 42A Report paras 233-234

134. NH-O1 and new NH-O2 are therefore recommended as follows.

NH-01	<b>Risk from natural hazards</b> <u>in High Hazard Areas of the Natural Hazard Overlays</u> Subdivision, use and development within <u>the High Hazard Areas of</u> the Natural Hazard Overlays reduce or do not increase the <u>existing</u> risk from natural hazards to people, property and infrastructure.
<u>NH-O2</u>	Risk from natural hazards in Low and Medium Hazard Areas of the Natural         Hazard Overlays         Subdivision, use and development within the Low and Medium Hazard Areas of the         Natural Hazard Overlays minimise the risk from natural hazards to people, property and infrastructure.

135. This would mean a consequential renumbering of the further objectives as a result.

# NH-O2 Planned natural hazard mitigation works (now NH-O3)

- 136. CentrePort Limited<sup>102</sup> sought the retention of NH-O2 as notified.
- 137. GWRC<sup>103</sup> sought the inclusion of "*catchment management*" as notified be retained in the objective, and sought an amendment to NH-O2 to recognise the need to minimise risk:
- 138. We agree with Mr Sirl<sup>104</sup> that it is inappropriate to direct the effectiveness of mitigation to the extent that it should be required to minimise risk, and that from a resource consenting perspective, achieving a reduction is an appropriate outcome to seek with regards to mitigation works and catchment management.

# NH-O3 Natural systems and features (now NH-O4)

- 139. FENZ, GWRC and CentrePort Limited<sup>105</sup> sought the retention of NH-O3 as notified.
- 140. NH-O4 Operational port activities, passenger port facilities and rail activities (now NH-O5)
- 141. GWRC and CentrePort Limited<sup>106</sup> sought the retention of NH-O4 as notified.
- 142. WIAL<sup>107</sup> opposed NH-O4 as it considered the activities listed in the objective have operational and functional constraints, which ultimately govern the location of these

<sup>&</sup>lt;sup>102</sup> Submission # 402.97

<sup>&</sup>lt;sup>103</sup> Submissions # 351.120-121, supported by Further Submission #70.22

<sup>&</sup>lt;sup>104</sup> Section 42A Report para 192

<sup>&</sup>lt;sup>105</sup> Submissions # 273.60, 351.122 and 402.98

 $<sup>^{\</sup>rm 106}$  Submissions # 351.123 and 402.99

<sup>&</sup>lt;sup>107</sup> Submission # 406.211

activities, including within areas exposed to natural hazard risk. It sought either the deletion of NH-O4 or its amendment.

- 143. We agree that it is appropriate to include specific reference to the Airport, given Wellington International Airport is included in the PDP definition of Regionally Significant Infrastructure. However, we do not support the use of the term "*create an intolerable level*" to replace "*increase the*" risk, but we do support its replacement with the word minimise, as recommended by Mr Sirl.
- 144. The recommended changes to NH-O4 are:

# NH-0504Airport purposes, Ooperational port activities, passenger port facilities and rail<br/>activitiesAirport purposes, Ooperational port activities, passenger port facilities and rail<br/>activities are provided for, while also ensuring that subdivision, development and use<br/>of land occupied by the airport purposes, operational port activities, passenger port<br/>facilities and rail activities do not increase minimise<br/>the risk to people, property and<br/>infrastructure.

#### Proposed New Natural Hazards Objectives

145. Argosy<sup>108</sup> sought the addition of a new objective to recognise that development in the natural hazard overlays in the City Centre Zone is appropriate in some instances. Fabric Property Limited<sup>109</sup> also sought the inclusion of the same additional objective as follows:

Add new objective NH-OX to the Natural Hazards chapter as follows:

Provide for a range of activities that maintain the vibrancy and vitality of the City Centre Zone, while also ensuring that subdivision, development and use in these areas do not increase the risk to people, property, and infrastructure

146. Mr Sirl<sup>110</sup> advised that non-coastal inundation and liquefaction are the two hazard overlays that impact a large part of the City Centre Zone, with both ranked as a low-risk hazard. He considered that the plan provisions relating to flood inundation and liquefaction hazards present in the City Centre are not overly constraining to use and development, due to the ability to relatively easily mitigate the associated hazard risk.

<sup>&</sup>lt;sup>108</sup> Submission # 383.20

<sup>109</sup> Submission # 425.11

<sup>&</sup>lt;sup>110</sup> Section 42A Report, at paragraph 261

147. We note Ms Carter for Argosy and Fabric did not refer to this in her evidence. We therefore agree that a proposed City Centre Zone specific objective is not needed in the Natural Hazards Chapter.

#### Natural Hazards – Policies

#### **NH-P1 Identification of Natural Hazards**

- 148. GWRC, supported by Waka Kotahi, Argosy, Horokiwi Quarries Ltd, FENZ and Oyster Management Limited<sup>111</sup>, sought the retention of NH-P1 as notified.
- 149. MoE supported by WIAL<sup>112</sup>, sought amendments to NH-P1 so that operational need criteria can be applied to facilities located in natural hazard areas to serve existing communities, and that can be considered when managing development in natural hazard areas.
- 150. WIAL<sup>113</sup> sought an amendment to NH-P1 to introduce the concept of tolerability. We disagree with this terminology, for reasons outlined previously in relation to NH-O1.
- 151. As this is an identification policy, we agree with Mr Sirl<sup>114</sup> that recognition of the operational need for some activities to locate in natural hazard overlays is an appropriate consideration, as there are various activities that may need to locate in a specific location where an alternative is not practicable.
- 152. The recommended changes to NH-P1 are:

NH–P1	Identification of natural hazards
	<ul> <li>Identify natural hazards within the District Plan and take a risk-based approach to the management of subdivision, use and development based on:</li> <li>1. The sensitivity of the activities to the impacts of natural hazards; and</li> <li>2. The hazard posed to people's lives and wellbeing, property and infrastructure, by considering the likelihood and consequences of natural hazard events-; and</li> <li>3. The operational need or functional need for some activities to locate in Natural Hazard Overlays.</li> </ul>

#### NH-P2 Levels of risk

153. Horokiwi Quarries Ltd and FENZ<sup>115</sup> sought the retention of NH-P2 as notified.

<sup>&</sup>lt;sup>111</sup> Submission # 351.124, supported by Further Submissions #103.51, 383.24, 271.18, 273.61 and 404.14

<sup>&</sup>lt;sup>112</sup> Submissions # 400.5-6, supported by Further Submission #36.78

<sup>&</sup>lt;sup>113</sup> Submissions # 406.213214

<sup>&</sup>lt;sup>114</sup> Section 42A Report, at paragraph 267

<sup>&</sup>lt;sup>115</sup> Submissions # 271.18 and 273.61

- 154. GWRC<sup>116</sup> sought amendment to NH-P2 to provide for the consistent wording of replacing "*reduce or do not increase*" with "*minimise*".
- 155. Argosy and Fabric Property Limited<sup>117</sup> sought similar amendments, as they considered NH-P2.1 is restrictive in only allowing low occupancy or low replacement value development within the Natural Hazard Overlays, that NH-P2.2 is unrealistic in expecting that mitigation can address the impacts from natural hazards, and that Policy NH-P.2 should apply in all hazard areas. Also, the submitters considered that NH-P2.3 is similarly restrictive and equally fails to recognise that a significant portion of the CBD is categorised as a high hazard area under the Liquefaction Hazard Overlay. They requested that Policy NH-P2.3 should apply to the Fault Hazard Overlay only, and also recognise the functional needs in this location.
- 156. MoE<sup>118</sup> submitted that, at times, there is an operational need to locate educational facilities in high hazard areas to serve existing communities. The submitter proposed inserting the words "*or operational need*" into clause 3.
- 157. Similarly, CentrePort Limited supported by WIAL<sup>119</sup> sought amendments to NH-P2, as the Special Purpose Port Zone has a number of hazard risks, including those categorised as high, and the policy as notified sought to only allow buildings and activities in exceptional circumstances, rather than recognising there may be a functional need or operational requirement for the building or activity:
- 158. WIAL<sup>120</sup> sought to delete or amend NH-P2 to include the concept of tolerability as per Objective SRCC-O2, to recognise that different activities, people, property and infrastructure will have a different tolerance to the effects of coastal hazards. We have discussed this matter previously in relation to tolerability, and do not recommend using this term.
- 159. Mr Sirl<sup>121</sup> did not agree with the deletion of NH-P2.1, as sought, as this would result in a less-enabling policy direction for activities less impacted by natural hazards. He did, however, recommend that a number of the other amendments sought by submitters be accommodated. Ms Sullivan for WIAL and Ms Carter for Argosy and Fabric supported these changes. We agree that the changes are an improvement.

<sup>&</sup>lt;sup>116</sup> Submission # 351.125, supported by Further Submission #70.23 and opposed by Further Submissions #107.11 and 108.11

<sup>&</sup>lt;sup>117</sup> Submissions # 383.25 and # 425.12

<sup>&</sup>lt;sup>118</sup> Submissions # 400.47-48, supported by Further Submission #106.52

<sup>&</sup>lt;sup>119</sup> Submissions # 402.100-101, supported by Further Submission #36.79

<sup>&</sup>lt;sup>120</sup> Submissions # 406.215-216 opposed by Further Submission #70.92

<sup>&</sup>lt;sup>121</sup> Section 42A Report, at paragraph 281-288

#### 160. Therefore, the recommended changes to NH-P2 are:

NH-P2	Levels of risk
	Subdivision, use and development <del>reduce or do not increase the</del> <u>manages natural</u> <u>hazard</u> risk to people, property and infrastructure by:
	<ol> <li>Allowing for those buildings and activities that have either low occupancy or low replacement value within the low, medium and high hazard areas of the Natural Hazard Overlays;</li> </ol>
	2. Requiring buildings and activities to mitigate the impacts the risk resulting from the development from natural hazards to people, property and infrastructure as far as reasonably practicable in the low hazard and medium hazard areas within the Natural Hazard Overlays; and
	3. Avoiding buildings and activities in the high hazard areas of the Natural Hazard Overlays unless there is an <u>operational need or functional need exceptional</u> <del>reason</del> for the building or activity to be located in this area and the <u>building or</u> activity mitigates the impacts from natural hazards to people, property and infrastructure.

#### NH-P3 Less hazard sensitive activities

- 161. Horokiwi Quarries Ltd and GWRC<sup>122</sup> sought the retention of NH-P3 as notified.
- 162. We also note that for consistency of terminology reasons, Mr Sirl<sup>123</sup> has, however, recommended the following changes that we endorse.

NH-P3	Less hazard sensitive activities
	Allow for subdivision, use and development associated with less hazard sensitive activities and associated additions to buildings within the Natural Hazards Overlays, provided that:
	<ol> <li>It can be demonstrated that overland flowpaths are unimpeded and unobstructed;</li> </ol>
	2. The building <u>, structure</u> or the additions are not located within a stream corridor; and
	<i>3.</i> The risk to people and property is reduced or not increased from the 1% Annual Exceedance Probability flood <u>is minimised</u> .

#### NH-P4 Additions to buildings for potentially hazard sensitive activities and hazard sensitive activities in an identified inundation area of the flood hazard overlay

163. Precinct Properties New Zealand Limited, GWRC, Argosy, and Oyster Management Limited<sup>124</sup> sought that NH-P4 be retained as notified.

<sup>&</sup>lt;sup>122</sup> Submissions # 271.19 and 351.126

<sup>&</sup>lt;sup>123</sup> Statement of Evidence in reply of Jamie Sirl paragraphs 10-11

<sup>&</sup>lt;sup>124</sup> Submissions # 139.5, 351.127, 383.26 and 404.15

- 164. FENZ<sup>125</sup> sought amendments to NH-P4 to add the words "The activity, excluding additions to existing building, has an operational and/or functional need to locate within the Wellington Fault Overlay and Ohariu Fault Overlay and locating outside of these Overlays is not a practicable option".
- 165. We agree with Mr Sirl<sup>126</sup>, who advised that he did not consider it appropriate for NH-P4 to be amended to also address activities within the Wellington Fault Overlay and Ohariu Fault Overlay. This policy is only intended to apply to the inundation area of the flood hazard overlay, noting that specific policy direction to manage buildings and activities in the Wellington Fault Overlay and Ohariu Fault Overlay is contained in NH-P10 and NH-P11.
- 166. Aside from the consistent change of the words "*is reduced or not increased*" to "*minimised*" there is no other change recommended.

### NH-P5 Additions to buildings for potentially hazard sensitive activities and hazard sensitive activities within the overland flow paths and stream corridors of the Flood Hazard Overlays

- 167. GWRC<sup>127</sup> sought the retention of NH-P5 as notified.
- 168. FENZ<sup>128</sup> sought the same amendments to NH-P5 as for NH-P4, to provide for operational and/or functional need criteria. We disagree that this is necessary, for the same reasons as for other policies.
- 169. Southern Cross Healthcare Limited<sup>129</sup> sought amendments to NH-P5 to allow for additions to buildings in overland flowpaths and stream corridors that allow for the conveyance of flood waters.
- 170. Mr Sirl<sup>130</sup> agreed in part with Southern Cross that the use of "*unimpeded and unobstructed*" could result in a test that excludes all scenarios where even a small impediment or obstruction occurs. He was of the opinion that this should be rectified by amending NH-P5.3, so that any building addition ensures the unimpeded conveyance of flood waters and no diversion of flood waters onto another property.
- 171. Further, Mr Sirl recommended amendments to the objective in response to GWRC's *"minimise"* submissions, and consequential amendments are required to NH-P2 to

<sup>&</sup>lt;sup>125</sup> Submissions # 273.62-63

<sup>&</sup>lt;sup>126</sup> Section 42A Report, at paragraph 298

<sup>&</sup>lt;sup>127</sup> Submission # 351.125

<sup>&</sup>lt;sup>128</sup> Submission # 273.64

<sup>&</sup>lt;sup>129</sup> Submission # 380.28

<sup>&</sup>lt;sup>130</sup> Section 42A Report, at paragraph 304

reflect the recommended approach to direct the minimisation of hazard risk in low and medium hazard areas, and to require that there be no increase or a reduction of risk in high hazard areas.

172. We agree with the following recommended changes to NH-P5 with one amendment to clause 2 in that we have reordered the sentence from saying "*In an overland flowpath, the risk to people and property is minimised from the 1% Annual Exceedance Probability flood event*" to "*In an overland flowpath, the risk to people and property from the 1% Annual Exceedance Probability flood event is minimised.* 

NH-P5	Additions to buildings for potentially hazard sensitive activities and hazard sensitive activities within the overland flowpaths and stream corridors of the Flood Hazard Overlays
	Only allow additions to buildings that accommodate existing potentially hazard sensitive activities and hazard sensitive activities within the overland flowpaths and stream corridors, where it can be demonstrated that:
	<ol> <li>The risk from the 1% Annual Exceedance Probability flood event is low due to either the:</li> </ol>
	a. Proposed mitigation measures;
	b. Size of the addition; or
	C. Nature of the activities undertaken within the addition; and
	2. In an overland flowpath, $t \mp$ he risk to people and property from the 1%
	Annual Exceedance Probability flood <u>event is reduced or not</u>
	<del>increased<u>minimised</u>; and</del>
	3. In a stream corridor the existing risk to people and property is not increased
	or is reduced from the 1% Annual Exceedance Probability flood event; and
	3. Overland flowpaths and stream corridors are unimpeded, and unobstructed to
	allow for the conveyancing of flood waters.
	4. The conveyancing of flood waters through the stream corridor or overland
	flowpath is still able to occur unimpeded and is not diverted onto adjacent
	properties.

# NH-P6 Potentially hazard sensitive activities and hazard sensitive activities within the identified inundation areas of the Flood Hazard Overlays

- Precinct Properties New Zealand Limited, Argosy and MoE<sup>131</sup> sought the retention of NH-P6 as notified.
- 174. FENZ<sup>132</sup> sought the same amendments to NH-P6 as for NH-P4 and P5, to provide for operational and/or functional need criteria. We disagree that this is necessary for the same reasons.

<sup>&</sup>lt;sup>131</sup> Submissions # 139.6, 383.27 and 400.49

<sup>&</sup>lt;sup>132</sup> Submissions # 273.66-67

- 175. GWRC<sup>133</sup> sought amendments to NH-P6 to utilise "*minimise*" defined as "*as low as reasonably practicable (ALARP)*" in line with standard risk-based hazard management approaches:
- 176. Oyster Management Limited<sup>134</sup> supported NH-P6 to the extent it enables potentially hazard sensitive activities within the inundation areas of the Flood Hazard Overlays with amendments sought so that it only applies when 'significant' risk is posed to people and property:
- 177. In his Section 42A Report Mr Sirl<sup>135</sup> recommend only the acceptance of the "*minimise*" change. Ms Carter<sup>136</sup> for Argosy continued to oppose the changes. In her opinion a policy direction to "*minimise*" risk provides a much higher bar than "*not increased or is reduced*" and is a more onerous response to the level or risk associated with the identified inundation areas.
- 178. We too were also concerned about the workability of the policy and through Minute 33 requested that officers "Address whether the 'language' and framing of Policy NH-P6 is appropriate for a (short) rule cascade that ends with a non-complying activity status and consider whether this policy would be better separated into two arms or two policies".
- 179. In the supplementary evidence in response Mr Sirl<sup>137</sup> agreed that further changes to NH-P6 were required. He stated:

NH-P6 provides policy direction for potentially hazard sensitive activities and hazard sensitive activities within identified inundation areas of the Flood Hazard Overlays. In particular it underpins corresponding rule NH-R6 (notified rule NH-R11), which provides for hazard sensitive activities that achieve the stipulated finished floor levels in the inundation area of the Flood Hazard Overlay as a restricted discretionary activity, and where finished floor levels are not achieved is treated as a non-complying activity.

Following further consideration, I am of the opinion that an amendment to NH-P6 that provides for a more nuanced policy direction with respect to hazard sensitive activities in inundation areas is appropriate to better support the NH-R6 non-complying activity status for buildings containing hazard sensitive activities in Flood Hazard Overlay – Inundation Area where required floor levels are not achieved. In my opinion this amendment more effectively manages the flood hazard related risks to

 <sup>&</sup>lt;sup>133</sup> Submission # 351.129, supported by Further Submission #70.24 and opposed by Further Submissions #107.12 and 108.12

<sup>&</sup>lt;sup>134</sup> Submissions # 404.16-18, opposed by Further Submission #70.66

<sup>&</sup>lt;sup>135</sup> Section 42A Report, at paragraph 319

<sup>&</sup>lt;sup>136</sup> Evidence of Janice Carter paragraphs 18 to 24

<sup>&</sup>lt;sup>137</sup> Reporting Officer Reply of Jamie Sirl paragraphs 19 and 20

people and property. I have outlined recommended amendments to NH-P6 below and included them in Appendix C to this Reply.

- 180. We agree that the revised policy is an improvement, and the wording more closely ties to the rule framework, particularly NH-R11 'Hazard sensitive activities in the inundation area of the Flood Hazard Overlay' (now NH-R6). We discuss that rule in much more detail later in this Report.
- 181. We therefore recommend that NH-P6 be amended as follows but with the same reordering of clause 1 as we have done for clause 2 of NH-P5.

NH-P6	Potentially hazard sensitive activities and hazard sensitive activities within the identified inundation areas of the Flood Hazard Overlays
	Provide <u>for</u> subdivision, development and use for potentially hazard sensitive activities and hazard sensitive activities within the inundation area provided that mitigation measures are incorporated to ensure the risk to people and property both on the site and on adjacent properties is not increased or is reduced <u>minimised</u> .
	Manage subdivision, development and use associated with potentially hazard sensitive activities and hazard sensitive activities within inundation areas by:
	1. Ensuring subdivision, development and use incorporates mitigation to ensure the risk to people and property from the 1% Annual Exceedance Probability flood event is minimised; and
	2. Avoiding the construction of new buildings, or the conversion of existing buildings that contain a hazard sensitive activity within identified inundation areas of the Flood Hazard Overlays where the finished floor level is below the 1% Annual Exceedance Probability flood levels.

## NH-P7 Potentially hazard sensitive activities and hazard sensitive activities within the overland flowpaths of the Flood Hazard Overlays

- 182. MoE<sup>138</sup> sought the retention of NH-P7 as notified.
- 183. Three very similar submissions were made on NH-P7 relating to overland flow paths to those that were made to NH-P6 relating to inundation areas.
  - a) FENZ<sup>139</sup> supported NH-P7 as it sought to only allow new buildings or additions to buildings that accommodate existing Potentially Hazard Sensitive Activities and Hazard Sensitive Activities within identified hazardous areas where certain conditions can be met. As with previous policies, FENZ considered they may

<sup>&</sup>lt;sup>138</sup> Submission # 400.50

<sup>&</sup>lt;sup>139</sup> Submissions # 273.68-69

have a functional or operational need to locate in identified hazardous areas and requested amendments to NH-P6 to reflect this.

b) GWRC<sup>140</sup> sought that minimise be defined as "as low as reasonably practicable (ALARP)" in line with standard risk-based hazard management approaches. It sought the following amendment to NH-P7: It sought that the words "minimise" replace "reduce or avoid an increase".

GWRC considered this leaves room for reduction as far as practicable but is a clearer signal than "*reduce or do not increase*", to actively look to bring down the risk in the design and planning of the development. It also considered that changes requested to the policies may necessitate amendments to the rules to have regard to the natural hazard direction in RPS-Change 1.

- c) Oyster Management Limited opposed in part by Toka Tū Ake EQC<sup>141</sup>, sought the retention of NH-P7 as notified to the extent it enabled potentially hazard sensitive activities within the inundation areas of the Flood Hazard Overlays, and sought amendments to the policy, so that it only applies when significant risk is posed to people and property.
- 184. For the same reasons as we outlined in relation to inundation areas under NH-P6, we agree with Mr Sirl's proposed change below to NH-P7 concerning overland flow paths.

# NH-P7Potentially hazard sensitive activities and hazard sensitive activities within the<br/>overland flowpaths of the Flood Hazard OverlaysManage subdivision, development and use associated with potentially hazard<br/>sensitive activities and hazard sensitive activities within the overland flowpaths by:<br/>1. Incorporating mitigation measures that reduce or avoid an increase in minimise<br/>the risk to people and property from the 1% Annual Exceedance Probability flood;<br/>2. Ensuring the conveyancing of flood waters through the stream corridor or<br/>overland flowpath is still able to occur unimpeded and is not diverted onto adjacent<br/>properties; and<br/>2.3. Ensuring that people can safely evacuate from properties during a 1% Annual<br/>Exceedance Probability flood event.; and<br/>4.Overland flowpaths are unimpeded, and unobstructed to allow for the<br/>conveyancing of flood waters and is not diverted onto adjacent properties.

 <sup>&</sup>lt;sup>140</sup> Submission # 351.130, supported by Further Submission #70.25 and opposed by Further Submissions
 #107.13 and 108.13

<sup>&</sup>lt;sup>141</sup> Submissions # 404.1921, opposed by Further Submission #70.67

#### NH-P8 Potentially hazard sensitive activities and hazard sensitive activities within the stream corridors of the Flood Hazard Overlay

- 185. MoE<sup>142</sup> sought the retention of NH-P8 as notified.
- 186. As with NH-P6 and NH-P7, FENZ<sup>143</sup> supported the policy as it sought to only allow new buildings or additions to buildings that accommodate existing Potentially Hazard Sensitive Activities and Hazard Sensitive Activities within identified hazardous areas where certain conditions can be met. Notwithstanding that, the submitter considered these policies form relevant matters of discretion where related rules are infringed and considered they may have a functional or operational need to locate in identified hazardous areas.
- 187. Similarly, GWRC<sup>144</sup> sought that minimise is defined as "as low as reasonably practicable (ALARP)" in line with standard risk-based hazard management approaches. It sought that the words "minimise" replace "reduce or avoid an increase".
- 188. RVA<sup>145</sup> sought amendments to NH-P8 as it considered that the use of both "*avoid*" and "*unless it can be demonstrated*" in NH-P8 is contradictory, and that the policy should be amended to be enabling when standards are met, rather than restrictive when standards are not met:
- 189. As the stream corridor has the highest level risk of flood hazard risk and activities within it should strongly be discouraged, we do not agree with RVA. Mr Sirl<sup>146</sup> noted that the intention of the policy is that it is strongly discouraging of subdivision, development and activities in the stream corridor area of the Flood Hazard Overlay, as the Stream Corridor Overlay represents the greatest depths and velocity of flood waters in high rainfall events and has a high hazard risk ranking in the PDP. Further, the proposed change sought by the submitter would introduce a contradiction, as enabling subdivision, development and use within the stream corridor that is entirely contrary to the risk-based approach of the PDP. We agree with the reporting officer.
- 190. Therefore, NH-P8 as recommended to read as follows:

<sup>&</sup>lt;sup>142</sup> Submission # 400.51

<sup>&</sup>lt;sup>143</sup> Submissions # 273.70-71

<sup>&</sup>lt;sup>144</sup> Submission # 351.131, supported by Further Submission #70.26 and opposed by Further Submissions #107.14 and 108.14

<sup>&</sup>lt;sup>145</sup> Submission # 350.61

<sup>&</sup>lt;sup>146</sup> Section 42A Report, at paragraph 340

NH-P8	Potentially hazard sensitive activities and hazard sensitive activities within the stream corridors of the Flood Hazard Overlay
	Avoid subdivision, development and use associated with potentially hazard sensitive activities and hazard sensitive activities within the stream corridors, unless it can be demonstrated that:
	<ol> <li>The activity or subdivision has an operational <u>need orand</u> functional need to locate within the stream corridor and locating outside of these stream corridor is not a practicable option;</li> </ol>
	<ol> <li>Mitigation measures are incorporated that reduce or avoid an increase in the <u>existing</u> risk to people and property from the 1% Annual Exceedance Probability Flood;</li> </ol>
	3. People can safely evacuate the property during a 1% Annual Exceedance Probability flood; and
	<ol> <li>The conveyancing of flood waters through the stream corridor is still able to occur unimpeded and is not diverted onto adjacent properties.</li> </ol>

#### NH-P9 Emergency facilities in the Liquefaction Overlay

- 191. FENZ<sup>147</sup> supported the policy as it sought to only allow new buildings or additions to buildings that accommodate existing Potentially Hazard Sensitive Activities and Hazard Sensitive Activities within identified hazardous areas where certain conditions can be met. Notwithstanding that, as the submitter considered these policies form relevant matters of discretion where related rules are infringed, and considered they may have a functional or operational need to locate in identified hazardous areas, it sought the addition of the words "*The activity, excluding additions to existing building, has an operational and/or functional need to locate within the Wellington Fault Overlay and Ohariu Fault Overlay and locating outside of these Overlays is not a practicable option*".
- 192. GWRC, supported by Toka Tū Ake EQC<sup>148</sup>, sought that NH-P9 be amended to include a clause saying that the foundation designs must be designed and certified by a qualified geotechnical engineer in order to prevent liquefaction induced deformation of the building, and in doing so maintains its post event functionality.
- 193. CentrePort Limited<sup>149</sup> sought that NH-P9 be amended, as the term Emergency Service Facilities is defined in the PDP, whereas the term Emergency Facility may be subject to interpretation.

<sup>&</sup>lt;sup>147</sup> Submissions # 273.72-73

<sup>&</sup>lt;sup>148</sup> Submission # 351.132, supported by Further Submission #70.27

<sup>&</sup>lt;sup>149</sup> Submissions # 402.102-103

194. In accepting these submissions relating to emergency facilities in the Liquefaction Overlay, we consider that they provide for an improvement in clarity. We recommend that Policy NH-P9 be amended as follows:

NH-P9	Emergency <u>service</u> facilities in the Liquefaction <u>Hazard</u> Overlay
	Only allow new emergency <u>service</u> facilities within the Liquefaction <u>Hazard</u> Overlay where it can be demonstrated that:
	1. The emergency service facility will be able to maintain post disaster
	functionality following an earthquake <u>, including having foundation designs</u> designed by a certified engineer to prevent liquefaction induced deformation of the building; and
	<ol> <li>Emergency vehicles will be able to service the impacted community by being able to enter and leave the site.</li> </ol>

## NH-P10 Potentially hazard sensitive activities within the Wellington Fault Overlay and Ohariu Fault Overlay

- 195. The Fault Hazard Policies (NH-P10, NH-P11 and NH-P12) were the subject of much discussion at the hearing, and suggested change from the notified version of these policies.
- 196. In relation to NH-P10, MoE and CentrePort Limited<sup>150</sup> sought the retention of the policy as notified.
- 197. Council and WCC Environmental Reference Group<sup>151</sup> sought minor wording amendments to NH-P10 for clarity and consistency:
- 198. As with a number of previous policies, FENZ<sup>152</sup> supported the policy as it sought to only allow new buildings or additions to buildings that accommodate existing Potentially Hazard Sensitive Activities and Hazard Sensitive Activities within identified hazardous areas where certain conditions can be met. Notwithstanding that, the submitter considered these policies form relevant matters of discretion where related rules are infringed and considered they may have a functional or operational need to locate in identified hazardous areas. It sought the addition of the words "The activity, excluding additions to existing building, has an operational and/or functional need to locate within the Wellington Fault Overlay and Ohariu Fault Overlay and locating outside of these Overlays is not a practicable option".

<sup>&</sup>lt;sup>150</sup> Submissions # 400.52 and 402.104

<sup>&</sup>lt;sup>151</sup> Submissions # 266.67 and 377.56

<sup>&</sup>lt;sup>152</sup> Submissions # 273.75-76

- 199. GWRC, supported by Toka Tū Ake EQC<sup>153</sup>, sought amendments to NH-P10 so minimise is defined as "*as low as reasonably practicable (ALARP)*" in line with standard risk-based hazard management approaches:
- 200. We had an in depth discussion with officers about the proposed fault hazard policies (NH-P10, NH-P11 and NH-P12), as we had concerns that they were complicated, confusing, and unclear. There are a range of different fault hazard locations identified, alongside a range of certainty levels about where the risk is, and there should be clear direction in relation to avoidance, remediation or mitigation of the risk within the policy framework.
- 201. As outlined earlier, in our minute 33 we asked, "whether Policies NH-P10 and P11 (as recommended in the Natural and Coastal Hazards Section 42A Report) could be made simpler and easier to understand, such as by restructuring or potentially divided into separate policies."
- In reply, Mr Sirl<sup>154</sup> stated that he had undertaken a review of these policies and NH P12. In relation to NH-P10 he stated:

The review has resulted in recommended changes to NH-P10 that remove references to various areas of fault complexity with respect to the Terāwhiti and Shepherds Gully fault hazard overlays (e.g. uncertain poorlyconstrained, uncertain constrained, distributed, well-defined and welldefined extended) on the basis that the associated provisions do not differentiate fault complexity in the same way the provisions do for the Wellington and Ohariu fault hazard overlays. This is because of the lower risk profile of the Terāwhiti and Shepherds Gully faults compared to the Wellington and Ohariu faults.

- 203. The outcome is that NH-P10 has had a comprehensive rewrite and now relates solely to the Terāwhiti Fault and Shepherds Gully Fault Hazard Overlays. The Wellington and Ohariu Faults are considered in the NH-P11 through to NH-P13.
- 204. While we still have concerns about the framework for assessment of fault hazards, the redraft of the policy is a significant improvement. While the submissions received did not specifically request such modifications, the consequential need to clarify the structure of the Fault Hazards has necessitated the change. We agree that an out of scope amendment is made in accordance with Schedule 1, clause 99(2)(b) of the RMA.

<sup>&</sup>lt;sup>153</sup> Submission # 351.133, supported by Further Submission #70.28

<sup>&</sup>lt;sup>154</sup> Reporting Officer Right of Reply of Jamie Sirl paragraph 59

205. Therefore, we recommend that the revised version of NH-P10 be adopted as follows, but we recommend that Council consider the framework for fault hazards further at a future time.

<del>NH-P10</del>	Potentially hazard sensitive activities within the Wellington Fault Overlay and Ohariu Fault Overlay
	- Manage subdivision, development or use associated with potentially hazard sensitive activities, including additions to existing buildings within the Wellington Fault Overlay and Ohariu Fault Overlay by ensuring that:
	<ol> <li>The activity is located more than 20m of the Wellington Faultline or Ohariu Faultline; and</li> </ol>
	<ol> <li>The activity incorporates mitigation measures that ensure the risk from fault rupture to people, property and infrastructure is reduced or not increased.</li> </ol>
<u>NH-P10</u>	<u>Potentially hazard sensitive activities and hazard sensitive activities and</u> <u>related buildings and structures within the Terāwhiti Fault and Shepherds</u> <u>Gully Fault Hazard Overlays</u>
	Subdivision, use, and development for potentially hazard sensitive activities and hazard sensitive activities within the Terāwhiti Fault and Shepherds Gully Fault Hazard Overlays are managed as follows:
	1. Allow for potentially hazard sensitive activities and hazard sensitive activities and related subdivision, buildings, building additions and structures within the Terāwhiti Fault and Shepherds Gully Fault Hazard Overlays with the exception of educational facilities, health care facilities, hazardous facilities, major hazardous facilities, and emergency service facilities where these activities are only allowed where it can be demonstrated that:
	a. <u>The building, building platforms associated with subdivision or activity is more than</u> <u>20 m from the edge of the fault deformation zone of the Terāwhiti Fault and</u> <u>Shepherds Gully Fault Hazard Overlays; or</u>
	b. <u>The building or activity has an operational need or functional need to locate within</u> <u>the Terāwhiti Fault and Shepherds Gully Fault Overlays and locating outside of</u> <u>these overlays is not a practicable option; and</u>
	C. <u>Mitigation measures are incorporated into the building to maintain safety of the</u> <u>occupants and the structural integrity of the building in the event of fault rupture.</u>

# NH-P11 Hazard sensitive activities, excluding a single residential dwelling on an existing site, within the Wellington Fault Overlay and Ohariu Fault Overlay

206. FENZ and MoE<sup>155</sup> sought the retention of NH-P11 as notified.

 $<sup>^{\</sup>rm 155}$  Submissions # 273.77 and 400.53

- 207. Toka Tū Ake EQC<sup>156</sup> considered that the Plan does not adequately manage the risks of fault rupture, with single residential dwellings able to be located within the Wellington and Ohariu Fault Overlays. It referred to the MfE guidelines for planning around an active fault that advise that Buildings Importance Category (BIC) 2 (residential) structures are not developed within the fault avoidance zones (within 20m of the fault trace) of Recurrence Interval Class (RIC) I (≤2000 years) faults on brownfield sites and RIC I and II (2000 3500 years) on greenfield sites. The Wellington Fault is RIC I and the Ohariu Fault Overlays should be avoided within 20m of the Wellington Fault, even on an existing site, and sought amendments to NH-P11 to remove the exclusion of a single residential dwelling from the policy.
- 208. RVA<sup>157</sup> sought amendments to NH-P11 as it considered that the use of both "*avoid*" and "*unless it can be demonstrated*" in NH-P11 is contradictory. It also sought that the policy be amended to be enabling when standards are met, rather than restrictive when standards are not met:
- 209. GWRC<sup>158</sup> sought its consistent amendment to NH-P11, as minimise is defined as "*as low as reasonably practicable (ALARP)*" in line with standard risk-based hazard management approaches:
- 210. WCC Environmental Reference Group<sup>159</sup> sought amendments to NH-P11 as it appears to allow for single residential buildings to be constructed on existing sites, such as for a replacement dwelling, or possibly in accordance with new rules allowing for infill housing on a single site. It considered that it may be prudent to not allow any new housing, even on existing sites, so that over time, the fault lines are depopulated, reducing the risk of loss of life, reducing future insurance burdens, and ultimately providing for more green corridors within the city:
- 211. We have already discussed terminology matters in relation to the submissions of RVA and GWRC. In relation to the EQC and WCC Environmental Reference Group submissions, we agree with Mr Sirl<sup>160</sup>, who considered that it would be inappropriate for the Plan to preclude the building of a single dwelling on an existing vacant site, as this preclusion could render land incapable of reasonable use. We also agree that a

<sup>&</sup>lt;sup>156</sup> Submission # 282.7

<sup>&</sup>lt;sup>157</sup> Submissions # 350.63-64

<sup>&</sup>lt;sup>158</sup> Submission # 351.134, supported by Further Submission #70.29

<sup>&</sup>lt;sup>159</sup> Submission # 377.57

<sup>&</sup>lt;sup>160</sup> Section 42A Report, at paragraph 369

new dwelling on a vacant site should require resource consent to ensure that any new residential unit incorporates building resilience measures.

212. NH-P11 was also the subject of Mr Sirl's review of the fault hazard policy. While the submissions above provide some scope for making these changes, we agree that an out of scope amendment is made in accordance with Schedule 1, clause 99(2)(b) of the RMA is necessary. Therefore, we endorse the revised wording on the basis that it provides increased clarity.

<del>NH-P11</del>	Hazard sensitive activities, excluding a single residential dwelling on an existing site, within the Wellington Fault Overlay and Ohariu Fault Overlay
	<ul> <li>Avoid subdivision, development or use associated with hazard sensitive activities, excluding a single residential dwelling on an existing site, within the Wellington Fault Overlay and Ohariu Fault Overlay unless it can be demonstrated that:         <ol> <li>The activity is located more than 20m from the Wellington Faultline or Ohariu Faultline, or</li> <li>The activity, excluding additions to existing building, has an operational and functional need to locate within the Wellington Fault Overlay and Ohariu Fault Overlay and locating outside of these Overlays is not a practicable option; and</li> <li>The activity incorporates mitigation measures that ensure the risk from fault rupture to people and property is reduced or not increased; or</li> </ol> </li> </ul>
	<ol> <li>For additions to existing buildings, the change in risk from fault rupture to people and property is reduced or not increased.</li> </ol>
<u>NH-P11</u>	Potentially hazard sensitive activities and hazard sensitive activities and related subdivision, buildings and structures within the uncertain poorly- constrained, uncertain constrained, or distributed areas of the Wellington Fault and Ohariu Fault Hazard OverlaysProvide for subdivision, development, and use for potentially hazard sensitive 
	<ol> <li><u>Any new buildings, building platforms associated with subdivision, or additions</u> to existing buildings are located more than 20 m from the edge of the fault deformation zone of the Wellington Fault and Ohariu Fault Hazard Overlays; or</li> <li><u>Mitigation measures are incorporated into the building to minimise the risk to</u> life of the occupants and the structural integrity of the building in the event of fault rupture.</li> </ol>

## NH-P12 Potentially hazard sensitive activities and hazard sensitive activities within the Sheppard's Fault Overlay and Terāwhiti Fault Overlay

- 213. FENZ<sup>161</sup> made its consistent submission point that it supported the policy as it sought to only allow new buildings or additions to buildings that accommodate existing Potentially Hazard Sensitive Activities and Hazard Sensitive Activities within identified hazardous areas where certain conditions can be met. Notwithstanding that, these policies form relevant matters of discretion where related rules are infringed. FENZ considered they may have a functional or operational need to locate in identified hazardous areas.
- 214. GWRC <sup>162</sup> sought its chapter wide amendment to NH-P11 to utilise "minimise" instead of "*reduced or not increased*".
- 215. MoE, supported by FENZ<sup>163</sup>, acknowledged the risk that natural hazards can pose to people and property, but noted that, at times, it has an operational need to locate educational facilities in fault overlays to provide for existing communities. It requested an amendment to policy NH-P12 to provide for development in fault overlays where there is an operational need to locate there, noting that this would still require resource consent as a Discretionary Activity, which is considered appropriate and is supported.
- 216. We have already outlined our position on these three consistent submission points, and they have been taken into account in the redraft.
- 217. NH-P12 that relates to the Wellington Fault and Ohariu Fault Overlays is however proposed to be split into three policies. Mr Sirl<sup>164</sup> advised:

To improve the understanding of the policy response to the Wellington Fault and Ohariu Fault Overlays it is suggested that NH-P12 is broken into three separate policies that cover the following:

- a. A policy addressing additions for potentially hazard sensitive activities and hazard sensitive activities within the Wellington Fault and Ohariu Fault Overlays;
- b. A policy addressing the construction of a residential unit on an existing vacant site within the Wellington Fault and Ohariu Fault Overlays; and
- c. A policy addressing potentially hazard sensitive activities and hazard sensitive activities and related subdivision, buildings and

<sup>&</sup>lt;sup>161</sup> Submission # 273.78

<sup>&</sup>lt;sup>162</sup> Submission # 351.135, supported by Further Submission #70.30

<sup>&</sup>lt;sup>163</sup> Submissions # 400.54-55, supported by Further Submission #14.5

<sup>&</sup>lt;sup>164</sup> Reporting Officer Reply of Jamie Sirl paragraphs 61 and 62

structures within the well-defined or well-defined extended areas of the Wellington Fault and Ohariu Fault Overlays.

The approach to the three separate policies ensures that there is a policy approach to the different activities that could occur within the Wellington Fault and Ohariu Fault Overlays. This makes it easier to read for plan users and replaces one long policy that addresses all of the aforementioned scenarios but in an unnecessarily [sic] way which makes it less approachable for plan users.

- 218. We consider that the three policy approach makes the position clearer, particularly when there are different certainty levels and different location based factors to take into account. This approach does not alter the meaning or intent of the as notified policy rather it puts it into a more coherent structure with the three policies now directed more clearly to the level of risk. However, submissions requesting that change were limited but we consider it important that these changes are made. We consider that an out of scope amendment is required in accordance with Schedule 1, clause 99(2)(b) of the RMA.
- 219. We therefore agree to the deletion of the current wording, and its replacement with the three new policies with a subsequent reordering of policy numbers. The recommended amendments are as follows.

NH-P12	Potentially hazard sensitive activities and hazard sensitive activities within the Sheppard's Fault Overlay and Terāwhiti Fault Overlay
	-Allow for potentially hazard sensitive activities and hazard sensitive activities within the Sheppard's Fault Overlay and Terāwhiti Fault Overlay with the exception of educational facilities, health care facilities and emergency facilities, where it can be demonstrated that the activity is more than 20m from either the Sheppard's Fault or Terāwhiti Fault and the development incorporates mitigation measures that ensure the risk from fault rupture to people and property is reduced or not increased.
<u>NH-P12</u>	Additions to buildings containing potentially hazard sensitive activities and hazard sensitive activities and related buildings and structures within the well- defined or well-defined extended areas of the Wellington Fault and Ohariu Fault Overlays
	Only allow for additions to existing buildings for potentially hazard sensitive activities and hazard sensitive activities within the well-defined or well-defined extended areas of the Wellington Fault and Ohariu Fault Overlays where:
	<ol> <li><u>Any new additions are located more than 20 m from the edge of the fault deformation zone; or</u></li> <li><u>If the locating the addition more than 20 m from the edge of the fault</u></li> </ol>
	deformation zone of the Wellington Fault and Ohariu Fault Overlays is not a practicable option, mitigation measures are incorporated into the addition to minimise the risk to life of the occupants and the structural integrity of the building in the event of fault rupture.

<u>NH-P13</u>	<ul> <li><u>Construction of a residential unit on an existing vacant site within the well-defined or well-defined extended areas of the Wellington Fault and Ohariu</u> </li> <li><u>Fault Overlays</u> <ul> <li><u>Only allow a single residential unit on an existing vacant site to be located within the well-defined or well-defined extended areas of the Wellington Fault and Ohariu Fault</u></li> <li><u>Overlays where:</u> </li></ul></li></ul>
<u>NH-P14</u>	Potentially hazard sensitive activities and hazard sensitive activities and related buildings and structures within the well-defined or well-defined extended areas of the Wellington Fault and Ohariu Fault Hazard Overlays Avoid subdivision, use, and development (unless provided for under NH-P13) for potentially hazard sensitive activities and hazard sensitive activities within the well- defined or well-defined extended areas of the Wellington Fault and Ohariu Fault Hazard Overlays unless: 1. Any new building, building platforms associated with subdivisions or activity are located more than 20 m from the edge of the fault deformation zone of the Wellington Fault and Ohariu Fault Hazard Overlays; or
	<ul> <li>2. If locating the building, building platforms associated with subdivision, or activity more than 20m from the edge of the fault deformation zone of the Wellington Fault and Ohariu Fault Overlays is not a practicable option:</li> <li>a. For any building, or activity that has an operational need or functional need to locate within the well-defined or well-defined extended areas of the Wellington Fault and Ohariu Fault Hazard Overlays and locating outside these areas is not a practicable option, mitigation measures are incorporated into the building to minimise the risk to life of the occupants and the structural integrity of the building, or activity potentially hazard sensitive activities and hazard sensitive activities, mitigation measures are incorporated into the building in the event of fault rupture; or</li> <li>b. For any other building, or activity potentially hazard sensitive activities and hazard sensitive activities, mitigation measures are incorporated into the building in the event of fault rupture.</li> </ul>

- NH-P13 Subdivision, use and development which will be occupied by members of the public, or employees associated with the operational port activities, passenger port facilities and rail activities in the Wellington Fault Overlay (Now NH-P15)
- 220. GWRC and KiwiRail<sup>165</sup> sought the retention of NH-P13 as notified.
- 221. CentrePort Limited<sup>166</sup> sought the deletion of NH-P13 in its entirety on the basis that it is unnecessary as large parts of the port operations, including the Kaiwharawhara ferry terminal location, are included within the fault overlay. It considered a policy limitation to 10 passengers, or 10 employees, would therefore render large parts of the Special Purpose Port Zone unusable for these activities.
- 222. We agree with Mr Sirl<sup>167</sup>, who recommended that the submission be rejected, as the PDP approach to hazard management in relation to operational port activities and passenger port activities is to provide a defined and different consenting pathway (refer NH-O4, NH-P13, NH-P14, NH-R8) to the hazard-sensitivity approach applied to most other activities. The approach applied to operational port activities and passenger port activities recognises the functional need, existing investment and social and economic benefit of these activities by providing a comparatively more enabling consenting pathway, particularly with respect to high hazard areas.
- 223. Toka Tū Ake EQC<sup>168</sup> sought amendments to NH-P13 as it considered that activities should be located 20m from the Wellington Fault. The submitter noted that MfE guidelines for planning around an active fault advise that BIC 3 (including principal railway stations) structures are not developed within the fault avoidance zones (within 20 m of the fault race) of RIC I, II and III faults on brownfield sites.
- 224. We did not have an appearance from EQC, but Mr Sirl<sup>169</sup> disagreed with this amendment. Although fault rupture has the potential to have significant implications on buildings and safety of occupants, he considered this policy is intentionally enabling of the establishment of port and rail related buildings and activities that have low occupancy in the fault overlay due to the operational need for these regionally significant activities to remain located in the current location. We agree.
- 225. The two proposed changes recommended are firstly to the policy title, to read "Buildings with a low occupancy associated with operational port activities, passenger

<sup>&</sup>lt;sup>165</sup> Submission # 351.136 and 408.94

<sup>&</sup>lt;sup>166</sup> Submission # 402.105

<sup>&</sup>lt;sup>167</sup> Section 42A Report, at paragraph 385

<sup>&</sup>lt;sup>168</sup> Submission # 282.8

<sup>&</sup>lt;sup>169</sup> Section 42A Report, at paragraph 387

port facilities and rail activities in the Wellington Fault Hazard Overlay", to clarify the policy relates to low occupancy buildings, which better reflects the intent of the policy. Secondly, we recommend the consequential addition of the word "hazard" when referring to the overlay within the body of the policy.

NH-P14 Subdivision, use and development which will be occupied by members of the public, or employees associated with the operational port activities, passenger port facilities and rail activities in the Wellington Fault Overlay (Now NH-P16)

- 226. KiwiRail<sup>170</sup> sought the retention of NH-P14 as notified.
- 227. Toka Tū Ake EQC<sup>171</sup> sought the same amendments to NH-P14 as it did for NH-P3, as it considered that activities should be located 20m from the Wellington Fault:
- 228. GWRC<sup>172</sup> sought its' plan wide amendment to NH-P14 to utilise "*minimise*" instead of *"reduced or not increased*".
- 229. CentrePort Limited<sup>173</sup> sought amendments to NH-P14 due to large parts of the Port Operations, including the Kaiwharawhara ferry terminal location, being included within the fault overlay, so that a policy limitation to 10 passengers or 10 employees renders large parts of the Special Purpose Port Zone unusable for these activities:
- 230. Mr Sirl<sup>174</sup> disagreed with the relief sought. He considered that it would be inappropriate and unnecessary to revise NH-P14 to provide enabling policy direction for development within the Wellington Fault Overlay. This is due to the high risk of fault rupture and associated effects, and also because of the ability to locate new buildings 20 m from the fault deformation zone. We concur.
- 231. There were however other changes proposed by Mr Sirl<sup>175</sup>, being a retitling of the Policy which does not materially alter its effect. He also recommended an out-of-scope change specific to NH-P14, to improve its interpretive and administrative clarity to clarify that mitigation measures are required specifically to buildings to minimise the consequences of fault rupture to people and buildings. We agree, in line with Schedule 1, clause 99(2)(b) of the RMA that the change is an improvement. Therefore NH-P14 (now P16) is recommended to be amended as follows.

<sup>&</sup>lt;sup>170</sup> Submission # 408.95

<sup>&</sup>lt;sup>171</sup> Submission # 282.9

<sup>&</sup>lt;sup>172</sup> Submission # 351.137, supported by Further Submission #70.31

<sup>&</sup>lt;sup>173</sup> Submissions # 402.106-107

<sup>&</sup>lt;sup>174</sup> Section 42A Report, at paragraph 399

<sup>&</sup>lt;sup>175</sup> Section 42A Report, at paragraphs 400-401

<u>NH-P16</u>	Subdivision, use and development <u>Buildings</u> which will be occupied by members of the public, or employees associated with the operational port activities, passenger port facilities and rail activities in the Wellington Fault <u>Hazard</u> Overlay.
	Manage subdivision, development and use associated within the operational port activities, passenger port facilities and rail activities within the Wellington Fault <u>Hazard</u> Overlay where the subdivision, development and use involves the construction of new buildings which will be occupied by members of the public, or more than 10 employees associated with the operational port activities, passenger port facilities and rail activities by ensuring that:
	<ol> <li>Mitigation measures are incorporated that avoid an increase in risk to people, property and infrastructure from the fault rupture of the Wellington Fault.</li> </ol>
	<ol> <li>Any new buildings are located more than 20 m from the edge of the fault deformation zone of the Wellington Fault Hazard Overlay; or</li> </ol>
	<ol> <li>Mitigation measures are incorporated into the building to minimise the risk to people and damage to buildings in the event of fault rupture and the activity can continue to operate following an earthquake.</li> </ol>

#### NH-P15 Natural systems and features Overlay (Now NH-P17)

232. GWRC and WCC Environmental Reference Group<sup>176</sup> sought the retention of NH-P15 as notified. No change is required.

#### NH-P16 Natural hazard mitigation works (Now NH-P18)

- 233. Waka Kotahi<sup>177</sup> supported enabling hazard mitigation or stream and river management works within the Natural Hazard Overlay where this will decrease the risk to people's lives and wellbeing, property and infrastructure.
- 234. GWRC<sup>178</sup> sought amendments to NH-P16. It considered that as notified, the policy implied that the mitigation works will be hard-engineering based, but that this may not be the case. It would therefore be good to clarify in the policy that the mitigation works could consist of a range of options, as outlined in NH-P17 and Policy 52 in RPS-Change 1. It also considered that changes requested to the policies may necessitate amendments to the rules to have regard to the natural hazard direction in RPS-Change 1.
- 235. Mr Sirl<sup>179</sup> disagreed with GWRC that NH-P16 as notified implies that the mitigation works will be hard-engineering based, as the intended purpose of this policy is to provide an easier consenting pathway for mitigation works of a scale that results in a

<sup>&</sup>lt;sup>176</sup> Submissions # 351.138 and 377.58

<sup>&</sup>lt;sup>177</sup> Submission # 103.53

<sup>178</sup> Submission # 351.139

<sup>&</sup>lt;sup>179</sup> Section 42A Report, at paragraphs 412-414

significant decrease in hazard risk to people, property and infrastructure. However, he considered that a minor amendment to NH-P16 to add "*works*" directly following "*natural hazard mitigation*" enabling a hyperlink to the existing definition of Natural Hazard Mitigation Works (which includes soft engineering hazard mitigation works) would reduce any potential uncertainty as to the policy intent of NH-P16.

- 236. He also noted the use of "*statutory agency*" within the notified version. Although outside the scope of submissions specific to NH-P16, to improve the interpretive and administrative clarity we agree with an out-of-scope amendment to name the specific entities, as we have done with other provisions that use the term.
- 237. Further, we agree with Mr Sirl that for overall plan consistency and simplicity, the term "stream and river management works" should be removed as "natural hazard mitigation works" encompasses works that would be involved in stream and river management, but including them separately connected by "or" suggests they are different.
- We agree that useful amendments can be made, and recommend that NH-P16 (now NH-18) be amended as follows:

<u>NH-P18</u>	Natural hazard mitigation works
	Enable natural hazard mitigation <del>or stream and river management</del> works undertaken by <del>a statutory agency</del> <u>the Greater Wellington Regional Council, Wellington City</u> <u>Council, Waka Kotahi, KiwiRail, CentrePort Limited or Wellington International</u> <u>Airport Limited</u> or their nominated contractors or agents within Natural Hazard Overlays where these will significantly decrease the existing risk to people's lives and wellbeing, property and infrastructure.

#### NH-P17 Green infrastructure (Now NH-P19)

- 239. GWRC<sup>180</sup> sought amendments to NH-P17 to ensure consistency with Policy 52 in RPS-Change 1. Green infrastructure has been defined in the Plan with a strong focus on engineering systems that mimic natural systems. However, there are other natural hazard mitigation measures. GWRC recommended the inclusion of the words "*non-structural, soft engineering or Mātauranga Māori*" within the policy.
- 240. Mr Sirl<sup>181</sup> recommended that "*Mātauranga Māori*" be added, but did not see the necessity to add non-structural or soft engineering to the policy. We agree.

<sup>&</sup>lt;sup>180</sup> Submission # 351.140

<sup>&</sup>lt;sup>181</sup> Section 42A Report, at paragraph 420

- 241. WCC Environmental Reference Group<sup>182</sup> sought amendments to NH-P17 to make Green Infrastructure the default choice for undertaking natural hazard mitigation, with other options considered in circumstances where green infrastructure solutions do not exist, are not suitable, or are prohibitively expensive.
- 242. Like Mr Sirl<sup>183</sup>, we agree that the policy should not be amended to "*require*" the use of green infrastructure, as the policy approach and associated rules are intended to encourage the use of green infrastructure through a more-enabling consenting pathway, which reduces barriers for hazard mitigation works that benefit multiple properties.
- 243. The same out-of-scope use of the terminology above for statutory agencies is recommended. We agree that this assists interpretative and administrative clarity. Therefore Policy NH-P7 (now P19) is recommended to be amended as follows.

<u>NH-P19</u>	Green infrastructure
	Encourage the use of green infrastructure, or Mātauranga Māori approaches when
	undertaking natural hazard mitigation <del>or stream and river managemen</del> t works by <del>a</del>
	statutory agency the Greater Wellington Regional Council, Wellington City Council,
	Waka Kotahi, KiwiRail, CentrePort Limited or Wellington International Airport Limited
	or their nominated contractors or agents within Natural Hazard Overlays.

#### Natural Hazards – proposed new policies

244. Argosy<sup>184</sup> sought the addition of two new policies to recognise that development in the natural hazard overlays in the City Centre Zone is appropriate in some instances:

#### Add new policy NH-PX to the Natural Hazards chapter as follows:

Enable subdivision, development and use associated within the City Centre Zone and within all of the Natural Hazard Overlays, where they do not involve the construction of new buildings which will be occupied by members of the public or the creation of vacant allotments

#### Add new policy NH-PX to the Natural Hazards chapter as follows:

Manage subdivision, development and use within the City Centre Zone and within all of the Natural Hazard Overlays, where they involve the construction of new buildings which will be occupied by members of the public or result in the creation of a vacant allotment by ensuring that the activity, building or subdivision incorporates measures that reduce or do not increase the risk to people, and property.

<sup>&</sup>lt;sup>182</sup> Submission # 377.59

<sup>&</sup>lt;sup>183</sup> Section 42A Report, at paragraph 421

<sup>&</sup>lt;sup>184</sup> Submission # 383.21, opposed by Further Submission #70.2, and Submission # 383.22

245. We agree with Mr Sirl<sup>185</sup>, who considered that the impact of the natural hazards that are managed by the Natural Hazards Chapter on the City Centre Zone (primarily liquefaction and flood inundation) is not of a magnitude that justifies the need for a specific policy framework for this zone. Ms Carter for Argosy did not refer to this matter in her evidence.

#### Natural Hazards – Rules

#### NH-R1 Less hazard sensitive activities within all hazard areas

- 246. Horokiwi Quarries Ltd<sup>186</sup> sought the retention of NH-R1 as notified.
- 247. Council<sup>187</sup> sought an amendment to NH-R1 for clarity and consistency to read:

NH-R1 Less hazard sensitive activities within all hazard areas <u>Natural</u> <u>Hazard Overlays</u>

248. We agree that referring to the defined term 'Natural Hazard Overlays' will improve clarity and consistency.

#### NH-R2 Green infrastructure in all Natural Hazard Overlays

- 249. GWRC<sup>188</sup> noted that there appeared to be a numbering error in respect of the Discretionary Activity rule for green infrastructure and suggested amending the numbering to '2', not '1' as notified.
- 250. The Section 42A Reporting officer also noted the use of "*Crown entity, Regional or Territorial Authority*" in NH-R2 and considered that to improve the interpretive and administrative clarity concerning this provision the Panel could, in line with Schedule 1, clause 99(2)(b) of the RMA, consider recommending an amendment to include the specific the entities as set out in paragraphs 73 to 74 of the Section 42A Report.
- 251. We agree that the above changes are consistent with changes made elsewhere in relation to the entities that this rule applies to.

#### NH-R3 Flood mitigation works within the Flood Hazard Overlays

252. While no submission points were received in respect of NH-R3, following consideration of submission points on NH-R4, Mr Sirl<sup>189</sup> recommended an

<sup>&</sup>lt;sup>185</sup> Section 42A Report, at paragraph 428

<sup>&</sup>lt;sup>186</sup> Submission # 271.20

<sup>&</sup>lt;sup>187</sup> Submission # 266.68, opposed by Further Submission #89.103

<sup>&</sup>lt;sup>188</sup> Submission # 351.141

<sup>&</sup>lt;sup>189</sup> Section 42A Report, at paragraph 349

amendment to NH-R3 to include "*the inundation area, overland flowpaths or the stream corridor of*" before "*the Flood Hazard Overlays*". This was considered to be more consistent with the policy titles NH-P4, NH-P5, NH-P6, NH-P7 and NH-P8. This is a consequential change required in relation to definitions. The same change to the "*Crown entity, Regional or Territorial Authority*" is also required as for NH-R2.

253. We agree as we do with the consistent changes made elsewhere in relation to the entities that this rule applies to. NH-R3 is proposed to be amended as follows:

Flood Hazard Overlays		
<u>NH-R3</u>	Flood mitigation works within the <u>inundation area, overland flowpaths or the stream</u> <u>corridor of</u> the Flood Hazard Overlays	
All Zones	<ol> <li>Activity Status: Permitted         Where:         <ul> <li>The works must be undertaken by either <u>the Greater Wellington Regional Council,</u> <u>Wellington City Council, Waka Kotahi, KiwiRail, CentrePort Limited or Wellington</u> <u>International Airport Limited or their nominated contractor</u> <del>Crown entity, Regional or</del> <del>Territorial Authority or</del> an agent on their behalf for the express purpose of flood mitigation works.         </li> </ul> </li></ol>	
All Zones	<ul> <li>2. Activity Status <b>Discretionary</b></li> <li>Where:</li> <li>a. Compliance with the requirements of <u>NH-R3.1.a</u> cannot be achieved.</li> </ul>	

## NH-R4 Additions to all buildings in the inundation area, overland flow paths or the stream corridor

- 254. Precinct Properties New Zealand Limited, Argosy, Oyster Management Limited, Fabric Property Limited and the Oil Companies<sup>190</sup> sought the retention of NH-R4 as notified.
- 255. Council<sup>191</sup> sought NH-R4 be amended for clarity and consistency to refer to "*within the Flood Hazard Overlay*" as opposed to "*in the inundation area, overland flow paths or the stream corridor*". We accept that this change is appropriate.
- 256. FENZ<sup>192</sup>, subject to relief sought for NH-P4, was supportive of NH-R4, which seeks to provide for additions to buildings in the inundation area and overland flowpath as

<sup>&</sup>lt;sup>190</sup> Submissions # 139.7, 383.28, 404.2, 425.14 and 372.89

<sup>&</sup>lt;sup>191</sup> Submission # 266.69, opposed by Further Submission #89.104

<sup>&</sup>lt;sup>192</sup> Submissions # 273.80-81

Permitted, Restricted Discretionary or Discretionary Activities. It noted that additions within a stream corridor would amount to a Non-Complying activity. FENZ has an existing fire station within a stream corridor which may need to be extended in the future, and therefore sought a Discretionary Activity status under such circumstances.

- 257. We agree with Mr Sirl<sup>193</sup> that is not appropriate to amend rules on the basis that someone may want to undertake development in the future at one particular site, and a less restrictive activity status would make that easier. This does not reflect an appropriate hazard management approach. We consider that the policy direction recommended in this report still strongly discourages buildings and structures in stream corridors, which are a high hazard area.
- 258. Rimu Architects Ltd<sup>194</sup> sought amendments to NH-R4 as follows to clarify its wording. In its view, the wording conflicts with itself as the finished floor level cannot be at "*the bottom of the floor joists or the base of the concrete floor slab*". It also considered that there should be provision to allow small additions to be built at the existing floor level, as it may be impractical, and would very likely serve no purpose to have the addition built at a higher level if the entire ground floor of the dwelling is subject to inundation as the result of extreme rain events.
- 259. Southern Cross Healthcare Limited<sup>195</sup> supported NH-R4.1a as notified, but sought that provisions in NH-R4.2 be amended to Restricted Discretionary Activity status as it considered it inappropriate for additions to existing buildings to trigger a Discretionary process, where the existing building is already subject to an overland flowpath. The submitter considered it would be more appropriate for additions to buildings within an overland flowpath to be a Restricted Discretionary Activity, which would still give the consent authority appropriate discretion to consider natural hazard risks. It also considered that the amendments sought would apply a consistent approach to inundation areas and overland flowpaths, noting that these features can intersect, and do in this case, and that it would be practical to take the same approach (which still allows for appropriate risk assessment by the Council):
- 260. We agree that a number of changes can be made to assist interpretation, as we too were confused at where the measurement heights should be taken from. Mr Sirl

<sup>&</sup>lt;sup>193</sup> Section 42A Report, at paragraph 454

<sup>&</sup>lt;sup>194</sup> Submission # 318.20

<sup>&</sup>lt;sup>195</sup> Submissions # 380.31-33

recommended that amendments be made to the Permitted Activity conditions as a result.

- 261. In respect of NH-R4 we requested officers via Minute 33 to "Identify whether there are any circumstances for the construction or addition to buildings in overland flow that should be a non-complying activity".
- 262. In his reply evidence, Mr Sirl<sup>196</sup> stated:

In considering whether there are circumstances where a building addition in an overland flowpath should trigger a non-complying activity status, I note that NH-R4 takes a relatively enabling approach particularly with respect to additions to buildings containing a hazard sensitive activity. I also note that there is no size limitation for building additions in flood hazard overlays. Consequently, I consider that it would be appropriate for building additions intended to contain a hazard sensitive activity in an overland flowpath, and which do not achieve a finished floor level above the 1:100 AEP flood event, to be treated as a non-complying activity. The principal reason for this is the potential adverse effects on such activities resulting from a major flood event i.e. increased depth and velocity of flood water in an overland flowpath. I note that this amendment would result in instances where additions that are non-habitable, and relatively low value (such as decking, or attached carports/garages) would be treated as a non-complying activity. Although the minor effects s104 gateway test is an avenue for such additions to be consented. I suggest an explicit exception for non-habitable additions could be considered.

However, in my view, an amendment to NH-R4 that results in a more restrictive activity status is not within scope of submissions. Accordingly, I suggest that the Panel consider this amendment under Schedule 1, clause 99(2)(b) of the RMA.

263. In relation to flood inundation hazard, we had difficulty in understanding how the revised conditions for minimum floor levels are to be interpreted; in particular, in regard to the concrete floor slab:

When located within an inundation area, the finished floor levels of the addition for hazard sensitive activities or potentially hazard sensitive activities are demonstrated to be above the 1% Flood Annual Exceedance Probability level plus the height of the floor joists or the base of the concrete floor slab and an allowance for freeboard;

- 264. In our minute 34 we outlined to officers that
  - This condition applies across several activity statuses, ranging from a condition as a Permitted Activity under Rules NH-R4.1 and NH-R5.1 to discretionary activity under NH-Rules R4.3 and NH-R8.1.

<sup>&</sup>lt;sup>196</sup> Reporting Officer Reply of Jamie Sirl paragraphs 28 and 292

- b) Two questions arise from the recommended rewording of this condition.
  - 1. First, can an explanation be provided how the finished floor level would be determined under this revised condition, ideally by reference to an example or diagram, particularly in relation to a concrete base slab?
  - 2. Second, does the condition referring to an unquantified allowance for freeboard meet the tests for a condition for a permitted activity in terms of certainty and avoiding an unlawful reservation of discretion?
- 265. In response, Mr Sirl<sup>197</sup> stated:

Following further discussion with Wellington Water Limited, and as outlined in a report presented at a Water NZ stormwater conference, I can confirm that (dynamic) freeboard is incorporated into the flood modelling that has informed the PDP Flood Hazard Overlay. The result is that the reference to an additional allowance for freeboard can be revised in the relevant provisions to provide greater certainty with respect to required finished floor levels above the modelled 1% Annual Exceedance Probability flood level. For clarity, this is due to the modelled 1% Annual Exceedance Probability flood level already incorporating freeboard. I recommend amendments to the relevant provisions and a new definition for '1% Annual Exceedance Probability flood' as discussed below, and outlined in Appendix C.

I suggest that a definition of 1% Annual Exceedance Probability flood is introduced into the Plan. I note that this definition will only be relevant to the Natural Hazards chapter flood hazard provisions, and will not result in a material change to plan provisions but simply assists with clarifying the required finished floor levels.

[...]

#### 1% Annual Exceedance Probability flood

Means the modelled 1% Annual Exceedance Probability flood level that informs the Wellington City Council District Plan Flood Hazard Overlays which incorporates climate change predictions and dynamic freeboard.

266. This new definition would require consequential minor amendments to align the terminology used in the PDP, including a change in related rules where this terminology is utilised, being NH-R4.1a, NH-R4.3b, NH-R5.1a, NH-R6.1a, NH-R7.1a, and NH-R8.1a. In respect of these provisions, Mr Sirl recommended the following text:

When located within an inundation area, the finished floor levels of the addition for hazard sensitive activities or potentially hazard sensitive activities are demonstrated to be above the 1% Annual Exceedance Probability Flood level:

<sup>&</sup>lt;sup>197</sup> Further reply of Jamie Sirl paragraphs 36 and 38

- *i.* plus the height of the floor joists; or,
- *ii.* to the base of the concrete floor slab;

Note: Technical advice on finished floor levels required to comply with this rule can be sought and obtained from Wellington Water Limited.

- 267. We agree with the addition of a new definition and the necessary minor consequential changes to improve the consistency in meaning and terminology. We have made one amendment to the officer's final recommendation to (ii) by replacing the phrase "to the base" with "plus the height" to read "plus the height of the concrete floor slab" to use consistent descriptions
- 268. We agree that this wording change provides the greater clarity we (and the submitter) sought and the proposed amendments to the rule relating to additions to buildings within the Flood Hazard Overlay are appropriate and necessary. We therefore recommend the following changes to NH-R4:

NH-R4	Additions to all buildings in the inundation area, overland flowpaths or the stream corridor <u>of the Flood Hazard Overlay</u>
	1. Activity status: <b>Permitted</b> Where:
	<ul> <li>a. When located within an inundation area, the finished floor levels of the addition for hazard sensitive activities and or potentially hazard sensitive activities are demonstrated to be above the 1% Flood Annual Exceedance Probability Flood level: including an allowance for freeboard, where the finished floor level is to the bottom of the floor joists or the base of the concrete floor slab; or <ol> <li>plus the height of the floor joists; or,</li> <li>plus the height of the concrete floor slab;</li> </ol> </li> <li>b. The additions are not located within an overland flowpaths; or and</li> <li>c. The additions are not located within a stream corridor.</li> </ul>
	and obtained from Wellington Water Limited.
All Zones	<ul> <li>2. Activity status: Restricted discretionary</li> <li>Where:</li> <li>a. Compliance with the requirements of NH-R4.1.a cannot be achieved.</li> </ul>
	Matters of discretion are:
	1. The matters in NH-P4.

All Zones	3. Activity status: Discretionary
	Where:
	<ul> <li>a. Compliance with the requirements of NH-R4.1.b cannot be achieved: and</li> <li>b. The finished floor levels of the addition (excluding non-habitable additions) to a building containing a hazard sensitive activity located within an inundation area is demonstrated to be above the 1% Annual Exceedance Probability flood level: <ol> <li><u>i.</u> plus the height of the floor joists; or</li> <li><u>ii.</u> plus the height of the concrete floor slab.</li> </ol> </li> <li>Note: Technical advice on finished floor levels required to comply with this rule can be sought and obtained from Wellington Water Limited.</li> </ul>
All Zones	4. Activity status: Non-Complying Where:
	a. Compliance with the requirements of NH-R4.1.c or NH-R4.3.b cannot be achieved.

269. It should be noted that there has been a reordering of the rules, with the Flood Hazard Rules being separated from the Fault Hazard Rules, and this is reflected in the recommended versions. While we consider this appropriate it can lead to some confusion with the renumbering in the 'as notified Plan' and the recommended version.

## NH-R10 Potentially hazard sensitive activities in the inundation area of the Flood Hazard Overlay (now NH-R5)

- 270. Precinct Properties New Zealand Limited, Argosy, Oyster Management Limited, Investore Property Limited, Fabric Property Limited, Reading Wellington Properties Limited, Stride Investment Management Limited and the Oil Companies<sup>198</sup> sought the retention of NH-R10 as notified.
- 271. Rimu Architects Ltd<sup>199</sup> sought amendments to NH-R10 to clarify the rule for the same reasons as for NH-R4.
- 272. Responding to that submission, we note that this rule also has the finished floor level improvements that we outlined in the previous rule as well as a consistent change to

<sup>&</sup>lt;sup>198</sup> Submissions # 139.9-10, 383.30, 404.23, 405.31, 425.16-17, 441.1, 470.15-16 and 372.90

<sup>&</sup>lt;sup>199</sup> Submission # 318.21

the title of the rule. We have also replaced the word 'is' with 'are' to improve grammatical accuracy.

#### 273. The recommended NH-R10 (now R5) is:

All Zones	1. Activity Status: Permitted
	Where:
	<ul> <li>a. When located within an Inundation Area of the Flood Hazard Overlay, the finished floor levels of the building for the potentially hazard sensitive activity is are located above the 1% Flood Annual Exceedance Probability level:, including an allowance for freeboard, where the finished floor level is to the bottom of the floor joists or the base of the concrete floor slab.         <ol> <li><u>plus the height of the floor joists; or</u></li> <li><u>plus the height of the concrete floor slab.</u></li> </ol> </li> </ul>
	Note: Technical advice on finished floor levels required to comply with this rule can be sought and obtained from Wellington Water Limited.
All Zones	2. Activity status: Restricted Discretionary
	Where:
	a. Compliance with the requirements of <u>NH-R5.1.a</u> cannot be achieved.
	Matters of discretion are:
	<ol> <li>The impact from the 1% Annual Exceedance Probability flood is low due to either the:         <ul> <li>a. Implementation mitigation measures;</li> <li>b. The shallow depth of the flood waters within the building; or</li> <li>c. Type of activity undertaken within the building; and</li> </ul> </li> <li>The risk to people and property is reduced or not increased.</li> </ol>

#### NH-R11 Hazard sensitive activities in the inundation area of the Flood Hazard Overlay (now NH-R6)

- 274. The Oil Companies and Oyster Management Limited<sup>200</sup> sought the retention of NH-R11 as notified.
- 275. The following submitters:
  - a. Investore Property Limited, opposed by Toka Tū Ake EQC<sup>201</sup>;
  - b. Fabric Property Limited<sup>202</sup>; and

<sup>&</sup>lt;sup>200</sup> Submissions # 372.91 and 404.24

<sup>&</sup>lt;sup>201</sup> Submissions # 405.32-35, opposed by Further Submissions #70.41 and 70.42

<sup>&</sup>lt;sup>202</sup> Submissions # 425.18-19

c. Stride Investment Management Limited, opposed by Toka Tū Ake EQC<sup>203</sup>

sought an amendment to the activity status where the Restricted Discretionary rule cannot be met to be Discretionary instead of Non-Complying which would be consistent with the approach taken to Hazard Sensitive Activities within the Overland Flowpaths (as provided for in rule NH-R13).

- 276. FENZ<sup>204</sup> sought amendments to NH-R11 as it may have a functional or operational need to locate in the Flood Hazard Overlays.
- 277. Southern Cross Healthcare Limited<sup>205</sup> supported hazard sensitive activities in inundation areas being Restricted Discretionary where the finished floor levels of the building are located above the 1% Flood Annual Exceedance Probability level (including an allowance for freeboard, where the finished floor level is to the bottom of the floor joists or the base of the concrete floor slab). However, it sought Discretionary Activity status be applied for hazard sensitive activities in an inundation area that do not comply with Rule NH-R11.1, as it considered that an activity status of Non-Complying may overstate the risk of locating such activities in an inundation area:
- 278. Further, it considered that it is appropriate for a consent authority to use its full discretion to undertake an assessment of such an activity with the benefit of a consent application, and that an assessment under s 104D of the Resource Management Act 1991 is not required.
- 279. Rimu Architects Ltd<sup>206</sup> sought to clarify NH-R11 in relation to the same issues as it raised on earlier rules.
- 280. Kāinga Ora<sup>207</sup> sought amendments to NH-R11 as it considered that the identified flooding inundation areas carry the lowest risk of natural hazard potential, and are more than capable of being mitigated. It considered that a Permitted Activity pathway should be available for development that achieves the 1% Flood Annual Exceedance Probability level, including allowance for freeboard. It also sought that the activity status for NH-R11.2 should be Restricted Discretionary.

<sup>&</sup>lt;sup>203</sup> Submission # 470.18, opposed by Further Submission #70.43

<sup>&</sup>lt;sup>204</sup> Submissions # 273.88-89

<sup>&</sup>lt;sup>205</sup> Submissions # 380.3436

<sup>&</sup>lt;sup>206</sup> Submission # 318.21

<sup>&</sup>lt;sup>207</sup> Submissions # 391.158-60, opposed by Further Submissions #69.8-10, 70.54-55 and 84.78

- 281. Mr Sirl<sup>208</sup> recommended that amendments be made to the Rule to improve its clarity but did not recommend altering the activity status.
- 282. This Rule was the subject of much attention at the hearing. We note that the inundation overlay (mapping based on modelling by Wellington Water) covers large parts of the City: for example, much of the Miramar basin, Kilbirnie/Lyall Bay, Strathmore, Tawa, Karori, Island Bay and the Central City. The overlay is also not aligned to property boundaries, and so many properties are only partly contained within or outside the overlay. The overlay also contains small 'bubbles' of inclusions or exclusions.
- 283. We were informed at the hearing that because the modelling is based on detailed LIDAR information, it appears that even the most minor differences in elevation, such as a concrete driveway, can exclude or include parts of properties within the inundation overlay (although we were also informed that the mapping does not include flood extents with a depth of less than 50mm). This may make implementation difficult and cause property-owners to incur costs even where the level of inundation is relatively small.
- 284. To illustrate this issue, the following are screenshots of Miramar and Tawa showing the inundation overlay in light blue.

<sup>&</sup>lt;sup>208</sup> Section 42A Report, at paragraph 523.



Figure 1: PDP Maps with Inundation Area Overlay – Miramar

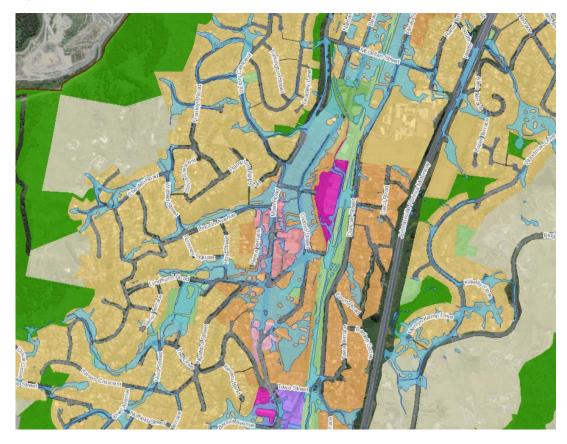


Figure 2: PDP Maps with Inundation Area Overlay - Tawa/Linden

- 285. While we were informed that the original mapping excluded modelled inundation areas less than 0.05m depth and removing small, isolated pockets of modelled flooding applying specific criteria, we still consider there is scope for further refinement in the future.
- 286. Exacerbating our concerns with the widespread mapping of inundation risks, we were concerned that there are no Permitted Activities or Permitted Activity Standards for buildings containing hazard sensitive activities in an identified inundation overlay. At the very least, resource consent as a Restricted Discretionary Activity is required, while non-compliance with the conditions triggers Non-Complying Activity status. Ascertaining specific floor levels to comply with this rule requires the input of Wellington Water on a site-by-site basis.
- 287. We asked officers through our Minute 33 to consider whether for the rules relating to the construction or alteration of buildings within the Flood Hazard Overlay Inundation Area, consider whether there could be any Permitted Activity standards or conditions developed.
- 288. In reply, Mr Sirl<sup>209</sup> firstly noted:
  - The construction or conversion of buildings containing a less hazard sensitive activity that are not located in an overland flowpath or stream corridor are Permitted under rule NH-R1.
  - The construction or conversion of buildings containing a potentially hazard sensitive activity are also Permitted in inundation areas, subject to complying with the required finished floor levels above a 1:100 AEP flood event.
  - NH-R4.1 provides for additions to buildings containing a potentially hazard sensitive activity or hazard sensitive activity in inundation areas of the flood hazard overlay as a Permitted Activity, subject to meeting floor level requirements.
- 289. After considering options to make more activities Permitted, Mr Sirl<sup>210</sup> did not support the introduction of a Permitted Activity standard to construct buildings containing a hazard sensitive activity in the Flood Hazard Overlay – Inundation Area. In particular, he was of the view that such a standard would be unable to appropriately manage potential flood water displacement effects on nearby properties, noting that these properties are also likely to be hazard sensitive activities, i.e., residential activities are for the most part located in residential zones.

<sup>&</sup>lt;sup>209</sup> Evidence in Reply of Jamie Sirl paragraph 31

<sup>&</sup>lt;sup>210</sup> Evidence in Reply of Jamie Sirl paragraph 37

- 290. We have put careful thought into this, and reluctantly accept that the Restricted Discretionary approach to assessing each proposal is necessary, but would strongly support increased levels of guidance and a user friendly method of ascertaining the 1% Flood Annual Exceedance Probability level, presumably with the assistance of Wellington Water. As with the inundation overlay mapping, we consider that this part of the Plan
- 291. This may simplify resource consent preparation and evaluation and potentially reduce compliance costs every time there is, for example, a new residential building being constructed within the inundation overlay. As noted above, these areas as mapped are extensive in the City and we are mindful of the additional consenting burden that assessment under this rule would require. However, we also consider that it should be signalled within the rule that if the matters in Rule NH-R6.1 cannot be met then it should appropriately be considered as a Non-Complying activity. As Mr Sirl stated in his supplementary evidence, "a Non-Complying activity status aligns with the intent of the direction in Policy NH-P6 and sends a signal that buildings containing hazard sensitive activities in inundation areas should achieve floor levels necessary to minimise risk of damage to property and the safety of people<sup>211</sup>." We agree, and note that, while we do not anticipate that there would many options other than ensuring the floor levels are at appropriate height above modelled flood levels, a consenting pathway would still be available.

NH-R6	<u>The construction of buildings or the conversion of existing buildings that will contain a</u> <u>Hh</u> azard sensitive activit <del>yies</del> in the inundation area of the Flood Hazard Overlay
All Zones	1. Activity Status: Restricted Discretionary
	Where:
	<ul> <li>a. When located within an Inundation Area of the Flood Hazard Overlay, the finished floor levels of the building for the hazard sensitive activity is located above the 1% Flood Annual Exceedance Probability level:, including an allowance for freeboard, where the finished floor level is to the bottom of the floor joists or the base of the concrete floor slab.</li> <li>i. plus the height of the floor joists; or</li> </ul>
	ii. plus the height of the concrete floor slab.

	Matters of discretion are:
	<ol> <li>The impact from the 1% Annual Exceedance Probability flood is low due to either the:         <ul> <li>a. Implementation mitigation measures;</li> <li>b. The shallow depth of the flood waters within the building; or</li> <li>c. Type of activity undertaken within the building; and</li> </ul> </li> <li>The risk to people and property is <del>reduced or</del> not increased <u>from flooding, including</u> <u>displacement of flood waters</u>.</li> </ol>
	Note: Technical advice on finished floor levels required to comply with this rule can be sought and obtained from Wellington Water Limited.
All Zones	<ul> <li>2. Activity Status: Non-Complying</li> <li>Where:</li> <li>a. Compliance with the requirements of <u>NH-R6.1.a</u> cannot be achieved.</li> </ul>

## 293. NH-R12 Potentially hazard sensitive activities in the overland flowpath of the Flood Hazard Overlay (now NH-R7)

#### 294. The following submitters:

- a. Precinct Properties New Zealand Limited<sup>212</sup>;
- b. Kāinga Ora, opposed by Toka Tū Ake EQC and GWRC<sup>213</sup>;
- c. Oyster Management Limited<sup>214</sup>;
- d. Stride investment Management Limited, opposed by Toka Tū Ake EQC<sup>215</sup>;
- e. Investore Property Limited, opposed by Toka Tū Ake EQC<sup>216</sup>;
- f. Fabric Property Limited<sup>217</sup>

sought an amendment to the activity status where the Restricted Discretionary rule cannot be met, which would be consistent with the approach taken to Hazard Sensitive Activities within the Overland Flowpaths (as provided for in rule NH-R13):

<sup>&</sup>lt;sup>212</sup> Submissions # 139.1 and 139.12

<sup>&</sup>lt;sup>213</sup> Submissions # 391.161-162, opposed by Further Submissions #70.56 and 84.79

<sup>&</sup>lt;sup>214</sup> Submissions # 404.25 and 404.27

<sup>&</sup>lt;sup>215</sup> Submissions # 470.19-20, opposed by Further Submission #70.82

<sup>&</sup>lt;sup>216</sup> Submissions # 405.32-35, opposed by Further Submissions #70.41-42

<sup>&</sup>lt;sup>217</sup> Submissions # 425.18-19

- 295. Rimu Architects Ltd<sup>218</sup> sought amendments to NH-R12 for the same reasons as in relation to NH-R4.
- 296. This rule relates to overland flowpaths, which cover a smaller extent than the inundation area, but have a higher level of risk. We agree that a similar approach is required to Rule 10 (now Rule 5), with Restricted Discretionary status when above the 1% Flood Annual Exceedance Probability level, and Discretionary Activity status for potentially hazard sensitive activities.

## NH-R13 Hazard sensitive activities within the overland flowpaths of the Flood Hazard Overlay (Now NH-R8)

- 297. MoE, Stride Investment Management Limited and Investore Property Limited<sup>219</sup> sought the retention of NH-R13 as notified.
- 298. Southern Cross Healthcare Limited<sup>220</sup> sought amendments to NH-R13 so that hazard sensitive activities within an overland flowpath are a Restricted Discretionary Activity as it considered that this would be more consistent with the risk-based approach to subdivision, use and development in Policy NH-P1, and would apply a more consistent approach to assessing hazard sensitive activities in overland flowpaths and inundation areas. Although the submitter appreciated that the Council had identified overland flowpaths and inundation areas as having different hazard rankings, it noted that the level of risk arising from the hazard will depend on the actual activity. Consequently, it considered that this rule relates to the risk to people involved in hazard sensitive activities in an inundation area to hazard sensitive activities in an overland flowpath:
- 299. Oyster Management Limited, opposed by Toka Tū Ake EQC<sup>221</sup>, considered that this rule should provide a tiered approach to activity status, specifically where compliance with the floor level (as per NH-12.1.a) is a Restricted Discretionary Activity.
- 300. This rule relates to hazard sensitive activities in overland flowpaths. We do not agree with Southern Cross that there is a similarity in risks between inundation areas and overland flowpaths. We agree that the officer's preferred approach is appropriate for Rule 13 (now Rule 8) with Discretionary Activity status for hazard sensitive activities

<sup>&</sup>lt;sup>218</sup> Submission # 318.23

<sup>&</sup>lt;sup>219</sup> Submissions # 400.59, 470.21 and 405.36

<sup>&</sup>lt;sup>220</sup> Submissions # 380.37-38

<sup>&</sup>lt;sup>221</sup> Submissions # 404.28-29, opposed by Further Submission #70.69

above the 1% Flood Annual Exceedance Probability level and Non-Complying if below.

301. The recommended amended text is as follows.

<u>NH-R8</u>	<u>The construction of buildings or the conversion of existing buildings that will contain a</u> hazard sensitive activit <u>v</u> ies within the overland flowpaths of the Flood Hazard Overlay				
All Zones	1. Activity Status: <b>Discretionary</b> Where:				
	<ul> <li>a. When located within an overland flowpath of the Flood Hazard Overlay, the finished floor levels of the building for the hazard sensitive activity is located above the 1% Flood Annual Exceedance Probability level: <ol> <li>plus the height of the floor joists; or</li> <li>plus the height of the concrete floor slab.</li> </ol> </li> </ul> Note: Technical advice on finished floor levels required to comply with this rule can be sought and obtained from Wellington Water Limited.				
<u>All Zones</u>	1. <u>Activity Status: Non-Complying</u> <u>Where:</u>				
	a. <u>Compliance with the requirements of NH-R8.1.a cannot be achieved.</u>				

# NH-R15 Potentially hazard sensitive activities and hazard sensitive activities within the stream corridors of the Flood Hazard Overlay - (now NH-R9)

302. MoE<sup>222</sup> sought the retention of NH-R15 relating to stream corridors as notified. This remains as a Non-Complying activity.

# NH-R5 Additions to a building for a hazard-sensitive activity within a Fault Overlay (now NH-R10)

- 303. We now turn to the Fault Hazard Rules which have also been consequentially renumbered. We also refer to our discussion at section 3.5 above in relation to general submissions relating to Fault Hazard, and concerns we had with the complexity and workability of the Fault Hazard provisions.
- 304. In respect of submissions on NH-R5, Council<sup>223</sup> sought amendments to fix a drafting error where both matters of discretion that relate to additions to a building for a

<sup>&</sup>lt;sup>222</sup> Submission # 400.60

<sup>223</sup> Submission # 266.70

hazard-sensitive activity within a Fault Overlay refer to potentially hazard sensitive activities. We agree that fixing these drafting errors is appropriate.

- 305. FENZ<sup>224</sup> supported NH-R5 as it sought to provide for additions to buildings for hazard sensitive activities within a Fault Overlay as Permitted or Restricted Discretionary Activity. It noted that emergency service facilities are considered a hazard-sensitive activity and, as such, sought that the Permitted Activity standard allow additions to buildings within a Fault Overlay where there is a functional and operational need to do so:
- 306. In relation to the submission of FENZ, we agree with Mr Sirl<sup>225</sup> that permitting building additions that have a functional and operational need is not appropriate, as this would require the exercise of a level of interpretive discretion that is contestable and lacks the level of certainty that aligns with being treated as a Permitted Activity.
- 307. We have discussed many of the issues we had with the Fault Hazard provisions. We note that this rule has had a comprehensive rewrite in response to provide a greater level of clarity. This would provide different Permitted Activity conditions relating to the knowledge of, and the potential for, significant hazard effects, and is now written to provide a clearer differentiation between the types and the locations of flood hazard risk and a closer alignment with the relevant fault hazard policies.
- 308. While still complex, the revised rule does provide the certainty required. Noting the uncertainty around scope, for the avoidance of doubt we agree, in line with Schedule 1, clause 99(2)(b) of the RMA that the change is an important improvement. We recommend that NH-R5 be amended as follows.

Fault Hazard Overlays			
<u>NH-R10</u>	Additions to a building <del>for a</del> <u>containing a potentially hazard sensitive activity or hazard</u> <u>sensitive activity</u> within <del>a Fault Overlay <u>the Shepherds</u> Gully Fault Hazard Overlay</del> <u>Terāwhiti Fault Hazard Overlay, Wellington Fault Hazard Overlay or the Ohariu Fault</u> <u>Hazard Overlay</u>		
All Zones	1. Activity status: <b>Permitted</b>		
	Where: <del>a. The additions are to a residential unit, or</del> <del>b. The additions are to a building in the Sheppards Fault Overlay or the Terāwhiti Fault</del> <del>Overlay; or</del>		

<sup>&</sup>lt;sup>224</sup> Submission # 273.82

<sup>&</sup>lt;sup>225</sup> Section 42A Report, at paragraph 462

	c. The additions do not increase the Gross Floor Area of a Hazard Sensitive Activity
	e. The additions do not increase the Gross Fride of a Hazard Sensitive Activity (excluding a residential unit) in the Wellington Fault Overlay or the Ohariu Fault
	Overlay by more than 20m <sup>2</sup> ; or
	d. The additions do not increase the Gross Floor Area of a Potentially Hazard
	Sensitive Activity in Wellington Fault Overlay or the Ohariu Fault Overlay by more
	than 30m <sup>2</sup> .
	a. <u>The additions are to a building in the Shepherds Gully Fault Hazard Overlay or the</u> <u>Terāwhiti Fault Hazard Overlay;</u>
	b. <u>The additions do not increase the Gross Floor Area of a building containing a hazard sensitive activity in the uncertain poorly-constrained, uncertain constrained or distributed areas of the Wellington Fault Hazard Overlay or the Ohariu Fault Hazard Overlay by more than 20m<sup>2</sup>;</u>
	C. <u>The additions do not increase the Gross Floor Area of a building containing a potentially hazard sensitive activity in the uncertain poorly-constrained, uncertain constrained or distributed areas of the Wellington Fault Hazard Overlay or the Ohariu Fault Hazard Overlay by more than 30m<sup>2;</sup> or</u>
	d. <u>The additions are not to a building containing a hazard sensitive activity or</u> potentially hazard sensitive activity in the well-defined and well-defined extended areas of the Wellington Fault Hazard Overlay or the Ohariu Fault Hazard Overlay.
All Zones	2. Activity status: <b>Restricted discretionary</b>
	Where:
	a. Compliance with the requirements of <del>NH-R5.1.c or NH-R5.1.d cannot be <u>NH-</u> <u>R10.1b - NH-R10.1d</u> cannot be achieved.</del>
	Matters of discretion are:
	1. For additions to potentially hazard sensitive activities - the matters in NH-P11; and 2. For additions to potentially hazard sensitive activities - the matters in NH-P10.
	<u>1.</u> For additions to a building containing a potentially hazard sensitive activity or hazard sensitive activity in the uncertain poorly-constrained, uncertain constrained and distributed areas of the Wellington Fault Hazard Overlay or the Ohariu Fault Hazard Overlay, the matters contained in NH-P11.
	2. For additions to a building containing potentially hazard sensitive activity or hazard sensitive activity in the well-defined and well-defined extended areas of the Wellington Fault Hazard Overlay or the Ohariu Fault Hazard Overlay the matters contained in NH-P12.

# NH-R6 Construction of a residential unit or conversion of any non-residential building into a residential unit in the Wellington Fault and Ohariu Fault Overlays (Now NH-R13)

- 309. Toka Tū Ake EQC<sup>226</sup> sought amendments to NH-R6 as it considered that the Plan did not adequately manage the risks of fault rupture, with single residential dwellings able to be located within the Wellington and Ohariu Fault Overlays:
- 310. Toka Tū Ake EQC noted that MfE guidelines for planning around an active fault advise that Buildings Importance Category (BIC) 2 (residential) structures are not developed within the fault avoidance zones (within 20 m of the fault race) of Recurrence Interval Class (RIC) I (≤2000 years) faults on brownfield sites and RIC I and II (2000 – 3500 years) on greenfield sites. As the Wellington Fault is RIC I and the Ohariu Fault is RIC II, Toka Tū Ake EQC considered that any residential development within the Fault Overlays should be avoided within 20 m of the Wellington Fault, even on an existing site.
- 311. Kimberley Vermaey<sup>227</sup> sought an amendment to NH-R6 to allow only one residential unit per site, with more than one dwelling per site to be assessed as a Non-Complying Activity due to the hazard and potential impacts presented by the Wellington Fault, rather than the proposed 2 dwellings.
- 312. We acknowledge the submissions but note that Mr Sirl<sup>228</sup> proposed the deletion of NH-R6 as part of the comprehensive rewrite of the Fault Hazard provisions. For all hazard sensitive activities in the well-defined or well-defined extended areas of the Wellington and Ohariu Fault overlays, this would be addressed by an amended NH-R16.
- 313. A new rule is also proposed to address the construction of buildings or conversion of buildings that will contain a potentially hazard sensitive activity or a hazard sensitive activity in the uncertain, poorly-constrained, uncertain constrained, or distributed areas of the Wellington Fault or Ohariu Fault overlays.
- 314. We agree that changes are necessary with the EQC submission providing sufficient scope. The amended rules recommended are:

NH-R13The construction of buildings or the conversion of existing buildings that<br/>will contain a potentially hazard sensitive activity or hazard sensitive activity

<sup>&</sup>lt;sup>226</sup> Submission # 282.10

<sup>&</sup>lt;sup>227</sup> Submission # 348.8

<sup>&</sup>lt;sup>228</sup> Section 42A Report, at paragraph 473

	in the uncertain poorly-constrained, uncertain constrained or distributed areas of the Wellington Fault and Ohariu Fault Hazard Overlays					
All Zones	<ol> <li><u>Activity status: Restricted Discretionary Activity</u> <u>Where:</u> <ul> <li><u>a. Buildings for potentially hazard sensitive activities or hazard sensitive</u></li></ul></li></ol>					
	1. Matters contained in NH-P11					
<u>NH-R14</u>	<u>The construction of buildings or the conversion of existing buildings that</u> <u>will contain a potentially hazard sensitive activity or hazard sensitivity</u> <u>activity</u> <del>Hazard sensitive activities (excluding a single residential unit)</del> within the <u>well-defined and well-defined extended areas of the</u> Wellington Fault and Ohariu Fault <u>Hazard</u> Overlays					
All Zones	<u>1.Activity Status: <b>Restricted Discretionary</b> <u>Where:</u></u>					
	a. <u>It involves the construction of one residential unit on an existing vacant</u> <u>site where the residential unit is located within the well-defined and well-</u> <u>defined extended areas of the Wellington Fault and Ohariu Fault</u> Hazard <u>Overlays.</u>					
	Matters of discretion are:					
	<ol> <li>Locating the building elsewhere on the site outside of the fault hazard overlay is not a practicable option; and</li> <li>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 fault rupture.</li> </ol>					
All Zones	<u>4.2.</u> Activity status: <b>Non-Complying</b>					
	Where:					
	a. <u>Any construction of buildings or conversion of existing buildings within the</u> well-defined and well-defined extended areas of the Wellington Fault and <u>Ohariu Fault Hazard Overlays is not provided for by NH-R14.1a.</u>					

# NH-R7 Hazard sensitive or potentially hazard sensitive activities in the Shepherds Gully Fault and Terāwhiti Fault Overlays (now NH-R11)

- 315. FENZ<sup>229</sup> sought an amendment to NH-R7 to exclude emergency service facilities from the rule, as it may have a functional or operational need to locate in the Shepherds Fault or Terāwhiti Fault Overlays.
- 316. Toka Tū Ake EQC<sup>230</sup> sought an amendment to NH-R7 as it considered that hazard sensitive or potentially hazard sensitive activities should be located 20m away from the Shepherd's or Terāwhiti Faults.
- 317. The submitter also referenced the MfE guidelines for planning around active faults which indicate to avoid hazardous facilities and major hazardous facilities within 20 m of RIC III faults. Based on this, it considered that no hazardous activities should be permitted within 20 m of either fault trace given Shepherd's Gully Fault is RIC III (3500 5000 years), and the Terāwhiti Fault has not yet had its recurrence interval calculated.
- 318. MoE sought amendments to NH-R7 to more accurately reflect the policy direction outline in NH-P12 in relation to a 20 m set back from a fault.
- 319. Mr Sirl<sup>231</sup> agreed with the submitters that to be consistent with the MfE guidelines for planning around active faults which indicate hazardous facilities and major hazardous facilities should be avoided within 20 m of a fault, that it is appropriate to amend NH-R7 to exclude hazardous facilities and major hazard facilities from the Permitted Activity status. Further, due to the likelihood of a fault rupture event, he did not consider that it is an efficient planning response to require other hazard sensitive activities and potentially hazard sensitive activities to demonstrate that they can be located 20 m from the edge of a fault deformation zone to meet the Permitted Activity rule. We agree.
- 320. Considering the lower levels of certainty and the more remote location than the Wellington Fault in particular, a different rule approach is required. We therefore agree with the amendments to NH-R7 as follows:

# NH-R11Hazard sensitive or potentially hazard sensitive activitiesThe construction ofbuildings or the conversion of existing buildings that will contain a potentially<br/>hazard sensitive activity or hazard sensitive activity with<br/>in the uncertain poorly-

<sup>&</sup>lt;sup>229</sup> Submissions # 273.8485

<sup>230</sup> Submission # 282.11

<sup>&</sup>lt;sup>231</sup> Section 42A Report, at paragraphs 483, 484

	<u>constrained, uncertain constrained areas, well-defined or well-defined extended</u> <u>areas of</u> <del>Sheppard</del> <u>Shepherds</u> Gully Fault and Terāwhiti Fault <u>Hazard</u> Overlays					
All Zones	1. Activity Status: <b>Permitted</b>					
	Where:					
	a. The development does not involve the establishment of either:					
	i. Educational facilities;					
	ii. Health care facilities; <del>or</del>					
	iii. Emergency service facilities <del>.; or</del>					
	iv Hazard facilities and major hazard facilities.					
All Zones	2. Activity status: <b>Discretionary</b>					
	Where:					
	a. Compliance with the requirements of NH-R11.1.a_cannot be achieved.					

321. In relation to the request by FENZ to enable emergency services to locate in these fault overlays, we do not consider it appropriate to do so. Furthermore, we consider it highly unlikely that FENZ or another emergency service would have a functional or operational need to locate in the Shepherds Fault or Terāwhiti Fault Overlays given their isolated and undeveloped locations.

# NH-R14 Potentially hazard sensitive activities within the Wellington Fault and Ohariu Fault Overlay

322. While no submissions were received specific to NH-R14, the Section 42A Reporting officer proposed that NH-R14 is deleted and replaced by an amended NH-14, in response to more general submissions on the PDP's approach to fault hazard. We agree with the suggested approach.

# NH-R16 Hazard sensitive activities (excluding a single residential unit) within the Wellington Fault and Ohariu Fault Overlay

- 323. MoE<sup>232</sup> sought the retention of NH-R16 as notified.
- 324. Toka Tū Ake EQC<sup>233</sup> sought amendments to NH-R16 as it considered that residential units should be included as hazard sensitive activities within the Wellington and Ohariu Fault Overlays.

<sup>&</sup>lt;sup>232</sup> Submission # 400.61

<sup>233</sup> Submission # 282.12

325. This rule is no longer required as it has been subsumed within the revised NH-R14, as outlined above.

# NH-R8 Operational port activities, passenger port facilities and rail activities (now NH-R12)

- 326. KiwiRail Holdings Limited<sup>234</sup> sought the retention of NH-R8 as notified.
- 327. CentrePort Limited<sup>235</sup> sought the retention of NH-R8 as notified, subject to the amendments sought by it to NH-P13 and NH-P14 being accepted.
- 328. We note that Mr Sirl<sup>236</sup> recommended an amendment to NH-R8 to clarify in the title that the rule applies to the construction of buildings or the conversion of existing buildings that will contain Operational Port Activities, Passenger Port Facilities and Rail Activities. In our view, this is an improvement.

# NH-R9 Activities in the liquefaction hazard overlay (now NH-R15)

- 329. Precinct Properties New Zealand Limited, Argosy, MoE and Fabric Property Limited<sup>237</sup> sought the retention of NH-R9 as notified.
- 330. FENZ<sup>238</sup> sought an amendment to NH-R9 to allow for emergency service facilities as they may have a functional or operational need to locate in the Liquefaction Hazard Overlay.
- 331. Mr Sirl<sup>239</sup> did not agree. Due to their purpose and the role these facilities assume post-hazard event, it is appropriate that these facilities demonstrate through a resource consenting process both their need to locate in a hazard area and that mitigation measures have been incorporated into the proposal to ensure resilience and functionality in a hazard event. We agree.

<sup>&</sup>lt;sup>234</sup> Submission # 408.96

<sup>&</sup>lt;sup>235</sup> Submission # 402.108

<sup>&</sup>lt;sup>236</sup> Section 42A Report, at paragraph 498

<sup>&</sup>lt;sup>237</sup> Submission # 139.8, 383.29, 400.58 and 425.15

<sup>&</sup>lt;sup>238</sup> Submissions # 273.86-87

<sup>&</sup>lt;sup>239</sup> Section 42A Report, at paragraph 498

# 4. COASTAL HAZARDS (COASTAL ENVIRONMENT CHAPTER)

### 4.1 Introduction

- 332. We now consider the Coastal hazards provisions that are contained within the Coastal Environment Chapter. The remainder of the Coastal Environment provisions will be considered under a Part 1 Schedule 1 hearing in 2024. There are two coastal hazards that are mapped within the Coastal Hazard Overlays.
  - a) Tsunami; and
  - b) Coastal inundation, including sea level rise.
- 333. As with Natural Hazards there are a number of changes suggested to the provisions that apply to Coastal Hazards from the PDP as notified, and we had a number of concerns about them. As outlined, we firstly issued Minute 33 in relation to the clarity and workability of the overall Natural Hazards and Coastal provisions, and we have referenced these throughout the report.
- 334. In relation to Minute 35, in the case of coastal hazards, we asked whether there was consistency with the New Zealand Coastal Policy Statement 2010 (NZCPS) particularly in relation to the possibly conflicting directions that there are between that document and the National Policy Statement on Urban Development 2020 (NPSUD). In that minute we also referred to a then very recent decision of the Supreme Court in the *Port Otago Limited v Environment Defence Society*<sup>240</sup> case and whether there was a need for subsequent change.
- 335. In particular we stated in Minute 33<sup>241</sup> that:

The Court emphasised the need for a close study of the relevant provisions to confirm there was indeed a conflict between them and identified that the particular policies in question were both directive ones, albeit there being a difference in the language used. The Court then provided guidance on how any conflicts should be addressed, directing that decision-makers should provide a 'structured analysis' to provide a disciplined approach to identifying and resolving conflicts between competing directive policies. While the Supreme Court decision focused on two directive policies within the NZCPS, we consider the decision has relevance to reconciling directive competing policies in two separate national directions.

It would assist the Panel if the reporting officer could identify precisely which NPS-UD provisions conflict with NZCPS Policies 25(a) and (b), and provide a 'structured analysis' along the lines the Supreme Court has

 <sup>&</sup>lt;sup>240</sup> Port Otago Limited V Environmental Defence Society Incorporated [2023] NZSC 112 [24 August 2023]
 <sup>241</sup> At paragraphs 12 and 13

*identified is required as to how the competing policies in the NZCPS and NPS-UD might be reconciled.* 

- 336. Mr Sirl<sup>242</sup> prepared a table that identified the relevant policies where a potential conflict exists, and an assessment of the 'directiveness' of the policies.
- 337. We also discuss this matter later in this Report when we consider the specific policies that apply. The key points of Mr Sirl's response were:
  - I do note the Court's approach and findings were within the context of conflicting policies contained in a single national policy statement, not across separate national policy statements. This is relevant note as I consider little consideration would have been given to the directiveness of the language used in other national direction when drafting the NPS-UD.
  - 2. I also note that the guidance of the Court with respect to the 'structured analysis' was directed at the resource consenting stage, where this approach would be required where such conflicts are not resolved at the plan-making stage, ideally, through the Regional Policy Statement or Regional Plan. Consequently, he considered that a slightly more holistic assessment of the applicable policies and language is appropriate to determine how to resolve any conflict between national direction at the district plan level and have undertaken my assessment accordingly.
  - 3. I consider that the structured analysis in Appendix A illustrates that NZCPS Policy 25 has more 'directive' language than NZCPS Policy 6. However, the policy language in the NZCPS and NPS-UD significantly differs, and as a result I am of the view that it is not simply the case that the 'avoid' policies prevail over the 'enabling' language of the NPS-UD Policies 1, 2, 3 and 6. Indeed, at paragraph [69] the Supreme Court confirmed that policies which are enabling in nature can be directive in the same way that an "avoid" policy is.
- 338. Mr Sirl<sup>243</sup> considered that the analysis of the relevant policies, as included in his Appendix A, supported the following conclusions:
  - a) Whilst Policy 6 and Policy 27 of the NZCPS are less directive than the avoidance direction of Policy 25, Policy 6 anticipates built development and the associated public infrastructure in the Coastal Environment to provide for the reasonably foreseeable needs of population growth without compromising the other values of the Coastal Environment. Policy 27 also provides for broad consideration for protecting significant existing infrastructure. The coastal hazards policy framework in the PDP achieves consistency with the NZCPS policy direction by ensuring that in those limited exceptions where further development is provided for in the identified high hazard areas (with respect to the CCZ and the airport, port and rail activities), mitigation is required to ensure coastal hazard related risk is mitigated to a level as

<sup>&</sup>lt;sup>242</sup> Further Reply Evidence of Jamie Sirl Appendix A

<sup>&</sup>lt;sup>243</sup> Further Reply Evidence of Jamie Sirl paragraph 24

low as reasonably practicable. This will ensure that redevelopment in these areas, which is required for the on-going operation of significant infrastructure and functioning of the city, adequately mitigates hazard risk.

- b) Whilst Policy 25 of the NZCPS requires councils to avoid an increase in coastal hazard risk in areas potentially affected by coastal hazards over the next 100 years, Policies 1, 2, 3 and 6 of the NPS-UD direct Tier 1 Councils to take a comprehensive and extensive approach to enabling urban development within urban environments to achieve the objectives of the NPS UD. Or, paraphrased, there is an obligation on Tier 1 Councils to enable urban development within urban areas, unless limited by the presence of qualifying matters.
- c) I consider that the avoidance directive of NZCPS Policy 25 has provided the starting point for the PDP coastal hazards policy development and has appropriately been given effect to with respect to the outcomes the plan seeks. However, the directives of the NPS-UD (and intensification policies in the Act) have not simply been dismissed as subordinate to the NZCPS policies and have also been appropriately given effect to in the context of the NZCPS policy direction.
- d) The plan review cycle requires Council to revisit these matters within a 10-year period. As noted in paragraph 49 of my supplementary statement of evidence and paragraph 109 of my right of reply dated 28 August, I consider that it would be appropriate for council to consider a scenario of coastal inundation that incorporates a degree of sea level rise that reflects a shorter period of time, 50 years for example, where redevelopment was strongly discouraged (high coastal hazard area approach) to support future managed retreat from those areas most impacted by future sea level rise.
- 339. Mr Sirl<sup>244</sup> considered that following the direction of the Court, the identified conflict between policy direction of the NZCPS and NPSUD is best resolved at regional policy statement and regional plan level. He noted however that as the RPS-Change 1 and Council's IPI process are occurring concurrently, the RPS-Change 1 cannot be relied upon with certainty. The NRP, although only recently operative, may also not remain consistent with changes introduced by RPS-Change 1. Regardless, he considered it of value to revisit both the direction of the RPS-Change 1 and the NRP.
- 340. We accept this view from Mr Sirl, but note as we have done for Natural Hazards generally that some of the provisions could do with more guidance. However, on the basis that we are considering the submissions that we received on the notified Plan, there is limited scope to make amendments in accordance with those submissions.

<sup>&</sup>lt;sup>244</sup> Further Reply Evidence of Jamie Sirl paragraph 25

### 4.2 General Submissions on Coastal Hazards

- 341. There were a number of general submissions made on the Coastal Hazard provisions that do not comfortably relate to a particular provision in the Plan.
- 342. Kimberley Vermaey<sup>245</sup> sought the reassessment of the inundation depth classifications for the Coastal Inundation Overlay, and the adjustment of the Coastal Inundation Overlay to remove inundation depths below a certain low-hazard level.
- 343. Mr Sirl<sup>246</sup> noted Mr Andrew's and Dr Burbidge's Statements of Evidence, to the effect that the removal of less than 0.05m coastal inundation and tsunami depths is appropriate, as this depth of inundation is not considered a significant enough hazard that needs to be managed by the District Plan. He noted also that this is consistent with the approach taken to the mapping of Flood Hazard Inundation Areas. We agree, and recommend modelled inundation depths of less than 0.05m be removed from the coastal inundation and tsunami hazard overlays.
- 344. Kimberley Vermaey<sup>247</sup> considered that rules relating to additions in the Coastal Hazards Overlay did not address alterations to existing buildings. She specifically sought that rules relating to additions in the Coastal Inundation Overlay address alterations to existing buildings. The submitter considered that there is the potential for alterations to increase the risk from the conversion of non-habitable buildings and that there needs to be consideration as to whether conversions to existing buildings are appropriate to ensure the rule frameworks are consistent with the framework for additions.
- 345. In disagreeing, Mr Sirl<sup>248</sup> considered that the conversion of buildings is addressed in policies and that the general intent was for the rules to apply to new buildings and the conversion of buildings that will contain activities sensitive to hazard risk, as managing buildings and activities is necessary to manage natural hazard related risk to property and people. We accept that view.
- 346. Grant Birkinshaw<sup>249</sup> opposed the Coastal Hazard overlay based on Tsunami occurrences. He considered that the tsunami baseline is for Civil Defence evacuation purposes, and as such, is not appropriate in a legal document.

<sup>&</sup>lt;sup>245</sup> Submissions # 348.6-7

<sup>&</sup>lt;sup>246</sup> Section 42A Report, at paragraphs 573 and 611

<sup>&</sup>lt;sup>247</sup> Submission # 348.4

<sup>&</sup>lt;sup>248</sup> Section 42A Report, at paragraph 574

<sup>&</sup>lt;sup>249</sup> Submissions # 52.4- 52.5

- 347. We agree with Mr Sirl<sup>250</sup> that the definition of natural hazards in section 2 of the RMA includes tsunami hazard. This is further supported by the NZCPS, which also identifies the need to plan for this hazard.
- 348. The support of Melissa Harward<sup>251</sup> for green infrastructure and planning coastal hazard mitigation works within the Coastal Environment chapter as notified is acknowledged.
- 349. Yvonne Weeber<sup>252</sup> opposed mining and quarrying activities within the Coastal Environment mentioned in CE-R10 and CE-R11. We note that this only applies to existing activities of which there are few or any in the Coastal Environment.
- 350. Yvonne Weeber<sup>253</sup> considered that the PDP maps needed to be clearly mapped using the language and classifications from CE-P14. The submitter's understanding was that there are no 'medium coastal hazard area and high coastal hazard areas' mapped, and that there is an arbitrary mix of hazard and risk overlays instead, which are difficult to discern from each other (Coastal inundation, Liquefaction, Tsunami Hazard Overlay, etc.). The submitter sought that the mapping of Coastal Hazards be more clearly categorized and mapped.
- 351. Similarly, Kāinga Ora<sup>254</sup> sought that the PDP maps be amended to display the high, medium, and low coastal hazards as separate layers that can be turned on and off individually in the GIS viewer.
- 352. In agreeing, Mr Sirl<sup>255</sup> was of the view that that mapping amendments can be made to improve the ease of interpreting low, medium, and high hazard areas. He considered that having to refer back to the hazard ranking table in the introduction of the Coastal Environment chapter to establish hazard ranking for the relevant coastal hazard overlays is unnecessarily burdensome and easily resolved. He proposed that this is best achieved through re-organising the map legend to clarify the hazard ranking for each of the coastal hazard overlays. We agree.
- 353. CentrePort Limited<sup>256</sup> opposed the PDP structure of dealing with natural hazards. It considered that the structure of managing Natural Hazards was confusing, with natural hazards provisions in the Infrastructure chapter, as well as the Natural

<sup>&</sup>lt;sup>250</sup> Section 42A Report, at paragraph 575

<sup>&</sup>lt;sup>251</sup> Submission # 65.3

<sup>252</sup> Submission # 340.22

<sup>&</sup>lt;sup>253</sup> Submission # 340.1

<sup>&</sup>lt;sup>254</sup> Submission #406.13

<sup>&</sup>lt;sup>255</sup> Section 42A Report, at paragraph 576

<sup>&</sup>lt;sup>256</sup> Submissions # 402.111-112

Hazards chapter, while coastal hazards are in the Coastal Environment chapter. It sought that the Plan be amended so all Natural Hazards requirements are included in one chapter. We have already considered this matter in relation to the Natural Hazards chapter.

- 354. Oyster Management Limited<sup>257</sup> sought that the PDP provide consistency in the approach to potentially hazard sensitive activities in the Natural Hazards and Coastal Hazards Overlays. Mr Sirl<sup>258</sup> advised that he considered having the PDP approach to potentially hazard-sensitive activities contained within the Natural Hazards chapter apply to the Coastal Environment chapter and concluded that the slightly more hazard-specific approach taken in the Natural Hazards chapter is not appropriate in the Coastal Environment chapter in response to coastal hazards. We accept that view, to the extent that a number of changes to the provisions have been recommended.
- 355. Oyster Management Limited<sup>259</sup> also sought that the PDP recognise the benefits of existing investment in the CBD in relation to natural hazards and coastal hazards.
- 356. Mr Sirl <sup>260</sup> considered that the PDP as notified appropriately recognises the existing investment in the CCZ by providing a specific objective (CE-08) and policies (CE-P21 and CE-P22) for the City Centre Zone in the Coastal Environment chapter. These policies recognise the significant infrastructure present in the CCZ, the high likelihood of hazard mitigation structures to protect this area from coastal hazards, and the operational need and functional need for many hazard-sensitive and potentially hazard sensitive activities to locate in the City Centre Zone. We do not consider that further change is necessary.
- 357. WIAL<sup>261</sup> considered that tsunami hazard response within existing urban areas required a broader management response that is best managed collectively by emergency management groups such as Civil Defence. The PDP's approach to tsunami management is cumbersome, particularly for large lifeline utilities like WIAL which has extensive emergency management plans and procedures in place, as well as CDEM requirements to remain operational during a civil defence emergency. Therefore, the relevant coastal hazard policies and methods that apply to the site have limited utility and will generate unnecessary resource consent requirements for

<sup>257</sup> Submission # 404.31

<sup>&</sup>lt;sup>258</sup> Section 42A Report, at paragraph 148

<sup>&</sup>lt;sup>259</sup> Submission # 404.30

<sup>&</sup>lt;sup>260</sup> Section 42A Report, at paragraph 587

<sup>&</sup>lt;sup>261</sup> Submissions # 406.291-292

matters that are otherwise already considered by WIAL during the design and development phase of activities within the zone. It sought that coastal hazard overlays be amended to focus only on coastal inundation hazards, and that the Coastal Environment chapter apply coastal tsunami hazard provisions to new greenfield developments only.

- 358. WIAL <sup>262</sup> stated that it was not opposed to the coastal inundation mapping in principle, but considered further nuancing of the provisions that relate to coastal hazards, and more specifically tsunami hazard, was required.
- 359. Mr Sirl<sup>263</sup> disagreed that there needed to be greater nuance to the approach to tsunami hazard. He considered that the approach to the low, medium and high tsunami hazard overlays is adequately nuanced, with policies and rules that reflect the likelihood and impact of tsunami events. He noted that it is only the high tsunami hazard where there is a strong directive to avoid further development (with some exceptions, such as in the City Centre Zone). We accept that view, but consider the detailed provisions and their workability later in respect of policies and rules.
- 360. Dawid Wojasz<sup>264</sup> considered that the coastal hazard overlays put much of the CBD in a high or medium hazard area, limiting development within the Central City. He sought the removal of the High, Medium and Low Coastal Hazard overlay within the City Centre. The submitter considered that density in the Central City should be encouraged, with hazards dealt with as an engineering issue.
- 361. We note that Mr Sirl<sup>265</sup> was of the view that the policy direction specific to the CCZ recognises the importance of the Central City and provides an appropriate consenting pathway to enable continued development in the form of more hazard-resilient buildings and activities.
- 362. Poneke Architects<sup>266</sup> considered that the Coastal Inundation and Tsunami Hazard Overlays effectively stop development in Wellington and are too broad. They sought the deletion of these overlays in their entirety.
- We do not agree and note the advice of Mr Sirl<sup>267</sup> that deleting the Coastal Inundation
   Overlays and Tsunami Overlays would result in the Plan not achieving the purpose

<sup>&</sup>lt;sup>262</sup> Submissions # 406.2, 406.13-14, supported by Further Submission #139.2 and opposed by Further Submissions #70.93-94

<sup>&</sup>lt;sup>263</sup> Section 42A Report, at paragraph 578

<sup>&</sup>lt;sup>264</sup> Submission # 295.2

<sup>&</sup>lt;sup>265</sup> Section 42A Report, at paragraph 591

<sup>&</sup>lt;sup>266</sup> Submissions # 292.1-2

<sup>&</sup>lt;sup>267</sup> Section 42A Report, at paragraph 592

of the Act, not meeting specific requirements under the s 6(h) of the Act, and not giving effect to the NZCPS (particularly Policy 24).

- 364. VicLabour<sup>268</sup> supported restrictions on development in areas at risk of coastal inundation and tsunami with amendments and sought the retention of the coastal inundation and tsunami overlays.
- 365. David Karl<sup>269</sup> considered that according to presentations from Council staff and technical experts at a community climate adaptation meeting, modelling underpinning the current maps reflects some of the available, appropriate possible modelling, but does not account for wave dynamics. It is understood from these experts' comments that wave dynamics may have a significant bearing on Tapu Te Ranga (the island in Island Bay). David Karl sought that the tsunami inundation overlay be amended to account for wave dynamics that include consideration of Tapu Te Ranga. In response, Mr Sirl<sup>270</sup> advised that Mr Burbidge confirmed that the tsunami modelling underpinning the Tsunami Hazard overlay does account for wave dynamics and Tapu Te Ranga.

### 4.3 Submissions on Coastal Hazards Provisions

### **Coastal Hazards – Introduction**

- 366. The Introduction to the Coastal Environment Chapter of the PDP contains a subsection on coastal hazards.
- 367. Yvonne Weeber<sup>271</sup> and Guardians of the Bays<sup>272</sup> sought amendments to the Coastal Environment Introduction, as it is not only sea level rise that is causing coastal inundation, but storm surges and storm events that are increasing due to climate change. This amendment to the introduction for the coastal hazards provisions is supported by Mr Sirl<sup>273</sup> as do we.
- 368. Argosy and Fabric Property Limited<sup>274</sup> both noted that there is significant existing investment in the Wellington CBD which is subject to the coastal hazards' overlays, and this is not recognised in the Introduction. Argosy supported the Introduction to the extent that it takes an adaptative approach to coastal hazards, noting that retreat

<sup>&</sup>lt;sup>268</sup> Submissions # 414.11-12

<sup>&</sup>lt;sup>269</sup> Submission # 309.4

<sup>&</sup>lt;sup>270</sup> Section 42A Report, at paragraph 581

<sup>&</sup>lt;sup>271</sup> Submission # 340.20

<sup>&</sup>lt;sup>272</sup> Submissions # 452.18-19

<sup>&</sup>lt;sup>273</sup> Section 42A Report para 602

<sup>&</sup>lt;sup>274</sup> Submissions # 383.74 and 425.32, opposed by Further Submissions #70.3, 70.13

from the Wellington CBD is unlikely to occur and it is therefore more appropriate for the PDP to anticipate a protective or adaptive approach to climate change hazards. However, it considered that amendment is required to help reconcile these provisions with the strategic direction and CCZ provisions. The Introduction also includes a proposed Coastal Hazard Overlay Hazard Ranking table which ranks tsunami with a 1:100 year scenario inundation extent as High.

- 369. Argosy noted that the high risk Coastal Hazard Tsunami Overlay covers a large part of the CBD, with the Medium and Low risk areas extending marginally further than the High risk area. Given the high impact, low probability nature of a tsunami, it considered that the greatest risk rating should be Medium. In light of this, Argosy and Fabric Property sought amendments to the risk ranking of the tsunami hazard scenarios, specifically that the Tsunami - 1:100 year scenario inundation extent should be allocated a medium risk ranking.
- 370. Oyster Management Limited<sup>275</sup> sought amendments to the Coastal Environment -Introduction to recognise the significant existing investment in Wellington CBD and that an adaption and protection approach is required to manage coastal hazards in the area.
- 371. It sought the following changes in hazard ratings.

Tsunami - 1:100 year scenario inundation extent: High <u>Medium</u> Tsunami - 1:500 year scenario inundation extent: <del>Medium <u>Low</u></del> Tsunami - 1:1000 year scenario inundation extent: Low

- 372. For Argosy, Fabric and Oyster, we received evidence of Mr Sam Morgan, Technical Principal – Coastal Adaptation at WSP and Ms Janice Carter who gave planning evidence. This was in relation to the coastal hazard provisions that apply to the CCZ.
- 373. In his evidence, Mr Morgan<sup>276</sup> was of the view that as there is greater risk presented along the South Coast, more stringent planning controls should be applied to this coastline. However, the Plan currently assigns the same high hazard ranking to respective parts of the South Coast and the City Centre. Mr Morgan considered that the coastal hazard risk for the City Centre is significantly less than the South Coast, and amendment is required to the hazard ranking table.

<sup>&</sup>lt;sup>275</sup> Submissions # 404.33-35, opposed by Further Submission #70.70

<sup>&</sup>lt;sup>276</sup> Evidence of Sam Morgan paragraph 22

- 374. Ms Carter<sup>277</sup> generally agreed with the reporting officer that the Section 42A recommended version of the Coastal Hazard provisions provides sufficient recognition of existing investment in the City Centre through specific policies and rules that are more enabling with respect to use and development in hazard overlays than areas outside of the CCZ. However, Ms Carter was "concerned that the Coastal Hazard Ranking table may present a misleading representation of the tsunami hazard in comparison to the coastal inundation hazard, given that the tsunami event includes 1m of sea level rise, and coastal inundation event does not include sea level rise".
- 375. In his rebuttal evidence, Mr Sirl<sup>278</sup> responded to Ms Carter's opinion that there is an inconsistency that results from the high hazard tsunami scenario including 1 m sea level rise and the high hazard coastal inundation excluding sea level rise. He did not agree that the difference between the hazard ranking approach for the two coastal hazards necessitated revision of the high tsunami hazard event to a scenario that excludes sea level rise. He was also of the opinion that it would be short-sighted and inappropriate to continue to enable development in areas where there is a relatively high likelihood of a tsunami event occurring, with much greater consequences if the tsunami that occurs is of the greater magnitude of tsunami predicted i.e. resulting from a Hikurangi Margin earthquake.
- 376. We agree with Mr Sirl and note the changes recommended to the Introduction relating to Hazard Rankings. This takes into account sea level rise of 1 metre for Tsunami and 1.43 metres in relation to inundation, based on the advice of Dr Burbridge.
- 377. There are accordingly two changes to the Coastal Hazards Introduction within the Coastal Environment chapter that we recommend:
  - a) After "Coastal inundation including sea level rise" add the words "storm surges and storm events"; and
  - Coastal Hazard OverlayRespective Hazard<br/>RankingTsunami 1:100 year scenario inundation extent with 1 m sea<br/>level riseHighExisting coastal inundation extent with a 1:100 year storm
- b) Amend the hazard ranking table as follows:

<sup>&</sup>lt;sup>277</sup> Evidence of Janice Carter paragraph 44

<sup>&</sup>lt;sup>278</sup> Rebuttal Evidence of Jamie Sirl paragraph 39

Tsunami – 1:500 year scenario inundation extent <u>with 1 m sea</u> <u>level rise</u>	Medium	
Coastal inundation extent – with 1.4 <del>9</del> 3m sea level rise scenario and 1:100 year storm	Wouldni	
Tsunami 1:1000 year scenario inundation extent <u>with 1 m sea</u> <u>level rise</u>	Low	

# **Coastal Hazards – Objectives**

# CE-O5 Risk from coastal hazards (ISPP)

- 378. WCC Environmental Reference Group, Argosy, Oyster Management Limited, and Investore Property Limited<sup>279</sup> sought that CE-O5 be retained as notified.
- 379. FENZ<sup>280</sup> supported reducing risk to people, property, and infrastructure, and sought that CE-O5 be retained as notified, noting that there are existing fire stations located within the Coastal Hazard Areas and that any development of these would be subject to provisions within this chapter.
- 380. TRoTR<sup>281</sup> sought that CE-O5 be retained as notified, subject to amendments in subsequent submission points.
- 381. Forest and Bird, opposed by WIAL<sup>282</sup>, sought amendments to CE-O5 as the objective should not only refer to increased risk to people, property and infrastructure, but should be amended to also acknowledge the natural character, natural landscape and biodiversity values that must be protected.
- 382. We did not hear from Forest and Bird at the hearing and agree with Mr Sirl<sup>283</sup> that objectives should ensure the protection of natural character, natural landscape and biodiversity values. However, the existing objectives in relation to the Coastal Environment (CE-O1, CE-O2, CE-O3) appropriately and specifically address these matters.
- 383. WIAL<sup>284</sup> sought amendments to CE-O5 as the risks from natural hazards should be avoided where they are intolerable, and that this concept should be brought into this

<sup>&</sup>lt;sup>279</sup> Submissions # 377.225, 383.75, 404.36 and 405.41

<sup>&</sup>lt;sup>280</sup> Submission # 273.132

<sup>&</sup>lt;sup>281</sup> Submission # 488.62

<sup>&</sup>lt;sup>282</sup> Submission # 345.298, opposed by Further Submission #36.90

<sup>&</sup>lt;sup>283</sup> Section 42A Report, at paragraphs 622 -625

<sup>&</sup>lt;sup>284</sup> Submissions # 406.300-301 supported by Further Submission #105.2

policy, acknowledging that people, activities, property and infrastructure have varying levels of coastal hazard tolerance.

- 384. We do not consider that such a change is necessary for the reasons we have outlined where this point was made elsewhere, and we note that Ms O'Sullivan for WIAL agreed with that position.
- 385. GWRC, supported by Toka Tū Ake EQC<sup>285</sup>, sought the "*minimise*" instead of "*reduces or does not increase*" amendment to CE-O5 to align it with Objectives 19 and 20 and Policies 51 and 52 in RPS-Change 1.
- 386. In relation to the more 'nuanced' approach to hazards generally, Mr Sirl<sup>286</sup> was of the view that amending CE-O5 to apply only to high hazard areas only ensures that the hazard risk in high hazard areas is reduced or not increased, with added clarification achieved by amending CE-05 to clarify the any risk reduction relates to the baseline hazard risk present in the existing environment, as opposed to simply reducing risk arising from the development.
- 387. Mr Sirl therefore considered that an additional objective that specifically addresses the outcomes sought with respect to coastal hazard risk in low and medium hazard areas is necessary, incorporating a policy direction to minimise hazard risk. This allows for new activities in less hazard prone areas and is commensurate with the lower probability and lower consequences of the coastal hazard scenarios that make up the medium and low hazard risk areas, and in most cases, requires that development and activities incorporate hazard resilience that provides for the safety of current and future residents and protects property from damage.
- 388. We agree that these changes are appropriate and recommend that the following changes be made to CE-O5 with the addition of a new CE-O6.

CE-05	Risk from coastal hazards <u>in High Hazard Areas of the Coastal Hazard</u> <u>Overlays</u>			
	Subdivision, use and development <u>with</u> in <u>the High Hazard Areas of</u> the Coastal Hazard Overlays reduce <del>s</del> or do <del>es</del> not increase the <u>existing</u> risk <u>from coastal hazards</u> to people, property, and infrastructure.			
CE-06	Risk from coastal hazards in Low and Medium Hazard Areas of the Coastal Hazard Overlays			

<sup>&</sup>lt;sup>285</sup> Submission # 351.201, supported by Toka Tū Ake EQC[Further Submission #70.34]

<sup>&</sup>lt;sup>286</sup> S42A Report, at paragraph 624, 625

Subdivision, use and development within the Low and Medium Hazard Areas of the
Coastal Hazard Overlays minimise the risk from coastal hazards to people, property
and infrastructure.

389. Consequential numbering changes to the remaining CE Objectives are required as a result.

# CE-O6 Natural systems and features (P1 Sch1) (now CE-O7)

- 390. GWRC and WCC Environmental Reference Group<sup>287</sup> sought the retention of CE-O6 as notified.
- 391. TRoTR<sup>288</sup> sought that CE-O6 be retained as notified, subject to amendments in subsequent submission points. Mr Sirl<sup>289</sup> was of the view that rather than a new standalone objective that including specific reference to Sites and Areas of Significance to Māori provides for things that may not fall under the more general reference to of people, property, and infrastructure. We agree.
- 392. Forest and Bird<sup>290</sup> sought amendments to CE-O6 so that it not only refers to increased risk to people, property and infrastructure, but also acknowledges the natural character, natural landscape and biodiversity values that must be protected.
- 393. Like Mr Sirl<sup>291</sup>, we disagree that CE-O6 should be amended to also acknowledge the protection of natural character, natural landscape and biodiversity values as these amendments go well beyond the intended scope of this objective and are sufficiently addressed in other objectives relating to the Coastal Environment.
- 394. Therefore, we recommend CE-O6 be amended as follows:

CE-0 <u>67</u>	Natural systems and features
	Natural systems and features that reduce the susceptibility of people, property, <del>and</del> infrastructure, <u>and Sites and Areas of Significance to Māori</u> from damage by coastal hazards are created, maintained or enhanced.

<sup>&</sup>lt;sup>287</sup> Submissions # 351.202 and 377.226

<sup>&</sup>lt;sup>288</sup> Submission # 488.63

<sup>&</sup>lt;sup>289</sup> Section 42A Report, at paragraph 635

<sup>&</sup>lt;sup>290</sup> Submission # 345.299

<sup>&</sup>lt;sup>291</sup> Section 42A Report, at paragraph 636

# CE-O7 Airport, operational port activities, passenger port facilities and rail activities (P1 Sch1)

- 395. Yvonne Weeber, KiwiRail, Guardians of the Bays and WCC Environmental Reference Group <sup>292</sup> sought that CE-O7 be retained as notified.
- 396. Te Rūnanga o Toa Rangatira<sup>293</sup> sought that CE-O7 be retained as notified, subject to amendments in subsequent submission points. We agree that the proposed amendments to CE-06 provide partial relief to the submitter.
- 397. Forest and Bird<sup>294</sup> sought amendments to CE-O7 so that it not only refers to increased risk to people, property and infrastructure, but also acknowledges the natural character, natural landscape and biodiversity values that must be protected. As with CE-O6, we consider that the protection of natural character, natural landscape and biodiversity values proposed goes well beyond the intended scope of this objective, and is sufficiently addressed in other objectives relating to the Coastal Environment.
- 398. CentrePort Limited<sup>295</sup> supported the objective, but opposed the structure of the Plan managing Natural Hazards as it is confusing, with Natural Hazards provisions in the infrastructure chapter, the Natural Hazards Chapter, as well as this chapter dealing with coastal hazards in the Coastal Environment. It sought that all Natural Hazards provisions are consolidated in the same place, or stronger cross-referencing is provided. For reasons outlined previously in response to this submission across the Natural and Coastal Hazards provisions we consider that no change is required.
- 399. WIAL<sup>296</sup> sought an amendment to CE-O7 as it considered that the activities listed have operational and functional constraints which ultimately govern the location of these activities, including within areas exposed to natural hazard risk. It considered that the objective needs to appropriately recognise this and be consistent with the directive contained within SRCC-O2, to avoid areas where the risks are intolerable, taking into consideration operational and functional constraints associated with identified activities.
- 400. We recognise that Mr Sirl<sup>297</sup> supported replacing "*do not increase*" with the term "*minimise*" as that would offer an appropriate alternative to the *'intolerable'* terminology sought by WIAL and has been a consistent change made elsewhere.

<sup>&</sup>lt;sup>292</sup> Submissions # 340.23, 408.99, 452.20 and 377.277

<sup>&</sup>lt;sup>293</sup> Submission # 488.64

<sup>&</sup>lt;sup>294</sup> Submission # 345.300, opposed by Further Submission #36.92

<sup>&</sup>lt;sup>295</sup> Submission # 402.115

<sup>&</sup>lt;sup>296</sup> Submissions # 406.302-303

<sup>&</sup>lt;sup>297</sup> Section 42A Report, at paragraph 647

The other change is replacing the term 'Airport' with 'Airport Purposes'. We agree with those changes. Therefore CE-O7 is recommended to be amended as follows:

# CE-078Airport purposes, operational port activities, passenger port facilities and rail<br/>activitiesAirport purposes, operational port activities, passenger port facilities and rail<br/>activities are provided for, while also ensuring that subdivision, development and use<br/>of land occupied by Airport purposes, operational port activities, passenger port<br/>facilities and rail activities do not increase minimise<br/>the risk to people, property, and<br/>infrastructure.

# CE-O8 City Centre Zone

- 401. Precinct Properties New Zealand Limited, Argosy, Oyster Management Limited, Fabric Property Limited and WCC Environmental Reference Group <sup>298</sup> sought that CE-O8 be retained as notified.
- 402. TRoTR<sup>299</sup> sought that CE-O8 be retained as notified, subject to amendments in subsequent submission points.
- 403. Forest and Bird opposed by WIAL<sup>300</sup> sought amendments to CE-O8 so that it not only refers to increased risk to people, property and infrastructure but also acknowledge the natural character, natural landscape and biodiversity values that must be protected.
- 404. As with CE-O6 and O7, we consider that the protection of natural character, natural landscape and biodiversity values proposed goes well beyond the intended scope of this objective, and is sufficiently addressed in other objectives relating to the Coastal Environment.
- 405. Kāinga Ora<sup>301</sup> sought amendments to CE-O8 to better identify the effects that new subdivision, use and development may have on the existing environment, and to recognise the additional impact that only new subdivision, use and development has on the existing environment:

<sup>&</sup>lt;sup>298</sup> Submission # 139.19, 383.76, 404.37, 425.34 and 377.277

<sup>&</sup>lt;sup>299</sup> Submission # 488.65

<sup>&</sup>lt;sup>300</sup> Submission # 345.301, opposed by Further Submission #36.93

<sup>&</sup>lt;sup>301</sup> Submission # 391.249

- 406. Mr Sirl<sup>302</sup> acknowledged that the intent of these Objectives is to apply to 'new' activities. He considered that the Objectives are sufficiently clear in this regard. Ms Woodbridge<sup>303</sup> agreed. She acknowledged that the amendment made to CE-O5, and the addition of CE-O6 as a new Objective, would provide greater clarity and directions for Plan users, aligning with the policy approach in relation to high, medium and low risk hazards. We concur.
- 407. Aside from the replacement of the words "*do not increase*" with "*minimise*", we do not consider any other change is necessary to CE-O8

### CE-O9 Measures to reduce damage from sea level rise and coastal erosion

- 408. WCC Environmental Reference Group <sup>304</sup> sought that CE-O9 be retained as notified. Yvonne Weeber<sup>305</sup> supported CE-O9 as it enables green infrastructure as the primary method being used to reduce damage from sea level rise and coastal erosion and sought that is be retained as notified.
- 409. TRoTR<sup>306</sup> sought that CE-O9 be retained as notified, subject to amendments in subsequent submission points. We consider that the proposed amendments to CE-06 provide partial relief to the submitter on this matter.
- 410. GWRC<sup>307</sup> sought amendments to CE-O9 to provide for consistency with Policy 52 in RPS-Change 1 by including non-structural, soft engineering or mātauranga Māori approaches, reflecting the fact that while the definition of green infrastructure in the Plan has a strong focus on engineering systems that mimic natural systems, there are other natural hazard mitigation measures that RPS-Change 1 directs consideration of, and which are not captured by green infrastructure.
- 411. We agree with Mr Sirl<sup>308</sup> that it is appropriate to recognise mātauranga Māori approaches in the coastal hazard provisions, but that this is best achieved through policies that implement the wider objectives of the Plan. CE-O9 does not need to be amended to include specific reference to non-structural or soft engineering mitigation works as these are already provided for within the definition of Green Infrastructure

<sup>&</sup>lt;sup>302</sup> Section 42A Report, at paragraph 657

<sup>&</sup>lt;sup>303</sup> Evidence of Victoria Woodbridge paragraph 3.1(b)

<sup>304</sup> Submission # 377.229

<sup>&</sup>lt;sup>305</sup> Submission # 340.24

<sup>&</sup>lt;sup>306</sup> Submission # 488.66

<sup>&</sup>lt;sup>307</sup> Submission # 351.203

<sup>&</sup>lt;sup>308</sup> Section 42A Report, at paragraph 667

which specifically refers to meaning a "natural or semi-natural area, feature or process, including engineered systems that mimic natural processes".

# CE – proposed new objective

- 412. TRoTR<sup>309</sup> sought the inclusion of an additional objective to have the Plan specifically recognise and protect significant cultural infrastructure, such as coastal marae, and the impacts that marae communities may face:
- 413. We did not hear from TRoTR at the hearing but consider that a new objective is not necessary. Like Mr Sirl<sup>310</sup>, we consider that incorporating specific recognition to Sites and Areas of Significance to Māori into existing CE-06 would provide partial relief to the submitter as it recognises these areas as distinct from the more general references to people, property and infrastructure. Mr Sirl also noted that both marae and papakāinga are included in the definition of hazard sensitive activities.

# **Coastal Hazards – Policies**

# CE-P11 Identification of coastal hazards (ISPP)

- 414. Yvonne Weeber, WCC Environmental Reference Group, Kāinga Ora, Oyster Management Limited and GWRC<sup>311</sup> sought that CE-P11 be retained as notified.
- 415. Argosy<sup>312</sup> supported this policy in so far that the risk-based approach needs to consider the impact, likelihood and consequences of different coastal hazard events. Although it noted that the PDP clearly identifies the risk of various coastal hazard events (e.g. a high risk that a property will be affected if there is a tsunami), the submitter considered that the PDP does not identify the probability of such events (which are low), and that this makes the identification of hazards misleading and potentially alarming.
- 416. In disagreeing, Mr Sirl<sup>313</sup> considered that it is appropriate for the PDP to consider land use and development for areas susceptible to hazard events that have a low probability but high impact, as the impacts of events such as tsunami can be significant. In his view, this ensures that development in hazard prone areas considers the best available information in relation to natural hazards and

<sup>&</sup>lt;sup>309</sup> Submission # 488.57

<sup>&</sup>lt;sup>310</sup> Section 42A Report paras 671-672

<sup>&</sup>lt;sup>311</sup> Submissions # 340.33, 377.240, 391.250, 404.38 and 351.210

<sup>312</sup> Submission # 383.77

<sup>&</sup>lt;sup>313</sup> Section 42A Report, at paragraph 679

incorporates appropriate measures into building design to mitigate the potential effects from natural hazards. We agree with Mr Sirl in this regard.

- 417. Forest and Bird<sup>314</sup> sought amendment to CE-P11 so that it addresses the risks posed to people, property and infrastructure in respect of use and development and coastal hazards, and acknowledges the natural character, natural landscape and biodiversity values that must be protected.
- 418. As with similar submissions made on the CE objectives, we consider that these amendments go beyond the intended scope of this policy, noting that these matters are already specifically addressed in other policies for the Coastal Environment.
- 419. WIAL<sup>315</sup> sought that CE-P11 either be deleted in its entirety, or amended to only apply to the coastal inundation hazard areas, and to recognise the concept of tolerability as per Objective SRCC-O2, so as to recognise that different activities, people, property and infrastructure will have a different tolerance to the effects of coastal hazards.
- 420. Ms O'Sullivan<sup>316</sup> for WIAL identified in her evidence that following the Section 42A Report recommendation to amend NH-P1 to provide for consideration of when an activity has an operational or functional need to locate in a Natural Hazard Overlay, a similar amendment should be made to CE-P11 (as the equivalent policy to NH-P1).
- 421. We agree with Mr Sirl<sup>317</sup> that this proposed amendment ensures consistent policy direction for natural and coastal hazard risk management. We note that an amendment of this nature was not initially recommended in the Section 42A Report as there was no submission specifically seeking this relief. Consequently, we see merit in this proposed amendment under Schedule 1, clause 99(2)(b) of the RMA.
- 422. CE-P11 is therefore recommended to be amended as follows:

CE–P11	Identification of coastal hazards					
	Identify coastal hazards within the District Plan and take a risk-based approach to the management of subdivision, use and development based on the following:					
	<ol> <li>The sensitivity of the activities to the impacts of coastal hazards;</li> <li>The risk posed to people, property, and infrastructure, by considering the likelihood and consequences of different coastal hazard events; and</li> <li>The longer term impacts of climate change and sea level rise; and-</li> </ol>					

<sup>&</sup>lt;sup>314</sup> Submission # 345.313, opposed by Further Submission #36.99

<sup>&</sup>lt;sup>315</sup> Submissions # 406.316-317, opposed by Further Submission #70.95

<sup>&</sup>lt;sup>316</sup> Evidence of Kirsty O'Sullivan paragraph 6.20

<sup>&</sup>lt;sup>317</sup> Supplementary Evidence of Jamie Sirl paragraph 12

4. The operational need or functional need for some activities to locate in the
Coastal Hazard Overlays.

### CE-P12 Levels of risk

- 423. Yvonne Weeber, WCC Environmental Reference Group, and MoE<sup>318</sup> sought that CE-P12 be retained as notified.
- 424. Forest and Bird, opposed by WIAL<sup>319</sup>, sought that CE-P12 be amended to also address risks posed to natural character, natural landscape, and biodiversity values. As with similar submissions made on the CE objectives and policies, we consider that these amendments go beyond go beyond the intended scope of this policy, noting that these matters are already specifically addressed in other policies for the Coastal Environment.
- 425. Council<sup>320</sup> sought amendments to CE-P12 as the policy wasn't considered clear. These were:

<u>Ensure</u> subdivision, use and development reduces the risk to people, property, and infrastructure by:

- 1. Enable Enabling subdivision:...
- 426. We consider that these amendments are appropriate.
- 427. GWRC<sup>321</sup> sought amendments to CE-P12 to ensure regard is had to RPS-Change 1 Objectives 19 and 20, and Policies 51 and 52 in respect of the word "*minimise*".
- 428. Argosy<sup>322</sup> opposed Policy CE-P12 as it considered that CE-P12.1 was very restrictive, only enabling low occupancy, risk or replacement value development within the Coastal Hazard Overlays. It noted that Policy CE-12.2 would also require mitigation for subdivision, use and development in the Low and Medium Hazard Areas, and sought that CE-P12.2 only apply to the Coastal Hazard Inundation Overlay. In particular, Argosy considered that it was not appropriate to require mitigation for tsunami risk based on the likelihood of an event occurring and the inability to mitigate this type of event, and that it was also unrealistic to expect that mitigation can address the impacts from coastal hazards, rather than to reduce or not increase the risk.

<sup>&</sup>lt;sup>318</sup> Submissions # 340.34, 377.241, and 400.63

<sup>&</sup>lt;sup>319</sup> Submission # 345.314, opposed by Further Submission #36.100

<sup>&</sup>lt;sup>320</sup> Submission # 266.112

<sup>&</sup>lt;sup>321</sup> Submission # 351.211, supported by Further Submission #70.35

<sup>&</sup>lt;sup>322</sup> Submission # 383.78, opposed by Further Submission #70.4

429. Argosy considered CE-P12.3 was also similarly restrictive in that it failed to recognise the existing significant investment in the CBD, that a significant portion of this area is subject to High Hazard Areas under the Coastal Hazard Overlays, and that it inappropriately applies to tsunami risk. The submitter sought the following changes to CE-P12.

### Amend CE-P12 Levels of risk as follows:

Subdivision, use and development reduces the risk to people, property, and infrastructure by:

Enable subdivision, use and development that have either low occupancy, risk, or replacement value within the low, medium and high hazard areas of the Coastal Hazard Overlays;
 Requiring mitigation for subdivision, use and development to reduce or not increase that

addresses the impacts from the relevant coastal hazards to people, property, and infrastructure in the low, and medium and high hazard areas

3. Avoiding subdivision, use and development in the high hazard area <u>of the Coastal Inundation</u> <u>Overlay</u> unless there is an functional <del>and <u>or</u></del> operational need for the building or activity to be located in this area and incorporates mitigation measures <del>are incorporated</del> that reduces the risk to people, property, and infrastructure.

- 430. Oyster Management Limited and Fabric Property Limited, opposed by Toka Tū Ake EQC<sup>323</sup>, sought amendments to CE-P12 for similar reasons as those outlined by Argosy.
- 431. Ms Carter<sup>324</sup> for these submitters noted that:

The reporting officer does not agree with the submitters that CE-P12 is overly constraining and does not support their requested amendments. However, the reporting officer does recommend a number of amendments to CE-P12 including the insertion of a City Centre exception to the requirement to avoid subdivision, use and development in the high hazard area.

I support, in part, the reporting officer's recommended amendment of CE-P12 and consider that it partially addresses the issues raised by the submitters particularly around the concern that the notified policy failed to adequately recognise existing investment in the CBD, consistent with CE-O8. I do not support the amendments to CE-P12 2. to replace 'addresses' with "minimises" risk. I consider that in the notified version 'addresses' provides a more appropriate balance between the need to mitigate coastal hazard risk and enabling appropriate use and development.

432. In his supplementary evidence, Mr Sirl<sup>325</sup> disagreed with Ms Carter's proposed recommendations to CE-P12.2 to revert back to the term "*addresses*" as this is

<sup>&</sup>lt;sup>323</sup> Submissions # 404.39-42, and 425.36- 425.37, opposed by Further Submissions #70.71-14

<sup>&</sup>lt;sup>324</sup> Evidence of Janice Carter paragraphs 57 and 58

<sup>&</sup>lt;sup>325</sup> Supplementary evidence of Jamie Sirl paragraph 45

unclear, and retention of the term "*minimise*" provides appropriate policy direction for coastal hazard management in medium hazard areas. However, he did agree with the proposed addition to CE-P12.2 to clarify that this policy direction also applies to high coastal areas of the Coastal Hazard Overlays in the CCZ.

- 433. Kāinga Ora and Tū Ake EQC<sup>326</sup> sought amendments to CE-P12 so that the policy enables mitigation of hazard risk in high hazard areas:
- 434. Mr Sirl did not agree with this submission. We note also that Ms Woodbridge did not refer to this in her evidence. Mr Sirl stated that a broad requirement for "*no increase*" across all hazard areas is not appropriate, as he considered that a more nuanced approach that differentiates between high hazard areas and low and medium hazard areas is necessary to ensure appropriate land use and development outcomes that reflect the hazard risk in these areas. Following this, and consistent with proposed changes to NH-P2, he was in favour of replacing "*reduces the risk*" with more the general terminology "*manages the coastal hazard risk*", with greater detail provided within the following subset of the policy (i.e. P12.1, P12.2 and P12.3).
- 435. Mr Sirl also strongly disagreed with the request for CE-P12 to be amended to remove the policy limb directing the avoidance of activities in the high hazard areas. In his view, consistent with the NZCPS, avoidance was the appropriate starting point in relation to high hazard areas. Further, he noted that CE-P12 already appropriately provides for mitigation of hazard risk for the limited exceptions provided for in high hazard areas.
- 436. WIAL<sup>327</sup> sought that CE-P12 either be deleted in its entirety, or amended to only apply to the coastal inundation hazard areas, and to recognise the concept of tolerability as per Objective SRCC-O2, to recognise that different activities, people, property and infrastructure will have a different tolerance to the effects of coastal hazards. Mr Sirl did not agree for the same reasons that applied to other provisions. We note that Ms O'Sullivan<sup>328</sup> supported the recommended changes. We also agree.
- 437. There have therefore been a number of recommended changes to CE-P12. These are as follows:

CE-P12	Levels of risk				
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<sup>&</sup>lt;sup>326</sup> Submissions # 391.251-252, opposed by Further Submission #70.63

<sup>&</sup>lt;sup>327</sup> Submissions # 406.318-319, opposed by Further Submission #70.96

<sup>&</sup>lt;sup>328</sup> Evidence of Kirsty O'Sullivan paragraph 6.16

Ensure <u>s</u> Subdivision, use and development <del>reduces</del> <u>manages <del>the</del> coastal hazard</u> risk to people, property, and infrastructure by:
<ol> <li>Enable Enabling subdivision, use and development that have either low occupancy, risk, or replacement value within the low, medium and high hazard areas of the Coastal Hazard Overlays;</li> </ol>
2. Requiring mitigation for subdivision, use and development that addresses <u>minimises</u> the <u>impacts</u> <u>risk resulting from the development</u> from the relevant coastal hazards to people, property, and infrastructure <u>as far as reasonably</u> <u>practicable</u> in the low and medium hazard areas, <u>and high hazard areas in the</u> <u>City Centre Zone</u> , <u>of the Coastal Hazard Overlays</u> ; and
3. Avoiding subdivision, use and development in the high hazard area <u>of the</u> <u>Coastal Hazard Overlays (with the exception of the City Centre Zone)</u> unless there is a functional <u>need</u> and operational need for the building or activity to be located in this area and <u>the building or activity</u> incorporates mitigation measures <del>are incorporated</del> that <del>reduces</del> <u>minimise</u> the risk to people, property, and infrastructure.

### **CE-P13 Less hazard sensitive activities**

- 438. Yvonne Weeber, GWRC and WCC Environmental Reference Group<sup>329</sup> sought that CE-P13 be retained as notified.
- 439. Forest and Bird, opposed by WIAL<sup>330</sup>, sought amendments to CE-P13 to also address risks posed to natural character, natural landscape, and biodiversity values. As with similar submissions made on the CE objectives and policies, we consider that these amendments go beyond go beyond the intended scope of this policy, noting that these matters are already specifically addressed in other policies for the Coastal Environment. No change is recommended.

# CE-P14 Additions to buildings for potentially hazard sensitive activities and hazard sensitive activities within the medium coastal hazard area and high coastal hazard area (ISPP)

- 440. Precinct Properties New Zealand Limited, FENZ, Yvonne Weeber, Kāinga Ora, MoE and Fabric Property<sup>331</sup> sought to retain CE-P14 as notified.
- 441. Forest and Bird, opposed by WIAL,<sup>332</sup> sought amendments to CE-P14 to also address risks posed to natural character, natural landscape, and biodiversity values. As with similar submissions made on the CE objectives and policies, we consider that these amendments go beyond go beyond the intended scope of this policy, noting that

<sup>&</sup>lt;sup>329</sup> Submissions # 340.35, 351.212 and 377.242

<sup>&</sup>lt;sup>330</sup> Submission # 345.315, opposed by Further Submission #36.101

<sup>&</sup>lt;sup>331</sup> Submissions # 139.20, 273.137, 340.36, 391.253, 400.64 and 425.38

<sup>&</sup>lt;sup>332</sup> Submission # 345.316, opposed by Further Submission #36.102

these matters are already specifically addressed in other policies for the Coastal Environment. No change is recommended.

- 442. Argosy and Oyster Management Limited <sup>333</sup> similarly supported the direction that additions to buildings for potentially hazard sensitive activities and hazard sensitive activities are enabled within the medium coastal hazard area and high coastal hazard area, where the risk can be mitigated. However, the submitters suggested that it is difficult to provide mitigation measures in relation to tsunami risk, because of the remoteness of tsunami risk. They considered that it would also be reasonable for policy CE-P14 to enable uses of the same level of hazard sensitivity in additions to buildings, rather than enabling the continued existing use. The submitters also noted that as the risk assessment framework in the PDP provides classifications of activities based on their risk level i.e. Potentially Hazard Sensitive Activities, there was no reason for uses within the same level of hazard sensitivity to be differentiated.
- 443. Mr Sirl<sup>334</sup> agreed that it would be reasonable for policy CE-P14 to enable uses of the same level of hazard sensitivity in additions to buildings, as this adequately manages hazard risk while also enabling continued use of existing buildings. However, he disagreed with the proposed amendment to CE-P14 that would result in the policy only applying to the coastal inundation overlay. In his view, it was appropriate to manage the effects of tsunami hazard.
- 444. WIAL<sup>335</sup> sought for CE-P14 to either be deleted in its entirety, or only apply to the coastal inundation hazard areas, and amended to recognise the concept of tolerability. Mr Sirl did not agree for the same reasons that applied to other provisions. We note that Ms O'Sullivan<sup>336</sup> supported the recommended changes, as do we.
- 445. Therefore, it is recommended that CE-P14 be amended as follows:

CE-P14	Additions to buildings for potentially hazard sensitive activities and hazard sensitive activities within the medium coastal hazard area and high coastal hazard area
	Enable additions to buildings that accommodate existing potentially hazard sensitive activities and hazard sensitive activities within the medium coastal hazard area and high coastal hazard area, where:

<sup>&</sup>lt;sup>333</sup> Submissions # 383.79-80, 404.91-92, opposed by Further Submissions # 70.5 and 70.74

<sup>&</sup>lt;sup>334</sup> Section 42A Report, at paragraphs 721,722

<sup>&</sup>lt;sup>335</sup> Submissions # 406.320-321, opposed by Further Submission #70.97

<sup>&</sup>lt;sup>336</sup> Evidence of Kirsty O'Sullivan paragraph 6.16

- They enable the continued use same level of hazard sensitivity as of the existing use of the building; and
- 2. The risk from the coastal hazard is low due to either:
  - a. Proposed mitigation measures; or
  - b. The size and the activity of the addition.

# **Coastal Hazards - Proposed new policy**

- 446. As part of the consideration of submissions, the Section 42A Reporting Officer identified a gap in policy direction with respect to potentially hazard sensitive activities in low coastal hazard areas, and recommended the Panel considered whether it was appropriate to make an out-of-scope recommendation in line with Schedule 1, clause 99(2)(b) of the RMA to include the following new policy which would provide the policy direction for rule CE-R21. It was suggested that if this policy was to be included in the PDP it would be best inserted as a new CE-P14, resulting in consequential renumbering of the subsequent policies.
- 447. We agree with the following, noting that the numbering of the subsequent policies is changed as a result.

<u>CE-P15</u>	Potentially hazard sensitive activities in low coastal hazard areas
	Allow potentially hazard sensitive activities in low coastal hazard areas.

# CE-P15 Subdivision and hazard sensitive activities within the low coastal hazard areas (ISPP) (now CE-P16)

- 448. FENZ, WCC Environmental Reference Group, Kāinga Ora, MoE and GWRC<sup>337</sup> sought the retention of CE-P15 as notified.
- 449. Yvonne Weeber<sup>338</sup> generally supported CE-P15, but considered that it was unclear where the low, medium and high coastal hazard areas are on the map. We note that Mr Sirl <sup>339</sup> agreed and highlighted proposed changes to the mapping legend titles that will make it easier to understand which hazard overlay makes up each of the low, medium and high coastal hazard areas.
- 450. Forest and Bird<sup>340</sup> sought amendments to CE-P15 to also address risks posed to natural character, natural landscape, and biodiversity values. As with similar submissions made on the CE objectives and policies, we consider that these

<sup>337</sup> Submissions # 273.138, 377.244, 391.254, 400.65 and 351.213

<sup>338</sup> Submission # 340.37

<sup>&</sup>lt;sup>339</sup> Section 42A Report, at paragraph 731

<sup>&</sup>lt;sup>340</sup> Submission # 345.317, opposed by Further Submission #36.103

amendments go beyond go beyond the intended scope of this policy, noting that these matters are already specifically addressed in other policies for the Coastal Environment. No change is recommended.

- 451. Council<sup>341</sup> sought minor amendments to CE-P15 to provide clarity and consistency of the policy with CE-P16.
- 452. WIAL, opposed by Toka Tū Ake EQC<sup>342</sup>, sought that CE-P15 either be deleted in its entirety, or amended to only apply to the coastal inundation areas, and to recognise the concept of tolerability, as per Objective SRCC-O2, reflecting that different activities, people, property and infrastructure will have a different tolerance to the effects of coastal hazards.
- 453. Mr Sirl<sup>343</sup> did not agree for the same reasons that applied to other provisions where this change was sought. We concur. Therefore, the changes recommended are as follows.

CE-P <del>15<u>16</u></del>	<del>Subdivision and h<u>H</u>azard sensitive activities within the low coastal hazard areas</del>
	Provide for hazard sensitive activities within the low coastal hazard area, or any subdivision where the building platform for a hazard sensitive activit <u>vies is</u> within the low coastal hazard area, where it can be demonstrated that:
	<ol> <li>The activity, building, or subdivision incorporates measures that reduce or do not increase minimise the risk to people, and property from a tsunami;</li> <li>There is the ability to access safe evacuation routes for occupants of the building in case of a tsunami.</li> </ol>
	<ul> <li>3. If the activity has a post disaster function, mitigation measures are incorporated to allow for the continued operation following a tsunami; and</li> <li>4. For health care facilities, retirement villages, educational facilities and childcare facilities, there is an evacuation plan that allows for the safe removal of all occupants prior to the arrival of the tsunami.</li> </ul>

# CE-P16 Potentially hazard sensitive activities within the medium coastal hazard areas (ISPP) (now CE-P17)

454. Precinct Properties New Zealand Limited, Fabric Property Limited and WCC Environmental Reference Group<sup>344</sup> sought that CE-P16 be retained as notified.

<sup>&</sup>lt;sup>341</sup> Submission # 266.113

<sup>&</sup>lt;sup>342</sup> Submissions # 406.322-323, opposed by Further Submission #70.98

<sup>&</sup>lt;sup>343</sup> Section 42A Report, at paragraph 746

<sup>&</sup>lt;sup>344</sup> Submission # 139.21, 425.39 and 377.245

- 455. Yvonne Weeber<sup>345</sup> generally supported CE-P16 but considered that it is unclear where the low, medium and high coastal hazard areas are on the map. We note that Mr Sirl <sup>346</sup> agreed and highlighted proposed changes to the mapping legend titles that will make it easier to understand which hazard overlay makes up each of the low, medium and high coastal hazard areas.
- 456. Forest and Bird, opposed by WIAL<sup>347</sup>, sought to amend CE-P16 to also address risks posed to natural character, natural landscape, and biodiversity values. As with similar submissions made on the CE objectives and policies, we consider that these amendments go beyond go beyond the intended scope of this policy, noting that these matters are already specifically addressed in other policies for the Coastal Environment. No change is recommended.
- 457. GWRC, supported by Toka Tū Ake EQC<sup>348</sup>, sought to amend CE-P16 to ensure regard is had to RPS-Change 1 Objectives 19 and 20, and Policies 51 and 52 in relation to the replacement of the words "*reduce or not increase*" with "*minimise*". As with Mr Sirl<sup>349</sup>, we agree with the relief sought and consider that "*minimise*" is the appropriate term that should be used in relation to the outcome sought in this policy.
- 458. Argosy and Oyster Management Limited opposed by Toka Tū Ake EQC<sup>350</sup> supported the policy to the extent that it enables potentially hazard sensitive activities within medium hazard areas where appropriate. However, they noted that as it is difficult to provide mitigation measures for tsunami risk because of the remoteness of the risk, they considered that discretion should be available to only require safe evacuation routes to address tsunami risk.:
- 459. Mr Sirl<sup>351</sup> did not agree that amending the policy direction so that a proposed activity or building would only be required to demonstrate either the incorporation of mitigation measures to manage hazard risk 'or' the ability to access safe evacuation routes. He considered that it is necessary to consider more than just safe evacuation in relation to tsunami hazards, given the high impact and potential consequences of a tsunami event. However, as the recommendation is that the direction to "*reduce or do not increase risk*" is replaced with "*minimise risk*" this provides a degree of relief to the submitters, because it provides a more achievable consenting pathway, subject

<sup>&</sup>lt;sup>345</sup> Submission # 340.38

<sup>&</sup>lt;sup>346</sup> Section 42A Report, at paragraph 731

<sup>&</sup>lt;sup>347</sup> Submission # 345.318, opposed by Further Submission #36.104

<sup>&</sup>lt;sup>348</sup> Submission # 351.214, supported by Further Submission #70.36

<sup>&</sup>lt;sup>349</sup> Section 42A Report, at paragraph 748

<sup>&</sup>lt;sup>350</sup> Submissions # 383.81-82, 404.93-94, opposed by Further Submissions #70.6 and 70.75

<sup>&</sup>lt;sup>351</sup> Section 42A Report, at paragraph 750

to demonstrating that reasonably practicable measures to minimise hazard risk have been incorporated into a proposal. We agree that this is appropriate.

- 460. WIAL, opposed by Toka Tū Ake EQC<sup>352</sup>, sought that CE-P16 either be deleted in its entirety, or amended to only apply to the coastal inundation hazard areas, and to recognise the concept of tolerability. As we have already agreed on similar relief, we do not support this change.
- 461. Therefore CE-P16 is recommended to be amended as follows:

CE-P <del>16<u>17</u></del>	Potentially hazard sensitive activities within the medium coastal hazard areas
	Provide for potentially hazard-sensitive activities in the medium coastal hazard areas, or any subdivision where the building platform for a potentially hazard- sensitive activity will be within the medium coastal hazard areas where it can be demonstrated that:
	<ol> <li>The activity, building, or subdivision incorporates measures that <del>reduce or</del> do not increase <u>minimise</u> the risk to people and property from the coastal hazard; and</li> <li>There is the ability to access safe evacuation routes for occupants of the building in case of a tsunami.</li> </ol>

# CE-P17 Hazard sensitive activities in the medium coastal hazard areas (now CE-P18)

- 462. FENZ, Kāinga Ora, MoE and WCC Environmental Reference Group<sup>353</sup> sought that CE-P17 be retained as notified.
- 463. Yvonne Weeber<sup>354</sup> generally supported CE-P17 but considered that it is unclear where the low, medium and high coastal hazard areas are on the map. We note our previous findings that clarity should be provided. The proposed changes to the mapping legend titles will make it easier to understand which hazard overlay makes up each of the low, medium and high coastal hazard areas.
- 464. Council<sup>355</sup> sought a minor amendment to improve the clarity of CE-P17 by removing the word "*where*" within the policy. We consider that the removal of the duplicated word is necessary.

<sup>&</sup>lt;sup>352</sup> Submission # 406.325, opposed by Further Submission #70.99

<sup>&</sup>lt;sup>353</sup> Submissions # 273.139, 391.256, 400.66 and 377.246

<sup>354</sup> Submission # 340.39

<sup>&</sup>lt;sup>355</sup> Submission # 266.114

- 465. Forest and Bird, opposed by WIAL<sup>356</sup>, sought to amend CE-P17 to also address risks posed to natural character, natural landscape, and biodiversity values. As with similar submissions made on the CE objectives and policies, we consider that these amendments go beyond go beyond the intended scope of this policy, noting that these matters are already specifically addressed in other policies for the Coastal Environment. No change is recommended.
- 466. GWRC<sup>357</sup> sought to amend CE-P17 to ensure regard is had to RPS-Change 1 Objectives 19 and 20, and Policies 51 and 52. This is in relation to the replacement of the words "*reduce or not increase*" with "*minimise*". As with Mr Sirl<sup>358</sup>, we agree with the relief sought and consider that "*minimise*" is the appropriate term that should be used in relation to the outcome sought in this policy.
- 467. Argosy, opposed by Toka Tū Ake EQC<sup>359</sup>, supported CE-P17 to the extent that it enables activities in the medium coastal hazard areas. However, due to the extent of the high coastal hazard area and the extent of potentially hazard sensitive activities, it considered that this policy should also apply in those scenarios. Accordingly, it sought that CE-P17 be amended to also apply to hazard sensitive activities and potentially hazard sensitive activities in the high coastal hazard areas.
- 468. We agree with Mr Sirl<sup>360</sup> that it is appropriate and necessary for the PDP to treat activities in high coastal hazard areas differently to activities in medium coastal hazard areas, due to the much greater probability of hazard event occurrence in the scenarios that comprise the high hazard areas (Tsunami 1:100 year scenario inundation extent, and coastal inundation extent with a 1:100 year storm), with it being appropriate to avoid further development in these areas in alignment with the direction of the NZCPS (policy 25) and RPS (Policy 29).
- 469. WIAL, opposed by Toka Tū Ake EQC<sup>361</sup>, sought to either delete CE-P17 in its entirety, or amend the policy to only apply to the coastal inundation hazard areas, and to recognise the concept of tolerability. Mr Sirl did not agree for the same reasons that applied to other provisions. We note that Ms O'Sullivan supported the recommended changes, as do we.

<sup>&</sup>lt;sup>356</sup> Submission # 345.319, opposed by Further Submission #36.105

<sup>&</sup>lt;sup>357</sup> Submission # 351.215

<sup>&</sup>lt;sup>358</sup> Section 42A Report, at paragraph 765

<sup>&</sup>lt;sup>359</sup> Submissions # 383.83-84, opposed by Further Submission #70.7

<sup>&</sup>lt;sup>360</sup> Section 42A Report, at paragraph 767

<sup>&</sup>lt;sup>361</sup> Submissions # 406.326-327, opposed by Further Submission #70.100

# CE-P18 Hazard sensitive activities and potentially hazard sensitive activities in the high coastal hazard area (now CE-P19)

- 470. WCC Environmental Reference Group and MoE<sup>362</sup> sought that CE-P18 be retained as notified.
- 471. Argosy<sup>363</sup> sought the deletion of CE-P18 in its entirety as it is not practical to avoid hazard sensitive and potentially hazard sensitive activities in the high coastal hazard area.
- 472. We agree with Mr Sirl<sup>364</sup>. His view was that following higher-order direction of the NZCPS (Policy 25) and RPS (Policy 29), that 'avoidance' is an appropriate policy starting point for hazard sensitive activities within high hazard risk areas.
- 473. Precinct Properties New Zealand Limited and Fabric Property Limited<sup>365</sup> sought amendments to CE-P18 on the basis that the term 'avoid' is unnecessarily onerous, and the establishment of Hazard-Sensitive Activities and Potentially-Hazard-Sensitive Activities within the High Coastal Hazard Areas should not occur at all.
- 474. These submitters considered that the requested amendment would provide appropriate policy support to the Restricted Discretionary status in rule CE-R20. The Restricted Discretionary status is enabling of activities, potentially hazard sensitive activities or hazard sensitive activities in high coastal hazard areas within the CCZ, and this needs to be recognised with appropriate wording in the supporting policy.
- 475. Oyster Management Limited, opposed by Toka Tū Ake EQC<sup>366</sup>, sought to amend CE-P18 as the submitter considered it was not practical to avoid hazard sensitive and potentially hazard sensitive activities in the High Coastal Tsunami Hazard Area.
- 476. Ms Carter<sup>367</sup> for Argosy, Precinct, Oyster and Fabric stated:

While the reporting officer does not support the submitter's requested amendments, they recommend amending CE-P18 to provide an exception to the policy for the City Centre, and to clarify the relationship between the avoid policy and the numbered conditions.

I support the Section 42A Report recommended version of CE-P18 and concur with the reasoning provided and the s32AA evaluation. In my opinion the city centre exception set out in the Section 42A Report version of CE-P18 is consistent with the intent of the Argosy, Fabric, Precinct, and

<sup>362</sup> Submissions # 377.247 and 400.67

<sup>&</sup>lt;sup>363</sup> Submission # 383.86, opposed by Further Submission #70.8

<sup>&</sup>lt;sup>364</sup> Section 42A Report, at paragraph 782

<sup>&</sup>lt;sup>365</sup> Submissions # 139.22 and 425.40

<sup>&</sup>lt;sup>366</sup> Submissions # 404.95-96, opposed by Further Submission #70.76

<sup>&</sup>lt;sup>367</sup> Evidence of Janice Carter paragraphs 71 and 72

Oyster submissions, and appropriately provides for development and use in the City Centre. The City Centre Zone has its own alternate objectives and policies and the exclusion provides greater clarity for plan implementation.

- 477. Council<sup>368</sup> sought to amend CE-P18 to improve clarity and fix a minor error.
- 478. FENZ<sup>369</sup> supported the policy as it allows hazard sensitive activities within the high coastal hazard area where the activity has an operational or functional need to locate within the high coastal hazard area and locating outside of these areas is not a practicable option. However, it considered the wording of CE-P18 to be unclear.
- 479. Mr Sirl<sup>370</sup> agreed with both submissions that greater clarity was required, and a minor drafting error should be fixed. In considering the choice between "*except where*" and "*unless*", he was of the view that both would achieve the same intended outcome, but preferred "*unless*", as this wording better aligns with other similar policies in the PDP.
- 480. Dawid Wojasz<sup>371</sup> sought the removal of point one of CE-P18 or amendment due to the coastal hazard overlays placing much of the CBD in a high or medium hazard area, limiting development within the Central City. Density in the Central City should be encouraged, and the hazard can be dealt with as an engineering issue if the City Centre is not exempt from the overlay.
- 481. Mr Sirl<sup>372</sup> agreed in part, to the extent that development in the CCZ should be enabled, subject to incorporating hazard-resilience into buildings to reduce damage and harm to people as a result of a natural hazard event. As there are CCZ specific policies (CE-P21 and CE-P22) to adequately and appropriately provide for continued development within parts of this zone that are within a High Coastal Hazard Area, he did not support deletion of CE-P18, but proposed that an explicit CCZ exception in CE-P18 would clarify that policy direction for those parts of the CCZ where hazard overlays are present is provided by CE-P21 and CE-P22. We agree with that suggestion.
- 482. Forest and Bird<sup>373</sup> sought to amend CE-P18 to also address risks posed to natural character, natural landscape, and biodiversity values. As with similar submissions made on the CE objectives and policies, we consider that these amendments go

<sup>&</sup>lt;sup>368</sup> Submission # 266.115

<sup>&</sup>lt;sup>369</sup> Submission # 273.141

<sup>&</sup>lt;sup>370</sup> Section 42A Report, at paragraph 785

<sup>&</sup>lt;sup>371</sup> Submissions # 295.3, 295.5-7

<sup>&</sup>lt;sup>372</sup> Section 42A Report, at paragraph 786

<sup>&</sup>lt;sup>373</sup> Submission # 345.320, opposed by Further Submission #36.106

beyond go beyond the intended scope of this policy, noting that these matters are already specifically addressed in other policies for the Coastal Environment. No change is recommended in this regard.

- 483. GWRC<sup>374</sup> sought to amend CE-P18 to ensure regard is had to RPS-Change 1 Objectives 19 and 20, and Policies 51 and 52 in relation to the replacement of the words "*reduce or not increase*" with "*minimise*". Mr Sirl<sup>375</sup> disagreed with the relief sought and considered that "*reduce or not increase*" is the appropriate term that should be used in relation to the outcome sought in this policy. That is a more onerous test than "*minimise*", and to improve clarity, he proposed the word "*existing*" be included before "*risk*" in CE-P18.2 to reduce the possibility of differences of interpretation with respect to demonstrating a reduction in risk. We accept his reasoning.
- 484. Kāinga Ora<sup>376</sup> sought to amend CE-P18 to enable the potential for Hazard Sensitive Activities and Potentially Hazard Sensitive Activities in the High Coastal Hazard Area to occur in some circumstances where the risks can be managed through mitigation measures.
- 485. Mr Sirl<sup>377</sup> did not agree. His view was that aside from the limited exceptions provided for, avoidance of development within high hazard areas is the most appropriate approach, and the most effective way to achieve the purpose of the Act, particularly with respect to s6(h), as high hazard areas represent areas that are most likely to experience the effects of coastal hazard events, with the two coastal hazard overlays that comprise the high hazard overlay reflecting a 1:100 year event. With the PDP high hazard areas including predicted hazard occurrence for the next 100 years, this approach to avoiding an increase in risk is consistent with the direction of Policy 26 of the NZCPS.
- 486. We note that Ms Woodbridge  $^{378}$  agreed with the officer's position, as do we.
- 487. On the basis of the above, we recommend amendments to CE-P18 as follows:

# CE-P18<u>19</u> Hazard sensitive activities and potentially hazard sensitive activities in the high coastal hazard area

<sup>&</sup>lt;sup>374</sup> Submission # 351.216, supported by Further Submission #70.37

<sup>&</sup>lt;sup>375</sup> Section 42A Report, at paragraph 789

<sup>&</sup>lt;sup>376</sup> Submissions # 391.257-258, opposed by Further Submission #70.64

<sup>&</sup>lt;sup>377</sup> Section 42A Report, at paragraph 790

<sup>&</sup>lt;sup>378</sup> Evidence of Victoria Woodbridge paragraph 3.1 (e)

Avoid\_Hhazard sensitive activities and potentially hazard sensitive activities in the high coastal hazard area or any subdivision where the building platform for a potentially hazard sensitive activity or hazard sensitive activity will be within the high coastal hazard area where (with the exception of the City Centre Zone and the Airport purposes, operational port activities, passenger port facilities and rail activities) unless it can be demonstrated that:

- 1. The activity, building or subdivision has an operational <u>need</u> or functional need to locate within the high coastal hazard area and locating outside of these high coastal hazard areas is not a practicable option;
- 2. The activity, building, or subdivision incorporates measures that demonstrate that reduce or do not increase the <u>existing</u> risk to people, and property from the coastal hazard;
- 3. There is the ability to access safe evacuation routes for occupants of the building from the coastal hazard; and
- 4. The activity does not involve the removal or modification of a natural system or feature that provides protection to other properties from the natural hazard.

CE-P19 Subdivision, use and development which will not be occupied by members of the public, or employees associated with the Airport, operation port Activities, passenger port facilities and rail activities in the Coastal Hazards Overlays (P1 Sch1) (now CE-P20)

- 488. GWRC, KiwiRail and WCC Environmental Reference Group<sup>379</sup> sought the retention of CE-P19 as notified.
- 489. Yvonne Weeber<sup>380</sup> generally supported CE-P19, but considered that it is unclear where the low, medium and high coastal hazard areas are on the map. We note our previous findings that clarity should be provided. The proposed changes to the mapping legend titles will make it easier to understand which hazard overlay makes up each of the low, medium and high coastal hazard areas.
- 490. Council<sup>381</sup> sought minor amendments to CE-P19 for consistency with the rest of the chapter/Plan.
- 491. Forest and Bird, opposed by WIAL<sup>382</sup>, sought to amend CE-P19 to also address risks posed to natural character, natural landscape, and biodiversity values. As with similar submissions made on the CE objectives and policies, we consider that these amendments go beyond go beyond the intended scope of this policy, noting that these matters are already specifically addressed in other policies for the Coastal Environment. No change is recommended in this regard.

<sup>&</sup>lt;sup>379</sup> Submissions # 351.217, 408.100 and 377.217

<sup>&</sup>lt;sup>380</sup> Submission # 340.41

<sup>&</sup>lt;sup>381</sup> Submission # 266.116

<sup>382</sup> Submission # 345.321, opposed by # FS36.107

- 492. CentrePort Limited<sup>383</sup> supported CE-P19, but opposed the structure of the Plan managing natural hazards as it is confusing. CentrePort considered that there are natural hazards provisions in the infrastructure chapter, the Natural Hazards Chapter as well as this chapter dealing with coastal hazards in the Coastal Environment. It considered this inefficient and could lead to duplication. CentrePort sought that all Natural Hazards provisions are consolidated in the same place, or stronger cross-referencing is provided. We have already addressed this matter in several places in this Report already. In summary, we do not support the relief sought.
- 493. WIAL, opposed by Toka Tū Ake EQC<sup>384</sup>, sought that CE-P19 either be deleted in its entirety, or amended to only apply to the coastal inundation hazard areas, and to recognise the concept of tolerability. Mr Sirl did not agree for the same reasons that applied to other provisions. We concur.
- 494. We agree that the notified version of CE-P19 be unchanged, aside from the amendments recommended by Mr Sirl to correct two grammatical and consistency matters.

CE-P20 Subdivision, use and development which will be occupied by members of the public, or employees associated with the Airport, operation port activities, passenger port facilities and rail activities in the Coastal Hazards Overlays (P1 Sch1) (now CE-P21)

- 495. WCC Environmental Reference Group and KiwiRail<sup>385</sup> sought the retention of CE-P20 as notified.
- 496. Yvonne Weeber<sup>386</sup> generally supported CE-P20, but considered that it is unclear where the low, medium and high coastal hazard areas are on the map. As above, Mr Sirl proposed a solution to this issue.
- 497. Forest and Bird, opposed by WIAL<sup>387</sup>, sought to amend CE-P20 to also address risks posed to natural character, natural landscape, and biodiversity values. As with similar submissions made on the CE objectives and policies, we consider that these amendments go beyond go beyond the intended scope of this policy, noting that

<sup>&</sup>lt;sup>383</sup> Submission # 402.116

<sup>&</sup>lt;sup>384</sup> Submissions # 406.328-329, opposed by Further Submission #70.101

<sup>&</sup>lt;sup>385</sup> Submissions # 377.218 and 408.101

<sup>&</sup>lt;sup>386</sup> Submission # 340.42

<sup>&</sup>lt;sup>387</sup> Submission # 345.322, opposed by Further Submission #36.108

these matters are already specifically addressed in other policies for the Coastal Environment. No change is recommended in this regard.

- 498. GWRC, supported by Toka Tū Ake EQC<sup>388</sup>, sought to amend CE-P20 as follows to ensure regard is had to RPS-Change 1 Objectives 19 and 20, and Policies 51 and 52. As with Mr Sirl<sup>389</sup>, we agree with the relief sought as "*minimise*" is the appropriate term and approach to use in relation to the outcome sought in this policy, particularly as the intent of related objective CE-O7 is to ensure that the listed activities can continue to operate, while ensuring that hazard risk is appropriately managed.
- 499. CentrePort Limited<sup>390</sup> supported CE-P20, but opposed the structure of the Plan managing Natural Hazards as it is confusing. CentrePort considered that there are Natural Hazards provisions in the infrastructure chapter, the Natural Hazards Chapter, as well as this chapter dealing with coastal hazards in the Coastal Environment. It considered this inefficient and could lead to duplication. CentrePort sought that all Natural Hazards provisions are consolidated in the same place or stronger cross-referencing is provided. We have already addressed this matter in several places in this Report already. In summary, we do not support the relief sought.
- 500. WIAL, opposed by Toka Tū Ake EQC<sup>391</sup>, sought that CE-P20 either be deleted in its entirety, or amended to only apply to the coastal inundation hazard areas, and to recognise the concept of tolerability. Mr Sirl did not agree for the same reasons that applied to other provisions. Again, we concur with that view.
- 501. We recommend amending the policy to replace the words "*reduce or not increase*" with "*minimise*". We also recommend the minor grammatical and amendments to the policy, consistent with those same amendments that we have recommended for policy CE-P19 (now CE-P20).

# CE-P21 Subdivision, use and development in the City Centre Zone which will not be occupied by members of the public and within the Coastal Hazards Overlays (P1 Sch1) (now CE-P22)

502. WCC Environmental Reference Group and GWRC<sup>392</sup> sought the retention of CE-P21 as notified.

<sup>&</sup>lt;sup>388</sup> Submission # 351.218, supported by Further Submission #70.38

<sup>&</sup>lt;sup>389</sup> Section 42A Report, at paragraph 818

<sup>&</sup>lt;sup>390</sup> Submission # 402.117

<sup>&</sup>lt;sup>391</sup> Submissions # 406.330-331, opposed by Further Submission #70.102

<sup>392</sup> Submissions # 377.250 and 351.219

- 503. Forest and Bird, opposed by WIAL<sup>393</sup>, sought to amend CE-P21 to also address risks posed to natural character, natural landscape, and biodiversity values. As with similar submissions made on the CE objectives and policies, we consider that these amendments go beyond go beyond the intended scope of this policy.
- 504. Argosy, Oyster Management Limited and Fabric Property Limited<sup>394</sup> supported CE-P21 to the extent that it enables development in the coastal hazard overlays in the CCZ in some instances. However, they considered that it is impractical to only enable activities in buildings which will not be occupied by employees, and this would be inconsistent with the purpose and objectives and policies in the CCZ, particularly as the City Centre is a major employment hub and contains entertainment, educational, government and commercial activities which involve employees.
- 505. Mr Sirl<sup>395</sup> disagreed. He considered that the policy and rule framework for activities involving a lower number of employees is directly related to the lower level of risk when a very small number of people are concerned, and where effective processes can be put in place e.g. evacuation procedures. He was of the view that it is appropriate to consider the risk to life of employees and require that building or conversions that result in larger number of employees minimise coastal hazard-related risk to life. We consider that this position is appropriate, noting that Ms Carter did not provide particular comment on the point.
- 506. Kāinga Ora, opposed by GWRC<sup>396</sup>, sought the deletion of CE-P21 as it places inappropriate restrictions on the CCZ and CE-P22 has more appropriate outcome. We do not agree that this is necessary for the reasons that we outlined in relation to the similar submission point on CE-P18.
- 507. We therefore recommend that CE-P21 remain unchanged.

# CE-P22 Subdivision, use and development in the City Centre Zone which will be occupied by members of the public and within the Coastal Hazards Overlays (P1 Sch1) (now CE-P23)

508. WCC Environmental Reference Group , MoE, Reading Wellington Properties Limited and Kāinga Ora<sup>397</sup> sought the retention of CE-P22 as notified.

<sup>&</sup>lt;sup>393</sup> Submission # 345.323, opposed by Further Submission #36.109

<sup>&</sup>lt;sup>394</sup> Submissions # 383.86, 404.97, 404.99, 425.42-43

<sup>&</sup>lt;sup>395</sup> Section 42A Report, at paragraph 830

<sup>&</sup>lt;sup>396</sup> Submission # 391.259, opposed by Further Submission #84.84

<sup>&</sup>lt;sup>397</sup> Submissions # 377.251, 400.68, 441.2 and 391.260

- 509. Council<sup>398</sup> sought that a grammatical amendment be made to CE-P22.
- 510. Forest and Bird, opposed by WIAL<sup>399</sup>, sought to amend CE-P22 to also address risks posed to natural character, natural landscape, and biodiversity values. As with similar submissions made on the CE objectives and policies, we consider that these amendments go beyond go beyond the intended scope of this policy.
- 511. GWRC<sup>400</sup> sought to amend CE-P22 to ensure regard is had to RPS Change 1 Objectives 19 and 20, and Policies 51 and 52. This is the "*minimise*" change GWRC consistently sought.
- 512. Argosy and Oyster Management Limited<sup>401</sup> supported CE-P22 to the extent that it enables development in the coastal hazard overlays in the CCZ in some instances. However, they considered that it is difficult to provide mitigation measures in relation to tsunami risk, because of the remoteness of tsunami risk, and that provision should be made to exercise discretion to solely rely on safe evacuation routes to address tsunami risk. Both submitters sought to amend CE-P22 to remove reference to employees and to make the two limbs of the policy mutually exclusive by removing the "*and*" between the provisions and replacing it with "*or*".
- 513. For the reasons we outlined previously in relation to CE-P21, we consider that CE-P22 provides appropriate policy direction for activities and buildings involving a greater number of employees or occupation by the public, to ensure that risk to life is minimised.
- 514. Aside from the "*minimise*" change referred to consistently through this report, there are no other changes recommended.

### CE-P23 Natural systems and features (now CE-P24)

- 515. Yvonne Weeber, GWRC, WCC Environmental Reference Group and Guardians of the Bays<sup>402</sup> sought the retention of CE-P23 as notified.
- 516. Forest and Bird opposed by WIAL<sup>403</sup> sought to amend CE-P23 to also address risks posed to natural character, natural landscape, and biodiversity values. As with similar submissions made on the CE objectives and policies, we consider that these

<sup>&</sup>lt;sup>398</sup> Submission # 266.117

<sup>&</sup>lt;sup>399</sup> Submission # 345.324, opposed by Further Submission #36.110

<sup>&</sup>lt;sup>400</sup> Submission # 351.220, supported by Further Submission #70.39

<sup>&</sup>lt;sup>401</sup> Submissions # 383.87, 404.100-101, opposed by Further Submission #70.77

<sup>402</sup> Submissions # 340.43, 351.221, 377.252 and 452.27

<sup>&</sup>lt;sup>403</sup> Submission # 345.325, opposed by Further Submission #36.111

amendments go beyond the intended scope of this policy. No changes are recommended.

# CE-P24 Coastal hazard mitigation works involving green infrastructure (now CE-P25)

- 517. Yvonne Weeber, WCC Environmental Reference Group and Guardians of the Bays<sup>404</sup> sought the retention of CE-P24 as notified.
- 518. Forest and Bird, opposed by WIAL<sup>405</sup>, sought to amend CE-P24 to also address risks posed to natural character, natural landscape, and biodiversity values. As with similar submissions made on the CE objectives and policies, we consider that these amendments go beyond the intended scope of this policy.
- 519. Council<sup>406</sup> sought to amend CE-P24 to improve the grammar by replacing the word *"they"* with *"this"*.
- 520. GWRC<sup>407</sup> sought to amend CE-P24 to ensure regard is had to Policy 52 in RPS-Change 1 and reference to non-structural, soft engineering or mātauranga Māori approaches is included. It noted that although green infrastructure has been defined in the PDP with a strong focus on engineering systems that mimic natural systems, there are other natural hazard mitigation measures that RPS-Change 1 directs consideration of that are not captured by this definition.
- 521. Mr Sirl<sup>408</sup> recommended that the policy should be amended to encourage Mātauranga Māori approaches. We did not hear from Taranaki Whānui and TRoTR on whether they supported this recommendation. However, this inclusion recognises the value of traditional Māori knowledge systems in addition to western-science-based knowledge in relation to the natural environment.
- 522. We agree with that position, and Mr Sirl's view that CE-P24 does not need to be amended to include specific reference to non-structural or soft engineering mitigation works as these are already provided for within the definition of Green Infrastructure, which specifically refers a "*natural or semi-natural area, feature or process, including engineered systems that mimic natural processes*".

<sup>&</sup>lt;sup>404</sup> Submissions # 340.44, 377.253 and 452.28

<sup>&</sup>lt;sup>405</sup> Submission # 345.326, opposed by Further Submission #36.112

<sup>&</sup>lt;sup>406</sup> Submission # 266.118

<sup>407</sup> Submission # 351.222

<sup>&</sup>lt;sup>408</sup> Section 42A Report, at paragraph 859

- 523. We also reluctantly agree that the broad reference to 'Crown entity' must remain, as CE-P24 is following the Part 1 Schedule 1 RMA process, and there have been no submissions on this specific matter. We have therefore not recommended a similar amendment to this policy as in relation to other policies.
- 524. Therefore, CE-P24 is recommended to be amended as follows:

CE-P <del>2</del> 4 <u>25</u>	Coastal hazard mitigation works involving green infrastructure
	Enable green infrastructure and <u>encourage Mātauranga Māori approaches</u> undertaken by a Crown entity or their nominated contractors or agents within the identified Coastal Hazard Overlay where <del>they this</del> will reduce the risk from coastal hazards to people, property and infrastructure.

# CE-P25 Green infrastructure and planning coastal hazard mitigation works (now CE-P26)

- 525. WCC Environmental Reference Group<sup>409</sup> sought the retention of CE-P23 as notified.
- 526. GWRC<sup>410</sup> sought to amend CE-P25 to include non-structural, soft engineering or mātauranga Māori approaches. We have already agreed in relation to similar policies that mātauranga Māori approaches are appropriate, but that non-structural and soft engineering mitigation need not be mentioned, as that is implicit in the green infrastructure policy.
- 527. Forest and Bird, opposed by WIAL<sup>411</sup>, sought to amend CE-P24 as follows to also address risks posed to natural character, natural landscape, and biodiversity values. As with similar submissions made on the CE objectives and policies, we consider that these amendments go beyond the intended scope of this policy.
- 528. We therefore recommend amending the policy to insert reference to mātauranga Māori approaches. We also recommend adopting the minor wording changes to the policy recommended in the s42A report.

### CE-P26 Hard engineering measures (now CE-P28)

529. Yvonne Weeber, WCC Environmental Reference Group and KiwiRail<sup>412</sup> sought the retention of CE-P26 as notified.

<sup>&</sup>lt;sup>409</sup> Submission # 377.254

<sup>&</sup>lt;sup>410</sup> Submission # 351.223

<sup>&</sup>lt;sup>411</sup> Submission # 345.327, opposed by Further Submission #36.113

<sup>&</sup>lt;sup>412</sup> Submissions # 340.45, 377.254 and 408.102

- 530. GWRC<sup>413</sup> sought to amend CE-P26 to include non-structural, soft engineering or Mātauranga Māori approaches. We agree with Mr Sirl<sup>414</sup> that recognition of Mātauranga Māori approaches is better addressed in CE-P24 and CE-P25, and that CE-P26 does not need to be amended to include specific reference to non-structural or soft engineering mitigation works, as this policy relates only to hard engineering measures.
- 531. Forest and Bird, opposed by WIAL<sup>415</sup>, sought to amend CE-P26 to also address risks posed to natural character, natural landscape, and biodiversity values. As with similar submissions made on the CE objectives and policies, we consider that these amendments go beyond go beyond the intended scope of this policy.
- 532. WIAL<sup>416</sup> sought to delete or amend CE-P26, as the directive nature of CE-P26, coupled with the conjunction "*and*" sets an unduly onerous threshold for hard engineering measures which protect regionally significant infrastructure. It also considered that the policy discourages proactive maintenance and repair of hard engineering structures, as the policy pathway only triggers (due to the conjunction) when there is an "*immediate risk to life or property*", and that leaving such structures until the risk reaches this threshold may result in a larger scale repair/replacement programme and larger associated environmental effects and costs.
- 533. Mr Sirl<sup>417</sup> concurred that CE-P26 sets an unduly onerous threshold for hard engineering hazard mitigation measures in relation to nationally and regionally significant infrastructure, but only agreed in part with the specific relief sought. He noted that Policy 27 of the NZCPS explicitly provides for protection of significant existing development from coastal hazard risk, including consideration of hard protection structures where they may be the only practical means to protect infrastructure of national or regional importance. As this policy intent is currently not explicitly captured in CE-P26, he considered that a further amendment to clarify that undertaking hard engineering works for the purpose of protecting nationally and significant infrastructure is within the scope of this policy would provide partial relief to the submitter, whilst also improving alignment with the policy direction of the NZCPS.

<sup>413</sup> Submission # 351.224

<sup>&</sup>lt;sup>414</sup> Section 42A Report, at paragraph 878

<sup>&</sup>lt;sup>415</sup> Submission # 345.328, opposed by Further Submission #36.114

<sup>&</sup>lt;sup>416</sup> Submissions # 406.332-333

<sup>&</sup>lt;sup>417</sup> Section 42A Report, at paragraph 879

- 534. He did not agree to the other amendments, particularly around the concept of 'intolerable' risks that we have discussed elsewhere.
- 535. We asked in our Minute 33 whether Policy CE-P28 (PDP policy CE-P26) should be amended to enable the maintenance and repair of hard mitigation measures in the Coastal Environment in all hazard overlays; and further, whether Policy CE-P28 should be extended to include all coastal hazard areas, or at least medium coastal hazard areas in addition to high coastal hazard areas?
- 536. In his reply, Mr Sirl<sup>418</sup> anticipated that the repair and maintenance of all existing hard engineering hazard mitigation structures that are for the purpose of protecting against the impacts of coastal hazards will, due to the extent of the high hazard tsunami 1:100 year overlay and the high hazard coastal inundation layer, be provided for by CE-P28 and associated rule CE-R24. Therefore, he was of the opinion that no further change to CE-P28 was required. However, the recommended changes included the new policy CE-P27 that we consider goes a long way to resolving the concerns of WIAL, and we recommend that this new policy is adopted. This policy reads as follows:

<u>CE-P27</u>	<u>Repair and maintenance of existing hard engineering hazard mitigation</u> <u>structures in the high coastal hazard area</u>
	Enable the repair and maintenance of existing hard engineering hazard mitigation structures in the high coastal hazard area where they will reduce the risk from coastal hazards to people, property and infrastructure.

537. On the second question, Mr Sirl <sup>419</sup> did not consider it necessary to provide for new hard engineering hazard mitigation structures for the purpose of protecting against the impacts of coastal hazards in the medium coastal hazard areas. The areas near the coast, where these structures would be anticipated, are already provided for by CE-R24. He also noted that associated rule CE-R24 provides for new hard engineering hazard mitigation structures as a Discretionary Activity. If there is an outlier, located in the medium hazard area, the relevant zone rules will apply. For example, in the Medium Density Residential Zone, MRZ-R13 provides for the construction, addition or alteration of buildings and structures as a Permitted Activity, subject to standards.

<sup>&</sup>lt;sup>418</sup> Evidence of Jamie Sirl in reply paragraph 91

<sup>&</sup>lt;sup>419</sup> Evidence of Jamie Sirl in reply paragraph 92

538. We accept this view and recommend the following amendments to improve the workability of the Policy.

CE-P <del>26</del> 28	Hard engineering measures Hard engineering natural hazards mitigation works
	Only allow for hard engineering measures hard engineering natural hazards mitigation works for the reduction of the risk from coastal hazards where:
	<ol> <li>The engineering measures are needed to protect existing nationally and regionally significant infrastructure and it can be demonstrated that there is no practicable alternative;</li> </ol>
	<ol> <li>There is an immediate demonstrable risk to existing nationally and regionally significant infrastructure, life or private property from the coastal hazard;</li> </ol>
	<ol> <li>The construction of the hard engineering measures will not increase the risk from Coastal Hazards on adjacent properties that are not protected by the hard engineering measures;</li> </ol>
	<ol> <li>It avoids the modification or alteration of natural features and systems in a way that would compromise their function as natural defences;</li> </ol>
	<u>4.</u> Hard engineering structures are designed to minimise adverse effects on the coastal environment:
	<u>5.</u> <u>Adverse effects on</u> <u>S</u> ignificant natural features and systems <u>and their function</u> <u>as natural defences</u> <del>and any adverse effects</del> are avoided; remedied or mitigated; and
	<u>6.</u> It can be demonstrated that green infrastructure measures would not provide an appropriate level of protection in relation to the significance of the risk.

### **Coastal Hazards – Rules**

### CE-R16 Less hazard sensitive activities within all the Coastal Hazard Overlays

- 539. Yvonne Weeber and WCC Environmental Reference Group<sup>420</sup> sought the retention of CE-R16 as notified.
- 540. Forest and Bird<sup>421</sup>, considered that the coastal hazard provisions of this chapter should also acknowledge the natural character, natural landscape and biodiversity values that must be protected. It sought that rules should either cross reference appropriate provisions from other chapters or include provisions to address adverse effects on these matters. It sought that CE-R16 be amended to acknowledge natural character, natural landscape, and biodiversity values are protected via reference to appropriate provisions from other chapters or by including provisions in the rule.

<sup>&</sup>lt;sup>420</sup> Submissions # 340.60, 377.271

<sup>&</sup>lt;sup>421</sup> Submission # 345.348, opposed by Further Submission #36.128

- 541. As with similar submissions made on the CE objectives and policies, we consider that these amendments go beyond go beyond the intended scope of this rule, which is the Permitted Activity rule for less sensitive activities.
- 542. WIAL<sup>422</sup> considered that to avoid unnecessary duplication in the PDP, rule CE-R16 should be deleted in its entirety, with the focus in this chapter on those additional consent requirements necessary to manage effects within the coastal hazard overlays that cannot be adequately dealt with by the underlying zone rules.
- 543. In response, Mr Sirl<sup>423</sup> disagreed as this rule provides necessary certainty in relation to less hazard sensitivity activities in all of the Coastal Hazard Overlays. In his view, it does not result in duplication with underlying zone rules that could cause interpretational issues. We agree.

# CE-R17 Green infrastructure for the purposes of coastal hazard mitigation works undertaken by a Crown entity or their nominated contractor or agent within the Coastal Hazard Overlays (P1 Sch1)

- 544. WCC Environmental Reference Group<sup>424</sup> sought the retention of CE-R17 as notified.
- 545. Yvonne Weeber<sup>425</sup> sought the retention of CE-R17 as notified, but considered that it is unclear where the Low Coastal Hazard Area, Medium Coastal Hazard Area and the High Coastal Hazard Area are in the Coastal Environment as these terms do not appear on the Plan maps. As above, Mr Sirl proposed a solution to this issue.
- 546. Forest and Bird, opposed by WIAL<sup>426</sup>, sought that CE-R17 be amended to acknowledge that natural character, natural landscape, and biodiversity values are protected via reference to appropriate provisions from other chapters or by including provisions in the rule. As with similar submissions made on the CE objectives, policies and rules, we consider that these amendments go beyond go beyond the intended scope of this rule which is the Permitted Activity rule for Green Infrastructure for Coastal Hazard.
- 547. We note that Mr Sirl<sup>427</sup> for the reasons previously outlined considered that the reference to 'Crown entity' is too broad. He noted, however, that as CE-R17 is following the Part 1 Schedule 1 RMA process, and there have been no submissions

<sup>&</sup>lt;sup>422</sup> Submission # 406.340

<sup>&</sup>lt;sup>423</sup> Section 42A Report, at paragraph 893

<sup>&</sup>lt;sup>424</sup> Submission # 377.272

<sup>425</sup> Submission # 340.61

<sup>&</sup>lt;sup>426</sup> Submission # 345.349, opposed by Further Submission #36.126

<sup>&</sup>lt;sup>427</sup> Section 42A Report, at paragraph 901

on this specific matter, he has not recommend a similar amendment to this policy. We reluctantly agree, but consider that this is a matter that should be addressed as part of a future process, particularly as CentrePort and WIAL both have valid reasons for undertaking coastal hazard mitigation works and are not Crown entities.

### **CE-R18 Additions to buildings within the Coastal Hazard Overlays**

- 548. Precinct Properties New Zealand Limited, WCC Environmental Reference Group, Yvonne Weeber and FENZ<sup>428</sup> sought the retention of CE-R18 as notified.
- 549. Forest and Bird, opposed by WIAL<sup>429</sup>, sought to amend CE-R18 to acknowledge that natural character, natural landscape, and biodiversity values are protected via reference to appropriate provisions from other chapters or by including provisions in the rule. We disagree for reasons we have previously outlined.
- 550. Argosy, Investore Property Limited, Fabric Property Limited and Oyster Management Limited<sup>430</sup> supported this rule to the extent that it enables additions to buildings within the coastal hazard overlays. However, they considered it is not appropriate to place controls on buildings in the Tsunami Hazard Overlay, as due to the nature of tsunamis, it is not realistic to construct additions to buildings to avoid tsunami risk. These submitters sought to amend CE-R18 to include provision that additions are permitted in the Tsunami Hazard Overlay
- 551. Oyster Management Limited, opposed by Toka Tū Ake EQC<sup>431</sup>, also sought the same relief.
- 552. Mr Sirl<sup>432</sup> did not consider that it is was appropriate to place controls on buildings in the Tsunami Hazard Overlay, as building additions, particularly in high hazard areas, can expose a greater number of people and or value of property to natural hazards. He noted that CE-R18 provides for permitted building additions in low and medium coastal hazard areas, as this enables these activities in areas where it does not materially increase risk. He also did not consider it to be appropriate to provide for all building additions in high coastal hazard areas as a Permitted Activity given the level of risk that could be introduced, particularly if the building additions were located at ground-level.

<sup>428</sup> Submissions # 139.23, 377.273, 340.62 and 273.148

<sup>&</sup>lt;sup>429</sup> Submission # 345.350 opposed by WIAL Further Submission #36.127]

 <sup>&</sup>lt;sup>430</sup> Submissions # 383.88, 405.44-45, 425.45-46, 404.102-103, opposed by Further Submissions #70.9, 70.43, 70.15 and 70.78

<sup>&</sup>lt;sup>431</sup> Submission # 404.104, opposed by Further Submission #70.79

<sup>&</sup>lt;sup>432</sup> Section 42A Report, at paragraphs 910 to 911

- Mr Sirl<sup>433</sup> did consider that it would be appropriate to provide for additions above 553. ground floor level, on the basis that any above ground floor addition will be above inundation levels, which appropriately mitigates coastal hazard risk, and with the Gross Floor Area controls applied to additions at ground floor level in the CCZ to enable small-scale additions that will not result in an unacceptable increase in risk to people. We agree that this is a pragmatic approach.
- 554. WIAL<sup>434</sup> sought either the deletion of CE-R18 in its entirety or that it be amended to apply to coastal hazard inundation areas only. We do not agree for the reasons previously outlined. We recommend CE-R18 be amended as follows:

CE-R18	Additions to buildings within the Coastal Hazard Overlays
All Zones	1. Activity status: <b>Permitted</b>
	Where:
	<u>a. The additions are above the ground floor of a building containing a hazard-</u> sensitive activity or potentially hazard sensitive activity within the City Centre Zone
	<del>a. <u>b.</u> The additions are to a <u>building containing a</u> hazard sensitive activity or potentially hazard sensitive activity in the low coastal hazard area;</del>
	<del>b. <u>c.</u> The additions are to <u>a</u> building<del>s for</del> <u>containing</u> a less hazard sensitive activity in either the low coastal hazard area, medium coastal hazard area or high coastal hazard area;</del>
	c. <u>d.</u> The additions are to a <u>building containing a</u> potentially hazard sensitive activity in the medium coastal hazard area <u>or to the ground floor of a building</u> <u>containing a hazard sensitive activity or potentially hazard sensitive activity</u> <u>within the City Centre Zone</u> and they do not increase the building footprint by more than 100m <sup>2</sup> ; or
	<del>d. <u>e.</u> The additions are to a <u>building containing a</u> hazard sensitive activity in the medium coastal hazard area and they do not increase the building footprint by more than 50m<sup>2</sup>.</del>
2. All Zones	2. Activity status: <b>Restricted discretionary</b>
201100	Where:
	<ul> <li>Compliance with the requirements of CE-R18.1.ed or CE-R18.1.de cannot be achieved; or</li> </ul>
	b. The addition is to a <u>building containing a</u> potentially hazard sensitive activity or a hazard sensitive activity within a high coastal hazard area <u>and is</u> located outside of the City Centre Zone.
	3. Matters of discretion are:

 <sup>&</sup>lt;sup>433</sup> Section 42A Report, at paragraph 912
 <sup>434</sup> Submissions # 406.341-343, opposed by Further Submissions #70.103-104

# CE-R19 Airport, operation port activities, passenger port facilities and rail activities within the Coastal Hazard Overlay

- 555. WCC Environmental Reference Group<sup>435</sup> sought the retention of CE-R19 as notified.
- 556. Yvonne Weeber<sup>436</sup> sought the retention of CE-R19 as notified but considered that it is unclear where the Low Coastal Hazard Area, Medium Coastal Hazard Area and the High Coastal Hazard Area are in the Coastal Environment as these terms do not appear on the Plan maps. As above, Mr Sirl proposed a solution to this issue.
- 557. Forest and Bird, opposed by WIAL<sup>437</sup>, sought that CE-R19 be amended to acknowledge that natural character, natural landscape, and biodiversity values are protected via reference to appropriate provisions from other chapters or by including provisions in the rule. We have already discussed this general issue previously. In summary, we do not support the relief sought.
- 558. CentrePort Limited<sup>438</sup> noted that large parts of its Port Operations, including the Kaiwharawhara ferry terminal location, are included within the Coastal Hazard Overlay and consider that a permitted activity limitation to 10 passengers or 10 employees for port activities that, by definition, need to adjoin the coastal marine area is impractical. It further considered that if it can be demonstrated that there is no practical alternative, Port activities with greater than 10 passengers or employees should be able to be a Permitted Activity. A need to correct a typographical error in the rule title is also highlighted, with a consequential amendment to CE-R19 sought.
- 559. For similar reasons as he outlined in respect of the related policy, Mr Sirl<sup>439</sup> did not consider it appropriate for new activities or buildings to be located in coastal hazard areas, particularly high coastal hazard areas, without necessary mitigation measures, including evacuation access, being incorporated into the proposal to minimise risk to people and property, as guided by CE-P20. He also considered that the additional permitted standard sought by the submitter, in relation to practical alternatives, is a matter for consideration as part of a resource consent process.

<sup>435</sup> Submission # 377.274

<sup>&</sup>lt;sup>436</sup> Submission # 340.63

<sup>&</sup>lt;sup>437</sup> Submission # 345.351, opposed by Further Submission #36.128

<sup>&</sup>lt;sup>438</sup> Submissions # 402.118120

<sup>&</sup>lt;sup>439</sup> Section 42A Report, at paragraph 925

- 560. WIAL, opposed by Toka Tū Ake EQC<sup>440</sup>, sought either the deletion of CE-R19 in its entirety or its amendment to apply to coastal hazard inundation areas only. We do not agree, and we have already outlined our view on this general point previously.
- 561. Aside from a change in the title to "<u>The construction of buildings or the conversion of</u> <u>existing buildings that will contain</u> Airport <u>purposes</u> activities, operation<u>al</u> port activities, passenger port facilities and rail activities within the Coastal Hazard Overlay", there are no other changes recommended.

# CE-R20 Potentially hazard sensitive activities or hazard sensitive activities within the City Centre Zone and are also within the medium and high coastal hazard areas

- 562. Precinct Properties New Zealand Limited, MoE and WCC Environmental Reference Group<sup>441</sup> sought the retention of CE-R20 as notified.
- 563. Yvonne Weeber<sup>442</sup> sought the retention of CE-R20 as notified but considered that it is unclear where the Low Coastal Hazard Area, Medium Coastal Hazard Area and the High Coastal Hazard Area are in the Coastal Environment as these terms do not appear on the Plan maps. As above, Mr Sirl proposed a solution to this issue.
- 564. FENZ<sup>443</sup> sought to amend CE-R20 to exclude restrictions on establishing emergency service facilities in these areas. It considered fire stations may have a functional need to be located in certain areas, including coastal hazard areas, and that the ability to construct and operate fire stations in locations which will enable reasonable response times to fire and other emergencies is paramount to the health, safety and wellbeing of people and the community.
- 565. We agree with Mr Sirl<sup>444</sup> that given the critical post-disaster function of emergency service facilities, it is appropriate for this Permitted Activity rule to exclude emergency service facilities from the rule, so new emergency service facilities incorporate hazard-resilience into the design of any facilities proposed to be located in a coastal hazard area.
- 566. Forest and Bird, opposed by WIAL<sup>445</sup>, sought to amend CE-R20 to acknowledge that natural character, natural landscape, and biodiversity values are protected via

<sup>&</sup>lt;sup>440</sup> Submissions # 406.344-346, opposed by Further Submissions #70.105-106

<sup>&</sup>lt;sup>441</sup> Submissions # 139.24, 400.71 and 377.275

<sup>442</sup> Submission # 340.64

<sup>443</sup> Submissions # 273.149-150

<sup>&</sup>lt;sup>444</sup> Section 42A Report, at paragraph 936

<sup>&</sup>lt;sup>445</sup> Submission # 345.352, opposed by Further Submission #36.129

reference to appropriate provisions from other chapters or by including provisions in the rule. We have already discussed this general issue previously. In summary, we do not support the relief sought.

- 567. Argosy, Fabric Property Limited and Oyster Management Limited, opposed by Toka Tū Ake EQC<sup>446</sup>, supported CE-R20 to the extent that it enables potentially hazard sensitive activities or hazard sensitive activities within the CCZ where those activities are also within the medium and high coastal hazard areas and that activities which cannot comply with CE-R20.1 are Restricted Discretionary Activities. However, they considered that it is unclear why potentially hazard sensitive activities should be permitted where a building will be occupied by 10 or less employees of an activity as this number appears to be arbitrary and impractical. They noted that five offices that are occupied by 10 or less employees are unlikely to have a different risk profile to one office occupied by 50 employees. The submitters considered that this rule also does not achieve the objectives and policies of the coastal hazard overlays, specifically Objective CE-O8 and Policy CE-P21, and sought that the rule is clarified to reflect that it would be very difficult for buildings to entirely avoid being occupied by members of the public occasionally e.g. a courier driver dropping off a parcel or a tradesperson undertaking a repair.
- 568. We agree with Mr Sirl<sup>447</sup> that the proposed approach to allow any building or conversion to occur as a Permitted Activity where the activity is not occupied predominantly by members of the public would allow for new buildings to be constructed and new activities established that could house and/or employ a large number of staff, with no consideration of hazard-risk incorporated as part of the proposal. He also did not agree with the addition of "*predominantly*" to CE-R20.2 as it is not easily measurable as a permitted standard. Turning to the Dictionary definition, to be "*occupied*" is to be "*used by someone or reside*". He considered that the example of a courier or tradesperson, would not be considered as occupying a building and would apply only where members of the public used the premises to access goods and services. We agree.
- 569. Aside from the change in the titles to add "<u>The construction of buildings or the</u> <u>conversion of existing buildings that will contain...</u>" to the front of the rule title, there is no other change recommended.

<sup>&</sup>lt;sup>446</sup> Submissions # 383.89, 425.48, 404.105-107 opposed by Further Submissions #.16 and 70.80

<sup>&</sup>lt;sup>447</sup> Section 42A Report, at paragraphs 938-939

570. Notwithstanding this, following the recommended amendments to the rule set out in the reporting officer's reply, we are aware that the application of the rule is incorrectly attributed to all zones, whereas, as stated in the rule itself, the rule only applies in the City Centre Zone. Accordingly, we make an out-of-scope recommendation under with Schedule 1, clause 99(2)(b) of the RMA with respect to the amendments to clarify that the rule applies in the City Centre Zone only.

### CE-R21 Potentially hazard sensitive activities in the low coastal hazard area

- 571. Precinct Properties New Zealand Limited, Oyster Management Limited and WCC Environmental Reference Group<sup>448</sup> sought the retention of CE-R21 as notified.
- 572. Yvonne Weeber<sup>449</sup> sought the retention of CE-R21 as notified but, considered that it is unclear where the Low Coastal Hazard Area, Medium Coastal Hazard Area and the High Coastal Hazard Area are in the Coastal Environment as these terms do not appear on the Plan maps. As above, Mr Sirl proposed a solution to this issue.
- 573. Forest and Bird, opposed by WIAL,<sup>450</sup> sought to amend CE-R21 to acknowledge that natural character, natural landscape, and biodiversity values are protected via reference to appropriate provisions from other chapters or by including provisions in the rule. We have already discussed this general issue previously and do not support the relief sought.
- 574. WIAL<sup>451</sup> sought the deletion of CE-R21 in its entirety to avoid unnecessary duplication with the PDP, and for other reasons, this chapter should focus on those additional consent requirements necessary to manage effects within the coastal hazard overlays that cannot be adequately dealt with by the underlying zone rules.
- 575. As did Mr Sirl<sup>452</sup>, we disagree with the deletion of CE-R21 as this rule provides necessary certainty in relation to less hazard sensitivity activities, and does not result in unnecessary duplication with underlying zone rules. Those rules do not consider risk in relation to coastal hazards. We also recognise that the National Planning Standards direct that Coastal Environment related provisions are contained in the Coastal Environment chapter. We note that Ms O'Sullivan had no remaining issues with this rule.

<sup>448</sup> Submissions # 139.25, 404.108 and 377.276

<sup>449</sup> Submission # 340.65

<sup>&</sup>lt;sup>450</sup> Submission # 345.353, opposed by Further Submission #36.130

<sup>&</sup>lt;sup>451</sup> Submission # 406.347

<sup>&</sup>lt;sup>452</sup> Section 42A Report, at paragraph 949

#### CE-R22 Hazard sensitive activities in the low coastal hazard area

- 576. Argosy, MoE and WCC Environmental Reference Group<sup>453</sup> sought the retention of CE-R22 as notified.
- 577. Yvonne Weeber<sup>454</sup> sought the retention of CE-R22 as notified. However, she considered that it is unclear where the Low Coastal Hazard Area, Medium Coastal Hazard Area and the High Coastal Hazard Area are in the Coastal Environment as these terms do not appear on the Wellington City Proposed District Plan maps. As above, Mr Sirl proposed a solution to this issue.
- 578. Forest and Bird, opposed by WIAL<sup>455</sup>, sought that CE-R22 be amended to acknowledge that natural character, natural landscape, and biodiversity values are protected via reference to appropriate provisions from other chapters or by including provisions in the rule. We have already discussed this general issue previously and do not support the relief sought.
- 579. FENZ<sup>456</sup> sought to amend CE-22 to exclude restrictions on establishing emergency service facilities in these areas. It considered fire stations may have a functional need to be located in certain areas, including coastal hazard areas, and the ability to construct and operate fire stations in locations which will enable reasonable response times to fire and other emergencies is paramount the health, safety and wellbeing of people and the community. We disagree for the same reasons that we outlined in respect of the same submission on CE-R20.
- 580. WIAL<sup>457</sup> sought the deletion of CE-R22 in its entirety, or an amendment to apply to coastal hazard inundation areas only. We disagree for the same reasons that we outlined in respect of the same submission on CE-R21.

# CE-R23 Potentially hazard sensitive activities in the medium coastal hazard area, excluding the City Centre Zone or Airport, operation port activities, passenger port facilities and rail activities

581. Argosy, Oyster Management Limited and WCC Environmental Reference Group<sup>458</sup> sought the retention of CE-R23 as notified.

<sup>&</sup>lt;sup>453</sup> Submissions # 383.90, 400.72 and 377.277

<sup>&</sup>lt;sup>454</sup> Submission # 340.66

<sup>&</sup>lt;sup>455</sup> Submission # 345.354, opposed by Further Submission #36.131

<sup>&</sup>lt;sup>456</sup> Submissions # 273.151-152

<sup>&</sup>lt;sup>457</sup> Submissions # 406.348-350, opposed by Further Submissions #70.107 and 70.108

<sup>&</sup>lt;sup>458</sup> Submissions # 383.91, 404.109 and 377.278

- 582. Yvonne Weeber<sup>459</sup> sought the retention of CE-R23 as notified but considered that it is unclear where the Low Coastal Hazard Area, Medium Coastal Hazard Area and the High Coastal Hazard Area are in the Coastal environment as these terms do not appear on the Plan maps. As above, Mr Sirl proposed a solution to this issue.
- 583. Forest and Bird opposed by WIAL<sup>460</sup> sought that CE-R23 be amended to acknowledge that natural character, natural landscape, and biodiversity values are protected via reference to appropriate provisions from other chapters or by including provisions in the rule. We have already discussed this general issue previously and do not support the relief sought.
- 584. WIAL, opposed by Toka Tū Ake EQC<sup>461</sup>, sought the deletion of CE-R23 in its entirety or its amendment to apply to coastal hazard inundation areas only. We have already discussed this general issue previously. Again, we disagree.
- 585. VicLabour<sup>462</sup> considered that the provision may be insufficient given recent evidence that sea level rise and weather impacts related to climate change may become worse, quicker than thought not long ago. It also considered that Council needs to consider a complete prohibition on all development of potentially or actually hazard sensitive activities within areas at risk of coastal inundation or tsunami as a result of sea level rise and sought that a Prohibited Activity status is applied to Rule CE-R23 [Inferred decision requested].
- 586. We agree with Mr Sirl<sup>463</sup> that as climate change has been accounted for in the coastal hazard scenarios, a complete prohibition on all development of potentially or actually hazard sensitive activities within areas at risk of coastal inundation or tsunami as a result of sea level rise is unnecessary, given the mitigation able to be incorporated into building design and the probability of some tsunami events compared to the life of buildings.
- 587. Aside from the change in the titles to add "<u>The construction of buildings or the</u> <u>conversion of existing buildings that will contain...</u>' to the front of the rule title, there is no other change recommended.

<sup>&</sup>lt;sup>459</sup> Submission # 340.67

<sup>&</sup>lt;sup>460</sup> Submission # 345.355, opposed by Further Submission #36.132

<sup>&</sup>lt;sup>461</sup> Submissions # 406.351-352 opposed by Further Submissions #70.109-110

<sup>&</sup>lt;sup>462</sup> Submission # 414.24, opposed by Further Submission #36.139

<sup>&</sup>lt;sup>463</sup> Section 42A Report, at paragraph 973

#### CE-R24 All hard engineering measures in the high coastal hazard area

- 588. WCC Environmental Reference Group and KiwiRail<sup>464</sup> sought the retention of CE-R24 as notified.
- 589. Yvonne Weeber<sup>465</sup> sought the retention of CE-R24 as notified but considered that it is unclear where the Low Coastal Hazard Area, Medium Coastal Hazard Area and the High Coastal Hazard Area are in the Coastal Environment as these terms do not appear on the Plan maps. As above, Mr Sirl proposed a solution to this issue .
- 590. Forest and Bird opposed by WIAL<sup>466</sup> sought to amend CE-R24 to acknowledge that natural character, natural landscape, and biodiversity values are protected via reference to appropriate provisions from other chapters or by including provisions in the rule. We have already discussed this general issue previously and do not support the relief sought.
- 591. CentrePort Limited<sup>467</sup> sought that CE-R24 be amended to exclude the Special Purpose Port Zone, as hard engineering options are often the only options for protection and enhancement of Port Infrastructure, which, by necessity, needs to be in the Coastal Environment.
- 592. Mr Sirl<sup>468</sup> disagreed with the relief sought as he did not consider that this is reason enough for excluding hard engineering in the Special Purpose Port Zone from this rule. He was instead of the opinion that this is more appropriately a matter that needs to be demonstrated on a case-by-case through the consenting process. Mr Sirl also noted that the proposed amendments to CE-P26 of this report may provide some relief to the submitter in the form of ensuring an achievable consenting pathway for hard engineering hazard mitigation measures.
- 593. We agree and note that Ms Searle for CentrePort did not raise this as an issue. We also observe that many of the hard engineering structures for the Port are located below Mean High Water Springs, where the provisions of the NRP would apply.
- 594. On a similar note, WIAL<sup>469</sup> sought the deletion of CE-R24 in its entirety and if not supported, its amendment insofar as it relates to the existing seawall located between

<sup>&</sup>lt;sup>464</sup> Submissions # 377.279 and 408.103

<sup>&</sup>lt;sup>465</sup> Submission # 340.68

<sup>&</sup>lt;sup>466</sup> Submission # 345.356, opposed by Further Submission #36.133

<sup>&</sup>lt;sup>467</sup> Submission # 402.121 and 404.122

<sup>&</sup>lt;sup>468</sup> Section 42A Report, at paragraph 986

<sup>&</sup>lt;sup>469</sup> Submission # 406.293, 406.354-355, supported by Further Submission #72.64, opposed by Further Submissions #44.67, 44.74-75

Lyall Bay and Moa Point. It considered that the rule should only be applicable to new hard engineering structures. It also considered that ongoing upgrade, maintenance and repair of existing hard engineering structures that protect existing regionally significant infrastructure should be Permitted, as WIAL has sought in the underlying Natural Open Space Zone.

- 595. WIAL<sup>470</sup> therefore sought the addition of a new Permitted Activity rule for hard engineering measures for regionally significant infrastructure.
- 596. Mr Sirl<sup>471</sup> agreed that Discretionary Activity status should apply to existing hard engineering structures that protect existing regionally significant infrastructure. However, he considered that enabling maintenance and repair of existing structures to ensure existing structures are effective in mitigating the impacts of hazard events is appropriate, and suggested that this would be best achieved through amending CE-R24 to explicitly permit these activities. Maintenance and repairs are defined in the PDP, which ensures clarity regarding the works that would be enabled by the suggested Permitted Activity rule. He agreed in part with the provisions for upgrades, but only to the extent that footprint or height of the existing structure in not increased.
- 597. We agree with that position and consider that the recommended amendments are an improvement. We recommend amendments to CE-R24 as follows.

CE-	R24	<del>All h</del> Hard e coastal ha	engineering <del>measures natural hazards mitigation works</del> in the high zard area
	All Zor	Whe a.	Activity Status: <b>Permitted</b> bere: <u>The works involve maintenance and repair of existing hard engineering</u> <u>natural hazard mitigation works; or</u> <u>Upgrades of existing hard engineering natural hazard mitigation works</u> <u>that protect existing regionally or nationally significant infrastructure that</u> <u>do not increase the footprint or height of the structure.</u>
	All Zor	Where a.	<ul> <li>Activity Status: Discretionary</li> <li><u>The works involve new hard engineering natural hazard mitigation works;</u> or <u>Upgrades to existing hard engineering natural hazard mitigation works</u> cannot comply with CE-R24.1b.</li> </ul>

<sup>&</sup>lt;sup>470</sup> Submission # 406.293

<sup>&</sup>lt;sup>471</sup> Section 42A Report, at paragraphs 987-988

### CE-R25 Potentially hazard sensitive activities within the high coastal hazard area, excluding the City Centre Zone or Airport, operation port activities, passenger port facilities and rail activities

- 598. WCC Environmental Reference Group and KiwiRail<sup>472</sup> sought the retention of CE-R25 as notified.
- 599. Yvonne Weeber<sup>473</sup> sought the retention of CE-R25 as notified but considered that it is unclear where the Low Coastal Hazard Area, Medium Coastal Hazard Area and the High Coastal Hazard Area are in the Coastal Environment as these terms do not appear on the Plan maps. As above, Mr Sirl proposed a solution to this issue.
- 600. Forest and Bird, opposed by WIAL<sup>474</sup>, sought to amend CE-R25 to acknowledge that natural character, natural landscape, and biodiversity values are protected via reference to appropriate provisions from other chapters or by including provisions in the rule. We have already discussed this general issue previously and do not support the relief sought.
- 601. VicLabour<sup>475</sup> considered that the provision may be insufficient given recent evidence that sea level rise and weather impacts related to climate change may become worse, quicker than thought not long ago. It also considered that Council needs to consider a complete prohibition on all development of potentially or actually hazard sensitive activities within areas at risk of coastal inundation or tsunami as a result of sea level rise and sought that Prohibited Activity status be applied to Rule CE-R25 [Inferred decision requested]. We have already discussed this general issue previously in relation to CE-R23 and take the same view in this context.
- 602. We also acknowledge that the Section 42A Reporting officer<sup>476</sup> noted the recommendation to amend the title of CE-R25 to clarify the rule applies to the construction of buildings or the conversion of existing buildings that will contain a potentially hazard sensitive activity in the high coastal hazard area, in part in in response to Kimberley Vermaey<sup>477</sup> as detailed in paragraph 151 of the Section 42A Report. However, amendments to the rule to clarify that the rule applies to new buildings that will contain a potentially hazard sensitively hazard sensitive to the rule to clarify that the rule applies to new buildings that will contain a potentially hazard sensitivity activity, although necessary

<sup>&</sup>lt;sup>472</sup> Submissions # 377.280 and 408.103

<sup>473</sup> Submission # 340.69

<sup>&</sup>lt;sup>474</sup> Submission # 345.357, opposed by Further Submission #36.134

<sup>&</sup>lt;sup>475</sup> Submission # 414.25

<sup>&</sup>lt;sup>476</sup> Section 42A Report, at paragraph 999

<sup>477</sup> Submission # 348.5

in the view of the Section 42A Reporting officer, is not a matter raised in submissions, nor clear in the notified version of the rule.

- 603. We agree that it is considered necessary to explicitly control the construction of buildings as it is appropriate to manage the risk of damage to property as well as the risk to life of those in the building. Accordingly, we make an out-of-scope recommendation under with Schedule 1, clause 99(2)(b) of the RMA with respect to the amendments to clarify that the rule applies to new buildings that will contain a potentially hazard sensitive activity in the high coastal hazard area. For consistency, we recommend equivalent amendments to rules CE-R26 and CE-R27.
- 604. Therefore CE-R25 is recommended to be amended as follows:

CE-R25	The construction of buildings or the conversion of existing buildings that will
	contain Ppotentially hazard sensitive activities within the high coastal hazard
	area, excluding the City Centre Zone or Airport <u>purposes</u> , operation port
	activities, passenger port facilities and rail activities

# CE-R26 Hazard sensitive activities within the medium coastal hazard area, excluding the City Centre Zone or Airport, operation port activities, passenger port facilities and rail activities

- 605. WCC Environmental Reference Group and MoE<sup>478</sup> sought the retention of CE-R26 as notified.
- 606. Yvonne Weeber<sup>479</sup> sought the retention of CE-R26 as notified but considered that it is unclear where the Low Coastal Hazard Area, Medium Coastal Hazard Area and the High Coastal Hazard Area are in the Coastal Environment as these terms do not appear on the Plan maps. As above, Mr Sirl proposed a solution to this issue.
- 607. Forest and Bird, opposed by WIAL<sup>480</sup>, sought to amend CE-R26 to acknowledge that natural character, natural landscape, and biodiversity values are protected via reference to appropriate provisions from other chapters or by including provisions in the rule. We have already discussed this general issue previously and do not support the relief sought.

<sup>478</sup> Submissions # 377.281 and 400.73

<sup>479</sup> Submission # 340.70

<sup>&</sup>lt;sup>480</sup> Submission # 345.358, opposed by Further Submission #36.135

- 608. WIAL, opposed by Toka Tū Ake EQC<sup>481</sup>, sought the deletion of CE-R26 in its entirety or its amendment to apply to coastal hazard inundation areas only. We have already discussed this general issue previously. Again, we disagree.
- 609. VicLabour<sup>482</sup> considered that the provision may be insufficient given recent evidence that sea level rise and weather impacts related to climate change may become worse, quicker than thought not long ago. It also considered that Council needs to consider a complete prohibition on all development of potentially or actually hazard sensitive activities within areas at risk of coastal inundation or tsunami as a result of sea level rise and sought that prohibited activity status is applied to Rule CE-R26 [Inferred decision requested]. We have already discussed this general issue previously in relation to CE-R23 and take the same view in this context.

# CE-R27 Hazard sensitive activities within the high coastal hazard area, excluding the City Centre Zone or Airport, operation port activities, passenger port facilities and rail activities

- 610. WCC Environmental Reference Group and MoE<sup>483</sup> sought the retention of CE-R27 as notified.
- 611. Yvonne Weeber<sup>484</sup> sought the retention of CE-R26 as notified but considered that it is unclear where the Low Coastal Hazard Area, Medium Coastal Hazard Area and the High Coastal Hazard Area are in the Coastal Environment as these terms do not appear on the Plan maps. As above, Mr Sirl proposed a solution to this issue.
- 612. Kāinga Ora, opposed by Toka Tū Ake EQC and GWRC<sup>485</sup>, sought to amend CE-R27 to change the activity status of Hazard Sensitive Activities within the High Coastal Hazard Area from Non-Complying to Discretionary, in order to give the potential for these activities to be provided where the risks can be managed through mitigation measures.
- 613. We agree with Mr Sirl<sup>486</sup> that an avoidance approach, as directed by the NZCPS and also inferred by Section 6(h) RMA with respect to significant risk, and application of the gateway test in Section 104D, is appropriate to ensure that inappropriate activities and development do not occur in High Coastal Hazard Areas. The alternative would

<sup>&</sup>lt;sup>481</sup> Submissions # 406.357-358, opposed by Further Submissions #70.111-112

<sup>&</sup>lt;sup>482</sup> Submission # 414.26, opposed by Further Submission #36.3140

<sup>&</sup>lt;sup>483</sup> Submissions # 377.282 and 400.74

<sup>&</sup>lt;sup>484</sup> Submission # 340.71

<sup>&</sup>lt;sup>485</sup> Submissions # 391.267-268, opposed by Further Submissions #70.65 and 84.85

<sup>&</sup>lt;sup>486</sup> Section 42A Report, at paragraph 1027

effectively increase the consequences of a hazard event, and like Mr Sirl, we do not consider it necessary to provide for a more enabling approach in these areas.

- 614. Forest and Bird<sup>487</sup> sought to amend CE-R26 to acknowledge that natural character, natural landscape, and biodiversity values are protected via reference to appropriate provisions from other chapters or by including provisions in the rule. We have already discussed this general issue previously and do not support the relief sought.
- 615. VicLabour<sup>488</sup> considered that the provision may be insufficient given recent evidence that sea level rise and weather impacts related to climate change may become worse, quicker than thought not long ago. It also considered that Council needs to consider a complete prohibition on all development of potentially or actually hazard sensitive activities within areas at risk of coastal inundation or tsunami as a result of sea level rise and sought that Prohibited Activity status is applied to Rule CE-R27 [Inferred decision requested]. We disagree for the same reasons as are stated above in relation to similar submissions on other rules.
- 616. Aside from the change in the titles to add "<u>The construction of buildings or the</u> <u>conversion of existing buildings that will contain...</u>" to the front of the rule title and to change the reference to the "*Airport*" to "*Airport <u>Purposes</u>*", there is no other change recommended.

<sup>&</sup>lt;sup>487</sup> Submission # 345.359

<sup>488</sup> Submission # 414.27

### 5. MINOR AND INCONSEQUENTIAL AMENDMENTS

- 617. Mr Sirl has recommended the following minor and inconsequential amendments as identified in the Section 42A Report<sup>489</sup> and his Right of Reply<sup>490</sup> should be corrected pursuant to Schedule 1, clause 16 (2) of the RMA:
  - a. the spelling of the name of the 'Shepherd's Gully' Fault (not Sheppard) throughout the PDP;
  - an amendment to the title of NH-P13 to distinguish it from NH-P14 (that currently has the same policy title) and to clarify that the policy relates to low occupancy buildings, which better reflects the intent of the policy;
  - c. an amendment to the title of NH-P14 which simplifies the title without materially altering the policy;
  - d. deletion of the reference to "stream and river management works" from NH-P16 and NHP17 as "natural hazard mitigation works" encompasses works that would be involved in stream and river management but including them separately connected by "or" suggests they are different;
  - e. an amendment to add reference to "*of the Coastal Hazard Overlays*" to CE-P12 to ensure policy drafting consistency across plan provisions;
  - f. the addition of "*need*" after operational in CE-P18 to align the term with the operational need term used and defined in the PDP;
  - g. correction to CE-R18.1a to clarify that the permitted addition is to a building containing the specified activity, not the activity itself;
  - h. an amendment to the titles of CE-R20 and CE-R22 to clarify the rules apply to the construction of buildings or the conversion of existing buildings;
  - i. amend the CE-P25 reference to "*planning*" by replacing it with "*planned*", and delete "*risk*" following "*coastal hazards*";
  - j. an amendment to CE-P24 to replace "they" with "this'";
  - k. Addition of "event" following use of the term "1% Annual Exceedance Probability flood";

<sup>&</sup>lt;sup>489</sup> Section 42A Report, at paragraph 1032

<sup>&</sup>lt;sup>490</sup> Reporting Officer Right of Reply of Jamie Sirl paragraph 115

- the use of hyphens throughout the provisions, in particular in references to "well-defined" in relation to fault rupture hazard, and reference to "hazardsensitive";
- m. for consistency between similar provisions in Natural Hazards chapter and Coastal Environment chapter, for example changing "*in*" to "*within*" and "*does*" to "*'do*";
- n. The addition of 'hazard' to the 'fault overlay' and 'liquefaction overlay' references in the hazard ranking table contained in the Introduction of the Natural Hazards chapter, and policies and rules to improve consistency in terminology used in the plan;
- the title of CE-P16 to be amended to remove reference to 'subdivision' as specific reference to 'subdivision' is inconsistent with the rest of the policy titles, which all apply to subdivision;
- NH-R10 is recommended to be amended to clarify that additions relate to a building not an activity; and
- q. CE-R18.2b. is recommended to be amended to clarify that additions relate to a building not an activity.
- 618. We agree with these recommended minor changes.

### 6. CONCLUSIONS

- 619. We have recommended that a number of changes be made to the Natural Hazards (NH) chapter and to the Coastal Hazards provisions within the Coastal Environment (CE) chapter. These are included in Appendix 1 to this report (including amendments made in respect of other recommendations where only the affected provisions are shown), with Appendix 1A being the recommended amendments to the Natural Hazards chapter, and Appendix 1B being the recommended amendments to the provisions for natural hazards in the Coastal Environment chapter.
- 620. We have sought to address all material issues of the parties who have appeared before us put in contention in relation to Natural and Coastal Hazards.
- 621. To the extent that we have not discussed submissions on this topic, we agree with and adopt the reasoning of the Section 42A Reports prepared by Mr Sirl, with the input of Council's technical advisers, as amended in his final written Reply.
- 622. To the extent that the Section 42A Reporting Officers have recommended amendments to the Plan requiring evaluation in terms of Section 32AA, we adopt their evaluations for this purpose.
- 623. Where we have discussed amendments, in particular where we have identified that further amendments should be made, our reasons in terms of Section 32AA of the Act are set out in the body of this Report.
- 624. Appendix 2 sets out in tabular form our recommendations on the submissions allocated to Hearing Stream 5B topics (separated into submissions on the natural hazards provisions and submissions on the coastal hazards provisions in the Coastal Environment chapter). Our recommendations on relevant further submissions reflect our decisions on the primary submission to which they relate.
- 625. Mapping amendments with respect to the fault hazard overlay, flood hazard inundation overlay, coastal inundation overlay and tsunami hazard overlay that reflect the recommendations in this report are shown in the following map viewer: https://experience.arcgis.com/experience/5e1d218fa5be4056b53b85cec61fa5d7/?d raft=true
- 626. We specifically note the following out-of-scope recommendations that we have made in regard to Natural and Coastal Hazards:

- a) The renaming of Policy CE-P26 to 'Hard Engineering Natural Hazards Mitigation Works' and replace reference to 'hard engineering measures' with 'Hard Engineering Natural Hazards Mitigation Works', as well as a consequential amendment to Rule CE-R24 to align it with the amended definition.
- b) Amendments to Policies NH-P3 and NH-P4 where a change from "reduced or not increased" to "minimised" was required over and above those already recommended to be changed.
- c) Amendments to Policies NH-P10, NH-P11 relating to fault hazards which have had a comprehensive rewrite: although the submissions received did not clearly request changes made, these changes were a necessary consequence from the whole re-evaluation of the workability of the fault hazard provisions.
- d) Amendments to Policy NH-P14 to improve its interpretive and administrative clarity to clarify that mitigation measures are required specifically to buildings to minimise the consequences of fault rupture to people and buildings.
- e) Amendments to Policies NH-P18 and NH-P19, and to Rule NH-R2, to replace the term "statutory agency" with listed agencies.
- f) Amendment to Policy CE-P11 (as the equivalent policy to NH-P1) to provide for consideration of when an activity has an operational or functional need to locate in a Natural Hazard Overlay.
- g) The inclusion of a new Policy CE-P14 to provide the necessary policy direction for Rule CE-R21.
- Amendments to Rule CE-R20 to clarify that the rule only applies in the City Centre Zone.
- Amendment to Rules CE-R25, CE-R26, and CE-R27 to clarify the rule applies to the construction of buildings or the conversion of existing buildings that will contain a potentially hazard sensitive activity in the high coastal hazard area.

For the Hearing Panel:

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Robert Schofield Chair, Hearing Stream 5

Dated: 8 February 2024