

Section 42A Officer’s Report

Hearing Stream 5:	Natural Hazards
Subjects:	Strategic Directions on Climate Change and Natural Hazards
	Natural Hazards
	Coastal Environment (provisions relating to coastal hazards)
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Appendix A1: Recommended amendments to the Proposed District Plan**Error!**
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2 Introduction

2.1 Purpose and Scope

- (1) This is the section 42A Officer's Report for the Natural Hazards and Coastal Environment (Coastal Hazards) portions of the Proposed Lower Hutt District Plan (the PDP).
- (2) This report is prepared under section 42A of the Resource Management Act 1991 (the RMA) to:
 - Assist the Hearing Panel in making their recommendations on the submissions and further submissions on the Strategic Directions, Natural Hazards, Coastal Environment, and Definitions chapters of the PDP, and
 - Provide submitters with information on how their submissions/further submissions have been evaluated by the reporting officer for these chapters, and the reporting officer's recommendations to the Hearing Panel on the decisions requested.
- (3) This report considers submissions/further submissions received by Council on the Natural Hazards and Coastal Environment chapters of the PDP, definitions within the Definitions chapter that primarily relate to natural and coastal hazards, and strategic direction CCSD-O2 (Natural Hazards), and concludes with the officer's recommendations with respect to decisions requested by submitters on these parts of the PDP.
- (4) Some provisions in other chapters address natural hazards as an issue or depend on mapped hazards overlays, such as the Infrastructure, Earthworks, and Subdivision chapters. These will be dealt with in the hearing streams for their overall topic chapters.
- (5) The Hearing Panel may choose to accept or reject the conclusions and recommendations of this report, or may come to different conclusions and make different recommendations, based on the information provided to them, including evidence provided to them by submitters.

2.2 Author

- (6) My full name is Stephen Davis. I am a Senior Policy Planner in the Policy Planning team at Hutt City Council (the Council).
- (7) I hold the qualifications of Bachelor of Science from Victoria University of Wellington, and Master of Urban Planning (Professional) from the University of Auckland. I am an intermediate member of the New Zealand Planning Institute.
- (8) I have seven years' experience in planning and resource management roles in local government, covering this district plan review, previous council-initiated and private plan changes, monitoring, and compliance.
- (9) I have been involved in the District Plan Review since 2020, including working on the Industrial Zones, Commercial and Mixed Use Zones, Seaview Marina Zone, Light, Noise, and Temporary Activities chapters, the urban design approach (cross-zone), and the maps, including their associated s32 reports. I helped prepare and was lead reporting officer for Hutt City Council's Intensification Planning Instrument in 2022-2023 (although did not lead natural hazards parts of that plan change). I also serve on the Ministry for Cities, Environment, Regions and Transport working group for standardised plan content under the government's proposed resource management reforms.
- (10) I had no significant involvement in the preparation of the Strategic Directions, Natural Hazards, or Coastal Environment portions of the plan prior to notification.
- (11) I have read the Code of Conduct for Expert Witnesses in the Environment Court Practice Note 2023. I have complied with the Code of Conduct when preparing my written report and will follow it when I give any oral evidence.
- (12) Other than where I state that I am relying on the advice of another person, this evidence is within my areas of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.
- (13) Any data, information, facts, and assumptions I have considered in forming my opinions are set out in the part of the evidence in which I

express my opinion. Where I have set out opinions in my evidence, I have given reasons for those opinions.

2.3 Supporting evidence

- (14) The s32 evaluation reports for these chapters remain relevant. I also include as appendices updated natural hazard evidence from experts in five of the six modelled natural hazards (appendices B1–B5) and a regional comparison of natural hazard modelling and policy approaches prepared by Urban Edge Planning (appendix B6). I do reference other existing publicly available reports¹ and I have processed and analysed some existing council records (e.g. GIS maps), which will be shown in the body of the report.

2.4 Glossary and abbreviations

Term or abbreviation	Meaning
CE	Coastal Environment chapter of the Proposed District Plan
FENZ	Fire and Emergency New Zealand
Forest and Bird	Royal Forest and Bird Protection Society of New Zealand, Inc. (submitter 424)
The Fuel Companies	The joint submission of BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd ² (submitter 471).
GIS	Geographic Information System
GNS	(former) Institute of Geological and Nuclear Sciences
GW, GWRC, WRC	Wellington Regional Council, t/a “Greater Wellington” and “Metlink” (submitter 452)
HCC	Hutt City Council

¹ Which will be footnoted like so.

² Note that Z Energy Ltd also made a separate individual submission (468), although not on the provisions in this report.

Term or abbreviation	Meaning
IPCC	Intergovernmental Panel on Climate Change
LIM	Land Information Memorandum
MPHRCIS	Manor Park and Haywards Residents Community Incorporated Society
NH	Natural Hazards chapter of the Proposed District Plan
NHC	Natural Hazards Commission / Toka Tū Ake
NPS-NH	National Policy Statement for Natural Hazards
ODP	Operative District Plan
PDP	Proposed District Plan
Policy Planning Team	Policy Planning Team of the Hutt City Council (submitter 440). For the avoidance of doubt this is a submission by officers, not a submission of the Hutt City Council.
RCP	Representative Concentration Pathway (in the context of Intergovernmental Panel on Climate Change projections)
RMA or 'the Act'	Resource Management Act 1991
RPS	Regional Policy Statement for the Wellington Region
SMZ	Seaview Marina Zone
SSP	Shared Socioeconomic Pathway (in the context of Intergovernmental Panel on Climate Change projections)
The Telecommunication Companies	Joint submission (311) of Connexa, Chorus, FortySouth and Spark
Wellington Water (Ltd)	Submitter 422 on the PDP, a predecessor organisation to Tiaki Wai Ltd before 1 July 2026 ³ .
WREMO	Wellington Region Emergency Management Office

³ For consistency, I will refer to the submitter using the name given in their submission, Wellington Water.

2.5 Procedural issues

2.5.1 Conferencing and additional evidence

- (15) I met with representatives of the Natural Hazards Commission and Wellington Regional Council on 1 July 2026 to discuss and clarify issues relating to their submissions on the Natural Hazards and Coastal Environment chapters, and subsequently discussed further via phone and email. This was not with the intent of reaching a joint position, but to clarify what additional evidence the submitters might provide before or after the publication of this report.
- (16) Wellington Regional Council submitted additional evidence⁴ relating to two provisions, NH-R9 and NH-R13, and so I will discuss their updated position on those provisions in this report.
- (17) I will discuss other relevant matters arising from these discussions throughout the report as it chiefly relates to particular submission points of these submitters.

2.5.2 Scope and validity

- (18) Some submissions seek changes to the plan that in themselves would be invalid – for example, by being contrary to the National Planning Standards. I have discussed these in their relevant topics, and they should be considered to the extent that the broader aims of the submission might be achieved by some other means.
- (19) Other submissions seek relief that is not, or could not, be advanced through changes to the plan. These are discussed in section 5.2.3.

4

https://hccpublicdocs.azurewebsites.net/api/download/d8937615b4d04c4eabe99da68ac79ed3/_dplanreview/13a9505b1221e56947d6bf416cb599fdb63f

2.5.3 Assignment of submissions to hearings streams and topics

- (20) Submitters and their individual submission points have been covered in this report where:
- They explicitly seek changes to provisions in the Natural Hazards and Coastal Environment chapters, Slope Assessment Overlay earthworks provisions, or strategic direction CCSD-O2,
 - They explicitly seek changes to maps linked to the chapters,
 - They explicitly seek changes to definitions mostly used in these chapters, or whose issues would mostly impact these chapters,
 - They seek broad relief, and mainly reference or relate to the chapters,
 - They seek broad relief and are more closely linked with these chapters than others, or
 - They have no other obvious topic/hearing stream that they better sit within. For such submissions reporting officers have attempted to group them with the aim of reducing duplication and the number of hearing streams a particular submitter would be involved in. This notably covers strategic direction CCSD-O1, which is not otherwise closely connected to this topic.
- (21) Some submission points cover broad, cross-plan issues, especially structural issues, and may be covered both in this report and reports on other topics.
- (22) For this report, submissions are divided into points on the Strategic Directions, chapter text provisions and cross-hazard issues, sections for the mapping and modelling of each individual hazard, and then definitions that are primarily relevant to natural and coastal hazards.

2.5.4 Partial withdrawal of the PDP

- (23) For the Natural Hazards provisions and the individual coastal hazards provisions within the Coastal Environment chapter, there are no notable issues for integration with the remaining parts of the Operative District

Plan (ODP). The non-withdrawn provisions of the PDP will replace in full the Natural Hazards chapter of the ODP and related definitions, and hazards-related provisions elsewhere in the ODP. There are no significant cross-references to withdrawn chapters.

- (24) However, the coastal hazards provisions sit within the wider Coastal Environment chapter, which as notified also contained provisions relating to coastal natural character, indigenous vegetation, development in the coastal environment, and other coastal environment issues not related to hazards. While every individual provision not relating to hazards in the chapter has been withdrawn, consequential changes are needed to the introduction, headings, and other structural elements to reflect that the chapter will now contain only hazards provisions. My recommendations for these are shown in Appendix A1.

2.6 Statutory and Policy Context

2.6.1 National and Regional Direction

- (25) The broader context of statutory considerations and national and regional direction as set out in the s32 report for the chapter remains relevant. However, there are two significant changes:
- Provisions relating to natural hazards in the Regional Policy Statement (RPS) have been substantially overhauled. At the time of notification, these were still uncertain as they were subject to appeals with quite a wide scope.
 - There is a new National Policy Statement for Natural Hazards (NPS-NH), which is directive and has implications for managing natural hazard risks in district plans.
- (26) The RPS direction is principally contained in Policies 29, 51, and 52. These set out a risk-based approach to addressing natural hazards, including accounting for at least 100 years of climate change, the use of hazard overlays to identify hazards or risks, identification of hazards and risks as low, medium, or high, and avoiding hazard sensitive activities (as defined in the RPS) where hazards or risks are high.

- (27) The NPS-NH direction sets out a proportional risk-based approach to addressing natural hazards, including accounting for at least 100 years of climate change, a detailed methodology for identification of hazards as low, medium, high, or very high, and avoiding subdivision, use and development where risk is very high.
- (28) Despite similarities, these two instruments are not designed to work together, with RPS provisions being notified prior to the NPS-NH, and the NPS-NH anticipating that the RPS will need to be updated in response. The district plan, in turn, was not prepared with the NPS-NH in mind. While it was prepared considering the decisions version of the RPS, the wide scope of appeals meant there was uncertainty around the outcome and the RPS provisions are now quite different.
- (29) Some major issues to be aware of in navigating the RPS and NPS-NH direction arise from this.
- (30) The district plan as notified, the RPS, and the NPS-NH each use a concept of ranking hazards as “low”, “medium”, “high”, and (for the RPS and NPS-NH) “very high/greater than high”. None of the three documents use these terms to mean precisely the same thing as the others.
- (31) The RPS contains direction around the management of natural hazards but does not contain detailed direction around the process of evaluating and categorising the risk, leaving that up to local authority discretion.
- (32) The NPS-NH on the other hand contains prescriptive direction around evaluating and categorising the risks from hazards, but leaves substantial scope for local authorities to choose a policy approach in response (providing that the response is proportionate). Neither document intended to prescribe *both* the evaluation *and* the policy response.
- (33) The RPS contains two separate plan-making directions, one that applies only to plan-making, and another that applies to all RMA decision-making including plan-making. These have different directions to each other.
- (34) Both RPS and NPS-NH contain direction around incorporating consideration of the effects of climate change at least 100 years into the future, but do not provide direction as to what predicted scenario should be used, or how the risks from natural hazards in the future should be

handled compared to risks that exist today or during the lifetime of the plan.

- (35) The district plan was prepared with heavy consideration for regional consistency, both to manage the costs of commissioning modelling, but also as a policy approach as housing and business development exists in a regional environment and it would be a perverse outcome for inconsistent provisions to end up pushing development from a somewhat unsafe area in one city to an even less safe area in another solely because the former city had a different and stricter methodology. However, all neighbouring cities now have settled natural hazards provisions and will not, in the foreseeable future, be likely to update them to reflect the NPS–NH or new RPS provisions.
- (36) The new national policy direction is intended to standardise the categorisation of risk. It is worth noting that while the PDP contains overlays using similar high/medium/low terminology, these maps identify the severity of the hazard, but not risk.

2.6.2 Guidance and other documents

- (37) Some non-statutory guidance, evidence, and other documents have been introduced or updated since the Section 32 report that are relevant to this topic. Notable changes are:
- An updated Table of Actions in the National Adaption Plan⁵, although the relevant changes it makes to this topic (e.g. adding reference to the proposed new Planning Bill and NPS on Natural Hazards) are generally all relevant in their own right.
 - A new implementation guide from the Ministry for the Environment for the NPS on Natural Hazards⁶. While non-binding, this provides useful context for the PDP.

⁵ <https://environment.govt.nz/assets/publications/climate-change/New-Zealands-first-national-adaptation-plan-Table-of-actions-Addendum-2025.pdf>

⁶ <https://environment.govt.nz/assets/publications/RMA/national-policy-statement-for-natural-hazards-implementation-guide.pdf>

- A new high-level National Adaptation Framework⁷. This is not detailed enough to substantially affect decisions on the plan, but reinforces that there is unlikely to be any significant funding for implementing adaptation planning or hazard mitigation measures for managing climate change effects in the near future.
- A letter from the Minister for Climate Change around the selection of climate scenarios for infrastructure planning and “regulatory decision-making”⁸. While not a form of direction under the RMA it is useful as context for the likely future funding environment for infrastructure and hazards mitigation.

⁷ <https://environment.govt.nz/what-government-is-doing/areas-of-work/climate-change/adapting-to-climate-change/national-adaptation-framework/>

⁸ https://www.huttcity.govt.nz/__data/assets/pdf_file/0034/75769/Letter-from-Minister-Watts-regarding-climate-change-assumptions-in-council-planning.pdf

3 Cross-topic resource management issues

- (38) Some issues cut across numerous provisions in the chapters for this topic in the plan, and submitters have presented either a package of requested changes or different submitters have raised the same issue in multiple contexts. I will consider some of these overall issues before trying to apply these submissions to individual provisions. I will however make recommendations on some very wide-ranging, general submission points that do not address specific provisions.

3.1 General approach

3.1.1 Regional direction and regional consistency

- (39) As set out in the Section 32 Report⁹, the PDP's approach to hazards reflects an evolution on a regionally agreed natural hazards management strategy¹⁰, with four objectives:
- "Our natural hazards and risks are well understood"
 - "Our planning takes a long term risk-based approach"
 - "Consistent approaches are applied to natural hazard risk reduction"
 - "We have an agreed set of priorities to reduce the risk from natural hazards"
- (40) This is reinforced by directions around natural hazard risk in the RPS (including changes proposed in RPS Change 1), discussed more below in section 3.1.2.

⁹ Section 32 Report, Natural Hazards, p41

¹⁰ https://www.huttcity.govt.nz/_data/assets/pdf_file/0033/75768/Wellington-region-natural-hazards-management-strategy_May-2019.PDF

- (41) The PDP accordingly takes a deliberately similar approach to natural hazard identification and management as in other recent plans, particularly Wellington and Porirua's recent full plan reviews. A more detailed comparison of both the modelling and management of hazards is available in Appendix B6.
- (42) I think this approach is appropriate, particularly as an inconsistent approach to either the identification or management of hazards risks displacing development from one council with more pessimistic modelling or more restrictive rules to another with more optimistic modelling or more enabling rules, even if the risk to that development would be no less or even greater.

3.1.2 Proportionate approach to risk

- (43) One consequence of the regional approach described above in section 3.1.1, is the evolution of the approach over time and in response to changing hazard mapping, national direction, and policy and technical guidance. The six different hazards modelled in the PDP were each modelled at different times, using different assumptions around climate change, and different versions of LIDAR elevation data and vertical land movement predictions (with the latter not included at all in some models). They are mostly consistent with the modelling of that same hazard in at least one neighbouring council, as the modelling was usually either jointly commissioned with another council, or carried out by a regional body (such as the Wellington Regional Council or Wellington Water).
- (44) The risk-based approach means some hazards are categorised into Low, Medium, and High overlays. These are not in themselves a description of Low, Medium, or High risk, either within the terminology of the NPS for Natural Hazards or in general – rather, they describe in some form the severity or likelihood of the natural hazard in a particular place.
- (45) The different hazards are categorised in different ways. The Flood, Coastal Inundation, and Tsunami hazards are categorised as Low, Medium, and High, but based on different distinctions:
- The flood modelling describes a single event (a 1:100 year/ 1% AEP flood event, with assumptions based around the IPCC RCP8.5M

scenario), with Low, Medium, and High reflecting the depth and velocity of floodwaters.

- The tsunami modelling describes three composite events, with Low, Medium, and High reflecting different return periods of 1:1000 years/0.1% AEP, 1:500 years/0.2% AEP, and 1:100 years/1% AEP respectively, with assumptions based around 1m of sea level rise (which does not correspond exactly to an IPCC scenario).
- The coastal inundation modelling categorises Medium and High only, with the difference reflecting assumptions around climate change – High considers a current-day 1:100 year/1% AEP event, and Medium considers such an event with assumptions based on the IPCC RCP8.5M scenario.

(46) The areas at potential risk of fault rupture are categorised based on the quality and certainty of information about the location of the fault, rather than the severity of the event.

(47) Areas of slope stability risk and liquefaction risk, while both modelled using an approach with tiers of risk, are each mapped as a single overlay, given the limited effect of the proposed associated rules.

(48) The provisions for each hazard nonetheless each attempt to take a risk-based approach, with provisions responding at least one of the severity, likelihood, or immediacy of an event, all of which are associated with higher risk. In some cases the approach also reflects the uncertainty in the information, which reflects the RMA's overall approach to uncertain information¹¹ and Policy 5 of the NPS for Natural Hazards:

Natural hazard risk assessment and decisions must be based on the best available information and must be made even when that information is uncertain or incomplete

(49) The Petone Community Board (502.2, 502.3, 502.4) seeks that the hazard overlays be simplified and not divided into low, medium, and high categories, considering that they are challenging to interpret.

¹¹ RMA, s32(2)(c)

- (50) My view is that the overall approach is appropriate, given the information available to Council. Classifying hazards into low, medium, and high allows for interim measures between the most restrictive and most enabling, allowing a reduction in risk while balancing the need for the ongoing adaptation and evolution of areas unlikely to be abandoned. It is also consistent with national and regional direction. I thus recommend rejecting these submission points.
- (51) There are specific concerns around both regional and inter-hazard consistency, which I discuss in section 3.2 in general and in section 6 in relation to each specific natural hazard.

3.1.3 Residual risk

- (52) The submission of the Natural Hazards Commission (327.7, 327.8, 327.18, 327.19) raises the issue of “residual risk”¹², the potential risk from natural hazards where mitigation measures are not successful or fail (which could in turn be due to a different natural hazard). This is particularly relevant in the case the NHC raises of river flooding, where the course of the Hutt River / Te Awa Kairangi is protected through stopbanks throughout almost all of Lower Hutt. I agree with the submitter that a failure of these stopbanks could well be catastrophic.
- (53) In general, and given the overall approach of the PDP, the only way to manage residual risk is through the identification of natural hazard events, and making assumptions around the likelihood of failure of mitigation measures. The only hazard for which modelling includes the effects of mitigation measures or residual risk from their failure is flooding, and the assumptions around these are set out in detail in the technical reports for the flood modelling. I do not think that a general consideration of residual risk is practical at the consenting stage – a consent would need to first be triggered, and this can only happen if the risk is identified at the plan-making stage so that a rule can hinge off an identified overlay.
- (54) I met with representatives of the Natural Hazards Commission prior to finalising this report, who suggested that an approach to the residual risk

¹² Submission 327 – Natural Hazards Commission, pp3-4

of stopbank failure could be the use of a 2024 Wellington Regional Council report modelling the impact of a potential stopbank failure¹³.

- (55) Having reviewed that evidence, I do not think it aligns well with any of the flood hazard scenarios modelled in the plan, as it is a less than 1% AEP scenario. To the extent that it would expand the coverage of high, medium, or low hazard areas I also do not think it was well enough signalled in the original submission that potentially affected owners and occupants would have been aware of this potential and so there are natural justice in such an expansion at this stage. Finally, the key area affected is the central city, as the modelling does not account for the additional protection provided by the (under construction) Riverlink stopbank improvement project. I accordingly do not recommend use of this modelling.

3.1.4 Protection of natural values

- (56) Forest and Bird (424) seek a number of changes with the general intent to “acknowledge the natural character, natural landscape and biodiversity values that must be protected” in a natural hazards context.
- (57) This is now outside the scope of the Plan Stop exemption as this would fall within the subject matter of withdrawn chapters.
- (58) In any case, a district plan’s purpose is carried out through managing land use, subdivision, and development – it cannot affect risks to natural values that arise from natural processes (such as natural hazards) with no human involvement.
- (59) I thus recommend not adding these references.

3.1.5 Seaview and Petone areas carve-out

- (60) The plan as notified has a different policy approach within an area it describes as the “General Industrial Zone and Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone and the Seaview Marina Zone”. This provides an alternative planning approach for commercial and industrial areas which have regional significance as set out in Policies 30

¹³ <https://www.gw.govt.nz/document/23844/hutt-river-flood-modelling-and-hazard-mapping/>

and 32 of the RPS, and which cannot feasibly be relocated without a wider strategy for hazards adaptation¹⁴.

Mapping of areas

- (61) The Policy Planning Team (440.48a, 440.48b, supported by Seaview Marina Ltd F14.1 and F14.2) submits that the naming of areas in each relevant provision is both imprecise and overly wordy, and seek that the relevant area be represented as an overlay on the maps instead.
- (62) This area is identified due to meeting the criteria in Policies 30 and 32 of the Regional Policy Statement, which cover the protection of certain regionally significant commercial and employment centres, while also falling within national, regional, and district plan strategic directions around natural hazards, as part of these areas are identified as hazard-prone.
- (63) In terms of plan usability, I agree that an overlay would be easier for plan users and provide appropriate precision, and recommend that this area be represented as a "Regionally Significant Coastal Business Areas Overlay".

Requested alterations to area

- (64) Winstone Aggregates (444.28, 444.29, 444.30, 444.31) seeks that the area in question also encompass the Quarry Zone, considering that it is similar in nature to Petone and Seaview.
- (65) I do not agree that the area is similar. The identification of Petone and Seaview is because of the regional significance of the areas under Policies 30 and 32 of the Regional Policy Statement respectively, and how this interacts where an area is subject to a potentially very restrictive policy approach because of the identification of multiple hazards. The Quarry Zone does not have an analogous situation. Petone and Seaview need special treatment for hazard adaptation because they cannot be easily moved or replaced, are significant regional economic drivers with a large employment base, and need to adapt and evolve over time to keep fulfilling these roles. These areas are impacted by multiple natural

¹⁴ See resource management issue 5 in the Section 32 Report, p66.

hazards, including several areas considered to be high hazard. If an alternative framework was not created for these areas, then there would be the potential that all future development potential would be removed, which would have wider economic and social impacts.

- (66) The Quarry Zone is subject to a single hazard, flooding, and only a small portion of the overall zone is impacted by the hazard, with the majority of the area being impacted by either low or medium hazards and not high hazard areas. In this regard, the Quarry Zone does not have the same restrictions or limitations from a natural hazards perspective as the properties covered by the proposed overlay.
- (67) Accordingly, I do not recommend the inclusion of the Quarry Zone.
- (68) The Adrian Palmer Family Trust (315.23a, 315.23b, 315.24a, 315.24b) supports the “carve out” and seeks that it be expanded to Gracefield and Light Industrial Zones.
- (69) I agree with the expansion to Gracefield. Gracefield and Seaview, while separate named suburbs, work together as a single cohesive area and other council strategies treat them as one¹⁵. In my view Gracefield qualifies as regionally significant under Policy 32 of the RPS in the same way as Seaview.
- (70) I do not agree with the inclusion of Light Industrial Zones. There is very little Light Industrial Zone land in Petone and none in Seaview or Gracefield, and none of it is connected with the main existing business areas in question. I do not think these areas meet the test of regional significance in Policy 32 of the RPS.

Conclusion

- (71) I recommend that the submission point of Winstone Aggregates (444) be rejected, and that the submission point of Adrian Palmer Family Trust (315.23a, 315.23b) be accepted in part, to the extent that the carve-out be extended to industrial zones in Gracefield; and

¹⁵ E.g. the Seaview Gracefield Vision 2030, https://hccpublicdocs.azurewebsites.net/api/download/8e9200db38b84fa4a6474c52c55cd409/_CM9-WE/3b204f06125e00b440e8641f8d62dd40328

- (72) I recommend that the submission point of the Policy Planning Team (440.48b) be accepted, that a new “Regionally Significant Coastal Business Areas Overlay” (as shown in Appendix A3 of this report) be added to the PDP maps, and that references to the carve-out areas be updated to refer to this overlay.
- (73) My overall recommended overlay area is represented in Appendix A3.

Section 32AA Evaluation

- (74) In my view the justification of the Seaview/Gracefield area in the s32 report still applies, but the altered mapping better aligns with the actual boundaries of the industrial area.

3.1.6 Property values and insurance

- (75) Numerous submitters raise concerns around natural hazard identification on the grounds that identification of hazards on plan maps might affect property values of listed properties, or make it more difficult for property owners to obtain insurance.
- (76) In my view, it is primarily the existence of the natural hazard risk itself that causes these issues, not the identification of the natural hazard risk by the Council.
- (77) Property prices in themselves are not an effect within the domain of the RMA. Nor is the price of insurance, although if insurance is completely unavailable or unaffordable this may have environmental effects associated with the unplanned abandonment of land and buildings. I consider this risk extremely low as insurers do not typically rely primarily on district plan maps. In any case, this risk is itself mitigated through the controls implemented in the proposed plan, which limit development and building in risk areas, thus limiting the number and value of buildings that could potentially be abandoned.

3.1.7 Terminology

General

- (78) Michael Rachlin (232.4) seeks that "natural and coastal hazards provisions are integrated across all relevant chapters, including use of consistent terms and language, and activity status for developments."
- (79) I make recommendations for making such corrections and changes for consistency in response to individual provisions In sections 4, 5, and 6.

High Hazard Areas

- (80) The Policy Planning Team (440.33) seek for various specific provisions that the terms "high hazard areas" (etc) be replaced with the name of the relevant overlay or a defined term for a group of overlays, e.g. "High Natural Hazard Overlays". I agree this is an error that should be corrected. The relevant changes are shown in Appendix A1.

Use of High, Medium, and Low

- (81) Charmy Mistry (392.3) seeks that the High Flood Hazard Overlay be renamed to something "more neutral" such as "Moderate Flood Risk" or "Flood Management Zone", considering that the name "High Flood Hazard" could be alarming or affect the marketability of properties.
- (82) Joe Jeffries (514.2a, 514.8, opposed by Wellington Water F36.353) seeks that overlays not use the words "low", "medium", and "high" and instead describe the specific hazard event being modelled, considering that the language is inaccurate when applied to present day conditions as they model potential future events with assumptions around climate change.
- (83) I do not think the district plan should use language with the intent of affecting the marketability of properties one way or the other – it should be designed to be as clear as possible for plan users.
- (84) Using the terms "high", "medium", and "low" has the advantage of aligning with direction in the RPS, which may well be relevant as a consideration, and with district plans of neighbouring councils.
- (85) There is the disadvantage that the names "high", "medium", and "low" are also used in the NPS for Natural Hazards in relation to risk, whereas the PDP

overlays are not maps or direct measures of risk, and do not align with the categorisation of risks in Appendix 1 of the NPS.

- (86) Overall, I think the advantage to plan users is greatest by retaining the names, as it makes it clearer how each overlay sits within the approach described in policies NH-P1, NH-P2, CE-P8, and CE-P9.
- (87) Accordingly, I recommend rejecting these submission points.

Activities sensitive to natural hazards

- (88) David Surrey (427.15a, 427.15b) seeks that the terms for sensitive activities align with other district plans in the region, e.g. *less hazard sensitive activities*, *potentially hazard sensitive activities*, and *hazard sensitive activities*.
- (89) The terms used in the PDP are consistent with how activities sensitive to other things are described, e.g. *activities sensitive to noise* or *activities sensitive to hazardous substance risks*. I think consistency within the plan is of greater value than consistency with other plans, and so recommend rejecting this submission point.

3.2 Modelling and mapping

3.2.1 Accounting for climate change

- (90) The RPS¹⁶ and NPS for Natural Hazards¹⁷ both direct councils to include consideration of the future effects of climate change for at least 100 years in the future in their natural hazard modelling. Neither document, however, gives a specific projection of future climate effects to use.
- (91) I will not discuss the different possible scenarios here – I recommend the discussion in the (then) Ministry for the Environment’s *Coastal Hazards and Climate Change Guidance*¹⁸ publication.

¹⁶ Policy 29

¹⁷ Policy 6

¹⁸ <https://environment.govt.nz/assets/publications/climate-change/MFE-AoG-20664-GF-National-Adaptation-Plan-2022-WEB.pdf>

- (92) As set out in the technical reports accompanying the Section 32 report and evidence of the specialists attached to this report, the hazards have been modelled using different assumptions at different times. These varying assumptions are also compared regionally in Appendix B6. The hazard-specific reports in Appendices B1-B3¹⁹ provide comments around the use and sensitivity of the specific modelling to climate change assumptions.
- (93) The National Adaptation Plan²⁰ directs the use of at least the Intergovernmental Panel on Climate Change SSP5-8.5 or RCP8.5 scenarios to *screen* for hazards and risks, and that vertical land movement should be incorporated, but does not direct the use of a specific scenario for land use controls.
- (94) Non-statutory guidance has been provided by the (then) Ministry for the Environment in its document *Coastal Hazards and Climate Change Guidance*²¹, which sets out that for changes in land use such as intensification, the IPCC SSP-8.5M and SSP-8.5H+ scenarios should be used. By contrast, the Council has also received a letter from the Minister of Climate Change²² discouraging the use of the SSP-8.5 group of projections in “regulatory decision-making”.
- (95) The status of this letter in relation to the Ministry for the Environment guidance is uncertain at time of writing although I understand the Council is hoping to get clarification.
- (96) In any case, there is no firm statutory direction about which scenario to use. This means that the choice is ultimately up to the Council and, due to submissions on this issue, something on which the panel will need to make a recommendation.

¹⁹ The fault rupture and slope stability hazard modelling do not incorporate assumptions around climate change as the former is not expected to be affected by climate change and the latter would affect the frequency of events rather than the area covered.

²⁰ <https://environment.govt.nz/assets/publications/climate-change/MFE-AoG-20664-GF-National-Adaptation-Plan-2022-WEB.pdf>

²¹ <https://environment.govt.nz/assets/publications/Coastal-hazards-and-climate-change-guidance-2024-ME-1805.pdf>

²² https://www.huttcity.govt.nz/_data/assets/pdf_file/0034/75769/Letter-from-Minister-Watts-regarding-climate-change-assumptions-in-council-planning.pdf

- (97) The Natural Hazards Commission (327.1, opposed by Wellington Water F36.289, 327.2) seeks that "Natural hazard risk [is] assessed on a multi-hazard basis, over multiple timeframes, to at least 50, or preferably 100, years into the future, and using multiple climate change scenarios", which I infer as partial support and partial opposition to the climate change assumptions made in the modelling used in the proposed plan.
- (98) Various submitters consider the assumptions, especially for flooding, as unrealistic, e.g. Edward Oosterbaan and Sarah-Kaye Oosterbaan (114), Chris Moore (448), and Denise Anglesey (366), and seek a lower IPCC scenario be used or the hazard overlays be withdrawn entirely.
- (99) As I discuss in section 3.1.1, in my view regional consistency is deeply important for the issue of natural hazards risk. The identification of hazard areas also needs to consider the overall effect on development of restricting development in particular for natural hazard reasons. This is particularly so in coastal areas of Lower Hutt such as further inland areas of Petone where natural hazard risks will not arise for a long period of time, there is uncertainty around to what degree mitigation measures could address the issue when it arises, and until and unless a decision is made to make a managed retreat from those areas, they need to continue functioning for their existing community. If development is restricted in too many areas, it may drive development out of the city, region, or country even though that does not necessarily reduce risks overall if people move to other jurisdictions with a less restrictive approach. An approach that restricts development over so much of the city that it could not meet its own development needs while meeting those restrictions also risks simply being unenforceable in practice.
- (100) Joe Jeffries (514) seeks in relation to various specific provisions that distinctions be made based on whether the natural hazard risk currently exists or will only arise in future after the climate has further changed.
- (101) Given the rate at which plans are made and updated and the climate situation evolves, and the limited difference in policy approach that would likely be justified in the different areas, I do not recommend making such a distinction (except for retaining it in the Coastal Inundation Hazard Overlay, where such an approach is used in the PDP as notified for the distinction between High and Medium hazards). While risks to life are not

immediate, risks to property are locked in when development occurs, even if the risk will only arise in future. A major role of the plan is in limiting sunk costs in development that inevitably will be subject to unacceptable risk in future.

- (102) Due to the differing assumptions made for each hazard, I will otherwise make overall recommendations about climate assumptions at a hazard-specific level in section 6 of this report, which addresses submissions on modelling and mapping for specific hazards.

3.2.2 Cumulative risk

- (103) The Natural Hazards Commission (327.104, 327.105, opposed by the Fuel Companies F32.20 and F32.21) seeks that provisions be added to address cumulative risk, that is, risk exacerbated because of the presence of two or more natural hazards simultaneously. This would effectively be by considering it in individual resource consents.
- (104) While I agree that this is a potential issue, to meaningfully address it in either the plan-making or resource consent stage, there would need to be sufficient evidence to assess the cumulative hazards in terms of risk relative to a single hazard, such as the annual exceedance probability of a cumulative natural hazard event or the consequences to life and property of that event.
- (105) No evidence has been presented by the Council or the submitter about the magnitude and relative importance of the interaction of the different hazards modelled in the PDP. I do not think it is practical to expect this to be produced for an individual resource consent – I would imagine the cost of this modelling is of the order of the hundreds of thousands of dollars spent by the Council (so far) on the modelling that informed the PDP.
- (106) The Natural Hazards Commission may want to consider presenting further evidence about the possible interactions between the hazards modelled in the plan, and in meeting with them while preparing this report I have invited them to do so for the hearing.
- (107) In the meantime, I recommend no specific reference to cumulative natural hazard risk be made in the plan.

3.2.3 Issues and accuracy in modelling

- (108) Perhaps the single largest issue for submitters was site-specific or area-specific concerns with the quality of the modelling. These have been assessed individually by experts in the relevant modelling, as discussed in section 6.

4 Strategic Directions

4.1 Chapter Summary

- (109) As discussed in the s42A report for Hearing Stream 1 – Opening, most strategic direction provisions will be discussed in the report for the topic most relevant to that particular objective. That report also has a broader discussion of the role and intent of the strategic directions as a whole.
- (110) One strategic direction objective is primarily relevant to natural hazards: CCSD-O2²³ (Natural Hazards). In addition, while it does not sit well in any one hearing stream, the nature of the submissions on CCSD-O1 (Carbon Neutral) mean that it fits better in this stream than any other. All submitters on this provision would have an interest in this topic stream in any case, and so dealing with it here will reduce the burden on those submitters.

4.2 Discussion of submissions and recommendations

4.2.1 Objectives

CCSD-O1 (Carbon Neutral)

- (111) The Fuel Companies (471.85) support the objective as notified.
- (112) Royal Forest and Bird (424.8, supported by the MPHRCIS F10.56 and Director-General of Conservation F29.1) seek that the objective be amended as follows:

The urban form, ~~and~~ built development and carbon sequestering potential of indigenous biodiversity, including

²³ This provision should have been numbered SD-CC-O2 to meet the National Planning Standards. See the s42A report for Hearing Stream 1 – Opening for a discussion and recommendation on actioning that numbering. For continuity I will refer to the provision using the non-compliant notified reference, as this is what is used in submissions and the summary of submissions.

wetlands, in Lower Hutt supports the transition of the city to be carbon neutral by 2050.

- (113) The submitter considers that this would support measures to protect indigenous biodiversity to the extent this helps achieve carbon neutrality.
- (114) With the withdrawal of the Indigenous Biodiversity chapter of the PDP, and given that the district plan (as opposed to regional plans) does not have a role in direct emissions offsetting, I do not think the plan can meaningfully advance this goal at a broad strategic level.
- (115) Wellington Regional Council (452.16, supported by the Natural Hazards Commission F15.5, opposed by Michael Rachlin F4.6), seeks that the objective be amended as follows:

CCSD-01 Carbon Neutral and Climate-Resilient

The urban form and built development in Lower Hutt supports the transition of the city to ~~be~~ become more climate-resilient, and carbon neutral by 2050.

- (116) The submitter considers that, while climate resilience is addressed in relation to urban development and infrastructure it should also be considered in other situations.
- (117) I note that maintaining climate resilience for natural hazards is also covered in CCSD-O2.
- (118) The change sought by the submitter would still apply specifically to “urban form and built development”. For urban areas, I do not think this meaningfully adds much to the existing proposed direction in UDSD-O2:

Urban development supports the creation of liveable, well-functioning urban environments that are:

...

(g) resilient to the impacts of natural hazards and climate change.

...

- (119) The impact of the change as I see it would therefore be to extend the consideration of climate resilience to built development in rural environments for situations other than natural hazards. The strategic

direction already broadly recommends urban containment (e.g. UDSD-O4, UDSD-O8).

- (120) I think that managing urban form generally, and managing development at potential risk from natural hazards, are the major strategic ways in which the district plan has scope to advance climate resilience. Generally, the plan can restrict development that might undermine resilience but has few if any tools to proactively advance resilience, particularly in rural areas where there are no tools to shape gross development outcomes in the absence of significant redevelopment or intensification, which there is already strategic direction discouraging. The submitter also has not sought relief in rural zones that this strategic direction might link with or support, but may wish to comment at the hearing on what relief sought by other submitters might advance this sought strategic direction.
- (121) Accordingly, I do not recommend accepting either of the changes proposed by submitters.
- (122) If the panel is nonetheless of a mind to accept the relief of Wellington Regional Council, I think as the issue raised by WRC is around climate change adaptation and CCSD-O1 as proposed is purely around climate change mitigation, this issue would be better addressed as a new standalone strategic direction objective rather than forming part of CCSD-O1 as requested.

CCSD-O2 (Natural Hazards)

- (123) Fire and Emergency NZ (374.13) and the Fuel Companies (471.86) support the objective as notified.
- (124) Their reasons for that support are fairly general and in my view are unaffected by the discussion below.
- (125) Michael Rachlin (232.1) seeks to delete the provision, amend it in line with his concerns, or replace it with an equivalent provision from the then²⁴ Porirua Proposed District Plan Appeals Version 2024, which is REE-O3:

²⁴ At the time Mr Rachlin made his submission this was still only a proposed plan and subject to appeals. The appeals have now been resolved, and the plan was made operative on 1 November 2025, with no changes to objective REE-O3.

There is no significant increase in the risk from natural hazards, including the effects of climate change, to people, property and infrastructure as a result of subdivision, use and development.

(126) The submitter considers that:

- The avoidance or minimisation of risk is not practical given Lower Hutt's hazards profile and susceptibility to climate change.
- The district plan should be designed for its expected 10-year lifetime [and I infer from this, that he means that it should not necessarily be designed to apply beyond that].
- The lower-order PDP provisions do not implement the strategic objective, for example provisions that carve out commercial and industrial areas in Petone, Seaview, and Gracefield from the stronger levels of risk management.
- The objective is vague as "minimise" is not defined.

(127) I agree with the submitter that there is significant existing risk from natural hazards in much of Lower Hutt and that this is likely to increase in the future due to the impacts of climate change. Given the tools available under the District Plan it is not possible to avoid or minimise the existing risk to built development. Similarly, the District Plan cannot manage an increase in risk from natural hazards impacted by climate change to existing built development. This is because the District Plan cannot cancel existing use rights, nor can it require retrospective actions to existing developments to address natural hazard risk.

(128) While the Proposed District Plan has only a ten-year review period²⁵, it would be prudent to consider the possibility of it having a longer lifespan – the current Operative District Plan, for example, was notified 31 years ago. More broadly, while the District Plan covers land uses as they establish and change, development now can be expected to last indefinitely and

²⁵ At the time of writing this ten-year review requirement is on hold subject to s79(10) of the Act but, barring further legislative change such as from the Planning Bill currently before the House, the requirement will automatically resume before the Proposed District Plan will have had a chance to accumulate 10 years of time being operative.

create “sunk” investments at risk in future, which is an inefficient use of natural resources. National direction also sets out that the “potential impacts of climate change to at least 100 years into the future must be considered”.²⁶

- (129) I also agree with the submitter that the detailed provisions in the plan as proposed also do not take an absolute approach of avoidance or minimisation in all circumstances, especially where they interact with other important resource management issues such as enabling infrastructure, and given the national direction to adopt a proportional rather than absolute approach²⁷.
- (130) I will discuss the potential need for a definition of “minimise” in section 7.1.3.
- (131) I agree some amendments would better reflect the approach the District Plan is taking (and must take) overall, to cover that the plan is only managing (and only able to manage) increased risk from development and land use change.
- (132) While I agree that the plan also needs to balance natural hazard issues with other resource management issues, this does not need to be reflected in the strategic objective, as other strategic objectives exist for those other issues and will need to be read alongside this one.
- (133) The PDP is attempting to match a regional approach to natural hazards as described in Section 3.1.1, and so I agree with the submitter that language in the Porirua District Plan is appropriate as a guide. I have also considered the language in the Wellington District Plan, Kāpiti Coast District Plan, Regional Policy Statement, and NPS on Natural Hazards, although I think the Porirua language best fits the overall PDP approach. I am of the view that this can be best achieved through changes to the wording of the proposed objective. This includes the requirement for the risk to be reduced to an acceptable level, as this level of risk is not defined within the District Plan.
- (134) I accordingly recommend rewording as follows:

²⁶ NPS on Natural Hazards, Policy 6.

²⁷ NPS on Natural Hazards, Objective 1 and Policy 2.

~~The~~ Increased risk to people, communities, and property from natural hazards, and from the potential effects of climate change on natural hazards, as a result of subdivision, land use and development, is avoided or minimised ~~to acceptable levels~~.

5 Chapter provisions

5.1 Chapters summary

- (135) Natural hazards provisions are spread in the plan across the *Natural Hazards* and *Coastal Environment* chapters, as required by the National Planning standards. Both chapters have similar objectives, and a similar suite of general policies. Then, each chapter has policies and rules specific to each of the mapped hazard overlays.
- (136) Provisions relating to earthworks, infrastructure, and subdivision for natural hazards are also located in their eponymous chapters.
- (137) The exception to this approach is the Slope Assessment Overlay, which is implemented primarily through policies, and entirely through rules, in the subdivision and earthworks chapters.
- (138) In this section, I will attempt to group together or cross-reference submissions that sought similar relief for both the Natural Hazards chapter and Coastal Environment chapter. In some cases individual submission points are worded to apply to both chapters.

5.2 Discussion of submissions and recommendations

- (139) This section will discuss submission points on the text of the plan (as opposed to the maps) and overall general points. Due to the structural similarity of the Natural Hazards and Coastal Environment chapters, and that submitters have often made equivalent points on equivalent provisions, I will usually discuss each Natural Hazards chapter provision alongside its Coastal Environment chapter counterpart.
- (140) I will also discuss some minor errors and consequential changes not raised by submitters.

5.2.1 Provisions not in dispute

(141) The following provisions only have submissions in support, with no changes sought, and on which I do not think any further comment is necessary:

Objectives

- **NH-O5 (Natural Systems and Features)** – supported by Wellington Fish and Game Council (509.5), the Natural Hazards Commission (327.34, F15.20), and the Wellington Regional Council (452.78).

Policies

- **NH-P1 (Risk-Based Approach)** – supported by Christine Potaka-Kelly (84.2a, supported by Wellington Water F36.280), Rafael Gonzalez-Montero (175.2a)*, Allison Thwaite (250.2a)*, Mukesh Chandra (201.1a, opposed by Wellington Water F36.239)*, Lin Streefkerk (297.6)*, Vicki McCabe (38.2)*, the Fuel Companies (471.173), the New Zealand Transport Agency (385.49), the Natural Hazards Commission (327.35, F15.21), Fire and Emergency NZ (374.37), the Ministry of Education (399.34), the New Zealand Defence Force (404.13a), the Wellington Regional Council (452.79). Submitters marked with a * also supported the rules associated with the policy in general terms. I note this support, although I will discuss the rules individually due to more specific submission points raised on them.

Rules

- **NH-R4 (Construction of new buildings and structures and the conversion of existing buildings for activities least sensitive to natural hazards within all areas of the Fault Location Area)** – supported by the Wellington Regional Council (452.92, supported by NHC F15.34). Note a recommended change to the rule title from Hearing Stream 1.
- **NH-R6 (Construction of new buildings and structures and the conversion of existing buildings for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the well-defined or well defined extension)**

areas of the Fault Location Area) – supported by the Natural Hazards Commission (327.50) and Wellington Regional Council (452.94, supported by NHC F15.36). Note a recommended change to the rule title from Hearing Stream 1.

- **CE-R18 (Hard engineering coastal hazard mitigation works in all areas of the Coastal Hazard Overlay)** – supported by the Wellington Regional Council (452.171, supported by NHC F15.78).

(142) As these points are all thus beyond contention, they all should be accepted.

(143) Where other provisions in the chapter are not listed in this report, they did not receive provision-specific submissions.

5.2.2 General

General support

(144) Jaimie-Leigh Cann and Nathaniel Cann (266.2) and Woolworths New Zealand (271.17) support the Natural Hazards chapter and general approach.

(145) Te Rūnanga o Toa Rangatira (353.7e) expresses general support for the Coastal Environment chapter. In context this is likely primarily support for the now withdrawn sections of the chapter, but otherwise this support for the Coastal Environment chapter is noted, subject to any further evidence from the submitter.

(146) Subject to the more detailed points on provisions discussed throughout this report I recommend accepting these submission points.

(147) The Natural Hazards Commission (327.3, 327.4, 327.6, 327.7, 327.8, 327.9) seeks that:

- “Risks are mitigated to tolerable levels for the community and council”,
- “New developments do not create any new or further risks for neighbouring suburbs – now, or in the future.”
- “‘Status quo’ of risk and risk tolerance are acceptable where long-term decisions are being made. E.g., an existing community being

flood-, liquefaction-, or tsunami-prone is not justification for a new development having the same risks.”

- (148) I infer these points as partial support and partial opposition for the chapter. As the submitter also has more specific points on individual provisions I will discuss their relief at a provision level.
- (149) Andrea Ebbitt (98.2) seeks to “encourage council to ensure that the proposed rules strike a balance, recognising the unique characteristics of individual properties to enable reasonable use and development”.
- (150) I believe that the PDP’s natural hazard provisions (including my other recommendations in this report) do so, and so recommend accepting this relief in part to the extent it already does so (or is improved in doing so via my other recommendations).

Whether natural hazard provisions and overlays should be used at all

- (151) Rowan Swain and Kim Weber-Swain (317.4a, 317.5a, opposed by Wellington Water F36.120, F36.150), Grant and Kristin Gunn (369.1a, 369.3a, supported by the Trustees of the Gunn Family Trust F7.1 and F7.8, opposed by Wellington Water F36.121, F36.122), Andrew Robinson and Robyn Robinson (380.4a, 380.15a, F9.8, F9.17, supported by Kris Connell F3.8, F3.17, supported by H Mackenzie F28.1, opposed by Wellington Water F36.123, F36.124), and Sensible Solutions for Eastbourne (383.4a, 383.22a, opposed by NHC F15.88, F15.89 and Wellington Water F36.125, F36.126) seek that all of the natural hazard overlays be removed, and consider that the maps are inaccurate, untested, and do not match historical flood events.
- (152) Susan Locke (61.1, opposed by Wellington Water F36.293) seeks that the natural hazard overlay provisions are removed, considering they will increase costs and not benefit owners and residents.
- (153) Kate Harris (454.1) and Jon Harris (457.1, opposed by Wellington Water F36.348) seek that “proposed changes to reduce property rights including building and subdivision should be deleted” (refer to original submission).
- (154) Denise Anglesey (366.2, opposed by Wellington Water F36.288) seeks that the Natural Hazards chapter be removed considering it an unreasonable burden and based on “extreme” modelling assumptions. (I discuss the climate assumptions in general in section 3.2.1 and for specific hazards in section 6).

- (155) Lars Schmidt (480.2) seeks that implementation of the Tsunami Hazard Overlay be delayed by 5-10 years to allow for more investigation of the technical modelling.
- (156) The RMA²⁸ and NPS for Natural Hazards²⁹ require that the Council manage significant risks from natural hazards using the best available information, even if it is imperfect, and that it considers increases in risk due to climate change even where there is no historical record of natural hazard events in the past and current climate.
- (157) Accordingly, I do not recommend the complete removal of the natural hazard overlays.
- (158) These submissions do nonetheless provide the panel with significant scope to grant the relief *in part* by reducing the area or hazard tier of identified natural hazard risk areas. In this report, I will discuss whether this should be done in the context of the more specific submission points, reasons, and evidence given by submitters on the basis of the expert evidence mentioned in section 6. I thus recommend accepting these points only to the relatively minor extent that I recommend some reductions in the mapped hazard areas in section 6.
- (159) However, the submitters above are able to provide further evidence in support of a reduction in the hazard overlays for specific areas at the hearing.

Overall restrictiveness of approach

- (160) David Surrey (427.14, opposed by Wellington Water F36.351, 427.17), Kelvin Sanderson (95.5, 95.6), and Chris Moore (448.5, opposed by Wellington Water F36.344) seek in general terms to allow a greater scale of development as-of-right in flood and coastal hazard overlays.
- (161) In order to achieve the objectives of the chapter to various reduce, not increase, or reduce risk, I do think that substantial restrictions on development are necessary to limit the number of people and value of property affected.

²⁸ Resource Management Act 1991, s6(h) and s31(1)(b)(i).

²⁹ NPS for Natural Hazards, Objective 1 and Policies 2, 5 and 6.

Control of development and subdivision

- (162) Creative Insight (274.3, opposed by Wellington Water F36.355) seeks that instead of applying a "High Natural Hazard Area" classification in the plan, any potential flood hazard should be assessed in the event of future redevelopment.
- (163) Lynne Birch (493.1b) seeks likewise for the Slope Assessment Overlay to keep "the present RMA and District Plan policies and rules requiring property owners or developers to get specific geotechnical advice prior to applying for building or development consents".
- (164) In both cases these are the general approach of the plan, and built in to the RMA, which by its design controls changes in land use and new development and subdivision, and changes to plans do not place requirements on existing activities.
- (165) However, the plan can only require assessment of flood risk in a way with regulatory impact through rules, which need to be triggered by either general district-wide provisions (which I think would be inefficient) or based off a plan overlay, which needs to be identified in the maps. Accordingly, I recommend accepting this relief in part to the degree that the plan already provides for it.
- (166) Ron Beernink and Glenda McCallum (303.8) seek that the District Plan focus on "high-density development other [than] subdivision, e.g. infill housing, replacing or heightening existing houses" and consider the plan to focus too much on subdivision.
- (167) The PDP needs to include provisions that cover (or choose not to regulate) all possible land uses and subdivision applications, and thus must have policies and rules that can be applied to all possible applications (or have chosen for some reason not to have policies and rules). That does not mean that the plan necessarily encourages activities because it has provisions around those activities – indeed, often a policy will be needed to give a direction that the plan intends to avoid an activity or effect occurring.
- (168) Subdivision (which includes schemes such as unit title used in higher density development) in itself does not have environmental effects, but is controlled for practicality due to the flow-on effects of land use

associated with that subdivision. I thus think it is appropriate for the plan (subject to my other recommendations) to retain policies relating to the management of subdivision for natural hazards reasons.

Reverting to approach in Operative District Plan

- (169) Kate Harris (454.5) and Jon Harris (457.5), opposed by Wellington Water (F36.347, F36.349) seek, in effect, to keep the Operative District Plan approach to natural hazards.
- (170) The rationale for the PDP being an improvement over the Operative District Plan approach and mapping is set out in the Section 32 report. Particular issues where I think the PDP is vital are:
- Ensuring consistent hazard rules across zones
 - Using updated modelling and modelling in areas where modelling had not been completed at the time the ODP maps were last updated
 - Improving regional consistency
- (171) Accordingly, subject to the other recommendations in this report, I recommend the PDP approach be retained.

Artificial and natural hazards

- (172) Mark Struthers (15.1) seeks that “man-made environmental risks” be separated from natural hazards in the map overlays, and considers that doing so would encourage owners of assets that contribute to natural hazard risk to improve those assets.
- (173) Natural hazard risks are, in general, a combination of natural processes interacting with human activities, and so I do not think making a distinction of this nature would be achievable. While it may be desirable to encourage the owners of existing assets to improve them to reduce risk, this is already encompassed to the limited degree possible for a district plan e.g. by NH-P3 (Natural systems and features) and NH-P4 (Natural hazard mitigation).
- (174) I accordingly recommend rejecting this point.

Interaction with zone provisions

- (175) Teh Meh Hing (9.4, 9.5) seeks that the plan include material clarifying the interaction of the Slope Assessment Overlay with the Medium Density Residential Zone.
- (176) I believe the chapters under the *How The Plan Works* heading adequately set out this interaction (i.e. that the provisions in both the zone chapter and Earthworks and Natural Hazards chapters apply) and so recommend accepting this point to the extent that the plan already provides for it.
- (177) Craig Davis (112.3) seeks clarification around how the Tsunami and Coastal Hazard overlays interact with zones.
- (178) I believe the chapters under the *How The Plan Works* heading adequately set out this interaction (i.e. that the provisions in both the zone chapter and Coastal Environment chapters apply) and so recommend accepting this point to the extent that the plan already provides for it.

Application to infrastructure

- (179) Transpower New Zealand (504.89b) seeks that, should the Natural Hazards chapter apply to the National Grid, then the Natural Hazard policies and rules be amended to recognise "the broader technical and operational constraints associated with infrastructure within natural hazard areas, and clarify that it is not the requirement of infrastructure to reduce the risk to others, rather that the infrastructure does not in itself cause or increase the risk".
- (180) In the PDP as notified, rules relating to the National Grid sit within the Infrastructure chapter, a structure which I do not think is in contention in this hearing. While policies do technically apply, the wording of policies is either very generic and not specific to activity types, or policies that support specific rules that do not apply to infrastructure. Accordingly, I do not think the condition that this relief is conditional on (being "should the Natural Hazards chapter apply to the National Grid") is met, and so no recommendation or action is necessary unless the panel is of a mind to accept some other relief in the Infrastructure topic that would affect this, which can be discussed in the relevant hearing (Stream #6).

Application to non-habitable or minor buildings and structures

- (181) The Fuel Companies (471.57, 471.178, 471.181) raise in general and for some specific provisions the issue of the application of rules to “non-habitable buildings or structures” which would not typically produce risks to life, only minor risks to property, and incur substantial compliance costs if they triggered consents. I generally think it is appropriate to limit the application of rules to buildings (rather than structures that are not buildings) and only require conditions such as minimum floor levels for habitable spaces.
- (182) There are some limits with scope to cleanly fixing this issue for all natural hazard rules, and so I recommend fixing this issue through a combination of changes to specific rules where scope exists and the definition of *activities least sensitive to natural hazards*, discussed in section 7.

Application of provisions to small, isolated high hazard areas

- (183) Summerset Group Holdings (326.26a, opposed by Kāinga Ora F26.52) seeks in general terms a consenting pathway for areas where small isolated pockets of High Flood Hazard are located interspersed among larger areas of Low and Medium Flood Hazard.
- (184) The proposed chapter does not have prohibited activities, and so any such activity would have a consenting pathway of some kind.
- (185) The submitter considers that the rules are generally disproportionate for this type of situation.
- (186) The modelling approach for each hazard has included some filtering to account for small isolated pockets, although the details of this vary by hazard. Where small pockets nonetheless remain, I think it is entirely possible that the high hazard is genuine and concentrated in that place, and not an artefact. Submission points seeking specific changes to modelling on this basis are discussed in section 6. If there are local specific reasons to reconsider that modelling after the plan becomes operative, that can be considered in the resource consent process.
- (187) I accordingly recommend rejecting this submission point.

Operation and maintenance of stormwater assets

- (188) Vicki McCabe (38.3), Christine Potaka-Kelly (84.3), Rafael Gonzalez-Montero (175.3a), Lin Streefkerk (297.3, 297.9, opposed by Wellington Water F36.306), Mukesh Chandra (201.1c, 201.3a, opposed by Wellington Water F36.303, F36.304), and Alison Thwaite (250.1c, 250.3a, opposed by Wellington Water F36.300, F36.305) seek that “there is a schedule for regular maintenance stormwater assets, including culverts and streams, along Manor Park golf course” (or similar relief in other terms).
- (189) Peter Borley (145.1b) seeks that more regular proactive maintenance be carried out on the stormwater network.
- (190) The District Plan cannot control how existing assets, or assets that already have resource consents or designations, are operated and maintained. This is an operational question for the Wellington Regional Council and Tiaki Wai as operators of the relevant assets, and to the extent the submissions relate to existing infrastructure are not in scope of this process.
- (191) However, new assets could potentially be subject to conditions on a resource consent or designation covering maintenance or operational requirements. This would need to be addressed in the resource consent or designation process as a plan cannot directly dictate these conditions.
- (192) It is possible for objective, policies, matters of discretion, and rule conditions to indirectly influence whether, for example, an ongoing management plan would be a condition of consent. However, for this situation, in my view this is best left to the judgement of the consent decision-maker as it is likely to be highly detail, context, and proposal-specific.

Use of floor levels

- (193) David Surrey (427.12, opposed by Wellington Water F36.350) seeks that provision is made in the policies and rules for the floor levels to not be met in the flood hazard overlay, providing flood resistant design is used, and suggests this could be as a restricted discretionary activity, with appropriate policy support.
- (194) I believe the approach as notified in NH-P9, NH-R8, and NH-R12 already implements this approach and so recommend accepting this relief to the

extent that the plan already provides for it, subject to by other recommendations on those provisions.

Application to low and medium hazard overlays

- (195) Rowan Swain and Kim Weber-Swain (317.4d, opposed by Wellington Water F36.336), Grant Gunn and Kristin Gunn (369.1d, 369.3c, supported by the Trustees of the Gunn Family Trust F7.4 and F7.10, opposed by Wellington Water F36.337, F36.338), Andrew Robinson and Robyn Robinson (380.4d, 380.15c, F9.11, F9.19, supported by Kris Connell F3.11 and F3.19, opposed by Wellington Water F36.339, F36.340), and Sensible Solutions for Eastbourne (383.4d, 383.22c, opposed by NHC F15.91, F15.92 and Wellington Water F36.341, F36.342) seek that the natural hazard rules apply only to high hazard areas and not low or medium hazard areas.
- (196) As I discuss in section 3.1.2, covering low and medium hazard areas allows for development to be controlled in less restrictive way, encouraging hazard to be mitigated or development to be limited, while not facing the as many of the economic and social costs associated with the stricter approach in the high hazard areas. It is also consistent with the approach directed by the RPS and NPS for Natural Hazards approach. On this basis, I recommend retaining policies and rules for low and medium hazard areas (subject to my other recommendations in this report).

Operational and functional need

- (197) The Adrian Palmer Family Trust (315.18, opposed by Wellington Water F36.299) in relation to a number of provisions seeks that the tests for operational or functional needs for activities in the High Hazard Overlays be removed.
- (198) It is not appropriate for this change to be made. The provisions that apply to the High Hazard Area are intentionally restrictive, largely to prevent new development from occurring in these areas. However, it is recognised that some activities may need to occur in a High Hazard Area for operational or functional reasons. As such, it is appropriate that a pathway is provided for these activities. If this pathway is not provided, then there is the potential for there to be undue regulatory burden for these activities that do have an operational or functional need to be located in the High

Hazard Areas. On this basis, I do not support the relief that is being sought by this submitter.

5.2.3 Not in scope of this process

General concerns and requests for information

- (199) Andrea Ebbitt (98.1) seeks further details on how the proposed objectives, policies and rules will affect properties in high hazard areas, specifically on property rights, potential development restrictions, and implications for insurance coverage.
- (200) This is not a request that can be implemented through decisions on the content of the plan, but hopefully this report itself can provide some of those details. More generally, I expect that once the Council makes decisions on the PDP and the provisions take effect, it will communicate the impacts and implications of the District Plan's natural hazards approaches proactively and in response to queries.
- (201) Mark Gunkel and Evangeline Gunkel (7.7) seeks that in future natural hazard assessments are conducted on a rolling basis or at defined shorter intervals (e.g. every ten years).
- (202) The Act already requires review of provisions that have been operative for ten years. The district plan itself cannot contain provisions that affect the Council's decisions around reviewing the district plan.
- (203) Mark Gunkel and Evangeline Gunkel (7.4) and Teh Meh Hing (9.2a) request Council conduct and release economic assessments of the effects of hazard classifications on property owners.
- (204) I do not think this information would help the Council make its decisions on the Proposed District Plan and if Council were to produce this information for any other reason it would be an operational question.
- (205) Mark Gunkel and Evangeline Gunkel (7.2, opposed by Wellington Water F36.137) seeks that assessment criteria and margins of error applied when determining flood risk is published, and that owners can challenge assessments through independent assessments.
- (206) Information on the flood modelling that has informed the PDP is available on Council's website. While this may not specifically detail criteria and

margins of error in the way that the submitter is after, it outlines what is considered in the modelling. In addition, property owners are able to 'challenge' the areas identified in the flood hazard overlays, either through a submission on the PDP (or future plan change) or as part of a resource consent process.

- (207) Patsy Jorgensen (208.15) has a submission point coded in the summary of submissions summarised as "no relief requested" with concerns around the evidence base for identifying natural hazards and impacts on property insurance and property values. This may have been an error in the summary of submissions. For the avoidance of doubt I consider that this submission point is discussed in general in sections 3.1.6 and 3.2, and that the relief sought in the submission is summarised in the other coded submission points, and those relevant to natural hazards are addressed in this report.

Property purchases and financial support

- (208) The Gilbert Trust seeks that:
- properties in High Natural Hazard Overlays be purchased from their owners by Council or central government (172.1),
 - that financial assistance be provided to owners of properties in High Natural Hazard Overlays (171.2),
 - that rates be reduced by 50% on properties in High Natural Hazard Overlays (172.3), and
 - that Council construct natural hazard mitigation works to reduce the risk of flooding (172.4).
- (209) These requests are made both in general and specifically for the area around Bryant Grove, Taitā.
- (210) Teh Meh Hing (9.2b, 9.3a, 9.9) seeks other forms of financial support for owners of property affected by natural hazards.
- (211) These are options available to Council and central government but cannot be directed by a district plan. In the case of the Council, this is a decision it would need to take through its Long Term Plan, probably in response to a broader natural hazard adaptation strategy, and cannot be advanced through the District Plan hearings process.

Land information memoranda

- (212) Jo-Ella Sarich (91.3) seeks that slope risk mapping is not put on Land Information Memoranda (LIMs) on the grounds of the effect this would have on property values.
- (213) Elizabeth Mary Nightingale (434.1) seeks that the Slope Assessment Overlay is not included on LIMs unless there has been a specific issue on that property.
- (214) Producing Land Information Memoranda is a statutory, non-discretionary function of Council under the Local Government Official Information and Meetings Act 1987 and Council is obliged to provide the information it holds. There is no ability for Council to avoid this duty through a change to its District Plan, and even if Council were to remove hazard information from the District Plan, it would still hold that information and be required to put it, if relevant, on a land information memorandum.

Building consents

- (215) Rowan Swain and Kim Weber-Swain (317.5b), Grant and Kristin Gunn (369.2b, supported by the Trustees of the Gunn Family Trust F7.6), Andrew Robinson and Robyn Robinson (380.5b, F9.13, supported by Kris Connell F3.13), and Sensible Solutions for Eastbourne (383.5b) seek that “the building consent processes consider the type of construction for new standalone structures where the existing construction meets the new hazard rules”.
- (216) Peter Borley (145.2) seeks that “consents for all new dwelling works” upstream of LOT 40 DP 12752 (in Wainuiomata) be put on hold.
- (217) Building consents are processed by Council under the Building Act 2004 using criteria set out in regulations. While natural hazard information held by Council can be relevant to processing these consents even if that information was originally developed for the District Plan, the District Plan itself cannot affect how building consents are processed.

Mitigation works and operational issues

- (218) Ian and Raylene Caddis (433.3) seeks that Council undertake various improvements to the stormwater network.

- (219) This is an operational decision for Council and/or Tiaki Wai, which would need to be budgeted in the Long Term Plan, and cannot be directed by a district plan.
- (220) Rafael Gonzalez-Montero (175.1e), Mukesh Chandra (201.1e), Allison Thwaite (250.1e), and Lin Streefkerk (297.5) seek that the Wellington Regional Council provide information about its plans to improve flood protection measures in Manor Park.
- (221) This cannot be directed in a district plan, although as the Wellington Regional Council is also a submitter in this process (452) I invite it to comment if possible.
- (222) Dieter Engel (475.7) seeks "that HCC provide a plan of how the overall rainfall will be managed in the light of the future increases of rainfall".
- (223) Increased rainfall is accounted for in the PDP modelling of Flood Hazard Overlays. Otherwise, this is not relief that can be advanced through a district plan.

Wellington Water information

- (224) Damon Smith (27.2) seeks that changes be made to non-district plan information held by Wellington Water. This cannot be directed through a district plan.

Statement about valuation and insurance

- (225) Lyn Bromley and Keith Bromley (211.2) and Neil Blackie (33.2) seek that "there should be specific instruction in the District Plan wording that the Slope Assessment Overlay is not provided for the purpose of property valuations or setting or reviewing of insurance premiums" or similar wording.
- (226) The District Plan is a document freely available to the public and the Council cannot set conditions on how information in the plan is used for purposes outside the RMA.

Artesian well harvesting

- (227) Dieter Engel (475.5) seeks "that a geological assessment is undertaken about the mechanics of artesian well harvesting and the speed of replenishment, to identify limits of this process and potential risks".

- (228) This is a regional council function, not a city council function, and cannot be advanced through a district plan.

Resource consent processes, incentives, etc

- (229) Mark Gunkel and Evangeline Gunkel (7.5) seek a streamlined resource consent processes for low-risk cases, and also seek a guide outlining when consent is required.
- (230) These are operational questions for Council's management of the resource consent process and cannot be directed by a district plan.
- (231) Jacob McInteer (108.3, opposed by Wellington Water F36.290) seeks that "the district plan should allow for an additional classification of properties which demonstrates whether the property has built protections that may alter the underlying land risk as it relates to the buildings and people on the site", similar to NBS adherence for earthquake resilience under the building code, or alternatively "provide other incentives for encouraging investment in climate resilience such as waiving resource consent fees or temporary rate reductions to offset the cost."
- (232) Providing non-regulatory information about property is a council function implemented through issuing Land Information Memoranda, and also in a non-statutory way through Council's online GIS maps and property file tools. However, it cannot be directed by a district plan.
- (233) Providing incentives such as waived resource consent fees or rates reductions are an operational function of Council that would need to be budgeted in the Long Term Plan.

Consultation, communication, and process

- (234) Michael Kerslake (501.1) seeks "that Council agree to meet its obligations under the RMA and the Local Government Act 2002, and:
- recognise and make a formal decision to acknowledge obligations under the two Acts, and their accountability to deliver on this responsibility,
 - agree to pro-actively advise Eastbourne rate payers and property owners of possible mitigation strategies to reduce the risk of hazards occurring, and

- decide to include existing engineering solutions already proved to be successful in mitigating coastal hazards in Eastbourne, thereby reducing hazard risk classifications to a lower setting."
- (235) These are operational, procedural, and communications issues, not things controlled by a district plan.
- (236) Patricia Cleland (367.2, opposed by Wellington Water F36.352) seeks to "interrogate scope of overlays, including slopes, foreshore and hazard areas, for justification, transparency and evidence."
- (237) The evidence supporting the PDP approach is set out in this report and its appendices and the Section 32 report and supporting technical reports.

5.2.4 Invalid and unclear relief

Location of chapters

- (238) Laura Skilton (314.1) and Christine Loweth (267.1) seek that the Coastal Environment chapter appears directly under the top-level *Part 2: District Wide* header rather than under the *General District-Wide Matters* heading, considering that its location is hard to find.
- (239) While I agree with the submitters about the confusion caused by some of the natural hazards provisions sitting in the *Coastal Environment* chapter, this layout is dictated by the National Planning Standards and cannot be altered³⁰. Were it not for the National Planning Standards, I would recommend that all of the natural and coastal hazard provisions be located in one chapter.

5.2.5 Use of overlays

Contextual and historical information

- (240) Andrea Ebbitt (98.3, opposed by Wellington Water F36.119) seeks that the plan maps include layers showing "historical natural hazard data and

³⁰ National Planning Standards, std. 7.23.b requires that coastal hazards be in the Coastal Environment chapter and std. 4.3 and Table 4 require that that chapter be under the *General District-Wide Matters* heading.

case studies” and considers this would aid property owners in understanding and preparing for risks.

- (241) The use of comparisons to historic flood events in particular has been important in Council’s engagement on natural hazard risks in the PDP process. However, this material, as it would not trigger provisions in the plan, is better presented outside the District Plan where it is easier to maintain and add material to.

Whether overlapping natural hazard overlays in Petone should be combined in a precinct

- (242) The Natural Hazards Commission (327.20, 327.21, 327.14, 327.15, 327.16, 327.17, 327.107, neutral further submission from Wellington Water F36.335) seeks that various provisions relating to natural and particularly coastal hazards in Petone be combined into a single precinct³¹ designed to manage an area at risk of multiple hazards.
- (243) While a potentially interesting idea, the submitter has not provided the detailed specific provisions to implement such a precinct in their submission. I think thoughtfully and practically implementing such an approach would require substantial further technical work and broader consultation.
- (244) The District Plan has provisions that apply to each natural hazard and coastal hazard overlay. While these do not cumulatively consider each overlay, the rule provisions require consideration of each hazard. This means that if there are multiple hazards on a site and a development triggered the relevant natural or coastal hazard rules, then the development would be required to be designed to address the resulting natural hazard risks. As such, it is considered that there is no significant regulatory gap by not having a natural hazard precinct within the Petone area.
- (245) Finally, the introduction at this stage of such provisions would be so great a departure from the notified plan that it would raise natural justice issues

³¹ The submission uses the term “precinct”, which has a specific meaning in the National Planning Standards which cannot be applied to this situation, and so if this relief were to be implemented, a different name would need to be used, probably “overlay”. For consistency with the submission, and as I am not recommending accepting the relief, I will use their language of “precinct” here.

for owners and occupants of sites in the proposed precinct. Accordingly, this may be an idea better suited to a future plan change.

(246) I therefore recommend that these submission points are not accepted.

Site-specific provisions for 30 Benmore Crescent

(247) Te Kārearea Ltd and Rosco Ice Cream Ltd (447.6.1b, opposed by the MPHRCIS F10.12 and supported by Waste Management F39.14) seeks in general terms site-specific faultline provisions for 30 Benmore Crescent, Manor Park.

(248) In my view the standard provisions for the Fault Location Area (including my recommended amendments) are suitable for managing urban, rural, and greenfield areas for all types of land use regardless of the outcomes of the submitter's other relief around rezoning of the site, and no site-specific fault hazard provisions are necessary. I recommend accepting this relief only to the extent that the Fault Location Area already provides spatially specific provisions.

5.2.6 Structure of hazard layer-specific policies and rules

Organisation of policies

(249) David Surrey (427.20a, 427.20b, 427.16) seeks in general terms and for some specific provisions to reconfigure the policies and rules for readability, suggesting that they be reorganised by activity types (e.g. *activities least sensitive to natural hazards, activities potentially sensitive to natural hazards, and activities most sensitive to natural hazards*) and also the overlay (hazard type and severity level).

(250) Laura Skilton (314.14a) seeks specifically that NH-P8 be separated into separate policies for the Low, Medium, and High flood overlays.

(251) Many of the policies and rules are highly complex due to taking different approaches that depend on the specific activity and overlay. I agree plan usability would be enhanced by separating these, and so recommend reorganising the policies in the fashion sought by those submitters. However, as there are other submission points on these policies, I will discuss those first in the structure of the plan as proposed, then make an

overall recommendation for restructuring including my recommendations on those individual policies. This is shown in Appendix A1.

- (252) Laura Skilton (314.13, 314.20b) also seeks generally that the sets of rules include a table setting out which rule is applicable for each interaction of risk classification (high, medium, low) and activity sensitivity (activities least sensitive, potentially sensitive, or most sensitive to natural hazards).
- (253) This issue will I think be largely fixed with the reorganisation I am proposing to the rules, so I recommend this relief be accepted in part to the extent that this reorganisation will provide the same general outcome.
- (254) My overall recommended restructure is summarised in Appendix A4 and shown in detail in Appendix A1.
- (255) Due to the requirement of the National Planning Standards that rules within a section be ordered by activity status³², some reordering of rules will be required. This is not completely shown in Appendix A1, as fully implementing this renders the appendix more difficult to follow for substantive changes to provisions. I recommend use of sections and subsections to keep provisions for particular overlays and activities together, ordering first by overlay and then by activity, which means interleaving the additions and new buildings rules. This can be implemented once substantive decisions on the chapters are made by the panel.

5.2.7 Other natural hazards not in proposed plan

Ground shaking

- (256) Dieter Engel (475.2, inferred) seeks that the plan include rules for taller buildings, particularly in the High Density Residential Zone, to ensure that they withstand earthquakes.
- (257) This is an issue addressed in considerable detail in the building consent process and I do not think duplicating that in the District Plan would provide any value. I accordingly recommend rejecting this point.

³² Standard 10.3

5.2.8 Chapter Introduction – both chapters

Application to infrastructure

- (258) Transpower New Zealand (504.61) seeks that a statement be added to the Coastal Hazards introduction:

Other than for the Policies – Coastal Hazards, General Policies, provisions relevant to infrastructure within the coastal environment are contained within the Infrastructure Chapter.

- (259) Or alternatively seeks in general terms that “there is appropriate recognition of the National Grid within the [Coastal Environment] chapter”.

- (260) Transpower (504.89a) seeks a similar statement for the Natural Hazards chapter:

Other than for Green infrastructure and flood mitigation works, and Hard engineering coastal hazard mitigation works, provisions relevant to infrastructure within hazard areas are contained within the Infrastructure Chapter.

- (261) The Telecommunication Companies (311.80, supported by Wellington Water F36.286) likewise seek in general terms a statement in the introductions stating that the chapter does not apply to infrastructure.

- (262) The General Approach and Relationships Between Spatial Layers chapters under the *How The Plan Works* heading in Part 1 set out in detail how the plan works structurally, including when provisions relating to infrastructure apply. This is also set out in the Infrastructure chapter.

- (263) It would lengthen the plan, creating a burden for other plan users, to repeat this material in each zone and district-wide chapter heading, as if this relief were to be adopted, for the sake of consistency, it would also need to:

- Mention that provisions relevant to renewable electricity generation, and in some cases temporary activities and papakāinga, are likewise included in their own chapters, and

- Have a similar statement in all of the other chapter introductions where provisions do not necessarily apply to infrastructure, which would include every zone, and most district-wide chapters.

- (264) One significant problem with the structure of the ODP that was identified in the District Plan Review is the overuse of cross-references, especially references ambiguously intended to alter the effect of rules. This creates an interpretation challenge where this language is inconsistent between chapters, or rules appear to be worded in a way that trigger additional rules.
- (265) I thus think it is more effective for these type of statements to remain where they are as notified, in the General Approach and Infrastructure chapters and so recommend rejecting this relief.

Descriptions of hazards

- (266) Argosy Property (237.5, supported by the Fuel Companies F32.2) and Oyster Management (272.5, 272.6) seek in general terms that the mapped hazards be described in more detail in either the introduction or Definitions chapter. I agree and consider the introduction the better location. I recommend some expansion of the description shown in Appendix A1.
- (267) The Policy Planning Team (440.29) seek for the Flood Hazard Overlay that the terms “stream corridor”, “overland flowpath”, and “inundation area” (which applied to the draft district plan) be replaced by descriptions of the High, Medium, and Low Flood Hazard Overlay velocities and depths. Go Architecture (331.7, supported by Wellington Water F36.287) seek similar relief in more general terms. I agree this correction should be made and show this in Appendix A1.
- (268) The Natural Hazards Commission (327.90) seek that the tables consistently use an annual exceedance probability, 1:X year description, or have both, rather than using some for one hazard and others for other hazards. I agree this aids plan usability, and recommend how this should be done in Appendix A1.

5.2.9 Chapter Introduction – Natural Hazards

General support

- (269) The Fuel Companies (471.169) support the Natural Hazards chapter introduction as notified.

Wildfire

- (270) The Natural Hazards Commission (327.28) seeks that the introduction be amended to “clarify” that wildfire is not currently managed through other statutory instruments or processes.
- (271) I do not agree with this view, and consider that the Council does have a role in managing wildfire, for example by providing firebreaks on council reserve land, a function it exercises under the Local Government Act 2002, one of the listed instruments, and under the Reserves Act 1977³³.
- (272) I accordingly recommend rejecting this point.

References to Local Government Act

- (273) The Policy Planning Team (440.30) seek that the text “Local Government Act 1974 and 2002” be expanded to “Local Government Act 1974 and Local Government Act 2002” due to limitation of the e-plan software restricting how these terms can hyperlink to the underlying legislation on *legislation.govt.nz*. I agree for the reasons given in the submission and recommend accepting this point.

Natural Hazard Overlay table

- (274) Wellington Water (422.15) supports the description of the Flood Hazard Overlay calculations as notified.
- (275) The Natural Hazards Commission (327.29) seeks to reclassify either some or all of the Liquefaction Hazard Overlay as Medium, rather than Low.
- (276) The submitter generally supports the overall policy approach for liquefaction, which I think is more comparable to the other Low hazards for

³³ See the Hutt City Council Bush Reserves Management Plan 2002, https://hccpublicdocs.azurewebsites.net/api/download/3379bf11af2a47feac71dd620eb57e67/_CM9-WE/3a250858132598d490787009155abfdcefc, pp11-12.

flooding and tsunami, so I think retaining it as Low is more useful for plan users, and recommend rejecting this submission point.

- (277) Jarred Gustafson and Paula Gentle (6.1) seek that the Slope Assessment Overlay be removed from the table of hazards in the introduction. This is part of a broader relief sought in the submission to remove the Slope Assessment Overlay, but the submitter's concerns relevant to the specific issue of the introduction include the communications issues arising from "considering properties within the overlay as higher risk, despite the absence of site-specific evidence".
- (278) While I do not agree with the submitter's more general relief around removing the overlay (as discussed in section 6), I agree that classifying the overlay as a natural hazard overlay alongside the others using the low/medium/high system is misleading, as the overlay is solely a trigger for assessment and does not attempt to assess either the annual probability or severity of a hazard event. For the other listed hazards this is either a core part of the description of the layer (tsunami, coastal inundation, flooding) or is used in the methodology of and can be inferred from the supporting technical reports (fault rupture, liquefaction).
- (279) I thus agree that the Slope Assessment Overlay should be removed from the table and recommend it being described as not falling within the low/medium/high system. This is shown in Appendix A1.
- (280) Wellington Water (422.14) seeks that where the 1% AEP flood is referenced that it refer to including "climate change" rather than just "sea level rise" to reflect that sea level rise is not the only climate change impact that alters the modelling – increased rainfall is also an important input. I agree that this would be more accurate and recommend making this change as shown in Appendix A1.

Groups of activities

- (281) Laura Skilton (314.11) seeks to amend the last paragraph of the introduction as follows:

...

Different activities by their nature present different consequences to natural hazards. For the provisions in this chapter, activities are classified as:

- *Activities most sensitive to natural hazards, such as residential*
 - *Activities potentially sensitive to natural hazards, such as commercial and industrial, and*
 - *Activities least sensitive to natural hazards, such as recreation facilities.*
- For a full list of activities in each category, refer to the definitions.*

- (282) The submitter's concerns are around plan usability for people using printed or PDF versions of the plan as plan users need to read the definitions to know what activities are covered.
- (283) The PDP is designed to be used primarily as an e-plan, which addresses the issue of definitions by providing for clickable, popup definitions. As with any National Planning Standards-compliant plan to a degree, and plans in the general format used by the Council and shared with Wellington, Porirua, etc., in particular, plan users will need to cross reference material in multiple sections to make use of the plan. Even for users of a printed plan, the introduction could be ten or more pages away from the provision they are actually using. Plan usability for both e-plan and print users is enhanced by avoiding any unnecessary or repeated material. For the e-plan, repetition can have value if it allows for provision-level filtering, which is why I recommend some repetition be added in order to break up the policies and rules into versions specific to the activities and overlays covered, as discussed in section X. Otherwise, I think plan usability is best advanced by avoiding unnecessary explanations of material that can simply be linked and cross-referenced instead, and so recommend rejecting this relief.

References to risk

- (284) The Natural Hazards Commission (327.27, supported by Wellington Water F36.285) seeks to, under the heading "Natural Hazard Overlays", amend
- ... Each of these natural hazards is assigned a Hazard Ranking, based on the future risk associated with the hazard and likely development. ...*

- (285) The submitter considers that "With the likely impacts from climate change well understood, we recommend clarifying whether this ranking is based on current or future risks. If based on current risk, then any required risk assessments need to include future development and climate change scenarios."
- (286) The introduction is describing the natural hazard overlays that are proposed in the plan, not setting policy for how natural hazard overlays should be identified in future. The amendments proposed would be inaccurate – the risk assessed is the current risk, with in some cases an allowance for climate change, but none of the mapped overlays account for any future development that might either exacerbate or mitigate risks. For some overlays, particularly the Flood Hazard Overlays, they depend in quite a detailed way on the layout of existing buildings and the stormwater network. Accordingly, I recommend rejecting this relief.
- (287) The Wellington Regional Council (452.73, supported by NHC F15.15) seeks to add a bullet point to the list under the heading Natural Hazard Risk as follows:

... priority has been given in this plan as follows to:

- The protection of people from loss of life and injury,*
- Reducing damage to buildings from natural hazard events, and*
- The protection of essential infrastructure to ensure the health, safety and resilience of communities.*
- Building long-term resilience to the impacts from natural hazards and effects of climate change.*

- (288) While a worthy ambition, I think the existing three bullet points already cover what the PDP does or is capable of doing, and recommend rejecting this relief.

5.2.10 Chapter Introduction – Coastal Environment

General

- (289) Argosy Property (237.19) and Oyster Management (272.24) support the introduction as notified.

New Zealand Coastal Policy Statement

- (290) Forest and Bird (424.78) seeks in general terms that the chapter introduction clarify how the NZCPS is given effect to, with particular reference to Policy 11 (Indigenous biological diversity (Biodiversity)).
- (291) With regards to coastal hazards, I consider that the introduction adequately describes the policy approach, which gives effect to the NZCPS directions around coastal hazards. Specific reference to the NZCPS is unlikely to assist plan users and better sits in supporting documents such as the section 32 report.
- (292) With regards to issues for the coastal environment other than coastal hazards, the relevant provisions have been withdrawn, and this aspect of the submission point does not fall within the Plan Stop exemption.

Issues not raised by submitters

- (293) The Council's partial withdrawal of the Coastal Environment chapter and the mapped Coastal Environment layer is discussed in the Section 42A Report for Hearing Stream 1³⁴. This withdrawal did not include any withdrawal of the introduction to the chapter, which describes the mapping approach.
- (294) As the chapter now only contains provisions about natural hazards and the introduction is inaccurate in relation to coastal environment provisions in the ODP, I recommend deleting the additional material that does not relate to natural hazards as a consequential change of minor effect under Schedule 1 clause 16 of the Act. These deletions are shown in detail in Appendix A1.

³⁴ Section 42A Report, Opening Hearing, para 49.

5.2.11 Objectives – Natural Hazards and Coastal Environment

NH-O1 (Risk from Natural Hazards in High Natural Hazard Overlays)

This is the counterpart objective to CE-O3

- (295) Argosy Property (237.6), Oyster Management (272.7), the Fuel Companies (471.170), the Ministry of Education (399.32), the New Zealand Transport Agency (385.48), and the Natural Hazards Commission (327.30) support the objective as notified.
- (296) Rafael Gonzalez-Montero (175.1a, opposed by Wellington Water F36.295), Allison Thwaite (250.1b, opposed by Wellington Water F36.296), Vicki McCabe (38.1), Christine Potaka-Kelly (84.1), Mukesh Chandra (201.1b, opposed by Wellington Water F36.297), and Lin Streefkerk (297.1) support the objective conditional on relief around the mapping, which they all have direct submission points on, and I discuss in section 6. Otherwise, this support is noted.
- (297) Michael Rachlin (232.6, opposed by Wellington Water F36.294) seeks to delete the objective or amend it to require the “avoidance of inappropriate activities in high hazard overlays”, and considers that “reduce or avoid increasing the existing risk” is a lower bar than the test of “minimise” in NH-O2.
- (298) I agree with the principle that as a proportionate approach, NH-O1 should set a higher bar for the high hazard areas than NH-O2 does for medium and low hazard areas. However, I believe the language does so. “Reduce or avoid increasing” sets a clear direction that the risk cannot be greater than the existing level. “Minimise” allows for an increase in risk, as long as that increase is limited to the minimum necessary.
- (299) The Policy Planning Team (440.31) note a minor error that grammatically “reduce or avoid” should be “reduces or avoids”, which I agree should be corrected.
- (300) The Wellington Regional Council (452.74), supported by the Natural Hazards Commission (F15.16), seeks “reduce or avoid increasing the

existing risk” be altered to just “avoid increasing the existing risk”, giving the reason that “[i]n high hazard areas increases in existing risk should be avoided, as even reducing an increase in existing risk would still produce significant risk”.

(301) I do not think that the reason given supports the relief requested. The policy as written requires that the existing risk be reduced or increases to it be avoided, which appears to be compatible with the thrust of the submission. The submitter may want to expand on their reasons for seeking this relief.

(302) Accordingly, I recommend the objective be altered as follows:

Subdivision, use and development within the High Natural Hazard Overlays reduces or avoids increasing the existing risk from natural hazards to people, buildings and infrastructure.

NH-O2 (Risk from Natural Hazards in Low Natural Hazard Overlays and Medium Natural Hazard Overlays)

This is the counterpart objective to CE-O4

(303) Horokiwi Quarries (246.8), the Fuel Companies (471.171), the Ministry of Education (399.33), the New Zealand Transport Agency (385.48), and the Wellington Regional Council (452.75, supported *in part* by NHC F15.17) support the objective as notified.

(304) Michael Rachlin (232.7, opposed by Wellington Water F36.298) seeks to delete the objective or amend it to require activities in these areas to mitigate risk to an acceptable level based on the level of risk.

(305) I do not agree with this submission point. It would reduce the directive nature of the objective around the outcomes that are sought as the District Plan does not define what is an acceptable level of risk.

(306) The Natural Hazards Commission (327.31, F15.17, opposed by Michael Rachlin F4.2) seeks that the objective be modified as follows:

Subdivision, use and development within the Low Natural Hazard Overlays and Medium Natural Hazard Overlays

minimise the risk from natural hazards to people, buildings and infrastructure to as low as reasonably practicable.

- (307) I also discuss this issue in the context of the submitter's request to add a definition of "minimise" (see section 7.1.3).
- (308) I think this statement would confuse rather than assist the interpretation of the policy – the term "minimise" is well enough understood without being restated more verbosely.
- (309) The Policy Planning Team (440.32) note a minor error that grammatically "minimise" should be "minimises", which I agree should be corrected.
- (310) Accordingly, I recommend the objective be altered as follows:

Subdivision, use and development within the Low Natural Hazard Overlays and Medium Natural Hazard Overlays minimise^s the risk from natural hazards to people, buildings and infrastructure.

NH-O3 (Subdivision, Use and Development in the General Industrial Zone and Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone and the Seaview Marina Zone and within the Medium Flood Hazard Overlay or High Flood Hazard Overlay)

This is the counterpart objective to CE-O5

- (311) Argosy Property (237.7), Oyster Management (272.8), the Fuel Companies (471.172), the New Zealand Transport Agency (385.48), and the Wellington Regional Council (452.76, supported *in part* by NHC F15.18) support the objective as notified.
- (312) The Natural Hazards Commission (327.32, F15.18) seeks to amend the objective as follows:

Provide for subdivision, use and development in the General Industrial Zone and Heavy Industrial Zone in Seaview, Metropolitan Centre Zone in Pito One and Seaview Marina Zone while also ensuring development and use in this area minimises the risk from flood hazards to people,

buildings and infrastructure to as low as reasonably practicable.

- (313) I also discuss this issue in the context of the submitter's request to add a definition of "minimise" (see section 7.1.3).
- (314) I think this statement would confuse rather than assist the interpretation of the policy – the term "minimise" is well enough understood without being restated more verbosely.
- (315) Winstone Aggregates (444.28) seeks that the policy also covers the Quarry Zone in addition to the identified areas. I discuss why I do not support this expansion in section 3.1.5.
- (316) The Policy Planning Team (440.48c, supported by Seaview Marina Ltd F14.3) seeks that the area in question be represented as an overlay. I discuss this issue and my recommended resolution in section 3.1.5.
- (317) The Adrian Palmer Family Trust (315.17a, 315.17b, 315.17c) supports the "carve out" for the Seaview and Petone areas and requests that it be expanded to include Gracefield and the Light Industrial Zones. I support the expansion to Gracefield but not Light Industrial Zones, as I discuss with my recommended resolution in section 3.1.5.
- (318) I accordingly recommend the objective be amended as follows:

NH-03 (Subdivision, Use and Development in the ~~General Industrial Zone and Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone and the Seaview Marina Zone~~ Regionally Significant Coastal Business Areas Overlay and within the Medium Flood Hazard Overlay or High Flood Hazard Overlay)

Provide for subdivision, use and development in the ~~General Industrial Zone and Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone and the Seaview Marina Zone~~ Regionally Significant Coastal Business Areas Overlay while also ensuring development and use in this area minimises the risk from flood hazards to people, buildings and infrastructure.

NH-O4 (Planned Natural Hazard Mitigation Works)

This is the counterpart objective to CE-O6

- (319) The New Zealand Transport Agency (385.48) and the Wellington Regional Council (452.77, supported *in part* by NHC F15.19) support the objective as notified.
- (320) Vicki McCabe (38.3), Christine Potaka-Kelly (84.3), Rafael Gonzalez-Montero (175.1c, opposed by Wellington Water F36.301, 175.3a), Lin Streefkerk (297.3, 297.9), Mukesh Chandra (201.1c, 201.3a) and Alison Thwaite (250.1c, 250.3a) support the objective (inferred) conditional on other submission points that I discuss in section 5.2.2, and which I do not recommend accepting. As they do not present alternative relief in the case those other points are not accepted, I will otherwise just note their potential support for the objective, although they may wish to provide alternative ways of achieving the relief they request in the hearing.
- (321) The Natural Hazards Commission (327.33, F15.19), supported by the Wellington Regional Council (F38.4), seeks that the objective be amended as follows:

Risk to people, buildings and infrastructure from flood hazards is reduced through ~~mitigation works~~:

- 1. Mitigation works where appropriate and practicable; and*
- 2. The management of residual risks.*

- (322) I discuss residual risk (in the sense used by the Natural Hazards Commission) in more detail in section 3.1.3.
- (323) The key issue with managing residual risk is the information base on which it can be done. Residual risk was not incorporated into the hazards modelling except for flooding, where it was limited to the sensitivity assessment used for freeboard, as discussed in Mr Osborne's evidence in Appendix B1.
- (324) While I agree that residual risk should in principle be taken into account in natural hazards planning where information is available, it is implicit as a type of risk managed in objectives NH-O1, NH-O2, and NH-O3. Objectives set high level outcomes and do not need to cover every detail of how issues are managed. I think the issue of residual risk if it is to be covered is

better covered at the policy level. However, I do not see what useful policy guidance could be given either unless the plan itself includes hazard mapping that incorporates residual risk. At this stage I do not see that could be done in the PDP, and would require a separate plan change.

(325) If the panel is nonetheless of a mind to think that residual risk should be addressed in an objective or policy as well, I recommend it be done as a new standalone objective and/or standalone policy, as it is not well connected to the subject matter of NH-O4, or any of the other existing objectives and policies.

(326) Accordingly, I recommend the objective remain as notified.

CE-O3 (Risk from Coastal Hazards in the High Tsunami Hazard Overlay and High Coastal Inundation Hazard Overlay)

This is the counterpart objective to NH-O1

(327) Argosy Property (237.20), Horokiwi Quarries (246.23), Oyster Management (272.25), the Fuel Companies (471.188), the Ministry of Education (399.39), the Natural Hazards Commission (327.91, F15.56), and Wellington Regional Council (452.134, supported by NHC F15.56) support the objective as notified.

(328) Laura Skilton (314.21) seeks that the language of “reduce or avoid increasing the existing risk” be changed to just “avoid increasing the existing risk”, considering that the policies and rules are not capable of ensuring that there is a reduction.

(329) While I agree that a district plan is not capable of *ensuring* that risk is reduced, it is capable of encouraging that outcome indirectly, and it can ensure that the risk is *either* reduced or at least not increased.

(330) I also note that this change is in conflict with the submitter’s relief sought on CE-O4, where she seeks that the language of “reduce” be added to the objective.

(331) Christene Loweth (267.9) seeks a rewrite of the objective as follows:

Subdivision, use, and development within the High Tsunami Hazard Overlay and High Coastal Inundation Hazard Overlay reduce Overlays must minimise or avoid increasing the existing prevent any increase in risk from coastal

~~hazards~~ to people, buildings, and infrastructure from coastal hazards.

- (332) The submitter considers that the objective and rules in the chapter are insufficient to prevent loss of life in coastal hazard overlays.
- (333) In my view this is primarily a question for the rules, on which the submitter has made more detailed points. I do not think the other aspects of the rewrite would materially advance the plan's goals or implementation, particularly in that it would align less with the language in the RPS.
- (334) Forest and Bird (424.81a, supported by the MPHRCIS F10.93), as they do in other provisions, seek in general terms that the objective be altered to also "acknowledge the natural character, natural landscape and biodiversity values that must be protected". I discuss why I do not support this change in section 3.1.1.
- (335) Accordingly, I do not recommend accepting any of the changes sought by submitters and recommend the objective remain as notified.

CE-O4 (Risk from Coastal Hazards in the Low Tsunami Hazard Overlay, Medium Tsunami Hazard Overlay, and Medium Coastal Hazard Overlay)

This is the counterpart objective to NH-O2

- (336) Horokiwi Quarries (246.24), the Fuel Companies (471.189), the Ministry of Education (399.40), and Wellington Regional Council (452.135, supported *in part* by NHC F15.57) support the objective as notified.
- (337) Laura Skilton (314.22) seeks that the language of "minimise" be changed to "reduce" and (inferred) considers that the objectives and rules are insufficient to ensure lives are not endangered.
- (338) The District Plan cannot eliminate all risk, and if it could, the risks of natural hazards are inevitably a trade-off against other values. All land in New Zealand is at least at some risk of natural hazards. The plan as notified thus uses a risk-based approach, which the NPS for Natural Hazards describes as a "proportionate" approach³⁵, with higher risk areas having

³⁵ NPS for Natural Hazards 2025, Objective 1 and Policy 2.

greater restrictions and lower – but still significant areas – facing lesser levels of restriction. This philosophy is also supported by the RPS and consistent with the approach used in neighbouring councils. As this objective specifically applies to medium and low hazard areas, not high risk areas (as these are covered in CE-O3), I believe the outcome of “minimise risk” is appropriate.

(339) Michael Rachlin (232.17) seeks in general terms that the outcomes for low hazard areas be differentiated from medium risk areas and considers that using the same language for both is not consistent with a risk-based approach. While worded differently, this has similar themes with the submitter’s point on the coastal hazards counterpart, CE-O4.

(340) While I agree that there should be a differentiation between low and medium areas this is more a question of the scope of “minimise” being interpreted in light of context in the policies and rules, and does not need to be reflected with a distinction at the objective level.

(341) Christine Loweth seeks a rewrite of the objective as follows:

Subdivision, use, and development within the Low and Medium Tsunami Hazard Overlay, ~~Medium Tsunami Hazard Overlay, Overlays and the~~ Medium Coastal Inundation Hazard Overlay must minimise ~~the risk from natural hazards~~ to people, buildings, and infrastructure from natural hazards.

(342) This is structurally similar to the submitter’s relief on CE-O3 and I recommend rejecting it for the same reasons (that I do not think the rewrite would materially advance the plan’s goals or implementation, particularly in that it would align less with the language in the RPS).

(343) The Natural Hazards Commission (327.92, F15.57) seeks that the objective be modified as follows:

Subdivision, use and development within the Low Tsunami Hazard Overlay, Medium Tsunami Hazard Overlay, and Medium Coastal Inundation Hazard Overlay minimise the risk from natural hazards to people, buildings and infrastructure to as low as reasonably practicable.

- (344) I also discuss this issue in the context of the submitter's request to add a definition of "minimise" (see section 7.1.3).
- (345) I think this statement would confuse rather than assist the interpretation of the policy – the term "minimise" is well enough understood without being restated more verbosely.
- (346) Forest and Bird (424.81b, supported by the MPHRCIS F10.94), as they do in other provisions, seek in general terms that the objective be altered to also "acknowledge the natural character, natural landscape and biodiversity values that must be protected". I discuss why I do not support this change in section 3.1.1.
- (347) Accordingly, I do not recommend any of the changes sought by submitters (although I do recommend a correction as discussed below).

Issues not raised by submitters

- (348) CE-O4 refers to "natural hazards", rather than "coastal hazards" like CE-O3.
- (349) For consistency and to fit within the scope of the chapter, I recommend changing "natural hazards" to "coastal hazards", with non-coastal hazards being dealt with in NH-O2. This is shown in Appendix A1.

CE-O5 (Subdivision, use and development in the General Industrial Zone and Heavy Industrial Zone in Seaview, Metropolitan Centre Zone in Petone and Seaview Marina Zone and within Medium and High Hazard Areas of the Coastal Hazard Area)

This is the counterpart objective to NH-O3

- (350) Argosy Property (237.21), Oyster Management (272.36), and the Wellington Regional Council (452.136, supported *in part* by NHC F15.58) support the objective as notified.
- (351) Forest and Bird (424.81c, supported by the MPHRCIS F10.95), as they do in other provisions, seek in general terms that the objective be altered to also "acknowledge the natural character, natural landscape and biodiversity values that must be protected". I discuss why I do not support this change in section 3.1.1.

- (352) The Natural Hazards Commission (327.93, F15.58) seeks that the objective be amended as follows:

Provide for subdivision, use and development in the General Industrial Zone and Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone and the Seaview Marina Zone while also ensuring development and use in this area minimises the risk from coastal hazards to people, buildings and infrastructure to as low as reasonably practicable.

- (353) I also discuss this issue in the context of the submitter's request to add a definition of "minimise" (see section 7.1.3).
- (354) I think this statement would confuse rather than assist the interpretation of the policy – the term "minimise" is well enough understood without being restated more verbosely.
- (355) The Fuel Companies (471.190) seek that "Coastal Hazard Area" be changed to "Coastal Hazard Overlays" for consistency with the term used elsewhere in the plan and to clarify that it applies to both tsunami and coastal inundation hazards. I agree.
- (356) The Policy Planning Team (440.48d, supported by Seaview Marina Ltd F14.4) seeks that the area in question be represented as an overlay. I discuss this issue and my recommended resolution in section 3.1.5.
- (357) Accordingly, I recommend that the objective be amended as follows:

CE-O5 (Subdivision, use and development in the ~~General Industrial Zone and Heavy Industrial Zone in Seaview, Metropolitan Centre Zone in Petone and Seaview Marina Zone~~ Regionally Significant Coastal Business Areas Overlay and within Medium and High Hazard Areas of the Coastal Hazard Area the Medium Coastal Hazard Overlays and the High Coastal Hazard Overlays)

Provide for subdivision, use and development in the General Industrial Zone and Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone and the Seaview Marina Zone Regionally Significant Coastal

Business Areas Overlay while also ensuring development and use in this area minimises the risk from coastal hazards to people, buildings and infrastructure.

CE-O6 (Measures to reduce damage from sea level rise, coastal inundation, and coastal erosion)

This is the counterpart objective to NH-O4

- (358) The Natural Hazards Commission (327.94, F15.59) and the Wellington Regional Council (452.137) support the objective as notified.
- (359) Forest and Bird (424.81d, supported by the MPHRCIS F10.96), as they do in other provisions, seek in general terms that the objective be altered to also “acknowledge the natural character, natural landscape and biodiversity values that must be protected”. I discuss why I do not support this change in section 3.1.1.
- (360) Accordingly, I recommend the objective remain as notified.

CE-O7 (Natural systems and features)

This is the counterpart objective to NH-O5

- (361) The Natural Hazards Commission (327.95) and the Wellington Regional Council (452.138) support the objective as notified.
- (362) Forest and Bird (424.81e, supported by the MPHRCIS F10.97), as they do in other provisions, seek in general terms that the objective be altered to also “acknowledge the natural character, natural landscape and biodiversity values that must be protected”. I discuss why I do not support this change in section 3.1.1.
- (363) The Director-General of Conservation (405.53) seeks that the objective be amended as follows:

Natural Systems and features that reduce the susceptibility of people, buildings and infrastructure from damage from coastal hazards are created, ~~retained~~ protected, restored or enhanced.

- (364) The submitter considers that this would better align with the language in Policy 26 of the NZCPS.

(365) While I do not think that the District Plan within the scope of the Plan Stop exemption can give full effect to Policy 26, I agree with the submitter that the language would be a better alignment, other than the replacement of “or” with “and”, as Policy 26 uses “or”. Accordingly, I recommend accepting the relief in part.

(366) This would mean amending the objective as follows:

Natural Systems and features that reduce the susceptibility of people, buildings and infrastructure from damage from coastal hazards are created, ~~retained~~ protected, restored or enhanced.

5.2.12 General Policies – Natural Hazards and Coastal Environment

NH-P2 (Levels of Risk)

This is the counterpart policy to CE-P9

(367) Christine Potaka-Kelly (84.2b, supported by Wellington Water F36.281), Vicki McCabe (38.2), the New Zealand Transport Agency (385.49), Rafael Gonzalez-Montero (175.2b)*, Argosy Property (237.8), Allison Thwaite (250.2b)*, Mukesh Chandra (201.2b), Lin Streefkerk (297.7), Oyster Management (272.9), the New Zealand Transport Agency (385.49), Fire and Emergency NZ (374.38a), the Ministry of Education (399.35), the New Zealand Defence Force (404.13b), and the Natural Hazards Commission (327.36, F15.22, conditional) support the policy as notified. Submitters marked with a * also supported the rules associated with the policy in general terms. I note this support, although I will discuss the rules individually due to more specific submission points raised on them.

(368) The Natural Hazards Commission’s support is conditional on their submission points on their requested definitions of “reduce” and “minimise”, for which see section 7.1.3.

(369) Winstone Aggregates (444.29) seek, as with other provisions, that the Quarry Zone be grouped with the commercial and industrial areas in Petone and Seaview. I discuss why I do not support this relief in section 3.1.5.

(370) Wellington Regional Council (452.80) seeks that clause 1 be amended to replace “existing risk” with just “risk”, and gives the view that “existing risk” “does not seem to be the correct term”.

(371) In my view this would weaken the policy and does not seem to be supported by the general thrust of the regional council’s submission. They may wish to provide additional reasons for seeking this relief in the hearing.

(372) The Fuel Companies (471.174, opposed by WRC F38.84) seek to amend clause 4 of the policy as follows:

*Subdivision, use and development manages the natural hazard risk to people, buildings and infrastructure by:
[...]*

4. Enabling use, or development within the Natural Hazard Overlays that ~~have~~ either:

a. Have a low occupancy,

b. ~~or~~ A low replacement value,

c. Are of a limited size, or

d. Are resilient to the impacts of natural hazards ~~within the Natural Hazard Overlays.~~

(373) This is opposed by the Wellington Regional Council (F38.84).

(374) Other than restructuring the policy, the two consequential changes would be enabling development of a limited size or that is “resilient to the impacts” of a hazard.

(375) The two key reasons for managing natural hazard risk are to protect people’s lives and valuable property. Low occupancy and low replacement value are the two directly connected ways to minimise these impacts. A land use having a “limited size” would only be an imperfect proxy to these more direct measurements, and so I do not support this addition.

(376) The latter option of how resilient a land use is to natural hazards is I think implicit in the management of risk. Risk is always a product of both a hazard event and the development in the way of that hazard event. However, the plan maps hazards, rather than risks, and so risk needs to be evaluated in the consent stage. The option of reducing risk through replacing an activity with another that is more resilient does not need to

be spelled out unless it is a particularly likely scenario. Whether simply making a development “hazard proof” is possible very much depends on the hazard in question, and so in my view is better handled in the hazard-specific policies from NH-P6 onwards (e.g. minimum floor levels for flood areas set out in NH-P9) and the associated rules.

- (377) Accordingly, I recommend the policy remain as notified, with the exception of the use of the overlay I recommend in section 3.1.5 (changes shown in Appendix A1).

NH-P3 (Natural systems and features)

This is the counterpart policy to CE-P10

- (378) The Natural Hazards Commission (327.37), New Zealand Transport Agency (385.49), and Wellington Fish and Game Council (509.6) support the policy as notified.
- (379) Wellington Regional Council (452.81), supported by the Natural Hazards Commission (F15.23), seek that the policy be amended as follows:

Maintain and enhance natural systems and features where they will reduce the existing risk posed by natural hazards to people, buildings and infrastructure and manage activities so that significant adverse effects on these systems or features are avoided and other adverse effects are avoided, minimised or remedied.

- (380) The submitter gives context in their submission that they intend this to mean that activities are specifically managed to retain the natural hazard mitigation functions of those natural systems and processes, rather than any adverse effects³⁶.
- (381) In the context of Lower Hutt, I think that this maintenance and enhancement of natural features is primarily an operational question for Council and the regional council working on public land, and to the extent it is achieved through regulatory means is much more closely associated

³⁶ Most other potential effects would be either not within the functions of a territorial authority, or not within the scope of the Plan Stop exemption, which does not include for example the protection of indigenous biodiversity or significant natural features and landscapes.

with regional plan functions, e.g. controlling the diversion of waterways and protecting wetlands.

- (382) This does not necessarily mean there is no role for district plan regulation, but I do not believe any rules or methods in the plan as notified, or any of the other relief sought by the submitter, would have the effect of managing activities to avoid significant adverse effects on mitigation functions of natural features. The submitter may wish to comment in the hearing on how they see the policy with their requested amendments being implemented. In the meantime, I recommend not accepting this relief.
- (383) Orlando & Franziska Ravera (459.3) seek in general terms that the policy clarify who is responsible for maintaining and enhancing the natural systems in question, particularly with reference to slope stability.
- (384) I agree that a district plan policy should be clear whose action it directs, and as written the policy leaves this ambiguous.
- (385) In my view, the primary responsibility for managing any natural feature or process (on land) is the owner of the land that natural feature or process covers. However, for Lower Hutt, in practice, the landowner will often be the Council or another arm of the state. Even for natural features partly on private land, a collective solution between government and private landowners, or between multiple private landowners and coordinated by the government, may be necessary.
- (386) The distribution of responsibility will in practice be allocated through a resource consent, especially when subdivision or financial contributions are involved. Work may also be funded through grants or other financial support from central or local government, and this may come with conditions. These will largely be influenced by out-of-plan factors and is likely to evolve over time, particularly as climate adaptation planning progresses.
- (387) Therefore, I do not think that detailed allocation is needed at a policy level, and so recommend giving effect to this relief simply by stating that central government, local government, and landowners will all have a role.
- (388) Accordingly, I recommend the policy be amended as follows:

Central government, local government, and landowners

~~m~~Maintain and enhance natural systems and features where they will reduce the existing risk posed by natural hazards to people, buildings and infrastructure.

NH-P4 (Natural hazard mitigation)

This policy has no direct CE counterpart but CE-P11, CE-P12, and CE-P13 generally address comparable issues to NH-P4 and NH-P5.

- (389) Christine Potaka-Kelly (84.2c, supported by Wellington Water F36.282), Rafael Gonzalez-Montero (175.2c)*, Vicki McCabe (38.2), Allison Thwaite (250.2e)*, Mukesh Chandra (201.2c)*, Lin Streefkerk (297.8)*, Argosy Property (237.9), Oyster Management (272.10), New Zealand Transport Agency (385.49), Natural Hazards Commission (327.38, F15.24), KiwiRail (442.68), and the Wellington Regional Council (452.82) support the policy as notified. Submitters marked with a * also supported the rules associated with the policy in general terms. I note this support, although I will discuss the rules individually due to more specific submission points raised on them.
- (390) No submissions directly on this policy seek changes. However, I consider that there is a minor issue that should be addressed. The policy specifically calls out the Council and the regional council, NZTA, and KiwiRail. However, the rules implementing the policy refer more generically to central government and local government and their agents. These are defined terms in the PDP and will continue to be accurate despite any local government restructuring or central government reorganisation over the life of the plan.
- (391) Accordingly, I recommend changing the wording in the policy to match that in the rules:

Enable natural hazard mitigation works undertaken by ~~the Wellington Regional Council, Hutt City Council, New Zealand Transport Agency (Waka Kotahi), KiwiRail or their nominated contractors or agents~~ central government, local government, or their agents within Natural Hazard Overlays where these will decrease the existing risk to people, buildings and infrastructure.

NH-P5 (Green infrastructure)

This policy has no direct CE counterpart but CE-P11, CE-P12, and CE-P13 generally address comparable issues to NH-P4 and NH-P5.

(392) The Natural Hazards Commission (327.39) supports the policy as written.

(393) The New Zealand Transport Agency (385.50) seeks the policy be amended as follows:

Encourage the use of green infrastructure or Mātauranga Māori approaches when undertaking natural hazard mitigation works ~~by the Wellington Regional Council, Hutt City Council, New Zealand Transport Agency (Waka Kotahi), KiwiRail or their nominated contractors or agents~~ within Natural Hazard Overlays where practicable to do so.

(394) The submitter considers that this places an unreasonable burden on central and local government agencies and contractors, and it may not be possible or practical to use green infrastructure or a Mātauranga Māori approach.

(395) This is opposed by the Wellington Regional Council (F38.13).

(396) The plan as notified, in my view, intended to implement this policy through being more enabling of green infrastructure than it otherwise might have, but as notified the rule structure could not have achieved this and interacts uncomfortably with the Infrastructure chapter. The key rule is NH-R18 which enables flood mitigation work *whether using a green infrastructure approach or not.*

(397) I agree with the submitter that it will at least in some circumstances be unreasonable to expect or even impossible to implement a green infrastructure or Mātauranga Māori approach to natural hazard mitigation, although the plan only intends to “encourage” such approaches rather than require them.

(398) The plan however has no mechanism to do the encouraging that it seeks as most natural hazard works will be permitted activities regardless of what approach they take.

(399) I thus do not think there is anything the plan either can or should do to implement the policy. I recommend accepting the submitter’s relief, but as

written this would amend the policy down to having no function at all. I think the simpler way to achieve this relief is to delete the policy.

- (400) Note that this situation is *not* necessarily the same for coastal hazards, which I discuss in CE-P11, CE-P12, and CE-P13 below.

CE-P8 (Risk-based approach)

This is the counterpart policy to NH-P1

- (401) Argosy Property (237.22), Oyster Management (272.27), Natural Hazards Commission (327.96, F15.60), Fire and Emergency NZ (374.56), Ministry of Education (399.41), Wellington Regional Council (452.146), Joe Jeffries (514.3), and the Fuel Companies (471.192) support the policy as notified.
- (402) Forest and Bird (424.89a, supported by the MPHRCIS F10.101) seek that the policy be amended to give effect to Policy 11 of the NZCPS, which relates to indigenous biodiversity.
- (403) I discuss why I do not support this change in general in section 3.1.1, which includes that the request is not in scope of the Plan Stop exemption. In addition, the issue raised by the submitter does not logically fit in this policy and, if it were to be advanced, relates to the subject matter of CE-P11, CE-P12, and/or CE-P13.
- (404) Accordingly, I recommend the policy remain as notified.

CE-P9 (Levels of risk)

This is the counterpart policy to NH-P2

- (405) Argosy Property (237.23), Oyster Management (272.28), Fire and Emergency NZ (374.57), the Ministry of Education (399.42), and the Wellington Regional Council (452.147), supported by the Natural Hazards Commission (F15.61, subject to their own relief discussed below), support the policy as notified.
- (406) Laura Skilton (314.23) seeks that the policy is amended as follows:

Ensure, subdivision, use and development manages the coastal hazard risk to people, buildings and infrastructure by:

1. Avoiding new buildings and activities in the High Tsunami Hazard Overlay and High Coastal Inundation Hazard

Overlay (with the exception of the General Industrial Zone and Heavy Industrial Zone in Seaview, Metropolitan Centre Zone in Petone and Seaview Marina Zone) ~~unless there is an operational need or functional need for the subdivision, use, or development to be located in this area and the subdivision, use, or development minimises the existing risk from coastal hazards to people, buildings and infrastructure.~~

...

3. Avoiding increased buildings and activities ~~Requiring subdivision, use, or development to minimise the risk to development from coastal hazards to people, buildings and infrastructure in the Low and Medium Coastal Hazard Overlays; and...~~

(407) The submitter gives reasons for this change that do not seem to connect with the relief sought.

(408) The net effect of these changes would be to be more lenient towards the expansion of existing activities and buildings in high hazard areas, and remove the consideration of functional and operational needs, while being more restrictive in the low and medium hazard areas. I do not think this is consistent with a proportionate risk-based approach and so do not support this relief. The submitter may want to provide additional reasons for this relief in the hearing.

(409) Christine Loweth (267.11) seeks that the policy be rewritten as follows:

Ensure subdivision, use, and development effectively manage coastal hazard risks to people, buildings, and infrastructure by:

1. Avoiding new buildings and activities in the High Tsunami and High Coastal Inundation Hazard Overlays, except in the General Industrial Zone and Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone, and the Seaview Marina Zone—where development is permitted only if there is an operational or functional need, and risks are minimised.

2. Recognising the regional significance of the General Industrial and Heavy Industrial Zones in Seaview, the Metropolitan Centre Zone in Petone, and the Seaview Marina Zone, while ensuring that development in these areas mitigates risks from coastal hazards in the Medium and High Coastal Hazard Overlays.

3. Requiring subdivision, use, and development in Low and Medium Coastal Hazard Overlays to minimise risks to people, buildings, and infrastructure.

4. Allowing development with low occupancy or low replacement value within Coastal Hazard Overlays.

- (410) For the sake of readability, I have not tracked these changes against the original version, as the bulk of this relief would not significantly change the meaning of the policy.
- (411) The submitter contends that the policy is ambiguous as “areas within the Low Tsunami Hazard Overlay fall within the Medium Coastal Overlay”. This is not the case – while the bulk of the Low Tsunami Hazard Overlay is also covered by the Medium or High Coastal Inundation Hazard Overlays, there are areas of Low Tsunami Hazard Overlay that do not, particularly in western Petone, Lowry Bay, Days Bay, and Eastbourne.
- (412) The substantive changes are the same as those sought by Laura Skilton discussed above. Therefore, I do not recommend accepting the relief (other than to the extent it corrects minor errors, as discussed below).
- (413) Forest and Bird (424.89b, supported by the MPHRCIS F10.102) seek that the policy be amended to give effect to Policy 11 of the NZCPS, which relates to indigenous biodiversity.
- (414) I discuss why I do not support this change in general in section 3.1.1, which includes that the request is not in scope of the Plan Stop exemption. In addition, the issue raised by the submitter does not logically fit in this policy and, if it were to be advanced, relates to the subject matter of CE-P11, CE-P12, and/or CE-P13.
- (415) The Fuel Companies (471.193) seek that the policy be amended as follows:

Ensure, subdivision, use and development manages the coastal hazard risk to people, buildings and infrastructure by:

1. Avoiding buildings and activities in the High Tsunami Hazard Overlay and High Coastal Inundation Hazard Overlay (with the exception of buildings or structures of limited size or in the General Industrial Zone and Heavy Industrial Zone in Seaview, Metropolitan Centre Zone in Petone and Seaview Marina Zone) unless there is an operational need or functional need for the subdivision, use, or development to be located in this area and the subdivision, use, or development minimises the existing risk from coastal hazards to people, buildings and infrastructure.

[...]

4. Enabling use, or development within the Coastal Hazard Overlays that have either:

- a. Have a low occupancy,*
- b. ~~or~~ A low replacement value,*
- c. Are of a limited size, or*
- d. Are resilient to the impacts of natural hazards ~~within the Coastal Hazard Overlays.~~*

(416) For the changes in clause 1 this would undermine the proportionate and risk-based approach to natural hazards, and fail to give effect to CE-O3.

(417) For the changes in clause 4, I discuss this issue and why I do not support the relief in the similarly worded NH-P2 above.

(418) The Natural Hazards Commission (327.97) seek that the policy be amended as follows:

...

2. Within the General Industrial Zone and Heavy Industrial Zone in Seaview, Metropolitan Centre Zone in Petone and Seaview Marina Zone, recognise the regional importance of these areas, while ensuring that subdivision, use, or development located in these area minimises the risk from coastal hazards in the Medium and High Coastal Hazard

Overlays to people, buildings, and infrastructure to as low as reasonably practicable.

3. Requiring subdivision, use, or development to minimise the risk to development from coastal hazards to people, buildings and infrastructure in the Low and Medium Coastal Hazard Overlays to as low as reasonably practicable; and

...

- (419) I also discuss this issue in the context of the submitter's request to add a definition of "minimise" (see section 7.1.3).
- (420) I think this statement would confuse rather than assist the interpretation of the policy – the term "minimise" is well enough understood without being restated more verbosely.
- (421) Accordingly, I recommend the policy remain as notified, except for correcting some minor typographical errors and inconsistencies (some included indirectly in the submission point of Christene Loweth), fixing the duplication of Medium hazard areas in clauses 2 and 3, and implementing the Petone/Seaview overlay discussed in section 3.1.5:

Ensure, subdivision, use and development manages the coastal hazard risk to people, buildings and infrastructure by:

1. Avoiding buildings and activities in the High ~~Tsunami Hazard Overlay and High Coastal Inundation Hazard Overlays~~ (with the exception of the ~~General Industrial Zone and Heavy Industrial Zone in Seaview, Metropolitan Centre Zone in Petone and Seaview Marina Zone Regionally Significant Coastal Centres Overlay~~) unless there is an operational need or functional need for the subdivision, use, or development to be located in this area and the subdivision, use, or development minimises the existing risk from coastal hazards to people, buildings and infrastructure.

2. Within the ~~General Industrial Zone and Heavy Industrial Zone in Seaview, Metropolitan Centre Zone in Petone and~~

~~Seaview Marina Zone Regionally Significant Coastal Centres Overlay~~, recognise the regional importance of these areas, while ensuring that subdivision, use, or development located in these areas minimises the risk from coastal hazards in the Medium and High Coastal Hazard Overlays to people, buildings, and infrastructure.

3. Requiring subdivision, use, or development to minimise the risk to development from coastal hazards to people, buildings and infrastructure in the Low ~~Tsunami Hazard Overlay~~ and Medium Coastal Hazard Overlays; and

4. Enabling use, or development that ~~have~~ has either low occupancy or low replacement value within the Coastal Hazard Overlays.

CE-P10 (Natural systems and features)

This is the counterpart policy to NH-P3

- (422) The Natural Hazards Commission (327.98) supports the policy as notified.
- (423) The Wellington Regional Council (452.148), supported by the Natural Hazards Commission (F15.62), and Forest and Bird (424.89c) each seek the equivalent relief as they do on NH-P3, discussed above, which I recommend rejecting for the same reasons.
- (424) The Director-General of Conservation (405.61) seeks that “Maintain and enhance” be replaced with “Protect, restore and enhance” to better align with the language in Policy 26 of the NZCPS.
- (425) This is a similar issue to their submission point on CE-O7. As there, I recommend that the point be accepted, except that “or” be used instead of “and” to better align with the NZCPS.
- (426) This means amending the policy as follows:

~~Maintain~~ Protect, restore and or enhance natural systems and features where they will reduce the existing risk posed by coastal hazards to people, buildings and infrastructure.

CE-P11 (Coastal hazard mitigation works)

This policy has no direct NH counterpart but CE-P11, CE-P12, and CE-P13 generally address comparable issues to NH-P4 and NH-P5.

- (427) Argosy Property (237.24), Oyster Management (272.29), the Natural Hazards Commission (327.99), and the Wellington Regional Council (452.149), supported by the Natural Hazards Commission (F15.63) support the policy as notified.
- (428) Forest and Bird (424.89d, supported by the MPHRCIS F10.103) seek that the policy be amended to give effect to Policy 11 of the NZCPS, which relates to indigenous biodiversity.
- (429) I discuss why I do not support this change in general in section 3.1.1, which includes that the request is not in scope of the Plan Stop exemption.
- (430) Accordingly, I recommend that the policy remain as notified.

CE-P12 (Coastal hazard mitigation works involving green infrastructure)

This policy has no direct NH counterpart but CE-P11, CE-P12, and CE-P13 generally address comparable issues to NH-P4 and NH-P5.

- (431) The Natural Hazards Commission (327.100, F15.64), Te Rūnanganui o Te Āti Awa (503.43a), and Wellington Regional Council (452.150, supported by NHC F15.64) support the policy as notified.
- (432) Forest and Bird (424.89e, supported by the MPHRCIS F10.104) seek that the policy be amended to give effect to Policy 11 of the NZCPS, which relates to indigenous biodiversity.
- (433) I discuss why I do not support this change in general in section 3.1.1, which includes that the request is not in scope of the Plan Stop exemption.

CE-P13 (Hard engineering coastal hazards mitigation works)

This policy has no direct NH counterpart but CE-P11, CE-P12, and CE-P13 generally address comparable issues to NH-P4 and NH-P5.

- (434) The Wellington Regional Council (452.151), supported by the Natural Hazards Commission (F15.65, subject to their own relief discussed below), supports the policy as notified.

- (435) Forest and Bird (424.89f, supported by the MPHRCIS F10.105) seek that the policy be amended to give effect to Policy 11 of the NZCPS, which relates to indigenous biodiversity.
- (436) I discuss why I do not support this change in general in section 3.1.1, which includes that the request is not in scope of the Plan Stop exemption.
- (437) Argosy Property (237.25) and Oyster Management (272.30) seek that the policy be made more enabling of hard engineering mitigation works by amending the policy as follows:

~~Only allow for~~ Enable hard engineering coastal hazards mitigation works for the reduction of the risk from coastal hazards where:

1. There is a demonstrable risk to life, private property or existing nationally or regionally significant infrastructure from the coastal hazard ~~and it can be demonstrated that there is no practicable alternative to reduce this risk.~~

- (438) The Natural Hazards Commission (327.101) seeks that the policy contain more detail around matters to consider in a consent for hard engineering mitigation works, by amending it as follows:

Only allow for hard engineering coastal hazards mitigation works for the reduction of the risk from coastal hazards where:

...

6. Relevant matters to consider when assessing the environmental and social costs of permitting hard protection structures to protect private property include assessments of:

a. the short- and long-term direct and indirect costs from the proposed hard protection structure,

b. the impacts of sea-level rise and other climate change effects, and how long the proposed hard protection structure would be viable,

c. the likelihood that more development (or development intensification) will be undertaken that relies on the hard protection structures over the long term; and

d. the impacts on communities (including future costs and liabilities for councils) associated with:

i. any future abandonment of hard protection structures (particularly where constructed on public land); and

ii. assistance to (and compensation actions by) private property owners in the event of failure of the hard protection structures and damage to private property.

(439) NHC's concerns include that:

- Allowing hard engineering protection for private property will set an expectation for these works rather than community-scale public works, and
- Not enough regard is given to NZCPS policies 25 and 27.

(440) Hard engineering works for hazards mitigation are governed by fairly directive policies in both the RPS (Policy 52) and the NZCPS (Policies 25 and 27). In general neither contain the strongest level of direction (e.g. terms with established directive meanings like "avoid" or "only allow for") but rather a softer direction ("discourage", "have particular regard") that set out a detailed list of considerations to weigh up when deciding if hard engineering works are the appropriate way forward. The one exception is the RPS direction of "having particular regard to ... avoiding hard engineering methods unless it is necessary to protect existing development, regionally significant infrastructure or property from unacceptable risk and the works form part of a hazard risk management strategy that represents the best practicable option for the future". "Having particular regard to avoiding" is however an unusual formulation. I have thus interpreted this as sitting somewhere beneath "avoid" on its own, but making it a more important consideration than others that fall under "have particular regard to".

(441) For NHC's concerns, I think it is worth noting the practical context of Lower Hutt and the likely need for hard engineering hazard mitigation in future. Lower Hutt has few areas of private property with a direct exposure to the coast. Most of the coastline is bounded by council owned land, roading or reserve land.

- (442) As identified in the coastal hazard modelling within the PDP, coastal hazards are likely to affect broad areas of the city including both private property and significant amounts of regionally significant infrastructure. Major arterials (which are regionally significant infrastructure) such as the Esplanade and Marine Drive separate most private property from the sea. It is likely that this infrastructure will see demand for protection from hazards in the coming years, and some areas (such as State Highway 2 between Ngauranga and Petone) have had recent hard engineering works to protect them.
- (443) It is highly likely therefore that significant hard engineering works would be likely to meet the situations set out in NZCPS Policy 27(4) – that they are designed to protect private property and sit on public land, but have significant public benefits in both the number of properties protected and the protection of public infrastructure.
- (444) It is also worth noting that the policy as written applies to any hard engineering works, regardless of scale, whether they sit on public or private property, and what they protect. Thus, the situations envisaged in the RPS and NZCPS where individual private property owners build isolated works without regard to their wider context are certainly possible, but has limited applicability given the limited number of private properties who share a boundary with the coastline.
- (445) Putting those considerations together, I think that the language of “only allow for ... where” is unwarranted as being stronger than the NZCPS or RPS direction while “enable ... where” fails to discourage unnecessary works as set out in the NZCPS. To be most compatible with the NZCPS language, I recommend the term be “discourage ... unless”, which I think sits between the PDP as notified and the submissions of Oyster and Argosy.
- (446) I do not agree with removing the test of “there is no practicable alternative”, as this is a key part of the logic of NZCPS Policy 27(2)(a).
- (447) I agree with some but not all of the additional considerations proposed by NHC. Their proposed matters “a” (short and long term costs), “b” (impact of sea level rise and other climate effects on how long the structure is viable) are matters addressed in NZCPS Policy 27 and likely to be major issues in whether hard engineering is acceptable and so I recommend accepting these parts of the relief.

- (448) However, matter “c” (the likelihood of whether more development or intensification would be undertaken that relies on the structure) is speculative and not a useful consideration – a resource consent for a protection structure, even if the Council is the applicant, cannot have conditions placed on it that might control development conducted by a third party, or control the Council’s plan-making functions. There is nothing meaningful for the consent decision-maker to assess.
- (449) Matter “d(i)” (future abandonment of structures) is speculative and in my view not something on which any meaningful information could be provided in a resource consent process. While decision-makers can take into account an applicant’s track record of compliance, for works on public land the applicant would be central or local government, who one imagines will have a good compliance track record. For works on private property I think it is very unlikely that the applicant will have a track record of abandoning coastal protection structures, and if it is, the decision-maker can have regard to this even without policy wording.
- (450) Matter “d(ii)” (compensation for property owners) is not within the domain of the Resource Management Act – to the extent there is a risk here, it would sit with the resource consent applicant themselves and so not be relevant to a consent decision.
- (451) Accordingly I recommend the policy be amended as follows:

~~Only allow for~~ Discourage hard engineering coastal hazards mitigation works for the reduction of the risk from coastal hazards ~~where~~ unless:

1. There is a demonstrable risk to life, private property or existing nationally or regionally significant infrastructure from the coastal hazard and it can be demonstrated that there is no practicable alternative to reduce this risk,
2. 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,
3. It minimises the modification or alteration of natural features and systems in a way which ensures their function as natural defences is not compromised,

4. *Hard engineering structures are designed to minimise adverse effects on the coastal environment, significant natural features and systems and any adverse effects are avoided, remedied or mitigated, and*
5. *It can be demonstrated that green infrastructure measures would not provide an appropriate level of protection in relation to the significance of the risk.*

Relevant matters to consider when assessing the environmental and social costs of permitting hard protection structures to protect private property include assessments of: 6. the short- and long-term direct and indirect costs from the proposed hard protection structure, and
7. the impacts of sea-level rise and other climate change effects, and how long the proposed hard protection structure would be viable.

Section 32AA Assessment

- (452) The proposed amendments to policies NH-P4, CE-P9 and CE-P10 are largely administrative in nature and are to improve readability and implementation . The proposed changes do not change the tests within the policies from what was notified. On this basis, it is considered that the changes are sufficiently minor that a Section 32AA Evaluation is not required.
- (453) The deletion of NH-P5 is more effective and efficient than retaining the policy as there are no means for the plan to implement the policy.
- (454) The alterations to CE-P13 are more effective and efficient than what was notified in achieving the directives of the Proposed District Plan because:
- The proposed wording more closely aligns with NZCPS in respect to discouraging hard engineering structures; and
 - It requires a wider consideration of the implications of hard engineering structures in respect to private properties, and ensuring they are appropriate designed for long term protection as well as any potential costs arising from their construction.

- (455) There are no significant costs associated with this suggested policy change to CE-P13, other than for private property owners who may look to construct hard engineering structures. This policy change would require these to be appropriately designed for the long-term protection of the property. Given the few number of private properties that have a boundary with the coastline in the Hutt Valley context, these additional costs are very limited.

5.2.13 Policies – Fault Location Area

NH-P6 (Additions to existing buildings and structures within the Fault Location Area)

- (456) Oyster Management (272.11) supports the policy as notified.
- (457) Go Architecture Ltd (331.8) seeks that clause 2 of the policy be amended as follows:

...

2. Provide for additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the poorly constrained, uncertain constrained, well-defined or well-defined extension areas where:

a. They ~~are located more than 20m from the edge of the fault deformation zone, or~~ do not increase the risk to the occupants over the existing situation.

b. ~~Mitigation measures are incorporated into the building to maintain life safety of the occupants and the structural integrity of the building in the event of fault rupture.~~

- (458) They note the inconsistency of the policy with NH-R2, which allows for additions up to 25m² as a permitted activity within the poorly constrained or the uncertain constrained areas of the Fault Location Area, and that the rule does not implement the principle around providing for additions where they are more than 20m from the edge of the fault deformation zone.
- (459) The Active Fault Guidelines for New Zealand, recommend that construction should not occur within 20m of a fault deformation zone. This is to prevent

significant damage that occurs to buildings from fault rupture (noting that this is different than ground shaking). The District Plans around the region consistently require a 20m setback from the fault deformation zone. On this basis, I do not support the change sought by the submitter around the need for additions to be constructed more than 20m from the fault deformation zone.

(460) I would note that there is a reason that small additions are provided for in the poorly constrained and uncertain constrained areas of the Fault Hazard Overlay. In these areas, the position of the fault line is less well understood and as a result, the fault hazard overlay is wider. As such, more properties are captured within this overlay, and a portion of these will be more than 20m from the fault deformation zone. However, as the fault position is less well understood, it is not appropriate from a planning perspective to prevent any reuse or adaptation of these residential properties. For this reason, a low level of additions are provided for. This is consistent with the approach with other District Plans in the region.

(461) The submitter also seeks for the removal of the consideration of mitigation measures. This arm of the policy provides a pathway for those additions that are within 20m of the fault deformation zone. The test provided by this policy is intentionally high, where life safety of the occupants and the structural integrity of the building are maintained. If this second limb did not exist, there would be not policy framework to guide decision making around additions that are less than 20m from fault deformation zone. On this basis, I do not support removing this aspect of the policy.

(462) The Natural Hazards Commission (327.40, opposed by the Fuel Companies F32.17) seeks that clause 2 be amended as follows:

...

2. Provide for additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the poorly constrained, uncertain constrained, well-defined or well-defined extension areas where:

a. They are located more than 20m from the edge of the fault deformation zone, ~~or~~

b. Mitigation measures are incorporated into the building to maintain life safety of the occupants and the structural integrity of the building in the event of fault rupture.

c. Additions are for non-habitable rooms

- (463) They consider that requiring rooms be non-habitable would reduce life safety risk.
- (464) I agree that this would advance life safety, but it is only one example of many possible mitigation measures, which is already covered more generically in sub-clause (b). I think it is also potentially artificial to separate the occupancy of the room that happens to be nearest the fault from the overall structural integrity of the building, which are considered alongside each other in (b).
- (465) No reasons are given for removing the word “or”, which I infer is with the intent of making the conditions additional rather than exclusive. I do not think there is any good reason to do so: the first condition applies due to uncertainty around the location of the fault in some areas. Where a building is more than 20 metres from the fault where its location has been identified, that risk from fault rupture is no longer significantly elevated, and this has governed the identification of the Fault Location Area in those places where its location is better established. This 20 metre setback is in line with the advice in the Ministry for the Environment / GNS publication “Planning for the Development of Land on or Close to Active Faults”³⁷.
- (466) Wellington Regional Council (452.83), supported by the Natural Hazards Commission (F15.25), seeks to “[d]efine where the 20m is to be measured from, e.g. the fault trace or an identified fault rupture zone.”
- (467) The submitter considers this ambiguous and refers to the above referenced document, “Planning for the Development of Land on or Close to Active Faults”.
- (468) I agree this should be clarified and recommend doing so on the basis of that guidance document.

³⁷ <https://environment.govt.nz/assets/Publications/Files/planning-development-faults-graphics-dec04-1.pdf>, see p12.

- (469) Accordingly, I recommend clause 2 be amended as shown, and the policy otherwise remain as notified (other than the restructuring proposed in section 5.2.6):

...

a. They are located more than 20m from the edge of the fault trace or fault deformation zone, or

...

NH-P7 (Subdivision, use and development within the Fault Location Area)

- (470) Oyster Management (272.12), Fire and Emergency NZ (374.38b), and the Ministry of Education (399.36) support the policy as notified.
- (471) The Adrian Palmer Family Trust (315.19, inferred) supports clause 3.c of the policy specifically.
- (472) The Natural Hazards Commission (327.41, opposed by the Fuel Companies F32.18) seek in general terms to clarify the relation of the policy with the Building Code and specifically that the policy be amended as follows:

New subdivision, use and development within the Fault Location Area are managed as follows:

...

2. Provide for new allotments, new buildings and the conversion of existing buildings for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the poorly constrained and uncertain constrained areas of the Fault Location Area where:

- a. The new building platforms, new buildings or conversions are located more than 20m from the edge of the fault deformation zone, ~~or~~*
- b. Mitigation measures are incorporated into the building to maintain life safety of the occupants and the structural integrity of the building in the event of fault rupture.*
- 3. Avoid new allotments, new buildings and the conversion of existing buildings for activities potentially sensitive to*

natural hazards and activities most sensitive to natural hazards within the well-defined or well-defined extension areas of the Fault Location Area unless:

...

*b. If locating the activity more than 20m from the edge of the deformation zone is not a practicable option **and there is an operational or functional need** to locate within the well-defined or well-defined extension areas of the Fault Location Area; mitigation measures are incorporated into the building **to minimise the risk** to life of the occupants and the structural integrity of the building on the event of fault rupture, or*

*c. If locating the activity more than 20m from the edge of the deformation zone is not a practicable option **but there is no operational or functional need** to locate within the well-defined or well-defined extension areas of the Fault Location Area; mitigation measures are incorporated into the building **to not increase risk** to life of the occupants and the structural integrity of the building in the event of fault rupture.*

...[emphasis added]

- (473) In my view the relationship between district plans and the building consent process is well-understood by plan users likely to be reading this provision and there is no need to address it in the text of provisions. The plan's intent is not to duplicate the building code but to ensure that a range of mitigation measures are considered and weighed up.
- (474) The submitter's concerns for the text changes they seek are that clauses 3.b and 3.c are duplicative as there is no difference based on whether the operational or functional need test is met, and the policy is confusing as to whether the operational or functional need test needs to be met.
- (475) While the wording of 3.b and 3.c are similar, there are differences. Clause 3.b applies to those activities with an operational and functional need. The test for these activities is that they need to minimise the risk from natural hazards. Clause 3.c applies to those activities that do not have an operational or functional need to locate in the fault hazard overlay. These

activities need to avoid or not increase the risk from fault hazards. This is a higher test than those activities with an operational or functional need.

- (476) On this basis, I do not support the relief sought by this submission as it would create a policy gap for those activities that do not have an operational or functional need. Accordingly, I recommend the policy remain as notified, other than the restructuring proposed in section 5.2.6.

5.2.14 Policies – Flood Hazard Overlay

NH-P8 (Additions to existing buildings and structures in the Flood Hazard Overlays)

- (477) Argosy Property (237.10), Oyster Management (272.13), the New Zealand Transport Agency (385.49), and the Ministry of Education (399.37) support the policy as notified.
- (478) Lisa Caddis (252.2, opposed by Wellington Water F36.307) seeks that the policy be deleted. Most of the reasons given are site-specific and so they are addressed in the submitter's site-specific submission point in section 6.2.3. In general, the submitter also considers that application of the policy lacks evidence and risks landowners not being able to obtain insurance.
- (479) The evidence behind the flood modelling is covered in the section 32 report and associated technical reports, and by Alistair Osborne in his evidence in Appendix B1. I discuss the issue of insurance in section 3.1.6. I thus do not support deleting the policy and consider it is necessary to meet the council's duty to manage the risk of significant natural hazards.
- (480) Ron Beernink and Glenda McCallum (303.10) support in part the policy but consider the definition of "addition" too narrow and seek that it also include placing residential units above existing industrial buildings.
- (481) I think the definition of "addition" as notified does cover this situation and so recommend accepting this relief to the extent that the plan already provides for it.
- (482) Christine Loweth (267.2) seeks that the term "1% Annual Exceedance Probability flood" be clarified. I agree, but consider that this is better done through the introduction (for which see section 5.2.9) and relief sought by

other submitters of providing a definition of “annual exceedance probability” (for which see section 7.1.3).

- (483) The Fuel Companies (471.175), opposed by the Wellington Regional Council (F38.85), seek that the policy be amended to add to clause 2.a:

...

a. The risk to people, and buildings on site from the 1% Annual Exceedance Probability Flood is minimised due to the incorporation of mitigation measures where necessary.

...

- (484) The submitter considers (I infer) that mitigation measures may not be necessary to minimise the risk. They state that mitigation may not be required based on “the use, location, size and design of the existing “building” (which is broadly defined by the PDP) and the hazard risk of each site”.
- (485) In my view the appropriate level of mitigation measures is highly situation-specific and a matter to be addressed in individual resource consents. The submitter’s wording would add confusion and potentially undermine the intent of the policy, where mitigation measures are provided to reduce the damage to additions from flooding.
- (486) Michael Rachlin (232.8) seeks to delete sub-clause 2.c, considering it unclear why buildings in the Low Flood Hazard Overlay would obstruct the Medium and High overlays. I agree and recommend deleting the clause.
- (487) Michael Rachlin (232.9) also seeks to delete or amend clauses 3 and 4 and considers them confusing. I agree that there is confusion and this can be addressed through separating the policy based on activity and overlay (as discussed in section 5.2.6) and through the use of a named overlay for the Petone/Seaview area discussed in the policy (as discussed in section 3.1.5).
- (488) Michael Rachlin (232.10a, 232.10b, opposed by Wellington Water F36.316) finally seeks to amend the policy to separate out the treatment of the Medium and High overlays, with the former changing from an “only allow ... where” direction to “provide for ... where”, considering that as notified it does not provide a risk-based approach.

- (489) In my view the policy does present a risk-based approach, particularly about whether the existing risk can be increased, but this can be more clearly expressed through separating the policy as discussed above. I thus recommend accepting the relief in part to the extent of separating the Medium and High arms.
- (490) Wellington Regional Council (452.84), supported in part by the Natural Hazards Commission (F15.26), seeks that the policy set out that additions in high hazard areas cannot be used for residential activities.
- (491) The original submitter does not give specific reasons for this relief. The further submitter considers that residential activities have a particularly high vulnerability to natural hazard events.
- (492) While I agree that residential activities have a high vulnerability to natural hazards, and support their retention within the definition of *activities most sensitive to natural hazards*, I do not think they have a greater vulnerability than the other activities in that category. Singling out residential activities does not fit well with the overall risk-based approach to activities or the ability to potentially mitigate the risks for residential activities in other ways, and I recommend rejecting this relief.
- (493) I also note that under the policy, there is a high test for additions for *activities most sensitive to natural hazards* in the High Flood Hazard Overlay, being the existing risk to people, buildings and infrastructure is not increased. In this regard, there is already a proposed high regulatory framework for additions in the High Flood Hazard Overlay.
- (494) The Natural Hazards Commission (327.42, inferred), supported by the Wellington Regional Council (F38.5), seeks to amend the policy as follows:

Additions to existing buildings and structures in the Flood Hazard Overlays are managed as follows:

- 1. Allow for additions to existing buildings and structures for activities least sensitive to natural hazards in the Low and Medium Flood Hazard Overlays and*
 - a. The conveyancing of flood waters through the Low and Medium Flood Hazard Overlay is still able to occur unimpeded and is not diverted onto adjacent properties*

...

5. People have access to safe evacuation routes in the event of a 1% Annual Exceedance Probability Flood event.

- (495) The submitter considers that this would make the policy more consistent with the direction in CE-P14, which is the equivalent policy for coastal inundation and tsunami hazards.
- (496) I do not agree that either of the submitter's changes would provide any consistency with CE-P14. Both CE-P14 and this policy, as notified, do not provide for additions in Medium hazard areas unless tests are met around the scale and type of the activity. The proposed change to subclause 1.a would remove this distinction. I also do not think that the test around flood waters is practical for the Low Flood Hazard Overlay, which covers a large fraction of properties in the city and would require site-specific resource consent assessment for all additions in order to implement.
- (497) There is an inconsistency with NH-P9, which applies to new subdivision, use and development, and provides a test around whether evacuation is possible. However, I think this distinction is warranted. The practicality of evacuation depends principally on the surrounding context of the activity, e.g. how flooding will affect the immediate road network. The policy around additions applies to existing development which cannot affect their evacuation situation, but where the question is around what level of evolution in land use over time is practical, even in existing locations at risk from hazards.
- (498) In terms of consistency with CE-P14, I also note the discussion of the same issue in submissions on that policy, which I discuss in section 5.2.17.
- (499) Laura Skilton (314.14a, inferred) seeks that the policy is amended to only allow activities most sensitive to natural hazards in the Medium Flood Hazard Overlay "if controlled" and avoid activities most sensitive to natural hazards in the High Flood Hazard Overlay.
- (500) The submitter's reasons are not specific to this relief but generally considers that the policy is not strong enough to protect people and property from hazard risks.
- (501) In my view the policy already does place significant limits on *activities most sensitive to natural hazards* in the Medium and High overlays, and in particular, the formula of "only allow ... where" is equivalent to "avoid ...

unless". Accordingly, I recommend accepting this relief to the extent that the plan already provides for it.

- (502) Laura Skilton (314.14a) also seeks that NH-P8 is divided into three policies for the Low, Medium, and High overlays. I agree, and recommend this divide, as discussed in section 5.2.6.

NH-P9 (Subdivision, use and development in the Flood Hazard Overlays)

- (503) Argosy Property (237.11), Oyster Management (272.14), the Natural Hazards Commission (327.43), Fire and Emergency NZ (374.38c), and the Ministry of Education (399.38) support the policy as notified.
- (504) Winstone Aggregates (444.30, 444.31) seek, as with other provisions, that the Quarry Zone be grouped with the commercial and industrial areas in Petone and Seaview. I discuss why I do not support this relief in section 3.1.5.
- (505) Lisa Caddis (252.3) seeks that the policy be deleted. Most of the reasons given are site-specific and so they are addressed in the submitter's site-specific submission point in section 6. In general, the submitter also considers that application of the policy lacks evidence and risks landowners not being able to obtain insurance.
- (506) The evidence behind the flood modelling is covered in the section 32 report and associated technical reports, and by Alistair Osborne in his evidence in Appendix B1. I discuss the issue of insurance in section 3.1.6. I thus do not support deleting the policy and consider it is necessary to meet the council's duty to manage the risk of significant natural hazards.
- (507) Grant Gunn and Kristin Gunn (369.3b, supported by the Trustees of the Gunn Family Trust F7.9, opposed by Wellington Water F36.308), Andrew Robinson and Robyn Robinson (380.15b, F9.18, supported by Kris Connell F3.18, opposed by Wellington Water F36.309), and Sensible Solutions for Eastbourne (383.22b, opposed by Wellington Water F36.310), opposed by the Natural Hazards Commission (F15.97), seek in general terms that the policy is amended as it is "impracticable for private owners to convert to above 1% AEP". I infer this is a reference to the minimum floor level requirement.

- (508) The policy (and the scope of the RMA in general) does not require existing buildings to be converted or redeveloped to meet a minimum floor level or add any other mitigation method. Rather, that is proposed as a condition for new development and as a trigger for resource consent assessment where the condition is not met. I believe this is appropriate. If meeting the minimum floor level is impractical in any given situation, this can be considered in a resource consent and weighed up with other costs and benefits as to whether consent should be granted despite not meeting the standard or declined as the adverse effects and risks would be too great.
- (509) Rowan Swain and Kim Weber-Swain (317.4c, opposed by Wellington Water F36.311), Grant Gunn and Kristin Gunn (369.1c, supported by the Trustees of the Gunn Family Trust F7.3, opposed by Wellington Water F36.312), Andrew Robinson and Robyn Robinson (380.4c, F9.10, supported by Kris Connell F3.10, opposed by Wellington Waer F36.313), and Sensible Solutions for Eastbourne (383.4c, opposed by Wellington Water F36.314), opposed by the Natural Hazards Commission (F15.90), also seek that “the requirement within Medium Flood Hazard overlays for all subdivision, use and development to provide for unimpeded and unobstructed conveyancing of flood waters” is removed.
- (510) In my view, unless there is a particular good reason to allow it such as an operational or functional need, or if the risks can be adequately mitigated, the Council should avoid allowing development that would divert floodwaters into areas not currently at risk. Unplanned and uncoordinated interference with natural processes risks worsening the effects of natural hazards on people that may not be prepared or property that may not be designed to manage those additional risks, through no fault of their own.
- (511) The Fuel Companies (471.176) seek that subclauses 2.a, 3.a, 3.b, 4.a, 4.c, and 5.a (which all relate to mitigation measures) be qualified with the words “where necessary”.
- (512) I discuss this issue in the context of policy NH-P8 above and recommend it be rejected for the same reasons.
- (513) The Fuel Companies (471.176) further seek that “Major Hazardous Facility” be replaced with “Significant Hazardous Facility” to match the defined term, with which I agree, as discussed in more detail in the context of the

definitions in section 7.1.2, and I recommend accepting this part of the requested relief.

- (514) Stephen Flaunty (34.11b) seeks to remove the “avoid” policy in relation to the High Flood Hazard Overlay and considers that “new subdivision and development can occur in these areas safely with appropriate mitigation being provided. Furthermore, the high flood hazard mapping does not sufficiently account for site-specific context such as changed ground levels from natural ground (e.g. a tennis court) and drainage or other mitigation measures that may already be in place.”
- (515) For the former issue of mitigation measures, I believe this is already handled through the policy’s wording in subclause 6.b.
- (516) The latter issue, of whether changes in real-world conditions mean the mapped hazard is no longer accurate is in my view not explicitly handled in this policy or any other. However, Policy 5 of the NPS for Natural Hazards is relevant:

Natural hazard risk assessment and decisions must be based on the best available information and must be made even when that information is uncertain or incomplete.

- (517) Some inaccuracies in the mapping can be handled in this hearing process, as discussed in section 6. However, the issue in principle can continue to arise with changes to ground levels, infrastructure, and surrounding development in future after the plan becomes operative, and a policy such as NH-P9 as notified would continue to direct plan users to “avoid new buildings [etc] ... within the High Flood Hazard Overlay ... unless [the] subdivision, development and use has an operational need or functional need to locate within the high hazard area”.
- (518) A district plan could possibly include policy guidance around how to deal with updated information. However, I do not think any submissions provide clear scope to do so, and I also do not think such a policy is strictly necessary, as the resource consent process allows in general for considering updated hazard information through sections 104, 106 and 106a of the RMA.

- (519) Accordingly, I think that the "avoid" policy will still be relevant in most circumstances and can be interpreted critically in situations where it is not. I thus recommend rejecting this submission point.
- (520) Christine Loweth (267.2) seeks that the term "1% Annual Exceedance Probability flood" be clarified. I agree, but consider that this is better done through the introduction (for which see section 5.2.9) and relief sought by other submitters of providing a definition of "annual exceedance probability" (for which see section 7.1.3).
- (521) Wellington Regional Council (452.85), supported in part by the Natural Hazards Commission (F15.27), seeks that clause 1 be amended as follows:

...

1. Allow for new buildings, structures, building platforms, and the conversion of existing buildings that will contain activities least sensitive to natural hazards in the Low Flood Hazard Overlay, will not impede or block pathways of flood water and will not significantly increase the risks to adjacent buildings and people,

...

- (522) This would relate to the Low Flood Hazard Overlay, and if any such test were to be added it would be implemented in rule NH-R10. This is not consistent with the submitter's position that they support rule NH-R10 as notified (submission point 452.98), although there is potential scope as other submitters have sought changes.
- (523) Given the large area of Lower Hutt covered by the overlay, I think it is impractical and disproportionate to the issue to require a discretionary assessment in the Low Flood Hazard Overlay, which is what would be required to implement this policy. Given that flood waters in the area are (by definition, from the identification of the layer) shallow and slow-moving, I think the risks of displaced flood waters are relatively low.
- (524) Michael Rachlin (232.12) seeks to delete clause 5 or otherwise amend it as follows:

Subdivision, use and development in the Flood Hazard Overlays are managed as follows:

....

5. ~~Only allow~~ Provide for new buildings and structures, building platforms and the conversion of existing buildings for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the Medium Flood Hazard Overlay in all zones (with the exception of General Industrial Zone in Seaview, the Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone and the Seaview Marina Zone) where:

a. The risk to people and buildings on site from the 1% Annual Exceedance Probability Flood is ~~minimised~~ low due to the incorporation of mitigation measures;

...

- (525) The submitter considers that this would make the policy more consistent with the objectives, and other reasons more connected with his relief sought on rules, which I will discuss in the submission points on the rules. Otherwise, I do not support these changes as these would be less consistent with other language in the chapter.
- (526) Michael Rachlin (232.11) further seeks to delete or amend clauses 4 and 5 and considers them unclear.
- (527) As I discuss for policy NH-P8, and for the submission of Laura Skilton below, I believe the clarity matter with the policy can be addressed by breaking the policy up into multiple policies.
- (528) Laura Skilton (314.15b, inferred) seeks that the policy is amended to only allow activities most sensitive to natural hazards in the Medium Flood Hazard Overlay "if controlled" and avoid activities most sensitive to natural hazards in the High Flood Hazard Overlay.
- (529) The submitter's reasons are not specific to this relief but generally considers that the policy is not strong enough to protect people and property from hazard risks.
- (530) In my view the policy already does place significant limits on *activities most sensitive to natural hazards* in the Medium and High overlays, and in particular, the formula of "only allow ... where" is equivalent to "avoid ... unless". Accordingly, I recommend accepting this relief to the extent that the plan already provides for it.

- (531) Laura Skilton (314.15a) further seeks that the policy is split up into separate policies, which as discussed in section 5.2.6, I agree with, and propose specific changes in Appendix A1.

NH-P10 (Residential apartments in the Medium Flood Hazard Overlay and High Flood Hazard Overlay)

- (532) The Adrian Palmer Family Trust (315.20) seeks to remove the requirement that buildings be at least four storeys high and that the policy apply to residential use and development in general. The submitter does not give specific reasons for this.
- (533) Christene Loweth (267.6) seeks to flip the requirement of the policy to provide for residential activities only where they are two storeys or less, rather than four or more. She considers this conflicts with the High Density Residential Zone that will often also apply and raises issues with civil defence and flood management generally.
- (534) The purpose of the policy is to provide for residential development, which is able to be designed to be resistant to the impacts of flooding, and which can accommodate residential occupants safely even if a flood event is to occur.
- (535) The four-storey building height has been identified as under the building code it is at this point where engineering design changes from , lightweight timber framed construction to construction methodologies that may incorporate concrete and steel (although timber framing may still be used). These construction materials are generally more resistant to the impacts from flood hazards. For this reason, lower-height residential development is unlikely to be appropriate within the High Flood Hazard Overlay. As a resource consent is required either way, and the difference is primarily activity status, a more detailed assessment of the risks and benefits is still available if for some reason a shorter building would also advance the policy goals.
- (536) Wellington Regional Council (452.86), supported in part by the Natural Hazards Commission (F15.28), seeks that the policy either be deleted, or alternatively be amended to add two more requirements:

Provide for residential apartments within the Medium Flood Hazard Overlay and High Flood Hazard Overlay where:

...

6. Access & egress during flood events and the requirement for an emergency response plan to be put in place by the building owner.

7. Not increase flood risk to neighbouring properties or impede over land flow paths

- (537) They consider that the policy does not support a risk-based approach.
- (538) In my view providing for development that can withstand a hazard event and provide safe vertical evacuation is consistent with the risk-based approach. The requirement for an emergency response plan is better dealt with at the resource consent stage, particularly given that this consent pathway will often apply to sites that are not currently at risk and will not become at risk for decades until after further climate change – an emergency response plan that is not yet useful but mandated through a resource consent is unlikely to be an efficient or even practically enforceable requirement in that situation.
- (539) I do agree that account should be given to potential displacement of flood waters but this is already addressed in the policy in clause 5.
- (540) The consideration of access and egress overlaps with the submission of NHC which I will now discuss.
- (541) The Natural Hazards Commission (327.44) seeks to add a condition that:
6. People have access to safe evacuation routes in the event of a 1% Annual Exceedance Probability Flood event.
- (542) They do not give specific reasons for this relief, however, I consider that this is desirable for consistency with NH-P9 and recommend accepting it in part, to the extent it is already addressed through the .
- (543) Given the potential confusion of issues in this and other policies, I recommend that the language be “People have access to safe [vertical or external](#) evacuation routes in the event of a 1% Annual Exceedance Probability flood event”.

- (544) As with NH-P8 and NH-P9, in response to the submission of David Surrey (427), I recommend the flood policies be divided into activity types and overlays. This is shown in Appendix A1. I will thus not show NH-P10 individually here.

5.2.15 Policy – Liquefaction Hazard Overlay

NH-P11 (Subdivision, Use and Development in the Liquefaction Hazard Overlay)

- (545) Argosy Property (237.12), the Adrian Palmer Family Trust (315.21), Oyster Management (272.15), Fire and Emergency NZ (374.39), and the Wellington Regional Council (452.87), supported by the Natural Hazards Commission (F15.29) and the Fuel Companies (F32.23), support the policy as notified.
- (546) Laura Skilton (314.17) and Christene Loweth (267.7) seek that clause 4 be expanded to cover (inferred) land use activities other than “child care services, retirement villages, educational facilities, hospitals, emergency service facilities and health care facilities” as set out in the policy.
- (547) The constraint in the policy is limited to emergency services and activities with similar concerns around functionality in the immediate aftermath of an earthquake. This rationale is set out in the Section 32 report³⁸, as for these activities in particular, there is a particular concern that they should not just be capable of evacuation, but continue to function in the disaster itself.
- (548) Given the risk-based approach, the wide coverage of the overlay, and liquefaction’s status as not being a primary risk to life, I think this is appropriate.
- (549) The Natural Hazards Commission (327.45) seeks to amend the policy as follows:

...

3. Provide for new building platforms, new buildings and structures and the conversion of existing buildings for activities most sensitive to natural hazards (with the

³⁸ Section 32 Report, Natural Hazards and Coastal Hazards, pp77–78.

exception of child care services, retirement villages, educational facilities, hospitals, emergency service facilities and health care facilities) within the Liquefaction Hazard Overlay, where:

a. Foundations are designed by a certified engineer to prevent liquefaction induced deformation of the building, ...

- (550) Clause 4.b of the policy already requires that foundation designs are undertaken by a certified engineer to prevent liquefaction induced deformation of the building. As such, this relief is already provided for in the policy framework and there I recommend to accept the relief sought in this submission point in part to the extent that the PDP already provides for it.
- (551) As I discuss in relation to the submissions of Laura Skilton and Christene Loweth above, the reason for the controls on emergency services (etc.) is that these activities need to continue functioning in the immediate aftermath of a disaster. There is no quantitative evidence yet before the panel about the costs of such a requirement, although the NHC may be able to provide this at the hearing. In the meantime, I think that it is likely that extending a costly engineering requirement in excess of the building code to all *activities most sensitive to natural hazards*, which would include all residential activities for example, with the aim of ensuring buildings can withstand liquefaction rather than simply avoid risks to life, is in excess of the benefits gained.
- (552) Accordingly, I recommend that no change be made to the policy based on the submission. As there is only one distinction by category of activities in the policy and the overlay is not broken up by severity, I do not recommend breaking the policy up as for the fault and flood policies as discussed in section 5.2.6.

5.2.16 Policy – Slope Assessment Overlay

NH-P12 (Subdivision in the Slope Assessment Overlay)

- (553) Winstone Aggregates (444.24, inferred), Oyster Management (272.16), the Natural Hazards Commission (327.46), Sandra Michel-Shanks (363.1,

inferred, conditional), and the Wellington Regional Council (452.88, supported by NHC F15.30) support the policy as notified.

- (554) Jarred Gustafson and Paula Gentle (6.3) and Cheow Khong Chng (104.1, opposed by Wellington Water F36.315) seek that the policy be deleted, considering generally that the modelling is inadequate, the associated rules are disproportionate and inefficient, or that the issue is better dealt with through other parts of the District Plan.
- (555) In my view the modelling is in general useful enough as a trigger for further assessment, which is how it operates in the plan, and sits alongside the other trigger applying to earthworks on existing slopes over 34° that would otherwise apply. The details of these rules are addressed in submission points that will be handled in the Earthworks chapter.
- (556) For more specific issues with the modelling, I discuss these in section 6.
- (557) Accordingly, I recommend the policy remain as notified.
- (558) The policy is the only provision specific to the Slope Assessment Overlay in the Natural Hazards chapter (other than the introduction), and applies only to subdivision, and would accordingly only be considered by plan users who would also need to apply provisions in the Subdivision chapter. It is specifically referenced in rule SUB-R20 as a matter of discretion.
- (559) Accordingly, I think it would assist plan users to move this policy to the Subdivision chapter, and recommend doing so subject to submission points on that chapter which will be heard in a future hearing stream. This would have no overall effect on the meaning of the plan, and so can be made as a minor change under clause 16A of Schedule 1 of the Act.

5.2.17 Policies – Coastal Hazard Overlays

CE-P14 (Additions to existing buildings and structures within the Coastal Hazard Overlays)

- (560) Oyster Management (272.31), Argosy Property (237.26), the Ministry of Education (399.43), the Wellington Regional Council (452.152), opposed by the Natural Hazards Commission (F15.66), and the Fuel Companies (471.194, conditional) support the policy as notified.

- (561) Forest and Bird (424.89g, supported by the MPHRCIS F10.106) seek that the policy be amended to give effect to Policy 11 of the NZCPS, which relates to indigenous biodiversity.
- (562) I discuss why I do not support this change in general in section 3.1.1, which includes that the request is not in scope of the Plan Stop exemption.
- (563) Christene Loweth (267.12) seeks that the policy be rewritten as follows (due to the large amount of minor rewording, I will not show tracked changes):

Additions to existing buildings and structures in the Coastal Hazard Overlays should be managed as follows:

1 Allow additions to existing buildings and structures for activities least sensitive to natural hazards in all areas of the Coastal Hazard Overlays.

2 Provide for additions to existing buildings and structures containing activities potentially sensitive to natural hazards or activities most sensitive to natural hazards in the Medium Coastal Hazard Overlays and High Coastal Hazard Overlays where:

a. The addition is of limited size.

b. The addition enables the continued use of the existing building.

c. The addition incorporates measures that minimise the risk to people and buildings from coastal inundation due to sea level rise, and

d. Safe pedestrian evacuation routes are available for occupants from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture.

5. Do not allow for additions to existing buildings and structures containing activities most sensitive to natural hazards in the Medium Coastal Hazard Overlays and High Coastal Hazard - Safe pedestrian evacuation routes are available for occupants from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture.

- (564) This submission point covers much the same ground and reasoning as that of Laura Skilton (314.24), opposed by Kāinga Ora F26.14, who seeks the policy be amended as follows:

Additions to existing buildings and structures in the Coastal Hazard Overlays are managed as follows:

1. Allow for additions to existing buildings and structures for activities least sensitive to natural hazards in all areas of the Coastal Hazard Overlays.

~~2. Allow for additions to existing buildings and structures containing activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Low Tsunami Hazard Overlay.~~

3. Provide for additions to existing buildings and structures containing activities potentially sensitive to natural hazards ~~or activities most sensitive to natural hazards~~ in the Medium Coastal Hazard Overlays where:

- a. The addition is of limited size,
- b. The addition enables the continued use of the existing building,
- c. The addition incorporates measures that minimise the risk to people and buildings from coastal inundation from sea level rise, and
- d. There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture by means of walking.

~~4. Provide for additions to existing buildings and structures containing activities potentially sensitive to natural hazards in the High Coastal Hazard Overlays where:~~

- ~~a. The addition enables the continued use of the existing building,~~
- ~~b. The addition incorporates measures that reduce or do not increase the risk to people and buildings from coastal inundation from sea level rise, and~~
- ~~c. There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture.~~

5. ~~Do not Only~~ allow for additions to existing buildings and structures containing activities most sensitive to natural hazards in the Medium Coastal Hazard Overlays and High Coastal Hazard Overlays ~~where:~~

- ~~a. The addition incorporates measures that reduce or do not increase the risk to people and buildings from the coastal hazard; and~~
- ~~b. There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture.~~

(565) The submitters generally consider that:

- The policy is too weak to prevent risks to life, and
- Separate treatment for the Low Tsunami Hazard Overlay is redundant, as the affected areas are entirely covered by the Medium Coastal Inundation Hazard Overlay as well.

(566) Tsunami evacuation is a critical mitigation measure that is needed to maintain life safety following a fault rupture event. It is acknowledged that different fault rupture events will produce different tsunami return periods. However, 30 minutes was selected to help plan users identify what is an appropriate evacuation time and aligns with the single most likely tsunami source, the Hikurangi Subduction Zone. At this stage, I support retaining the 30 minute evacuation timeframe. However, I am open to receiving further evidence from submitters around whether this timeframe should be shortened, and this be reflected in the policy. I do not support the full removal of this arm of the policy (as reflected in the suggested changes to Policy 5 (b)) as I am of the view that tsunami evacuation is important and needs to remain within the policy.

(567) The submitter has sought to clarify that for Policy 3(b), the 30 minutes is for walking evacuation. I believe this is already included via the word "pedestrian" in the policy as notified.

(568) I do not agree that the framework for the Low Tsunami Hazard Overlay is redundant – there are areas particularly in western Petone, Eastbourne, Days Bay, and Lowry Bay which are covered by the Low or Medium

Tsunami Hazard Overlays that do not fall within the identified coastal inundation area at all.

(569) Otherwise, I think the approach raised by submitters is excessive. The threat from tsunamis and coastal hazards in most of the overlay is not imminent, but part of a long-term strategy to avoid long term increases in risk from more development in areas that will be at risk in future. There is no short or medium term plan to generally abandon these areas, and some practical allowance needs to be made for their ongoing use.

(570) Joe Jeffries (514.4) seeks that the policy be amended as follows:

...

4. Provide for additions to existing buildings and structures containing activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the High Coastal Hazard Overlays where:

a. The addition enables the continued use of the existing building,

b. The addition incorporates measures that reduce or do not increase the risk to people and buildings from coastal inundation from sea level rise; and

~~c. There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture.~~

~~5. Only allow for additions to existing buildings and structures containing activities most sensitive to natural hazards in the High Coastal Hazard Overlays where:~~

~~a. The addition incorporates measures that reduce or do not increase the risk to people and buildings from the coastal hazard; and~~

~~b. There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture.~~

(571) The submitter considers that additions to existing buildings do not increase risk unless they increase the number of people living in a

dwelling, and that being more enabling of additions assists the ongoing use of buildings by enabling upgrades and improvements, and that it is unclear how access to evacuation route is relevant to additions to an existing dwelling.

(572) Both the number of people living in a dwelling and the floor area of the dwelling are only proxies for the risk faced by that household, which will depend on other factors. The number of people is likely a better proxy for risk to life, and the floor area a better proxy for the risk to property.

(573) However, in choosing a trigger for the relevant rules a major issue is enforceability. The Council does not have a practical way of controlling or monitoring how many people live in a house and the enforcement associated with such a condition would involve more intrusive powers than Council is generally given under the RMA. Floor area, even if imperfect as a trigger, can be enforced in more conventional ways.

(574) For the question of evacuation, this raises similar issues as in policy NH-P8, particularly how evacuation can be considered for existing dwellings. I agree that for the context of an addition, it inherently relates to an existing building in a specific location, and so there is no ability to affect the practicality of external evacuation. There are two ways in which it may still be relevant – the existing practicality of evacuation may affect whether the consent is granted at all, and in some cases, an addition might improve the value of internal, vertical evacuation. However, the former does not sit well with the policy's overall goal of allowing continued use of existing buildings through allowing minor adaptations and changes, and I think the latter is unlikely.

(575) The Natural Hazards Commission (327.102) seeks that the policy be rewritten as follows:

Additions to existing buildings and structures in the Coastal Hazard Overlays are managed as follows:

1. Allow for additions to existing buildings and structures for activities least sensitive to natural hazards in all areas of the Coastal Hazard Overlays.

2. Allow for additions to existing buildings and structures containing activities potentially sensitive to natural hazards

and activities most sensitive to natural hazards in the Low Tsunami Hazard Overlay.

3. Provide for additions to existing buildings and structures containing activities potentially sensitive to natural hazards or activities most sensitive to natural hazards in the Medium Coastal Hazard Overlays where:

~~a. The additions is of limited size do not increase the gross floor area by more than 25m²,~~

~~x. The additions are for a non-habitable room,~~

b. The addition enables the continued use of the existing building,

c. The addition incorporates measures that minimise the risk to people and buildings from coastal inundation from sea level rise and storm surge to as low as reasonably practicable, and

~~d. There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture.~~

4. Provide for additions to existing buildings and structures containing activities potentially sensitive to natural hazards in the High Coastal Hazard Overlays where:

~~x. The additions do not increase the gross floor area by more than 25m²,~~

~~x. The additions are for a non-habitable room,~~

a. The addition enables the continued use of the existing building,

b. The addition incorporates measures that reduce or do not increase the existing risk to people and buildings from coastal inundation from sea level rise and storm surge, and

~~c. There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture.~~

5. Only allow for additions to existing buildings and structures containing activities most sensitive to natural hazards in the High Coastal Hazard Overlays where:

- x. The additions do not increase the gross floor area by more than 25m².
- x. The additions are for a non-habitable room.
 - a. The addition incorporates measures that reduce or do not increase the existing risk to people and buildings from the coastal hazard, and
 - ~~b. There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture.~~

- (576) As discussed above, I do not support removing the policy pertaining to tsunami evacuation. While I am open to consideration around the tsunami arrival time, I am currently not proposing any changes in respect to Policy 3(b) or 5(b).
- (577) I disagree that the 25m² threshold should be repeated in the policy. The chief value of the policy is in assessing resource consents when the permitted activity conditions of the rule are not met – if the size were an absolute determination of whether the application should proceed, that would be better reflected using a prohibited activity rule (which I think is excessive).
- (578) I agree with the inclusion of storm surge as this reflects the phenomena included in the coastal inundation model³⁹.
- (579) I do not agree with the limitation of the policy to non-habitable rooms. Additions will often not simply involve adding an extra room and leaving the building otherwise unchanged – the value of additions often comes from enabling a substantial internal reconfiguration of a building. It is artificial and pointless to impose a limit that would apply to the enlarged

³⁹ See the technical report accompanying the Section 32 reports, "Coastal inundation and sea level rise assessment for the Hutt City District 2023", https://hccpublicdocs.azurewebsites.net/api/download/c9be9b889d1746e2b710f382e92d32e8/_dplanreview/e441161b4271361f42c2b578e03707531192, explained on pp9-10.

part of the building. It is also difficult to enforce in the long term (as the use of rooms can change without Council's knowledge).

- (580) The submitter does not provide reasons for the introduction of the phrase "existing risk", and it does not seem to me to improve the readability of the policy.
- (581) With regards to the phrase "as low as reasonably practicable", I think this is better handled through a definition, which I discuss in section 7.1.3.
- (582) As discussed in section 5.2.6, I also recommend separating the policy into the different hazard levels and activity groups, which I show in Appendix A1.

CE-P15 (Subdivision, Use and Development within the Coastal Hazard Overlays)

- (583) Argosy Property (237.27), Oyster Management (272.32), the Adrian Palmer Family Trust (315.25), Fire and Emergency NZ (374.58), the Ministry of Education (399.44), the Fuel Companies (471.195, conditional), and the Wellington Regional Council (452.153), opposed by the Natural Hazards Commission (F15.67), support the policy as notified.
- (584) Michael Rachlin (232.19) supports the policy as it relates to the Low Tsunami Hazard Overlay.
- (585) Forest and Bird (424.89h, supported by the MPHRCIS F10.107) seek that the policy be amended to give effect to Policy 11 of the NZCPS, which relates to indigenous biodiversity.
- (586) I discuss why I do not support this change in general in section 3.1.1, which includes that the request is not in scope of the Plan Stop exemption.
- (587) Christene Loweth (267.13) seeks that the policy is reworded as follows (due to the large amount of minor rewording, I will not show tracked changes):

- 1. Allow new buildings and structures in the Coastal Hazard Overlays only if they are for activities least sensitive to natural hazards.
- 2. Allow the conversion of existing buildings for activities potentially sensitive to natural hazards in the Coastal Hazard Overlays.

3. In the Medium and High Coastal Hazard Overlays, only allow new buildings and structures in areas like Seaview, Petone, and Seaview Marina if:

- o The building size is appropriate.
- o Measures are in place to reduce risks from coastal hazards.
- o Safe pedestrian evacuation routes are provided for tsunami evacuation.

assuming the tsunami arrives within 30 minutes.

4. Require that new buildings in the Medium Coastal Hazard Overlay include measures to reduce risks from coastal hazards and provide safe evacuation routes.

5. Only allow new buildings in the High Coastal Hazard Overlays if:

- o They incorporate measures to reduce risks from coastal hazards.
- o Safe pedestrian evacuation routes are available in the event of a tsunami.

6. Avoid new buildings or structures in the High Coastal Hazard Overlays

unless the building:

- o Has an operational need to be in that location.
- o Includes mitigation measures to reduce risk to life.
- o Provides safe evacuation routes for tsunami hazards.

assuming the tsunami arrives within 30 minutes.

(588) This submission point covers much the same ground and reasoning as that of Laura Skilton (314.25, opposed by Kāinga Ora F26.15), who seeks the policy be amended as follows:

Subdivision, use and development in the Coastal Hazard Overlay are managed as follows:

1. Allow for new buildings and structures, building platforms and the conversion of existing buildings for activities least sensitive to natural hazards in all areas of the Coastal Hazard Overlays.

2. Allow for the conversion of existing buildings containing activities potentially sensitive to natural hazards in all areas of the Coastal Hazard Overlays.
- ~~3. Allow for new buildings and structures and building platforms containing activities potentially sensitive to natural hazards in the Low Tsunami Hazard Overlay.~~
4. Provide for new buildings and structures and building platforms containing activities potentially sensitive to natural hazards ~~and activities most sensitive to natural hazards~~ in the Medium and High Coastal Hazard Overlays when located in the General Industrial Zone in Seaview, the Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone and the Seaview Marina Zone where:
 - a. The building or structure does not exceed an appropriate gross floor area,
 - b. The building or structure incorporates measures that minimise the risk to people and buildings from coastal hazards,
 - c. If the building is a Major Hazardous Facility, measures that minimise the risk from the release of hazardous goods from a coastal hazard are incorporated into the design of the building or the storage of the hazardous goods,
 - d. There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture by means of walking, and
 - e. The impact of any local government or central government planned climate change adaptation methods on the hazard susceptibility of the development has been considered.
5. Provide for new buildings and structures and building platforms containing activities potentially sensitive to natural hazards in the Medium Coastal Hazard Overlays in all other zones where:

a. The new building incorporates measures that minimise the risk to people and buildings from the coastal hazard, and

b. There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture by means of walking.

6. Only allow for new buildings and structures and building platforms containing activities potentially sensitive to natural hazards in the High Coastal Hazard Overlays in all other zones where:

a. The new building incorporates measures that reduce or do not increase the existing risk to people and buildings from the coastal hazard, and

b. There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture.

~~7. Provide for new buildings and structures, building platforms and the conversion of existing buildings containing activities most sensitive to natural hazards in the Low Tsunami Hazard Overlay where:~~

~~a. The building will not be occupied by a sensitive activity with vulnerable residents or occupants; or more than three residential units on a site unless mitigation measures are incorporated into the development to minimise the risks to people and buildings from the coastal hazard.~~

8. Only allow for new buildings and structures, building platforms and the conversion of existing buildings containing activities most sensitive to natural hazards in the Medium Coastal Hazard Overlays in all other zones where:

a. The new building replaces an existing building and has the same or less footprint than building(s) than were on the site on 31 December 2024~~incorporates measures that~~

~~minimise the risk to people and buildings from the coastal hazard,~~

b. The new development does not involve or require the removal or modification of a natural system or feature that provides protection to other properties from the natural hazard, and

c. There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture by means of walking.

9. Avoid new buildings and structures, building platforms and the conversion of existing buildings containing activities most sensitive to natural hazards in the High Coastal Hazard Overlays in all zones (excluding the General Industrial Zone in Seaview, the Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone and the Seaview Marina Zone) unless:

a. For activities that have an operational need and functional need to locate or occur within the High Coastal Hazard Overlays and locating or occurring outside these areas is not a practicable option:

i. Mitigation measures are incorporated to minimise the risk of damage to buildings and loss of life to people associated with the activity, or

b. For any other activities:

i. The new building, building platform or conversion of the building does not increase the risk to life, or

ii. The new building, building platform or conversion of the building incorporates measures that minimise the risk to people and buildings from the coastal hazard,

iii. There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture by means of walking,

iv. The new building, or building platform does not involve or require the removal or modification of a natural system

or feature that provides protection to other properties from the natural hazard.

(589) The submitters generally consider that:

- The policy is too weak to prevent risks to life, and
- Separate treatment for the Low Tsunami Hazard Overlay is redundant, as the affected areas are entirely covered by the Medium Coastal Inundation Hazard Overlay as well.

(590) As with CE-P14, I think it should be specific that evacuation is by foot but in using the word “pedestrian” the policy already does so.

(591) I do not support the requirement to compare gross floor area to 31 December 2024. As the policy is going to be considered in the context of a detailed resource consent, a more detailed and holistic consideration of risk can be made and a proxy such as gross floor area is not necessary.

(592) I do not agree that the framework for the Low Tsunami Hazard Overlay is redundant – there are areas particularly in western Petone, Eastbourne, Days Bay, and Lowry Bay which are covered by the Low or Medium Tsunami Hazard Overlays that do not fall within the identified coastal inundation area at all.

(593) Otherwise, I think the approach raised by submitters is excessive. The threat from tsunamis and coastal hazards is not imminent in most of the overlay, but part of a long-term strategy to avoid long term increases in risk from more development in areas that will be at risk in future. There is no short or medium term plan to generally abandon these areas, and some practical allowance needs to be made for their ongoing use. Given the timeframes involved, this needs to include consideration for new and replacement buildings, changes in land use and tenancies, which can be evaluated in the context of the direction to minimise or not increase risk (depending on hazard level) in the context of specific applications.

(594) The Natural Hazards Commission (327.103) seek that the policy be amended as follows:

...

4. Provide for new buildings and structures and building platforms containing activities potentially sensitive to

natural hazards and activities most sensitive to natural hazards in the Medium and High Coastal Hazard Overlays when located in the General Industrial Zone in Seaview, the Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone and the Seaview Marina Zone where:

- a. The building or structure does not exceed ~~an appropriate~~ 200m² gross floor area,
- b. The building or structure incorporates measures that minimise the risk to people and buildings from coastal hazards to as low as reasonably practicable,
- c. If the building is a Major Hazardous Facility, measures that minimise the risk from the release of hazardous goods from a coastal hazard are incorporated into the design of the building or the storage of the hazardous goods,
- ~~d. There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture, and~~
- e. The impact of any local government or central government planned climate change adaptation methods on the hazard susceptibility of the development has been considered.

5. Provide for new buildings and structures and building platforms containing activities potentially sensitive to natural hazards in the Medium Coastal Hazard Overlays in all other zones where:

- a. The new building incorporates measures that minimise the risk to people and buildings from the coastal hazard to as low as reasonably practicable, and
- ~~b. There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture.~~

6. Only allow for new buildings and structures and building platforms containing activities potentially sensitive to

natural hazards in the High Coastal Hazard Overlays in all other zones where:

a. The new building incorporates measures that reduce or do not increase the existing risk to people and buildings from the coastal hazard, and

~~b. There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture.~~

...

8. Only allow for new buildings and structures, building platforms and the conversion of existing buildings containing activities most sensitive to natural hazards in the Medium Coastal Hazard Overlays in all other zones where:

a. The new building incorporates measures that minimise the risk to people and buildings from the coastal hazard to as low as reasonably practicable,

b. The new development does not involve or require the removal or modification of a natural system or feature that provides protection to other properties from the natural hazard, and

~~c. There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture.~~

9. Avoid new buildings and structures, building platforms and the conversion of existing buildings containing activities most sensitive to natural hazards in the High Coastal Hazard Overlays in all zones ~~(excluding the General Industrial Zone in Seaview, the Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone and the Seaview Marina Zone)~~ unless:

~~a. For activities that have~~ There is an operational need and functional need to locate or occur within the High Coastal

Hazard Overlays and locating or occurring outside these areas is not a practicable option; and

~~b. Mitigation measures are incorporated to minimise the risk of damage to buildings and loss of life to people associated with the activity, or~~

~~b. For any other activities:~~

~~i. The new building, building platform or conversion of the building does not increase the risk to life, or~~

~~ii. The new building, building platform or conversion of the building incorporates measures that minimise the risk to people and buildings from the coastal hazard;~~

~~iii. There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture;~~

~~iv. The new building, or building platform does not involve or require the removal or modification of a natural system or feature that provides protection to other properties from the natural hazard.~~

- (595) As in CE-P14 above, the value of the policy is for considering resource consents which occur when permitted activity conditions are not met, so I do not see value in restating the gross floor area condition in the policy.
- (596) As previously discussed, I do not support removing the policy pertaining to tsunami evacuation. While I am open to consideration around the tsunami arrival time, I am currently not proposing any changes in respect to clauses 3(b) or 5(b).
- (597) As discussed in section 3.1.5, I do not support removing the special treatment for Seaview/Petone.
- (598) With regards to the phrase “as low as reasonably practicable”, I think this is better handled through a definition, which I discuss in section 7.1.3.
- (599) I think it is appropriate to provide for development that reduces or does not increase risk, even if it has no functional or operational need to be in a high hazard overlay, particularly for tsunami given the long time horizon of the modelled event. There is not yet a general expectation of retreat from these areas and the plan needs to provide for their continued operation.

This may be better handled through redevelopment, especially if it can reduce risk, than preserving existing uses as-is.

- (600) Joe Jeffries (514.5) seeks to delete clause 9 and apply clause 8 to the High Hazard overlays as well, considering it appropriate to provide for new buildings.
- (601) In my view clause 9 as notified does provide a pathway for new buildings, either where they have a functional or operational need, or they do not increase the risk to life. This is a higher bar than clause 8 for Medium Hazard areas, which only requires that risk be minimised, but I consider this appropriate given the risk-based approach.
- (602) As discussed in section 5.2.6, I also recommend separating the policy into the different hazard levels and activity groups, which I show in Appendix A1.

5.2.18 New policies sought

Risk assessments

- (603) David Surrey (427.19a, opposed by Wellington Water F36.317, 427.19b) seeks a new policy in each chapter providing direction on when risk assessments should be made.
- (604) In my view the existing policy guidance makes it clear when assessments of risk should be made and recommend rejecting these submission points.

5.2.19 Rules – General issues across rules

Notes to the rules

- (605) Michael Rachlin (232.13) seeks a note at the start of the rules framework to state that rules only apply to activities undertaken within the part of the site located within an overlay.
- (606) This would be redundant given the more detailed explanation of how overlays apply in the *How The Plan Works – General Approach* chapter and so I recommend rejecting this relief.
- (607) Transpower New Zealand (504.65) supports the note to the Coastal Environment rules stating "The policies, rules and standards for

infrastructure within the coastal environment are located in the Infrastructure chapter".

- (608) The notes to the rules were primarily relevant to the now withdrawn rules CE-R1 to CE-R7, covering general coastal environment Issues. The remaining sections of the chapter are now structurally the same as the Natural Hazards chapter, in that they apply only within identified overlays. I therefore recommend deleting the note to the rules as a consequential change from the partial withdrawal and for consistency with the Natural Hazards chapter, which does not have an equivalent note.
- (609) I discuss more generally how the plan communicates which rules apply in which circumstances in section 5.2.8.

Buildings and structures

- (610) The PDP uses National Planning Standards definitions for *building* and *structure*, the latter of which is also defined in the Act. Buildings are a subset of structures and one key distinction is that only structures with roofs come under the definition of *building*. There are a large number of everyday outdoor objects that are therefore structures but not buildings, including signs, fences, walls, planter boxes, street cabinets, decks, benches, cycle racks, picnic tables, and so on.
- (611) Some of these are covered in the definition of *activities least sensitive to natural hazards*, which are in most cases permitted in even Medium and High hazard overlays. This includes some structures associated with parks and passive recreation. Also included are non-habitable accessory *buildings* (e.g. sheds and detached garages). However, structures that are not buildings are not included in the definition.
- (612) The Fuel Companies (471) in relation to specific provisions seek that rules relating to buildings and structures be more enabling of small-scale, non-habitable, or other presumably low-risk structures, particularly by adding a permitted activity pathway for buildings with a low gross floor area.
- (613) One perhaps wider issue is the interpretation of "gross floor area" for this type of situation. The definition in the PDP, which comes from the National Planning Standards, begins (emphasis mine):

*means the sum of the total area of all floors **of a building**
or buildings*

- (614) I would interpret this to mean that structures that are not buildings therefore do not have a gross floor area, and thus any rule that is permitted subject to gross floor area does not impose a condition on structures that are not buildings.
- (615) Laura Skilton (314) and Christene Loweth (267) seek that rule NH-R9 be expanded to cover all structures and not just buildings.
- (616) No submitters raise the issue in general of the coverage of the rule to both buildings and structures. By comparison, as set out in Appendix B6, other National Planning Standard compliant district plans in the region have rules only for buildings, and do not cover structures that are not buildings, avoiding potential issues around natural hazard rules applying to non-habitable accessory structures such as fences or letterboxes, or low-value structures whose presence or absence probably does not increase a population at risk from natural hazards, such as decks.
- (617) I would recommend consistency with the Wellington City District Plan approach, although I am not sure there is scope in submissions to do so. This may be an issue on which submitters may wish to present further evidence or for the panel to investigate further.
- (618) In the case of those rules where there is scope from submissions, I recommend limiting their scope to only buildings. I discuss this in the relevant rules in the sections below.

Notification preclusions for rules

- (619) The Adrian Palmer Family Trust (315.22) seeks that the natural hazard and coastal hazard rules have preclusions from notification.
- (620) I believe in some instances it is appropriate to have non-notification clauses, as there is no scenario in which there would be affected parties. In particular, it is appropriate to have non-notification clauses for those natural or coastal hazards which are not increased or changed for other people outside the site as a result of subdivision, use or development, or for which there is no discretion in restricted discretionary rules to consider effects that might warrant notification.
- (621) The proposed non-notification clauses are outlined in the table below:

	Non-notification clause for public notification	Non-notification clause for limited notification
Liquefaction	Yes	Yes
Fault Rupture	Yes	Yes
Low Flood Hazard Overlay	Yes	Yes
Medium Flood Hazard Overlay	In Regionally Significant Coastal Business Areas Overlay only	No
High Flood Hazard Overlay	In Regionally Significant Coastal Business Areas Overlay only	No
Low Tsunami Hazard Overlay	Yes	Yes
Medium Coastal Hazard Overlay	Yes	Yes
High Coastal Hazard Overlay	No	No

(622) I do not proposed precluding notification for discretionary or non-complying rules, as this is an unusual combination of provisions and the situations where these would be relevant are generally so much more fact-specific and distinct that notification should be at least considered.

(623) I thus recommend accepting this relief in part. This is shown in the rules in Appendix A1.

Section 32AA Analysis

- (624) This change substantially changes the potential for notification in the relevant rules. In my view, adding preclusions only to the listed rules will only preclude notification in situations in which it would be very unlikely there would be relevant effects to cause an affected party, and so will make consent processing more efficient without significant drawbacks. It will also align better when consents are bundled with rules under other chapters that also have notification preclusions.

Spatial application of rules

- (625) While not raised by submitters, most rules apply in specific identified overlays. The general structure of the plan for district-wide rules is to identify these overlays in the box at left. I recommend as a minor correction, moving the identification of areas here rather than in rule titles or conditions. This is shown in Appendix A1 and includes some merging and separating of rules with multiple activity statuses depending on which overlay applies.

5.2.20 Rules – Fault Location Area

NH-R1 (Additions to existing buildings and structures for activities least sensitive to natural hazards within the poorly constrained, uncertain constrained, well defined and well defined extension areas of the Fault Location Area)

- (626) Wellington Regional Council (452.89, supported by NHC F15.31) supports the rule as notified.
- (627) There are no submissions seeking changes. However, as a minor correction, I think the title can be simplified as the rule applies to the entirety of the Fault Location Area:

NH-R1 (Additions to existing buildings and structures for activities least sensitive to natural hazards within ~~the poorly constrained, uncertain constrained, well defined and well defined extension areas of~~ all areas of the Fault Location Area)

NH-R2 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the poorly constrained or the uncertain constrained areas of the Fault Location Area)

(628) The Natural Hazards Commission (327.47) seeks to amend the permitted activity conditions to add:

1. Activity status: Permitted

Where:

a. The additions do not increase the Gross Floor Area by more than 25m., and

b. The additions are located at least 20m away from the Fault; and

c. The additions are not habitable areas.

...

(629) The former requested condition is unenforceable, as the Council would need to prove, as an element of the offence, where the real-life location of the fault is. The poorly constrained and uncertain constrained areas of the Fault Location Area are those where the Council does not hold this information. This can only be determined with an assessment within a resource consent, where the Council can require it of the applicant, not as a rule condition.

(630) For the latter, the issue is that this rule applies in situations where the location of the fault is unclear. The submitter suggests that regard be had to the 2003 Ministry for the Environment publication "Planning for Development of Land on or Close to Active Faults"⁴⁰. The guidance is more general and does not suggest that an approach of always avoiding all development near a fault is always the best approach. As the guidance notes:

It is not always possible to avoid building within a fault avoidance zone. Past planning decisions may have resulted in buildings being within a fault avoidance zone, or

⁴⁰ <https://environment.govt.nz/assets/Publications/Files/planning-development-faults-graphics-dec04-1.pdf>

people may have an expectation to build there now. Also, where the level of certainty is low regarding the fault location, its complexity and recurrence interval, it may be difficult to justify rules that limit any building in these areas.⁴¹

- (631) The guidance does include recommendations for activity statuses for activities based on Building Act building importance categories (BICs). This would suggest activities to be limited to BIC 1, which is similar to the Planning Standards concepts of accessory buildings or non-habitable rooms.
- (632) However, in my view this is not practical to implement unchanged in a modern planning context. The guidance relates to the RMA before a large number of significant amendments and predates many now well-accepted planning methods, including heavier use of permitted activities with conditions, and restricted discretionary activities. The plan approach needs to balance managing risk with the uncertainty around which land is actually affected, in the context of an existing built-up area, and the difficulty of dividing additions to an existing building into habitable and non-habitable parts.
- (633) I thus consider the permitted allowance for a 25m² addition a proportional response to the uncertainty over the location of the risk and recommend the relief not be accepted.
- (634) The Wellington Regional Council (452.90, supported by NHC F15.32) seeks that the term “fault line” be replaced with “fault trace” as being more standard geohazard terminology. I agree with this for the reasons set out in that submission and recommend this change be made:

...

Matters of discretion are restricted to:

- 1. The change in risk to life as a result of the additions being undertaken on the site.*
- 2. The location of the additions relative to the fault ~~line~~ trace.*

⁴¹ p24.

3. Any mitigation measures to reduce the impacts to life and buildings from fault rupture.
4. The relevant matters in Policy NH-P6: Additions to existing buildings and structures within the Fault Location Area.

NH-R3 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the well-defined or well-defined extension areas of the Fault Location Area)

- (635) The Natural Hazards Commission (327.48, opposed by the Fuel Companies F32.19) seeks to clarify the relation of matter of discretion 3 with the Building Act, considering it potentially an acceptable crossover into building consent issues.
- (636) The Building Act and Building Code do not contain acceptable solutions or a general method of ensuring that buildings built on a fault can survive a rupture of that fault. I do not think that mitigation measures are particularly likely to hinge solely on the details of the building consent and whether more than minimum performance would be achieved, but it would be within scope of the discretion to consider that if so. I consider that appropriate, especially in determining whether or not the consent should be granted, and no specific reference to the Building Act is necessary.
- (637) Mitigation measures may not relate to building design but could also be operational, such as for a business, having facilities less frequently used by staff such as storage nearer to the likely location of the fault. I thus do not recommend accepting the relief.
- (638) The Wellington Regional Council (452.91, supported by NHC F15.33) supports the rule subject to replacing the term “fault line” with “fault trace”, which I support as discussed in NH-R2, and so recommend the rule be changed as follows:

...

Matters of discretion are restricted to:

1. The scale and size of the addition and how it changes the risk of building damage as a result of its construction.
2. The change in risk to life as a result of the additions being undertaken on the site.
3. The location of the additions relative to the fault ~~line~~ trace and any mitigation measures to reduce the impacts to life and buildings from fault rupture.
4. The relevant matters in NH-P6: Additions to existing buildings and structures within the Fault Location Area.

...

NH-R5 (New buildings and structures and the conversion of existing buildings for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the poorly constrained or the uncertain constrained areas of the Fault Location Area)

- (639) Oyster Management (272.18) supports the rule as notified.
- (640) Wellington Regional Council (452.93, supported by NHC F15.35) seeks to delete the controlled activity arm of the rule and make it restricted discretionary in all circumstances, and to replace “fault line” with “fault trace”.
- (641) As discussed in NH-R2, I agree with the use of “fault trace” and recommend this part of the relief be accepted.
- (642) The submitter considers that the Council should retain an ability to decline consents where a new building might be used for a *potentially sensitive* or *most sensitive* activity.
- (643) The Council has a duty, in effect, under s85 of the Act to provide for the reasonable use of land. A policy direction that refused the ability to build on an otherwise vacant section, or allowed it only for the very limited category of *activities least sensitive to natural hazards*, would fail to meet this duty. Depending on the location and underlying zoning, this might well also apply to *activities potentially sensitive to natural hazards*, particularly in a residential zone.

(644) A controlled activity status requires that the Council grant consent, but also allows it to place conditions on that consent. In my view the matters of control are adequate to allow a consideration of the design, use, and location of the building in balancing the risk from the fault with the need to allow some sort of reasonable use of the site.

(645) The Natural Hazards Commission (327.49) seeks that the controlled arm be changed to restricted discretionary, with different matters of discretion for the two arms of the rule, deleting some of the existing matters of control/discretion. For the vacant site situation, this would be:

- ~~1. The ability for the building to maintain life safety during and after a fault rupture.~~
- ~~2. The location of the building relative to the fault line and any mitigation measures to reduce the impacts from fault rupture.~~

(646) For other situations, the matters of discretion would be reduced as follows:

- ~~1. The ability of the existing building to maintain life safety during and after a fault rupture.~~
- ~~2. The ability of the existing building to remain structurally sound during and after a fault rupture.~~
- ~~3. The location of the existing building relative to the fault line and any mitigation measures to reduce the impacts from fault rupture.~~
4. The relevant matters in NH-P7: Subdivision, use and development within the Fault Location Area

(647) The submitter also notes the amendments they request to NH-P7.

(648) The change from a controlled activity to a restricted discretionary activity I discuss above in relation to Wellington Regional Council's submission point, and for the same reasons recommend rejecting the submission point of the Natural Hazards Commission.

(649) For the changes to the matters of discretion/control, I think these are inappropriate and cut against both the risk-based approach and general themes of the NHC submission. Making the consent solely about the location of the building relative to the fault line fails to provide any

reasonable scope to place conditions to mitigate hazards for existing buildings

(650) For new buildings in the very likely situation that there is no practical location for a building away from the fault, this would allow buildings to be built essentially anywhere without conditions, and sensitive activities to locate in an uncontrolled fashion without any requirement for mitigation measures.

(651) Accordingly, I recommend the rule be amended as follows:

1. Activity status: Controlled

...

Matters of control are limited to:

...

2. The location of the building relative to the fault ~~line~~ trace and any mitigation measures to reduce the impacts from fault rupture.

2. Activity status: Restricted discretionary

...

Matters of discretion are restricted to:

...

3. The location of the existing building relative to the fault ~~line~~ trace and any mitigation measures to reduce the impacts from fault rupture.

...

5.2.21 Rules – Flood Hazard Overlays

NH-R7 (Additions to existing buildings and structures for activities least sensitive to natural hazards in the Flood Hazard Overlays)

(652) The Fuel Companies (471.177) and Wellington Regional Council (452.95, supported *in part* by NHC F15.37) support the rule as notified.

(653) The Natural Hazards Commission (327.51) seek to amend the rule to add a permitted activity condition as follows:

1. Activity status: Permitted

where: Compliance is achieved with relevant matters in

NH-P8.

- (654) This is unworkable as a permitted activity condition as it relies on subjective judgements and assessments about the application of a policy. The submitter has also not requested any relief that would set out what happens should the permitted activity condition not be met.
- (655) More broadly, as I discuss in relation to policy NH-P8, I think the overall approach of the plan in providing for development in Low Flood Hazard Overlay areas subject to a minimum floor height standard is the most efficient way to achieve the policy, and an approach relying on subjective assessment would be impractical given the number of sites affected.
- (656) I accordingly recommend this relief be rejected.

NH-R8 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Low Flood Hazard Overlay)

- (657) Argosy Property (237.13) and the Wellington Regional Council (452.96) support the rule as notified.
- (658) Michael Rachlin (232.14a, 232.14b, opposed by Wellington Water F36.323, F36.324) seeks that the standard be clarified so that it only apply to the addition, and not unchanged parts of the existing building.
- (659) Rowain Swain and Kim Weber-Swain (317.4b, opposed by Wellington Water F36.318, 317.5c), Grant Gunn and Kristin Gunn (369.1b, 369.2c, supported by the Trustees of the Gunn Family Trust F7.2 and F7.7, opposed by Wellington Water F36.319), Andrew Robinson and Robyn Robinson (380.4b, 380.5c, F9.9, F9.14, supported by Kris Connell F3.9 and F3.14, opposed by Wellington Water F36.320), and Sensible Solutions for Eastbourne (383.4b, 383.5c, opposed by NHC F15.94 and Wellington Water F36.321, F36.322) likewise seek that the rule not apply to additions to existing buildings or the rule be deleted entirely.

- (660) I agree that the rule should only apply to additions and recommend accepting the relief of the submitters in part, by setting out that the rule apply to the addition and not the entire building.
- (661) I do not otherwise agree with the broader idea that the standard is unachievable for extensions to existing buildings or that it should be the automatic responsibility of the Council to construct mitigation works to protect new development and additions, which is unlikely to be the most efficient way to mitigate the flood hazard.
- (662) Michael Rachlin further seeks (232.14b) (with specific provisions) changes that would clarify the coverage of the rules within the Medium Flood Hazard Overlay.
- (663) I do not agree with the submitter's interpretation of the rule's application to the Medium Flood Hazard Overlay, but in any case I think the issue is solved indirectly through the changes to the layout I recommend in section 5.2.19 (under "spatial application of rules").
- (664) The Fuel Companies (471.178) seek that the rule condition not apply where the addition is not for a habitable room.
- (665) I agree that the rule has very limited benefits and would in some cases be impractical to meet when applied to non-habitable rooms. Where the required floor height is significantly elevated off the ground, the use of sub-floor space for non-habitable rooms such as storage or garages may also be an efficient design solution. I recommend accepting this submission point (with some slight rewording for clarity), by limiting the application to habitable rooms in buildings.
- (666) Laura Skilton (314.16, opposed by Wellington Water F36.325) seeks to alter the rule so that floors must be elevated on piles and cannot use a concrete slab, considering that piles create a greater allowance for floodwater to drain under the house.
- (667) As the rule applies specifically to the Low Flood Hazard Overlay which does not have general policy direction around the direction of flood waters, I think this is excessive and recommend rejecting this point.
- (668) The Natural Hazards Commission seek to retain the rule, conditional on their requested changes to NH-P8 (which I discuss in section 5.2.14), and further that the height of the freeboard allowance should be included, with

specific values of 500mm for residential activities and 300mm for commercial activities, considering this to be in line with other territorial authorities.

- (669) Those figures are based on the recommendations in the *Tiaki Wai Regional Standard for Water Services*⁴², which also includes a value of 200mm for activities that are neither residential nor commercial. However, it also notes that these figures apply where there has not been a "formal assessment of an appropriate freeboard allowance based on sensitivity testing in a validated hydraulic model". Such an assessment was done for the six models used in the Low Flood Hazard Overlay, as described in the technical reports and in the evidence of Mr Osborne in Appendix B1.
- (670) Accordingly, I recommend clarifying the rule so that it is this freeboard that is intended to be used.
- (671) Consequentially I recommend the rule be amended as follows:

NH-R8 (Additions to existing buildings ~~and structures~~ for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Low Flood Hazard Overlay)

1. Activity status: Permitted

Where:

a. ~~When located within a Low Flood Hazard Overlay, the~~ finished floor levels of the habitable rooms in the additions building are located above the level of the Modelled 1% AEP Flood Annual Exceedance Probability level including the modelled freeboard, plus the height of the floor joists or the base of the concrete floor slab ~~and an allowance for freeboard.~~

...

- (672) As I describe in section 7.1.3, I also recommend a definition of "Modelled 1% AEP Flood" to clarify the models to be used in determining the relevant levels.

⁴² <https://www.wellingtonwater.co.nz/assets/Reports-and-Publications/Regional-Standard-RSWS.pdf>

NH-R9 (Additions to existing buildings that contain activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Medium Flood Hazard Overlay and High Flood Hazard Overlay)

- (673) When notified on 6 February 2025, this policy contained an error in that the rule title referred to the Low Flood Hazard Overlay where it should have referenced the Medium Flood Hazard Overlay and High Flood Hazard Overlay. Due to the high confusion this could have caused for submitters, Council on 5 March 2025, during the original submissions process, used its power under Schedule 1 cl16A of the Act to make a minor correction to fix this issue, rather than waiting to correct it through the hearings process.
- (674) Argosy Property (237.14) and Oyster Management (272.19) both sought that the above error be corrected. As it already has been corrected, these submission points are now moot.
- (675) As noted by Michael Rachlin (232.15), the provision also incorrectly numbers the discretionary arm of the rule as 2, whereas it should be 3 as 2 is already used for the restricted discretionary arm. This will be indirectly corrected through the policy restructure I recommend in section 5.2.6. I will use the corrected number 3 for the discretionary arm in the rest of this discussion as other submitters used this implicitly corrected numbering.
- (676) The Fuel Companies (471.179) support the rule as notified.
- (677) The Wellington Regional Council (452.97, opposed by Michael Rachlin F4.9, supported by NHC F15.38) originally sought amendments to the permitted activity conditions to address significant hazardous facilities, but as discussed in section 2.5.1, now supports the rule as notified and considers that the provisions in the Hazardous Substances chapter will address their concerns.
- (678) Winstone Wallboards (31.30) and Michael Rachlin (232.15) seek to amend the discretionary arm of the rule (NH-R9.3) to restricted discretionary and with the matters of discretion aligned with the matters in NH-R11.
- (679) I agree that the situations for NH-R9.3 and NH-R11 are analogous and in this case there is no reason for a more onerous activity status for additions as compared to new buildings. I also agree the matters of

discretion in NH-R11, by covering the same issues but directly referencing the relevant policy, are more appropriate, and recommend accepting this relief.

- (680) Go Architecture Ltd (331.9) seeks to provide for a permitted activity pathway outside the Petone/Seaview areas for additions up to 30m² gross floor area, where they do not add a new residential activity or new bedrooms on the ground floor. Alternatively, they seek the same approach as in rule CE-R10.1.b.
- (681) I do not think the situation for coastal hazards provides a guide for flooding, given the policy direction also encompasses managing the potential diversion of floodwaters within the Medium and High Flood Hazard Overlays, and so a lower bar for assessment is warranted even if the policy approach is otherwise similar.
- (682) Accordingly, I recommend rejecting this relief.
- (683) Christene Loweth (267.4) and Laura Skilton (314.12) seek that the rule be expanded to cover all structures and not only buildings, for consistency with other rules.
- (684) I discuss the buildings/structures distinction in section 5.2.19, which sets out why I think structures that are not buildings should not be covered by the rule. I thus recommend rejecting this relief.
- (685) Michael Rachlin (232.15) seeks that the rule be separated into Medium and High Flood Hazard Overlay components. This is not necessary given the restructuring I am recommending and so I recommend rejecting this part of the submission point.
- (686) The Natural Hazards Commission (327.53, opposed by Michael Rachlin F4.3) seeks to update the rule to provide for a controlled and/or restricted discretionary activity status for *activities potentially sensitive to natural hazards* and discretionary for *activities most sensitive to natural hazards*. I infer this would be without regard to whether this is in the Seaview/Petone area distinguished by the rule as notified.
- (687) The submitter does not give reasons for this, and I am more convinced by the other submissions seeking a general restricted discretionary status as this allows targeted assessment against the relevant policy.

(688) NHC further seeks to add an additional permitted activity condition to NH-R9.1, being that:

...

c. Flood resistant design is incorporated into additions

(689) This is much too subjective to work as a permitted activity condition (rather than a policy or matter of discretion).

(690) More broadly, the submitter's relief could only be achieved through a resource consent assessment, which I think is disproportionate given the policy direction for the Seaview/Petone area. I thus recommend rejecting this relief.

(691) Finally, I recommend updating the rule to reflect the Regionally Significant Coastal Business Areas Overlay I recommend in section 3.1.5, and splitting the rule up as recommended in section 5.2.6. This is shown in Appendix A1.

NH-R10 (New buildings and structures and the Conversion of Existing Buildings for activities least sensitive to natural hazards within the Low Flood Hazard Overlay)

(692) The Fuel Companies (471.180) and Wellington Regional Council (452.98, supported *in part* by NHC F15.40) support the rule as notified.

(693) The New Zealand Defence Force (404.13c, conditional) supports the rule as notified, although raises issues around the interaction with temporary activities. However, I think any changes to provisions to advance this relief could only be handled in the Temporary Activities chapter and are better dealt with in the context of the submitter's more specific submission points on that chapter, which will be addressed in Hearing Stream 7.

(694) The Natural Hazards Commission (327.54) seeks to add a permitted activity condition of:

...

where: Compliance is achieved with relevant matters in NH-P9.

(695) As with the equivalent relief the submitter seeks for NH-R7, this is unworkable as a permitted activity condition as it relies on subjective judgements and assessments about the application of a policy. The

submitter has also not requested any relief that would set out what happens should the permitted activity condition not be met.

(696) Accordingly, I recommend that the rule remain as notified.

NH-R11 (New buildings and structures and the conversion of existing buildings for activities least sensitive to natural hazards within the Medium Flood Hazard Overlay and High Flood Hazard Overlay)

(697) Wellington Regional Council (452.99, supported by NHC F15.41) supports the rule as notified.

(698) The Natural Hazards Commission (327.55, conditional) supports the rule conditional on the changes they seek to NH-P9.

(699) The Fuel Companies (471.181, opposed by WRC F38.86) as with rule CE-R15 seek to provide a permitted activity status for buildings and structures that do not exceed 10m² gross floor area or are not fully enclosed and do not have a constructed floor.

(700) As in that case, and as discussed in section 5.2.19, I recommend accepting the relief in part by limiting the application of the rule to buildings but not structures. This is shown in Appendix A1.

NH-R12 (New buildings and structures and the conversion of existing buildings for activities potentially sensitive to natural hazards or activities most sensitive to natural hazards within the Low Flood Hazard Overlay)

(701) Argosy Property (237.15), Oyster Management (272.20), and the Wellington Regional Council (452.100, 452.101, supported by NHC F15.42 and Wellington Water F36.328, F36.329) support the rule as notified.

(702) The Fuel Companies (471.182, supported by Wellington Water F36.327) seek that the rule's condition be clarified as to how it applies to structures that are not buildings.

(703) As discussed in section 5.2.19, I recommend accepting the relief in part by limiting the application of the rule to buildings but not structures.

(704) The Natural Hazards Commission (327.56, opposed by Wellington Water F36.326) seeks to include an explicit statement about the freeboard requirement. I recommend doing so in the same fashion as for rule NH-R8, above.

(705) The NHC further seeks to add a permitted activity condition of:

...

b. The relevant matters in NH-P9: Subdivision, Use and Development in the Flood Hazard Overlays.

(706) As with the equivalent relief the submitter seeks for NH-R7, this is unworkable as a permitted activity condition as it relies on subjective judgements and assessments about the application of a policy.

(707) Putting this together I recommend the rule be amended as follows:

NH-R12 (New buildings ~~and structures~~ and the conversion of existing buildings for activities potentially sensitive to natural hazards or activities most sensitive to natural hazards within the Low Flood Hazard Overlay)

1. Activity status: Permitted

Where:

a. The finished floor levels of the building are located above the level of the Modelled 1% AEP Flood Annual Exceedance Probability level including the modelled freeboard, plus the height of the floor joists or the base of the concrete floor slab ~~and an allowance for freeboard~~.

...

NH-R13 (New buildings and structures and the conversion of existing buildings for activities potentially sensitive to natural hazards or activities most sensitive to natural hazards within the Medium Flood Hazard Overlay and High Flood Hazard Overlay)

(708) The provision as notified incorrectly numbers the discretionary arm of the rule as 2, whereas it should be 3 as 2 is already used for the restricted discretionary arm. Arm 3 should likewise be numbered 4. This will be

indirectly corrected through the policy restructure I recommend (see below). For the rest of the discussion of submissions on this provision I will refer to the arms of the policy by their activity status as notified, as this is unambiguous. I have inferred which arm submitters are referring to where necessary.

- (709) The Fuel Companies (471.183) support the rule as notified.
- (710) The Wellington Regional Council (452.102, opposed by Michael Rachlin F4.10, supported by NHC F15.39) originally sought amendments to the permitted activity conditions to address significant hazardous facilities, but as discussed in section 2.5.1, now supports the rule as notified and considers that the provisions in the Hazardous Substances chapter will address their concerns.
- (711) The Policy Planning Team (440.34) seek that the rule title be amended to exclude “residential apartments”, as these are covered by NH-R14.
- (712) I agree this error should be corrected.
- (713) Barbara Sullivan (351.1) seeks that the non-complying arm of the rule state that it is “subject to the exceptions provided in section 10 of the Resource Management Act 1991.”
- (714) The application of existing use rights is the same for every land use rule in the PDP and section 10 (and other limits on rules such as in sections 4, 4A, 10A, 10B, etc.) apply regardless of whether it is stated in the plan or not. I do not think the PDP should generally repeat procedural matters found in the Act.
- (715) Argosy Property (237.16, supported by the Fuel Companies F32.16, opposed by Wellington Water F36.330) and Oyster Management (272.21) seek that the non-complying arm of the policy be made discretionary, i.e., that both *activities potentially sensitive to natural hazards* and *activities most sensitive to natural hazards* have the same treatment.
- (716) The relevant policy test in NH-P9 is hard to meet and uses the language of “avoid ... unless”, which I think is more consistent with a non-complying activity status. I thus recommend rejecting that relief.

- (717) Michael Rachlin (232.16) seeks that the discretionary arm be changed to restricted discretionary, with the only matter of discretion be reference to the policy test in NH-P9.5.
- (718) I agree that the only relevant matter for the consent is that policy test, and recommend making this change, although with the general structural changes I recommend below.
- (719) The Natural Hazards Commission (327.57, opposed by Michael Rachlin F4.4) seek to add another condition to the permitted arm of the rule, being:

...

c. The new building or conversion meets the matters in NH-P9.

...

- (720) As with the equivalent relief the submitter seeks for NH-R7, this is unworkable as a permitted activity condition as it relies on subjective judgements and assessments about the application of a policy. I thus recommend rejecting this relief.
- (721) Finally, I recommend updating the rule to reflect the Regionally Significant Coastal Business Areas Overlay I recommend in section 3.1.5, and splitting the rule up as recommended in section 5.2.6. This is shown in Appendix A1.

NH-R14 (New buildings and the conversions of existing buildings for residential apartments within the Medium Flood Hazard Overlay and High Flood Hazard Overlay)

- (722) Christene Loweth (267.5) seeks that the rule's condition change from four storeys or more to two storeys or less.
- (723) Wellington Regional Council (452.103, opposed by Michael Rachlin F4.11, supported by NHC F15.43) seeks that the rule be made non-complying or deleted entirely.
- (724) Both submitters raise this issue as well for the relevant policy, NH-P10, where I discuss this issue in section 5.2.14. For those reasons, I recommend rejecting both items of relief.

- (725) I do recommend consequential changes to this rule and NH-R13 to clarify that this rule is intended to apply instead of NH-R13. This is shown in Appendix A1.

5.2.22 Rules – Liquefaction Hazard Overlay

NH-R15 (Additions to existing buildings and structures for activities least sensitive to natural hazards, activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Liquefaction Hazard Overlay)

- (726) Argosy Property (237.17), Oyster Management (272.22), the Fuel Companies (471.184), and the Wellington Regional Council (452.104, supported *in part* by NHC F15.44) support the rule as notified.
- (727) The Natural Hazards Commission (327.58) seeks that the permitted activity be subject to a condition:
- 1. Activity status: Permitted*
- Where:*
- a. Meets the matters in NH-P11(4)*
- (728) They do not give reasons specific to this relief.
- (729) This is unworkable as a permitted activity condition as it relies on subjective judgements and assessments about the application of a policy. The submitter has also not requested any relief that would set out what happens should the permitted activity not be met.
- (730) I met with the submitter prior to completing this report and invited them to submit additional evidence that might set out how their general concerns could be advanced in a workable way through the scope of their submission. I had not received any at time of writing, but they are still able to do so prior to the hearing.
- (731) More broadly, as I discuss in relation to policy NH-P7, I think the overall approach of the plan in limiting planning restrictions for liquefaction to child care facilities, retirement villages, educational facilities, emergency services, and health care facilities is appropriate.
- (732) I accordingly recommend this relief be rejected.

NH-R16 (New buildings and structures and the conversion of existing buildings for activities least sensitive to natural hazards and activities potentially sensitive to natural hazards in the Liquefaction Hazard Overlay)

(733) Argosy Property (237.18), Oyster Management (272.23), the Fuel Companies (471.185), and the Wellington Regional Council (452.105, supported *in part* by NHC F15.45) support the rule as notified.

(734) The Natural Hazards Commission (327.59) seeks that the permitted activity be subject to a condition:

1. Activity status: Permitted

Where:

a. Meets the matters in NH-P11

(735) As I discuss above in relation to NH-R16 this requested condition is unworkable and I continue to think the approach set out in NH-P11 is appropriate. I accordingly recommend this relief be rejected.

NH-R17 (New buildings and structures and the conversion of existing buildings for activities most sensitive to natural hazards in the Liquefaction Hazard Overlay)

(736) The Fuel Companies (471.186), Natural Hazards Commission (327.60), and the Wellington Regional Council (452.106, supported by NHC F15.46) support the rule as notified.

(737) Christene Loweth (267.8) and Laura Skilton (314.18) seek that the restricted discretionary arm of the rule cover all *activities most sensitive to natural hazards*, not just the listed activities of “child care service, retirement village, educational facility, emergency service facility or health care activity”.

(738) I discuss why I think the notified approach is appropriate in relation to the policy, NH-P11, in section 5.2.15. I accordingly recommend this relief be rejected.

5.2.23 Rules – Coastal Hazard Overlays

CE-R8 (Additions to existing buildings and structures for activities least sensitive to natural hazards in all Coastal Hazard Overlays)

- (739) Michael Rachlin (232.20), the Fuel Companies (471.199), and the Wellington Regional Council (452.161, supported by NHC F15.68) support the rule as notified.
- (740) The Policy Planning Team (440.46b) seek that the rule be deleted on the grounds that it has no function, as it permits activities that would be permitted anyway if the rule did not exist.
- (741) While true, the rule does no harm and given the complexity of the chapter, I consider that it will probably aid plan usability to have a structure where plan users can be assured of finding a rule for each combination of overlay and activity category, even if that rule is a theoretically unnecessary permitted activity rule, and so recommend rejecting this relief.

CE-R9 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Low Tsunami Hazard Overlay)

- (742) The Fuel Companies (471.200), Michael Rachlin (232.20), Argosy Property (237.28), Oyster Management (272.33), Fire and Emergency NZ (374.60a), and the Wellington Regional Council (452.162, supported by NHC F15.69) support the rule as notified.
- (743) Laura Skilton (314.26) seeks that the rule be deleted on the grounds of being redundant in the belief that all Low Tsunami Overlay areas are within the Medium Coastal Inundation Hazard Overlay, which has a more restrictive rule framework.
- (744) This is not the case, there are areas where the Low Tsunami Hazard Overlay applies to which the Coastal Inundation Hazard Overlay does not, particularly in far western Petone, Lowry Bay, Days Bay, and Eastbourne. However, the rule is still technically redundant as I discuss below.

- (745) The Policy Planning Team (440.46c) seek that the rule be deleted on the grounds that it has no function, as it permits activities that would be permitted anyway if the rule did not exist.
- (746) While true that the rule has no function for this reason, the rule does no harm and given the complexity of the chapter, I consider that it will probably aid plan usability to have a structure where plan users can be assured of finding a rule for each combination of overlay and activity category, even if that rule is a theoretically unnecessary permitted activity rule, and so recommend rejecting this relief.
- (747) Accordingly, I recommend the rule remain as notified.

CE-R10 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Medium Coastal Hazard Overlays)

- (748) Fire and Emergency NZ (374.60b), Argosy Property (237.29), Oyster Management (272.34), and the Wellington Regional Council (452.163, supported by NHC F15.70) support the rule as notified.
- (749) Christene Loweth (267.14, 267.15) and Laura Skilton (314.27, 314.28, opposed by Kāinga Ora F26.16) seek that additions to existing buildings and structures for activities most sensitive to natural hazards be a prohibited activity (inferred, from the context of related submission points).
- (750) A prohibited activity status is difficult to justify in the RMA and requires the Council to be certain that the effects of that activity are never acceptable and that it has solid enough evidence to justify that. Hazard information inevitably evolves over time and that is reason enough to allow at least a resource consent pathway to reevaluate the risk for particular situations in future.
- (751) More broadly, the relief could be partially given effect to with a less restrictive activity status such as discretionary or non-complying. However, I also do not think this is appropriate. As I discuss in policy CE-P14 above in section 5.2.17, the policy and rule framework is part of a long-term strategy to avoid long term increases in risk from more development in areas that will be at risk in future. There is no short or medium term plan

to generally abandon these areas, and some practical allowance needs to be made for their ongoing use.

- (752) The Fuel Companies (471.201) seek that additions up to 200m² be permitted in the General and Heavy Industrial Zones in Seaview, for consistency with CE-R15. I agree that this relief should be accepted in part for consistency, although the condition should be that the total footprint is no more than 200m² rather than that of the addition alone. I also recommend for consistency this cover the proposed Regionally Significant Coastal Business Areas Overlay.
- (753) This correction will be implemented by the restructuring of the rules I recommend in section 5.2.6. The details of this are shown in Appendix A1.

CE-R11 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards in the High Coastal Hazard Overlays)

- (754) Argosy Property (237.30), Oyster Management (272.35), and the Wellington Regional Council (452.164, supported by NHC F15.71) support the rule as notified.
- (755) The Fuel Companies (471.202) seek that in the General and Heavy Industrial Zones in Seaview, a permitted activity option be added for additions up to 200m².
- (756) As with CE-R10, I think this would improve consistency with CE-R15 for new buildings but this would mean only additions where the *total* floor area is no more than 200m², not the increase alone, so I recommend accepting this relief in part.
- (757) I also recommend splitting up the rule as described in section 5.2.6. This is shown in Appendix A1.

CE-R12 (Additions to existing buildings and structures for activities most sensitive to natural hazards in the High Coastal Hazard Overlays)

- (758) Fire and Emergency NZ (374.61), the Fuel Companies (471.203), and the Wellington Regional Council (452.165, supported by NHC F15.72) support the rule as notified.

- (759) Christene Loweth (267.16) and Laura Skilton (314.29, opposed by Kāinga Ora F26.18) seek that the rule's activity status be modified to prohibited.
- (760) A prohibited activity status is difficult to justify in the RMA and requires the Council to be certain that the effects of that activity are never acceptable and that it has solid enough evidence to justify that. Hazard information inevitably evolves over time and that is reason enough to allow at least a resource consent pathway to reevaluate the risk for particular situations in future.
- (761) More broadly, the relief could be partially given effect to with a less restrictive activity status of non-complying. However, I also do not think this is appropriate. The relevant test in policy CE-P14 sets out that additions are acceptable where they incorporate measures that reduce or do not increase the risk to people and buildings, which I think is an achievable test in many situations. This is more consistent with a discretionary or restricted discretionary status than non-complying or prohibited.
- (762) Joe Jeffries (514.6) seeks that the rule status be modified to restricted discretionary, considering that mitigation measures will often be able to mitigate risk and that a restricted discretionary status would be consistent with the Wellington City District Plan⁴³.
- (763) As I discuss in section 3.1.1, regional consistency is an important consideration. In this case, the rule is also analogous with CE-R11, in which the main consideration is compatibility with the policy test in CE-P14.
- (764) Accordingly, I recommend the rule be altered as follows:

1. Activity status: Restricted Discretionary

Matters of discretion are restricted to:

1. The relevant matters in CE-P14: Additions to existing buildings and structures within the Coastal Hazards Overlays

⁴³ The equivalent rule in the Wellington City District Plan 2024 Appeals Version is CE-R18.2, which is restricted discretionary.

CE-R13 (New buildings and structures and the conversion of existing buildings for activities least sensitive to natural hazards in the Coastal Hazard Overlays)

- (765) The Fuel Companies (471.204), Michael Rachlin (232.20), and Wellington Regional Council (452.166, supported by NHC F15.73) support the rule as notified.
- (766) The Policy Planning Team (440.46d) seek that the rule be deleted on the grounds that it has no function, as it permits activities that would be permitted anyway if the rule did not exist.
- (767) While true that the rule has no function for this reason, the rule does no harm and given the complexity of the chapter, I consider that it will probably aid plan usability to have a structure where plan users can be assured of finding a rule for each combination of overlay and activity category, even if that rule is a theoretically unnecessary permitted activity rule, and so recommend rejecting this relief.
- (768) Accordingly, I recommend the rule remain as notified.

CE-R14 (Conversion of existing buildings for activities potentially sensitive to natural hazards in the Coastal Hazard Overlays)

- (769) Argosy Property (237.31), Oyster Management (272.36), the Fuel Companies (471.205), Michael Rachlin (232.20), and the Wellington Regional Council (452.167, supported by NHC F15.74) support the rule as notified.
- (770) The Policy Planning Team (440.46e) seek that the rule be deleted on the grounds that it has no function, as it permits activities that would be permitted anyway if the rule did not exist.
- (771) While true that the rule has no function for this reason, the rule does no harm and given the complexity of the chapter, I consider that it will probably aid plan usability to have a structure where plan users can be assured of finding a rule for each combination of overlay and activity category, even if that rule is a theoretically unnecessary permitted activity rule, and so recommend rejecting this relief.
- (772) Accordingly, I recommend the rule remain as notified.

CE-R15 (New buildings and structures for activities potentially sensitive to natural hazards in the Coastal Hazard Overlays)

- (773) Argosy Property (237.32), Oyster Management (272.37), Michael Rachlin (232.20), and Wellington Regional Council (452.168, supported by NHC F15.75) support the rule as notified.
- (774) Laura Skilton (314.30) seeks that arm 1 of the rule be deleted in the belief that the Low Tsunami Hazard Overlay is entirely covered by the Medium Coastal Inundation Overlay. As I discuss for the equivalent relief in CE-R9, this is not the case and so I recommend rejecting this relief.
- (775) The Fuel Companies (471.206) seek to provide a permitted activity status for buildings and structures that do not exceed 10m² gross floor area or are not fully enclosed and do not have a constructed floor.
- (776) Where accessory buildings are non-habitable they fall within the definition of *activities least sensitive to natural hazards* and so are not covered by this rule. However, this does not apply to buildings that are not structures, or are not accessory buildings (e.g. if they are the only building on a site).
- (777) I agree that the rule is probably disproportionate if applied to non-habitable, infrequently used, or weather-dependent structures. I discuss the wider issue of structures that are not buildings in section 5.2.19.
- (778) I am however not fully convinced that buildings that are “not fully enclosed by walls” is a practical or enforceable rule, or to the degree it is, lines up well with natural hazard risk. Accordingly, I recommend granting the relief but only in relation to excluding structures that are not buildings. As I discuss for the definition of *activity least sensitive to natural hazards*, the rule will no longer apply to non-habitable buildings.
- (779) I also recommend splitting up the rule as described in section 5.2.6. This is shown in Appendix A1.

CE-R16 (New buildings and structures and the conversion of existing buildings for activities most sensitive to natural hazards in the Coastal Hazard Overlays)

- (780) Michael Rachlin (232.20), the Fuel Companies (471.207), and the Wellington Regional Council (452.169, supported by NHC F15.76) support the rule as notified.
- (781) Christine Loweth (267.17a, 267.17b) and Laura Skilton (314.31, opposed by Kāinga Ora F26.19) seek that where new buildings replace existing ones, the overall footprint should not exceed 100% (Skilton) or 120% (Loweth) of the footprint as at 31 December 2024, that the rule for the Low Tsunami Hazard Overlay be removed, and that new buildings for *activities most sensitive to natural hazards* be a prohibited activity.
- (782) As discussed in rule CE-R15, the Low Tsunami Hazard Overlay does apply to areas not covered by the Medium Coastal Inundation Hazard Overlay and so is not redundant.
- (783) For the question of prohibited activities, I discuss a related issue for similar submission points for rule CE-R12.
- (784) For whether there should be a rule-level cap on gross floor area, I do not agree. A consent is required regardless, which allows a more holistic examination of whether the policy test to *reduce or not increase risk* is met, and it is possible that increasing floor area while changing the use, management, or design of the activity or building will be an overall reduction in risk.
- (785) Joe Jeffries (514.7) seeks that the non-complying arm of the rule, CE-R16.6, be changed to restricted discretionary.
- (786) In my view, a non-complying activity status accurately reflects the difficult policy CE-P15 test for a consent in this situation and it would not be appropriate to grant the consent if that test is not met.
- (787) Accordingly, I do not recommend changes be made on the basis of these submission points.
- (788) The Policy Planning Team (440.47) seeks that the arms of the rule are re-ordered in National Planning Standards order: permitted, restricted discretionary, discretionary, non-complying. As I recommend to split the

rule up, as described in section 5.2.6, this issue will be solved. This is shown in Appendix A1.

5.2.24 Rules – Natural Hazards and Coastal Environment – General

NH-R18 (Flood mitigation works within the Flood Hazard Overlays)

- (789) Allison Thwaite (250.1d, inferred, conditional, and opposed by Wellington Water F36.332), Rafael Gonzalez-Montero (175.1d, inferred, conditional, and opposed by Wellington Water F36.331), Mukesh Chandra (201.1d, inferred, conditional, and opposed by Wellington Water F36.333), and Lin Streefkerk (297.4, inferred, conditional, and opposed by Wellington Water F36.334) support the rule in general, subject to specific concerns around flooding in Manor Park. I discuss these in the context of more specific submission points in section 6.2.3.
- (790) KiwiRail (442.69) seeks that the permitted activity condition include network utility operators alongside central government and local government as being covered by the rule. KiwiRail do not give specific reasons for this relief. I do however note the potential mismatch with the relevant policy NH-P4, which I discuss in section 5.2.12.
- (791) For the case of KiwiRail itself, I note that it is already included in the PDP definition of *central government* as it is a state-owned enterprise.
- (792) With regards to private-sector network utility operators, in my view, it is appropriate to require resource consent for flood mitigation works not conducted by an arm of the state. Flood mitigation can reduce risk in one area while increasing it in another, or if done poorly give people a dangerous false sense of security. Flood mitigation should thus be considered in terms of the overall interests of society rather than solely private interests where some third party would bear the costs.
- (793) I accordingly recommend rejecting this submission point.

Matters not raised by submitters

- (794) As notified, the plan has an overall structure for identifying when plan provisions are relevant to a proposed activity. The Natural Hazards and Coastal Environment chapters are listed in the General Approach chapter

under “Identifying provisions that are relevant to your activity” with the following description:

Whether provisions in District-Wide Matters chapters apply to an activity is covered in the introduction to each relevant chapters. Some chapters apply to any activity covered by the chapter, in addition to provisions in the relevant zone. You will need to consult these chapters if your activity includes anything covered by the chapter.

(795) In my view the Council’s intent in notifying this rule was to enable flood mitigation works by central and local government, rather than only restrict it when carried out by someone else. In order to implement this, the rules need to specify that they override catchall zone rules, rather than the default of applying alongside them. This is the case for the Infrastructure, Temporary Activities, and Renewable Energy Generation chapters.

(796) I thus recommend that the *Identifying provisions that are relevant to your activity* section in the *General Approach* chapter be amended to spell out that:

Whether provisions in District-Wide Matters chapters apply to an activity is covered in the introduction to each relevant chapters. Some chapters apply to any activity covered by the chapter, usually in addition to provisions in the relevant zone, but sometimes particular rules will specify that they override some other rules. You will need to consult these chapters if your activity includes anything covered by the chapter.

(797) And a statement be added to rule NH-R18 as follows:

NH-R18 (Flood Mitigation works within the Flood Hazard Overlays)

This rule applies instead of any zone or precinct rule. Other district-wide rules still apply in addition to this rule.

1. Activity status: Permitted

...

2. Activity status: Discretionary

CE-R17 (Green Infrastructure in the Coastal Hazard Overlays), NH-R19 (Green Infrastructure in all Natural Hazard Overlays)

- (798) Te Rūnanganui o Te Āti Awa (503.43b) and Wellington Regional Council (452.170, supported by NHC F15.77) support CE-R17 as notified.
- (799) The Policy Planning Team (440.35a, 440.35b) seeks to delete the rules on the grounds that as written they do not serve any function and are unclear in their intent.
- (800) I believe that it is reasonably clear that Council's intent in writing the rules was to provide for green infrastructure for the purpose of flood mitigation as a permitted activity, overriding zone provisions. I do not however see any support for the discretionary arm of the rule in the section 32 report, objectives or policies.
- (801) "Green infrastructure" is defined⁴⁴ as:

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

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

- (802) This is a very wide definition that could encompass a wide range of things that would also be thought of as a "conservation activity". There is no good resource management reason to prevent people from doing these in natural hazard overlays.

⁴⁴ National Planning Standards definition.

- (803) The rules also apply only for flood mitigation works and coastal hazard mitigation works. Flood mitigation works are already covered in rule NH-R18, and given the restructuring I propose for that rule, the function of this rule to enable coastal hazard mitigation works can also be included within this altered rule.
- (804) Accordingly, I recommend accepting the Policy Planning Team's relief in part, by granting the relief literally asked for, and deleting NH-R19 and CE-R17, subject to the consequential changes to NH-R18 described above.
- (805) The objectives and policies of the chapter support green infrastructure more generally, for example for the stormwater network. This is better handled in the Infrastructure chapter. I do not recommend any changes on this basis, however, as there are more direct submission points on the issue from the Wellington Regional Council (452) on the Infrastructure chapter that can be considered in that hearing stream, which might involve cross-references to the Natural Hazards objectives and policies.

5.2.25 New rules sought

Intensification in the Liquefaction Hazard Overlay

- (806) Ian Peter Cassidy (207.3) seeks that no intensification be allowed in the Liquefaction Hazard Overlay, raising concerns around the Christchurch earthquakes.
- (807) I discuss in section 5.2.15 why I think that it appropriate to only control a limited number of land uses in the Liquefaction Hazard Overlay. I accordingly recommend rejecting this relief.

6 Modelling and mapping

6.1 Layers Summary

(808) The District Plan maps the following overlays referred to in the Natural Hazards and Coastal Environment provisions (and in some cases other chapters of the plan):

- Low Flood Hazard Overlay
- Medium Flood Hazard Overlay
- High Flood Hazard Overlay
- Liquefaction Hazard Overlay
- Fault Location Area, including sub-areas of uncertain constrained, uncertain poorly constrained, well-defined, and well-defined extended
- Low Tsunami Hazard Overlay
- Medium Tsunami Hazard Overlay
- High Tsunami Hazard Overlay
- Medium Coastal Inundation Hazard Overlay
- High Coastal Inundation Hazard Overlay

(809) As provisions often (but not always) treat the two the same, there are also defined terms of Medium Coastal Hazard Overlay for both the Medium Coastal Inundation Hazard Overlay and Medium Tsunami Hazard Overlay, and High Coastal Hazard Overlay for both the High Coastal Inundation Hazard Overlay and High Tsunami Hazard Overlay.

(810) For the avoidance of doubt, for any one hazard, the Low, Medium, and High levels do not overlap.

6.2 Discussion of submissions and recommendations

- (811) This section will discuss submission points on the mapped overlays, and general other points about the conduct of the modelling.
- (812) I will also discuss some minor errors and consequential changes not raised by submitters.

6.2.1 Provisions not in dispute

- (813) Given the very broad submissions seeking complete removal of the hazard maps, all hazard mapping is in contention.

6.2.2 Not in scope of this process

Recording data specific to properties

- (814) Jacob McInteer (108.2) seeks that "properties which are partially impacted by risk overlays, are indicated in council's records as such. In the case of 42 Bolton Street, if it falls partially in the "High Flood Hazard" overlay, it should be designated "High Flood Hazard – Partial" in council records and LIM reports."
- (815) Tim Louis (106.1a) seeks that "no classification is attached to properties and that district plan users refer to overlays to assess risk or that some tolerance is applied to the extent of the hazard when applying a hazard classification to a property".
- (816) The PDP does not contain any boundaries of properties or information that is specific to properties. That is a factual question that is determined as and when it arises that the plan for some reason needs to be applied in a way that depend on property boundaries (e.g. in applying rules about setbacks, or standards that apply to a "site"). While at the time of writing, the ePlan can display property boundaries as an optional context layer alongside other context such as aerial imagery or roads, this does not form part of the maps of the plan, and this context information is regularly updated.

- (817) Council holds property information as part of its general databases and the information provided by Land Information New Zealand and other agencies. The maps of the PDP in some cases (such as zones) are designed to align with property boundaries at the time decisions on the plan are made, and property boundaries may inform other decisions about the plan, but in other cases such as natural hazard overlays, the overlays are simply mapped.
- (818) Accordingly, this relief is not relevant to the content of the district plan.
- (819) Katy Cook (254.1) seeks that if a property owners chooses to develop their land (whether in a minor way or more extensively), then each piece of land should be considered in isolation [with regard to slope hazard - inferred] and treated as such.
- (820) This is inherent in how an overlay functions and so I recommend accepting this relief to the extent that the plan already provides for it.

Appealing hazard classifications

- (821) Tim Louis (106.1b) seeks that once the District Plan has been implemented, that property owners should be able to appeal hazard classifications.
- (822) The framework of the RMA provides for both resource consents, in which additional evidence around hazards can be provided, and plan changes for broader changes to mapping and overlays. In addition, Council has a duty to review the appropriateness of its plan after it has been operative for ten years.
- (823) However, this is a procedural question set in legislation, and not affected by the content of the district plan.

National and regional coordination

- (824) John Wadham (122.1) seeks “that HCC collaborates with other authorities to improve consistency in mapping hazards, and to prevent the dissemination of inaccurate information” and that “Council, through the Ministry for the Environment, seek that the National Planning Standards be expanded to include the mapping of hazards by overlays.
- (825) The Council has taken an approach to identifying natural hazards in partnership with other city councils in the region and the regional council, as described in section 3.1.1. However, the remaining aspects of the

submission point are not things that can be advanced through the provisions of a district plan.

6.2.3 General

General support

- (826) The Natural Hazards Commission (327.11, 327.13) expresses some general support for the modelling and mapping of hazards, subject to some other more specific points about particular areas and issues.
- (827) I recommend accepting this relief, subject to the other specific changes I recommend in this section.

Merging of layers

- (828) Laura Skilton (314.19, 314.20a, opposed by Kāinga Ora F26.13) seeks that the Coastal Inundation and Tsunami hazard overlays be merged, considering the separate identification redundant.
- (829) While in most cases the rule treatment for the overlays is identical, there are policy differences between the treatment of tsunami and coastal inundation, particularly around evacuation, and so I think it is necessary to still identify them separately. I accordingly recommend rejecting this relief.

Site-specific assessments

- (830) Jarred Gustafson and Paula Gentle (6.18c, opposed by Wellington Water F36.291) seek that Council "Conduct site-specific assessments before imposing any future land-use restrictions".
- (831) James Sunderland and Jocelyn Qian (119.2, opposed by Wellington Water F36.292) seek that relevant provisions for natural hazards "require Council to rely on site-specific technical reports before applying restrictive natural hazard overlays, particularly where development is likely to be impacted."
- (832) Mark Blackham (450.25) seeks that inclusion in the Slope Assessment Overlay be "tested on a property-by-property basis".
- (833) Hamish Hill (240.1, opposed by Wellington Water F36.240) seeks that "the method of assessment for flood risk be reviewed before the Proposed District Plan is finalised, and for properties assessed as high risk, the actual risk should be verified by accurate on-site assessments".

- (834) None of the methodologies for identifying natural hazards in the PDP were site-specific. I think the approach of the PDP in conducting a city-scale assessment, then relying on site-specific assessments only at the resource consent stage when site-specific precision is needed to make a decision, is considerably more efficient.
- (835) Mark Gunkel and Evangeline Gunkel (7.1b, 7.3) seek a general process for Council to conduct site-specific assessments or property owners to conduct site-specific assessments.
- (836) I believe this is most effectively done in combination with geotechnical assessments for a specific proposed development as part of a resource consent application, although submitters are welcome to present site-specific evidence in the hearing as well.

6.2.4 Flood Hazard Overlays

Site-specific submissions

- (837) The submitters in the table below seek that the Flood Hazard Overlays be either removed, or a lower category applied, in the listed sites and areas:

Submitter	SP#	Address	Recommendation
Kulbhushan Joshi	2.2*	3 Hastings Grove	Reject
Rohan Kulkarni	3.10a*	1/48 and 2/48 Stanley Street	Reject
Rohan Kulkarni	3.10b*	52N Stanley Street	Reject
Mark Gunkel and Evangeline Gunkel	7.1a, 7.2	Not given	Reject
Tom Brodie	11.1	438 Muritai Road	Reject
Jason Westerby	16.1*	55 Laings Road	Reject
Lisa Bowker	17.1	438 Muritai Road	Reject
Richard Kemp and Honor Kemp	25.1	226 Marine Drive	Reject
Damon Smith	27.1*	99 Oroua Street, Eastbourne	Reject
Stephen Flaunty	34.11a*	121 Waterloo Road	Amend maps as set out in Appendix B1

Submitter	SP#	Address	Recommendation
Dave and Michaela O'Donovan	37.2*	Multiple sites	Reject
Chakrin Gangodawila	88.2*, 88.3*	11 Martha Turnell Cres	Reject
Verity Doak	89.1*, 89.2*	2/196 Waiwhetū Road	Reject
Kelvin Sanderson	95.1*	129 Cuba Street	Reject
EPG Davies Holding Company Ltd	107.2*	27 Cornish St	Reject
Jacob McInteer	108.1a*	42 Bolton St, Petone	Reject
Jacob McInteer	108.1b*	Multiple sites	Reject
Joerg Bruemmer	110.1*	94 Pomare Road, Tirohanga	Reject
Craig Davis	112.1*, 112.2*	10 Campbell Terrace, Petone	Reject
Edward and Sarah-Kaye Oosterbaan	114.1*	5 Herbert St, Melling	Reject
Ian Carson and Lynette Carson	120.1*	4 Redvers Drive, Belmont	Amend maps as set out in Appendix B1
Philip King	125.1*	238 Marine Drive	Reject
Neha Punjabi (opposed by Te Karearea / Rosco Ice Cream F40.92)	140.1*	Multiple sites (Manor Park)	Reject
Anish Punjabi	141.2*	Multiple sites (Manor Park)	Reject
Bhuvi Punjabi	144.2*	Multiple sites (Manor Park)	Reject
Peter Borley	145.1a*	31 Gibbs Crescent, Wainuiomata	Reject
Don Setungamudalige	151.1*	Multiple sites (Manor Park)	Reject
Pamodh Panagoda	154.1*	14 Martha Turnell Grove, Manor Park	Reject

Submitter	SP#	Address	Recommendation
Rafael Gonzalez-Montero	175.1b*	Northern end of Manor Park	Reject
Julius Korent and Joanne Korent	199.1*, 199.6	56 Mary Huse Grove, Manor Park	Reject
Mukesh Chandra	201.1a	Northern end of Manor Park	Reject
Mary Lynskey and Christopher Lynskey	213.1*	2 Cheviot Road, Lowry Bay	Reject
Mike Humphrey and Nic Hill	224.1*	192 Normandale Road	Reject
David James Clode	227.1*	26 Kowhai Street, Naenae	Reject
Beverley and Oliver Driver	242.1*	57A Hautana Street	Reject
Allison Thwaite	250.1a*	Northern end of Manor Park	Reject
Lisa Caddis	252.4*	297 Muritai Road	Reject
Tony Brenton-Rule	268.1*	10 Ngaio Street, Eastbourne	Reject
Creative Insight	274.2*	52 Penrose Street	Reject
Jennifer Gray	277.1*	272 Muritai Road	Reject
Christopher John McHaffie and Mary Anne Malone	278.1*	9 Ngaio Street, Eastbourne	Reject
Louise Kay Cameron	279.1*	13 Karamu Street, Eastbourne	Reject
Lynn Kelleher	280.1*	5 Karamu Street, Eastbourne	Reject
Antony and Penelope Orbell	281.1*	3 Ngaio Street, Eastbourne	Reject
Tom Hudig	288.2a*	231 Marine Drive	Reject
Tom Hudig	288.3*	48 Victoria Street, Petone	Reject
Lin Streefkerk	297.2	Northern end of Manor Park	Reject

Submitter	SP#	Address	Recommendation
Adrian Palmer Family Trust	315.9a*	5 Toop Street	Reject
Adrian Palmer Family Trust	315.9b*	6 Wareham Place	Reject
Adrian Palmer Family Trust	315.9c*	10 Wareham Place	Reject
Adrian Palmer Family Trust	315.9d*	2 Jackson Street	Reject
Adrian Palmer Family Trust	315.9e*	10 Udy Street	Reject
Adrian Palmer Family Trust	315.9f*	1/65 Marsden Street	Reject
Adrian Palmer Family Trust	315.9g*	6 Regent Street	Reject
Adrian Palmer Family Trust	315.9h*	127 Gracefield Road	Reject
Adrian Palmer Family Trust	315.9i*	29 Udy Street	Reject
Adrian Palmer Family Trust	315.9j*	337 High Street	Reject
Adrian Palmer Family Trust	315.9k*	339 High Street	Reject
Adrian Palmer Family Trust	315.9l*	355 High Street	Reject
Adrian Palmer Family Trust	315.9m*	369 High Street	Reject
Adrian Palmer Family Trust	315.9n*	371 High Street	Reject
Adrian Palmer Family Trust	315.9o*	373 High Street	Reject
Adrian Palmer Family Trust	315.9p*	375 High Street	Reject
Adrian Palmer Family Trust	315.9q*	33 Rutherford Street	Reject
Adrian Palmer Family Trust	315.9r*	35 Rutherford Street	Reject

Submitter	SP#	Address	Recommendation
Adrian Palmer Family Trust	315.9s*	37 Rutherford Street	Reject
Adrian Palmer Family Trust	315.9t*	39 Rutherford Street	Reject
Adrian Palmer Family Trust	315.9u*	10 Pretoria Street	Reject
Adrian Palmer Family Trust	315.9v*	411-413 Cuba Street	Reject
Adrian Palmer Family Trust	315.9w*	19 Pretoria Street	Reject
Adrian Palmer Family Trust	315.9x*	15 Raroa Street	Reject
Adrian Palmer Family Trust	315.9y*	21 Meachen Street	Reject
Adrian Palmer Family Trust	315.9z*	23 Rutherford Street	Reject
Adrian Palmer Family Trust	315.9aa*	25 Rutherford Street	Reject
Adrian Palmer Family Trust	315.9ab*	27 Rutherford Street	Reject
Adrian Palmer Family Trust	315.9ac*	140 Hutt Road	Reject
Palmer and Cook Developments	316.3*, 316.4*	127 Waterloo Road	Reject
Summerset Group Holdings	326.25*, 326.26b*	33 Military Road	Reject
Barbara Sullivan	351.2*	89 Oroua Street, Eastbourne	Reject
Stephanie Middleton	352.1*	15 Whiorau Grove	Reject
Grant Gunn and Kristin Gunn (supporting by the trustees of the Gunn Family Trust F7.4 and F7.11)	369.2a*, 369.4*	95 Oroua Street, Eastbourne	Reject
Fiona Christeller	375.11*	18 Taungata Road	Reject

Submitter	SP#	Address	Recommendation
Manor Park and Haywards Residents Community Incorporated Society (supported by Waste Management NZ F39.48 and Te Karearea / Rosco Ice Cream F40.33)	377.3*	30 Benmore Crescent	Amend maps as set out in Appendix B1
Andrew Robinson and Robyn Robinson (supported by Kris Connel F3.12 and themselves F9.12)	380.5a, 380.22	269 Muritai Road	Reject
Upul Priyankara Angulugaha Gamage & Hewawasan Sarukkalige Yashani Pradeepika Fernando	381.1*	36 Manor Park Road	Reject
Sensible Solutions for Eastbourne (opposed <i>in part</i> by NHC F15.93)	383.5a*	Multiple sites	Reject
Charmi Mistry	392.1*, 392.2*	2/1 Helvetia Grove, Naenae	Amend maps as set out in Appendix B1
Nicola Stent and Stuart Stent	393.1b*	6A Oriental Street, Petone	Reject
PTL Trust	397.1*	212 Marine Drive	Reject
Katrina Jacobsen	398.1*	7 Wyndrum Avenue, Waterloo	Reject

Submitter	SP#	Address	Recommendation
Susan Ewart	423.1*	4 Kaitawa Road, York Bay	Reject
The Francis Family Trust	443.3*	Multiple sites	Reject
Winstone Aggregates	444.25*, 444.26*, 444.27*, 444.99*, 444.100, 444.101*	Belmont Quarry	Amend maps as set out in Appendix B1
Te Kārearea Ltd and Rosco Ice Cream Ltd (supported <i>in part</i> by MPHRCIS F10.1 and supported by Waste Management NZ F39.49)	447.7*	30 Benmore Crescent	Amend maps as set out in Appendix B1
Chris Moore	448.1*	3A Nikau Grove, Woburn	Amend maps as set out in Appendix B1
Mark Blackham	450.24*	396 Muritai Road	Reject
Kate Harris	454.2*, 454.3*, 454.4*	404 Muritai Road	Reject
Jon Harris	457.2*, 457.3*, 457.4*	404 Muritai Road	Reject
Orlando & Franziska Ravera	459.1*	Not site-specific	Reject
Waste Management NZ Ltd (supported by MPHRCIS F10.28 and Te Karearea / Rosco Ice Cream F40.34)	461.2a*	30 Benmore Crescent	Amend maps as set out in Appendix B1

Submitter	SP#	Address	Recommendation
Richard Kelly	463.1*	10 Bunratty Grove	Amend maps as set out in Appendix B1
Brett Osborne (supported <i>in part</i> by Wellington Water)	464.1	13 Holmes Grove	Amend maps as set out in Appendix B1
Dieter Engel	475.6	Not site specific	Reject
PBJ Properties	476.1	23 Fitzherbert St, Petone	Reject
Lars Schmidt	480.1*	227 Marine Drive	Reject
Jeremy Lovell-Smith	486.1*	93 Oroua Street, Eastbourne	Reject
Michelle Fisher	489.2*	283 Muritai Road	Reject
John Burroughs	499.1*, 499.2*	97 Norton Park Grove and surrounds	Reject
Michael Kerslake	501.2*	12 Ngaio Street, Eastbourne	Reject

- (838) In addition to the further submissions noted in the above table, Wellington Water (as further submitter F36) submitted in opposition to those submission points in the table that are marked with an *.
- (839) The evidence of Mr Alistair Osborne in Appendix B1 discusses submissions with area-specific requests or that otherwise raise issues with the flood modelling methodology and process. I adopt his assessment as it relates to submissions with criticisms of the modelling.
- (840) Mr Osborne also identifies an issue around missing stream corridors in the Eastern Bays. While I agree with his conclusion that they should ultimately be covered in the maps, there is no scope in this process to do so, and so I recommend the stream corridors that he recommends not proceed until a future plan change.
- (841) Submitters also raise policy or non-modelling concerns in support of requests to change the modelling. These are addressed in the general themes discussed in section 3, and in my view none would support either site-specific or broad changes to the modelling. Other points sought complete removal of the hazard maps, which would also imply removing most of the related provisions. This is discussed in section 5.2.2.

- (842) Some submissions raise other more general concerns about modelling, which I address below.

Climate change scenario

- (843) Chris Moore (448.3, opposed by Wellington Water F36.156) and David Surrey (427.4a, opposed by F36.241) seek that the flood modelling use a lower IPCC climate change scenario, considering the RCP8.5 scenario unlikely to occur.
- (844) The choice of climate change scenario is discussed in section 3.2.1. The RCP8.5 scenario aligns with Wellington Regional Council's modelling of Hutt River flooding and MfE guidance, but does not align with other territorial authorities in the region.
- (845) As shown in the regional comparison in Appendix B6, Hutt City uses a substantially higher climate change scenario than equivalent modelling in other city councils in the region. In my view, regional consistency is of considerable importance as misaligned mapping risks displacing development from cities with more pessimistic approaches to areas that may have the same or even greater risk in cities using a more optimistic scenario. Regardless of the merits of one scenario over another, choosing a substantially more pessimistic approach will in my view carry considerable opportunity costs of lost or sub-optimally located development without the corresponding benefits from risk reduction.
- (846) I thus agree that a scenario closer to Wellington City (the next highest) should be used, with my preference being to use Tiaki Wai's standard model as expressed in the Draft District Plan, being a 20% rainfall increase and 1m sea level rise.
- (847) Given the substantial cost in re-running the modelling, I do not recommend specific changes to the maps yet. The panel should hear evidence on this issue in the hearing, make a determination, and then seek updated modelling giving direction about the parameters to be used. I discuss how this could be addressed in section 6.2.10.
- (848) I would also invite Wellington Regional Council to contribute compatible river flood modelling, although I imagine the panel will want to hear the regional council's evidence before making a decision to seek this.

- (849) From my discussions with Mr Osborne, re-running using a lower scenario would likely reduce the coverage of the high, medium, and low overlays. For the sake of aligning with scope of submissions and natural justice to avoid establishing new overlays not previously proposed by Council, this could have a “sanity check” to filter out any expanded areas of the overlays (except where the expansion was sought by submitters, e.g. the Hutt River corridor sought by the Wellington Regional Council).

High/Medium/Low categorisation

- (850) Michael Rachlin (232.5a, 232.5b, opposed by Wellington Water F36.140, F36.343) seeks that the high/medium/low system be replaced with identification based on overland flow paths, stream corridors, and inundation/ponding areas, as done in the draft district plan and Porirua District Plan.
- (851) This is discussed in Mr Osborne’s evidence in Appendix B1, and I agree with his conclusion that retaining the high/medium/low system better expresses the risk implied by the modelled event and aligns better with the ranking system required by the RPS and NPS-NH. I accordingly recommend rejecting this relief.

Inundation depth

- (852) Dieter Engel (475.3, with a neutral further submission from Wellington Water F36.166) seeks that a map be added showing inundation depth as well as extent.
- (853) While this would potentially provide easier access to the data required to determine flooding levels, I think it would be difficult to present data of this complexity in the district plan maps and it is not necessary to determine whether rules are triggered. The data is also not sufficient alone to determine usable minimum floor heights for a building consent without reference to ground survey data and so providing flood depths directly in the maps risks inaccurate calculations of this height being made without confirming necessary site-specific floor heights with Council, Tiaki Wai, or external experts, adding costs associated with needing to redesign to different floor levels later in the design process.

- (854) Chris Moore (448.2, opposed by Wellington Water F36.155) seeks that the overlay remove areas subject to less than 100mm of inundation, as opposed to 50mm.
- (855) This is discussed in the evidence of Mr Osborne in Appendix B1 and agree with his recommendation that 50mm is an appropriate figure.

Future mitigation works

- (856) Some submitters in relation to specific sites, and Chris Moore (448.4, opposed by Wellington Water F36.169) as a general matter, seek that the flood modelling take account of future flood mitigation works that may be implemented.
- (857) This presents a tension with the PDP's approach of accounting for hazards arising from climate change over a century in the future – it may be possible to construct mitigation measures, but those measures have not been constructed yet as they will not be needed for some time.
- (858) However, I do not see a realistic way of accounting for this in the modelling. It is simply too uncertain to speculate about what future works will be constructed or future adaptation strategies for at-risk communities. Until these decisions are made, and as long as medium and high hazard areas are relatively small fractions of the urban area, I think identifying hazards as though no community-scale mitigation will occur will minimise the potential for future risk from inappropriate development at a relatively low opportunity cost, as development can instead occur in nearby substitute locations.

Flood modelling of Wellington Regional Council

- (859) As discussed in Mr Osborne's evidence in Appendix B1, part of the modelled flood hazard overlays rely on Wellington Regional Council modelling of flooding from the Hutt River/Te Awa Kairangi and the Waiwhetū Stream.
- (860) The Wellington Regional Council is a submitter on the PDP including a submission point (452.72, opposed by Michael Rachlin F4.8, supported by NHC F15.14) that seeks to replace flood maps with those in attached maps. These include the modelling mentioned above.
- (861) I find the justification of the modelling in the regional council's submission and its supporting reports convincing, and support the existing mapping

provided prior to notification of the plan be retained (other than as recommended by Mr Osborne, above).

- (862) I also agree that it is appropriate to identify the major Waiwhetū and Hutt River corridors themselves as High Flood Hazard Overlays, as the risk within these corridors (particularly inside the stopbanks) to hypothetical development is obviously severe, and recommend accepting this relief and adding the additional corridors identified in the maps attached to the submission.

Submissions in support of the overlays

- (863) Don Setungamudalige (151.3), Pamodh Panagoda (154.2), and Julius Korent and Joanne Korent (199.2), opposed by Wellington Water (F36.234, F36.236, F36.238) give conditional support to the overlays, conditional on their other relief. I note this conditional support and recommend accepting it in part, subject to my other recommendations on the overlays.
- (864) Z Energy (468.1d, 468.2d, 468.3d, 468.4d, 468.5e, 468.6f, 468.7b, 468.9b, supported by Wellington Water F36.210, F36.215–F36.217, F36.253, F36.266, F36.270–F36.272) supports the Flood Hazard Overlays for various specific sites.
- (865) Palmer and Cook Developments (316.2, supported by Wellington Water F36.269) supports the Low Flood Hazard Overlay at 127 Waterloo Road.
- (866) I note this support and recommend accepting these submission points.
- (867) Andrew Sherson (181.1) supports in part the overlay maps as they relate to 91B Main Road, Wainuiomata, but seeks that the High Flood Hazard Overlay apply only to the stream corridor and the remainder of the site be Low or Medium. I believe this is what the maps as notified do and so recommend accepting this relief to the degree that the PDP already provides for it.
- (868) Dieter Engel (475.1, opposed by Wellington Water F36.165) supports in part the flood hazard overlays but seeks more information about how the rainfall assumptions were reached.
- (869) This information is provided in Appendix B1.

Other submission points

- (870) Laura Skilton (314.6a, opposed by Wellington Water F36.148) and Christene Loweth (267.3b) seek that “pockets” of lower flood risk surrounded by higher risk be updated to the higher risk level.
- (871) The cause of this due to varying ground levels is discussed in the evidence of Mr Osborne in Appendix B1, which I adopt. I accordingly recommend this relief be rejected.
- (872) Laura Skilton (314.6c, opposed by Wellington Water F36.149) and Christene Loweth (267.3a, opposed by Wellington Water F36.168) seek that the flood mapping be aligned with property boundaries or roads, considering that the mapping cannot be as good as the boundaries suggest.
- (873) Natural hazard overlays in the PDP are not attempts to identify particular properties or sites, but to identify physical areas. While there is uncertainty in the boundaries of the overlay, “rounding” those boundaries to properties or roads would only compound those uncertainties. The only potential advantage is where there is only a very minor overlap with a particular property and the administrative advantage would outweigh any benefits of retaining the overlay. I recommend this in relation to some site-specific requests above but I accordingly recommend otherwise rejecting this relief.

Section 32AA Evaluation

- (874) The change I recommend to the climate change assumption in this section is potentially a major change to the identification of hazard areas. The size of this, and thus any potential quantification of the costs and benefits, cannot be known until the modelling is redone. The original Section 32 report did not quantitatively assess the costs and benefits either.
- (875) In the meantime, I will make an interim assessment of the costs and benefits of this change qualitatively. In my view consistency with other councils in the region is important due to the potential diversion of development from relatively low risk areas (i.e. those only included in an overlay because of the use of the RCP8.5 scenario that would not be covered under a lower scenario) into areas that may well have the same or greater risk in other council jurisdictions. These are also areas where the

benefits from risk reduction are lowest. I think it reasonably likely that the affected areas will include relatively desirable and well-located development capacity, in for example Alicetown and northern Petone, and so the benefits of this development capacity is greater than it would be elsewhere.

- (876) The cost is the potential increase in risk from development that would have been prevented under the PDP as notified but with this change would not.
- (877) In my view it is highly likely that this change would be a more effective way to advance the purpose of the Act and implement national and regional direction, although the panel will have better information to make this decision by re-running the model and seeing what impact the changes have on affected areas.
- (878) A more detailed s32AA evaluation can be provided once the remodelling is done.

6.2.5 Coastal Inundation Overlay

Site-specific submissions

- (879) The submitters in the table below seek that the Coastal Inundation Overlay be either removed, or a lower category applied, in the listed sites and areas:

Submitter	SP#	Address	Recommendation
Richard Kemp and Honor Kemp	25.1	226 Marine Drive	Reject
Kelvin Sanderson, opposed by Wellington Water F36.279	95.2	129 Cuba Street, Petone	Reject
Philip King	125.1	238 Marine Drive	Reject
Tony Brenton-Rule	268.2	10 Ngaio Street, Eastbourne	Reject
Jennifer Gray	277.2	272 Muritai Road, Eastbourne	Reject

Submitter	SP#	Address	Recommendation
Christopher John McHaffie and Mary Anne Malone	278.2	9 Ngaio Street, Eastbourne	Reject
Louise Kay Cameron	279.2	13 Karamu Street, Eastbourne	Reject
Lynn Kelleher	280.2	5 Karamu Street, Eastbourne	Reject
Antony and Penelope Orbell	281.2	3 Ngaio Street, Eastbourne	Reject
Tom Hudig	288.2c	231 Marine Drive	Reject
Adrian Palmer Family Trust	315.8a	5 Toop St	Reject
Adrian Palmer Family Trust	315.8b	6 Wareham Place	Reject
Adrian Palmer Family Trust	315.8c	10 Wareham Place	Reject
Adrian Palmer Family Trust	315.8d	2 Jackson St, Petone	Reject
Adrian Palmer Family Trust	315.8e	10 Udy St	Reject
Adrian Palmer Family Trust	315.8f	1/65 Marsden St	Reject
Adrian Palmer Family Trust	315.8g	6 Regent St	Reject
Adrian Palmer Family Trust	315.8h	127 Gracefield Road	Reject
Adrian Palmer Family Trust	315.8i	29 Udy St	Reject
Adrian Palmer Family Trust	315.8j	411-413 Cuba St	Reject
Adrian Palmer Family Trust	315.8k	21 Meachen St	Reject
Adrian Palmer Family Trust	315.8l	140 Hutt Road	Reject
Grant Gunn and Kristin Gunn (supported by the	369.5	95 Oroua Street, Eastbourne	Reject

Submitter	SP#	Address	Recommendation
Trustees of the Gunn Family Trust F9.12)			
Andrew Robinson and Robyn Robinson	380.24	Multiple sites	Reject
Sensible Solutions for Eastbourne	383.24	Multiple sites	Reject
Nicola Stent and Stuart Stent	393.1c	6A Oriental St, Petone	Reject
PTL Trust	397.1	212 Marine Drive	Reject
TTL Trust (opposed by Wellington Water F36.130)	412.1	18 Saulbrey Grove, Woburn	Reject
Mary Spiers and Samuel Spink	479.2	267 Muritai Road	Reject
Michael Kerslake	501.3	Not site-specific	Reject

- (880) The evidence of Dr Scott Stephens in Appendix B2 discusses submissions with area-specific requests or that otherwise raise issues with the coastal inundation modelling methodology and process. I adopt his assessment as it relates to submissions with criticisms of the modelling.
- (881) Submitters also raise policy or non-modelling concerns in support of requests to change the modelling. These are addressed in the general themes discussed in section 3, and in my view none would support either site-specific or broad changes to the modelling. Other points sought complete removal of the hazard maps, which would also imply removing most of the related provisions. This is discussed in section 5.2.2.
- (882) Some submissions raise more general concerns, which I address below.

Inundation depth

- (883) David Surrey (427.18, opposed by Wellington Water F36.129) seeks that the overlay not apply to areas subject to inundation of 150mm or less, considering that the mapped overlay should make a distinction based on inundation depth.

- (884) As set out in the evidence of Dr Stephens in Appendix B2, the overlays do not apply unless there is a minimum inundation of 100mm.
- (885) Given the reasoning of the submitter does not provide a reason for 150mm as opposed to 100mm, I think this is likely to address his concerns and so recommend accepting this relief in part to the extent the PDP already provides for it. Otherwise, the submitter may wish to provide reasons for a specific figure of 150mm in the hearing.

Climate change scenario

- (886) David Surrey (427.4b, opposed by Wellington Water F36.133) seeks that the Medium Coastal Inundation Hazard Overlay be reduced in scope through re-running the modelling using a lower IPCC climate change scenario than the RCP8.5 used in the modelling.
- (887) Considering the approaches taken by other councils in the region (shown in Appendix B6) and the Ministry for the Environment's *Coastal Hazards and Climate Change Guidance*⁴⁵ on the selection of scenarios, and my discussion of scenarios in section 3.2.1, I think there is no obvious justification based on consistency to select another scenario, as other councils in the region each use different figures. Wellington City's figure is similar (although without accounting for vertical land movement), and so I recommend the maps be retained based on the RCP8.5M scenario as notified.

Submissions in support of the overlays

- (888) Z Energy (468.4c, 468.5d) supports the Coastal Inundation Hazard Overlays for various specific sites.
- (889) I note this support and recommend accepting these submission points.

⁴⁵ <https://environment.govt.nz/assets/publications/Coastal-hazards-and-climate-change-guidance-2024-ME-1805.pdf>

6.2.6 Tsunami Hazard Overlay

Site-specific submissions

(890) The submitters in the table below seek that the Coastal Inundation Overlay be either removed, or a lower category applied, in the listed sites and areas:

Submitter	SP#	Address	Recommendation
Tom Brodie (opposed by Wellington Water F36.127)	11.1	438 Muritai Road	Reject
Lisa Bowker (opposed by Wellington Water F36.128)	17.1	438 Muritai Road	Reject
Richard Kemp and Honor Kemp	25.1	226 Marine Drive	Reject
Dave and Michaela O'Donovan	37.1	Not site-specific	Reject
Kelvin Sanderson	95.4	129 Cuba Street, Petone	Reject
Philip King	125.1	238 Marine Drive	Reject
Mary Lynskey and Christopher Lynskey	213.2	2 Cheviot Road, Lowry Bay	Reject
Tom Hudig	288.2b	231 Marine Drive	Reject
Tom Hudig	288.4a	11 Aurora St, Petone	Reject
Nicola Stent and Stuart Stent	393.1a	6A Oriental St, Petone	Reject
PTL Trust	397.1	212 Marine Drive	Reject
PBJ Properties (opposed by Wellington Water F36.265)	476.1	23 Fitzherbert St, Petone	Reject

(891) The evidence of Dr David Burbidge and Ms Edith Bretherton in Appendix B3 discusses submissions with area-specific requests or that otherwise raise

issues with the tsunami modelling methodology and process. I adopt their assessment as it relates to submissions with criticisms of the modelling.

- (892) The evidence of Dr David Burbidge and Ms Edith Bretherton in Appendix B3 discusses submissions with area-specific requests or that otherwise raise issues with the tsunami modelling methodology and process. I adopt their assessment as it relates to submissions with criticisms of the modelling.
- (893) Submitters also raise policy or non-modelling concerns in support of requests to change the modelling. These are addressed in the general themes discussed in section 3, and in my view none would support either site-specific or broad changes to the modelling. Other points sought complete removal of the hazard maps, which would also imply removing most of the related provisions. This is discussed in section 5.2.2.
- (894) Some site-specific submissions raise more general concerns, which I address below.

Other submission points

- (895) Laura Skilton (314.6b) and Christene Loweth (267.3b) seek that “pockets” of lower tsunami risk surrounded by higher risk be updated to the higher risk level.
- (896) The cause of this due to varying ground levels is discussed in the evidence of Dr Burbidge and Ms Bretherton in Appendix B3, which I adopt. I accordingly recommend this relief be rejected.
- (897) Laura Skilton (314.6d) seeks that the tsunami mapping be aligned with property boundaries or roads, considering that the mapping cannot be as good as the boundaries suggest.
- (898) Natural hazard overlays in the PDP are not attempts to identify particular properties or sites, but to identify physical areas. While there is uncertainty in the boundaries of the overlay, “rounding” those boundaries to properties or roads would only compound those uncertainties. I accordingly recommend rejecting this relief.

Submissions in support of the overlays

- (899) Michael Rachlin (232.18) supports the Low Tsunami Hazard Overlay in general.

- (900) Z Energy Ltd (468.2g, 468.3g, 468.4g, 468.5g, 468.6h) supports the Tsunami Hazard Overlay on several specific sites.
- (901) I note this support and recommend accepting these submission points.

6.2.7 Fault Location Area

- (902) The evidence of Dr Nicola Jane Litchfield and Ms Edith Bretherton in Appendix B4 discusses area-specific submissions on the Fault Location Area.
- (903) In addition, Z Energy Limited (468.1c) supports the Fault Location Area applying to 453 Hutt Road.
- (904) Waste Management NZ (461.2b, supported *in part* by MPHRCIS F10.29) supports the overlay at 30 Benmore Crescent.
- (905) This support is noted and I recommend accepting this relief.
- (906) No submitters seek site-specific changes to the Fault Location Area or raise general concerns around the modelling process (as opposed to provisions) and so I recommend the Fault Location Area map be retained as notified.

6.2.8 Slope Assessment Overlay

Chapter summary

- (907) While the Slope Assessment Overlay is included in the proposed plan's list of *Natural Hazard Overlays* and has relevant objectives and policies in the Natural Hazards chapter, it is primarily implemented through a land use rule in the Earthworks chapter and subdivision rules in the Subdivision chapter.

Discussion of submissions

- (908) The submitters in the table below seek that the Coastal Inundation Overlay be either removed, or a lower category applied, in the listed sites and areas:

Submitter	SP#	Address	Recommendation
Kulbhushan Joshi	2.3	3 Hastings Grove, Wainuiomata	Reject
Rohan Kulkarni	3.11a	1/48 & 2/48 Stanley St, Wainuiomata	Reject
Rohan Kulkarni	3.11b	52N Stanley Street	Reject
Seyedomid Zoie	5.1, 5.2	20 Thomson Grove, Stokes Valley	Reject
Jarred Gustafson and Paula Gentle	6.2	Not site-specific	Reject
Jay Daley	8.3, 8.4	Entire overlay	Reject
Teh Meh Hing	9.1, 9.3b, 9.6, 9.8	14 Main Road, Wainuiomata	Reject
Judy Ryan	10.1a, 10.1b, 10.1c	19A Mulberry St, Maungaraki	Reject
Julia Neuhof	13.1	60 Pokohiwi Road	Reject
Terry Strickland and Mary Strickland	19.1	18 Thomson Grove, Stokes Valley	Reject
Dean Tredrea and Rennie Tredrea	21.1	2 Bledisloe Cres, Wainuiomata	Reject
Eli Gilfedder	22.4	114 Cheviot Road	Reject
Ron Muir	23.1	131 Park Road, Belmont	Reject
Barry Godfrey	24.1	7 Winifred Way, Belmont	Reject
Ki Long Lei and Rong Tang	67.1	38 Speldhurst Grove	Reject
Jo-Ella Sarich	91.1	Not site-specific	Reject
Brent McKenzie	97.1	56 Miromiro Road	Reject
Susan Ellis	101.1	12 Bull Avenue	Reject
Joerg Bruemmer	110.2	94 Pomare Road, Tirohanga	Reject
James Sunderland and Jocelyn Qian	119.1	11 Gribble Grove, Stokes Valley	Reject
John Wadham	122.3	23 Pomare Road	Reject

Submitter	SP#	Address	Recommendation
Rakesh Mehta	123.1	115 Main Road, Wainuiomata	Reject
Philip King	125.1	238 Marine Drive	Reject
Eujin Au	183.8a, 183.8b	32 Cypress Drive, Maungaraki	Reject
Steve Hobman	194.1, 194.2	6 and 7 Catherine Grove, Tirohanga	Reject
Lesley Glen and Peter Glen	206.1, 206.2, 206.3	6 Sheehy Grove	Reject
Roger McMilleen et al	229.1, 229.3, 229.4, 229.5	385 Hebden Crescent	Reject
Claudia Riley and John Riley	230.3	Multiple sites	Reject
Lisa Caddis	252.5	297 Muritai Road, Eastbourne	Reject
Monique McDonald	282.1, 282.2, 282.3	21 Thomson Grove, Stokes Valley	Reject
Graham Mark	285.1	5 Tarras Grove, Kelson	Reject
Tom Hudig	288.2d	231 Marine Drive	Reject
Rowan Swain & Kim Weber-Swain	317.6, 317.7	273 Muritai Road	Reject
Terry Pinfold and Ruth Gilbert	347.9	20 Taungata Road, York Bay	Reject
Sandra Michel- Shanks	363.2, 363.3	39 Dalton Grove, Stokes Valley	Reject
Wainuiomata Rural Community Association Incorporated	364.22	Rural zoned properties	Reject
Kelson Heights Limited	373.1	64 Waipounamu Drive	Reject
Fiona Christeller	375.12	18 Taungata Road	Reject

Submitter	SP#	Address	Recommendation
Andrew Robinson and Robyn Robinson, supported by K Connell (F3.15 and F3.16) and A & R Robinson (F9.15 and F9.16)	380.6, 380.7	269 Muritai Road, Eastbourne	Reject
Sensible Solutions for Eastbourne (opposed by NHC F15.95 and F15.96)	383.6, 383.7	Multiple sites	Reject
Craig Barker and Margaret Barker (supported <i>in part</i> by Spencer Holmes Ltd F34.2)	387.1b	18 Otira Grove, Kelson	Reject
PTL Trust	397.1	212 Marine Drive	Reject
Katrina Jacobsen	398.2	7 Wyndrum Avenue, Waterloo	Reject
David Innes and Pauline Innes	416.11	353 Moores Valley Road	Reject
David Surrey	427.13a	Not site-specific	Reject
Ian Caddis and Raylene Caddis	433.4	618 Marine Drive	Reject
Sanna McGavin and Mark McGavin	438.2	46 Major Drive	Reject
Sanna McGavin and Mark McGavin	438.3	Entire overlay	Reject
Elizabeth Anya Jones and Kenneth Anthony Jones	445.1	560 Moores Valley Road	Reject
Jenny Couch and Danny Hughes	458.3	38 Cheviot Road, Lowry Bay	Reject

Submitter	SP#	Address	Recommendation
Orlando Ravera and Franziska Ravera	459.2	Not site-specific	Reject
Steven Penn and Nicola Cooper	465.1	46 Moores Valley Road	Reject
The Brookfield Board and Scouts Aotearoa	469.4	562 Moores Valley Road	Reject
Luke Scullion (opposed by Wellington Water F36.164)	473.1	Not site specific	Reject
Mary Spiers and Samuel Spink	479.1	267 Muritai Road	Reject
Lynn Birch	493.1a	Not site specific	Reject
Peter Fahey	495.1	15 Sweetacres Drive	Reject
Rinu Abraham	506.1	131 Wainuiomata Road	Reject

- (909) The evidence of Mr Pathmanathan Brabhaharan and Dr Dougal Mason in Appendix B5 discusses submissions with area-specific requests or that otherwise raise issues with the coastal inundation modelling methodology and process. I adopt his assessment as it relates to submissions with criticisms of the modelling.
- (910) Some submitters raised the issue that the WSP report had not been peer reviewed by anyone working for a different firm. The report (and the evidence in Appendix B5) has been internally peer reviewed. In my view an external peer review is not necessary unless the work is particularly novel or unusual in its methodology, and this is not the case for this modelling. The report behind the methodology is public and open to critique from submitters.
- (911) Submitters also raise policy or non-modelling concerns in support of requests to change the modelling. These are addressed in the general themes discussed in section 3, and in my view none would support either site-specific or broad changes to the modelling. Other points sought complete removal of the hazard maps, which would also imply removing most of the related provisions. This is discussed in section 5.2.2.

(912) Some submissions raise more general concerns, which I address below.

Separating overlay into multiple hazard levels

(913) Lyn Bromley and Keith Bromley (211.1), Mark Gunkel and Evangeline Gunkel (7.6), and Neil Blackie (33.1) seek that the overlay be split to distinguish different levels of severity.

(914) Given the overlay is a trigger for further assessment and there are no provisions sought by submitters that could meaningfully take a proportionate approach based on different levels of the Slope Assessment Overlay, I do not think this would add any value to the plan, and recommend rejecting this relief.

6.2.9 Liquefaction Hazard Overlay

Submissions seeking changes

(915) The Adrian Palmer Family Trust requests that the Liquefaction Hazard Overlay be removed from a list of sites:

Submission Point #	Address
315.10f	1/65 Marsden Street
315.10u	10 Pretoria Street
315.10e	10 Udy Street
315.10c	10 Wareham Place
315.10h	127 Gracefield Road
315.10ac	140 Hutt Road
315.10x	15 Raroa Road
315.10w	19 Pretoria Street
315.10d	2 Jackson Street
315.10y	21 Meachen Street
315.10z	23 Rutherford Street
315.10aa	25 Rutherford Street
315.10ab	27 Rutherford Street
315.10i	29 Udy Street
315.10q	33 Rutherford Street
315.10j	337 High Street
315.10k	339 High Street
315.10r	35 Rutherford Street

Submission Point #	Address
315.10l	355 High Street
315.10m	369 High Street
315.10s	37 Rutherford Street
315.10n	371 High Street
315.10o	373 High Street
315.10p	375 High Street
315.10t	39 Rutherford Street
315.10v	411-413 Cuba Street
315.10a	5 Toop Street
315.10g	6 Regent Street
315.10b	6 Wareham Place

- (916) There are no site-specific reasons given for these requests and nothing in the submission challenges or addresses the quality or assumptions of the modelling. Accordingly, I recommend not accepting any of these points. The submitter may wish to provide reasons for this request in the hearing.
- (917) The TTL Trust (412.1) seeks that the Liquefaction Hazard Overlay be removed from 18 Saulbrey Grove, Woburn. The submitter's reasons given relate to their experience that the land has not suffered from liquefaction in previous recent earthquakes in Christchurch and Kaikoura.
- (918) Tom Hudig (288.4b) seeks that the Liquefaction Hazard Overlay be removed from 11 Aurora St, Petone, considering it inappropriate given the house dates from the 1930s and has not suffered liquefaction since then.
- (919) The modelling for liquefaction uses a design event for an earthquake in excess of anything to have occurred in Wellington in the last century. Accordingly, I do not think the track record in past earthquakes is a guide to the future susceptibility in a larger or closer earthquake than for example those in Kaikoura or Christchurch and the modelling is still generally applicable. I recommend rejecting these submission points.
- (920) Kelvin Sanderson (95.3) seeks that the Liquefaction Hazard Overlay be deleted from 129 Cuba St, Petone, considering that the risk is created through the action of Hutt City Council and other public bodies.

- (921) The submitter considers that the risk is affected by what land use activities are provided for on the site and could be reduced through a rezoning of the site to allow for commercial or light industrial uses instead of the use of natural hazard overlays.
- (922) The issue of the zoning of the site was addressed in Hearing Stream 2, where I recommended that the PDP's zoning of the site as Mixed Use (allowing for some limited commercial use) be retained⁴⁶. I agree this provides for a wider range of activities, some of which are lower risk than residential (for example, that would fall within the definition of *activities potentially sensitive to natural hazards* rather than *activities most sensitive to natural hazards*).
- (923) While I agree that changing the land uses provided for can affect the risk, in my view the plan needs to also be capable of addressing natural hazard risk through controlling activities directly, particularly in a zone such as the Mixed Use Zone that also provides for residential activity as permitted. I accordingly recommend rejecting this relief.

Submissions in support

- (924) Z Energy (468.2f, 468.3f, 468.4f, 468.5f, 468.6g, 468.7c, 468.9c) support the Liquefaction Hazard Overlay at a variety of specific sites.
- (925) Waste Management NZ (461.2b) supports the overlay at 30 Benmore Crescent.
- (926) I note this support and recommend accepting these points.

6.2.10 If changes are to be made

- (927) Some submitters seek that major changes to the hazard overlays be made on the basis of re-running the models using different parameters and assumptions. I recommend adopting one such change, to align flood modelling with standard Tiaki Wai modelling practices (roughly equivalent to RCP4.5) used in the Wellington City District Plan rather than the RCP8.5 scenario used in the PDP.

⁴⁶ Section 42A Report, Commercial and Mixed Use Zones, para 598.

- (928) Considering that the panel may be of a mind to agree with this recommendation, or to agree with other submitters even where I have not recommended any changes, I have consulted with the experts responsible for this modelling. In general, the flooding and coastal inundation models can be re-run using different assumptions in the time between the close of this hearing stream and the time for the panel to finalise its recommendations. The tsunami model likely cannot, and the fault, liquefaction, and slope stability overlays are not based on automated models. For those hazards, the panel will need to make decisions on the basis of the information already available or provided by submitters.
- (929) Changes sought by, or within the scope of submitters, would include:
- The use of less pessimistic climate change scenarios
 - Increases in the high/medium/low cutoffs for inundation depth or velocity, or
 - Changes in the post-processing to filter out properties affected by smaller areas.
- (930) These would each have the effect of reducing the area affected by overlays or downgrading the severity at a particular spot, which I consider within the scope of a number of general submissions.
- (931) I suggest that the panel hear all evidence in the hearing first and then make a recommendation as soon as possible if it considers re-running the modelling warranted, including expert conferencing to establish firm parameters for this modelling.

7 Definitions

7.1 Discussion of submissions and recommendations

- (932) This section is a discussion of the submission points on definitions that are either primarily relevant to the Natural Hazards and Coastal Environment chapters, or raised by submitters primarily interested in those chapters, with my recommendations on decisions requested by submitters.
- (933) For the sake of brevity, where a submission is in support of a provision and I have not otherwise discussed it, I recommend accepting that submission point in whole or in part for the grounds set out in the Natural Hazards s32 report.
- (934) Definitions are usually consequential on the recommendations made on the substance of objective, policies, and rules, and submitters have usually submitted on those provisions as well, so I will generally refer back to the discussions in the above sections.

7.1.1 Definitions not in dispute

- (935) The following definitions only have submissions in support, with no changes sought:

Definition	Supported by
Fault Location Area	Fuel Companies (471.22)
Flood Hazard Overlays	Fuel Companies (471.23)
High Coastal Hazard Overlay	Fuel Companies (471.28)
High Coastal Inundation Hazard Overlay	Fuel Companies (471.29)
High Natural Hazard Overlay	Fuel Companies (471.31)
High Tsunami Hazard Overlay	Fuel Companies (471.32)
Low Flood Hazard Overlay	Fuel Companies (471.36)

Definition	Supported by
Low Hazard Overlay	Fuel Companies (471.37)
Low Tsunami Hazard Overlay	Fuel Companies (471.38)
Medium Coastal Hazard Overlay	Fuel Companies (471.39)
Medium Coastal Inundation Hazard Overlay	Fuel Companies (471.40)
Medium Flood Hazard Overlay	Fuel Companies (471.41)
Natural hazard	Fire and Emergency NZ (374.6), Wellington Regional Council (452.11, supported by NHC F15.3), Fuel Companies (471.43)
Natural hazard mitigation works	NZ Transport Agency (385.13)
Natural hazard overlay	Fuel Companies (471.44)

(936) As these points are all thus beyond contention, they all should be accepted.

7.1.2 Definitions – Proposed

Activity least sensitive to natural hazards, Activity most sensitive to natural hazards, Activity potentially sensitive to natural hazards

(937) All the submission points on these definitions are either in support or seek that activities be moved from one of the definitions to another, so I will discuss the three definitions together.

(938) KiwiRail (442.1 “least sensitive”, 442.2, “potentially sensitive”), Argosy Property (237.1, “potentially sensitive”, 237.2 “most sensitive”), the Ministry of Education (399.1, “most sensitive”), and Oyster Management (272.1, “potentially sensitive”) support one or more definitions as notified.

Plantation forestry

(939) Wellington Regional Council (452.1, supported by Royal Forest and Bird F23.3, 452.2, supported *in part* by NHC F15.1, 452.3) supports the definitions

other than seeking that “plantation forest or plantation forestry” be moved from “least sensitive” to “potentially sensitive”. This is supported by the Natural Hazards Commission (F15.1).

- (940) There is no specific reason given for this change or evidence given around the risks of plantation forestry, and it is unclear why the sensitivity of plantation forestry to natural hazards is such that the rules for potentially sensitive activities (which are generally more restrictive and require resource consent in more circumstances) should apply. Accordingly, I do not recommend accepting this submission point, but suggest the submitter provide further evidence in the hearing.

Pluralisation

- (941) The Natural Hazards Commission further submission (F15) also notes that the definition refers to “activity” in the singular and suggest it should be “activities” consistent with its usage in chapters. While a further submission cannot seek original relief, however, if this were to be an issue it would be within the panel’s power to recommend as a minor correction.
- (942) Definitions apply even if the grammatical form of the words changes⁴⁷, and the plan uses both *activity* and *activities* depending on context⁴⁸. The (many) other definitions of “activity sensitive to...” in the plan use the singular and so I recommend for consistency these definitions follow suit. Accordingly, I do not consider there is an error to correct.

Temporary buildings

- (943) The New Zealand Defence Force (404.2) seeks that “buildings and structures associated with temporary activities” be added as to the “least sensitive” category. While they do not give specific reasons for this relief, they draw a distinction with permanent buildings and connect this with their general concerns around providing for temporary military training activities.

⁴⁷ This is a long-standing principle of statutory interpretation currently codified in the Legislation Act 2019, ss18–19.

⁴⁸ For interest, the IsoPlan software used for the e-plan is capable of providing pop-up definitions even where the grammatical form alters due to case, number, etc.

- (944) In my view, natural hazards provisions, particularly for risks that will not arise until many years in the future, should not in general apply to temporary activities and temporary buildings as the risk during the period the temporary activity occurs is always going to be trivially unlikely or non-existent. Temporary activities in practice are also often weather dependent and will be less likely to occur during the types of storms which the flood, coastal inundation, and landslide modelling is based around. Even in the worst case of a risk that is a 1:100 year event independent of the weather (e.g. a fault rupture hazard), the Temporary Activities chapter limits temporary activities to 6 days as a permitted activity, thus making the risk much lower than a 1:100 year risk overall.
- (945) However, in the policy approach of the proposed plan, temporary buildings and structures are dealt with in the Temporary Activities chapter, which does not use the definition of *activities least sensitive to natural hazards*. Granting the relief of NZDF as requested would therefore have no effect, as there is no relevant buildings and structures rule using the definition.
- (946) Accordingly, I recommend accepting the relief in part to the extent that some exemption should be made from natural hazards for temporary buildings, however, this cannot be done through modifying the definition of *activities least sensitive to natural hazards*, and the details of this will need to be reassessed in the context of the Temporary Activities chapter (part of Hearing Stream 7) where there are other submission points this issue interacts with. NZDF is also a submitter on the Temporary Activities provisions in general and may be better placed to discuss how this relief is implemented in that hearing.

Catchall provision

- (947) The Fuel Companies (471.57) support the definition of *activities least sensitive to natural hazards* but seek that a catch-all provision be added to cover:

...

f. any other activity that is not an activity most sensitive to natural hazards or activity potentially sensitive to natural hazards

(948) As notified, the definitions of *activities most sensitive to natural hazards* and *activities potentially sensitive to natural hazards* cover the vast majority of conceivable land uses, with the latter also particularly excluding any activity defined as *least sensitive* or *most sensitive*. If there are any activities that somehow do not fall into any of the three categories⁴⁹, they also would not be caught by any rules. However, some activities are still not covered and this provides an opportunity to clear up the definition to address the submitter's more general concerns around the application to non-habitable buildings. Accordingly, I recommend the definition of *activities least sensitive to natural hazards* be amended as follows:

means a:

- a. accessory building or part of a building used for non-habitable purposes,
- b. structure used for non-habitable purposes.
- c. building associated with marina operations (above MHWS),
- d. passive recreation activity,
- e. parks facility, ~~or~~
- f. plantation forest or plantation forestry, or
- g. any activity not otherwise included as an activity potentially sensitive to natural hazards or an activity most sensitive to natural hazards.

(949) Consequentially, *activities potentially sensitive to natural hazards* needs a slight amendment to fix the issue that it would otherwise be circular:

means a:

...

but excludes any activities most sensitive to natural hazards and activities in clauses (a) to (f) of the definition of activities least sensitive to natural hazards.

⁴⁹ Given the definitions involved, it would need to be an activity that, for example and at minimum, did not involve anyone residing, learning, being cared for, engaging in worship, sport, recreation, commerce, industry, agriculture, or any other primary production, doing any cultural or community activity, or providing infrastructure.

Quarrying

- (950) Winstone Aggregates (444.3) seek that *quarrying activities* be removed from the definition of *activities potentially sensitive to natural hazards*, giving the view that quarrying activities are not sensitive to natural hazards.
- (951) I do not agree – quarrying activities, per the definition in the plan, includes a large number of facilities that could be directly damaged by a natural hazard event and place employees and customers at risk. The various ancillary activities such as offices and workshops would in any case qualify as *potentially sensitive* as a standalone activity. I thus recommend rejecting this relief.

Hazardous facility or major hazard facility

- (952) The Fuel Companies (471.58, 471.59, opposed by WRC F38.75, F38.76) seek to exclude “hazardous facility or major hazardous facility” from the *most sensitive* definition and replace it with “significant hazardous facility” in the *potentially sensitive* definition.
- (953) They consider this mainly in relation to whether oil terminals (which are hazardous facilities) should be subject to this definition and consider that:
- Oil terminals are subject to design requirements from other statutes and their regulations such as the Hazardous Substances and New Organisms Act 1996 and Health and Safety at Work Act 2015 (including regulations under these),
 - Comparable facilities have proved resilient to other hazard events in the past, giving the example of oil terminals and the 2010 and 2011 Christchurch earthquakes,
 - Hazardous facilities do not normally have large numbers of people on-site or restrict people from leaving the site,
 - Oil terminals are no more hazardous than other general industrial activities that store hazardous substances such as ports, and
 - “Hazardous facilities” are not defined.
- (954) This is opposed by Wellington Regional Council (F38.75, F38.76) who consider that this would be inconsistent with definitions in the Regional Policy Statement.

- (955) The Regional Policy Statement does not include gradations of hazard sensitivity in the definition – it has a single definition for “hazard sensitive activity” that includes “major hazard facility”. I therefore do not think there is any difference in consistency with the RPS if the Fuel Companies’ relief were to be granted.
- (956) Other than this, I generally agree with the reasoning of the Fuel Companies as it relates to oil terminals and I think their logic applies to other existing significant hazardous facilities in the district (which are also all oil, gas, and chemical storage facilities). This may not necessarily be true for all new significant hazardous facilities, but these would require consent under Hazardous Substances chapter rule HS-R1 which includes a general matter of discretion for natural hazard risk.
- (957) To the extent that significant hazardous facilities would increase the potential risk of discharges of hazardous substances in a natural hazard event, this is no longer a district plan function⁵⁰.
- (958) I also agree that using the defined term “significant hazardous facility” would aid plan usability rather than “hazardous facility or major hazardous facility” which are undefined.
- (959) Accordingly, I recommend accepting the relief of the Fuel Companies.

Section 32AA Analysis

- (960) I agree for the reasons set out in pp5-6 of the Fuel Companies submission that this change to the definition would better give effect to the relevant objectives and policies.

High Flood Hazard Overlay

- (961) The Fuel Companies (471.30) support the definition as notified.
- (962) Charmi Mistry (392.3) seeks that the overlay be renamed from “High Flood Hazard Overlay” to a more neutral term. I discuss this issue more generally in section 3.1.7.
- (963) Accordingly, I recommend the definition remain as notified.

⁵⁰ A territorial authority’s role in giving effect to the RMA was altered in 2017 to remove “the prevention or mitigation of any adverse effects of the storage, use, disposal, or transportation of hazardous substances”, Resource Legislation Amendment Act 2017 (2017 No 15) s13(2).

Liquefaction Hazard Overlay

- (964) The Fuel Companies (471.35) support the definition as notified.
- (965) Argosy Property No. 1 Ltd (237.4, supported by the Fuel Companies F32.1) and Oyster Management Ltd (272.3) seek that the definition describe the scope and extent of the overlay and describes its purpose instead of referring to the maps (inferred).
- (966) The overlay is described in detail in the Natural Hazards chapter that it refers to. In my view the only value of the definition is to remove any doubt that the overlay is the mapped area, and so I recommend not accepting these points.

Medium Hazard Overlay

- (967) The Fuel Companies (471.42) support the definition as notified.
- (968) Jarred Gustafson and Paula Gentle (6.5) seek to remove "Slope Assessment Overlay" from the definition.
- (969) This is consequential on their relief in the Natural Hazards chapter introduction (see section 5.2.9), and so I recommend accepting this relief.

Slope Assessment Overlay

- (970) The Fuel Companies (471.50) support the definition as notified.
- (971) Oyster Management (272.4) seeks that the definition describe the scope and extent of the overlay and describes its purpose instead of referring to the maps (inferred).
- (972) The overlay is described in detail in the Natural Hazards chapter that it refers to. In my view the only value of the definition is to remove any doubt that the overlay is the mapped area, and so I recommend not accepting these points.

7.1.3 Definitions – New definitions sought

“1% Flood Annual Exceedance Probability Level”, “Annual Exceedance Probability”

(973) Laura Skilton (314.2) seeks in general terms a definition of “1% Flood Annual Exceedance Probability”.

(974) Wellington Water (422.16) seeks a definition of “annual exceedance probability” as:

The probability of a flood occurring in a single year

(975) Both submitters consider this would avoid confusion and ambiguity for plan users, with which I agree. As “annual exceedance probability” is used in contexts other than flooding, I recommend accepting these points in part with a more generic version of Wellington Water’s preferred definition of “Annual Exceedance Probability”:

Means the probability of a natural hazard event occurring in a single year

(976) And for the more specific context of flood, also include the model to be used, which is relevant to the resolution of submission points on rule NH-R8 (see section 5.2.21), by defining “Modelled 1% AEP Flood” and incorporating the relevant documents by reference:

Means the 1:100 year / 1% annual exceedance probability flood modelled using the methodology in the Wellington Regional Stormwater Hydraulic Modelling Specifications 2019 and the Black Creek 2022, Eastern Lower Hutt 2022, East Harbour 2024, Petone 2022, Stokes Valley 2022, and Western Hills 2024 model build reports.

“Cumulative natural hazards”

(977) The Natural Hazards Commission (327.22) seeks to add a definition for “Cumulative natural hazards” as:

Where two or more unrelated natural hazard events have the potential to affect human life and/or property.

- (978) I do not recommend adding this definition as I am not recommending adding or modifying any provisions that would use the term.
- (979) If the panel is nonetheless of a mind to grant other relief of the submitter that would introduce the term "cumulative natural hazards" to the PDP then I would agree with adding a definition and think the definition sought by the submitter is appropriate.

"Freeboard"

- (980) The Natural Hazards Commission (327.23) seeks a definition of "freeboard", which is used in the permitted activity conditions for NH-R8 and NH-R12. They specifically request:

In setting floor levels, freeboard incorporates the following factors:

- Uncertainties in estimates of flood levels;
- Differences in water levels across the floodplain because of "local factors" not included in hydraulic models;
- The cumulative effect of subsequent infill development;
- Increases in water level as a result of wave action – waves can be wind-induced (across fetches of open water) and wave-induced (powerboats and vehicles moving through flooded areas);
- Increases in water level as a result of debris effects and gravel build up in the riverbed.

- (981) They consider that without a definition, the height of the freeboard would be "open to interpretation".
- (982) I agree that as written, with "freeboard" left undefined, the relevant rules lack the clarity expected for a rule condition. The proposed definition, however, would not help with this and would if anything make the situation more confusing as it would imply that the freeboard is a subjective decision by plan users.
- (983) I believe this would be better addressed by clarifying the freeboard details in the rules through a definition, which I discuss above in section 5.2.13 in the discussion of the rules NH-R8 and NH-R12 and for the requested definition of "1% Flood Annual Exceedance Probability". The NHC also has direct submission points on these provisions.

(984) I accordingly recommend rejecting this point.

“Minimise”, and “Reduce” or “Risk reduction”

(985) The Natural Hazards Commission (327.24, opposed by the Fuel Companies F32.4) seeks a definition of “minimise”:

The duty to take all reasonable steps to reduce the adverse effects of natural hazards on future activities.

(986) “Minimise” is a term used throughout the PDP in relation to a large number of different effects – e.g. transport impacts in the Transport chapter, health and safety in the Contaminated Land and Hazardous Substances chapters, and in Subdivision in relation to the National Grid, a wide range of effects for Temporary Activities, amenity, character and reverse sensitivity in some zones, and so forth. It was a term used throughout the ODP and not identified as an issue in relation to visual, amenity, shading, traffic, safety, nuisance, health and safety, and other effects.

(987) I believe that the definition of “minimise” is reasonably obvious and in any case, is used throughout the plan and so a natural hazards-specific definition would be strange and imply the word meant something different in a natural hazards context – for otherwise, why would the definition need to be limited in scope. I accordingly recommend rejecting this relief.

(988) If the panel is nonetheless of a mind to recommend such a definition, I recommend that it be clearly scoped to apply only to natural hazards and coastal hazards (as concepts, not chapters – it would also need to apply in some contexts to the Infrastructure, Subdivision, and Earthworks chapters) and use the language from the definition in the RPS, which would produce:

In relation to natural hazards and coastal hazards, means to reduce to the smallest amount reasonably practicable.

(989) The NHC also seeks (327.25, opposed by the Fuel Companies F32.5) a definition for either “reduce” or “risk reduction” as:

Add a definition for either “reduce” or “risk reduction” as “In relation to the Natural Hazards chapter, prevent new and reducing existing risks, and manage residual risks.

- (990) The NHC's reasons are that they consider that "reduce" and "minimise" are similar terms that might be confused, and also that this would clarify the plan as notified, rather than being reasons in support of a policy change.
- (991) I consider that these definitions would substantially change the meaning of the plan, which does not fit with the submitter's given reasoning, and so do not recommend accepting these proposed new definitions. The proposal is also circular in that the definition of "reduce" would include the word "reducing", which raises questions about interpretation.
- (992) The submitter may want to clarify for the hearing if they have other reasons for pursuing this definition in terms of the change it would have on the plan.
- (993) I accordingly do not recommend accepting either of these points.

"Residual risk"

- (994) The plan as notified contains a definition of "residual risk" specific to the Hazardous Substances chapter. Submission points on that definition were addressed in Hearing Stream 2 – Business, in the context of the Hazardous Substances chapter. As the relief requested would be for a different definition specific to natural hazards, I will consider this separately.
- (995) The Natural Hazards Commission (327.26, supported by WRC F38.3 and supported *in part* by the Fuel Companies F32.6) seeks to add a definition for residual risk in relation to natural hazards that would be:

...

In relation to the Natural Hazards chapter, the risk that remains after risk(s) treatment has been applied to reduce the potential consequence(s).

- (996) As I do not recommend adding the term "residual risk" into the text of the plan, no definition is necessary. If panel is nonetheless of a mind to grant any of that relief that would mean the term "residual risk" is used in the plan in relation to natural hazards, then I agree it should be defined. However, I do not think the definition requested would help plan users understand it. This issue can be considered further if the panel does decide to include reference to residual risk.

“Resilient” or “Resilience”

- (997) Wellington Regional Council (452.12, supported *in part* by NHC F15.4) seeks a definition for resilient/resilience as:

in relation to natural hazards and climate change means the capacity and ability of natural and physical resources, including people, communities, businesses, infrastructure, and ecosystems, to withstand the impacts and recover from the effects of climate change, including natural hazard events.

- (998) In my view where the words “resilient” and “resilience” are used in the PDP their meaning is obvious from context. I accordingly recommend rejecting this relief.

8 Conclusion

- (999) This report has provided an assessment of submissions received in relation to Hearing Stream 5 for Natural Hazards, the Coastal Environment, related definitions, and the strategic direction on CCSD-O1 and CCSD-O2.
- (1000) Sections 3, 4, 5, 6, and 7 assess and provide recommendations on the decisions requested in submissions. I consider that the submissions on Hearing Stream 5 – Natural Hazards should be accepted, accepted in part, or rejected, as set out in my recommendations of this report and in Appendix A2.
- (1001) I recommend that provisions be amended as set out in Appendices A1, A3, and A4 for the reasons set out in this report.

Section 32AA Evaluations

- (1002) I consider that the amended provisions will be efficient and effect in achieving the purpose of the RMA, the relevant objectives of the PDP and other relevant statutory documents, for the reasons set out in the individual Section 32AA evaluations undertaken in this report.
- (1003) For minor corrections and minor changes, or for changes that are largely administrative in nature and are to improve the readability and the implementation of the plan, I have not made individual section 32AA assessments as I consider that the section 32 evaluation made by the Council continues to apply.

9 Appendices

Appendix A1: Recommended amendments to the Proposed District Plan

Appendix A2: Recommended decisions on submissions on Natural Hazards

Appendix A3: Recommended Regionally Significant Coastal Business Areas Overlay

Appendix A4: Table of Recommended Restructuring of Hazard-Specific Policies and Rules

Appendix B1: Flood modelling evidence of Mr Alistair Osborne

Appendix B2: Coastal inundation evidence of Dr Scott Stephens

Appendix B3: Tsunami evidence of Dr David Burbidge and Ms Edith Bretherton

Appendix B4: Fault rupture evidence of Dr Nicola Litchfield and Ms Edith Bretherton

Appendix B5: Slope stability evidence of Mr Pathmanathan Brabhakaran and Dr Dougal Mason

Appendix B6: Regional comparison of natural hazard modelling and policy approaches

Appendix A1: Recommended amendments to the Proposed District Plan

SD – Strategic Direction

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Climate Change and Natural Hazards

CCSD-CC-O1	Carbon Neutral
The urban form and built development in Lower Hutt supports the transition of the city to be carbon neutral by 2050.	
CCSD-CC-O2	Natural Hazards
The Increased risk to people, communities, and property from natural hazards, and from the potential effects of climate change on natural hazards, as a result of subdivision, land use and development, is avoided or minimised to acceptable levels.	

Commented [SD1]: Policy Planning Team of HCC (440.18) HS1

Commented [SD2]: Policy Planning Team of HCC (440.18) HS1

Commented [SD3]: Michael Rachlin (232.1)

...

NH — Natural Hazards

Hutt 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.

The District Plan focuses on the following natural hazards as they are the hazards that present the greatest risk to people, buildings and infrastructure and their potential impacts can be addressed through appropriate land use planning measures:

- Flooding,
- Fault rupture,
- Liquefaction,
- Slope Instability,
- Coastal inundation, including from sea level rise, and
- Tsunami.

The coastal hazard provisions (coastal inundation, sea level rise, and tsunami) are addressed in the Coastal Environment chapter of the District Plan. The Natural Hazards Chapter addresses the other hazards identified above.

Natural Hazard Overlays

Areas that are particularly susceptible to natural hazards are mapped in the District Plan as Natural Hazards Overlays. Each of these natural hazards is assigned a Hazard Ranking, based on the risk associated with the hazard.

The Hazard Ranking for each of the natural hazards addressed in the Natural Hazard chapter is provided in the table below:

Natural Hazard Overlay	Respective Hazard Ranking
Wellington Fault	High
Stream Corridor (1% AEP flood event + 1.59m sea level rise)	
Overland Flowpath (1% AEP flood event + 1.59m sea level rise)	Medium
Slope Assessment Overlay	
Liquefaction Hazard Area	Low
Inundation Area (1% AEP flood event + 1.59m sea level rise)	

Natural Hazard Overlay	Hazard Ranking	Description
Fault Location Area	High	Fault rupture zone and 20 metre buffer either side. Includes poorly constrained, uncertain constrained, well defined and well defined extension areas.
High Flood Hazard Overlay	High	1% AEP flood event (1:100 year) + climate change including 1.59m sea level rise. Covers areas with a predicted velocity over 2m/s or depth over 0.5m, plus specific identified stream and river corridors.

<u>Medium Flood Hazard Overlay</u>	<u>Medium</u>	<u>1% AEP flood event (1:100 year) + climate change including 1.59m sea level rise. Covers areas that do not qualify as "High" but have a predicted velocity over 0.5m/s or depth over 0.25m.</u>
<u>Low Flood Hazard Overlay</u>	<u>Low</u>	<u>1% AEP flood event (1:100 year) + climate change including 1.59m sea level rise. Covers areas that do not qualify as "High" or "Medium" but have a predicted depth over 0.05m.</u>
<u>Liquefaction Hazard Overlay</u>	<u>Low</u>	<u>Areas of moderate or greater liquefaction susceptibility.</u>

The Slope Assessment Overlay does not have a Hazard Ranking as it is intended as a trigger for site-specific assessment and does not model a natural hazard event by probability or severity.

Natural Hazard Risk

Risk is a product of both the likelihood of and the consequences from a natural hazard. A risk-based approach to natural hazards balances allowing people and communities to use their property and undertake activities, while also ensuring that lives or significant assets are not harmed or lost as a result of a natural hazard event. When addressing the consequences from natural hazards, priority has been given in this plan as follows to:

- The protection of people from loss of life and injury,
- Reducing damage to buildings from natural hazard events, and
- The protection of essential infrastructure to ensure the health, safety and resilience of communities.

While in most instances development is unable to change the likelihood of a natural hazard event, incorporating mitigation measures or avoiding any further development in certain hazard areas can reduce the consequences from natural hazards, thereby over time reducing the associated risks.

Potential mitigation measures that can be incorporated into developments to reduce the consequences of natural hazards include:

- Building design and location,
- Raising floor or ground levels to avoid inundation,
- The creation of flood water detention areas to protect areas from flooding,
- The creation, retention or enhancement of natural systems and features,
- The use of suitable materials in infrastructure and building construction,
- The type of activities within buildings and structures, or the type of development,
- Having buildings being able to be relocated in the future,
- The use of green infrastructure options (for example sacrificial fill), and
- Securing Overland Flowpaths to allow for controlled stormwater flows when primary network capacity is exceeded.

Different activities by their nature present different consequences to natural hazards. For the provisions in this chapter, activities are classified as:

- Activities most sensitive to natural hazards,
- Activities potentially sensitive to natural hazards, and
- Activities least sensitive to natural hazards.

Commented [SD1]: Argosy Property (237.5), Oyster Management (272.5, 272.6), Policy Planning Team (440.29), Natural Hazards Commission (327.90), Jarred Gustafson and Paula Gentle (6.1), Wellington Water (422.14), c116A

Commented [SD2]: c116A

Objectives

NH-O1	Risk from Natural Hazards in High Natural Hazard Overlays
Subdivision, use and development within the High Natural Hazard Overlays <u>reduces</u> or <u>avoids</u> increasing the existing risk from natural hazards to people, buildings and infrastructure.	
NH-O2	Risk from natural hazards in Low Natural Hazard Overlays and Medium Natural Hazard Overlays
Subdivision, use and development within the Low Natural Hazard Overlays and Medium Natural Hazard Overlays minimises the risk from natural hazards to people, buildings and infrastructure.	
NH-O3	Subdivision, Use and Development in the ~~General Industrial Zone and Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone and the Seaview Marina Zone Regionally Significant Coastal Business Areas Overlay~~ and within the Medium Flood Hazard Overlay or High Flood Hazard Overlay
Provide for subdivision, use and development in the ~~General Industrial Zone and Heavy Industrial Zone in Seaview, Metropolitan Centre Zone in Pito One and Seaview Marina Zone Regionally Significant Coastal Business Areas Overlay~~ while also ensuring development and use in this area minimises the risk from flood hazards to people, buildings and infrastructure.	
NH-O4	Planned Natural Hazard Mitigation Works
Risk to people, buildings and infrastructure from flood hazards is reduced through mitigation works.	
NH-O5	Natural Systems and Features
Natural systems and features that reduce the susceptibility of people, buildings and infrastructure from damage from natural hazards are created, retained or enhanced.	

Commented [SD4]: Policy Planning Team (440.32), c116A

Commented [SD5]: Note - corrections recommended in HS1 for the following are now superseded

HS1 -
Minor Corrections
Laura Skilton (314.5)
Policy Planning Team of the Hutt City Council (440.2)

Policies

General Policies

NH-P1	Risk-Based Approach
Identify natural hazards within the District Plan and take a risk-based approach to the management of subdivision, use and development based on: 1. The sensitivity of the activities to the impacts of natural hazards, 2. The hazard posed to people's lives and wellbeing, property and infrastructure, by considering the likelihood and consequences of natural hazard events, and 3. The operational need or functional need for some activities to locate in Natural Hazard Overlays.	
NH-P2	Levels of Risk
Subdivision, use and development manages the natural hazard risk to people, buildings and infrastructure by: 1. Avoiding buildings and activities in the High Natural Hazard Overlays (with the exception of the ~~General Industrial Zone and Heavy Industrial Zone in Seaview, Metropolitan Centre Zone in Pito One and Seaview Marina Zone Regionally Significant Coastal Business Areas Overlay~~) unless there is an operational need or functional need for the subdivision, use, or development to be located in this area and the subdivision, use, or development maintains or reduces the existing risk from the natural hazard to people, buildings and infrastructure. 2. Within the ~~General Industrial Zone and Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone and the Seaview Marina Zone Regionally Significant Coastal Business Areas Overlay~~, recognise the regional importance of these areas, while ensuring that subdivision, use, or development located in these areas minimises the risk from flood hazards in the High Flood Hazard Overlay to people, buildings, and infrastructure. 3. Requiring subdivision, use, or development to minimise the risk to development from natural hazards to people, buildings and infrastructure in the Low Hazard Overlays and Medium Hazard Overlays, and 4. Enabling use, or development that have either low occupancy or low replacement value within the Natural Hazard Overlays.	
NH-P3	Natural systems and features
~~Central government, local government, and landowners m~~Maintain and enhance natural systems and features where they will reduce the existing risk posed by natural hazards to people, buildings and infrastructure.	
NH-P4	Natural hazard mitigation
Enable natural hazard mitigation works undertaken by ~~the Wellington Regional Council, Hutt City Council, New Zealand Transport Agency (Waka Kotahi), KiwiRail or their nominated contractors or agents central government, local government, or their agents~~ within Natural Hazard Overlays where these will decrease the existing risk to people, buildings and infrastructure.	
NH-P5	Green Infrastructure
~~Encourage the use of green infrastructure or Mātauranga Māori approaches when undertaking natural hazard mitigation works by the Wellington Regional Council, Hutt City Council, New Zealand Transport Agency (Waka Kotahi), KiwiRail or their nominated contractors or agents within Natural Hazard Overlays.~~	

Commented [SD7]: Policy Planning Team (440.48a, 440.48b)

Commented [SD8]: Orlando & Franziska Ravera (459.3)

Commented [SD9]: c116A

Fault Location Area - Policies

Commented [SD11]: Policies split up, per David Surrey (427.20a)

NH-Paaa	Activities least sensitive to natural hazards within the Fault Location Area
- Allow for additions to existing buildings for activities least sensitive to natural hazards within the poorly constrained, uncertain constrained, well defined and well defined extension areas of the Fault Location Area. - Allow for new allotments, new buildings and the conversion of existing buildings for activities least sensitive to natural hazards within the poorly constrained, uncertain constrained, well defined and well defined extension areas of the Fault Location Area.	
NH-P6	Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the Fault Location Area
Additions to existing buildings in the Fault Location Area are managed as follows: - Provide for additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the poorly constrained, uncertain constrained, well-defined or well-defined extension areas where: - They are located more than 20m from the edge of the fault trace or fault deformation zone, or - Mitigation measures are incorporated into the building to maintain life safety of the occupants and the structural integrity of the building in the event of fault rupture.	
NH-P7	Subdivision, use and development for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the Fault Location Area
New subdivision, use and development within the Fault Location Area are managed as follows: - Provide for new allotments, new buildings and the conversion of existing buildings for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the poorly constrained and uncertain constrained areas of the Fault Location Area where: - The new building platforms, new buildings or conversions are located more than 20m from the edge of the fault trace or fault deformation zone, or - Mitigation measures are incorporated into the building to maintain life safety of the occupants and the structural integrity of the building in the event of fault rupture. - Avoid new allotments, new buildings and the conversion of existing buildings for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the well-defined or well-defined extension areas of the Fault Location Area unless: - The new building platforms, new buildings or conversions are located more than 20m from the edge of the fault deformation zone of the Fault Location Area, or - If locating the activity more than 20m from the edge of the deformation zone is not a practicable option and there is an operational need or functional need to locate within the well-defined or well-defined extension areas of the Fault Location Area; mitigation measures are incorporated into the building to minimise the risk to life of the occupants and the structural integrity of the building on the event of fault rupture, or - If locating the activity more than 20m from the edge of the deformation zone is not a practicable option but there is no operational need or functional need to locate within the well-defined or well-defined extension areas of the Fault Location Area; mitigation measures are incorporated into the building to not increase risk to life of the occupants and the structural integrity of the building in the event of fault rupture.	

Commented [SD12]: Moved from notified NH-P6.1 - David Surrey (427.20a)

Commented [SD13]: Moved from notified NH-P7.1 - David Surrey (427.20a)

Commented [SD14]: WRC (452.83)

Commented [SD15]: WRC (452.83)

Commented [CN16]: Policy Planning team of Hutt City Council (440.4)

Flood Hazard Overlays – Policies

NH-P8 Additions to existing buildings and structures in the Low Flood Hazard Overlay~~s~~

Additions to existing buildings and structures in the Low Flood Hazard Overlay~~s~~ are managed as follows:

1. Allow for additions to existing buildings and structures for activities least sensitive to natural hazards ~~in the Flood Hazard Overlays.~~
2. Allow for additions to existing buildings for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards ~~in the Low Flood Hazard Overlay~~, where:
 - a. The risk to people, and buildings on site from the ~~modelled~~ 1% Annual Exceedance Probability AEP Flood is minimised due to the incorporation of mitigation measures, ~~and~~
 - b. The existing risk to people and buildings on adjacent properties is reduced or not increased from the 1% Annual Exceedance Probability Flood, ~~and~~
 - c. ~~The Medium and High Hazard Areas remain unobstructed to allow for the conveyancing of flood waters and flood waters are not diverted onto adjacent properties or blocked.~~
3. ~~Provide for additions to existing buildings for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the Medium Flood Hazard Overlay and High Flood Hazard Overlay but also in the General Industrial Zone in Seaview, the Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone or the Seaview Marina Zone, where the addition:~~
 - a. ~~is of a limited scale and size,~~
 - b. ~~does not create new residential units on the ground floor~~
4. Only allow additions to existing buildings for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the Medium Flood Hazard Overlay and High Flood Hazard Overlay ~~in all zones (excluding General Industrial Zone in Seaview, the Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone or the Seaview Marina Zone), where it can be demonstrated that:~~
 - a. ~~The risk from the 1% Annual Exceedance Probability flood event is low due to either the:~~
 - i. ~~Proposed mitigation measures, or~~
 - ii. ~~Size of the addition, or~~
 - iii. ~~Nature of the activities undertaken within the addition.~~
 - b. ~~The conveyancing of flood waters through the Medium Flood Hazard Overlay and High Flood Hazard Overlay is still able to occur unimpeded and is not diverted onto adjacent properties, and~~
 - c. ~~In the High Flood Hazard Overlay the existing risk to people, buildings and infrastructure is not increased from the 1% Annual Exceedance Probability flood event.~~

Commented [SD17]: Policies split up, per Laura Skilton (314.14a, 314.14b), David Surrey (427.20a), Michael Rachlin (232.9)

Commented [SD18]: Michael Rachlin (232.8)

Commented [SD19]: Moved into NH-Pbbb, NH-Pccc below

NH-Pbbb Additions to existing buildings and structures in the Medium Flood Hazard Overlay

Additions to existing buildings and structures in the Medium Flood Hazard Overlay are managed as follows:

1. Allow for additions to existing buildings and structures for activities least sensitive to natural hazards ~~in the Flood Hazard Overlays.~~
2. ~~Provide for additions to existing buildings for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the Medium Flood Hazard Overlay and High Flood Hazard Overlay but also in the General Industrial Zone in Seaview, the Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone or the Seaview Marina Zone Regionally Significant Coastal Business Areas Overlay, where the addition:~~
 - a. ~~is of a limited scale and size,~~
 - b. ~~does not create new residential units on the ground floor~~
3. Only allow additions to existing buildings for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards ~~within the Medium Flood Hazard Overlay and High Flood Hazard Overlay in all zones (excluding General Industrial Zone in Seaview, the Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone or the Seaview Marina Zone in the Regionally Significant Coastal Business Areas Overlay), where it can be demonstrated that:~~

Commented [SD20]: Policy Planning Team (440.48a, 440.48b)

- a. The risk from the modelled 1% Annual Exceedance Probability AEP flood event is low due to either the:
 - i. Proposed mitigation measures, or
 - ii. Size of the addition, or
 - iii. Nature of the activities undertaken within the addition.
- b. The conveyancing of flood waters through the Medium Flood Hazard Overlay and High Flood Hazard Overlay is still able to occur unimpeded and is not diverted onto adjacent properties.

Commented [SD21]: cl16A

Commented [SD22]: Moved from NH-P8

NH-Pccc Additions to existing buildings and structures in the High Flood Hazard Overlay

Additions to existing buildings and structures in the High Flood Hazard Overlays are managed as follows:

1. Allow for additions to existing buildings and structures for activities least sensitive to natural hazards in the Flood Hazard Overlays.
2. Provide for additions to existing buildings for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the Medium Flood Hazard Overlay and High Flood Hazard Overlay but also in the General Industrial Zone in Seaview, the Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone or the Seaview Marina Zone Regionally Significant Coastal Business Areas Overlay, where the addition:
 - a. is of a limited scale and size,
 - b. does not create new residential units on the ground floor
3. Only allow additions to existing buildings for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the Medium Flood Hazard Overlay and High Flood Hazard Overlay in all zones (excluding General Industrial Zone in Seaview, the Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone or the Seaview Marina Zone in the Regionally Significant Coastal Business Areas Overlay), where it can be demonstrated that:
 - a. The risk from the modelled 1% Annual Exceedance Probability AEP flood event is low due to either the:
 - i. Proposed mitigation measures, or
 - ii. Size of the addition, or
 - iii. Nature of the activities undertaken within the addition.
 - b. The conveyancing of flood waters through the Medium Flood Hazard Overlay and High Flood Hazard Overlay is still able to occur unimpeded and is not diverted onto adjacent properties, and
 - c. The existing risk to people, buildings and infrastructure is not increased from the modelled 1% Annual Exceedance Probability AEP flood event.

Commented [SD23]: Policy Planning Team (440.48a, 440.48b)

Commented [SD24]: cl16A

Commented [SD25]: cl16A

Commented [SD26]: Moved from NH-P8

NH-P9 Subdivision, use and development in the Low Flood Hazard Overlays

Subdivision, use and development in the Low Flood Hazard Overlays are managed as follows:

1. Allow for new buildings, structures, building platforms, and the conversion of existing buildings that will contain activities least sensitive to natural hazards in the Low Flood Hazard Overlay,
2. Provide for new buildings and structures, building platforms and the conversion of existing buildings that will contain activities least sensitive to natural hazards within the Medium Flood Hazard Overlay and High Flood Hazard Overlay where:
 - a. The existing risk to people and buildings on site from the 1% Annual Exceedance Probability Flood is reduced or avoided due to the incorporation of mitigation measures;
 - b. The risk to people and buildings on adjacent properties is reduced or avoided from the 1% Annual Exceedance Probability Flood; and
 - c. The Medium Flood Hazard Overlay or High Flood Hazard Overlay is unimpeded and unobstructed to allow for the conveyancing of flood waters and flood water is not diverted onto adjacent properties or blocked.
3. Allow for new buildings and structures, building platforms and the conversion of existing buildings for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Low Flood Hazard Overlay, where:
 - a. The subdivision, development and use incorporates mitigation measures to ensure the risk to people and buildings from the modelled 1% Annual Exceedance Probability AEP flood event is minimised, and
 - b. The finished floor level of any new building or conversion of an existing building for

Commented [SD27]: Moved into NH-Pddd and NH-Peee below

Commented [SD28]: cl16A

activities most sensitive to natural hazards within identified inundation areas of the Flood Hazard Overlays is above the modelled 1% Annual Exceedance Probability AEP flood levels.

4. ~~Provide for new buildings and structures, building platforms and the conversion of existing buildings for activities potentially sensitive to natural hazards or activities most sensitive to natural hazards within the Medium Flood Hazard Overlay and High Flood Hazard Overlay but also in the General Industrial Zone in Seaview, the Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone, or the Seaview Marina Zone where:~~
 - a. ~~The building incorporates measures that minimise the risk to people and buildings from flood hazards;~~
 - b. ~~There are no residential activities provided on the ground floor of the building; and~~
 - c. ~~If the building is a Major Hazardous Facility, measures that minimise the risk from the release of hazardous goods from flooding are incorporated into the design of the building.~~
5. ~~Only allow for new buildings and structures, building platforms and the conversion of existing buildings for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the Medium Flood Hazard Overlay in all zones (with the exception of General Industrial Zone in Seaview, the Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone and the Seaview Marina Zone) where:~~
 - a. ~~The risk to people and buildings on site from the 1% Annual Exceedance Probability Flood is minimised due to the incorporation of mitigation measures;~~
 - b. ~~The risk to people and buildings on adjacent properties is reduced or not increased from the 1% Annual Exceedance Probability Flood; and~~
 - c. ~~The flow of floodwaters is unimpeded and unobstructed to allow for the conveyancing of flood waters, and flood water is not diverted onto adjacent properties or blocked.~~
6. ~~Avoid new buildings and structures, building platforms, and the conversion of existing buildings for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the High Flood Hazard Overlay in all zones (with the exception of General Industrial Zone in Seaview, the Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone and the Seaview Marina Zone) unless:~~
 - a. ~~The subdivision, development and use has an operational need or functional need to locate within the high hazard area and locating outside of these high hazard area is not a practicable option;~~
 - b. ~~Mitigation measures are incorporated that reduce or avoid an increase in the existing risk to people and buildings from the 1% Annual Exceedance Probability Flood;~~
 - c. ~~People can safely evacuate the property during a 1% Annual Exceedance Probability flood; and~~
 - d. ~~The conveyancing of flood waters through high hazard areas is still able to occur unimpeded and is not diverted onto adjacent properties.~~

Commented [SD29]: c116A

NH-Pddd

Subdivision, use and development in the Medium Flood Hazard Overlay

Subdivision, use and development in the Medium Flood Hazard Overlay are managed as follows:

1. Allow for new buildings, structures, building platforms, and the conversion of existing buildings that will contain activities least sensitive to natural hazards.
2. Provide for new buildings and structures, building platforms and the conversion of existing buildings that will contain activities least sensitive to natural hazards where:
 - a. The existing risk to people and buildings on site from the modelled 1% Annual Exceedance Probability AEP Flood is reduced or avoided due to the incorporation of mitigation measures;
 - b. The risk to people and buildings on adjacent properties is reduced or avoided from the modelled 1% Annual Exceedance Probability AEP Flood; and
 - c. The Medium Flood Hazard Overlay is unimpeded and unobstructed to allow for the conveyancing of flood waters and flood water is not diverted onto adjacent properties or blocked.
3. Provide for new buildings and structures, building platforms and the conversion of existing buildings for activities potentially sensitive to natural hazards or activities most sensitive to natural hazards within the Medium Flood Hazard Overlay and High Flood Hazard Overlay but also in the General Industrial Zone in Seaview, the Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone, or the Seaview Marina Zone Regionally Significant

Commented [SD30]: Moved into NH-Pddd and NH-Peee below

Commented [SD31]: c116A

Commented [SD32]: c116A

Coastal Business Areas Overlay where:

- a. The building incorporates measures that minimise the risk to people and buildings from flood hazards;
 - b. There are no residential activities provided on the ground floor of the building; and
 - c. If the building is a Major Significant Hazardous Facility, measures that minimise the risk from the release of hazardous goods from flooding are incorporated into the design of the building.
4. Only allow for new buildings and structures, building platforms and the conversion of existing buildings for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the Medium Flood Hazard Overlay in all zones (with the exception of General Industrial Zone in Seaview, the Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone and the Seaview Marina Zone excluding in the Regionally Significant Coastal Business Areas Overlay) where:
- a. The risk to people and buildings on site from the 1% Annual Exceedance Probability AEP Flood is minimised due to the incorporation of mitigation measures;
 - b. The risk to people and buildings on adjacent properties is reduced or not increased from the modelled 1% Annual Exceedance Probability AEP Flood; and
 - c. The flow of floodwaters is unimpeded and unobstructed to allow for the conveyancing of flood waters, and flood water is not diverted onto adjacent properties or blocked.

Commented [SD33]: The Fuel Companies (471.176)

Commented [SD34]: Policy Planning Team (440.48a, 440.48b)

Commented [SD35]: c116A

Commented [SD36]: c116A

Commented [SD37]: Moved from NH-P9

NH-Pee

Subdivision, use and development in the High Flood Hazard Overlay

Subdivision, use and development in the High Flood Hazard Overlay are managed as follows:

1. Allow for new buildings, structures, building platforms, and the conversion of existing buildings that will contain activities least sensitive to natural hazards.
2. Provide for new buildings and structures, building platforms and the conversion of existing buildings that will contain activities least sensitive to natural hazards within the Medium Flood Hazard Overlay and High Flood Hazard Overlay where:
 - a. The existing risk to people and buildings on site from the modelled 1% Annual Exceedance Probability AEP Flood is reduced or avoided due to the incorporation of mitigation measures;
 - b. The risk to people and buildings on adjacent properties is reduced or avoided from the modelled 1% Annual Exceedance Probability AEP Flood; and
 - c. The High Flood Hazard Overlay is unimpeded and unobstructed to allow for the conveyancing of flood waters and flood water is not diverted onto adjacent properties or blocked.
3. Provide for new buildings and structures, building platforms and the conversion of existing buildings for activities potentially sensitive to natural hazards or activities most sensitive to natural hazards within the Medium Flood Hazard Overlay and High Flood Hazard Overlay but also in the General Industrial Zone in Seaview, the Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone, or the Seaview Marina Zone Regionally Significant Coastal Business Areas Overlay where:
 - a. The building incorporates measures that minimise the risk to people and buildings from flood hazards;
 - b. There are no residential activities provided on the ground floor of the building; and
 - c. If the building is a Major Significant Hazardous Facility, measures that minimise the risk from the release of hazardous goods from flooding are incorporated into the design of the building.
4. Avoid new buildings and structures, building platforms, and the conversion of existing buildings for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the High Flood Hazard Overlay in all zones (with the exception of General Industrial Zone in Seaview, the Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone and the Seaview Marina Zone excluding in the Regionally Significant Coastal Business Areas Overlay) unless:
 - a. The subdivision, development and use has an operational need or functional need to locate within the high-hazard-area High Flood Hazard Overlay and locating outside of these high-hazard-area it is not a practicable option;
 - b. Mitigation measures are incorporated that reduce or avoid an increase in the existing risk to people and buildings from the modelled 1% Annual Exceedance Probability AEP Flood;

Commented [SD38]: c116A

Commented [SD39]: c116A

Commented [SD40]: The Fuel Companies (471.176)

Commented [SD41]: c116A

Commented [SD42]: c116A

	c. People can safely evacuate the property during a modelled 1% Annual Exceedance Probability AEP flood, and d. The conveyancing of flood waters through high hazard areas the High Flood Hazard Overlay is still able to occur unimpeded and is not diverted onto adjacent properties.
NH-P10	Residential Apartments in the Medium Flood Hazard Overlay and High Flood Hazard Overlay
Provide for residential apartments within the Medium Flood Hazard Overlay and High Flood Hazard Overlay where: 1. The residential apartment building is at least four stories in height, 2. There are no residential apartments or habitable spaces provided on the ground floor of the building, 3. The building has been designed so that any flood sensitive services (for example power transformers) have been designed to be located above the modelled 1% Annual Exceedance Probability AEP Flood level, 4. Materials that are less susceptible to flood damage are used to construct the ground floor of the building (such as concrete blocks), and 5. There is no increase in the flood water depths within buildings that contain activities potentially sensitive to natural hazards or activities most sensitive to natural hazards on adjacent properties. 6. People have access to safe vertical or external evacuation routes in the event of a modelled 1% AEP Flood event.	

Commented [SD43]: c116A

Commented [SD44]: c116A

Commented [SD45]: Moved from NH-P9

Commented [SD46]: c116A

Commented [SD47]: NHC (327.44)

Liquefaction Hazard Overlay – Policy

NH-P11	Subdivision, Use and Development in the Liquefaction Hazard Overlay
Subdivision, use and development within the Liquefaction Hazard Overlay are managed as follows: 1. Allow for additions to existing buildings and structures for activities least sensitive to natural hazards, activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the Liquefaction Hazard Overlay, 2. Allow for building platforms, new buildings and structures and the conversion of existing buildings for activities least sensitive to natural hazards and activities potentially sensitive to natural hazards within the Liquefaction Hazard Overlay, 3. Provide for new building platforms, new buildings and structures and the conversion of existing buildings for activities most sensitive to natural hazards (with the exception of child care services, retirement villages, educational facilities, hospitals, emergency service facilities and health care facilities) within the Liquefaction Hazard Overlay, 4. Provide for new building platforms, new buildings and structures and the conversion of existing buildings for child care services, retirement villages, educational facilities, hospitals, emergency service facilities and health care facilities within the Liquefaction Hazard Overlay where: a. It can be demonstrated that occupants will be able to evacuate safely following an earthquake that results in liquefaction of the local soil; b. It can be demonstrated that post disaster functionality can be maintained following an earthquake including having foundation designs designed by a certified engineer to prevent liquefaction induced deformation of the building, and c. For emergency service facilities, hospitals, and health care facilities it can be demonstrated that emergency vehicles will be able to service the impacted community by being able to enter and leave the site.	

Slope Assessment Overlay – Policy

NH-P12	Subdivision in the Slope Assessment Overlay

Provide for subdivision that creates additional building platforms in the Slope Assessment Overlay where:

1. A geotechnical assessment confirms that the site is suitable for subdivision, use and development, and that the risk from slope instability can be avoided, remedied or mitigated.
2. The subdivision does not cause land instability on the site or adjoining properties.

Rules

Fault Location Area - Rules

Additions to existing buildings and structures within the Fault Location Area	
NH-R1	Additions to existing buildings and structures for activities least sensitive to natural hazards within ~~the poorly constrained, uncertain constrained, well defined and well defined extension areas of all areas of~~ the Fault Location Area
All-Zones Fault Location Area	1. Activity status: Permitted
NH-R2	Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the poorly constrained or the uncertain constrained areas of the Fault Location Area
All-Zones Fault Location Area – poorly constrained and uncertain constrained areas	1. Activity status: Permitted Where: a. The additions do not increase the Gross Floor Area by more than 25m ² .
All-Zones Fault Location Area – poorly constrained and uncertain constrained areas	2. Activity status: Restricted discretionary Where: a. Compliance with NH-R2.1a cannot be achieved. Matters of discretion are restricted to: 1. The change in risk to life as a result of the additions being undertaken on the site. 2. The location of the additions relative to the fault ~~line trace~~. 3. Any mitigation measures to reduce the impacts to life and buildings from fault rupture. 4. The relevant matters in Policy NH-P6: Additions to existing buildings and structures within the Fault Location Area. Notification: ~~Public notification and limited notification are precluded for applications under this rule.~~
NH-R3	Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the well-defined or well-defined extension areas of the Fault Location Area
All-Zones	1. Activity status: Restricted discretionary

Commented [SD49]: NOTE: Per the National Planning Standards - Rules should be reordered P/C/RD/D/NC/Pr within each section or subsection. I recommend this reordering be done, but have not shown in below in order to aid report readers comparing the recommendations to the notified version of the PDP

Commented [SD50]: Rules split up per David Surrey (427.20b)

Commented [SD51]: cl16A

Commented [SD52]: Wellington Regional Council (452.90)

Commented [SD53]: Adrian Palmer Family Trust (315.22)

Fault Location Area – well-defined and well-defined extension areas	Matters of discretion are restricted to: 1. The scale and size of the addition and how it changes the risk of building damage as a result of its construction. 2. The change in risk to life as a result of the additions being undertaken on the site. 3. The location of the additions relative to the fault line trace and any mitigation measures to reduce the impacts to life and buildings from fault rupture. 4. The relevant matters in NH-P6: Additions to existing buildings and structures within the Fault Location Area. Notification: Public notification and limited notification are precluded for applications under this rule.
New Buildings and Structures within the Fault Location Area	
NH-R4	Construction of New buildings and structures and the conversion of existing buildings for activities least sensitive to natural hazards within all areas of the Fault Location Area
All Zones Fault Location Area	1. Activity status: Permitted
NH-R5	Construction of New buildings and structures and the conversion of existing buildings for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the poorly constrained or the uncertain constrained areas of the Fault Location Area
All Zones Fault Location Area – poorly constrained and uncertain constrained areas	1. Activity status: Controlled Where: a. The building is being constructed on an existing vacant site. Matters of control are limited to: 1. The ability for the building to maintain life safety during and after a fault rupture. 2. The location of the building relative to the fault line trace and any mitigation measures to reduce the impacts from fault rupture. Notification: Public notification and limited notification are precluded for applications under this rule.
All Zones Fault Location Area – poorly constrained and uncertain constrained areas	2. Activity status: Restricted discretionary Where: a. Compliance with NH-R5.1a cannot be achieved. Matters of discretion are restricted to: 1. The ability of the existing building to maintain life safety during and after a fault rupture. 2. The ability of the existing building to remain structurally sound during and after a fault rupture. 3. The location of the existing building relative to the fault line trace and any mitigation measures to reduce the impacts from fault rupture. 4. The relevant matters in NH-P7: Subdivision, use and development within the Fault Location Area.

Commented [SD54]: Wellington Regional Council (452.91)

Commented [SD55]: Adrian Palmer Family Trust (315.22)

Commented [CN56]: New Zealand Heavy Haulage Association (429.03 and 429.08)

Commented [CN57]: New Zealand Heavy Haulage Association (429.03 and 429.08)

Commented [SD58]: Wellington Regional Council (452.93)

Commented [SD59]: Adrian Palmer Family Trust (315.22)

Commented [SD60]: Wellington Regional Council (452.93)

	Notification: Public notification and limited notification are precluded for applications under this rule.
NH-R6	Construction of Nnew buildings and structures and the conversion of existing buildings for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the well-defined or well defined extension areas of the Fault Location Area
All Zones Fault Location Area – well-defined and well-defined extension areas	1. Activity status: Non-complying

Commented [SD61]: Adrian Palmer Family Trust (315.22)

Commented [CN62]: New Zealand Heavy Haulage Association (429.03 and 429.08)

Flood Hazard Overlays - Rules

Additions to Existing Buildings in the Flood Hazard Overlays	
NH-R7	Additions to existing buildings and structures for activities least sensitive to natural hazards in the Flood Hazard Overlays
All Zones Low Flood Hazard Overlay Medium Flood Hazard Overlay High Flood Hazard Overlay	1. Activity status: Permitted

Commented [SD63]: Rules split up per David Surrey (427.20b)

Commented [SD64]: c116A

NH-R8	Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Low Flood Hazard Overlay
All Zones Low Flood Hazard Overlay	1. Activity status: Permitted Where: a. ~~When located within a Low Flood Hazard Overlay, t~~The finished floor levels of the habitable rooms in the additions building are located above the level of the modelled 1% AEP Flood Annual Exceedance Probability level, including the modelled freeboard plus the height of the floor joists or the base of the concrete floor slab and an allowance for freeboard.
All Zones Low Flood Hazard Overlay	2. Activity status: Restricted discretionary Where: a. Compliance is not achieved with NH-R8.1a. Matters of discretion are restricted to: 1. The relevant matters in NH-P8: Additions to existing buildings and structures in the Low Flood Hazard Overlays.

Commented [SD65]: Fuel Companies (471.178)

Commented [SD66]: Fuel Companies (471.178)

Commented [SD67]: Michael Rachlin (232.14a, 232.14b)

	Notification: <u>Public notification and limited notification are precluded for applications under this rule.</u>

Commented [SD68]: Adrian Palmer Family Trust (315.22)

NH-R9	Additions to existing buildings that contain activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Medium Flood Hazard Overlay and High Flood Hazard Overlay
All Zones except for- - General Industrial Zone in Seaview - Heavy Industrial Zone in Seaview - Metropolitan Centre Zone in Petone - Seaview Marina Zone <u>Medium Flood Hazard Overlay</u> <u>High Flood Hazard Overlay</u>	1. Activity status: <u>Restricted</u> Discretionary Matters of discretion are restricted to: 1. <u>The relevant matters in NH-Pbbb: Additions to existing buildings and structures in the Medium Flood Hazard Overlay or NH-Pccc: Additions to existing buildings and structures in the High Flood Hazard Overlay (as relevant).</u>

Commented [SD69]: Winstone Wallboards (31.30) and Michael Rachlin (232.15)

NH-Raaa	Regionally Significant Coastal Business Areas Overlay - Additions to existing buildings that contain activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Medium Flood Hazard Overlay and High Flood Hazard Overlay
<u>This rule replaces NH-R9 within the Regionally Significant Coastal Business Areas Overlay</u>	
General Industrial Zone in Seaview - Heavy Industrial Zone in Seaview - Metropolitan Centre Zone in Petone - Seaview Marina Zone <u>In either of the</u> <u>Medium Flood</u>	1. Activity status: Permitted Where: a. The gross floor area of the addition is no more than 200m², and b. The addition does not result in the in the establishment of a residential activity on the ground floor of the building.

<u>Hazard Overlay</u> <u>High Flood Hazard Overlay</u> And also in the <u>Regionally Significant Coastal Business Areas Overlay</u>	
<u>General Industrial Zone in Seaview</u> - <u>Heavy Industrial Zone in Seaview</u> - <u>Metropolitan Centre Zone in Petone</u> - <u>Seaview Marina Zone</u> In either of the <u>Medium Flood Hazard Overlay</u> <u>High Flood Hazard Overlay</u> And also in the <u>Regionally Significant Coastal Business Areas Overlay</u>	2. Activity status: Restricted discretionary Where: a. Compliance with the requirements of NH-R9.1 cannot be achieved. Matters of discretion are restricted to: 1. The risk to people and buildings on site from the <u>modelled 1% Annual-Exceedance-Probability AEP</u> Flood and the mitigation measures to reduce this risk. 2. The risk to people and buildings on adjacent properties from the <u>modelled 1% Annual-Exceedance-Probability AEP</u> Flood, and the mitigation measures to reduce this risk. 3. The impacts of the additions on the conveyance of flood waters, including any potential for flood waters to be blocked or diverted onto adjacent properties. Notification: Public notification is precluded for applications under this rule.

Commented [SD70]: Adrian Palmer Family Trust (315.22)

New Buildings and Structures and the Conversion of Existing Buildings in the Flood Hazard Overlays	
NH-R10	<u>Construction of New buildings and structures and the Conversion of Existing Buildings for activities least sensitive to natural hazards within the Low Flood Hazard Overlay</u>
<u>All Zones</u> <u>Low Flood Hazard Overlay</u>	1. Activity status: Permitted

Commented [CN72]: New Zealand Heavy Haulage Association (429.03 and 429.08)

Commented [SD73]: cl16A

NH-R11	Construction of ~~N~~new buildings and structures and the conversion of existing buildings for activities least sensitive to natural hazards within the Medium Flood Hazard Overlay and High Flood Hazard Overlay

Commented [CN74]: New Zealand Heavy Haulage Association (429.03 and 429.08)

Commented [SD75]: Fuel Companies (471.181)

All Zones Medium Flood Hazard Overlay High Flood Hazard Overlay	1. Activity status: Restricted discretionary Matters of discretion are restricted to: 1. The relevant matters in ~~NH-P9: Subdivision, Use and Development in the Flood Hazard Overlays~~ ~~NH-Pddd: Subdivision, use and development in the Medium Flood Hazard Overlay or NH-Peee: Subdivision, use and development in the Medium Flood Hazard Overlay (as relevant).~~

Commented [SD76]: consequential

NH-R12	Construction of ~~N~~new buildings and structures and the conversion of existing buildings for activities potentially sensitive to natural hazards or activities most sensitive to natural hazards within the Low Flood Hazard Overlay

Commented [CN77]: New Zealand Heavy Haulage Association (429.03 and 429.08)

Commented [SD78]: Fuel Companies (471.181)

All Zones Low Flood Hazard Overlay	1. Activity status: Permitted Where: a. The finished floor levels of the building are located above ~~the level of the modelled 1% AEP Flood Annual Exceedance Probability level, including the modelled freeboard~~ plus the height of the floor joists or the base of the concrete floor slab ~~and an allowance for freeboard.~~

Commented [SD79]: Michael Rachlin (232.14a, 232.14b)

All Zones Low Flood Hazard Overlay	2. Activity status: Restricted discretionary Where: a. Compliance is not achieved with NH-R12.1. Matters of discretion are restricted to: 1. The relevant matters in NH-P9: Subdivision, Use and Development in the ~~Low~~ Flood Hazard Overlay~~s~~. Notification: ~~Public notification and limited notification are precluded for applications under this rule.~~

Commented [SD80]: Adrian Palmer Family Trust (315.22)

NH-R13	Construction of ~~N~~new buildings and structures and the conversion of existing buildings for activities potentially sensitive to natural hazards or activities most sensitive to natural hazards (~~other than residential apartments~~) within the Medium Flood Hazard Overlay and High Flood Hazard Overlay

Commented [CN81]: New Zealand Heavy Haulage Association (429.03 and 429.08)

Commented [SD82]: Policy Planning Team (440.34)

All Zones except for - General Industrial Zone in Seaview - Heavy Industrial Zone in Seaview - Metropolitan	1. Activity status: ~~Restricted~~ Discretionary Where: a. ~~The new building or conversion is located in a Medium Flood Hazard Overlay.~~ Matters of discretion are restricted to: 1. ~~The relevant matters in NH-Pddd: Subdivision, use and development in the Medium Flood Hazard Overlay.~~

Centre Zone in Petone - Seaview Marina Zone Medium Flood Hazard Overlay	

NH-Rbbb	Construction of new buildings and the conversion of existing buildings for activities potentially sensitive to natural hazards or activities most sensitive to natural hazards (other than residential apartments) within the Medium Flood Hazard Overlay and High Flood Hazard Overlay

All Zones except for - General Industrial Zone in Seaview - Heavy Industrial Zone in Seaview - Metropolitan Centre Zone in Petone - Seaview Marina Zone High Flood Hazard Overlay	1. Activity status: Non-complying Where: a. The new building or conversion is located in a High Flood Hazard Overlay;

Commented [SD83]: Moved from NH-R13

NH-R14	Construction of new buildings and the conversions of existing buildings for residential apartments within the Medium Flood Hazard Overlay and High Flood Hazard Overlay

Commented [CN84]: New Zealand Heavy Haulage Association (429.03 and 429.08)

All Zones except for - General Industrial Zone in Seaview Heavy Industrial Zone in Seaview Metropolitan Centre Zone in Petone - Seaview Marina Zone Medium Flood	1. Activity status: Restricted discretionary Where: a. The new building or conversion of an existing building is for an apartment development of four storeys or greater in height, and b. There are no residential units located on the ground floor. Matters of discretion are restricted to: 1. The matters in ~~NH-P10: Residential Apartments in the Medium and High Hazard Areas of the Flood Hazard Overlays~~; NH-P10: Residential Apartments in the Medium Flood Hazard Overlay and High Flood Hazard Overlay;

Commented [SD85]: cl16A

<u>Hazard Overlay</u>	
<u>High Flood Hazard Overlay</u>	
All Zones except for - General Industrial Zone in Seaview Heavy Industrial Zone in Seaview Metropolitan Centre Zone in Petone - Seaview Marina Zone <u>Medium Flood Hazard Overlay</u> <u>High Flood Hazard Overlay</u>	2. Activity status: Non-Complying Where: a. Compliance is not achieved with NH-R14.1.

<u>NH-Rccc</u>	<u>Regionally Significant Coastal Business Areas Overlay - Construction of new buildings and structures and the conversion of existing buildings for activities potentially sensitive to natural hazards or activities most sensitive to natural hazards within the Medium Flood Hazard Overlay and High Flood Hazard Overlay</u>
<u><i>This rule replaces NH-R13, NH-Rbbb, and NH-R14 within the Regionally Significant Coastal Business Areas Overlay</i></u>	
General Industrial Zone in Seaview - Heavy Industrial Zone in Seaview - Metropolitan Centre Zone in Petone - Seaview Marina Zone <u>In either of the</u> <u>Medium Flood Hazard Overlay</u>	1. Activity status: Permitted Where: a. The gross floor area of the new building or conversion is no more than 200m², and b. The new building or conversion does not result in the establishment of a residential activity on the ground floor of the building.

<u>High Flood Hazard Overlay</u> And also in the <u>Regionally Significant Coastal Business Areas Overlay</u>	
<u>General Industrial Zone in Seaview</u> - <u>Heavy Industrial Zone in Seaview</u> - <u>Metropolitan Centre Zone in Petone</u> - <u>Seaview Marina Zone</u> In either of the <u>Medium Flood Hazard Overlay</u> <u>High Flood Hazard Overlay</u> And also in the <u>Regionally Significant Coastal Business Areas Overlay</u>	2. Activity status: Restricted discretionary Where: a. Compliance is not achieved with NH-R13.1. Matters of discretion are restricted to: 1. The matters in <u>NH-P9: Subdivision, Use and Development in the Flood Hazard Overlay</u> NH-Pddd: Subdivision, use and development in the Medium Flood Hazard Overlay, NH-Peee Subdivision, use and development in the High Flood Hazard Overlay, or NH-P10: Residential Apartments in the Medium Flood Hazard Overlay and High Flood Hazard Overlay (as relevant). Notification: Public notification is precluded for applications under this rule.

Commented [SD86]: Adrian Palmer Family Trust (315.22)

Liquefaction Hazard Overlay - Rules

Additions to Existing Buildings and Structures in the Liquefaction Hazard Overlay	
NH-R15	Additions to existing buildings and structures for activities least sensitive to natural hazards, activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Liquefaction Hazard Overlay
All Zones	1. Activity status: Permitted
New Buildings and Structures in the Liquefaction Hazard Overlay	

NH-R16	Construction of new buildings and structures and the conversion of existing buildings for activities least sensitive to natural hazards and activities potentially sensitive to natural hazards in the Liquefaction Hazard Overlay
All Zones	1. Activity status: Permitted
NH-R17	Construction of new buildings and structures and the conversion of existing buildings for activities most sensitive to natural hazards in the Liquefaction Hazard Overlay
All Zones	1. Activity status: Permitted Where: a. The new building is not for a child care service, retirement village, educational facility, emergency service facility or health care activity.
All Zones	2. Activity status: Restricted discretionary Where: a. Compliance with the requirements of NH-R17.1 cannot be achieved. Matters of discretion are restricted to: 1. The relevant matters in NH-P11: Subdivision, Use and Development in the Liquefaction Hazard Overlay. Notification: Public notification and limited notification are precluded for applications under this rule.

Commented [CN88]: New Zealand Heavy Haulage Association (429.03 and 429.08)

Commented [CN89]: New Zealand Heavy Haulage Association (429.03 and 429.08)

Commented [SD90]: Adrian Palmer Family Trust (315.22)

Natural Hazards Overlays - General Rules

Flood Hazard Overlays	
NH-R18	Flood Mitigation works within the Flood Hazard Overlays
<i>This rule applies instead of any zone or precinct rule. Other district-wide rules still apply in addition to this rule.</i>	
All Zones	1. Activity Status: Permitted Where: a. The works must be undertaken by either central government, local government, or their agents for the express purpose of flood mitigation works.
All Zones	2. Activity status: Discretionary Where: a. Compliance with the requirements of NH-R18.1a cannot be achieved.
All Natural Hazards Overlays	
NH-R19	Green Infrastructure in all Natural Hazard Overlays
All Zones	1. Activity Status: Permitted Where:

	a. The works must be undertaken by either central government, local government, or their agents for the express purpose of flood mitigation works.
All Zones	2. ~~Activity status:~~ Discretionary Where: a. Compliance with the requirements of NH R19.1a cannot be achieved.

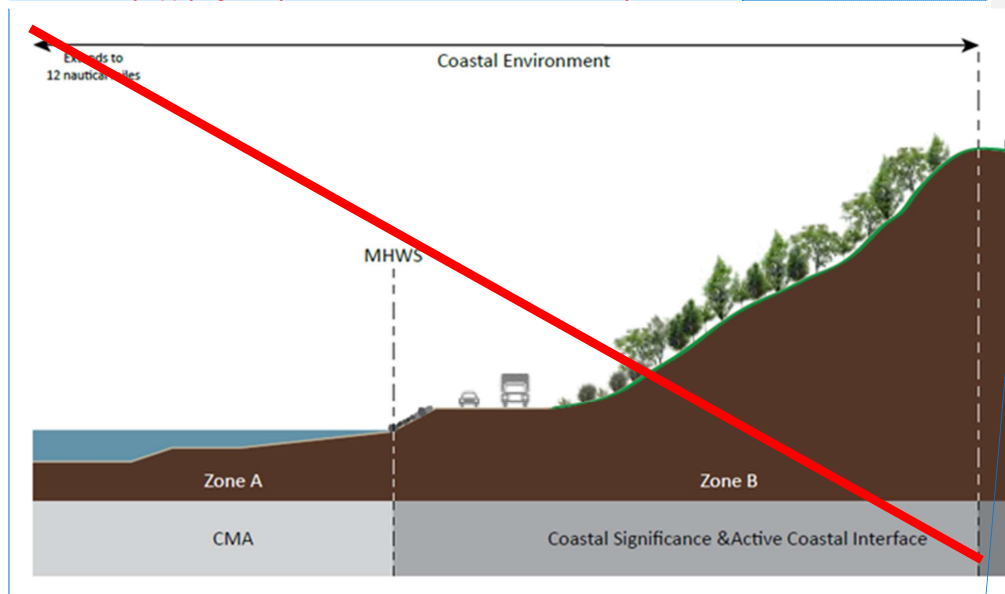
CE — Coastal Environment

Hutt City has over 42 km of coastline which varies from highly modified areas such as Seaview through to remote and undeveloped areas such as Turakirae.

The purpose of the Coastal Environment chapter is to ~~manage the effects of use and development in the landward extent of the coastal environment and to~~ manage the risk from coastal hazards.

Coastal Environment

~~Hutt City's coastal environment includes the coastal marine area as well as the inland extent of the coastal environment (coastal terrestrial area). The coastal marine area extends up to 12 nautical miles out to sea and falls under the jurisdiction of the Wellington Regional Council. The landward extent of the coastal environment represents the area inland from mean high water springs where coastal processes, influences or qualities are significant. The extent of the landward portion of the coastal environment has been determined by applying Policy 1 of the New Zealand Coastal Policy Statement.~~



~~The coastal terrestrial area also comprises the three harbour islands – Matiu / Somes Island, Mōkopuna Island and Mākaro / Ward Islands, which fall under the jurisdiction of Hutt City Council.~~

~~The coastal environment provisions only apply to the inland extent of the coastal environment, which is identified on the planning maps. Any activities within the coastal marine area fall within the responsibility of Wellington Regional Council.~~

~~Hutt City has a long coastline and a strong relationship with its coastal environment. The coastal environment includes remote and rural natural areas with beaches and coastal mountains and escarpments such as Turakirae Head as well as developed coastal areas with suburban development, particularly along Petone and Eastbourne, and the highly modified industrial areas of Seaview and Gracefield.~~

Commented [SD1]: This document shows changes relative to the proposed plan as it was subsequent to the partial withdrawal of the chapter

Commented [SD2]: Changes to introduce Regionally Significant Coastal Business Areas Overlay - Policy Planning Team (440.48a, 440.48b)

Commented [SD3]: Schedule 1 clause 16

Commented [SD4]: Schedule 1 clause 16

Commented [SD5]: Delete image - Schedule 1 clause 16

In accordance with the requirements of the New Zealand Coastal Policy Statement, Council has identified the landward extent of the coastal environment as well as areas of high, very high and outstanding coastal natural character. The areas of high, very high and outstanding coastal natural character are listed in SCHED5—Coastal Natural Character Areas.

This chapter contains provisions for the protection of the identified values. The protection of coastal margins and riparian margins within the coastal environment is covered in the Natural Character chapter. Outstanding Natural Features and Landscapes within the coastal environment are addressed in the Natural Features and Landscapes Chapter.

Commented [SD6]: Schedule 1 clause 16

Coastal Hazards

Hutt City is susceptible to a range of coastal hazards, which are mapped as Coastal Hazard Overlays and includes:

- Tsunami, and
- Coastal inundation including sea level rise, storm surges and storm events.

These coastal hazards are expected to worsen with time as a result of climate change and the associated changes to strengths of storms as well as increased sea level. Given the continued uncertainty associated with the rate of sea level rise, the sea level rise scenarios as outlined in the Ministry for the Environment 'Preparing for Coastal Change' (2017) guidance and updated in 2022 and again in 2024 have been used to form the basis of the mapping of these hazards.

The Natural Hazards Chapter (NH) provides a comprehensive assessment of the risk-based approach including a break-down of the susceptibility of different activities and the corresponding sensitivities to natural hazards. The assessment against the risk-based approach within the natural hazard chapter is equally applicable to coastal hazards, and therefore is not duplicated in this chapter. The hazard ranking of coastal hazards is set out below:

Coastal Hazard Overlay	Respective Hazard Ranking
Tsunami – 1% AEP scenario inundation extent with 1m Sea Level Rise	High
Existing Coastal Inundation Extent with 1% AEP storm tide and wave setup	
Tsunami — 0.2% AEP scenario inundation extent with 1m Sea Level Rise	Medium
Coastal Inundation Extent — 1.59m Relative Sea Level Rise and 1% AEP storm tide and wave setup	
Tsunami 0.1% AEP scenario inundation extent with 1m Sea Level Rise	Low

Overlays

Coastal Hazard Overlays — Means the mapped extent within the District Plan of the following Coastal Hazards:

- Tsunami Hazards, including the effects of climate change:
 - Low Tsunami Hazard Overlay (1:1,000 year tsunami scenario including 1m sea level rise)
 - Medium Tsunami Hazard Overlay (1:500 year tsunami scenario including 1m sea level rise)
 - High Tsunami Hazard Overlay (1:100 year tsunami scenario including 1m sea level rise)
- Coastal Inundation Hazard, including the effects of climate change and Vertical Land Movement
 - Medium Coastal Inundation Hazard Overlay (1.59m Relative Sea Level Rise, 1% Annual Exceedance Probability storm tide and wave setup (the average raised elevation of sea level at the shore caused by breaking waves)
 - High Coastal Inundation Hazard Overlay — Coastal inundation from a 1% Annual Exceedance Probability storm tide and wave setup based on current sea levels.

While most coastal hazards and other natural hazards in this plan are identified as low, medium, or high, the Plan only identifies Medium and High Coastal Inundation Overlays and does not identify any low coastal

inundation hazard.

Objectives - Coastal Hazards

CE-O3	Risk from Coastal Hazards in the High Tsunami Hazard Overlay and High Coastal Inundation Hazard Overlay
Subdivision, use and development within the High Tsunami Hazard Overlay and High Coastal Inundation Hazard Overlay reduce or avoid increasing the existing risk from coastal hazards to people, buildings and infrastructure.	
CE-O4	Risk from Coastal Hazards in the Low Tsunami Hazard Overlay, Medium Tsunami Hazard Overlay, and Medium Coastal Inundation Hazard Overlay
Subdivision, use and development within the Low Tsunami Hazard Overlay, Medium Tsunami Hazard Overlay, and Medium Coastal Inundation Hazard Overlay minimise the risk from ~~natural coastal~~ hazards to people, buildings and infrastructure.	
CE-O5	Subdivision, use and development in the ~~General Industrial Zone and Heavy Industrial Zone in Seaview, Metropolitan Centre Zone in Petone and Seaview Marina Zone Regionally Significant Coastal Business Areas Overlay~~ and within Medium and High Hazard Areas of the Coastal Hazard Area the Medium Coastal Hazard Overlays and the High Coastal Hazard Overlays
Provide for subdivision, use and development in the ~~General Industrial Zone and Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone and the Seaview Marina Zone Regionally Significant Coastal Business Areas Overlay~~ while also ensuring development and use in this area minimises the risk from coastal hazards to people, buildings and infrastructure.	
CE-O6	Measures to reduce damage from sea level rise, coastal inundation and coastal erosion
Green infrastructure is the primary method used to reduce damage from sea level rise, coastal inundation, and coastal erosion.	
CE-O7	Natural Systems and Features
Natural Systems and features that reduce the susceptibility of people, buildings and infrastructure from damage from coastal hazards are created, ~~retained protected, restored,~~ or enhanced.	

Commented [SD7]: c116A

Commented [SD9]: Director-General of Conservation (405.53)

Policies - Coastal Hazards

General Policies

CE-P8	Risk-Based Approach
Identify coastal hazards within the District Plan and take a risk-based approach to the management of subdivision, use and development based on: 1. The sensitivity of the activities to the impacts of natural hazards, 2. The hazard posed to people's lives and wellbeing, property and infrastructure, by considering the likelihood and consequences of natural hazard events, and 3. The operational need or functional need for some activities to locate in Coastal Hazard Overlays.	
CE-P9	Levels of Risk
Ensure, subdivision, use and development manages the coastal hazard risk to people, buildings and infrastructure by: 1. ~~Avoiding buildings and activities in the High Tsunami Hazard Overlay and High Coastal Inundation Hazard Overlays~~ (with the exception of the ~~General Industrial Zone and Heavy Industrial Zone in Seaview, Metropolitan Centre Zone in Petone and Seaview Marina Zone Regionally Significant Coastal Business Areas Overlay~~) unless there is an operational need or functional need for the	

subdivision, use, or development to be located in this area and the subdivision, use, or development minimises the existing risk from coastal hazards to people, buildings and infrastructure.
2. Within the General Industrial Zone and Heavy Industrial Zone in Seaview, Metropolitan Centre Zone in Petone and Seaview Marina Zone Regionally Significant Coastal Business Areas Overlay , recognise the regional importance of these areas, while ensuring that subdivision, use, or development located in these areas minimises the risk from coastal hazards in the Medium and High Coastal Hazard Overlays to people, buildings, and infrastructure.
3. Requiring subdivision, use, or development to minimise the risk to development from coastal hazards to people, buildings and infrastructure in the Low Tsunami Hazard Overlay and Medium Coastal Hazard Overlays; and
4. Enabling use, or development that have has either low occupancy or low replacement value within the Coastal Hazard Overlays.

Commented [SD10]: David Surrey (427.20a), Policy Planning Team (440.48a), c116A

CE-P10	Natural systems and features

Maintain and Protect, restore or enhance natural systems and features where they will reduce the existing risk posed by coastal hazards to people, buildings and infrastructure.

Commented [SD11]: Director-General of Conservation (405.61)

CE-P11	Coastal hazard mitigation works

Enable coastal hazard mitigation works undertaken by central government, local government, and their agents within Coastal Hazard Overlays where these will decrease the existing risk to people, buildings and infrastructure.

CE-P12	Coastal hazard mitigation works involving green infrastructure

Encourage the use of green infrastructure and encourage Mātauranga Māori approaches when undertaking coastal hazard mitigation works by central government, local government, and their agents within Coastal Hazard Overlays.

CE-P13	Hard engineering coastal hazards mitigation works

Only allow for Discourage hard engineering coastal hazards mitigation works for the reduction of the risk from coastal hazards **where unless:**

Commented [SD12]: Argosy Property (237.25) and Oyster Management (272.30)

1. There is a demonstrable risk to life, private property or existing nationally or regionally significant infrastructure from the coastal hazard and it can be demonstrated that there is no practicable alternative to reduce this risk,
2. 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,
3. It minimises the modification or alteration of natural features and systems in a way which ensures their function as natural defences is not compromised,
4. Hard engineering structures are designed to minimise adverse effects on the coastal environment, significant natural features and systems and any adverse effects are avoided, remedied or mitigated, and
5. It can be demonstrated that green infrastructure measures would not provide an appropriate level of protection in relation to the significance of the risk.

Relevant matters to consider when assessing the environmental and social costs of permitting hard protection structures to protect private property include assessments of:

6. the short- and long-term direct and indirect costs from the proposed hard protection structure, and
7. the impacts of sea-level rise and other climate change effects, and how long the proposed hard protection structure would be viable.

Commented [SD13]: The Natural Hazards Commission (327.101)

Coastal Hazard Overlays

Commented [SD14]: Policies split up per David Surrey (427.20a)

CE-P14	Additions to existing buildings and structures within the Low Tsunami Coastal Hazard Overlays

Additions to existing buildings and structures in the **Low Tsunami Coastal Hazard Overlay**s are managed as follows:

1. Allow for additions to existing buildings and structures for activities least sensitive to natural hazards

~~in all areas of the Coastal Hazard Overlays.~~ 2. Allow for additions to existing buildings and structures containing activities potentially sensitive to natural hazards and activities most sensitive to natural hazards ~~in the Low Tsunami Hazard Overlay.~~ 3. ~~Provide for additions to existing buildings and structures containing activities potentially sensitive to natural hazards or activities most sensitive to natural hazards in the Medium Coastal Hazard Overlays where:~~ ~~a. The addition is of limited size;~~ ~~b. The addition enables the continued use of the existing building;~~ ~~c. The addition incorporates measures that minimise the risk to people and buildings from coastal inundation from sea level rise, and~~ ~~d. There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture.~~ 4. ~~Provide for additions to existing buildings and structures containing activities potentially sensitive to natural hazards in the High Coastal Hazard Overlays where:~~ ~~a. The addition enables the continued use of the existing building;~~ ~~b. The addition incorporates measures that reduce or do not increase the risk to people and buildings from coastal inundation from sea level rise, and~~ ~~c. There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture.~~ 5. ~~Only allow for additions to existing buildings and structures containing activities most sensitive to natural hazards in the High Coastal Hazard Overlays where:~~ ~~a. The addition incorporates measures that reduce or do not increase the risk to people and buildings from the coastal hazard, and~~ ~~b. There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture.~~	

CE-Paaa

Additions to existing buildings and structures within the Medium Coastal Hazard Overlay

Additions to existing buildings and structures in the Medium Coastal Hazard Overlay are managed as follows:

1. Allow for additions to existing buildings and structures for activities least sensitive to natural hazards ~~in all areas of the Coastal Hazard Overlays.~~
2. Provide for additions to existing buildings and structures containing activities potentially sensitive to natural hazards or activities most sensitive to natural hazards ~~in the Medium Coastal Hazard Overlays~~ where:
 - a. The addition is of limited size,
 - b. The addition enables the continued use of the existing building,
 - c. The addition incorporates measures that minimise the risk to people and buildings from coastal inundation from sea level rise and storm surge, and
 - d. There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture.

Commented [SD15]: NHC (327.102)

CE-Pbbb

Additions to existing buildings and structures within the High Coastal Hazard Overlay

Additions to existing buildings and structures in the High Coastal Hazard Overlay are managed as follows:

1. Allow for additions to existing buildings and structures for activities least sensitive to natural hazards ~~in all areas of the Coastal Hazard Overlays.~~
2. Provide for additions to existing buildings and structures containing activities potentially sensitive to natural hazards ~~in the High Coastal Hazard Overlays~~ where:
 - a. The addition enables the continued use of the existing building,
 - b. The addition incorporates measures that reduce or do not increase the risk to people and buildings from coastal inundation from sea level rise and storm surge, and
 - c. There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture.
3. Only allow for additions to existing buildings and structures containing activities most sensitive to natural hazards ~~in the High Coastal Hazard Overlays~~ where:
 - a. The addition incorporates measures that reduce or do not increase the risk to people and buildings from the coastal hazard, and

Commented [SD16]: NHC (327.102)

- b. There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture.

CE-P15

Subdivision, Use and Development within the Low Tsunami Coastal Hazard Overlays

Subdivision, use and development in the Low Tsunami Coastal Hazard Overlay are managed as follows:

1. Allow for new buildings and structures, building platforms and the conversion of existing buildings for activities least sensitive to natural hazards ~~in all areas of the Coastal Hazard Overlays.~~
2. Allow for the conversion of existing buildings containing activities potentially sensitive to natural hazards ~~in all areas of the Coastal Hazard Overlays.~~
3. Allow for new buildings and structures and building platforms containing activities potentially sensitive to natural hazards ~~in the Low Tsunami Hazard Overlay.~~
4. ~~Provide for new buildings and structures and building platforms containing activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Medium and High Coastal Hazard Overlays when located in the General Industrial Zone in Seaview, the Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone and the Seaview Marina Zone where:~~
 - a. ~~The building or structure does not exceed an appropriate gross floor area;~~
 - b. ~~The building or structure incorporates measures that minimise the risk to people and buildings from coastal hazards;~~
 - c. ~~If the building is a Major Hazardous Facility, measures that minimise the risk from the release of hazardous goods from a coastal hazard are incorporated into the design of the building or the storage of the hazardous goods;~~
 - d. ~~There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture; and~~
 - e. ~~The impact of any local government or central government planned climate change adaptation methods on the hazard susceptibility of the development has been considered.~~
5. ~~Provide for new buildings and structures and building platforms containing activities potentially sensitive to natural hazards in the Medium Coastal Hazard Overlays in all other zones where:~~
 - a. ~~The new building incorporates measures that minimise the risk to people and buildings from the coastal hazard; and~~
 - b. ~~There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture.~~
6. ~~Only allow for new buildings and structures and building platforms containing activities potentially sensitive to natural hazards in the High Coastal Hazard Overlays in all other zones where:~~
 - a. ~~The new building incorporates measures that reduce or do not increase the existing risk to people and buildings from the coastal hazard; and~~
 - b. ~~There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture.~~
7. Provide for new buildings and structures, building platforms and the conversion of existing buildings containing activities most sensitive to natural hazards ~~in the Low Tsunami Hazard Overlay~~ where:
 - a. The building will not be occupied by a sensitive activity with vulnerable residents or occupants; or more than three residential units on a site unless mitigation measures are incorporated into the development to minimise the risks to people and buildings from the coastal hazard.
8. ~~Only allow for new buildings and structures, building platforms and the conversion of existing buildings containing activities most sensitive to natural hazards in the Medium Coastal Hazard Overlays in all other zones where:~~
 - a. ~~The new building incorporates measures that minimise the risk to people and buildings from the coastal hazard;~~
 - b. ~~The new development does not involve or require the removal or modification of a natural system or feature that provides protection to other properties from the natural hazard; and~~
 - c. ~~There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture.~~
9. ~~Avoid new buildings and structures, building platforms and the conversion of existing buildings containing activities most sensitive to natural hazards in the High Coastal Hazard Overlays in all zones (excluding the General Industrial Zone in Seaview, the Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone and the Seaview Marina Zone) unless:~~
 - a. ~~For activities that have an operational need and functional need to locate or occur within the High Coastal Hazard Overlays and locating or occurring outside these areas is not a practicable option:-~~

- i. Mitigation measures are incorporated to minimise the risk of damage to buildings and loss of life to people associated with the activity, or
- b. For any other activities:
 - i. The new building, building platform or conversion of the building does not increase the risk to life, or
 - ii. The new building, building platform or conversion of the building incorporates measures that minimise the risk to people and buildings from the coastal hazard,
 - iii. There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture,
 - iv. The new building, or building platform does not involve or require the removal or modification of a natural system or feature that provides protection to other properties from the natural hazard.

CE-Pccc

Subdivision, Use and Development within the Medium Coastal Hazard Overlays

Subdivision, use and development in the Medium Coastal Hazard Overlay are managed as follows:

1. Allow for new buildings and structures, building platforms and the conversion of existing buildings for activities least sensitive to natural hazards in all areas of the Coastal Hazard Overlays.
2. Allow for the conversion of existing buildings containing activities potentially sensitive to natural hazards in all areas of the Coastal Hazard Overlays.
3. Provide for new buildings and structures and building platforms containing activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Medium and High Coastal Hazard Overlays when located in the General Industrial Zone in Seaview, the Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone and the Seaview Marina Zone Regionally Significant Coastal Business Areas Overlay where:
 - a. The building or structure does not exceed an appropriate gross floor area,
 - b. The building or structure incorporates measures that minimise the risk to people and buildings from coastal hazards,
 - c. If the building is a Major Hazardous Facility, measures that minimise the risk from the release of hazardous goods from a coastal hazard are incorporated into the design of the building or the storage of the hazardous goods,
 - d. There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture, and
 - e. The impact of any local government or central government planned climate change adaptation methods on the hazard susceptibility of the development has been considered.
4. Provide for new buildings and structures and building platforms containing activities potentially sensitive to natural hazards in the Medium Coastal Hazard Overlays in all other zones (excluding in the Regionally Significant Coastal Business Areas Overlay) where:
 - a. The new building incorporates measures that minimise the risk to people and buildings from the coastal hazard, and
 - b. There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture.
5. Only allow for new buildings and structures, building platforms and the conversion of existing buildings containing activities most sensitive to natural hazards in the Medium Coastal Hazard Overlays in all other zones (excluding in the Regionally Significant Coastal Business Areas Overlay) where:
 - a. The new building incorporates measures that minimise the risk to people and buildings from the coastal hazard,
 - b. The new development does not involve or require the removal or modification of a natural system or feature that provides protection to other properties from the natural hazard, and
 - c. There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture.

CE-Pddd

Subdivision, Use and Development within the High Coastal Hazard Overlays

Subdivision, use and development in the Coastal Hazard Overlay are managed as follows:

1. Allow for new buildings and structures, building platforms and the conversion of existing buildings for activities least sensitive to natural hazards in all areas of the Coastal Hazard Overlays.
2. Allow for the conversion of existing buildings containing activities potentially sensitive to natural

hazards ~~in all areas of the Coastal Hazard Overlays.~~

3. Provide for new buildings and structures and building platforms containing activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the ~~Medium and High Coastal Hazard Overlays when located in the General Industrial Zone in Seaview, the Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone and the Seaview Marina Zone Regionally Significant Coastal Business Areas Overlay~~ where:
 - a. The building or structure does not exceed an appropriate gross floor area,
 - b. The building or structure incorporates measures that minimise the risk to people and buildings from coastal hazards,
 - c. If the building is a Major Hazardous Facility, measures that minimise the risk from the release of hazardous goods from a coastal hazard are incorporated into the design of the building or the storage of the hazardous goods,
 - d. There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture, and
 - e. The impact of any local government or central government planned climate change adaptation methods on the hazard susceptibility of the development has been considered.
4. Only allow for new buildings and structures and building platforms containing activities potentially sensitive to natural hazards in the ~~High Coastal Hazard Overlays in all other zones (excluding in the Regionally Significant Coastal Business Areas Overlay)~~ where:
 - a. The new building incorporates measures that reduce or do not increase the existing risk to people and buildings from the coastal hazard, and
 - b. There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture.
5. Avoid new buildings and structures, building platforms and the conversion of existing buildings containing activities most sensitive to natural hazards ~~in the High Coastal Hazard Overlays in all zones (excluding the General Industrial Zone in Seaview, the Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone and the Seaview Marina Zone) (excluding in the Regionally Significant Coastal Business Areas Overlay)~~ unless:
 - a. For activities that have an operational need and functional need to locate or occur within the High Coastal Hazard Overlays and locating or occurring outside these areas is not a practicable option:
 - i. Mitigation measures are incorporated to minimise the risk of damage to buildings and loss of life to people associated with the activity, or
 - b. For any other activities:
 - i. The new building, building platform or conversion of the building does not increase the risk to life, or
 - ii. The new building, building platform or conversion of the building incorporates measures that minimise the risk to people and buildings from the coastal hazard,
 - iii. There is the ability to access safe pedestrian evacuation routes for occupants of the building from tsunami hazards, assuming the tsunami arrives within 30 minutes of fault rupture,
 - iv. The new building, or building platform does not involve or require the removal or modification of a natural system or feature that provides protection to other properties from the natural hazard.

Rules

Note:

- ~~The policies, rules and standards for subdivision within the coastal environment are located in the Subdivision chapter.~~
- ~~The policies, rules and standards for earthworks within the coastal environment are located in the Earthworks chapter.~~
- ~~The policies, rules and standards for infrastructure within the coastal environment are located in the Infrastructure chapter.~~
- ~~The policies, rules and standards for renewable electricity generation within the coastal environment are located in the Renewable Electricity Generation chapter.~~
- The landward extent of the coastal environment and areas of high, very high or outstanding natural character within the coastal environment may be subject to additional provisions and overlays, e.g.

Commented [SD17]: NOTE: Per the National Planning Standards - Rules should be reordered P/C/RD/D/NC/Pr within each section or subsection. I recommend this reordering be done, but have not shown in below in order to aid report readers comparing the recommendations to the notified version of the PDP

Outstanding Natural Features and Landscapes (Natural Features and Landscapes chapter) or Natural Character (Natural Character chapter).

Commented [SD18]: Clause 16A (consequential on partial withdrawal)

Rules - Coastal Hazards

Commented [SD19]: Rules split up per David Surrey (427.20b)

Additions to Existing Buildings and Structures in the Coastal Hazard Overlays

CE-R8	Additions to existing buildings ~~and structures~~ for activities least sensitive to natural hazards in all Coastal Hazard Overlays
All Zones Coastal Hazard Overlays	1. Activity status: Permitted
CE-R9	Additions to existing buildings ~~and structures~~ for activities potentially sensitive to natural hazards ~~and activities most sensitive to natural hazards~~ in the Low Tsunami Hazard Overlay
All Zones Low Tsunami Hazard Overlay	1. Activity status: Permitted
CE-Raaa	Additions to existing buildings for activities most sensitive to natural hazards in the Low Tsunami Hazard Overlay
All Zones Low Tsunami Hazard Overlay	1. Activity status: Permitted
CE-R10	Additions to existing buildings ~~and structures~~ for activities potentially sensitive to natural hazards ~~and activities most sensitive to natural hazards~~ in the Medium Coastal Hazard Overlays
All Zones Medium Tsunami Hazard Overlay	1. Activity status: Permitted
Medium Coastal Inundation Hazard Overlay	Where: a. The addition ~~is for an activity potentially sensitive to natural hazards and~~ does not increase the building footprint by more than 100m ² , or b. ~~The addition is for an activity most sensitive to natural hazards and does not increase the building footprint by more than 50m².~~
All Zones Medium Tsunami Hazard Overlay	2. Activity status: Restricted discretionary
Medium Coastal Inundation Hazard Overlay	Where: a. Compliance with the requirements of CE-R10.1a cannot be achieved. Matters of discretion are restricted to: 1. The relevant matters in CE-P14: Additions to existing buildings and structures within the Coastal Hazard Overlays. Notification: ~~Public notification and limited notification are precluded for applications under this rule.~~
CE-Rbbb	Additions to existing buildings for activities most sensitive to natural hazards in the Medium Coastal Hazard Overlays
All Zones Medium Tsunami Hazard Overlay	1. Activity status: Permitted
Medium Coastal Inundation	Where: a. The addition is for an activity potentially sensitive to natural hazards and does not increase the building footprint by more than 100m ² , or b. The addition is for an activity most sensitive to natural hazards and does

Commented [SD20]: Fuel Companies (471.206)

Commented [SD21]: Fuel Companies (471.206)

Commented [SD22]: Fuel Companies (471.206)

Commented [SD23]: Adrian Palmer Family Trust (315.22)

Hazard Overlay	not increase the building footprint by more than 50m ² .
All Zones Medium Tsunami Hazard Overlay Medium Coastal Inundation Hazard Overlay	2. Activity status: Restricted discretionary Where: a. Compliance with the requirements of CE-R10.1a CE-Rbbb.1 cannot be achieved. Matters of discretion are restricted to: 1. The relevant matters in CE-P14: Additions to existing buildings and structures within the Coastal Hazard Overlays. Notification: Public notification and limited notification are precluded for applications under this rule.
CE-Rccc	Regionally Significant Coastal Business Areas Overlay - Additions to existing buildings for activities potentially sensitive to natural hazards in the Medium Coastal Hazard Overlays
<i>This rule replaces CE-R10 within the Regionally Significant Coastal Business Areas Overlay</i>	
All Zones In either of the Medium Tsunami Hazard Overlay Medium Coastal Inundation Hazard Overlay And also in the Regionally Significant Coastal Business Areas Overlay	1. Activity status: Permitted Where: a. <u>The addition is for an activity potentially sensitive to natural hazards and does not increase the total building footprint to be more than 200m² or</u> b. <u>The addition is for an activity most sensitive to natural hazards and does not increase the building footprint by more than 50m².</u>
All Zones In either of the Medium Tsunami Hazard Overlay Medium Coastal Inundation Hazard Overlay And also in the Regionally Significant Coastal Business Areas Overlay	2. Activity status: Restricted discretionary Where: a. <u>Compliance with the requirements of CE-R10.1a CE-Rccc.1 cannot be achieved.</u> Matters of discretion are restricted to: 1. <u>The relevant matters in CE-P14: Additions to existing buildings and structures within the Coastal Hazard Overlays.</u> Notification: Public notification and limited notification are precluded for applications under this rule.
CE-Rddd	Regionally Significant Coastal Business Areas Overlay - Additions to existing buildings for activities most sensitive to natural hazards in the Medium Coastal Hazard Overlays

Commented [SD24]: Adrian Palmer Family Trust (315.22)

Commented [SD25]: Adrian Palmer Family Trust (315.22)

This rule replaces CE-Rbbb within the Regionally Significant Coastal Business Areas Overlay

All Zones In either of the Medium Tsunami Hazard Overlay Medium Coastal Inundation Hazard Overlay And also in the Regionally Significant Coastal Business Areas Overlay	1. Activity status: Permitted Where: a. The addition is for an activity potentially sensitive to natural hazards and does not increase the <u>total</u> building footprint to <u>be</u> by more than <u>200m²</u> <u>100m²</u>, or b. The addition is for an activity most sensitive to natural hazards and does not increase the building footprint by more than 50m².
All Zones In either of the Medium Tsunami Hazard Overlay Medium Coastal Inundation Hazard Overlay And also in the Regionally Significant Coastal Business Areas Overlay	2. Activity status: Restricted discretionary Where: a. Compliance with the requirements of CE-R40.4a CE-Rddd.1 cannot be achieved. Matters of discretion are restricted to: 1. The relevant matters in CE-P14: Additions to existing buildings and structures within the Coastal Hazard Overlays. Notification: Public notification and limited notification are precluded for applications under this rule.
CE-R11	Additions to existing buildings and structures for activities potentially sensitive to natural hazards in the High Coastal Hazard Overlays
All Zones High Tsunami Hazard Overlay High Coastal Inundation Hazard Overlay	1. Activity status: Restricted discretionary Matters of discretion are restricted to: 1. The relevant matters in CE-P14: Additions to existing buildings and structures within the Coastal Hazard Overlays CE-Pbbb: Additions to existing buildings and structures within the High Coastal Hazard Overlay.
CE-R12	Additions to existing buildings and structures for activities most sensitive to natural hazards in the High Coastal Hazard Overlays
All Zones High Tsunami Hazard Overlay High Coastal Inundation Hazard Overlay	1. Activity status: Restricted Discretionary Matters of discretion are restricted to: 1. The relevant matters in CE-Pbbb: Additions to existing buildings and structures within the High Coastal Hazard Overlay.

Commented [SD26]: Fuel Companies (471.201)

Commented [SD27]: Adrian Palmer Family Trust (315.22)

Commented [SD28]: Fuel Companies (471.206)

Commented [SD29]: Fuel Companies (471.206)

Commented [SD30]: Joe Jeffries (514.6)

Commented [SD31]: Joe Jeffries (514.6)

New Buildings and Structures in the Coastal Hazard Overlays	
CE-R13	Construction of ~~N~~new buildings ~~and structures~~ and the conversion of existing buildings for activities least sensitive to natural hazards in the Coastal Hazard Overlays Commented [CN32]: New Zealand Heavy Haulage Association (429.03 and 429.08)
All Zones Coastal Hazard Overlays	1. Activity status: Permitted
CE-R14	Conversion of existing buildings for activities potentially sensitive to natural hazards in the Coastal Hazard Overlays
All Zones Coastal Hazard Overlays	1. Activity status: Permitted
CE-R15	Construction of ~~N~~new buildings ~~and structures~~ for activities potentially sensitive to natural hazards in the <u>Low Tsunami Coastal</u> Hazard Overlays Commented [CN33]: New Zealand Heavy Haulage Association (429.03 and 429.08) Commented [SD34]: Fuel Companies (471.206)
All Zones Low Tsunami Hazard Overlay	1. Activity status: Permitted ~~Where:~~ ~~a. The new building or structure is located in a Low Tsunami Hazard Overlay.~~
CE-Reee	Construction of new buildings for activities potentially sensitive to natural hazards in the Medium Coastal Hazard Overlays
All Zones excluding - General Industrial Zone in Seaview Heavy Industrial Zone in Seaview Metropolitan Centre Zone in Petone Seaview Marina Zone Medium Tsunami Hazard Overlay Medium Coastal Inundation Hazard Overlay	1. Activity status: Restricted discretionary ~~Where:~~ ~~a. The new building or structure is located in a Medium Coastal Hazard Overlay.~~ Matters of discretion are restricted to: 1. The relevant matters in CE-P15: Subdivision, Use and Development within the Coastal Hazard Overlays. Notification: ~~Public notification and limited notification are precluded for applications under this rule.~~ Commented [SD35]: Adrian Palmer Family Trust (315.22)
CE-Rfff	Construction of new buildings for activities potentially sensitive to natural hazards in the High Coastal Hazard Overlays
All Zones excluding - General Industrial Zone in Seaview	1. Activity status: Discretionary ~~Where:~~ ~~a. The new building or structure is located in a High Coastal Hazard Overlay.~~

~~Heavy Industrial Zone in Seaview~~ ~~Metropolitan Centre Zone in Petone~~ ~~Seaview Marina Zone~~ ~~High Tsunami Hazard Overlay~~ ~~High Coastal Inundation Hazard Overlay~~	
CE-Rggg	<u>Regionally Significant Coastal Business Areas Overlay - Construction of new buildings for activities potentially sensitive to natural hazards in the Medium Coastal Hazard Overlays inside the Regionally Significant Coastal Business Areas Overlay</u>
<i>This rule replaces CE-Reee within the Regionally Significant Coastal Business Areas Overlay</i>	
~~General Industrial Zone in Seaview~~ ~~Heavy Industrial Zone in Seaview~~ ~~Metropolitan Centre Zone in Petone~~ ~~Seaview Marina Zone~~ ~~In either of the~~ ~~Medium Tsunami Hazard Overlay~~ ~~Medium Coastal Inundation Hazard Overlay~~ ~~And also in the~~ ~~Regionally Significant Coastal Business Areas Overlay~~	1. Activity status: Permitted Where: a. ~~The new building or structure is located in a Medium Coastal Hazard Overlay or High Coastal Hazard Overlay, and~~ b. The new building or structure does not exceed 200m² gross floor area.
~~General Industrial Zone in Seaview~~ ~~Heavy Industrial Zone in Seaview~~	2. Activity status: Restricted discretionary Where: a. Compliance with the requirements of CE-R45.2 CE-Rggg.1 cannot be achieved. Matters of discretion are restricted to:

Metropolitan Centre Zone in Petone Seaview Marina Zone In either of the Medium Tsunami Hazard Overlay Medium Coastal Inundation Hazard Overlay And also in the Regionally Significant Coastal Business Areas Overlay	1. The relevant matters in CE-P15: Subdivision, Use and Development within the Coastal Hazard Overlays. Notification: Public notification and limited notification are precluded for applications under this rule.	Commented [SD36]: Adrian Palmer Family Trust (315.22)
CE-Rhhh	Regionally Significant Coastal Business Areas Overlay - Construction of new buildings for activities potentially sensitive to natural hazards in the High Coastal Hazard Overlays	
<i>This rule replaces CE-Rfff within the Regionally Significant Coastal Business Areas Overlay</i>		
General Industrial Zone in Seaview Heavy Industrial Zone in Seaview Metropolitan Centre Zone in Petone Seaview Marina Zone In either of the High Tsunami Hazard Overlay High Coastal Inundation Hazard Overlay And also in the Regionally Significant Coastal Business Areas Overlay	1. Activity status: Permitted Where: a. ~~The new building or structure is located in a Medium Coastal Hazard Overlay or High Coastal Hazard Overlay, and~~ b. The new building or structure does not exceed 200m² gross floor area.	
General Industrial Zone	2. Activity status: Restricted discretionary	

in-Seaview Heavy Industrial Zone in Seaview Metropolitan Centre Zone in Petone Seaview Marina Zone <u>In either of the</u> <u>High Tsunami Hazard Overlay</u> <u>High Coastal Inundation Hazard Overlay</u> <u>And also in the</u> <u>Regionally Significant Coastal Business Areas Overlay</u>	Where: a. Compliance with the requirements of <u>CE-R45.2 CE-Rhhh.1</u> cannot be achieved. Matters of discretion are restricted to: 1. The relevant matters in CE-P15: Subdivision, Use and Development within the Coastal Hazard Overlays.

CE-R16	Construction of ~~N~~new buildings and structures and the conversion of existing buildings for activities most sensitive to natural hazards in the <u>Low Tsunami Coastal Hazard Overlays</u>	Commented [CN37]: New Zealand Heavy Haulage Association (429.03 and 429.08) Commented [SD38]: Fuel Companies (471.206)
All Zones <u>Low Tsunami Hazard Overlay</u>	1. Activity status: Permitted Where: ~~a. The new building or structure or conversion of an existing building is located in a Low Tsunami Hazard Overlay, and~~ b. The new building is not for a childcare service, retirement village, educational facility, hospital, emergency service facility or healthcare facility, and c. The number of residential units on a site is no more than three.	
All Zones <u>Low Tsunami Hazard Overlay</u>	2. Activity status: Restricted discretionary Where: ~~a. The new building or structure or conversion of an existing building is located in a Low Tsunami Hazard Overlay, and~~ b. Compliance is not achieved with CE-R16.1. Matters of discretion are restricted to: 2. The relevant matters in CE-P15: Subdivision, Use and Development within the Coastal Hazard Overlays. Notification: <u>Public notification and limited notification are precluded for applications under this rule.</u>	Commented [SD39]: Adrian Palmer Family Trust (315.22)
CE-R11j	Construction of new buildings and the conversion of existing buildings for activities most sensitive to natural hazards in the <u>Medium Coastal Hazard Overlays</u>	
All Zones	1. Activity status: Discretionary	

excluding- - General Industrial Zone in Seaview Heavy Industrial Zone in Seaview Metropolitan Centre Zone in Petone Seaview Marina Zone <u>Medium Tsunami Hazard Overlay</u> <u>Medium Coastal Inundation Hazard Overlay</u>	Where: a. ~~The new building or structure or conversion of an existing building is located in a Medium Coastal Hazard Overlay.~~
CE-Rmmm	Construction of new buildings and the conversion of existing buildings for activities most sensitive to natural hazards in the High Coastal Hazard Overlays
All Zones excluding- - General Industrial Zone in Seaview Heavy Industrial Zone in Seaview Metropolitan Centre Zone in Petone Seaview Marina Zone <u>High Tsunami Hazard Overlay</u> <u>High Coastal Inundation Hazard Overlay</u>	1. Activity status: Non-complying Where: a. ~~The new building or structure or conversion of an existing building is located in a High Coastal Hazard Overlay.~~
CE-Rnnn	Regionally Significant Coastal Business Areas Overlay - Construction of new buildings and the conversion of existing buildings for activities most sensitive to natural hazards in the Medium Coastal Hazard Overlays
<i>This rule replaces CE-Rjjj within the Regionally Significant Coastal Business Areas Overlay</i>	
General Industrial Zone in Seaview Heavy Industrial Zone in Seaview	1. Activity status: Permitted Where: a. ~~The new building or structure or conversion of an existing building is located in a Medium Coastal Hazard Overlay or High Coastal Hazard Overlay, and-~~ b. The gross floor area of the new building or structure or conversion does

Metropolitan Centre Zone in Petone Seaview Marina Zone In either of the Medium Tsunami Hazard Overlay Medium Coastal Inundation Hazard Overlay And also in the Regionally Significant Coastal Business Areas Overlay	not exceed 200m ² .
General Industrial Zone in Seaview Heavy Industrial Zone in Seaview Metropolitan Centre Zone in Petone Seaview Marina Zone In either of the Medium Tsunami Hazard Overlay Medium Coastal Inundation Hazard Overlay And also in the Regionally Significant Coastal Business Areas Overlay	2. Activity status: Restricted discretionary Where: ~~a. The new building or structure or conversion of an existing building is located in a Medium Coastal Hazard Overlay or High Coastal Hazard Overlay, and~~ b. Compliance is not achieved with ~~CE-R16.3~~ <u>CE-Rnnn.1</u>. Matters of discretion are restricted to: 1. The matters in CE-P15: Subdivision, Use and Development within the Coastal Hazard Overlays. Notification: Public notification and limited notification are precluded for applications under this rule.
CE-Rppp	Regionally Significant Coastal Business Areas Overlay - Construction of new buildings and the conversion of existing buildings for activities most sensitive to natural hazards in the High Coastal Hazard Overlays
<u>This rule replaces CE-Rmmm within the Regionally Significant Coastal Business Areas Overlay</u>	
General	1. Activity status: Permitted

Commented [SD40]: Adrian Palmer Family Trust (315.22)

Industrial Zone in Seaview Heavy Industrial Zone in Seaview Metropolitan Centre Zone in Petone Seaview Marina Zone In either of the High Tsunami Hazard Overlay High Coastal Inundation Hazard Overlay And also in the Regionally Significant Coastal Business Areas Overlay	Where: ~~a. The new building or structure or conversion of an existing building is located in a Medium Coastal Hazard Overlay or High Coastal Hazard Overlay, and~~ b. The gross floor area of the new building or structure or conversion does not exceed 200m².
General Industrial Zone in Seaview Heavy Industrial Zone in Seaview Metropolitan Centre Zone in Petone Seaview Marina Zone In either of the High Tsunami Hazard Overlay High Coastal Inundation Hazard Overlay And also in the Regionally Significant Coastal Business Areas Overlay	2. Activity status: Restricted discretionary Where: ~~a. The new building or structure or conversion of an existing building is located in a Medium Coastal Hazard Overlay or High Coastal Hazard Overlay, and~~ b. Compliance is not achieved with GE-R46-3 CE-Rppp.1. Matters of discretion are restricted to: 1. The matters in CE-P15: Subdivision, Use and Development within the Coastal Hazard Overlays.

Coastal Hazard Overlays - General Rules

CE-R17		Green Infrastructure in the Coastal Hazard Overlays
-	All Zones	~~1. Activity Status:~~ Permitted Where: ~~a. The works are undertaken by either central government, local government, or their agents for the express purpose of coastal hazard mitigation works.~~
-	All Zones	~~2. Activity status:~~ Discretionary Where: ~~a. Compliance with the requirements of CE-R17.1 cannot be achieved.~~
CE-R18		Hard engineering coastal hazard mitigation works in all areas of the Coastal Hazard Overlay
	All Zones	1. Activity Status: Discretionary

Definitions

...

Term	Definition
activity least sensitive to natural hazards	means a: a. accessory building <u>or part of a building</u> used for non-habitable purposes, b. <u>structure used for non-habitable purposes,</u> c. building associated with marina operations (above MHWS), d. passive recreation activity, e. parks facility, ~~or~~ f. plantation forest or plantation forestry, <u>or</u> g. <u>any activity not otherwise included as an activity potentially sensitive to natural hazards or an activity most sensitive to natural hazards.</u>
activity most sensitive to natural hazards	means a: a. residential activity, b. retirement village, c. supported residential care facility, d. marae, e. healthcare activity, f. educational facility, g. childcare services, h. community facility, i. emergency services facility, j. ~~hazardous facility or major hazardous facility,~~ k. custodial corrections facility, l. visitor accommodation, or m. place of assembly.
activity potentially sensitive to natural hazards	means a: a. active recreation activity, b. building associated with primary production (excluding residential units, minor residential units, residential activities or buildings identified as activities least sensitive to natural hazards), c. commercial activity, d. conservation activity, e. cultivation activity, f. customary activity, g. customary harvesting, h. entertainment facility, i. food and beverage activity, j. industrial activity, k. <u>significant hazardous facility</u> l. major sports facility, m. office activity, n. sports facility, o. primary production activity, p. quarrying activity, q. rural activity, or r. rural industry, but excludes any activities most sensitive to natural hazards and <u>activities in clauses (a) to (f) of the definition of</u> activities least sensitive to natural hazards.

Commented [SD1]: Only definitions covered in this s42A report are shown

Commented [SD2]: Fuel Companies (471.57)

Commented [SD3]: Fuel Companies (471.58)

Commented [SD4]: Fuel Companies (471.58)

Commented [SD5]: Fuel Companies (471.57) - consequential

<u>Annual exceedance probability</u>	<u>The probability of a natural hazard event occurring in a single year</u>
coastal hazard overlays	means the: • Low Tsunami Hazard Overlay • Medium Tsunami Hazard Overlay • High Tsunami Hazard Overlay • Medium Coastal Inundation Hazard Overlay, and • High Coastal Inundation Hazard Overlay
Fault Location Area	means the area shown on the maps as being within the Fault Location Area
Flood Hazard Overlays	means the Low Flood Hazard Overlay, Medium Flood Hazard Overlay, and High Flood Hazard Overlay.
High Coastal Hazard Overlay	means the High Coastal Inundation Hazard Overlay and High Tsunami Hazard Overlay
High Coastal Inundation Hazard Overlay	means the area shown in the planning maps as the High Coastal Inundation Hazard Overlay
High Flood Hazard Overlay	means the area shown in the planning maps as the High Flood Hazard Overlay
high natural hazard overlay	means any of the: • High Flood Hazard Overlay • High Tsunami Hazard Overlay • High Coastal Inundation Hazard Overlay • Fault Location Area
High Tsunami Hazard Overlay	means the area shown in the planning maps as the High Tsunami Hazard Overlay
Liquefaction Hazard Overlay	means the area shown in the planning maps as the Liquefaction Hazard Overlay
Low Flood Hazard Overlay	means the area shown in the planning maps as the Low Flood Hazard Overlay
low hazard overlay	means the: a. Liquefaction Hazard Overlay, b. Low Flood Hazard Overlay, and c. Low Tsunami Hazard Overlay.
Low Tsunami Hazard Overlay	means the area shown in the planning maps as the Low Tsunami Hazard Overlay
medium coastal hazard overlay	means the Medium Tsunami Hazard Overlay and Medium Coastal Inundation Hazard Overlay
Medium Coastal Inundation Hazard Overlay	means the area shown in the planning maps as the Medium Coastal Inundation Hazard Overlay
Medium Flood Hazard Overlay	means the area shown in the planning maps as the Medium Flood Hazard Overlay
medium hazard overlay	means an area located within any of the following overlays:

Commented [SD6]: Wellington Water (422.16)

	a. Medium Flood Hazard Overlay, b. Medium Tsunami Hazard Overlay, or ~~c. Medium Coastal Inundation Hazard Overlay, or~~ d. ~~Slope Assessment Area.~~
Medium Tsunami Hazard Overlay	means the area shown in the planning maps as the Medium Tsunami Hazard Overlay
<u>Modelled 1% AEP Flood</u>	<u>means the 1:100 year / 1% annual exceedance probability flood modelled using the methodology in the Wellington Regional Stormwater Hydraulic Modelling Specifications 2019 and the Black Creek 2022, Eastern Lower Hutt 2022, East Harbour 2024, Petone 2022, Stokes Valley 2022, and Western Hills 2024 model build reports.</u>
natural hazard	has the same meaning as in section 2 of the RMA (as set out below) means any atmospheric or earth or water related occurrence (including earthquake, tsunami, erosion, volcanic and geothermal activity, landslip, subsidence, sedimentation, wind, drought, fire, or flooding) the action of which adversely affects or may adversely affect human life, property, or other aspects of the environment.
natural hazard mitigation works	means structures and associated engineering works to prevent or control the impacts of natural hazards and includes both soft engineering natural hazard mitigation and hard engineering natural hazard mitigation. Retaining walls not required for a hazard mitigation purpose are excluded from this definition. Raised building floor levels and raised land which are required to be raised to meet the requirements of a hazards assessment certificate are excluded from this definition.
natural hazard overlay	means any of the: • Fault Location Area • High Flood Hazard Overlay • Medium Flood Hazard Overlay • Low Flood Hazard Overlay • Liquefaction Hazard Overlay • Slope Assessment Overlay • Medium Coastal Inundation Hazard Overlay • High Coastal Inundation Hazard Overlay • High Tsunami Hazard Overlay • Medium Tsunami Hazard Overlay • Low Tsunami Hazard Overlay but for the avoidance of doubt does not include the Hazardous Substances Risk Management Overlay, and in the Natural Hazards chapter where context requires does not include Coastal Hazard Overlays.
Slope Assessment Overlay	means the area shown in the planning maps as the Slope Assessment Overlay
stormwater	means run-off that has been intercepted, channelled, diverted, intensified or accelerated by human modification of a land surface, or run-off from the surface of any structure, as a result of precipitation and includes any contaminants contained within.

Commented [SD7]: Jarred Gustafson and Paula Gentle (6.5)

Commented [SD8]: Laura Skilton (314.2)

Appendix A2: Recommended decisions on submissions on Natural Hazards

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Kulbhushan Joshi	2	2	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 3 Hastings Grove, Wainuiomata	Oppose	Reject
Kulbhushan Joshi	2	3	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 3 Hastings Grove, Wainuiomata	Oppose in part	Reject
Rohan Kulkarni	3	10a	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlays - 1/48 and 2/48 Stanley Street	Oppose in part	Reject
Rohan Kulkarni	3	10b	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlays - 52N Stanley Street (part)	Oppose in part	Reject
Rohan Kulkarni	3	11a	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 1/48 and 2/48 Stanley Street	Oppose in part	Reject
Rohan Kulkarni	3	11b	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 52N Stanley Street (part)	Oppose in part	Reject
Seyedomid Zoie	5	1	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 20 Thomson Grove, Stokes Valley	Oppose in part	Reject
Seyedomid Zoie	5	2	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 20 Thomson Grove, Stokes Valley	Other/Not stated	Reject
Jarred Gustafson and Paula Gentle	6	1	NH - Natural Hazards	Introduction - Table	Oppose	Accept in part
Jarred Gustafson and Paula Gentle	6	2	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Oppose	Reject
Jarred Gustafson and Paula Gentle	6	3	NH - Natural Hazards	NH-P12 (Subdivision in the Slope Assessment Overlay)	Oppose	Reject
Jarred Gustafson and Paula Gentle	6	5	Definitions	Medium Hazard Overlay	Support in part	Accept
Jarred Gustafson and Paula Gentle	6	18c	NH - Natural Hazards	Natural hazard generally	Other/Not stated	Reject
Mark Gunkel and Evangeline Gunkel	7	1a	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Oppose in part	Reject

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Mark Gunkel and Evangeline Gunkel	7	1b	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Oppose in part	Reject
Mark Gunkel and Evangeline Gunkel	7	2	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Oppose in part	Reject
Mark Gunkel and Evangeline Gunkel	7	3	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Oppose in part	Reject
Mark Gunkel and Evangeline Gunkel	7	4	NH - Natural Hazards	n/a	Other/Not stated	Reject
Mark Gunkel and Evangeline Gunkel	7	5	NH - Natural Hazards	Resource consent requirements	Oppose in part	Other
Mark Gunkel and Evangeline Gunkel	7	6	Maps - Natural and Coastal Hazard Overlays	Unclear	Other/Not stated	Reject
Mark Gunkel and Evangeline Gunkel	7	7	NH - Natural Hazards	None	Other/Not stated	Other
Jay Daley	8	3	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Oppose	Reject
Jay Daley	8	4	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Oppose	Reject
Teh Meng Hing	9	1	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Oppose in part	Reject
Teh Meng Hing	9	2a	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Oppose in part	Reject
Teh Meng Hing	9	2b	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Oppose in part	Reject

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Teh Meng Hing	9	3a	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Oppose in part	Reject
Teh Meng Hing	9	3b	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Oppose in part	Reject
Teh Meng Hing	9	4	NH - Natural Hazards	Slope Assessment Overlay	Oppose in part	Accept in part
Teh Meng Hing	9	5	MRZ - Medium Density Residential Zone	Slope Assessment Overlay	Oppose in part	Accept in part
Teh Meng Hing	9	6	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Oppose in part	Reject
Teh Meng Hing	9	8	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Oppose in part	Reject
Teh Meng Hing	9	9	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Oppose in part	Reject
Judy Ryan	10	1a	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 19A Mulberry Street, Maungaraki	Oppose in part	Reject
Judy Ryan	10	1b	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 19A Mulberry Street, Maungaraki	Oppose in part	Reject
Judy Ryan	10	1c	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 19A Mulberry Street, Maungaraki	Oppose in part	Reject
Tom Brodie	11	1	Maps - Natural and Coastal Hazard Overlays	All natural hazards - 438 Muritai Road	Oppose	Reject
Julia Neuhoof	13	1	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 60 Pokohiwi Road	Oppose	Reject
Mark Struthers	15	1	Hazards and Risks	Entire chapter	Support in part	Reject
Jason Westerby	16	1	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 55 Laings Road	Oppose in part	Reject
Lisa Bowker	17	1	Maps - Natural and Coastal Hazard Overlays	All natural hazards - 438 Muritai Road	Oppose	Reject
Terry Strickland and Mary Strickland	19	1	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 18 Thomson Grove, Stokes Valley	Oppose	Reject

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Dean Tredrea and Rennie Tredrea	21	1	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 2 Bledisloe Crescent, Wainuiomata	Oppose in part	Reject
Eli Gilfedder	22	4	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 114 Cheviot Road	Oppose in part	Reject
Ron Muir	23	1	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 131 Park Road, Belmont	Oppose in part	Reject
Barry Godfrey	24	1	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 7 Winifred Way, Belmont	Oppose in part	Reject
Richard Kemp and Honor Kemp	25	1	Maps - Natural and Coastal Hazard Overlays	Natural Hazards Overlays - 226 Marine Drive	Oppose in part	Reject
Damon Smith	27	1	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 99 Oroua Street	Oppose in part	Reject
Damon Smith	27	2	Does not relate to text or maps of the plan	None	Amend	Other
Winstone Wallboards Limited	31	30	NH - Natural Hazards	NH-R9 (Additions to existing buildings that contain activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Medium Flood Hazard Overlay and High Flood Hazard Overlay)	Oppose in part	Accept
Neil Blackie	33	1	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Support in part	Reject
Neil Blackie	33	2	NH - Natural Hazards	Slope Assessment Overlay	Support in part	Reject
Stephen Flaunty	34	11a	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlays - 121 Waterloo Road, Hutt Central	Oppose	Accept in part
Stephen Flaunty	34	11b	NH - Natural Hazards	NH-P9 (Subdivision, use and development in the Flood Hazard Overlays)	Oppose in part	Reject

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Dave and Michaela O'Donovan	37	1	Maps - Natural and Coastal Hazard Overlays	Tsunami Hazard Overlay	Oppose in part	Reject
Dave and Michaela O'Donovan	37	2	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Oppose in part	Reject
Vicki McCabe	38	1	NH - Natural Hazards	NH-O1 (Risk from Natural Hazards in High Natural Hazard Overlays) NH-O4 (Planned Natural Hazard Mitigation Works) NH-R18 (Flood Mitigation works within the Flood Hazard Overlays)	Support in part	Accept in part
Vicki McCabe	38	2	NH - Natural Hazards	NH-P1 (Risk-Based Approach) NH-P2 (Levels of Risk) NH-P4 (Natural hazard mitigation)	Support	Accept in part
Vicki McCabe	38	3	NH - Natural Hazards	NH-O4 (Planned Natural Hazard Mitigation Works)	Support in part	Accept in part
Susan Locke	61	1	NH - Natural Hazards	Natural Hazards Chapter and Mapping	Oppose	Reject
Ki Long Lei and Rong Tang	67	1	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 38 Speldhurst Grove	Oppose	Reject
Christine Potaka-Kelly	84	1	NH - Natural Hazards	NH-O1 (Risk from Natural Hazards in High Natural Hazard Overlays) NH-O4 (Planned Natural Hazard Mitigation Works) NH-R18 (Flood Mitigation works within the Flood Hazard Overlays)	Support in part	Accept in part
Christine Potaka-Kelly	84	2a	Maps - Natural and Coastal Hazard Overlays	NH-P1 (Risk Based Approach)	Support	Accept
Christine Potaka-Kelly	84	2b	Maps - Natural and Coastal Hazard Overlays	NH-P2 (Levels of Risk)	Support	Accept

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Christine Potaka-Kelly	84	2c	Maps - Natural and Coastal Hazard Overlays	NH-P4 (Natural hazard mitigation)	Support	Accept
Christine Potaka-Kelly	84	3	NH - Natural Hazards	NH-O4 (Planned Natural Hazard Mitigation Works)	Support in part	Accept in part
Chakrin Gangodawila	88	2	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlays	Oppose in part	Reject
Chakrin Gangodawila	88	3	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlays	Oppose in part	Accept in part
Verity Doak	89	1	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 2/196 Waiwhetū Road	Oppose in part	Reject
Verity Doak	89	2	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Oppose in part	Reject
Jo-Ella Sarich	91	1	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Oppose	Reject
Jo-Ella Sarich	91	3	Other	None	Oppose	Other
Kelvin Sanderson	95	1	Maps - Natural and Coastal Hazard Overlays	Natural Hazard overlays 129 Cuba Street, Petone	Oppose	Reject
Kelvin Sanderson	95	2	Maps - Natural and Coastal Hazard Overlays	Natural Hazard overlays 129 Cuba Street, Petone	Oppose	Reject
Kelvin Sanderson	95	3	Maps - Natural and Coastal Hazard Overlays	Natural Hazard overlays 129 Cuba Street, Petone	Oppose	Reject
Kelvin Sanderson	95	4	Maps - Natural and Coastal Hazard Overlays	Natural Hazard overlays 129 Cuba Street, Petone	Oppose	Reject
Kelvin Sanderson	95	5	NH - Natural Hazards	Various rules	Amend	Reject
Kelvin Sanderson	95	6	CE - Coastal Environment (Hazards)	Various rules	Amend	Reject
Brent McKenzie	97	1	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 56 Miromiro Road	Oppose in part	Reject
Andrea Ebbitt	98	1	NH - Natural Hazards	Objectives, policies and rules	Other/Not stated	Other
Andrea Ebbitt	98	2	NH - Natural Hazards	Rules	Other/Not stated	Accept in part

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Andrea Ebbitt	98	3	Maps - Natural and Coastal Hazard Overlays	Additional layers	Other/Not stated	Other
Susan Ellis	101	1	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 12 Bull Avenue	Oppose in part	Reject
Cheow Khong Chng	104	1	NH - Natural Hazards	NH-P12 (Subdivision in the Slope Assessment Overlay)	Oppose	Reject
Tim Louis	106	1a	Maps - Natural and Coastal Hazard Overlays	Natural Hazard Overlays	Oppose	Other
Tim Louis	106	1b	Maps - Natural and Coastal Hazard Overlays	Natural Hazard Overlays	Other/Not stated	Other
EPG Davies Holding Company Limited	107	2	Maps - Natural and Coastal Hazard Overlays	High Flood Hazard Overlay - 27 Cornish Street	Oppose	Reject
Jacob McInteer	108	1a	Maps - Natural and Coastal Hazard Overlays	42 Bolton Street, Petone - High Flood Hazard Overlay	Oppose in part	Reject
Jacob McInteer	108	1b	Maps - Natural and Coastal Hazard Overlays	High Flood Hazard Overlay - on sites: a. 34, 36, 38, 40, 44 & 46 Bolton Street b. 22, 24, 26, 28, 35, 37, 39 & 41 Tory Street c. 328A-B, 330-334, 336-338, 340-342, 350 & 352 Jackson Street d. 3 & 5 Adelaide Street	Multiple	Reject
Jacob McInteer	108	2	Maps - Natural and Coastal Hazard Overlays	42 Bolton Street, Petone - various	Oppose in part	Other
Jacob McInteer	108	3	NH - Natural Hazards	n/a	Multiple	Other
Joerg Bruemmer	110	1	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 94 Pomare Road, Tirohanga	Oppose in part	Reject
Joerg Bruemmer	110	2	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 94 Pomare Road, Tirohanga	Oppose in part	Reject

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Craig Davis	112	1	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 10 Campbell Terrace, Petone	Support in part	Reject
Craig Davis	112	2	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlays	Support in part	Reject
Craig Davis	112	3	CE - Coastal Environment (Hazards)	Medium Tsunami Hazard Overlay and Medium Coastal Inundation Overlay	Support in part	Accept in part
Edward and Sarah-Kaye Oosterbaan	114	1	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Oppose in part	Reject
James Sunderland and Jocelyn Qian	119	1	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Oppose	Reject
James Sunderland and Jocelyn Qian	119	2	NH - Natural Hazards	Natural Hazard provisions	Oppose in part	Reject
Ian Carson and Lynette Carson	120	1	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 4 Redvers Drive, Belmont	Multiple	Accept
John Wadham	122	1	Maps - Natural and Coastal Hazard Overlays	Natural Hazards	Neutral	Other
John Wadham	122	3	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 23 Pomare Road	Oppose in part	Reject
Rakesh Mehta	123	1	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - Lot 129 DP 12424	Oppose in part	Reject
Philip King	125	1	Maps - Natural and Coastal Hazard Overlays	Coastal Inundation Hazard Overlay, Flood Hazard Overlay, Tsunami Hazard Overlay, Slope Assessment Hazard Overlay - 238 Marine Drive	Oppose	Reject
Neha Punjabi	140	1	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlays	Other/Not stated	Reject
Anish Punjabi	141	2	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlays	Other/Not stated	Reject

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Bhuvi Punjabi	144	2	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlays	Other/Not stated	Reject
Peter Borley	145	1a	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - Lot 40 DP 12752	Oppose in part	Reject
Peter Borley	145	1b	NH - Natural Hazards	None stated	Other/Not stated	Reject
Peter Borley	145	2	NH - Natural Hazards	None stated	Other/Not stated	Reject
Don Setungamudalige	151	2	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlays	Oppose in part	Reject
Don Setungamudalige	151	3	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlays	Oppose in part	Accept in part
Pamodh Panagoda	154	1	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlays	Oppose in part	Reject
Pamodh Panagoda	154	2	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlays	Oppose in part	Accept in part
Gilbert Trust	171	1	NH - Natural Hazards	Unspecified	Other/Not stated	Other
Gilbert Trust	171	2	NH - Natural Hazards	Unspecified	Other/Not stated	Other
Gilbert Trust	171	3	NH - Natural Hazards	Unspecified	Other/Not stated	Other
Gilbert Trust	171	4	NH - Natural Hazards	Unspecified	Other/Not stated	Other
Rafael Gonzalez-Montero	175	1a	NH - Natural Hazards	NH-O1 (Risk from Natural Hazards in High Natural Hazard Overlays)	Support in part	Accept in part
Rafael Gonzalez-Montero	175	1b	Maps - Natural and Coastal Hazard Overlays	Northern end of Manor Park	Support in part	Reject
Rafael Gonzalez-Montero	175	1c	NH - Natural Hazards	NH-O4 Planned Natural Hazard Mitigation Works	Support in part	Accept in part
Rafael Gonzalez-Montero	175	1d	NH - Natural Hazards	NH-R18 Flood Mitigation works within the Flood Hazard Overlays	Support in part	Accept in part
Rafael Gonzalez-Montero	175	1e	Does not relate to text or maps of the plan	None	Other/Not stated	Other
Rafael Gonzalez-Montero	175	2a	NH - Natural Hazards	NH-P1 (Risk Based Approach)	Support	Accept

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Rafael Gonzalez-Montero	175	2b	NH - Natural Hazards	NH-P2 (Levels of Risk)	Support	Accept
Rafael Gonzalez-Montero	175	2c	NH - Natural Hazards	NH-P4 (Natural hazard mitigation)	Support	Accept in part
Rafael Gonzalez-Montero	175	3a	NH - Natural Hazards	NH-O4 (Planned Natural Hazard Mitigation Works)	Support in part	Accept in part
Andrew Sherson	181	1	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Oppose in part	Accept in part
Eujin Au	183	8a	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Oppose in part	Reject
Eujin Au	183	8b	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Oppose in part	Reject
Steve Hobman	194	1	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 6 and 7 Catherine Grove, Tirohanga	Oppose in part	Reject
Steve Hobman	194	2	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 6 Catherine Grove, Tirohanga	Oppose in part	Reject
Julius Korent and Joanne Korent	199	1	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlays	Oppose in part	Reject
Julius Korent and Joanne Korent	199	2	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlays	Oppose in part	Accept in part
Julius Korent and Joanne Korent	199	6	Does not relate to text or maps of the plan	Northern end of Manor Park	Support in part	Reject
Mukesh Chandra	201	1a	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlays	Oppose (requesting new provision)	Reject
Mukesh Chandra	201	1b	NH - Natural Hazards	NH-01 Risk from Natural Hazards in High Natural Hazard Overlays	Support in part	Accept in part
Mukesh Chandra	201	1c	NH - Natural Hazards	NH-04 Planned Natural Hazard Mitigation Works	Support in part	Accept in part
Mukesh Chandra	201	1d	NH - Natural Hazards	NH-R18 Flood Mitigation works within the Flood Hazard Overlays	Support in part	Accept in part

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Mukesh Chandra	201	1e	Does not relate to text or maps of the plan	None	Other/Not stated	Other
Mukesh Chandra	201	2a	NH - Natural Hazards	NH-P1 Risk Based Approach	Support	Accept
Mukesh Chandra	201	2b	NH - Natural Hazards	NH-P2 Levels of Risk	Support	Accept
Mukesh Chandra	201	2c	NH - Natural Hazards	NH-P4 Natural hazard mitigation	Support	Accept in part
Mukesh Chandra	201	3a	NH - Natural Hazards	NH-O4 Planned Natural Hazard Mitigation Works	Support in part	Accept in part
Lesley and Peter Glen	206	1	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 6 Sheehy Grove	Oppose	Reject
Lesley and Peter Glen	206	2	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Amend	Reject
Lesley and Peter Glen	206	3	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Other/Not stated	Reject
Ian Peter Cassidy	207	3	Hazards and Risks	Rules - Liquefaction Hazard Area	Oppose in part	Reject
Patsy Jorgensen	208	15	NH - Natural Hazards	None	Other/Not stated	Other
Lyn and Keith Bromley	211	1	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Support in part	Reject
Lyn and Keith Bromley	211	2	NH - Natural Hazards	NH-P12 (Subdivision in the Slope Assessment Overlay), Natural Hazards chapter in general	Support in part	Reject
Mary Lynskey and Christopher Lynskey	213	1	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 2 Cheviot Road, Lowry Bay	Oppose in part	Reject
Mary Lynskey and Christopher Lynskey	213	2	Maps - Natural and Coastal Hazard Overlays	Tsunami hazard Overlays	Oppose in part	Reject
Mike Humphrey and Nic Hill	224	1	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 192 Normandale Road	Oppose in part	Reject
David James Clode	227	1	Maps - Natural and Coastal Hazard Overlays	High Flood Hazard Overlay - 26 Kowhai Street, Naenae	Oppose	Reject

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Roger McMillan et al	229	1	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 385 Hebden Crescent	Oppose in part	Reject
Roger McMillan et al	229	3	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 385 Hebden Crescent	Oppose	Reject
Roger McMillan et al	229	4	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 385 Hebden Crescent	Oppose	Reject
Roger McMillan et al	229	5	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 385 Hebden Crescent	Oppose in part	Reject
Claudia and John Riley	230	3	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Oppose in part	Reject
Michael Rachlin	232	1	CCSD - Strategic Direction - Climate Change and Natural Hazards	CCSD-O2 (Natural Hazards)	Oppose in part	Accept in part
Michael Rachlin	232	4	Part 2 - District Wide Matters	Relationship between Coastal Environment, Natural Hazards, Earthworks and Subdivision chapters	Oppose in part	Accept in part
Michael Rachlin	232	5a	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Oppose in part	Reject
Michael Rachlin	232	5b	NH - Natural Hazards	Flood Hazard Overlay - objectives and provisions	Oppose in part	Reject
Michael Rachlin	232	6	NH - Natural Hazards	NH-O1 (Risk from Natural Hazards in High Natural Hazard Overlays)	Oppose in part	Reject
Michael Rachlin	232	7	NH - Natural Hazards	NH-O2 (Risk from natural hazards in Low Natural Hazard Overlays and Medium Natural Hazard Overlays)	Oppose in part	Reject
Michael Rachlin	232	8	NH - Natural Hazards	NH-P8 (Additions to existing buildings and structures in the Flood Hazard Overlays)	Oppose in part	Accept

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Michael Rachlin	232	9	NH - Natural Hazards	NH-P8 (Additions to existing buildings and structures in the Flood Hazard Overlays)	Oppose in part	Accept in part
Michael Rachlin	232	10a	NH - Natural Hazards	NH-P8 (Additions to existing buildings and structures in the Flood Hazard Overlays)	Oppose in part	Accept in part
Michael Rachlin	232	10b	NH - Natural Hazards	New policy	Oppose (requesting new provision)	Accept in part
Michael Rachlin	232	11	NH - Natural Hazards	NH-P9 (Subdivision, use and development in the Flood Hazard Overlays)	Oppose in part	Accept in part
Michael Rachlin	232	12	NH - Natural Hazards	NH-P9 (Subdivision, use and development in the Flood Hazard Overlays)	Oppose in part	Reject
Michael Rachlin	232	13	NH - Natural Hazards	Rules	Support in part	Reject
Michael Rachlin	232	14a	NH - Natural Hazards	NH-R8 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Low Flood Hazard Overlay)	Oppose in part	Accept in part
Michael Rachlin	232	14b	NH - Natural Hazards	NH-R8 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Low Flood Hazard Overlay)	Oppose in part	Accept in part

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Michael Rachlin	232	15	NH - Natural Hazards	NH-R9 (Additions to existing buildings that contain activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Medium Flood Hazard Overlay and High Flood Hazard Overlay)	Oppose in part	Accept in part
Michael Rachlin	232	16	NH - Natural Hazards	NH-R13 (New buildings and structures and the conversion of existing buildings for activities potentially sensitive to natural hazards or activities most sensitive to natural hazards within the Medium Flood Hazard Overlay and High Flood Hazard Overlay)	Oppose in part	Accept in part
Michael Rachlin	232	17	CE - Coastal Environment (Hazards)	CE-O4 (Risk from Coastal Hazards in the Low Tsunami Hazard Overlay, Medium Tsunami Hazard Overlay, and Medium Coastal Inundation Hazard Overlay)	Oppose in part	Reject
Michael Rachlin	232	18	Maps - Natural and Coastal Hazard Overlays	Low Tsunami Hazard Overlay	Support	Accept
Michael Rachlin	232	19	CE - Coastal Environment (Hazards)	CE-P15 (Subdivision, Use and Development within the Coastal Hazard Overlays)	Support	Accept in part
Michael Rachlin	232	20	CE - Coastal Environment (Hazards)	CE-R8, CE-R9, CE-R13 to CE-R16	Support	Accept in part
Argosy Property No.1 Limited	237	01	Definitions	Activity potentially sensitive to natural hazards	Support	Accept in part
Argosy Property No.1 Limited	237	02	Definitions	Activity most sensitive to natural hazards	Support	Accept in part

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Argosy Property No.1 Limited	237	04	Definitions	Liquefaction hazard overlay	Support in part	Reject
Argosy Property No.1 Limited	237	05	NH - Natural Hazards	Introduction	Support in part	Accept in part
Argosy Property No.1 Limited	237	06	NH - Natural Hazards	NH-O1 (Risk from Natural Hazards in High Natural Hazard Overlays)	Support	Accept
Argosy Property No.1 Limited	237	07	NH - Natural Hazards	NH-O3 (Subdivision, Use and Development in the General Industrial Zone and Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone and the Seaview Marina Zone and within the Medium Flood Hazard Overlay or High Flood Hazard Overlay)	Support	Accept
Argosy Property No.1 Limited	237	08	NH - Natural Hazards	NH-P2 (Levels of Risk)	Support	Accept
Argosy Property No.1 Limited	237	09	NH - Natural Hazards	NH-P4 (Natural hazard mitigation)	Support	Accept in part
Argosy Property No.1 Limited	237	10	NH - Natural Hazards	NH-P8 (Additions to existing buildings and structures in the Flood Hazard Overlays)	Support	Accept in part
Argosy Property No.1 Limited	237	11	NH - Natural Hazards	NH-P9 (Subdivision, use and development in the Flood Hazard Overlays)	Support	Accept in part
Argosy Property No.1 Limited	237	12	NH - Natural Hazards	NH-P11 (Subdivision, Use and Development in the Liquefaction Hazard Overlay)	Support	Accept in part

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Argosy Property No.1 Limited	237	13	NH - Natural Hazards	NH-R8 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Low Flood Hazard Overlay)	Support	Accept in part
Argosy Property No.1 Limited	237	14	NH - Natural Hazards	NH-R9 (Additions to existing buildings that contain activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Medium Flood Hazard Overlay and High Flood Hazard Overlay)	Oppose in part	Other
Argosy Property No.1 Limited	237	15	NH - Natural Hazards	NH-R12 (New buildings and structures and the conversion of existing buildings for activities potentially sensitive to natural hazards or activities most sensitive to natural hazards within the Low Flood Hazard Overlay)	Support	Accept in part
Argosy Property No.1 Limited	237	16	NH - Natural Hazards	NH-R13 (New buildings and structures and the conversion of existing buildings for activities potentially sensitive to natural hazards or activities most sensitive to natural hazards within the Medium Flood Hazard Overlay and High Flood Hazard Overlay)	Oppose in part	Reject

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Argosy Property No.1 Limited	237	17	NH - Natural Hazards	NH-R15 (Additions to existing buildings and structures for activities least sensitive to natural hazards, activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Liquefaction Hazard Overlay)	Support	Accept
Argosy Property No.1 Limited	237	18	NH - Natural Hazards	NH-R16 (New buildings and structures and the conversion of existing buildings for activities least sensitive to natural hazards and activities potentially sensitive to natural hazards in the Liquefaction Hazard Overlay)	Support	Accept
Argosy Property No.1 Limited	237	19	CE - Coastal Environment (Hazards)	Introduction	Support	Accept in part
Argosy Property No.1 Limited	237	20	CE - Coastal Environment (Hazards)	CE-O3 (Risk from Coastal Hazards in the High Tsunami Hazard Overlay and High Coastal Inundation Hazard Overlay)	Support	Accept
Argosy Property No.1 Limited	237	21	CE - Coastal Environment (Hazards)	CE-O5 (Subdivision, use and development in the General Industrial Zone and Heavy Industrial Zone in Seaview, Metropolitan Centre Zone in Petone and Seaview Marina Zone and within Medium and High Hazard Areas of the Coastal Hazard Area)	Support	Accept in part
Argosy Property No.1 Limited	237	22	CE - Coastal Environment (Hazards)	CE-P8 (Risk-Based Approach)	Support	Accept

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Argosy Property No.1 Limited	237	23	CE - Coastal Environment (Hazards)	CE-P9 (Levels of Risk)	Support	Accept
Argosy Property No.1 Limited	237	24	CE - Coastal Environment (Hazards)	CE-P11 (Coastal hazard mitigation works)	Support	Accept
Argosy Property No.1 Limited	237	25	CE - Coastal Environment (Hazards)	CE-P13 (Hard engineering coastal hazards mitigation works)	Support	Accept in part
Argosy Property No.1 Limited	237	26	CE - Coastal Environment (Hazards)	CE-P14 (Additions to existing buildings and structures within the Coastal Hazard Overlays)	Support	Accept in part
Argosy Property No.1 Limited	237	27	CE - Coastal Environment (Hazards)	CE-P15 (Subdivision, Use and Development within the Coastal Hazard Overlays)	Support	Accept in part
Argosy Property No.1 Limited	237	28	CE - Coastal Environment (Hazards)	CE-R9 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Low Tsunami Hazard Overlay)	Support	Accept
Argosy Property No.1 Limited	237	29	CE - Coastal Environment (Hazards)	CE-R10 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Medium Coastal Hazard Overlays)	Support	Accept in part
Argosy Property No.1 Limited	237	30	CE - Coastal Environment (Hazards)	CE-R11 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards in the High Coastal Hazard Overlays)	Support	Accept in part

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Argosy Property No.1 Limited	237	31	CE - Coastal Environment (Hazards)	CE-R14 (Conversion of existing buildings for activities potentially sensitive to natural hazards in the Coastal Hazard Overlays)	Support	Accept
Argosy Property No.1 Limited	237	32	CE - Coastal Environment (Hazards)	CE-R15 (New buildings and structures for activities potentially sensitive to natural hazards in the Coastal Hazard Overlays)	Support	Accept in part
Hamish Hill	240	1	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlays	Support in part	Reject
Beverley and Oliver Driver	242	1	Maps - Natural and Coastal Hazard Overlays	High Flood Hazard Overlay - 57a Hautana Street	Oppose	Reject
Horokiwi Quarries Ltd	246	8	NH - Natural Hazards	NH-O2 (Risk from natural hazards in Low Natural Hazard Overlays and Medium Natural Hazard Overlays)	Support	Accept
Horokiwi Quarries Ltd	246	23	CE - Coastal Environment (Hazards)	CE-O3 (Risk from Coastal Hazards in the High Tsunami Hazard Overlay and High Coastal Inundation Hazard Overlay)	Support	Accept
Horokiwi Quarries Ltd	246	24	CE - Coastal Environment (Hazards)	CE-O4 (Risk from Coastal Hazards in the Low Tsunami Hazard Overlay, Medium Tsunami Hazard Overlay, and Medium Coastal Inundation Hazard Overlay)	Support	Accept
Allison Thwaite	250	1a	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlays Northern end of Manor Park	Support in part	Reject
Allison Thwaite	250	1b	NH - Natural Hazards	NH-O1 (Risk from Natural Hazards in High Natural Hazard Overlays)	Support in part	Accept in part
Allison Thwaite	250	1c	NH - Natural Hazards	NH-O4 (Planned Natural Hazard Mitigation Works)	Support in part	Accept in part
Allison Thwaite	250	1d	NH - Natural Hazards	NH-R18 (Flood Mitigation works within the Flood Hazard Overlays)	Support in part	Accept in part

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Allison Thwaite	250	1e	Does not relate to text or maps of the plan	None	Other/Not stated	Other
Allison Thwaite	250	2a	NH - Natural Hazards	NH-P1 (Risk Based Approach)	Support	Accept
Allison Thwaite	250	2b	NH - Natural Hazards	NH-P2 (Levels of Risk)	Support	Accept
Allison Thwaite	250	2e	NH - Natural Hazards	NH-P4 (Natural hazard mitigation)	Support	Accept in part
Allison Thwaite	250	3a	NH - Natural Hazards	NH-O4 Planned Natural Hazard Mitigation Works	Support in part	Accept in part
Lisa Caddis	252	2	NH - Natural Hazards	NH-P8 (Additions to existing buildings and structures in the Flood Hazard Overlays)	Oppose	Reject
Lisa Caddis	252	3	NH - Natural Hazards	NH-P9 (Subdivision, use and development in the Flood Hazard Overlays)	Oppose	Reject
Lisa Caddis	252	4	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Oppose	Reject
Lisa Caddis	252	5	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Oppose	Reject
Katy Cook	254	1	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Oppose in part	Accept in part
Jaimie-Leigh and Nathaniel Cann	266	2	NH - Natural Hazards	Whole chapter	Support	Accept in part
Christene Loweth	267	1	General District Wide Matters	Location of Coastal Environment chapter	Neutral	Reject
Christene Loweth	267	2	NH - Natural Hazards	NH-P8 (Additions to existing buildings and structures in the Flood Hazard Overlays) NH-P9 (Subdivision, use and development in the Flood Hazard Overlays)	Neutral	Accept in part
Christene Loweth	267	3a	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Oppose in part	Reject

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Christene Loweth	267	3b	Maps - Natural and Coastal Hazard Overlays	Tsunami Hazard Overlay	Oppose in part	Reject
Christene Loweth	267	4	NH - Natural Hazards	NH-R9 (Additions to existing buildings that contain activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Medium Flood Hazard Overlay and High Flood Hazard Overlay)	Support in part	Reject
Christene Loweth	267	5	NH - Natural Hazards	NH-R14 (New buildings and the conversions of existing buildings for residential apartments within the Medium Flood Hazard Overlay and High Flood Hazard Overlay)	Oppose in part	Reject
Christene Loweth	267	6	NH - Natural Hazards	NH-P10 (Residential Apartments in the Medium Flood Hazard Overlay and High Flood Hazard Overlay)	Oppose in part	Reject
Christene Loweth	267	7	NH - Natural Hazards	NH-P11 (Subdivision, Use and Development in the Liquefaction Hazard Overlay)	Oppose in part	Reject
Christene Loweth	267	8	NH - Natural Hazards	NH-R17 (New buildings and structures and the conversion of existing buildings for activities most sensitive to natural hazards in the Liquefaction Hazard Overlay)	Oppose in part	Reject
Christene Loweth	267	9	CE - Coastal Environment (Hazards)	CE-O3 (Risk from Coastal Hazards in the High Tsunami Hazard Overlay and High Coastal Inundation Hazard Overlay)	Oppose in part	Reject

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Christene Loweth	267	10	CE - Coastal Environment (Hazards)	CE-O4 (Risk from Coastal Hazards in the Low Tsunami Hazard Overlay, Medium Tsunami Hazard Overlay, and Medium Coastal Inundation Hazard Overlay)	Oppose in part	Reject
Christene Loweth	267	11	CE - Coastal Environment (Hazards)	CE-P9 (Levels of Risk)	Oppose in part	Reject
Christene Loweth	267	12	CE - Coastal Environment (Hazards)	CE-P14 (Additions to existing buildings and structures within the Coastal Hazard Overlays)	Oppose in part	Reject
Christene Loweth	267	13	CE - Coastal Environment (Hazards)	CE-P15 (Subdivision, Use and Development within the Coastal Hazard Overlays)	Oppose in part	Reject
Christene Loweth	267	14	CE - Coastal Environment (Hazards)	CE-R10 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Medium Coastal Hazard Overlays)	Oppose	Reject
Christene Loweth	267	15	CE - Coastal Environment (Hazards)	New rule	Oppose (requesting new provision)	Reject
Christene Loweth	267	16	CE - Coastal Environment (Hazards)	CE-R12 (Additions to existing buildings and structures for activities most sensitive to natural hazards in the High Coastal Hazard Overlays)	Oppose	Reject
Christene Loweth	267	17a	CE - Coastal Environment (Hazards)	CE-R16 (New buildings and structures and the conversion of existing buildings for activities most sensitive to natural hazards in the Coastal Hazard Overlays)	Oppose	Reject

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Christene Loweth	267	17b	CE - Coastal Environment (Hazards)	CE-R16 (New buildings and structures and the conversion of existing buildings for activities most sensitive to natural hazards in the Coastal Hazard Overlays)	Oppose	Reject
Tony Brenton-Rule	268	1	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Oppose in part	Reject
Tony Brenton-Rule	268	2	Maps - Natural and Coastal Hazard Overlays	Coastal Inundation Hazard Overlay	Oppose in part	Reject
Woolworths New Zealand Limited	271	17	NH - Natural Hazards	Whole Chapter	Support	Accept in part
Oyster Management Limited	272	1	Definitions	Activity potentially sensitive to natural hazards	Support	Accept in part
Oyster Management Limited	272	3	Definitions	Liquefaction Hazard Overlay	Support in part	Reject
Oyster Management Limited	272	4	Definitions	Slope Assessment Overlay	Support in part	Accept in part
Oyster Management Limited	272	5	NH - Natural Hazards	Introduction	Support in part	Accept in part
Oyster Management Limited	272	6	NH - Natural Hazards	Introduction	Support in part	Accept in part
Oyster Management Limited	272	7	NH - Natural Hazards	NH-O1 (Risk from Natural Hazards in High Natural Hazard Overlays)	Support	Accept

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Oyster Management Limited	272	8	NH - Natural Hazards	NH-O3 (Subdivision, Use and Development in the General Industrial Zone and Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone and the Seaview Marina Zone and within the Medium Flood Hazard Overlay or High Flood Hazard Overlay)	Support	Accept
Oyster Management Limited	272	9	NH - Natural Hazards	NH-P2 (Levels of Risk)	Support	Accept
Oyster Management Limited	272	10	NH - Natural Hazards	NH-P4 (Natural hazard mitigation)	Support	Accept in part
Oyster Management Limited	272	11	NH - Natural Hazards	NH-P6 (Additions to existing buildings and structures within the Fault Location Area)	Support	Accept in part
Oyster Management Limited	272	12	NH - Natural Hazards	NH-P7 (Subdivision, use and development within the Fault Location Area)	Support	Accept in part
Oyster Management Limited	272	13	NH - Natural Hazards	NH-P8 (Additions to existing buildings and structures in the Flood Hazard Overlays)	Support	Accept in part
Oyster Management Limited	272	14	NH - Natural Hazards	NH-P9 (Subdivision, use and development in the Flood Hazard Overlays)	Support	Accept in part
Oyster Management Limited	272	15	NH - Natural Hazards	NH-P11 (Subdivision, Use and Development in the Liquefaction Hazard Overlay)	Support	Accept in part
Oyster Management Limited	272	16	NH - Natural Hazards	NH-P12 (Subdivision in the Slope Assessment Overlay)	Support	Accept in part

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Oyster Management Limited	272	17	NH - Natural Hazards	NH-R2 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the poorly constrained or the uncertain constrained areas of the Fault Location Area)	Support	Accept in part
Oyster Management Limited	272	18	NH - Natural Hazards	NH-R5 (New buildings and structures and the conversion of existing buildings for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the poorly constrained or the uncertain constrained areas of the Fault Location Area)	Support	Accept
Oyster Management Limited	272	19	NH - Natural Hazards	NH-R9 (Additions to existing buildings that contain activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Medium Flood Hazard Overlay and High Flood Hazard Overlay)	Oppose in part	Other
Oyster Management Limited	272	20	NH - Natural Hazards	NH-R12 (New buildings and structures and the conversion of existing buildings for activities potentially sensitive to natural hazards or activities most sensitive to natural hazards within the Low Flood Hazard Overlay)	Support	Accept in part

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Oyster Management Limited	272	21	NH - Natural Hazards	NH-R13 (New buildings and structures and the conversion of existing buildings for activities potentially sensitive to natural hazards or activities most sensitive to natural hazards within the Medium Flood Hazard Overlay and High Flood Hazard Overlay)	Oppose in part	Reject
Oyster Management Limited	272	22	NH - Natural Hazards	NH-R15 (Additions to existing buildings and structures for activities least sensitive to natural hazards, activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Liquefaction Hazard Overlay)	Support	Accept
Oyster Management Limited	272	23	NH - Natural Hazards	NH-R16 (New buildings and structures and the conversion of existing buildings for activities least sensitive to natural hazards and activities potentially sensitive to natural hazards in the Liquefaction Hazard Overlay)	Support	Accept
Oyster Management Limited	272	24	CE - Coastal Environment (General)	Introduction	Support	Accept in part
Oyster Management Limited	272	25	CE - Coastal Environment (General)	CE-O3 (Risk from Coastal Hazards in the High Tsunami Hazard Overlay and High Coastal Inundation Hazard Overlay)	Support	Accept

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Oyster Management Limited	272	26	CE - Coastal Environment (General)	CE-O5 (Subdivision, use and development in the General Industrial Zone and Heavy Industrial Zone in Seaview, Metropolitan Centre Zone in Petone and Seaview Marina Zone and within Medium and High Hazard Areas of the Coastal Hazard Area)	Support	Accept in part
Oyster Management Limited	272	27	CE - Coastal Environment (General)	CE-P8 (Risk-Based Approach)	Support	Accept
Oyster Management Limited	272	28	CE - Coastal Environment (General)	CE-P9 (Levels of Risk)	Support	Accept
Oyster Management Limited	272	29	CE - Coastal Environment (General)	CE-P11 (Coastal hazard mitigation works)	Support	Accept
Oyster Management Limited	272	30	CE - Coastal Environment (General)	CE-P13 (Hard engineering coastal hazards mitigation works)	Support in part	Accept in part
Oyster Management Limited	272	31	CE - Coastal Environment (General)	CE-P14 (Additions to existing buildings and structures within the Coastal Hazard Overlays)	Support	Accept in part
Oyster Management Limited	272	32	CE - Coastal Environment (General)	CE-P15 (Subdivision, Use and Development within the Coastal Hazard Overlays)	Support	Accept in part
Oyster Management Limited	272	33	CE - Coastal Environment (General)	CE-R9 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Low Tsunami Hazard Overlay)	Support	Accept

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Oyster Management Limited	272	34	CE - Coastal Environment (General)	CE-R10 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Medium Coastal Hazard Overlays)	Support	Accept in part
Oyster Management Limited	272	35	CE - Coastal Environment (General)	CE - R11 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards in the High Coastal Hazard Overlays)	Support	Accept in part
Oyster Management Limited	272	36	CE - Coastal Environment (General)	CE-R14 (Conversion of existing buildings for activities potentially sensitive to natural hazards in the Coastal Hazard Overlays)	Support	Accept
Oyster Management Limited	272	37	CE - Coastal Environment (Hazards)	CE-R15 (New buildings and structures for activities potentially sensitive to natural hazards in the Coastal Hazard Overlays)	Support	Accept in part
Creative Insight Limited	274	2	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 52 Penrose Street	Oppose in part	Reject
Creative Insight Limited	274	3	NH - Natural Hazards	Flood Hazard Overlay	Oppose in part	Accept in part
Jennifer Gray	277	1	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Oppose in part	Reject
Jennifer Gray	277	2	Maps - Natural and Coastal Hazard Overlays	Coastal Inundation Hazard Overlay	Oppose in part	Reject
Christopher John McHaffie and Mary Anne Malone	278	1	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Oppose in part	Reject

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Christopher John McHaffie and Mary Anne Malone	278	2	Maps - Natural and Coastal Hazard Overlays	Coastal Inundation Hazard Overlay	Oppose in part	Reject
Louise Kay Cameron	279	1	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Oppose in part	Reject
Louise Kay Cameron	279	2	Maps - Natural and Coastal Hazard Overlays	Coastal Inundation Hazard Overlay	Oppose in part	Reject
Lynn Kelleher	280	1	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Oppose in part	Reject
Lynn Kelleher	280	2	Maps - Natural and Coastal Hazard Overlays	Coastal Inundation Hazard Overlay	Oppose in part	Reject
Antony and Penelope Orbell	281	1	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Oppose in part	Reject
Antony and Penelope Orbell	281	2	Maps - Natural and Coastal Hazard Overlays	Coastal Inundation Hazard Overlay	Oppose in part	Reject
Monique McDonald	282	1	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 21 Thomson Grove, Stokes Valley	Oppose in part	Reject
Monique McDonald	282	2	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 21 Thomson Grove, Stokes Valley	Other/Not stated	Reject
Monique McDonald	282	3	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 21 Thomson Grove, Stokes Valley	Other/Not stated	Reject
Graham Mark	285	1	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 5 Tarras Grove, Kelson	Oppose in part	Reject
Tom Hudig	288	2a	Maps - Natural and Coastal Hazard Overlays	High Flood Hazard Overlay - 231 Marine Drive, Lowry Bay	Oppose in part	Reject
Tom Hudig	288	2b	Maps - Natural and Coastal Hazard Overlays	High Tsunami Hazard Overlay - 231 Marine Drive, Lowry Bay	Oppose in part	Reject
Tom Hudig	288	2c	Maps - Natural and Coastal Hazard Overlays	Coastal Inundation Hazard Overlay - 231 Marine Drive, Lowry Bay	Oppose in part	Reject

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Tom Hudig	288	2d	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 231 Marine Drive, Lowry Bay	Oppose in part	Reject
Tom Hudig	288	3	Maps - Natural and Coastal Hazard Overlays	High Flood Hazard Overlay - 48 Victoria Street, Petone	Oppose in part	Reject
Tom Hudig	288	4a	Maps - Natural and Coastal Hazard Overlays	High Tsunami Hazard Overlay - 11 Aurora Street, Petone	Oppose in part	Reject
Tom Hudig	288	4b	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 11 Aurora Street	Oppose in part	Reject
Lin Streefkerk	297	1	NH - Natural Hazards	NH-O1 Risk from Natural Hazards in High Natural Hazard Overlays	Support in part	Accept in part
Lin Streefkerk	297	2	Maps - Natural and Coastal Hazard Overlays	Northern end of Manor Park	Support in part	Reject
Lin Streefkerk	297	3	NH - Natural Hazards	NH-O4 Planned Natural Hazard Mitigation Works	Support in part	Accept in part
Lin Streefkerk	297	4	NH - Natural Hazards	NH-R18 Flood Mitigation works within the Flood Hazard Overlays	Support in part	Accept in part
Lin Streefkerk	297	5	Does not relate to text or maps of the plan	None	Other/Not stated	Other
Lin Streefkerk	297	6	NH - Natural Hazards	NH-P1 Risk Based Approach	Support	Accept
Lin Streefkerk	297	7	NH - Natural Hazards	NH-P2 Levels of Risk	Support	Accept
Lin Streefkerk	297	8	NH - Natural Hazards	NH-P4 Natural hazard mitigation	Support	Accept in part
Lin Streefkerk	297	9	NH - Natural Hazards	NH-O4 Planned Natural Hazard Mitigation Works	Support in part	Accept in part
Ron Beernink and Glenda McCallum	303	8	NH - Natural Hazards	Whole Chapter	Support in part	Reject
Ron Beernink and Glenda McCallum	303	10	NH - Natural Hazards	NH-P8 (Additions to existing buildings and structures in the Flood Hazard Overlays)	Support in part	Accept in part

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Connexa, Chorus, FortySouth and Spark	311	80	NH - Natural Hazards	Introduction	Support in part	Reject
Laura Skilton	314	1	General District Wide Matters	Coastal environment	Neutral	Reject
Laura Skilton	314	2	Definitions	New definition - 1% Flood Annual Exceedance Probability level	Oppose (requesting new provision)	Accept in part
Laura Skilton	314	6a	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Neutral	Reject
Laura Skilton	314	6b	Maps - Natural and Coastal Hazard Overlays	Tsunami Hazard Overlay	Neutral	Reject
Laura Skilton	314	6c	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Neutral	Accept in part
Laura Skilton	314	6d	Maps - Natural and Coastal Hazard Overlays	Tsunami Hazard Overlay	Neutral	Reject
Laura Skilton	314	11	NH - Natural Hazards	Introduction	Neutral	Reject
Laura Skilton	314	12	NH - Natural Hazards	NH-R9 (Additions to existing buildings that contain activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Medium Flood Hazard Overlay and High Flood Hazard Overlay)	Neutral	Reject
Laura Skilton	314	13	NH - Natural Hazards	Rules	Neutral	Accept in part
Laura Skilton	314	14a	NH - Natural Hazards	NH-P8 (Additions to existing buildings and structures in the Flood Hazard Overlays)	Neutral	Accept in part
Laura Skilton	314	14b	NH - Natural Hazards	NH-P8 (Additions to existing buildings and structures in the Flood Hazard Overlays)	Neutral	Accept in part

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Laura Skilton	314	15a	NH - Natural Hazards	NH-P9 (Subdivision, use and development in the Flood Hazard Overlays)	Neutral	Accept
Laura Skilton	314	15b	NH - Natural Hazards	NH-P9 (Subdivision, use and development in the Flood Hazard Overlays)	Neutral	Accept in part
Laura Skilton	314	16	NH - Natural Hazards	NH-R8 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Low Flood Hazard Overlay)	Oppose	Reject
Laura Skilton	314	17	NH - Natural Hazards	NH-P11 (Subdivision, Use and Development in the Liquefaction Hazard Overlay)	Oppose	Reject
Laura Skilton	314	18	NH - Natural Hazards	NH-R17 (New buildings and structures and the conversion of existing buildings for activities most sensitive to natural hazards in the Liquefaction Hazard Overlay)	Oppose in part	Reject
Laura Skilton	314	19	CE - Coastal Environment (Hazards)	Coastal Inundation Hazard Overlay Tsunami Hazard Overlay	Neutral	Reject
Laura Skilton	314	20a	CE - Coastal Environment (Hazards)	Rules	Neutral	Reject
Laura Skilton	314	20b	CE - Coastal Environment (Hazards)	Rules	Neutral	Accept in part
Laura Skilton	314	21	CE - Coastal Environment (Hazards)	CE-03 (Risk from Coastal Hazards in the High Tsunami Hazard Overlay and High Coastal Inundation Hazard Overlay)	Oppose in part	Reject

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Laura Skilton	314	22	CE - Coastal Environment (Hazards)	CE-04 (Risk from Coastal Hazards in the Low Tsunami Hazard Overlay, Medium Tsunami Hazard Overlay, and Medium Coastal Inundation Hazard Overlay)	Oppose in part	Reject
Laura Skilton	314	23	CE - Coastal Environment (Hazards)	CE-P9 (Levels of Risk)	Oppose in part	Reject
Laura Skilton	314	24	CE - Coastal Environment (Hazards)	CE-P14 (Additions to existing buildings and structures within the Coastal Hazard Overlays)	Oppose in part	Reject
Laura Skilton	314	25	CE - Coastal Environment (Hazards)	CE-P15 (Subdivision, Use and Development within the Coastal Hazard Overlays)	Oppose in part	Reject
Laura Skilton	314	26	CE - Coastal Environment (Hazards)	CE-R9 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Low Tsunami Hazard Overlay)	Neutral	Reject
Laura Skilton	314	27	CE - Coastal Environment (Hazards)	CE-R10 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Medium Coastal Hazard Overlays)	Oppose	Reject
Laura Skilton	314	28	CE - Coastal Environment (Hazards)	New Provision	Oppose (requesting new provision)	Reject
Laura Skilton	314	29	CE - Coastal Environment (Hazards)	CE-R12 (Additions to existing buildings and structures for activities most sensitive to natural hazards in the High Coastal Hazard Overlays)	Oppose	Reject

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Laura Skilton	314	30	CE - Coastal Environment (Hazards)	CE-R15 (New buildings and structures for activities potentially sensitive to natural hazards in the Coastal Hazard Overlays)	Neutral	Reject
Laura Skilton	314	31	CE - Coastal Environment (Hazards)	CE-16 (New buildings and structures and the conversion of existing buildings for activities most sensitive to natural hazards in the Coastal Hazard Overlays)	Oppose	Reject
Adrian Palmer Family Trust	315	8a	Maps - Natural and Coastal Hazard Overlays	Medium Coastal Inundation Overlay - 5 Toop Street	Oppose	Reject
Adrian Palmer Family Trust	315	8b	Maps - Natural and Coastal Hazard Overlays	Medium Coastal Inundation Overlay - 6 Wareham Place	Oppose	Reject
Adrian Palmer Family Trust	315	8c	Maps - Natural and Coastal Hazard Overlays	Medium Coastal Inundation Overlay - 10 Wareham Place	Oppose	Reject
Adrian Palmer Family Trust	315	8d	Maps - Natural and Coastal Hazard Overlays	Medium Coastal Inundation Overlay - 2 Jackson Street	Oppose	Reject
Adrian Palmer Family Trust	315	8e	Maps - Natural and Coastal Hazard Overlays	Medium Coastal Inundation Overlay - 10 Udy Street	Oppose	Reject
Adrian Palmer Family Trust	315	8f	Maps - Natural and Coastal Hazard Overlays	Medium Coastal Inundation Overlay - 1/65 Marsden Street	Oppose	Reject
Adrian Palmer Family Trust	315	8g	Maps - Natural and Coastal Hazard Overlays	Medium Coastal Inundation Overlay - 6 Regent Street	Oppose	Reject
Adrian Palmer Family Trust	315	8h	Maps - Natural and Coastal Hazard Overlays	Medium Coastal Inundation Overlay - 127 Gracefield Road	Oppose	Reject
Adrian Palmer Family Trust	315	8i	Maps - Natural and Coastal Hazard Overlays	Medium Coastal Inundation Overlay - 29 Udy Street	Oppose	Reject
Adrian Palmer Family Trust	315	8j	Maps - Natural and Coastal Hazard Overlays	Medium Coastal Inundation Overlay - 411-413 Cuba Street	Oppose	Reject
Adrian Palmer Family Trust	315	8k	Maps - Natural and Coastal Hazard Overlays	Medium Coastal Inundation Overlay - 21 Meachen Street	Oppose	Reject

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Adrian Palmer Family Trust	315	8l	Maps - Natural and Coastal Hazard Overlays	Medium Coastal Inundation Overlay - 140 Hutt Road	Oppose	Reject
Adrian Palmer Family Trust	315	9a	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 5 Toop Street	Oppose	Reject
Adrian Palmer Family Trust	315	9aa	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 25 Rutherford Street	Oppose	Reject
Adrian Palmer Family Trust	315	9ab	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 27 Rutherford Street	Oppose	Reject
Adrian Palmer Family Trust	315	9ac	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 140 Hutt Road	Oppose	Reject
Adrian Palmer Family Trust	315	9b	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 6 Wareham Place	Oppose	Reject
Adrian Palmer Family Trust	315	9c	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 10 Wareham Place	Oppose	Reject
Adrian Palmer Family Trust	315	9d	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 2 Jackson Street	Oppose	Reject
Adrian Palmer Family Trust	315	9e	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 10 Udy Street	Oppose	Reject
Adrian Palmer Family Trust	315	9f	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 1/65 Marsden Street	Oppose	Reject
Adrian Palmer Family Trust	315	9g	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 6 Regent Street	Oppose	Reject
Adrian Palmer Family Trust	315	9h	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 127 Gracefield Road	Oppose	Reject
Adrian Palmer Family Trust	315	9i	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 29 Udy Street	Oppose	Reject
Adrian Palmer Family Trust	315	9j	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 337 High Street	Oppose	Reject
Adrian Palmer Family Trust	315	9k	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 339 High Street	Oppose	Reject

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Adrian Palmer Family Trust	315	9l	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 355 High Street	Oppose	Reject
Adrian Palmer Family Trust	315	9m	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 369 High Street	Oppose	Reject
Adrian Palmer Family Trust	315	9n	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 371 High Street	Oppose	Reject
Adrian Palmer Family Trust	315	9o	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 373 High Street	Oppose	Reject
Adrian Palmer Family Trust	315	9p	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 375 High Street	Oppose	Reject
Adrian Palmer Family Trust	315	9q	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 33 Rutherford Street	Oppose	Reject
Adrian Palmer Family Trust	315	9r	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 35 Rutherford Street	Oppose	Reject
Adrian Palmer Family Trust	315	9s	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 37 Rutherford Street	Oppose	Reject
Adrian Palmer Family Trust	315	9t	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 39 Rutherford Street	Oppose	Reject
Adrian Palmer Family Trust	315	9u	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 10 Pretoria Street	Oppose	Reject
Adrian Palmer Family Trust	315	9v	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 411-413 Cuba Street	Oppose	Reject
Adrian Palmer Family Trust	315	9w	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 19 Pretoria Street	Oppose	Reject
Adrian Palmer Family Trust	315	9x	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 15 Raroa Street	Oppose	Reject
Adrian Palmer Family Trust	315	9y	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 21 Meachen Street	Oppose	Reject
Adrian Palmer Family Trust	315	9z	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 23 Rutherford Street	Oppose	Reject

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Adrian Palmer Family Trust	315	10a	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 5 Toop Street	Oppose	Reject
Adrian Palmer Family Trust	315	10aa	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 25 Rutherford Street	Oppose	Reject
Adrian Palmer Family Trust	315	10ab	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 27 Rutherford Street	Oppose	Reject
Adrian Palmer Family Trust	315	10ac	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 140 Hutt Road	Oppose	Reject
Adrian Palmer Family Trust	315	10b	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 6 Wareham Place	Oppose	Reject
Adrian Palmer Family Trust	315	10c	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 10 Wareham Place	Oppose	Reject
Adrian Palmer Family Trust	315	10d	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 2 Jackson Street	Oppose	Reject
Adrian Palmer Family Trust	315	10e	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 10 Udy Street	Oppose	Reject
Adrian Palmer Family Trust	315	10f	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 1/65 Marsden Street	Oppose	Reject
Adrian Palmer Family Trust	315	10g	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 6 Regent Street	Oppose	Reject
Adrian Palmer Family Trust	315	10h	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 127 Gracefield Road	Oppose	Reject
Adrian Palmer Family Trust	315	10i	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 29 Udy Street	Oppose	Reject
Adrian Palmer Family Trust	315	10j	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 337 High Street	Oppose	Reject
Adrian Palmer Family Trust	315	10k	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 339 High Street	Oppose	Reject
Adrian Palmer Family Trust	315	10l	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 355 High Street	Oppose	Reject

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Adrian Palmer Family Trust	315	10m	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 369 High Street	Oppose	Reject
Adrian Palmer Family Trust	315	10n	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 371 High Street	Oppose	Reject
Adrian Palmer Family Trust	315	10o	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 373 High Street	Oppose	Reject
Adrian Palmer Family Trust	315	10p	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 375 High Street	Oppose	Reject
Adrian Palmer Family Trust	315	10q	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 33 Rutherford Street	Oppose	Reject
Adrian Palmer Family Trust	315	10r	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 35 Rutherford Street	Oppose	Reject
Adrian Palmer Family Trust	315	10s	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 37 Rutherford Street	Oppose	Reject
Adrian Palmer Family Trust	315	10t	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 39 Rutherford Street	Oppose	Reject
Adrian Palmer Family Trust	315	10u	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 10 Pretoria Street	Oppose	Reject
Adrian Palmer Family Trust	315	10v	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 411-413 Cuba Street	Oppose	Reject
Adrian Palmer Family Trust	315	10w	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 19 Pretoria Street	Oppose	Reject
Adrian Palmer Family Trust	315	10x	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 15 Raroa Road	Oppose	Reject
Adrian Palmer Family Trust	315	10y	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 21 Meachen Street	Oppose	Reject
Adrian Palmer Family Trust	315	10z	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 23 Rutherford Street	Oppose	Reject
Adrian Palmer Family Trust	315	11a	Maps - Natural and Coastal Hazard Overlays	Tsunami Hazard Overlay - 9 Toop Street	Oppose	Reject

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Adrian Palmer Family Trust	315	11b	Maps - Natural and Coastal Hazard Overlays	Tsunami Hazard Overlay - 6 Wareham Place	Oppose	Reject
Adrian Palmer Family Trust	315	11c	Maps - Natural and Coastal Hazard Overlays	Tsunami Hazard Overlay - 10 Wareham Place	Oppose	Reject
Adrian Palmer Family Trust	315	11d	Maps - Natural and Coastal Hazard Overlays	Tsunami Hazard Overlay - 2 Jackson Street	Oppose	Reject
Adrian Palmer Family Trust	315	11e	Maps - Natural and Coastal Hazard Overlays	Tsunami Hazard Overlay - 21 Meachen Street	Oppose	Reject
Adrian Palmer Family Trust	315	11f	Maps - Natural and Coastal Hazard Overlays	Tsunami Hazard Overlay - 1/65 Marsden Street	Oppose	Reject
Adrian Palmer Family Trust	315	11g	Maps - Natural and Coastal Hazard Overlays	Tsunami Hazard Overlay - 10 Udy Street	Oppose	Reject
Adrian Palmer Family Trust	315	11h	Maps - Natural and Coastal Hazard Overlays	Tsunami Hazard Overlay - 411-413 Cuba Street	Oppose	Reject
Adrian Palmer Family Trust	315	11i	Maps - Natural and Coastal Hazard Overlays	Tsunami Hazard Overlay - 140 Hutt Road	Oppose	Reject
Adrian Palmer Family Trust	315	17a	NH - Natural Hazards	NH-O3, NH-P2, NH-P8, NH-P9	Support in part	Accept in part
Adrian Palmer Family Trust	315	17b	NH - Natural Hazards	NH-O3, NH-P2, NH-P8, NH-P9	Amend	Reject
Adrian Palmer Family Trust	315	17c	NH - Natural Hazards	NH-O3, NH-P2, NH-P8, NH-P9	Amend	Accept
Adrian Palmer Family Trust	315	18	NH - Natural Hazards	NH-O3, NH-P2, NH-P8, NH-P9	Amend	Reject
Adrian Palmer Family Trust	315	19	NH - Natural Hazards	NH-P7 (Subdivision, use and development within the Fault Location Area)	Support	Accept in part
Adrian Palmer Family Trust	315	20	NH - Natural Hazards	NH-P10 (Residential Apartments in the Medium Flood Hazard Overlay and High Flood Hazard Overlay)	Amend	Accept in part

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Adrian Palmer Family Trust	315	21	NH - Natural Hazards	NH-P11 (Subdivision, Use and Development in the Liquefaction Hazard Overlay)	Support	Accept in part
Adrian Palmer Family Trust	315	22	NH - Natural Hazards	Rules	Amend	Accept in part
Adrian Palmer Family Trust	315	23a	NH - Natural Hazards	Rules	Amend	Accept in part
Adrian Palmer Family Trust	315	23b	NH - Natural Hazards	Rules	Amend	Reject
Adrian Palmer Family Trust	315	24a	CE - Coastal Environment (Hazards)	Rules and Policies	Amend	Accept in part
Adrian Palmer Family Trust	315	24b	CE - Coastal Environment (Hazards)	Rules and Policies	Amend	Reject
Adrian Palmer Family Trust	315	25	CE - Coastal Environment (General)	CE-P15 (Subdivision, Use and Development within the Coastal Hazard Overlays)	Support	Accept in part
Palmer and Cook Developments Ltd	316	2	Maps - Natural and Coastal Hazard Overlays	Low Flood Hazard Overlay - 127 Waterloo Road	Support	Reject
Palmer and Cook Developments Ltd	316	3	Maps - Natural and Coastal Hazard Overlays	Medium Flood Hazard Overlay	Oppose	Reject
Palmer and Cook Developments Ltd	316	4	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 127 Waterloo Road	Neutral	Reject
Rowan Swain & Kim Weber-Swain	317	4a	Maps - Natural and Coastal Hazard Overlays	All hazard overlays	Oppose	Accept in part

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Rowan Swain & Kim Weber-Swain	317	4b	NH - Natural Hazards	NH-R8 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Low Flood Hazard Overlay)	Oppose	Accept in part
Rowan Swain & Kim Weber-Swain	317	4c	NH - Natural Hazards	NH-P9, NH-R9	Oppose	Reject
Rowan Swain & Kim Weber-Swain	317	4d	NH - Natural Hazards	Rules	Oppose	Reject
Rowan Swain & Kim Weber-Swain	317	5a	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Oppose in part	Reject
Rowan Swain & Kim Weber-Swain	317	5b	Does not relate to text or maps of the plan	None specific	Oppose in part	Other
Rowan Swain & Kim Weber-Swain	317	5c	NH - Natural Hazards	NH-R8 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Low Flood Hazard Overlay)	Oppose in part	Reject
Rowan Swain & Kim Weber-Swain	317	6	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Oppose	Reject
Rowan Swain & Kim Weber-Swain	317	7	NH - Natural Hazards	Slope Assessment Overlay	Oppose in part	Reject

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Summerset Group Holdings Limited	326	25	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Oppose in part	Reject
Summerset Group Holdings Limited	326	26a	NH - Natural Hazards	NH1-O1, NH-P2, NH-P9	Oppose in part	Reject
Summerset Group Holdings Limited	326	26b	Maps - Natural and Coastal Hazard Overlays	High Flood Hazard Overlay - 33 Military Road	Oppose in part	Reject
Natural Hazards Commission Toka Tū Ake	327	001	NH - Natural Hazards	Identification of risks	Multiple	Accept in part
Natural Hazards Commission Toka Tū Ake	327	002	CE - Coastal Environment (Hazards)	Identification of risks	Multiple	Accept in part
Natural Hazards Commission Toka Tū Ake	327	003	NH - Natural Hazards	Whole chapter	Multiple	Accept in part
Natural Hazards Commission Toka Tū Ake	327	004	CE - Coastal Environment (Hazards)	Whole chapter	Multiple	Accept in part
Natural Hazards Commission Toka Tū Ake	327	005	NH - Natural Hazards	Whole chapter	Multiple	Accept in part
Natural Hazards Commission Toka Tū Ake	327	006	CE - Coastal Environment (Hazards)	Whole chapter	Multiple	Accept in part
Natural Hazards Commission Toka Tū Ake	327	007	NH - Natural Hazards	Whole chapter	Multiple	Reject

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Natural Hazards Commission Toka Tū Ake	327	008	CE - Coastal Environment (Hazards)	Whole chapter	Multiple	Reject
Natural Hazards Commission Toka Tū Ake	327	009	NH - Natural Hazards	Whole chapter	Multiple	Accept in part
Natural Hazards Commission Toka Tū Ake	327	010	CE - Coastal Environment (Hazards)	Whole chapter	Multiple	Accept in part
Natural Hazards Commission Toka Tū Ake	327	011	Maps - Natural and Coastal Hazard Overlays	All overlays	Other/Not stated	Accept in part
Natural Hazards Commission Toka Tū Ake	327	013	Maps - Natural and Coastal Hazard Overlays	All natural hazards overlays	Other/Not stated	Accept in part
Natural Hazards Commission Toka Tū Ake	327	014	Maps - Natural and Coastal Hazard Overlays	New precinct (multi-zone): "Petone Natural Hazards Precinct"	Oppose (requesting new provision)	Reject
Natural Hazards Commission Toka Tū Ake	327	015	Part 3 - Area-Specific Matters	New precinct (multi-zone): "Petone Natural Hazards Precinct"	Oppose (requesting new provision)	Reject
Natural Hazards Commission Toka Tū Ake	327	016	NH - Natural Hazards	New precinct (multi-zone): "Petone Natural Hazards Precinct"	Oppose (requesting new provision)	Reject
Natural Hazards Commission Toka Tū Ake	327	017	CE - Coastal Environment (Hazards)	New precinct (multi-zone): "Petone Natural Hazards Precinct"	Oppose (requesting new provision)	Reject
Natural Hazards Commission Toka Tū Ake	327	018	NH - Natural Hazards	Whole chapter	Oppose (requesting new provision)	Reject

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Natural Hazards Commission Toka Tū Ake	327	019	CE - Coastal Environment (Hazards)	Whole chapter	Oppose (requesting new provision)	Reject
Natural Hazards Commission Toka Tū Ake	327	020	CE - Coastal Environment (Hazards)	CE-P14 (Additions to existing buildings and structures within the Coastal Hazard Overlays)	Other/Not stated	Reject
Natural Hazards Commission Toka Tū Ake	327	021	CE - Coastal Environment (Hazards)	CE-P15 (Subdivision, Use and Development within the Coastal Hazard Overlays)	Other/Not stated	Reject
Natural Hazards Commission Toka Tū Ake	327	022	Definitions	New definition - "cumulative natural hazards"	Oppose (requesting new provision)	Reject
Natural Hazards Commission Toka Tū Ake	327	023	Definitions	New definition - "freeboard"	Oppose (requesting new provision)	Reject
Natural Hazards Commission Toka Tū Ake	327	024	Definitions	New definition - "minimise"	Oppose (requesting new provision)	Reject
Natural Hazards Commission Toka Tū Ake	327	025	Definitions	New definition - either "reduce" or "risk reduction"	Multiple	Reject
Natural Hazards Commission Toka Tū Ake	327	026	Definitions	New definition - "residual risk"	Amend	Reject
Natural Hazards Commission Toka Tū Ake	327	027	NH - Natural Hazards	Introduction	Amend	Reject
Natural Hazards Commission Toka Tū Ake	327	028	NH - Natural Hazards	Introduction	Amend	Reject

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Natural Hazards Commission Toka Tū Ake	327	029	NH - Natural Hazards	Introduction	Multiple	Reject
Natural Hazards Commission Toka Tū Ake	327	030	NH - Natural Hazards	NH-O1 (Risk from Natural Hazards in High Natural Hazard Overlays)	Support	Accept
Natural Hazards Commission Toka Tū Ake	327	031	NH - Natural Hazards	NH-O2 (Risk from Natural Hazards in Low Natural Hazard Overlays and Medium Natural Hazard Overlays)	Amend	Reject
Natural Hazards Commission Toka Tū Ake	327	032	NH - Natural Hazards	NH-O3 (Subdivision, Use and Development in the General Industrial Zone and Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone and the Seaview Marina Zone and within the Medium Flood Hazard Overlay or High Flood Hazard Overlay)	Amend	Reject
Natural Hazards Commission Toka Tū Ake	327	033	NH - Natural Hazards	NH-O4 (Planned Natural Hazard Mitigation Works)	Amend	Reject
Natural Hazards Commission Toka Tū Ake	327	034	NH - Natural Hazards	NH-O5 (Natural Systems and Features)	Support	Accept
Natural Hazards Commission Toka Tū Ake	327	035	NH - Natural Hazards	NH-P1 (Risk-Based Approach)	Support	Accept
Natural Hazards Commission Toka Tū Ake	327	036	NH - Natural Hazards	NH-P2 (Levels of Risk)	Support in part	Accept in part
Natural Hazards Commission Toka Tū Ake	327	037	NH - Natural Hazards	NH-P3 (Natural systems and features)	Support	Accept in part

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Natural Hazards Commission Toka Tū Ake	327	038	NH - Natural Hazards	NH-P4 (Natural hazard mitigation)	Support	Accept in part
Natural Hazards Commission Toka Tū Ake	327	039	NH - Natural Hazards	NH-P5 (Green infrastructure)	Support	Reject
Natural Hazards Commission Toka Tū Ake	327	040	NH - Natural Hazards	NH-P6 (Additions to existing buildings and structures within the Fault Location Area)	Multiple	Reject
Natural Hazards Commission Toka Tū Ake	327	041	NH - Natural Hazards	NH-P7 (Subdivision, use and development within the Fault Location Area)	Multiple	Reject
Natural Hazards Commission Toka Tū Ake	327	042	NH - Natural Hazards	NH-P8 (Additions to existing buildings and structures in the Flood Hazard Overlays)	Amend	Reject
Natural Hazards Commission Toka Tū Ake	327	043	NH - Natural Hazards	NH-P9 (Subdivision, use and development in the Flood Hazard Overlays)	Support	Accept in part
Natural Hazards Commission Toka Tū Ake	327	044	NH - Natural Hazards	NH-P10 (Residential Apartments in the Medium Flood Hazard Overlay and High Flood Hazard Overlay)	Amend	Accept in part
Natural Hazards Commission Toka Tū Ake	327	045	NH - Natural Hazards	NH-P11 (Subdivision, Use and Development in the Liquefaction Hazard Overlay)	Amend	Accept in part
Natural Hazards Commission Toka Tū Ake	327	046	NH - Natural Hazards	NH-P12 (Subdivision in the Slope Assessment Overlay)	Support	Accept in part

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Natural Hazards Commission Toka Tū Ake	327	047	NH - Natural Hazards	NH-R2 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the poorly constrained or the uncertain constrained areas of the Fault Location Area)	Amend	Reject
Natural Hazards Commission Toka Tū Ake	327	048	NH - Natural Hazards	NH-R3 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the well-defined or well-defined extension areas of the Fault Location Area)	Multiple	Reject
Natural Hazards Commission Toka Tū Ake	327	049	NH - Natural Hazards	NH-R5 (New buildings and structures and the conversion of existing buildings for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the poorly constrained or the uncertain constrained areas of the Fault Location Area)	Multiple	Reject

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Natural Hazards Commission Toka Tū Ake	327	050	NH - Natural Hazards	NH-R6 (New buildings and structures and the conversion of existing buildings for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the well-defined or well defined extension areas of the Fault Location Area)	Support	Accept
Natural Hazards Commission Toka Tū Ake	327	051	NH - Natural Hazards	NH-R7 (Additions to existing buildings and structures for activities least sensitive to natural hazards in the Flood Hazard Overlays)	Support in part	Reject
Natural Hazards Commission Toka Tū Ake	327	052	NH - Natural Hazards	NH-R8 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Low Flood Hazard Overlay)	Support in part	Accept in part
Natural Hazards Commission Toka Tū Ake	327	053	NH - Natural Hazards	NH-R9 (Additions to existing buildings that contain activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Medium Flood Hazard Overlay and High Flood Hazard Overlay)	Multiple	Reject
Natural Hazards Commission Toka Tū Ake	327	054	NH - Natural Hazards	NH-R10 (New buildings and structures and the Conversion of Existing Buildings for activities least sensitive to natural hazards within the Low Flood Hazard Overlay)	Amend	Reject

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Natural Hazards Commission Toka Tū Ake	327	055	NH - Natural Hazards	NH-R11 (New buildings and structures and the conversion of existing buildings for activities least sensitive to natural hazards within the Medium Flood Hazard Overlay and High Flood Hazard Overlay)	Support in part	Accept in part
Natural Hazards Commission Toka Tū Ake	327	056	NH - Natural Hazards	NH-R12 (New buildings and structures and the conversion of existing buildings for activities potentially sensitive to natural hazards or activities most sensitive to natural hazards within the Low Flood Hazard Overlay)	Amend	Accept in part
Natural Hazards Commission Toka Tū Ake	327	057	NH - Natural Hazards	NH-R13 (New buildings and structures and the conversion of existing buildings for activities potentially sensitive to natural hazards or activities most sensitive to natural hazards within the Medium Flood Hazard Overlay and High Flood Hazard Overlay)	Amend	Reject
Natural Hazards Commission Toka Tū Ake	327	058	NH - Natural Hazards	NH-R14 (Additions to existing buildings and structures for activities least sensitive to natural hazards, activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Liquefaction Hazard Overlay)	Amend	Reject

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Natural Hazards Commission Toka Tū Ake	327	059	NH - Natural Hazards	NH-R16 (New buildings and structures and the conversion of existing buildings for activities least sensitive to natural hazards and activities potentially sensitive to natural hazards in the Liquefaction Hazard Overlay)	Amend	Reject
Natural Hazards Commission Toka Tū Ake	327	060	NH - Natural Hazards	NH-R17 (New buildings and structures and the conversion of existing buildings for activities most sensitive to natural hazards in the Liquefaction Hazard Overlay)	Support	Accept
Natural Hazards Commission Toka Tū Ake	327	089	CE - Coastal Environment (Hazards)	Introduction - Coastal Hazards	Support in part	Accept in part
Natural Hazards Commission Toka Tū Ake	327	090	CE - Coastal Environment (Hazards)	Introduction - Coastal Hazards	Amend	Accept
Natural Hazards Commission Toka Tū Ake	327	091	CE - Coastal Environment (Hazards)	CE-O3 (Risk from Coastal Hazards in the High Tsunami Hazard Overlay and High Coastal Inundation Hazard Overlay)	Support	Accept
Natural Hazards Commission Toka Tū Ake	327	092	CE - Coastal Environment (Hazards)	CE-O4 (Risk from Coastal Hazards in the Low Tsunami Hazard Overlay, Medium Tsunami Hazard Overlay, and Medium Coastal Inundation Hazard Overlay)	Amend	Reject

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Natural Hazards Commission Toka Tū Ake	327	093	CE - Coastal Environment (Hazards)	CE-O5 (Subdivision, use and development in the General Industrial Zone and Heavy Industrial Zone in Seaview, Metropolitan Centre Zone in Petone and Seaview Marina Zone and within Medium and High Hazard Areas of the Coastal Hazard Area)	Amend	Reject
Natural Hazards Commission Toka Tū Ake	327	094	CE - Coastal Environment (Hazards)	CE-O6 (Measures to reduce damage from sea level rise, coastal inundation and coastal erosion)	Support	Accept
Natural Hazards Commission Toka Tū Ake	327	095	CE - Coastal Environment (Hazards)	CE-O7 (Natural Systems and Features)	Support	Accept in part
Natural Hazards Commission Toka Tū Ake	327	096	CE - Coastal Environment (Hazards)	CE-P8 (Risk-Based Approach)	Support	Accept
Natural Hazards Commission Toka Tū Ake	327	097	CE - Coastal Environment (Hazards)	CE-P9 (Levels of Risk)	Amend	Reject
Natural Hazards Commission Toka Tū Ake	327	098	CE - Coastal Environment (Hazards)	CE-P10 (Natural systems and features)	Support	Accept in part
Natural Hazards Commission Toka Tū Ake	327	099	CE - Coastal Environment (Hazards)	CE-P11 (Coastal hazard mitigation works)	Support	Accept
Natural Hazards Commission Toka Tū Ake	327	100	CE - Coastal Environment (Hazards)	CE-P12 (Coastal hazard mitigation works involving green infrastructure)	Support	Accept
Natural Hazards Commission Toka Tū Ake	327	101	CE - Coastal Environment (Hazards)	CE-P13 (Hard engineering coastal hazards mitigation works)	Support in part	Accept in part

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Natural Hazards Commission Toka Tū Ake	327	102	CE - Coastal Environment (Hazards)	CE-P14 (Additions to existing buildings and structures within the Coastal Hazard Overlays)	Amend	Accept in part
Natural Hazards Commission Toka Tū Ake	327	103	CE - Coastal Environment (Hazards)	CE-P15 (Subdivision, Use and Development within the Coastal Hazard Overlays)	Amend	Accept in part
Natural Hazards Commission Toka Tū Ake	327	104	NH - Natural Hazards	In new precinct (multi-zone): "Petone Natural Hazards Precinct", add new objective	Oppose (requesting new provision)	Reject
Natural Hazards Commission Toka Tū Ake	327	105	NH - Natural Hazards	In new precinct (multi-zone): "Petone Natural Hazards Precinct", add new objective	Oppose (requesting new provision)	Reject
Natural Hazards Commission Toka Tū Ake	327	106	NH - Natural Hazards	In new precinct (multi-zone): "Petone Natural Hazards Precinct", add new policy	Oppose (requesting new provision)	Reject
Natural Hazards Commission Toka Tū Ake	327	107	NH - Natural Hazards	In new precinct (multi-zone): "Petone Natural Hazards Precinct", add new policy	Oppose (requesting new provision)	Reject
Go Architecture Ltd	331	7	NH - Natural Hazards	Introduction	Support in part	Accept in part
Go Architecture Ltd	331	8	NH - Natural Hazards	NH-P6 (Additions to existing buildings and structures within the Fault Location Area)	Support in part	Reject
Go Architecture Ltd	331	9	NH - Natural Hazards	NH-R9 (Additions to existing buildings that contain activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Medium Flood Hazard Overlay and High Flood Hazard Overlay)	Support in part	Accept in part
Terry Pinfold and Ruth Gilbert	347	9	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 20 Taungata Road, York Bay	Oppose	Reject

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Barbara Sullivan	351	1	NH - Natural Hazards	NH-R13 (New buildings and structures and the conversion of existing buildings for activities potentially sensitive to natural hazards or activities most sensitive to natural hazards within the Medium Flood Hazard Overlay and High Flood Hazard Overlay)	Support in part	Reject
Barbara Sullivan	351	2	Maps - Natural and Coastal Hazard Overlays	High Flood Hazard Overlay - 89 Oroua Street, Eastbourne	Oppose in part	Reject
Stephanie Middleton	352	1	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay 15 Whiorau Grove	Oppose	Reject
Te Rūnanga o Toa Rangatira	353	7e	CE - Coastal Environment (General)	Entire chapter	Support	Accept in part
Sandra Michel-Shanks	363	1	NH - Natural Hazards	NH-P12 (Subdivision in the Slope Assessment Overlay)	Support in part	Accept in part
Sandra Michel-Shanks	363	2	NH - Natural Hazards	Whole chapter	Support in part	Reject
Sandra Michel-Shanks	363	3	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 39 Dalton Grove, Stokes Valley	Amend	Reject
Wainuiomata Rural Community Association Incorporated	364	22	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Oppose in part	Reject
Denise Anglesey	366	2	NH - Natural Hazards	Entire Natural Hazards chapter	Oppose	Reject
Patricia Cleland	367	2	NH - Natural Hazards	Overlays	Oppose	Other
Grant and Kristin Gunn	369	1a	Maps - Natural and Coastal Hazard Overlays	All hazard overlays	Oppose	Accept in part

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Grant and Kristin Gunn	369	1b	NH - Natural Hazards	NH-R8 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Low Flood Hazard Overlay)	Oppose	Accept in part
Grant and Kristin Gunn	369	1c	NH - Natural Hazards	NH-P9, NH-R9	Oppose	Reject
Grant and Kristin Gunn	369	1d	NH - Natural Hazards	Rules	Oppose	Reject
Grant and Kristin Gunn	369	2a	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Oppose in part	Reject
Grant and Kristin Gunn	369	2b	Does not relate to text or maps of the plan	None specific	Oppose in part	Other
Grant and Kristin Gunn	369	2c	NH - Natural Hazards	NH-R8 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Low Flood Hazard Overlay)	Oppose in part	Reject
Grant and Kristin Gunn	369	3a	Maps - Natural and Coastal Hazard Overlays	All hazard overlays	Oppose	Accept in part
Grant and Kristin Gunn	369	3b	NH - Natural Hazards	NH-P9 (Subdivision, use and development in the Flood Hazard Overlays)	Oppose	Reject
Grant and Kristin Gunn	369	3c	NH - Natural Hazards	Rules	Oppose	Reject
Grant and Kristin Gunn	369	4	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 95 Oroua Steet	Oppose	Reject
Grant and Kristin Gunn	369	5	Maps - Natural and Coastal Hazard Overlays	Coastal Inundation Hazard Overlay - 95 Oroua Street	Oppose	Reject

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Kelson Heights Limited	373	1	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 64 Waipounamu Drive	Amend	Reject
Fire and Emergency New Zealand	374	6	Definitions	Natural hazard	Support	Accept
Fire and Emergency New Zealand	374	13	CCSD - Strategic Direction - Climate Change and Natural Hazards	CCSD-02 (Natural Hazards)	Support	Accept in part
Fire and Emergency New Zealand	374	37	NH - Natural Hazards	NH-P1 (Risk-based approach)	Support	Accept
Fire and Emergency New Zealand	374	38a	NH - Natural Hazards	NH-P2 (Levels of Risk)	Support	Accept
Fire and Emergency New Zealand	374	38b	NH - Natural Hazards	NH-P7 (Subdivision, use and development within the Fault Location Area)	Support	Accept in part
Fire and Emergency New Zealand	374	38c	NH - Natural Hazards	NH-P9 (Subdivision, use and development in the Flood Hazard Overlays)	Support	Accept in part
Fire and Emergency New Zealand	374	39	NH - Natural Hazards	NH-P11 (Subdivision, Use and development in the Liquefaction Hazard Overlay)	Support	Accept in part
Fire and Emergency New Zealand	374	56	CE - Coastal Environment (Hazards)	CE-P8 (Risk-Based Approach)	Support	Accept
Fire and Emergency New Zealand	374	57	CE - Coastal Environment (Hazards)	CE-P9 (Levels of Risk)	Support	Accept

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Fire and Emergency New Zealand	374	58	CE - Coastal Environment (Hazards)	CE-P15 (Subdivision, Use and Development within the Coastal Hazard Overlays)	Support	Accept in part
Fire and Emergency New Zealand	374	60a	CE - Coastal Environment (Hazards)	CE-R9 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Low Tsunami Hazard Overlay)	Support	Accept
Fire and Emergency New Zealand	374	60b	CE - Coastal Environment (Hazards)	CE-R10 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Medium Coastal Hazard Overlays)	Support	Accept in part
Fire and Emergency New Zealand	374	61	CE - Coastal Environment (Hazards)	CE-R12 (Additions to existing buildings and structures for activities most sensitive to natural hazards in the High Coastal Hazard Overlays)	Support	Accept in part
Fiona Christeller	375	11	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 18 Taungata Road	Oppose	Reject
Fiona Christeller	375	12	Maps - Natural and Coastal Hazard Overlays	Sope Assessment Overlay - 18 Taungata Road	Oppose	Reject
Manor Park and Haywards Residents Community Incorporated Society	377	3	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 30 Benmore Crescent	Oppose in part	Accept in part

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Andrew Robinson and Robyn Robinson	380	4a	Maps - Natural and Coastal Hazard Overlays	All hazard overlays	Oppose	Accept in part
Andrew Robinson and Robyn Robinson	380	4b	NH - Natural Hazards	NH-R8 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Low Flood Hazard Overlay)	Oppose	Accept in part
Andrew Robinson and Robyn Robinson	380	4c	NH - Natural Hazards	NH-P9, NH-R9	Oppose	Reject
Andrew Robinson and Robyn Robinson	380	4d	NH - Natural Hazards	Rules	Oppose	Reject
Andrew Robinson and Robyn Robinson	380	5a	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Oppose in part	Reject
Andrew Robinson and Robyn Robinson	380	5b	Does not relate to text or maps of the plan	None specific	Oppose in part	Other
Andrew Robinson and Robyn Robinson	380	5c	NH - Natural Hazards	NH-R8 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Low Flood Hazard Overlay)	Oppose in part	Reject
Andrew Robinson and Robyn Robinson	380	6	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Oppose	Reject

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Andrew Robinson and Robyn Robinson	380	7	NH - Natural Hazards	Slope Assessment Overlay	Oppose in part	Reject
Andrew Robinson and Robyn Robinson	380	15a	Maps - Natural and Coastal Hazard Overlays	All hazard overlays	Oppose	Accept in part
Andrew Robinson and Robyn Robinson	380	15b	NH - Natural Hazards	NH-P9 (Subdivision, use and development in the Flood Hazard Overlays)	Oppose	Reject
Andrew Robinson and Robyn Robinson	380	15c	NH - Natural Hazards	Rules	Oppose	Reject
Andrew Robinson and Robyn Robinson	380	22	Maps - Natural Environment Values Overlays	Flood Hazard Overlay - 269 Muritai Road	Oppose in part	Reject
Andrew Robinson and Robyn Robinson	380	24	Maps - Natural Environment Values Overlays	Coastal Inundation Hazard Overlay	Amend	Reject
Upul Priyankara Angulugaha Gamage & Hewawasan Sarukkalige Yashani Pradeepika Fernando	381	1	Maps - Natural and Coastal Hazard Overlays	High Flood Hazard Overlay - 36 Manor Park Road	Oppose	Reject
Sensible Solutions for Eastbourne	383	4a	Maps - Natural and Coastal Hazard Overlays	All hazard overlays	Oppose	Accept in part

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Sensible Solutions for Eastbourne	383	4b	NH - Natural Hazards	NH-R8 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Low Flood Hazard Overlay)	Oppose	Accept in part
Sensible Solutions for Eastbourne	383	4c	NH - Natural Hazards	NH-P9, NH-R9	Oppose	Reject
Sensible Solutions for Eastbourne	383	4d	NH - Natural Hazards	Rules	Oppose	Reject
Sensible Solutions for Eastbourne	383	5a	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Oppose in part	Reject
Sensible Solutions for Eastbourne	383	5b	Does not relate to text or maps of the plan	None specific	Oppose in part	Other
Sensible Solutions for Eastbourne	383	5c	NH - Natural Hazards	NH-R8 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Low Flood Hazard Overlay)	Oppose in part	Reject
Sensible Solutions for Eastbourne	383	6	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Oppose	Reject
Sensible Solutions for Eastbourne	383	7	NH - Natural Hazards	Slope Assessment Overlay	Oppose in part	Reject

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Sensible Solutions for Eastbourne	383	22a	Maps - Natural and Coastal Hazard Overlays	All hazard overlays	Oppose	Accept in part
Sensible Solutions for Eastbourne	383	22b	NH - Natural Hazards	NH-P9 (Subdivision, use and development in the Flood Hazard Overlays)	Oppose	Reject
Sensible Solutions for Eastbourne	383	22c	NH - Natural Hazards	Rules	Oppose	Reject
Sensible Solutions for Eastbourne	383	24	Maps - Natural Environment Values Overlays	Coastal Inundation Hazard Overlay	Oppose in part	Reject
NZ Transport Agency Waka Kotahi	385	13	Definitions	Natural hazard mitigation works	Support	Accept
NZ Transport Agency Waka Kotahi	385	48	NH - Natural Hazards	Objectives	Support	Accept in part
NZ Transport Agency Waka Kotahi	385	49	NH - Natural Hazards	NH-P1, NH-P2, NH-P3, NH-P4, NH-P8	Support	Accept in part
NZ Transport Agency Waka Kotahi	385	50	NH - Natural Hazards	NH-P5 (Green infrastructure)	Oppose in part	Accept in part
Craig & Margaret Barker	387	1b	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay at 18 Otira Grove, Kelson	Oppose	Reject
Charmi Mistry	392	1	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 2/1 Helvetia Grove	Oppose in part	Accept in part
Charmi Mistry	392	2	Maps - Natural and Coastal Hazard Overlays	High Flood Hazard Overlay - Waiwhetū Stream	Oppose in part	Accept in part
Charmi Mistry	392	3	Definitions	High Flood Hazard Overlay	Oppose in part	Reject

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Nicola Stent and Stuart Stent	393	1a	Maps - Natural and Coastal Hazard Overlays	High Tsunami Hazard Overlay - 6A Oriental Street, Petone	Oppose in part	Reject
Nicola Stent and Stuart Stent	393	1b	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 6A Oriental Street, Petone	Oppose in part	Reject
Nicola Stent and Stuart Stent	393	1c	Maps - Natural and Coastal Hazard Overlays	Medium Coastal Inundation Hazard Overlay - 6A Oriental Street, Petone	Oppose in part	Reject
PTL Trust	397	1	Maps - Natural and Coastal Hazard Overlays	Coastal Inundation Hazard Overlay, Flood Hazard Overlay, Tsunami Hazard Overlay, Slope Assessment Hazard Overlay - 212 Marine Drive, Lowry Bay	Oppose in part	Reject
Katrina Jacobsen	398	1	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 7 Wyndrum Avenue, Waterloo	Oppose in part	Reject
Katrina Jacobsen	398	2	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 7 Wyndrum Avenue, Waterloo	Oppose in part	Reject
Ministry of Education	399	1	Definitions	Activity most sensitive to natural hazards	Support	Accept in part
Ministry of Education	399	32	NH - Natural Hazards	NH-O1 (Risk from Natural Hazards in High Natural Hazard Overlays)	Support	Accept
Ministry of Education	399	33	NH - Natural Hazards	NH-O2 (Risk from natural hazards in Low Natural Hazard Overlays and Medium Natural Hazard Overlays)	Support	Accept
Ministry of Education	399	34	NH - Natural Hazards	NH-P1 (Risk-Based Approach)	Support	Accept
Ministry of Education	399	35	NH - Natural Hazards	NH-P2 (Levels of Risk)	Support	Accept
Ministry of Education	399	36	NH - Natural Hazards	NH-P7 (Subdivision, use and development within the Fault Location Area)	Support	Accept in part
Ministry of Education	399	37	NH - Natural Hazards	NH-P8 (Additions to existing buildings and structures in the Flood Hazard Overlays)	Support	Accept in part

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Ministry of Education	399	38	NH - Natural Hazards	NH-P9 (Subdivision, use and development in the Flood Hazard Overlays)	Support	Accept in part
Ministry of Education	399	39	CE - Coastal Environment (Hazards)	CE-O3 (Risk from Coastal Hazards in the High Tsunami Hazard Overlay and High Coastal Inundation Hazard Overlay)	Support	Accept
Ministry of Education	399	40	CE - Coastal Environment (Hazards)	CE-O4 (Risk from Coastal Hazards in the Low Tsunami Hazard Overlay, Medium Tsunami Hazard Overlay, and Medium Coastal Inundation Hazard Overlay)	Support	Accept
Ministry of Education	399	41	CE - Coastal Environment (Hazards)	CE-P8 (Risk-Based Approach)	Support	Accept
Ministry of Education	399	42	CE - Coastal Environment (Hazards)	CE-P9 (Levels of Risk)	Support	Accept
Ministry of Education	399	43	CE - Coastal Environment (Hazards)	CE-P14 (Additions to existing buildings and structures within the Coastal Hazard Overlays)	Support	Accept in part
Ministry of Education	399	44	CE - Coastal Environment (Hazards)	CE-P15 (Subdivision, Use and Development within the Coastal Hazard Overlays)	Support	Accept in part
New Zealand Defence Force	404	02	Definitions	Activity less sensitive to natural hazards	Support in part	Other
New Zealand Defence Force	404	13a	NH - Natural Hazards	NH-P1 (Risk-Based Approach)	Support	Accept
New Zealand Defence Force	404	13b	NH - Natural Hazards	NH-P2 (Levels of Risk)	Support	Accept

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New Zealand Defence Force	404	13c	NH - Natural Hazards	NH-R10 (New buildings and structures and the Conversion of Existing Buildings for activities least sensitive to natural hazards within the Low Flood Hazard Overlay)	Support	Accept
Director-General of Conservation	405	53	CE - Coastal Environment (General)	CE-O7 (Natural Systems and Features)	Support in part	Accept in part
Director-General of Conservation	405	61	CE - Coastal Environment (General)	CE-P10 (Natural Systems and Features)	Support in part	Accept in part
TTL Trust	412	1	Maps - Natural and Coastal Hazard Overlays	Coastal Inundation Hazard Overlay, Flood Hazard Overlay, Liquefaction Hazard Overlay - 18 Saulbrey Grove, Woburn	Oppose in part	Reject
David and Pauline Innes	416	11	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 353 Moores Valley Road	Oppose in part	Reject
Wellington Water Limited	422	14	NH - Natural Hazards	Introduction - Natural Hazard Overlay table	Support in part	Accept
Wellington Water Limited	422	15	NH - Natural Hazards	Introduction - Natural Hazard Overlay table	Support	Accept in part
Wellington Water Limited	422	16	Definitions	New definition - Annual exceedance probability	Oppose (requesting new provision)	Accept in part
Susan Ewart	423	1	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlays 4 Kaitawa Road, York Bay	Oppose	Reject
Royal Forest and Bird Protection Society of New Zealand Inc.	424	8	CCSD - Strategic Direction - Climate Change and Natural Hazards	CCSD-O1 (Carbon Neutral)	Support in part	Accept in part
Royal Forest and Bird Protection Society of New Zealand Inc.	424	78	CE - Coastal Environment (General)	Introduction	Support in part	Reject

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Royal Forest and Bird Protection Society of New Zealand Inc.	424	81a	CE - Coastal Environment (Hazards)	CE-O3 (Risk from Coastal Hazards in the High Tsunami Hazard Overlay and High Coastal Inundation Hazard Overlay)	Support in part	Accept in part
Royal Forest and Bird Protection Society of New Zealand Inc.	424	81b	CE - Coastal Environment (Hazards)	CE-O4 (Risk from Coastal Hazards in the Low Tsunami Hazard Overlay, Medium Tsunami Hazard Overlay, and Medium Coastal Inundation Hazard Overlay)	Support in part	Reject
Royal Forest and Bird Protection Society of New Zealand Inc.	424	81c	CE - Coastal Environment (Hazards)	CE-O5 (Subdivision, use and development in the General Industrial Zone and Heavy Industrial Zone in Seaview, Metropolitan Centre Zone in Petone and Seaview Marina Zone and within Medium and High Hazard Areas of the Coastal Hazard Area)	Support in part	Reject
Royal Forest and Bird Protection Society of New Zealand Inc.	424	81d	CE - Coastal Environment (Hazards)	CE-O6 (Measures to reduce damage from sea level rise, coastal inundation and coastal erosion)	Support in part	Accept in part
Royal Forest and Bird Protection Society of New Zealand Inc.	424	81e	CE - Coastal Environment (Hazards)	CE-O7 (Natural Systems and Features)	Support in part	Accept in part
Royal Forest and Bird Protection Society of New Zealand Inc.	424	89a	CE - Coastal Environment (General)	CE-P8(Risk-based approach)	Oppose in part	Reject

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Royal Forest and Bird Protection Society of New Zealand Inc.	424	89b	CE - Coastal Environment (General)	CE-P9 (Levels of Risk)	Oppose in part	Reject
Royal Forest and Bird Protection Society of New Zealand Inc.	424	89c	CE - Coastal Environment (General)	CE-P10 (Natural systems and features)	Oppose in part	Reject
Royal Forest and Bird Protection Society of New Zealand Inc.	424	89d	CE - Coastal Environment (General)	CE-P11 (Coastal hazard mitigation works)	Oppose in part	Reject
Royal Forest and Bird Protection Society of New Zealand Inc.	424	89e	CE - Coastal Environment (General)	CE-P12 (Coastal hazard mitigation works involving green infrastructure)	Oppose in part	Reject
Royal Forest and Bird Protection Society of New Zealand Inc.	424	89f	CE - Coastal Environment (General)	CE-P13 (Hard engineering coastal hazards mitigation works)	Oppose in part	Reject
Royal Forest and Bird Protection Society of New Zealand Inc.	424	89g	CE - Coastal Environment (Hazards)	CE-P14 (Additions to existing buildings and structures within the Coastal Hazard Overlays)	Oppose in part	Reject
Royal Forest and Bird Protection Society of New Zealand Inc.	424	89h	CE - Coastal Environment (Hazards)	CE-P15 (Subdivision, Use and Development within the Coastal Hazard Overlays)	Oppose in part	Reject
David Surrey	427	4a	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlays	Oppose in part	Accept in part
David Surrey	427	4b	Maps - Natural and Coastal Hazard Overlays	Coastal Inundation Hazard Overlays	Oppose in part	Reject

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David Surrey	427	12	NH - Natural Hazards	Flood Hazard Overlay provisions	Oppose in part	Accept in part
David Surrey	427	13a	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Oppose in part	Reject
David Surrey	427	14	NH - Natural Hazards	Flood Hazard Overlay provisions	Oppose in part	Accept in part
David Surrey	427	15a	CE - Coastal Environment (Hazards)	Coastal Hazard provisions	Oppose in part	Reject
David Surrey	427	15b	NH - Natural Hazards	Whole chapter	Oppose in part	Reject
David Surrey	427	16	CE - Coastal Environment (Hazards)	CE-R15, CE-R16	Oppose in part	Accept in part
David Surrey	427	17	CE - Coastal Environment (Hazards)	Coastal Hazard provisions	Oppose in part	Accept in part
David Surrey	427	18	Maps - Natural and Coastal Hazard Overlays	Coastal Inundation Hazard Overlay	Oppose in part	Accept in part
David Surrey	427	19a	NH - Natural Hazards	New policy - risk assessments	Oppose (requesting new provision)	Reject
David Surrey	427	19b	CE - Coastal Environment (Hazards)	New policy - risk assessments	Oppose (requesting new provision)	Reject
David Surrey	427	20a	NH - Natural Hazards	Policies	Oppose in part	Accept
David Surrey	427	20b	CE - Coastal Environment (Hazards)	Policies	Oppose in part	Accept
Ian and Raylene Caddis	433	3	NH - Natural Hazards	Flood Hazard Overlay	Other/Not stated	Other
Ian and Raylene Caddis	433	4	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Other/Not stated	Reject
Elizabeth Mary Nightingale	434	1	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Oppose	Reject
Sanna and Mark McGavin	438	2	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 46 Major Drive	Oppose	Reject
Sanna and Mark McGavin	438	3	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - Whole Overlay	Oppose	Reject

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Policy Planning team of the Hutt City Council	440	29	NH - Natural Hazards	Introduction	Oppose in part	Accept in part
Policy Planning team of the Hutt City Council	440	30	NH - Natural Hazards	Introduction	Oppose in part	Accept
Policy Planning team of the Hutt City Council	440	31	NH - Natural Hazards	NH-01 (Risk from Natural Hazards in High Natural Hazard Overlays)	Oppose in part	Accept
Policy Planning team of the Hutt City Council	440	32	NH - Natural Hazards	NH-02 (Risk from natural hazards in Low Natural Hazard Overlays and Medium Natural Hazard Overlays)	Oppose in part	Accept
Policy Planning team of the Hutt City Council	440	33	NH - Natural Hazards	NH-P9 (Subdivision, use and development in the Flood Hazard Overlays)	Oppose in part	Accept
Policy Planning team of the Hutt City Council	440	34	NH - Natural Hazards	NH-R13 (New buildings and structures and the conversion of existing buildings...)	Oppose in part	Accept in part
Policy Planning team of the Hutt City Council	440	35a	CE - Coastal Environment (Hazards)	NH-R19 (Green Infrastructure in all Natural Hazard Overlays)	Oppose	Accept in part
Policy Planning team of the Hutt City Council	440	35b	CE - Coastal Environment (General)	CE-R17 (Green Infrastructure in the Coastal Hazard Overlays)	Oppose	Accept in part
Policy Planning team of the Hutt City Council	440	46b	CE - Coastal Environment (General)	CE-R8 (Additions to existing buildings and structures for activities least sensitive to natural hazards in all Coastal Hazard Overlays)	Oppose	Reject

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Policy Planning team of the Hutt City Council	440	46c	CE - Coastal Environment (General)	CE-R9 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Low Tsunami Hazard Overlay)	Oppose	Reject
Policy Planning team of the Hutt City Council	440	46d	CE - Coastal Environment (General)	CE-R13 (New buildings and structures and the conversion of existing buildings for activities least sensitive to natural hazards in the Coastal Hazard Overlays)	Oppose	Reject
Policy Planning team of the Hutt City Council	440	46e	CE - Coastal Environment (General)	CE-R14 (Conversion of existing buildings for activities potentially sensitive to natural hazards in the Coastal Hazard Overlays)	Oppose	Reject
Policy Planning team of the Hutt City Council	440	47	CE - Coastal Environment (General)	CE-R16 (New buildings and structures and the conversion of existing buildings for activities most sensitive to natural hazards in the Coastal Hazard Overlays)	Oppose in part	Accept in part
Policy Planning team of the Hutt City Council	440	48a	Maps - Other	New map layer	Oppose (requesting new provision)	Accept
Policy Planning team of the Hutt City Council	440	48b	Definitions	New definition	Oppose (requesting new provision)	Accept in part
Policy Planning team of the Hutt City Council	440	48c	NH - Natural Hazards	NH-O3, NH-P2	Oppose in part	Accept
Policy Planning team of the Hutt City Council	440	48d	CE - Coastal Environment (General)	CE-O5, CE-P9, CE-P15, CE-R15, CE-R16	Oppose in part	Accept

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KiwiRail Holdings Ltd	442	01	Definitions	Activity least sensitive to natural hazards	Support	Accept
KiwiRail Holdings Ltd	442	02	Definitions	Activity potentially sensitive to natural hazards	Support	Accept in part
KiwiRail Holdings Ltd	442	68	NH - Natural Hazards	NH-P4 (Natural hazard mitigation)	Support	Accept in part
KiwiRail Holdings Ltd	442	69	NH - Natural Hazards	NH-R18 (Flood Mitigation works within the Flood Hazard Overlays)	Support in part	Reject
The Francis Family Trust	443	3	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlays - 1 Military Road and "surrounding area"	Oppose	Reject
Winstone Aggregates	444	3	Definitions	Sensitive activities	Oppose	Reject
Winstone Aggregates	444	24	NH - Natural Hazards	NH-P12 (Subdivision in the Slope Assessment Overlay)	Support	Accept
Winstone Aggregates	444	25	Maps - Natural and Coastal Hazard Overlays	Low Flood Hazard Overlay - Quarry Zone	Oppose	Accept
Winstone Aggregates	444	26	Maps - Natural and Coastal Hazard Overlays	Medium Flood Hazard Overlay - Quarry Zone	Oppose	Accept
Winstone Aggregates	444	27	Maps - Natural and Coastal Hazard Overlays	High Flood Hazard Overlay - Quarry Zone	Oppose	Accept
Winstone Aggregates	444	28	NH - Natural Hazards	NH-O3 (Subdivision, Use and Development in the General Industrial Zone and Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone and the Seaview Marina Zone and within the Medium Flood Hazard Overlay or High Flood Hazard Overlay)	Amend	Reject
Winstone Aggregates	444	29	NH - Natural Hazards	NH-P2 (Levels of Risk)	Amend	Reject

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Winstone Aggregates	444	30	NH - Natural Hazards	NH-P9 (Subdivision, use and development in the Flood Hazard Overlays)	Amend	Reject
Winstone Aggregates	444	31	NH - Natural Hazards	NH-P9 (Subdivision, use and development in the Flood Hazard Overlays)	Amend	Reject
Winstone Aggregates	444	99	Maps - Natural and Coastal Hazard Overlays	Low Flood Hazard Overlay	Oppose	Accept
Winstone Aggregates	444	100	Maps - Natural and Coastal Hazard Overlays	Medium Flood Hazard Overlay	Oppose	Accept
Winstone Aggregates	444	101	Maps - Natural and Coastal Hazard Overlays	High Flood Hazard Overlay	Oppose	Accept
Elizabeth Anya Jones and Kenneth Anthony Jones	445	1	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 560 Moores Valley Road	Amend	Reject
Te Kārearea Ltd and Rosco Ice Cream Ltd	447	7	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 30 Benmore Crescent	Oppose in part	Accept in part
Te Kārearea Ltd and Rosco Ice Cream Ltd	447	6.1b	NH - Natural Hazards	New site specific provision - 30 Benmore Crescent	Oppose (requesting new provision)	Accept in part
Chris Moore	448	1	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 3A Nikau Grove	Oppose	Accept in part
Chris Moore	448	2	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Amend	Reject
Chris Moore	448	3	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Amend	Accept in part
Chris Moore	448	4	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Amend	Reject
Chris Moore	448	5	NH - Natural Hazards	Flood Hazard Overlay provisions	Oppose in part	Accept in part

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Mark Blackham	450	24	Maps - Natural and Coastal Hazard Overlays	Low Flood Hazard Overlay	Oppose	Reject
Mark Blackham	450	25	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Oppose in part	Reject
Wellington Regional Council	452	1	Definitions	Activity least sensitive to natural hazards	Support in part	Accept in part
Wellington Regional Council	452	2	Definitions	Activity most sensitive to natural hazards	Support	Accept in part
Wellington Regional Council	452	3	Definitions	Activity potentially sensitive to natural hazards	Support in part	Accept in part
Wellington Regional Council	452	11	Definitions	Natural Hazard	Support	Accept
Wellington Regional Council	452	12	Definitions	New definition - Resilient or resilience (in relation to natural hazards and climate change)	Amend	Reject
Wellington Regional Council	452	16	CCSD - Strategic Direction - Climate Change and Natural Hazards	CCSD-O1 (Carbon Neutral)	Support in part	Accept in part
Wellington Regional Council	452	72	Maps - Natural and Coastal Hazard Overlays	All mapping	Support in part	Accept in part
Wellington Regional Council	452	73	NH - Natural Hazards	Introduction	Support in part	Reject
Wellington Regional Council	452	74	NH - Natural Hazards	NH-O1 (Risk from Natural Hazards in High Natural Hazard Overlays)	Support in part	Accept in part
Wellington Regional Council	452	75	NH - Natural Hazards	NH-O2 (Risk from natural hazards in Low Natural Hazard Overlays and Medium Natural Hazard Overlays)	Support	Accept

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Wellington Regional Council	452	76	NH - Natural Hazards	NH-O3 (Subdivision, Use and Development in the General Industrial Zone and Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone and the Seaview Marina Zone and within the Medium Flood Hazard Overlay or High Flood Hazard Overlay)	Neutral	Accept
Wellington Regional Council	452	77	NH - Natural Hazards	NH-O4 (Planned Natural Hazard Mitigation Works)	Support	Accept
Wellington Regional Council	452	78	NH - Natural Hazards	NH-O5 (Natural Systems and Features)	Support	Accept
Wellington Regional Council	452	79	NH - Natural Hazards	NH-P1 (Risk-Based Approach)	Support	Accept
Wellington Regional Council	452	80	NH - Natural Hazards	NH-P2 (Levels of Risk)	Support in part	Accept in part
Wellington Regional Council	452	81	NH - Natural Hazards	NH-P3 (Natural systems and features)	Support in part	Reject
Wellington Regional Council	452	82	NH - Natural Hazards	NH-P4 (Natural hazard mitigation)	Support	Accept in part
Wellington Regional Council	452	83	NH - Natural Hazards	NH-P6 (Additions to existing buildings and structures within the Fault Location Area)	Support in part	Accept
Wellington Regional Council	452	84	NH - Natural Hazards	NH-P8 (Additions to existing buildings and structures in the Flood Hazard Overlays)	Support in part	Reject
Wellington Regional Council	452	85	NH - Natural Hazards	NH-P9 (Subdivision, use and development in the Flood Hazard Overlays)	Support in part	Reject
Wellington Regional Council	452	86	NH - Natural Hazards	NH-P10 (Residential Apartments in the Medium Flood Hazard Overlay and High Flood Hazard Overlay)	Support in part	Accept in part

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Wellington Regional Council	452	87	NH - Natural Hazards	NH-P11 (Subdivision, Use and Development in the Liquefaction Hazard Overlay)	Support	Accept in part
Wellington Regional Council	452	88	NH - Natural Hazards	NH-P12 (Subdivision in the Slope Assessment Overlay)	Support	Accept in part
Wellington Regional Council	452	89	NH - Natural Hazards	NH-R1 (Additions to existing buildings and structures for activities least sensitive to natural hazards within the poorly constrained, uncertain constrained, well defined and well defined extension areas of the Fault Location Area)	Support	Accept in part
Wellington Regional Council	452	90	NH - Natural Hazards	NH-R2 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the poorly constrained or the uncertain constrained areas of the Fault Location Area)	Support in part	Accept
Wellington Regional Council	452	91	NH - Natural Hazards	NH-R3 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the well-defined or well-defined extension areas of the Fault Location Area)	Support in part	Accept

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Wellington Regional Council	452	92	NH - Natural Hazards	NH-R4 (New buildings and structures and the conversion of existing buildings for activities least sensitive to natural hazards within all areas of the Fault Location Area)	Support	Accept
Wellington Regional Council	452	93	NH - Natural Hazards	NH-R5 (New buildings and structures and the conversion of existing buildings for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the poorly constrained or the uncertain constrained areas of the Fault Location Area)	Oppose	Reject
Wellington Regional Council	452	94	NH - Natural Hazards	NH-R6 (New buildings and structures and the conversion of existing buildings for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the well-defined or well defined extension areas of the Fault Location Area)	Support	Accept
Wellington Regional Council	452	95	NH - Natural Hazards	NH-R7 (Activities to existing buildings and structures for activities least sensitive to natural hazards in the Flood Hazard Overlays)	Support in part	Accept

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Wellington Regional Council	452	96	NH - Natural Hazards	NH-R8 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Low Flood Hazard Overlay)	Support	Accept in part
Wellington Regional Council	452	97	NH - Natural Hazards	NH-R9 (Additions to existing buildings that contain activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Medium Flood Hazard Overlay and High Flood Hazard Overlay)	Oppose	Accept in part
Wellington Regional Council	452	98	NH - Natural Hazards	NH-R10.1 (New buildings and structures and the Conversion of Existing Buildings for activities least sensitive to natural hazards within the Low Flood Hazard Overlay)	Support	Accept
Wellington Regional Council	452	99	NH - Natural Hazards	NH-R11.1 (New buildings and structures and the conversion of existing buildings for activities least sensitive to natural hazards within the Medium Flood Hazard Overlay and High Flood Hazard Overlay)	Support	Accept in part
Wellington Regional Council	452	100	NH - Natural Hazards	NH-R12.1 (New buildings and structures and the conversion of existing building for activities most sensitive to natural hazards within the Low Flood Hazard Overlay)	Support	Accept in part

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Wellington Regional Council	452	101	NH - Natural Hazards	NH-R12.2 (New buildings and structures and the conversion of existing building for activities most sensitive to natural hazards within the Low Flood Hazard Overlay)	Support	Accept in part
Wellington Regional Council	452	102	NH - Natural Hazards	NH-R13.1 (New buildings and structures and the conversion of existing buildings for activities potentially sensitive to natural hazards or activities most sensitive to natural hazards within the Medium Flood Hazard Overlay and High Flood Hazard Overlay)	Support in part	Accept in part
Wellington Regional Council	452	103	NH - Natural Hazards	NH-R14 (New buildings and the conversion of existing buildings for residential apartments within the Medium Flood Hazard Overlay and High Flood Hazard Overlay)	Oppose	Reject
Wellington Regional Council	452	104	NH - Natural Hazards	NH-R15 (Additions to existing buildings and structures for activities least sensitive to natural hazards and activities most sensitive to natural hazards in the Liquefaction Hazard Overlay)	Support	Accept
Wellington Regional Council	452	105	NH - Natural Hazards	NH-R16 (New buildings and structures and the conversion of existing buildings for activities least sensitive to natural hazards and activities potentially sensitive to natural hazards in the Liquefaction Hazard Overlay)	Support	Accept

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Wellington Regional Council	452	106	NH - Natural Hazards	NH-R17 (New buildings and structures and the conversion of existing buildings for activities most sensitive to natural hazards in the Liquefaction Hazard Overlay)	Support	Accept
Wellington Regional Council	452	134	CE - Coastal Environment (Hazards)	CE-O3 (risk from Coastal Hazards in the High Tsunami Hazard Overlay and High Coastal Inundation Hazard Overlay)	Support	Accept
Wellington Regional Council	452	135	CE - Coastal Environment (Hazards)	CE-O4 (Risk from Coastal Hazards in the Low Tsunami Hazard Overlay, Medium Tsunami Hazard Overlay, and Medium Coastal Inundation Hazard Overlay)	Support	Accept
Wellington Regional Council	452	136	CE - Coastal Environment (Hazards)	CE-O5 (Subdivision, use and development in the General Industrial Zone and Heavy Industrial Zone in Seaview, Metropolitan Centre Zone in Petone and Seaview Marina Zone and within Medium and High Hazard Areas of the Coastal Hazard Area)	Neutral	Accept in part
Wellington Regional Council	452	137	CE - Coastal Environment (Hazards)	CE-O6 (Measures to reduce damage from sea level rise, coastal inundation and coastal erosion)	Support	Accept
Wellington Regional Council	452	138	CE - Coastal Environment (Hazards)	CE-O7 (Natural Systems and Features)	Support	Accept in part
Wellington Regional Council	452	146	CE - Coastal Environment (General)	CE-P8 (Risk-Based approach)	Support	Accept
Wellington Regional Council	452	147	CE - Coastal Environment (General)	CE-P9 (Levels of Risk)	Support	Accept

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Wellington Regional Council	452	148	CE - Coastal Environment (General)	CE-P10 (Natural systems and features)	Support in part	Accept in part
Wellington Regional Council	452	149	CE - Coastal Environment (General)	CE-P11 (Coastal hazard mitigation works)	Support	Accept
Wellington Regional Council	452	150	CE - Coastal Environment (General)	CE-P12 (Coastal hazard mitigation works involving green infrastructure)	Support	Accept
Wellington Regional Council	452	151	CE - Coastal Environment (General)	CE-P13 (Hard engineering coastal hazards mitigation works)	Support	Accept in part
Wellington Regional Council	452	152	CE - Coastal Environment (Hazards)	CE-P14 (Additions to existing buildings and structures within the Coastal Hazard Overlays)	Support	Accept in part
Wellington Regional Council	452	153	CE - Coastal Environment (Hazards)	CE-P15 (Subdivision, Use and Development within the Coastal Hazard Overlays)	Support	Accept in part
Wellington Regional Council	452	161	CE - Coastal Environment (Hazards)	CE-R8 (Additions to existing buildings and structures for activities least sensitive to natural hazards in all Coastal Hazard Overlays)	Support	Accept
Wellington Regional Council	452	162	CE - Coastal Environment (Hazards)	CE-R9 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Low Tsunami Hazard Overlay)	Support	Accept
Wellington Regional Council	452	163	CE - Coastal Environment (Hazards)	CE-R10 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Medium Coastal Hazard Overlays)	Support	Accept in part

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Wellington Regional Council	452	164	CE - Coastal Environment (Hazards)	CE-R11 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards in the High Coastal Hazard Overlays)	Support	Accept in part
Wellington Regional Council	452	165	CE - Coastal Environment (Hazards)	CE-R12 (Additions to existing buildings and structures for activities most sensitive to natural hazards in the High Coastal Hazard Overlays)	Support	Accept in part
Wellington Regional Council	452	166	CE - Coastal Environment (Hazards)	CE-R13 (New buildings and structures and the conversion of existing buildings for activities least sensitive to natural hazards in the Coastal Hazard Overlays)	Support	Accept
Wellington Regional Council	452	167	CE - Coastal Environment (Hazards)	CE-R14 (Conversion of existing buildings for activities potentially sensitive to natural hazards in the Coastal Hazard Overlays)	Support	Accept
Wellington Regional Council	452	168	CE - Coastal Environment (Hazards)	CE-R15 (New buildings and structures for activities potentially sensitive to natural hazards in the Coastal Hazard Overlays)	Support	Accept in part
Wellington Regional Council	452	169	CE - Coastal Environment (Hazards)	CE-R16 (New buildings and structures and the conversion of existing buildings for activities most sensitive to natural hazards in the Coastal Hazard Overlays)	Support	Accept in part
Wellington Regional Council	452	170	CE - Coastal Environment (Hazards)	CE-R17 (Green Infrastructure in the Coastal Hazard Overlays)	Support	Accept in part

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Wellington Regional Council	452	171	CE - Coastal Environment (Hazards)	CE-R18 (Hard engineering coastal hazard mitigation works in all areas of the Coastal Hazard Overlay)	Support	Accept
Kate Harris	454	1	NH - Natural Hazards	Whole chapter	Oppose	Accept in part
Kate Harris	454	2	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Amend	Reject
Kate Harris	454	3	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Oppose	Reject
Kate Harris	454	4	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Oppose	Reject
Kate Harris	454	5	NH - Natural Hazards	Flood Hazard Overlay	Oppose	Reject
Jon Harris	457	1	NH - Natural Hazards	Flood Hazard Overlay	Oppose	Reject
Jon Harris	457	2	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Oppose	Reject
Jon Harris	457	3	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Oppose	Reject
Jon Harris	457	4	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Oppose	Reject
Jon Harris	457	5	NH - Natural Hazards	Flood Hazard Overlay	Oppose	Reject
Jenny Couch and Danny Hughes	458	3	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 38 Cheviot Rd, Lowry Bay	Oppose	Reject
Orlando & Franziska Ravera	459	1	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Oppose in part	Reject
Orlando & Franziska Ravera	459	2	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Oppose in part	Reject
Orlando & Franziska Ravera	459	3	NH - Natural Hazards	NH-P3 (Natural systems and features)	Neutral	Accept in part
Waste Management NZ Limited	461	2a	Maps - Natural and Coastal Hazard Overlays	Flood Overlay - 30 Benmore Crescent	Support in part	Accept in part

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Waste Management NZ Limited	461	2b	Maps - Natural and Coastal Hazard Overlays	Multiple Overlays excluding Flood Overlay	Support	Accept
Richard Kelly	463	1	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 10 Bunratty Grove	Oppose in part	Accept in part
Brett Osborne	464	1	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 13 Holmes Grove	Support in part	Accept
Steven Penn & Nicola Cooper	465	1	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Oppose in part	Reject
Z Energy Limited	468	1c	Maps - Natural and Coastal Hazard Overlays	Fault Location Area - 453 Hutt Road	Support	Accept
Z Energy Limited	468	1d	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 453 Hutt Road	Support	Accept
Z Energy Limited	468	2d	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 55-59 Seaview Road (Z Seaview Terminal)	Support	Accept
Z Energy Limited	468	2f	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 55-59 Seaview Road (Z Seaview Terminal)	Support	Accept
Z Energy Limited	468	2g	Maps - Natural and Coastal Hazard Overlays	Tsunami Hazard Overlay - 55-59 Seaview Road (Z Seaview Terminal)	Support	Accept
Z Energy Limited	468	3d	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 59 Seaview Road (Caltex Seaview Truck Stop)	Support	Accept
Z Energy Limited	468	3f	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 59 Seaview Road (Caltex Seaview Truck Stop)	Support	Accept
Z Energy Limited	468	3g	Maps - Natural and Coastal Hazard Overlays	Tsunami Hazard Overlay - 59 Seaview Road (Caltex Seaview Truck Stop)	Support	Accept
Z Energy Limited	468	4c	Maps - Natural and Coastal Hazard Overlays	Medium Coastal Inundation Hazard Overlay - 58 Seaview Road (Z Seaview Truck Stop)	Support	Accept
Z Energy Limited	468	4d	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 58 Seaview Road (Z Seaview Truck Stop)	Support	Accept

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Z Energy Limited	468	4f	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 58 Seaview Road (Z Seaview Truck Stop)	Support	Accept
Z Energy Limited	468	4g	Maps - Natural and Coastal Hazard Overlays	Tsunami Hazard Overlay - 58 Seaview Road (Z Seaview Truck Stop)	Support	Accept
Z Energy Limited	468	5d	Maps - Natural and Coastal Hazard Overlays	Medium Coastal Inundation Overlay - 11 Seaview Road	Support	Accept
Z Energy Limited	468	5e	Maps - Natural and Coastal Hazard Overlays	High Flood Hazard Overlay - 11 Seaview Road	Support	Accept
Z Energy Limited	468	5f	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 11 Seaview Road	Support	Accept
Z Energy Limited	468	5g	Maps - Natural and Coastal Hazard Overlays	High Tsunami Hazard Overlay - 11 Seaview Road	Support	Accept
Z Energy Limited	468	6f	Maps - Natural and Coastal Hazard Overlays	Low Flood Hazard Overlay - 60 Hutt Road	Support	Accept
Z Energy Limited	468	6g	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 60 Hutt Road	Support	Accept
Z Energy Limited	468	6h	Maps - Natural and Coastal Hazard Overlays	Low Tsunami Hazard Overlay - 60 Hutt Road	Support	Accept
Z Energy Limited	468	7b	Maps - Natural and Coastal Hazard Overlays	Low Flood Hazard Overlay - 555 High Street	Support	Accept
Z Energy Limited	468	7c	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 555 High Street	Support	Accept
Z Energy Limited	468	9b	Maps - Natural and Coastal Hazard Overlays	Low Flood Hazard Overlay - 30 Hollands Crescent	Support	Accept
Z Energy Limited	468	9c	Maps - Natural and Coastal Hazard Overlays	Liquefaction Hazard Overlay - 30 Hollands Crescent	Support	Accept

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The Brookfield Board and Scouts Aotearoa	469	4	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 562 Moores Valley Road	Oppose	Reject
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	15	Definitions	Coastal hazard overlays	Support	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	22	Definitions	Fault Location Area	Support	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	23	Definitions	Flood Hazard Overlays	Support	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	28	Definitions	High Coastal Hazard Overlay	Support	Accept

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BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	29	Definitions	High Coastal Inundation Hazard Overlay	Support	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	30	Definitions	High Flood Hazard Overlay	Support	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	31	Definitions	High Natural Hazard Overlay	Support	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	32	Definitions	High Tsunami Hazard Overlay	Support	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	35	Definitions	Liquefaction Hazard Overlay	Support	Accept

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BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	36	Definitions	Low Flood Hazard Overlay	Support	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	37	Definitions	Low hazard overlay	Support	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	38	Definitions	Low Tsunami Hazard Overlay	Support	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	39	Definitions	Medium Coastal Hazard Overlay	Support	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	40	Definitions	Medium Coastal Inundation Hazard Overlay	Support	Accept

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BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	41	Definitions	Medium Flood Hazard Overlay	Support	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	42	Definitions	Medium hazard overlay	Support	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	43	Definitions	Natural hazard	Support	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	44	Definitions	Natural hazard overlay	Support	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	50	Definitions	Slope Assessment Overlay	Support	Accept

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BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	57	Definitions	Activity least sensitive to natural hazards	Support in part	Accept in part
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	58	Definitions	Activity most sensitive to natural hazards	Oppose	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	59	Definitions	Activity potentially sensitive to natural hazards	Support in part	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	85	CCSD - Strategic Direction - Climate Change and Natural Hazards	CCSD-O1 (Carbon Neutral)	Support	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	86	CCSD - Strategic Direction - Climate Change and Natural Hazards	CCSD-O2 (Natural Hazards)	Support	Accept in part

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	169	NH - Natural Hazards	Chapter Introduction	Support	Accept in part
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	170	NH - Natural Hazards	NH-O1 Risk from Natural Hazards in High Natural Hazard Overlays	Support	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	171	NH - Natural Hazards	NH-O2 Risk from natural hazards in Low Natural Hazard Overlays and Medium Natural Hazard Overlays	Support	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	172	NH - Natural Hazards	NH-O3 Subdivision, Use and Development in the General Industrial Zone and Heavy Industrial Zone in Seaview, the Metropolitan Centre Zone in Petone and the Seaview Marina Zone and within the Medium Flood Hazard Overlay or High Flood Hazard Overlay	Support	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	173	NH - Natural Hazards	NH-P1 Risk-Based Approach	Support	Accept

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	174	NH - Natural Hazards	NH-P2 Levels of Risk	Support in part	Accept in part
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	175	NH - Natural Hazards	NH-P8 Additions to existing buildings and structures in the Flood Hazard Overlays	Support in part	Reject
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	176	NH - Natural Hazards	NH-P9 Subdivision, use and development in the Flood Hazard Overlays	Support in part	Accept in part
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	177	NH - Natural Hazards	NH-R7 Additions to existing buildings and structures for activities least sensitive to natural hazards in the Flood Hazard Overlays	Support	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	178	NH - Natural Hazards	NH-R8 Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Low Flood Hazard Overlay	Oppose in part	Accept in part

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	179	NH - Natural Hazards	NH-R9 Additions to existing buildings that contain activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Medium Flood Hazard Overlay and High Flood Hazard Overlay	Support	Accept in part
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	180	NH - Natural Hazards	NH-R10 New buildings and structures and the Conversion of Existing Buildings for activities least sensitive to natural hazards within the Low Flood Hazard Overlay	Support	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	181	NH - Natural Hazards	NH-R11 New buildings and structures and the conversion of existing buildings for activities least sensitive to natural hazards within the Medium Flood Hazard Overlay and High Flood Hazard Overlay	Oppose in part	Accept in part
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	182	NH - Natural Hazards	NH-R12 New buildings and structures and the conversion of existing buildings for activities potentially sensitive to natural hazards or activities most sensitive to natural hazards within the Low Flood Hazard Overlay	Support	Accept in part

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	183	NH - Natural Hazards	NH-R13 New buildings and structures and the conversion of existing buildings for activities potentially sensitive to natural hazards or activities most sensitive to natural hazards within the Medium Flood Hazard Overlay and High Flood Hazard Overlay	Support	Accept in part
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	184	NH - Natural Hazards	NH-R15 Additions to existing buildings and structures for activities least sensitive to natural hazards, activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Liquefaction Hazard Overlay	Support	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	185	NH - Natural Hazards	NH-R16 New buildings and structures and the conversion of existing buildings for activities least sensitive to natural hazards and activities potentially sensitive to natural hazards in the Liquefaction Hazard Overlay	Support	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	186	NH - Natural Hazards	NH-R17 New buildings and structures and the conversion of existing buildings for activities most sensitive to natural hazards in the Liquefaction Hazard Overlay	Support	Accept

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	188	CE - Coastal Environment (Hazards)	CE-O3 Risk from Coastal Hazards in the High Tsunami Hazard Overlay and High Coastal Inundation Hazard Overlay	Support	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	189	CE - Coastal Environment (Hazards)	CE-O4 Risk from Coastal Hazards in the Low Tsunami Hazard Overlay, Medium Tsunami Hazard Overlay, and Medium Coastal Inundation Hazard Overlay	Support	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	190	CE - Coastal Environment (Hazards)	CE-O5 Subdivision, use and development in the General Industrial Zone and Heavy Industrial Zone in Seaview, Metropolitan Centre Zone in Petone and Seaview Marina Zone and within Medium and High Hazard Areas of the Coastal Hazard Area	Support	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	192	CE - Coastal Environment (Hazards)	CE-P8 Risk-Based Approach	Support	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	193	CE - Coastal Environment (Hazards)	CE-P9 Levels of Risk	Support in part	Reject

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	194	CE - Coastal Environment (Hazards)	CE-P14 Additions to existing buildings and structures within the Coastal Hazard Overlays	Support	Accept in part
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	195	CE - Coastal Environment (Hazards)	CE-P15 Subdivision, Use and Development within the Coastal Hazard Overlays	Support	Accept in part
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	199	CE - Coastal Environment (Hazards)	CE-R8 Additions to existing buildings and structures for activities least sensitive to natural hazards in all Coastal Hazard Overlays	Support	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	200	CE - Coastal Environment (Hazards)	CE-R9 Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Low Tsunami Hazard Overlay	Support	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	201	CE - Coastal Environment (Hazards)	CE-R10 Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Medium Coastal Hazard Overlays	Oppose in part	Accept in part

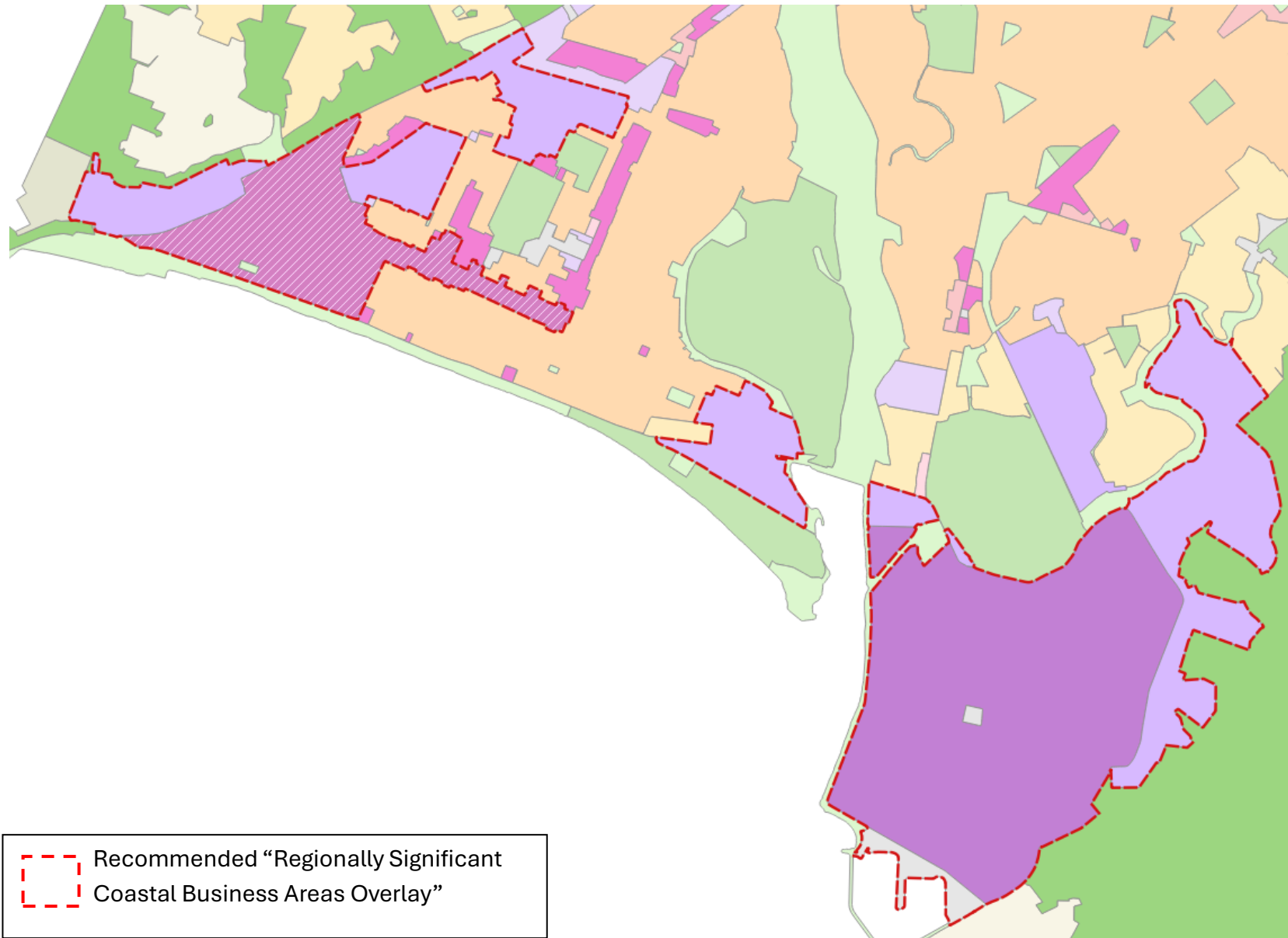
Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	202	CE - Coastal Environment (Hazards)	CE-R11 Additions to existing buildings and structures for activities potentially sensitive to natural hazards in the High Coastal Hazard Overlays	Oppose in part	Accept in part
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	203	CE - Coastal Environment (Hazards)	CE-R12 Additions to existing buildings and structures for activities most sensitive to natural hazards in the High Coastal Hazard Overlays	Support	Accept in part
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	204	CE - Coastal Environment (Hazards)	CE-R13 New buildings and structures and the conversion of existing buildings for activities least sensitive to natural hazards in the Coastal Hazard Overlays	Support	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	205	CE - Coastal Environment (Hazards)	CE-R14 Conversion of existing buildings for activities potentially sensitive to natural hazards in the Coastal Hazard Overlays	Support	Accept
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	206	CE - Coastal Environment (Hazards)	CE-R15 New buildings and structures for activities potentially sensitive to natural hazards in the Coastal Hazard Overlays	Multiple	Accept in part

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
BP Oil New Zealand Ltd, Mobil Oil New Zealand Ltd and Z Energy Ltd (the Fuel Companies)	471	207	CE - Coastal Environment (Hazards)	CE-R16 New buildings and structures and the conversion of existing buildings for activities most sensitive to natural hazards in the Coastal Hazard Overlays	Support	Accept in part
Luke Scullion	473	1	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Oppose in part	Reject
Dieter Engel	475	1	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Support in part	Reject
Dieter Engel	475	2	NH - Natural Hazards	Earthquake hazard	Support in part	Reject
Dieter Engel	475	3	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Support in part	Reject
Dieter Engel	475	5	Does not relate to text or maps of the plan	None	Other/Not stated	Other
Dieter Engel	475	6	Whole Plan	unclear	Other/Not stated	Reject
Dieter Engel	475	7	Does not relate to text or maps of the plan	None	Other/Not stated	Other
PBJ Properties Ltd	476	1	Maps - Natural and Coastal Hazard Overlays	High Natural Hazard Area - 23 Fitzgerald Street	Oppose	Reject
Mary Spiers and Samuel Spink	479	1	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 267 Muritai Road	Oppose	Reject
Mary Spiers and Samuel Spink	479	2	Maps - Natural and Coastal Hazard Overlays	Coastal Inundation Hazard Overlay - 267 Muritai Road, Eastbourne	Oppose	Reject
Lars Schmidt	480	1	NH - Natural Hazards	Flood Hazard Overlay	Oppose	Reject
Lars Schmidt	480	2	NH - Natural Hazards	Tsunami Hazard Overlay	Oppose	Accept in part
Lars Schmidt	480	3	NH - Natural Hazards	Seismic hazards	Oppose	Reject
Jeremy Lovell-Smith	486	1	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay - 93 Oroua Street	Support in part	Reject
Michelle Fisher	489	2	Maps - Natural and Coastal Hazard Overlays	Medium Flood Hazard Overlay - 283 Muritai Road	Oppose	Reject

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Lynne Birch	493	1a	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay	Support in part	Reject
Lynne Birch	493	1b	NH - Natural Hazards	Slope Hazard	Other/Not stated	Accept in part
Peter Fahy	495	1	Maps - Natural and Coastal Hazard Overlays	Slope Assessment Overlay - 15 Sweetacres Drive)	Oppose	Reject
John Burroughs	499	1	NH - Natural Hazards	Medium Flood Hazard Overlay	Oppose in part	Reject
John Burroughs	499	2	NH - Natural Hazards	Medium Flood Hazard Overlay	Oppose in part	Reject
Michael Kerslake	501	1	NH - Natural Hazards	None specific	Other/Not stated	Other
Michael Kerslake	501	2	Maps - Natural and Coastal Hazard Overlays	Flood Hazard Overlay	Oppose in part	Reject
Michael Kerslake	501	3	Maps - Natural and Coastal Hazard Overlays	Coastal Inundation Hazard Overlay	Oppose in part	Reject
Petone Community Board	502	02	NH - Natural Hazards	Whole chapter	Oppose in part	Reject
Petone Community Board	502	03	CE - Coastal Environment (Hazards)	Whole chapter	Oppose in part	Reject
Petone Community Board	502	04	Maps - Natural and Coastal Hazard Overlays	All hazard overlays	Oppose in part	Reject
Te Ruunanganui O Te Atiawa	503	43a	CE - Coastal Environment (Hazards)	CW-P12 (Coastal hazard mitigation works involving green infrastructure)	Support	Accept
Te Ruunanganui O Te Atiawa	503	43b	CE - Coastal Environment (Hazards)	CE-R17 (Coastal hazard mitigation works involving green infrastructure)	Support	Accept in part
Transpower New Zealand Limited	504	61	CE - Coastal Environment (General)	Introduction	Amend	Reject
Transpower New Zealand Limited	504	65	CE - Coastal Environment (General)	Note to the rules section	Support	Reject
Transpower New Zealand Limited	504	89a	NH - Natural Hazards	Introduction	Amend	Reject

Submitter	Sub #	SP #	Topic/chapter	Provision	Support/oppose	Recommendation
Transpower New Zealand Limited	504	89b	NH - Natural Hazards	whole chapter	Amend	Other
Rinu Abraham	506	1	NH - Natural Hazards	Slope Assessment Overlay	Amend	Reject
Wellington Fish and Game Council	509	5	NH - Natural Hazards	NH-O5 (Natural Systems and Features)	Support	Accept
Wellington Fish and Game Council	509	6	NH - Natural Hazards	NH-P3 (Natural systems and features)	Support	Accept in part
Joe Jeffries	514	2a	NH - Natural Hazards	Tsunami Hazard Overlay	Oppose	Reject
Joe Jeffries	514	2b	NH - Natural Hazards	Coastal Inundation Hazard Overlay	Oppose	Reject
Joe Jeffries	514	3	CE - Coastal Environment (Hazards)	CE-P8 (Risk-Based Approach)	Support	Accept
Joe Jeffries	514	4	CE - Coastal Environment (Hazards)	CE-P14 (Additions to existing buildings and structures within the Coastal Hazard Overlays)	Amend	Reject
Joe Jeffries	514	5	CE - Coastal Environment (Hazards)	CE-P15 (Subdivision, Use and Development within the Coastal Hazard Overlays)	Amend	Reject
Joe Jeffries	514	6	CE - Coastal Environment (Hazards)	CE-R12 (Additions to existing buildings and structures for activities most sensitive to natural hazards in the High Coastal Hazard Overlays)	Oppose	Accept
Joe Jeffries	514	7	CE - Coastal Environment (Hazards)	CE-R16 (New buildings and structures and the conversion of existing buildings for activities most sensitive to natural hazards in the Coastal Hazard Overlays)	Amend	Reject
Joe Jeffries	514	8	NH - Natural Hazards	Flood Hazard Overlay	Oppose	Reject

Appendix A3: Recommended “Regionally Significant Coastal Business Areas Overlay”



Appendix A4: Table of Recommended Restructuring of Hazard-Specific Policies and Rules

Proposed Provisions	Recommended Provision Structure
Fault Location Area Policies	
NH-P6 (Additions to existing buildings and structures within the Fault Location Area), and	Move activities least sensitive to natural hazards into a standalone policy. <u>NH-Paaa: Activities least sensitive to natural hazards within the Fault Location Area</u>
NH-P7 (Subdivision, use and development within the Fault Location Area)	NH-P6: Additions to existing buildings and structures <u>for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards</u> within the Fault Location Area NH-P7: Subdivision, use and development <u>for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards</u> within the Fault Location Area
Flood Hazard Overlay Policies	
NH-P8 (Additions to existing buildings and structures in the Flood Hazard Overlays)	<i>Split into:</i> NH-P8 (Additions to existing buildings and structures in the Low Flood Hazard Overlay) NH-Pbbb (Additions to existing buildings and structures in the Medium Flood Hazard Overlay) NH-Pccc (Additions to existing buildings and structures in the High Flood Hazard Overlay)
NH-P9 (Subdivision, use and development in the Flood Hazard Overlays)	<i>Split into:</i> NH-P9 (Subdivision, use and development in the Low Flood Hazard Overlay) NH-Pddd (Subdivision, use and development in the Medium Flood Hazard Overlay) NH-Peee (Subdivision, use and development in the High Flood Hazard Overlay)

Proposed Provisions	Recommended Provision Structure
NH-P10 (Residential Apartments in the Medium Flood Hazard Overlay and High Flood Hazard Overlay)	<i>Keep as one policy</i>
Liquefaction Hazard Overlay Policy	
NH-P11 (Subdivision, Use and Development in the Liquefaction Hazard Overlay)	<i>Keep as one policy – there is only one activity tier and the hazard overlays are not broken out by severity.</i>
Slope Assessment Overlay Policy	
NH-P12 (Subdivision in the Slope Assessment Overlay)	<i>Keep as one policy – there is only one activity tier and the hazard overlays are not broken out by severity.</i>
Coastal Hazard Policies	
CE-P14 (Additions to existing buildings and structures within the Coastal Hazard Overlays)	<i>Split into:</i> CE-P14 (Additions to existing buildings and structures within the Low Tsunami Hazard Overlay) CE-Paaa (Additions to existing buildings and structures within the Medium Coastal Hazard Overlays) CE-Pbbb (Additions to existing buildings and structures within the High Coastal Hazard Overlays)
CE-P15 (Subdivision, Use and Development within the Coastal Hazard Overlays)	<i>Split into:</i> CE-P15 (Subdivision, Use and Development within the Low Tsunami Hazard Overlay) CE-Pccc (Subdivision, Use and Development within the Medium Coastal Hazard Overlays) CE-Pddd (Subdivision, Use and Development within the High Coastal Hazard Overlays)

Proposed Provisions	Recommended Provision Structure
Fault Location Area Rules	
NH-R1 (Additions to existing buildings and structures for activities least sensitive to natural hazards within the poorly constrained, uncertain constrained, well defined and well defined extension areas of the Fault Location Area)	<i>Keep as one rule</i>
NH-R2 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the poorly constrained or the uncertain constrained areas of the Fault Location Area)	<i>Keep as one rule</i>
NH-R3 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the well-defined or well-defined extension areas of the Fault Location Area)	<i>Keep as one rule</i>
NH-R4 (New buildings and structures and the conversion of existing buildings for activities least sensitive to natural hazards within all areas of the Fault Location Area)	<i>Keep as one rule</i>
NH-R5 (New buildings and structures and the conversion of existing buildings for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the poorly constrained or the uncertain constrained areas of the Fault Location Area)	<i>Keep as one rule</i>
NH-R6 (New buildings and structures and the conversion of existing buildings for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards within the well-defined or well defined extension areas of the Fault Location Area)	<i>Keep as one rule</i>

Proposed Provisions	Recommended Provision Structure
Flood Hazard Overlay Rules	
NH-R7 (Additions to existing buildings and structures for activities least sensitive to natural hazards in the Flood Hazard Overlays)	<i>Keep as one rule</i>
NH-R8 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Low Flood Hazard Overlay)	<i>Keep as one rule</i>
NH-R9 (Additions to existing buildings that contain activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Medium Flood Hazard Overlay and High Flood Hazard Overlay)	<i>Separate into arms for within and outside the Regionally Significant Coastal Business Areas Overlay</i> NH-R9 (Additions to existing buildings that contain activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Medium Flood Hazard Overlay and High Flood Hazard Overlay) NH-Raaa (Regionally Significant Coastal Business Areas Overlay - Additions to existing buildings that contain activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Medium Flood Hazard Overlay and High Flood Hazard Overlay)
NH-R10 (New buildings and structures and the Conversion of Existing Buildings for activities least sensitive to natural hazards within the Low Flood Hazard Overlay)	<i>Keep as one rule</i>
NH-R11 (New buildings and structures and the conversion of existing buildings for activities least sensitive to natural hazards within the Medium Flood Hazard Overlay and High Flood Hazard Overlay)	<i>Keep as one rule</i>

Proposed Provisions	Recommended Provision Structure
NH-R12 (New buildings and structures and the conversion of existing buildings for activities potentially sensitive to natural hazards or activities most sensitive to natural hazards within the Low Flood Hazard Overlay)	<i>Keep as one rule</i>
NH-R13 (New buildings and structures and the conversion of existing buildings for activities potentially sensitive to natural hazards or activities most sensitive to natural hazards within the Medium Flood Hazard Overlay and High Flood Hazard Overlay)	<i>Separate into arms for within and outside the Regionally Significant Coastal Business Areas Overlay and (for outside) into Medium and High areas</i> NH-R13 (New buildings and structures and the conversion of existing buildings for activities potentially sensitive to natural hazards or activities most sensitive to natural hazards within the Medium Flood Hazard Overlay) NH-Rbbb (New buildings and structures and the conversion of existing buildings for activities potentially sensitive to natural hazards or activities most sensitive to natural hazards within the High Flood Hazard Overlay) NH-Rccc (Regionally Significant Coastal Business Areas Overlay - New buildings and structures and the conversion of existing buildings for activities potentially sensitive to natural hazards or activities most sensitive to natural hazards within the Medium Flood Hazard Overlay and High Flood Hazard Overlay)
NH-R14 (New buildings and the conversions of existing buildings for residential apartments within the Medium Flood Hazard Overlay and High Flood Hazard Overlay)	<i>Keep as one rule, move to sit between NH-Rbbb and NH-Rccc</i>
Liquefaction Hazard Overlay Rules	
NH-R15 (Additions to existing buildings and structures for activities least sensitive to natural hazards and activities most sensitive to natural hazards in the Liquefaction Hazard Overlay)[	<i>Keep as one rule</i>

Proposed Provisions	Recommended Provision Structure
NH-R16 (New buildings and structures and the conversion of existing buildings for activities least sensitive to natural hazards and activities potentially sensitive to natural hazards in the Liquefaction Hazard Overlay)	<i>Keep as one rule</i>
NH-R17 (New buildings and structures and the conversion of existing buildings for activities most sensitive to natural hazards in the Liquefaction Hazard Overlay)	<i>Keep as one rule</i>
Coastal Hazard Overlay Rules	
CE-R8 (Additions to existing buildings and structures for activities least sensitive to natural hazards in all Coastal Hazard Overlays)	<i>Keep as one rule</i>
CE-R9 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Low Tsunami Hazard Overlay)	<i>Split into:</i> CE-R9 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards in the Low Tsunami Hazard Overlay) CE-Raaa (Additions to existing buildings and structures for activities most sensitive to natural hazards in the Low Tsunami Hazard Overlay)
CE-R10 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards and activities most sensitive to natural hazards in the Medium Coastal Hazard Overlays)	<i>Split into:</i> CE-R10 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards in the Medium Coastal Hazard Overlays) CE-Rbbb (Additions to existing buildings and structures for activities most sensitive to natural hazards in the Medium Coastal Hazard Overlays) CE-Rccc (Regionally Significant Coastal Business Areas Overlay - Additions to existing buildings and structures for activities potentially sensitive to natural hazards in the Medium Coastal Hazard Overlays) CE-Rddd (Regionally Significant Coastal Business Areas Overlay - Additions to existing buildings and structures for activities most sensitive to natural hazards in the Medium Coastal Hazard Overlays)

Proposed Provisions	Recommended Provision Structure
CE-R11 (Additions to existing buildings and structures for activities potentially sensitive to natural hazards in the High Coastal Hazard Overlays)	<i>Keep as one rule</i>
CE-R12 (Additions to existing buildings and structures for activities most sensitive to natural hazards in the High Coastal Hazard Overlays)	<i>Keep as one rule</i>
CE-R13 (New buildings and structures and the conversion of existing buildings for activities least sensitive to natural hazards in the Coastal Hazard Overlays)	<i>Keep as one rule</i>
CE-R14 (Conversion of existing buildings for activities potentially sensitive to natural hazards in the Coastal Hazard Overlays)	<i>Keep as one rule</i>
CE-R15 (New buildings and structures and the conversion of existing buildings and the conversion of existing buildings for activities most sensitive to natural hazards in the Coastal Hazard Overlays)	<i>Split into:</i> CE-R15 (Construction of new buildings and structures for activities potentially sensitive to natural hazards in the Low Tsunami Hazard Overlay) CE-Reee (Construction of new buildings and structures for activities potentially sensitive to natural hazards in the Medium Coastal Hazard Overlays) CE-Rfff (Construction of new buildings and structures for activities potentially sensitive to natural hazards in the High Coastal Hazard Overlays) CE-Rggg (Regionally Significant Coastal Business Areas Overlay - Construction of new buildings and structures for activities potentially sensitive to natural hazards in the Medium Coastal Hazard Overlays inside the Regionally Significant Coastal Business Areas Overlay) CE-Rhhh (Regionally Significant Coastal Business Areas Overlay - Construction of new buildings and structures for activities potentially sensitive to natural hazards in the High Coastal Hazard Overlays)

Proposed Provisions	Recommended Provision Structure
CE-R16 (New buildings and structures for activities potentially sensitive to natural hazards in the Coastal Hazard Overlays)	<i>Split into:</i> CE-R16 (Construction of new buildings and structures and the conversion of existing buildings for activities most sensitive to natural hazards in the Low Tsunami Hazard Overlay) CE-Rjjj (Construction of new buildings and structures and the conversion of existing buildings for activities most sensitive to natural hazards in the Medium Coastal Hazard Overlays) CE-Rmmm (Construction of new buildings and structures and the conversion of existing buildings for activities most sensitive to natural hazards in the High Coastal Hazard Overlays) CE-Rnnn (Regionally Significant Coastal Business Areas Overlay - Construction of new buildings and structures and the conversion of existing buildings for activities most sensitive to natural hazards in the Medium Coastal Hazard Overlays) CE-Rppp (Regionally Significant Coastal Business Areas Overlay - Construction of new buildings and structures and the conversion of existing buildings for activities most sensitive to natural hazards in the High Coastal Hazard Overlays)

Appendix B1: Flood modelling evidence of Mr Alistair Osborne

**Before the Hearings Panel
At Hutt City Council**

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

**Statement of evidence of Alistair Osborne on behalf of Hutt City Council
(Flood Hazard Modelling)**

Date: 20th July 2026

INTRODUCTION:

- 1 My name is Alistair Mark Osborne. I am employed as a Principal Stormwater Modeller at Tiaki Wai (previously Wellington Water).
- 2 I have prepared this statement of evidence on behalf of the Hutt City Council (**Council**) in respect of technical matters arising from the submissions and further submissions on Hutt City Council's District Proposed District Plan (PDP) in relation to flooding hazard modelling and mapping.
- 3 I have been providing input into the flood hazard mapping for the PDP since 2023. This input includes managing the hydrological and hydraulic modelling, peer review programme, and development of flood hazard mapping based on model output.
- 4 In preparation of this evidence, I have reviewed the Natural Hazards chapter of the PDP, and the Submissions and Further Submissions referred to in Section 22.
- 5 I am authorised to provide this evidence on behalf of the Council.

QUALIFICATIONS AND EXPERIENCE

- 6 I hold the qualification of a Master of Science (with Honours) from Victoria University, Wellington.
- 7 I have 21 years' experience in hydraulic and hydrological modelling in New Zealand. I have worked for both Engineering Consultancies and Councils.
- 8 I am a member of the New Zealand Hydrological Society and Water New Zealand.

Code of conduct

- 9 I have read the Code of Conduct for Expert Witnesses set out in the Environment Court's Practice Note 2023. I have complied with the Code of Conduct in preparing my evidence and will continue to comply with it while giving oral evidence before the Hearings Panel. My qualifications as an expert are set out above. Except where I state I rely on the evidence of another person, I confirm that the issues addressed in this statement of evidence are within my area of expertise, and I have not omitted to consider material facts known to me that might alter or detract from my expressed opinions.

SCOPE OF EVIDENCE

- 10 My statement of evidence covers the following matters:
- 10.1 The framework that Tiaki Wai and Council have applied to manage flood risk. This will include comments on the following items:
 - 10.1.1 How the hydraulic modelling has been undertaken
 - 10.1.2 The topographic information applied in the hydraulic modelling.
 - 10.1.3 The hydrological approach adopted in the hydraulic modelling, and design event selection.
 - 10.1.4 The climate change scenario adopted in the hydraulic modelling.
 - 10.1.5 Freeboard.
 - 10.1.6 The hazard classification scheme that has been applied to the results from the hydraulic modelling to develop the flood hazard overlays for the PDP.

- 10.1.7 The difference between the flood hazard overlays presented in the Draft District Plan and the flood hazard overlays presented in the PDP.
- 10.2 Comments on submission points pertaining to the PDP flood hazard overlays.
- 10.3 I note that the flood hazard overlays comprise data from the three different sets of modelling, as follows:
- (a) Tiaki Wai stormwater hydraulic modelling;
 - (b) Greater Wellington Regional Council (GWRC) hydraulic modelling for Te Awa Kairangi/Hutt River;
 - (c) GWRC hydraulic modelling for the Waiwhetu Stream;
- 10.4 Results from these three datasets have been classified into hazard categories separately and then combined into the flood hazard overlays presented in the PDP.
- 10.5 I only have working knowledge of the Tiaki Wai stormwater hydraulic models, so cannot speak with expertise on the GWRC models.
- 10.6 I am familiar with the hazard classification approach that has been applied to the modelling results from all three datasets, and I have access to, and have reviewed, the individual GWRC flood hazard overlays, prior to their combination with the Tiaki Wai generated overlays.

- 10.7 A list of the documents I have used and reference in this document is provided in Section 22.

FLOOD HAZARD MODELLING AND MAPPING

11 How the hydraulic modelling has been undertaken:

- 11.1 Tiaki Wai (previously Wellington Water) has generated flood hazard overlay data from hydraulic models developed based on the Wellington Water Regional Stormwater Hydraulic Modelling Specifications. The models have been validated and peer reviewed.
- 11.2 The flood hazard overlays for the PDP are based on the outputs from validated hydraulic models, flood records and feedback from the community.
- 11.3 Six hydraulic models have been developed to model the Hutt City stormwater catchments. The models are as follows:
- 11.3.1 Stokes Valley – modelling initiated in 2016 and completed in 2022.
- 11.3.2 Black Creek (Wainuiomata) - modelling initiated in 2018 and completed in 2022.
- 11.3.3 Eastern Lower Hutt - modelling initiated in 2019 and completed in 2022.
- 11.3.4 Petone (including the western hills from Korokora to Normandale) - modelling initiated in 2017 and completed in 2022.
- 11.3.5 East Harbour – modelling initiated in 2020 and completed in 2024

11.3.6 Western Hills – modelling initiated in 2021 and completed in 2024

11.4 Tiaki Wai (previously Wellington Water) and Hutt City Council ran eleven public engagement sessions on natural hazards in the Hutt Valley in 2021. I attended four of the public engagement meetings to present the flood hazard information on behalf of Wellington Water and Hutt City Council to the community and receive feedback on the validity of the mapping. Feedback from the community engagement sessions generally supported the modelled flood extents and provided some additional validation of the modelling. There was no significant opposition that required a review of, and changes to the modelling.

11.5 In addition to the community engagement described above, additional information for the East Harbour modelling was obtained from the public through engagement via social pinpoint site ([Managing Flood Risks Eastbourne | Social Pinpoint \(mysocialpinpoint.com\)](https://www.mysocialpinpoint.com/)). The site went live in March 2022 for three months, but is still accessible now at the link above.

12 **The topographic information applied in the hydraulic modelling.**

12.1 Topographic representation of the modelled catchments comprises a critical component of the stormwater hydraulic models. Digital Elevations Models (DEMs) developed from aerial LiDAR surveys have been applied in the hydraulic models to represent topography.

12.2 The development of the hydraulic models for the Hutt City stormwater catchments has been completed over a period of 8 years (from 2016 to 2024), and DEMs generated from two

different aerial LiDAR surveys have been applied in the models.

12.3 The list below provides the DEMs (and aerial LiDAR survey) used for each model:

12.3.1 Stokes Valley – DEM generated from the 2013 aerial LiDAR survey.

12.3.2 Black Creek (Wainuiomata) - DEM generated from the 2013 aerial LiDAR survey.

12.3.3 Eastern Lower Hutt – a combined DEM generated from the 2013 and 2016 aerial LiDAR surveys.

12.3.4 Petone – DEM generated from the 2013 aerial LiDAR survey.

12.3.5 East Harbour – a combined DEM generated from the 2013 and 2016 aerial LiDAR surveys.

12.3.6 Western Hills – DEM generated from the 2013 aerial LiDAR survey.

13 **Hydrological approach adopted in the hydraulic modelling, and design event selection.**

13.1 The hydrological approach applied in the hydraulic modelling provides a representation of how rainfall is converted to runoff in the model environment.

13.2 The hydrological approach applied in the models follows the Wellington Water Hydraulic Modelling Specification and the Wellington Water Reference Guide for Design Storm Hydrology.

- 13.3 The design storm selected for the stormwater model simulations used to generate results for the flood hazard overlays is the 1% Annual Exceedance Probability (AEP) rainfall event including an allowance for climate change.
- 13.4 The 1% AEP rainfall event is a storm that has a 1% chance of occurring in any one year. It is also commonly referred to as 1 in 100 year (or 1:100 year) event
- 13.5 The 1% AEP event is considered an industry standard event for use in flood modelling, and it aligns with the Tiaki Wai stormwater level of service target of no habitable floor flooding in the 1% AEP event (including climate change).
- 13.6 The use of AEP also allows the calculation of exposure probability. For example, there is approximately a 25% chance of a property experiencing a 1% AEP rainfall event across the duration of a 30-year mortgage.

14 The climate change scenario adopted in the hydraulic modelling.

- 14.1 Climate change has been allowed in the hydraulic modelling by adjusting the rainfall and the sea-level (as represented by a tidal boundary) applied in the model.
- 14.2 Rainfall has been adjusted by increasing the current 1% AEP design rainfall by 35%, which is equivalent to the RCP 8.5 scenario provided by NIWA HIRDS version 4, for Hutt City 100 years from now (the 2130 date horizon).
- 14.3 The 35% increase in rainfall has been calculated by interpolating the projected temperature increase along RCP 8.5 in the Wellington Region from 2100 to 2130. Information

for this was derived from a NIWA report published in 2017¹. The total temperature increase was estimated to be just below 4.5°C. The report also provided a percentage rainfall increase (8%) for each degree of warming. The total rainfall increase was calculated to be approximately 35%, so was rounded to 35% for simplicity.

- 14.4 Sea-level has been adjusted by an increase of 1.59m. This value has been generated using the [Takiwa-NZ Searise website](https://environment.govt.nz/publications/coastal-hazards-and-climate-change-guidance/), following the SSP5 8.5 projection pathway to the year 2130. The value also includes the projected vertical land movement for the Petone foreshore. This approach has been adopted based on recommendations in the 2023 guidance document on coastal hazards and climate change from the Ministry for the Environment (<https://environment.govt.nz/publications/coastal-hazards-and-climate-change-guidance/>).
- 14.5 The date horizon for the projected climate change is 2130. This means the rainfall has been adjusted to a value that is projected to be the 1%AEP design rainfall in the year 2130. It should be noted that this rainfall can occur now, but it would be an event larger than a 1%AEP event (that is, it has a lower probability of occurring).
- 14.6 Regarding sea-level rise, the projected increase of 1.59m (including vertical land movement) is representative of how much higher mean sea-level will be relative to the current mean sea-level.

¹ Climate change and variability – Wellington Region. Prepared for Greater Wellington Regional Council. NIWA (2017)

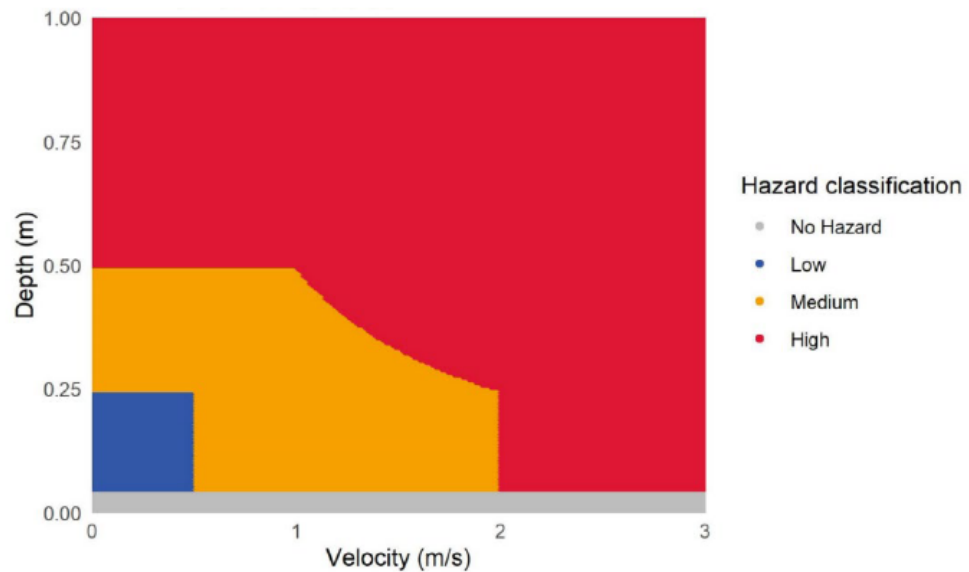
15 **Freeboard**

- 15.1 Freeboard is an additional allowance that is included in the models to take into account unknowns or residual risks during flood events, including, but not limited to:
- Blocked culverts
 - Sediment build-up
 - Wave generation from vehicles
- 15.2 To establish suitable freeboard values, sensitivity analyses have been carried out by simulating different scenarios in the models.
- 15.3 The scenarios are depending on the catchment but typically include testing the sensitivity of the model results to inlet blockages, culvert blockages, variation in the design rainfall event, increased surface roughness, or altered tailwater/sea level assumptions.
- 15.4 The results of the sensitivity analyses are then used to determine the appropriate additional flood depths to apply in the models. Typically, 200mm freeboard suitably accounted for these residual risks.
- 15.5 A final model simulation is then completed using the using the derived freeboard amounts to assess how the impacts of the residual risks would propagate beyond the location of their occurrence.
- 15.6 Further details on the Tiaki Wai freeboard approach can be found in the Wellington Water Hydraulic Modelling Specifications.

- 15.7 Regarding the impact of the freeboard allowance on the flood hazard overlays, freeboard is only incorporated into the low hazard overlay. It is not considered in the medium and high hazard categories.

16 **Flood Hazard Classification**

- 16.1 The flood hazard classification has been completed following the approach set out in the GWRC Flood Hazard Planning Guidance (2023) document.
- 16.2 The approach outlined below describes the process applied to the Tiaki Wai stormwater modelling results prior to their combining with the GWRC flood hazard overlays for Te Awa Kairangi/Hutt River and the Waiwhetu Stream.
- 16.3 The hazard classification process has used the depth, velocity, and depth-velocity product results from the stormwater hydraulic model simulations of the 1% AEP event including allowance for climate change.
- 16.4 The figure below shows the depth-velocity-hazard relationship that has been applied to develop the three hazard categories from the model results.



Source: *Greater Wellington Flood Hazard Overlays – Hutt City Council District Plan memo. 2024*

16.5 In addition to the model results applied in hazard classification process, two additional datasets have been applied to the flood hazard overlays:

16.5.1 The freeboard allowance has been included in the low hazard category, effectively increasing its extent.

16.5.2 Manually generated stream corridors have been included in the high hazard category. The stream corridors have been generated from multiple sources including modelled streams, Tiaki Wai stormwater asset data, and the review of aerial photography.

16.6 Post-processing has been undertaken to generalise (smooth) the edges of hazard overlays and remove small islands of one overlay sitting within the overlay of a different hazard category. Further details of this post-processing can be found

in the WWL_Flood_hazard_process_Memo² developed by Stantec on behalf of Tiaki Wai (previously Wellington Water).

17 Difference between the flood hazard overlays presented in the Draft District Plan and the flood hazard overlays presented in the PDP

17.1 The difference between the flood overlays presented in the Draft District Plan and the PDP stem from the two changes in approach listed below.

17.1.1 A change in the climate change allowance.

17.1.2 A change in the hazard classification approach.

17.2 Regarding the climate change allowance:

17.2.1 The PDP flood hazard overlays have been generated from model simulations that applied the approach outlined in Section 14. The Draft District Plan, however, applied the standard Tiaki Wai approach of increasing current rainfall by 20% (approximately equivalent to RCP 4.5 to 2130), and raising seal level by 1m (a previously established nominal value for the Wellington region). The 1m increase is now approximately equivalent to projected sea-level rise associated with SSP3-7.0, including vertical land movement, to 2130.

17.2.2 The change was made due to the release of the new MfE Coastal Hazard and Climate Change Guidance document, which recommended SSP5-

²

https://hccpublicdocs.azurewebsites.net/api/download/d764466f20cf454ba1010adf695ed15f/_dplanreview/2418b24e13451956440fa1cf1f98f86fd7c1

8.5M for projecting sea-level rise in the context of Land-use planning controls for existing coastal uses and assets. The rainfall increases described in Section 14 were then selected to align the rainfall RCP scenario to the sea-level SSP scenario.

17.3 Regarding the hazard classification approach:

17.3.1 The PDP flood hazard overlays have been generated using the hazard classification system described in Section 16. The Draft District Plan, however, applied the standard Tiaki Wai classification system of Inundation, Overland Flow Paths, and Stream Corridors. Key differences between the two systems are described below:

- (a) The GWRC Flood Hazard Guidance applies depth and velocity thresholds across all categories.
- (b) The Tiaki Wai approach applies a depth-velocity product threshold for the Inundation category (that is, all flooding with a depth-velocity product below a given value is considered Inundation); flooding with a depth-velocity product above the Inundation threshold initiates the overland flow path category which is then finalised through manual delineation of overland flow paths based on catchment characteristics; finally, manually generated stream corridors independent of modelling output comprise the stream corridor category.

- (c) In both approaches the freeboard allowance is only included in the low hazard and Inundation categories.

COMMENTS ON SUBMISSIONS AND FURTHER SUBMISSIONS

SUBMISSION SUMMARY

- 18 Approximately 90 submissions have been received in relation to the PDP flood hazard overlays. A number of these submissions raise common questions, concerns, and themes regarding the proposed overlays. To assist in responding consistently and efficiently, a number of these common themes are summarised below, together with corresponding responses. These issue summaries and responses are referenced, where applicable, within the individual submission responses.
- 19 While I have developed the common issue summaries, each submission has been reviewed and considered individually. The response to each submission reflects my understanding of the matters raised by the submitter and the reasons provided in support of their position. The use of standardised responses for recurring issues is intended to improve the clarity, consistency, and efficiency of the reporting process.
- 20 **Common Issues Raised**
- 20.1 **A lack of historical flooding**
- Multiple submitters have noted that their properties or localities have not previously been affected by flooding.
 - While previous flooding at a property is useful in model validation and a good indicator of future flood risk, the

lack of previous flooding does not preclude future flood risk

- The modelling undertaken for PDP flood hazard overlays simulates an extreme, future event that has not previously occurred in the Hutt City stormwater catchments. Please refer to Sections 13 and 14 for additional information on the simulated event.

20.2 Flood overlay does not reflect local topography or site conditions

- Multiple submitters have noted that the flood hazard overlays do not reflect the local topography or site conditions of their properties.
- The flood hazard overlays are based on physics-based hydraulic modelling that uses LiDAR-derived terrain models (DEMs). The information was considered the best available topographic information available at the time of the model builds.
- There will almost certainly be some locations the catchment landform has changed at specific due to earthworks and development. Location specific changes are discussed below in relation to individual submission responses.

20.3 Flooding is caused by stormwater infrastructure deficiencies rather than natural flooding

- Multiple submitters have noted that the observed flooding in the Hutt City stormwater catchment, including the observations that have been used to validate the modelling, has been due to stormwater

infrastructure inefficiencies or failures, such as culvert or sump blockages and similar.

- The hydraulic models assume a clean and functioning stormwater network and the modelled flooding is predicted under those assumptions. I do note that, however, that because the low flood hazard overlay includes results from the freeboard simulations, some of the extents of this overlay may be impacted by the culvert blockages tested in the sensitivity analyses. Please see Section 15 for information on the Tiaki Wai approach to freeboard.
- This is because the simulated design event is beyond the designed capacity of the infrastructure, that is the ability of the infrastructure to capture and carry stormwater.
- In general, stormwater infrastructure in the Wellington Region is designed to capture and convey the 10% AEP design event (not including climate change). However, historically installed infrastructure regularly does not achieve this.
- Use of observations made of flooding that is a result of infrastructure failure is still suitable in for model validation as it is indicative of where water will flow and collect if it is not contained by the stormwater infrastructure.

20.4 **The hydraulic models contain assumptions and limitations that reduce reliability**

- Multiple submitters have questioned the accuracy of the modelling due to the limitations and assumptions associated with the models, and as a result, the

suitability of using their output for the flood hazard overlay mapping.

- I note that there are limitations in the models and that some model information is assumed. This is because they have been developed within the constraints of time, budget, and available information. However, to manage these limitations and assumptions the models have been built in compliance with accepted modelling specifications (the *Wellington Water Hydraulic Modelling Specification*), have undergone validation, sensitivity testing, and independent review.
- I believe the models represent the best available information available for the PDP and that the model outputs are suitable for District Plan purposes.

20.5 Climate change assumptions are excessive or unrealistic

- Multiple submitters have raised the concern that the climate change assumptions are excessive or unrealistic.
- The climate change approach adopted in the modelling were selected through discussions with HCC and GWRC, with the aim of aligning with MfE recommendations for sea-level rise, and GWRC requirements for rainfall. Please see Section 14 for additional information.

20.6 Property-specific mitigation has not been recognised

- Multiple submitters have noted that property specific mitigations (such as raised floor levels, fences, retaining walls, and private drainage) have not been considered in the modelling.

- I note that there are limitations to the modelling, and it is generally not possible to include property specific mitigations due to lack of available and suitable information, and time and budget constraints. However, site specific mitigations would be considered when site specific work requiring a resource consent is undertaken.

20.7 Future infrastructure improvements should be reflected in the overlays

- Multiple submitters have noted that currently proposed infrastructure upgrades, along with potential future flood mitigation work, have not been considered in the modelling used for the flood hazard overlays.
- Future work is generally not incorporated into the modelling used for the District Plan overlays until it has been completed. This is because of potential changes that can occur in the scheduling and design of upgrades prior to their completion.
- There is a pathway via the Plan Change process for changes to the flood hazard overlays due to infrastructure upgrades or mitigation work to be incorporated in the District Plan.

20.8 Flood hazard boundaries appear inaccurate

- Multiple submitters have asserted that the flood hazard overlays appear inaccurate.
- The flood hazard overlays have been generated by applying the GWRC Flood Hazard Planning Guidance approach to classify model results into the low, medium, and high categories presented in the PDP.

- Post-processing has been undertaken to generalise (smooth) the edges of hazard overlays and remove small islands of one overlay sitting within the overlay of a different hazard category. Further details of this post-processing can be found in the WWL_Flood_hazard_process_Memo³ developed by Stantec on behalf of Tiaki Wai (previously Wellington Water).

21 Issues not raised by submitters

- 21.1 An error has been found in the PDP flood hazard overlays while reviewing the submissions. During the hazard classification and mapping process, the open channels represented in the East Harbour stormwater model were not included in the flood hazard overlays as high hazard (see Stream Corridors in Section 16.5), as has been done for the remainder of modelled catchments.
- 21.2 One missing stream corridor was also identified in flood hazard overlays in Wainuiomata.
- 21.3 I recommend updating the flood hazard overlays to include the East Harbour stormwater model open channels as high hazard areas, and the missing stream corridor identified in Wainuiomata.

³

https://hccpublicdocs.azurewebsites.net/api/download/d764466f20cf454ba1010adf695ed15f/_dplanreview/2418b24e13451956440fa1cf1f98f86fd7c1

22.1 Adrian Palmer Family Trust (315) - Various

- The submitter opposes the flood hazard overlays mapped on 18 locations owned by the submitter. No reasons or evidence is provided in support of removing the flood hazard overlays. A review of the locations shows that the modelled flooding is reasonable/expected given the event simulated
- I recommend the flood hazard overlays remain unchanged at the locations specified in the submission.

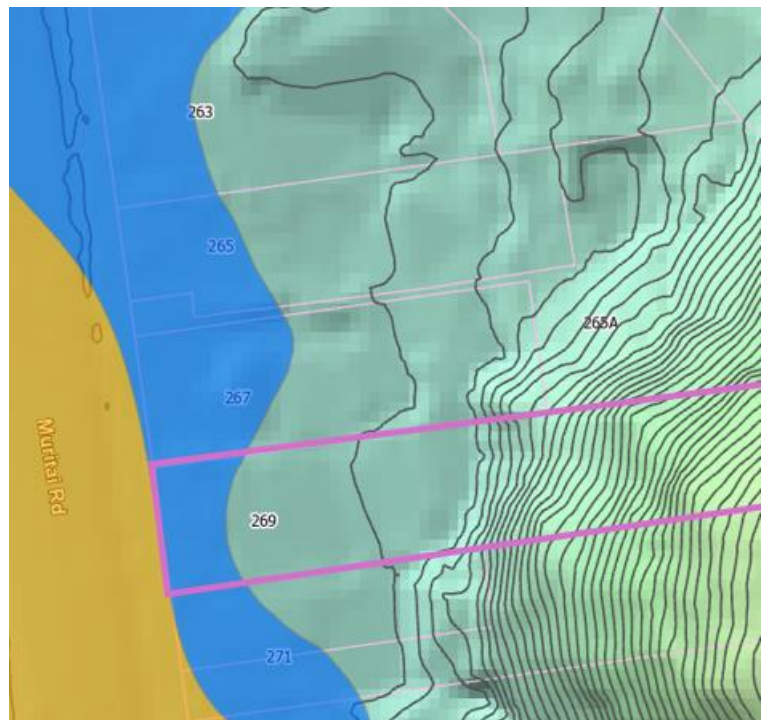
22.2 Allison Thwaite (250) – Manor Park

- The submitter notes that their property or locality has not previously been affected by flooding.
- Please see Section 20.1.
- In addition to the above, it is noted that the predominance of the high flood hazard overlay in Manor Park is due to flooding from the Hutt River, as modelled by GWRC. However, Wellington Water modelling also indicates there is potential for flooding originating from the Western Hills above Manor Park.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.3 **Andrew Robinson and Robyn Robinson (380, F09) - 269**
Muritai Rd Eastbourne

- The submitter opposes the medium flood hazard overlay mapped on their property due to a broad range of concerns. Issues relating to the flood hazard overlays are listed below:
 - There is no history of flooding at their property, or limited historical basis, that provides compelling evidence for this overlay on the applicant properties.
 - No accurate future modelling that provides compelling evidence for this overlay on the applicant properties. The hydraulic models contain assumptions and limitations that reduce reliability.
 - The flood zone outline on the submitter's property bears no resemblance to any historical flooding or the topography of the property.
 - Any surface flooding has been caused by stormwater infrastructure deficiencies rather than natural flooding.
 - The supporting documentation highlights the hydraulic models contain assumptions and limitations that reduce reliability.
 - Property-specific mitigation has not been recognised.

- Future infrastructure improvements should be reflected in the overlays.
- These issues are addressed in Sections 20.1, 20.2, 20.3, 20.4, 20.6, 20.7, 20.8.
- Further, a review of the flood hazard overlays at the submitter's property in the context of available topographic contours shows the overlays are sensible relative to the topography. Please see the image below, the submitter's property is outlined in magenta.



- Alongside the common issues listed above the submitter has also highlighted the following points in support of their submission:
 - The suggested 1% AEP or 1 in 100-year flood analysis by Wellington Water is noted as best practice in the PDP but is hypothetical and not proven fact.

- The Council (and by extension Tiaki Wai) misuses and misrepresents feedback to generate the flood hazard overlays, with particular reference to the Social Pinpoint campaign.
- Please see Section 13 for information regarding the 1% AEP event. I note that while it is a hypothetical event, the science behind the calculation of the rainfall values applied is well established and adopted globally. I do not believe there is currently better information available to use for predicting extreme events.
- The Social Pinpoint campaign was set up specifically to collect information for use in validating the hydraulic modelling, and this stated in the introductory pop-up of the website.
- I note also that there is no direct link between the community feedback and the PDP flood hazard overlays.
- The community feedback was used for validating the hydraulic modelling which, once reviewed and accepted, was then used to simulate the extreme event. The outputs of this simulation were then used the hazard classification process, with no reference back to the community feedback during the classification process.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.4 **Anish Punjabi (141) – Ford Road, Manor Park**

- The submitter raises concerns regarding the accuracy of the modelling due to the limitations and assumptions

associated with the models, and their appropriateness for use in the PDP context.

- Please see Section 20.4.
- In addition to the above, it is noted that the predominance of the high flood hazard overlay in Manor Park is due to flooding from the Hutt River, as modelled by GWRC. However, Tiaki Wai modelling also indicates there is potential for flooding originating from the Western Hills above Manor Park.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.5 Antony and Penelope Orbell (281) - 3 Ngaio St, Eastbourne

- The submitter raises a broad range concerns and queries. Issues relating to the flood hazard overlays are listed below:
 - Flooding is caused by stormwater infrastructure deficiencies rather than natural flooding.
 - Future infrastructure improvements should be reflected in the overlays.
 - Property-specific mitigation has not been recognised.
- Please see Sections 20.3, 20.6, and 20.7.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.6 Argosy Property No.1 Limited (237) - Various

- The submitter does not request any changes to the flood hazard overlays.
- I recommend the flood hazard overlays remain unchanged at the locations specified in the submission.

22.7 Barbara Sullivan (351) - 89 Oroua Street, Eastbourne

- The submitter raises a broad range concerns and queries. Issues relating to the flood hazard overlays are listed below:
 - Flooding is caused by stormwater infrastructure deficiencies rather than natural flooding.
 - The hydraulic models contain assumptions and limitations that reduce reliability.
 - Future infrastructure improvements should be reflected in the overlays.
 - Property-specific mitigation has not been recognised.
- Please see Sections 20.3, 20.4, 20.6, and 20.7.
- In addition to the above, the submitter has also noted that “the relevant High Flood Hazard overlay does not accord with zones illustrated on the map titled “91 Oroua Street” on page 59 of “The East Harbour

Stormwater Catchment – Model Build Report” prepared for HCC by Wellington Water (“the WW Report”).

- This is because the modelled flooding shown in the report image referenced relates to simulated flooding during the February 2004 event, which is a smaller event than what has been simulated to generate the flood hazard maps.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.8 Beverley and Oliver Driver (242) - 57A Hautana Street, Woburn

- The submitter opposes the high flood hazard overlay mapped on their property, highlighting local topography and no previous flooding
- Please see Sections 20.1 and 20.2.
- Further, the high flood hazard overlay is present on the submitter’s property due to the stream (and represented stream corridor) at the rear of the property.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

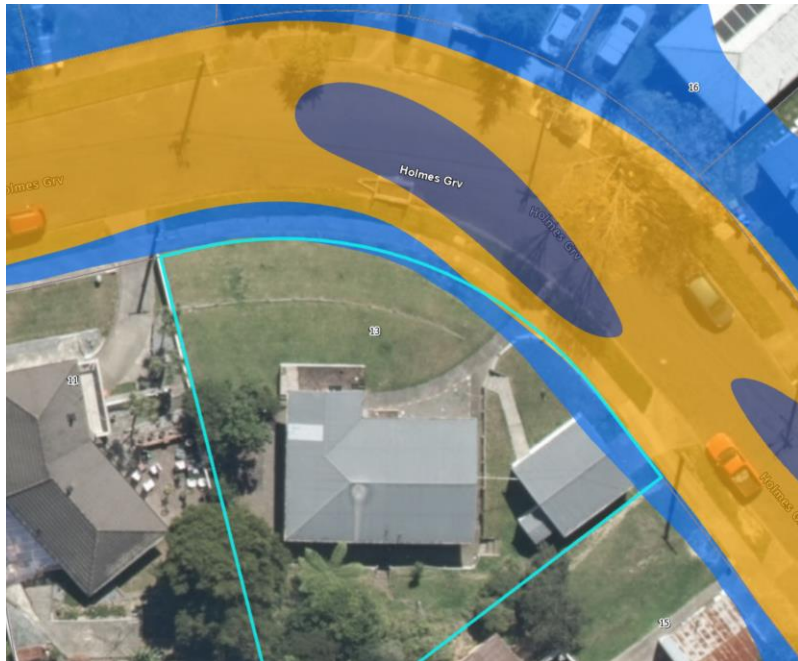
22.9 Bhuvi Punjabi (144) – Ford Road, Manor Park

- The submitter raises concerns regarding the accuracy of the modelling due to the limitations and assumptions associated with the models, and their appropriateness for use in the PDP context.

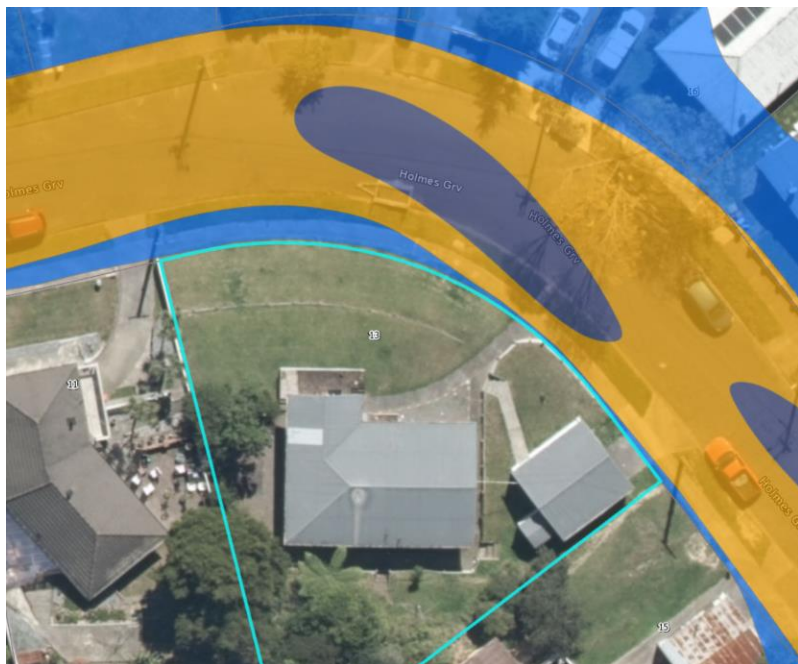
- Please see Section 20.4.
- In addition to the above, it is noted that the predominance of the high flood hazard overlay in Manor Park is due to flooding from the Hutt River, as modelled by GWRC. However, Tiaki Wai modelling also indicates there is potential for flooding originating from the Western Hills above Manor Park.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.10 Brett Osborne (464) - 13 Holmes Grove, Naenae

- The submitter supports with amendments the flood hazard overlays in the vicinity of their property. They requested that the overlays are refined based on the site photographs showing a retaining at the edge of the property would contain the flooding within the road parcel.
- I have reviewed the location of the property in the modelling and the flood hazard overlays and note that property is intersected by the flood hazard overlays due to the processing of the flood hazard overlays to smooth them, rather than modelled flooding extending onto the property.
- As a result, and with consideration of the site photographs, I believe it is acceptable to edit the flood hazard overlays to sit within the road parcel at this location.
- Below are images of the current and proposed flood hazard overlays



Current PDP flood hazard overlays (464)



Proposed update to PDP flood hazard overlays (464)



Legend for the flood hazard overlays

22.11 Chakrin Gangodawila (88) - 11 Martha Turnell Cres, Manor Park

- The submitter raises multiple concerns. Issues relating to the flood hazard overlays are listed below:
 - Flooding is caused by stormwater infrastructure deficiencies rather than natural flooding.
 - The hydraulic models contain assumptions and limitations that reduce reliability.
- Please see Sections 20.3 and 20.4.
- In addition to the above, the submitter has also noted the flood risk associated with the Hutt River and work done to mitigate this risk.
- I am unable to provide comment on this as the modelling and mitigation work has been carried out by GWRC, and I am not familiar with it. However, Tiaki Wai modelling also indicates there is potential for flooding originating from the Western Hills above Manor Park.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.12 Charmi Mistry (392) - 2/1 Helvetia Grove, Naenae

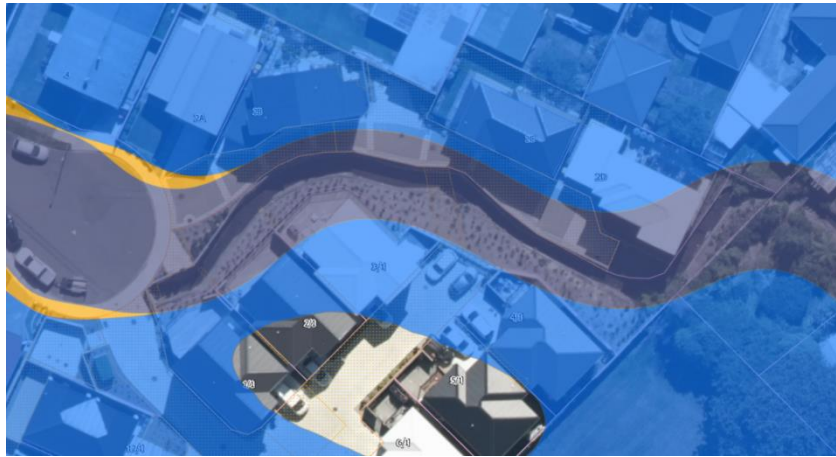
- The submitter opposes the flood hazard overlays mapped on their property and seeks reconsideration and

removal of the overlays, as the property was developed recently and the house was completed in 2024. As a result, it is unlikely any flood mitigation work completed as part of the development has been included in the modelling.

- I have reviewed the property in the flood modelling and the hazard overlays and can confirm the development work is not included in the model.
- I also visited the location, view the property and stream from the street and start of the driveway, as well as assessing the upstream catchment above the development.
- Following the site visit I believe it is acceptable to re-delineate the stream corridor to constructed extent as requested in the submission. However, I do not believe removal of the low flood hazard overlay is appropriate as there is no obvious mitigation in place to stop the shallow flooding arriving at the development from the upstream catchment.
- I do note however, that given the age of the development, the constructed buildings will likely have been required to meet a minimum floor which will set them above modelled flooding. However, the adopted modelling approach does not generally include or account for the presence residential buildings⁴.

⁴ Regional Stormwater Hydraulic Modelling Specifications. Wellington Water, 2023

- Below are images of the current and proposed flood hazard overlays.



Current PDP flood hazard overlays (392)



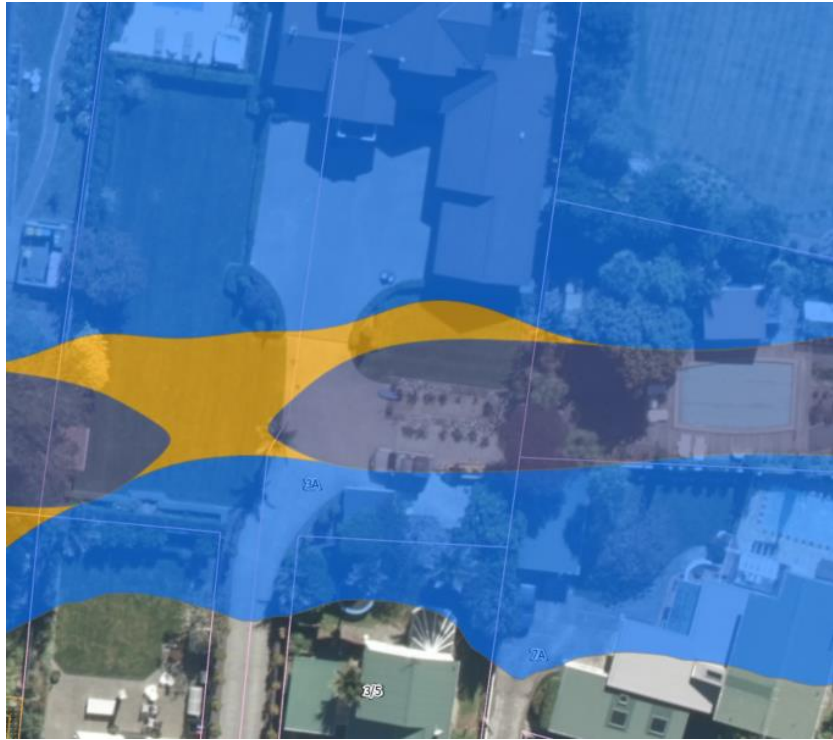
Proposed update to PDP flood hazard overlays (392)



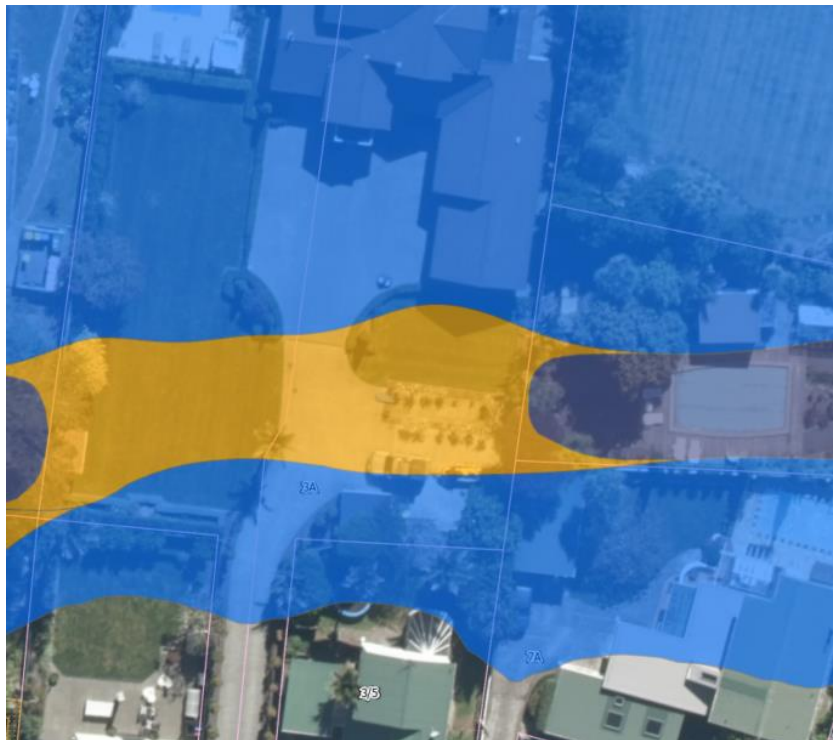
Legend for the flood hazard overlays

22.13 **Chris Moore (448) - 3A Nikau Grove, Woburn**

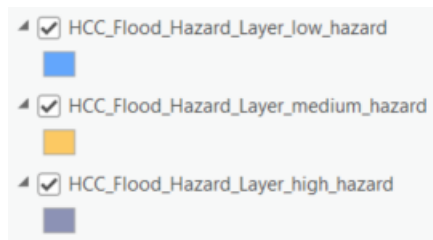
- The submitter opposes the flood hazard overlays mapped on their property for the following reasons.
 - Lack of historical flooding.
 - Climate change assumptions are excessive or unrealistic.
 - Future infrastructure improvements should be reflected in the overlays.
- Please see Sections 20.1, 20.5, and 20.7 for commentary on these issues.
- I have reviewed the modelling at the submitter's property, and the flood hazard overlays have been mapped as they are because of surface flow arriving from the east (originating from Ludlam Cr and beyond) and the presence of a stream corridor on the property.
- However, I visited the property and found the stream corridor was no longer present and the channel had been piped beneath the property.
- I recommend the removal the high flood hazard overlay from the submitter's property, replacing it with the medium flood hazard overlay.
- Below are images of the current and proposed flood hazard overlays.



Current PDP flood hazard overlays (448)



Proposed update to PDP flood hazard overlays (448)



Legend for the flood hazard overlays

22.14 Christine Potaka-Kelly (84) – Manor Park

- The submitter notes that their property or locality has not previously been affected by flooding.
- Please see Section 20.1.
- In addition to the above, it is noted that the predominance of the high flood hazard overlay in Manor Park is due to flooding from the Hutt River, as modelled by GWRC. However, Tiaki Wai modelling also indicates there is potential for flooding originating from the Western Hills above Manor Park.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.15 Christopher John McHaffie and Mary Anne Malone (278) - 9 Ngaio St, Eastbourne

- The submitter raises a broad range concerns and queries. Issues relating to the flood hazard overlays are listed below:
 - Flooding is caused by stormwater infrastructure deficiencies rather than natural flooding.

- Future infrastructure improvements should be reflected in the overlays.
 - Property-specific mitigation has not been recognised.
- Please see Sections 20.3, 20.6, and 20.7.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.16 Craig Davis (112) – 10 Campbell St, Petone

- The submitter supports with amendment the flood hazard overlays mapped at their property; however, they disagree with the specific hazard classifications and approach the method of classification. They note the property is built on well-draining ground and has no history of flooding.
- The modelling and hazard classification approach used to develop the flood hazard overlays is discussed in Sections 11 to 17, and commentary on the lack of historical flooding is provided in Section 20.1.
- I have reviewed the flood hazard overlays and modelling results at submitter's property and note the high and medium flood hazard overlays are present due to the significant flood depths modelled at this location.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.17 Damon Smith (27) - 99 Oroua St, Eastbourne

- The submitter opposes the high flood hazard overlay on their property, noting there is an error in the relevant model build report (flooding report).
- The community feedback discussed in the reporting was used for validating the hydraulic model which, once reviewed and accepted, was then used to simulate the extreme event. The outputs of this simulation were then used the hazard classification process, with no reference back to the community feedback during the classification process.
- Further, I have reviewed the error that has been described alongside the model report and the mapped flooding and do not believe it would have a material impact on the model output.
- The submitter's property would still be affected by flooding during the simulated event if the reporting error was corrected and taken in account in the model validation.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.18 Dave and Michaela O'Donovan (37)

- The submitter opposes the high flood hazard overlay mapped across most of the residential areas between Jackson St and the Esplanade, and requests the classification is reduced to medium.

- They note the high hazard classification is a result of the projected sea-level rise and the cascading effect of raised groundwater reducing the effectiveness of the stormwater network.
- They also highlight that the Council has recognised this and is looking to address when needed with future pump stations.
- As noted in Section 20.7 the modelling cannot account for future infrastructure improvements until they are constructed.
- Similarly, the modelling does not allow a reduction in network effectiveness due to groundwater, and as discussed in Section 20.3 applies a fully functioning system.
- Therefore, while the high flood hazard overlay present over most of the residential areas between Jackson St and the Esplanade, is likely in part due to the projected sea-level rise, it is not due to a reduction in the network's effective because of groundwater. Rather it would be due to the network's inability to drain out at the coast because of the high sea-level.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.19 David James Clode (227) - 26 Kowhai Street, Naenae

- The submitter opposes the flood hazard overlays mapped on their property because they will restrict their ability to add value to their property, and there has historically not been flooding at their location.

- A review of the model results at the submitter's property shows that during the simulated design event, the modelling generates results that fall within the High Hazard category of Flood Hazard Planning Guidelines.
- Please see Section 20.1 in relation to the non-occurrence of historical flooding.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.20 David Surrey (427) - Various

- The submitter requests a review of the climate change approach adopted in the modelling for the flood hazard overlays.
- It is acknowledged that the use of a different, less extreme, RCP scenario would reduce the area impacted by the flood hazard overlays. However, Section 20.5 (and Section 14) provides an explanation of the why the adopted RCP scenario was selected.
- I do not hold a position regarding the submitter's request to adopt a different RCP scenario.

22.21 Dieter Engel (475)

- The submitter supports with amendment the rainfall predictions noted in Natural Hazards chapter of the PDP. However, they asked for improved transparency on how the 35% rainfall increase was derived.
- This information is provided in Section 14.

22.22 Don Setungamudalige (151) - Martha Turnell Grove, Manor Park

- The submitter supports with amendments the flood hazard overlays in the locality of the property. However, they raise the concerns listed below:
 - Flooding is caused by stormwater infrastructure deficiencies rather than natural flooding.
 - The hydraulic models contain assumptions and limitations that reduce reliability.
- Please see Sections 20.3 and 20.4.
- In addition to the above, the submitter has also noted the flood risk associated with the Hutt River and work done to mitigate this risk.
- I am unable to provide comment on this as the modelling and mitigation work has been carried out by GWRC, and I am not familiar with it. However, Tiaki Wai modelling also indicates there is potential for flooding originating from the Western Hills above Manor Park.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.23 Edward and Sarah-Kaye Oosterbaan (114) - 5 Herbert St, Melling

- The submitter opposes the high hazard flood hazard overlay mapped on their property primarily because they

consider the climate change assumptions excessive or unrealistic.

- Section 20.5 (and Section 14) provides an explanation of the why the adopted RCP scenario was selected.
- Further, while the NZ SeaRise method is still under peer review, it was (and possibly is still) the best information available for projecting sea-level rise at a given location.
- The submitter also recommends retaining the GWRC “inundation maps as the authority for high natural hazard designation”. It is not clear which mapping this refers to so I cannot provide comment on it. However, the PDP flood hazard overlays include modelling of the Hutt River undertaken by GWRC. When the flood hazard results from this modelling is considered independent of the Tiaki Wai stormwater modelling, the submitter’s property is still affected by the high flood hazard category.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.24 EPG Davies Holding Company Limited (107) - 27 Cornish St, Korokoro

- The submitter raises multiple concerns and opposes the high hazard flood hazard overlay mapped on their property. In support of their opposition, the submitter states that no evidence to support the zoning has been provided, and that flooding is caused by stormwater

infrastructure deficiencies, and can be mitigated by channel and culvert maintenance.

- Alongside the information provided in Section 20.3, a review of the flood modelling in the vicinity of the property identified by the submitter shows that during the simulated design event, the modelling generates results that fall within the High Hazard category of Flood Hazard Planning Guidelines.
- It is also noted that reporting on the nature and development of the hydraulic modelling and the hazard classification approach were made available at the time of the notification of the PDP.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.25 Fiona Christeller (375) - 18 & 18A Taungata Road, York Bay

- The submitter opposes the flood hazard overlays mapped on their property as they do not consider them to be an accurate representation of what would occur if the stream was to flood.
- Please see Sections 1.2 and 1.4 for information how the modelling accounts for local topography and the limitations associated with the modelling.
- I have reviewed the location of the submitter's property relative to the flood hazard overlays and note there is an error in the flood hazard overlays at this location as they do not include the full extent of the stream described in the submission and represented in the model (see Section 21).

- I recommend the flood hazard overlays are updated to include the missing stream corridors. In the interim, I recommend the flood hazard overlays remain unchanged.
- Below are images of the current flood hazard overlays and the recommended update including stream corridors.



Current PDP flood hazard overlays (375)



Recommended inclusion of East Harbour stream corridors in the PDP flood hazard overlays (375)



Legend for the flood hazard overlays

22.26 **Grant and Kristin Gunn (Trustees Of The Gunn Family Trust) (369, F07)) - 95 Oroua St, Eastbourne**

- The submitter opposes the flood hazard overlays mapped on their property and locality for the following reasons:
 - Flood overlay does not reflect local topography or site conditions.

- Flooding is caused by stormwater infrastructure deficiencies rather than natural flooding.
 - The hydraulic models contain assumptions and limitations that reduce reliability.
 - Property-specific mitigation has not been recognised.
 - Future infrastructure improvements should be reflected in the overlays.
 - Flood hazard boundaries appear inaccurate.
- Please see Sections 20.2, 20.3, 20.4, 20.6, 20.7, and 20.8.
 - In addition to the concerns raised above, the submitter also asserts the following:
 - The model is not designed to assess coastal processes.
 - The purpose of the model is infrastructure planning, not zoning.
 - The model build report recommends further verification.
 - The 1% AEP event analysis lacks context.
 - The submitter is correct in noting the model is not designed to assess coastal processes, and it is not do this. The flood hazard overlays have been derived from

modelling that simulates extreme rainfall in the Hutt City stormwater catchments.

- The tidal boundary in the modelling (which is adjusted for projected sea-level rise due to climate change) is included because all the stormwater networks, ultimately, drain towards the sea and it is important to assess the impact of high sea-levels impeding the ability of the stormwater network to discharge to the sea.
- Regarding the purpose of the modelling, the 2nd paragraph of the Model Build report states that “the model is to be used for the generation of flood hazard maps”. These maps have then been used for the PDP flood hazard overlays.
- Regarding the report recommending further verification, the purpose of this statement is to highlight that the model has been developed as best as possible within the constraints noted in Section 20.4, however if the model is to be used for site or asset specific investigations, then the model information should be cross checked at the given location.
- Please see Section 13 for information on the 1% AEP event.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.27 Greater Wellington Regional Council (452, F38)

- The submitter has requested the inclusion of an additional flood hazard overlay extent covering Te Awa Kairangi/Hutt River within the corridor of the stopbanks.

- The additional overlay extent is representative of the high hazard within the river corridor. Inclusion is consistent with the GWRC Flood Hazard Planning Guidance which describe River Corridors as high hazard.
- I support the submission.

22.28 Hamish Hill (240) - 69 Cedar Street, Maungaraki

- The submitter supports with amendment the flood hazard overlays, requesting a review of the method of assessment for flood hazard.
- Details regarding the hydraulic modelling and hazard classification approach can be found in Sections 11 and 16.
- A review of the submitter's property relative to the flood hazard overlays shows the property is impact by low and high hazard.
- The high hazard is associated with the stream corridor that has been mapped in the gully immediately adjacent to their property. Rules associated with the high flood hazard overlay apply only to the land covered by the stream corridor/high hazard extent.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.29 Ian and Raylene Caddis (433) - 618 Marine Drive Days Bay

- The submitter raises multiple concerns listed below regarding the flood hazard overlays:

- Flooding is caused by stormwater infrastructure deficiencies rather than natural flooding.
 - The hydraulic models contain assumptions and limitations that reduce reliability.
 - Future infrastructure improvements should be reflected in the overlays.
- Please see Sections 20.3, 20.4, and 20.7.
 - The submitter has also noted that the relevant model build report contains multiple errors. This is unfortunate; however, it does not have an impact of the flood hazard overlays.
 - I note the report was in draft at the time of the PDP notification.
 - I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.30 Ian Carson and Lynette Carson (120) - 4 Redvers Drive, Belmont

- The submitter opposes the high flood hazard overlay mapped on their property due to a lack of historical flooding, particularly since the local stormwater system was upgraded.
- Section 20.1 provides commentary on the lack of historical flooding.

- I am not familiar with the work on the stormwater network, however, given the dates provided in the submission it is likely that any mitigation work will have been included in the modelling, which was begun in 2021.
- However, following a review of the property and the surrounding area and the hydraulic modelling, the area covered by the high flood hazard overlay does not appear to be materially different from the surrounding areas, and there is no stream corridor present. I believe it would be acceptable to change it to medium hazard.
- I recommend the high flood hazard overlay on the submitter's property and adjacent property is subsumed into the surround medium flood hazard overlay.
- Below are images of the current and proposed flood hazard overlays.



Current PDP flood hazard overlays (120)



Proposed update to PDP flood hazard overlays (120)



Legend for the flood hazard overlays

22.31 **Jacob McInteer (108) - 42 Bolton St, Petone**

- The submitter opposes in the part the flood hazard overlays, and requests that the high hazard flood hazard overlay on their property is changed to medium hazard. They recommend site specific surveying of ground levels to determine the suitability of the high hazard classification.
- The submitter has also provided a survey plan with their submission.
- The high hazard classification at the submitter's property is due to high modelled flood depths (>0.5m) at the rear of the property. Both the provided survey plan and the modelled topography show a 0.5m difference in ground

levels across the property, which is reflected in the change from medium hazard to high hazard on the property.

- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.32 Jason Westerby (16) - 55 Laings Road, Hutt Central

- The submitter raises the concern that the flood hazard overlays mapped on their property do not reflect local topography or site conditions.
- Alongside the explanation provided in Section 20.2, it is noted that while the model topography may not fully represent the full increase in ground level at the rear of the submitter's property, a general increase is present in the modelled topography. This is reflected in extents of high and medium hazard overlays which skirt around the edges of the rear of the property. The modelling indicates there is a low point along the boundary of 55 and 57 Laings Road where surface water flow is concentrated when the culvert beneath the property is overtopped. Modelling indicates the surface water extends onto the property to varying degrees, reflected in the gradation of hazard from high to low across the property.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.33 Jennifer Gray (277) - 272 Muritai Road, Eastbourne

- The submitter raises a broad range concerns and queries. Issues related to the flood hazard overlays are listed below:
 - Flooding is caused by stormwater infrastructure deficiencies rather than natural flooding.
 - Future infrastructure improvements should be reflected in the overlays.
 - Property-specific mitigation has not been recognised.
- Please see Sections 20.3, 20.6, and 20.7.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.34 Jeremy Lovell-Smith (486) - 93 Oroua St, Eastbourne

- The submitter raises a broad range concerns and queries. Issues related to the flood hazard overlays are listed below:
 - Flooding is caused by stormwater infrastructure deficiencies rather than natural flooding.
 - The hydraulic models contain assumptions and limitations that reduce reliability.

- Future infrastructure improvements should be reflected in the overlays.
 - Property-specific mitigation has not been recognised.
- Please see Sections 20.3, 20.4, 20.6, and 20.7.
- In addition to the above, the submitter has also noted that “the relevant High Flood Hazard overlay does not accord with zones illustrated on the map titled “91 Oroua Street” on page 59 of “The East Harbour Stormwater Catchment – Model Build Report” prepared for HCC by Wellington Water (“the WW Report”)”
- This is because the modelled flooding shown in the report image referenced relates to simulated flooding during the February 2004 event, which is a smaller event than what has been simulated to generate the flood hazard maps.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.35 Joe Jeffries (514)

- The submitter opposes applying a ‘high’ hazard ranking based on a 1.59m sea level rise because it does not reflect a high risk based on probability today.
- Further, the submitter recommends deleting the “High, Medium and Low categorisations for overlays and instead rename the natural hazard overlays around the information they are based on.”

- Please see Section 20.5 for comments on the adopted climate change projection, and Section 16 for information on the flood hazard classification approach.
- I do not hold a position regarding the submitter's request to adopt a different RCP scenario or hazard classification approach.

22.36 Joerg Bruemmer (110) - 94 Pomare Rd, Tirohanga

- The submitter opposes the high flood hazard overlay that has been mapped on their property because the stream does not present a risk to their home.
- The mapped high flood hazard overlay is present on the submitter's property is due to the presence of a stream (and associated stream corridor). The high hazard overlay is only applicable to the land covered by the overlay.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.37 John Burroughs (499) - 97 Norton Park Grove, Waterloo

- The submitter opposes the high flood hazard overlay that has been mapped on their property because the stream does not present a risk to their home.
- A review of the modelling shows flow stays within the stream corridor during the simulate extreme event. However, the presence of the stream corridor results in the high hazard classification.

- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.38 John Wadham (122) - 23 Pomare Road, Tirohanga

- The submitter has highlighted previous work by Tiaki Wai (previously Wellington Water) in relation to draft district plan flood hazard overlays at the submitter's property.
- The submitter challenged the Draft District Plan flood hazard overlays in 2023. A visit to the submitter's property indicated the topography applied in the modelling lacked detail due to LiDAR limitations in penetrating dense vegetation.
- Additionally, it was found that the subcatchment loading approach for the location was not suitable.
- The model topography and subcatchment hydrology was updated in the model following the site visit, which removed flooding from the property in the model. As a result, the property was not covered by any flood hazard overlay in the PDP as notified.
- I do not hold a position regarding the submitter's opposition to the slope hazard overlays as it is not my expertise.

22.39 Jon Harris (457) - 404 Muritai Rd, Eastbourne

- The submitter raises multiple concerns. Issues related to the flood hazard overlays are listed below:
 - There is no history of flooding at their property.

- The hydraulic models contain assumptions and limitations that reduce reliability.
 - Property-specific mitigation has not been recognised.
- Please see Sections 20.1, 20.4, and 20.6.
- In addition to the above, the submitter also comments that there was no flooding at their property in the winter of 2022, where all three winter months received rainfalls over 150% above the standard, respective monthly averages.
- It is noted that the modelled event used as the basis of the flood hazard overlays is a discrete, extreme storm event, that does not explicitly consider seasonal impacts on how wet or dry the modelled area is.
- Further, the percentage increases described in the submission are not directly comparable to the 35% uplift applied to the modelled rainfall event. The increases described in the submission relate to monthly and seasonal rainfall totals, whereas the model event is a discrete 12-hour rainfall event with an AEP of 1%, that could occur at any time during the year.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

**22.40 Julius Korent and Joanne Korent (199) - 56 Mary Huse
Grove, Manor Park**

- The submitter raises multiple concerns. Issues related to the flood hazard overlays are listed below:
 - Flooding is caused by stormwater infrastructure deficiencies rather than natural flooding.
 - The hydraulic models contain assumptions and limitations that reduce reliability.
- Please see Sections 20.3 and 20.4.
- In addition to the above, the submitter has also noted the flood risk associated with the Hutt River and work done to mitigate this risk.
- I am unable to provide comment on this as the modelling and mitigation work has been carried out by GWRC, as I am not familiar with it. However, Tiaki Wai modelling also indicates there is potential for flooding originating from the Western Hills above Manor Park.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.41 Kate Harris (454) - 404 Muritai Rd, Eastbourne

- The submitter raises multiple concerns. Issues related to the flood hazard overlays are listed below:
 - There is no history of flooding at their property.

- The hydraulic models contain assumptions and limitations that reduce reliability.
 - Property-specific mitigation has not been recognised.
- Please see Sections 20.1, 20.4, and 20.6.
- In addition to the above, the submitter also comments that there was no flooding at their property in the winter of 2022, where all three winter months received rainfalls over 150% above the standard, respective monthly averages.
- It is noted that the modelled event used as the basis of the flood hazard overlays is a discrete, extreme storm event, that does not explicitly consider seasonal impacts on how wet or dry the modelled area is.
- Further, the percentage increases described in the submission are not directly comparable to the 35% uplift applied to the modelled rainfall event. The increases described in the submission relate to monthly and seasonal rainfall totals, whereas the model event is a discrete 12-hour rainfall event with an AEP of 1%, that could occur at any time during the year.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.42 Katrina Jacobsen (398) - 7 Wyndrum Ave, Waterloo

- The submitter requests that the high flood hazard overlay mapped on their property be changed to

medium hazard because the stream is narrow and does not present a risk to their home.

- A review of the modelling shows flow stays within the stream corridor during the simulate extreme event. However, the presence of the stream corridor results in the high hazard classification.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.43 Kelvin Sanderson (95) - 129 Cuba St, Petone

- The submitter opposes the high flood hazard overlay that has been mapped on their property.
- The high flood hazard overlay at the submitter's property is due to high modelled flood depths (>0.5m) at, and in the vicinity of, their property.
- The submitter also raises the possibility of future hazard mitigation work. Please see Section 20.7.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.44 Kris Philip Connell (F03) - 269 Muritai Rd, Eastbourne

- The submitter has made a submission in support of submission 380 and F09 by Andrew Robinson and Robyn Robinson.
- Please see Section 22.3.

22.45 Kulbushan Joshi (2) – 3 Hastings Gr, Wainuiomata

- The submitter opposes the low flood hazard overlay mapped on the specified property. No reason is given.
- I have reviewed the flood hazard overlays at the submitter's property, and the low flood hazard overlay is present due to the local topography, which indicates overland flow would drain through the site from the hillside above Hastings Gr.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.46 Lars Schmidt (480) - 227 Marine Drive, Lowry Ba

- The submitter raises multiple concerns. Issues related to the flood hazard overlays are listed below:
 - Flooding is caused by stormwater infrastructure deficiencies rather than natural flooding.
 - The hydraulic models contain assumptions and limitations that reduce reliability.
- The submitter also asserts that the flood zone layout "is arbitrary at best as it is against hydrodynamic principles".
- Alongside Sections 20.3 and 20.4, I can also confirm that the modelling used to generate data for the flood hazard overlays has been completed using specialist hydrodynamic modelling software.

- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.47 Laura Skilton (314) - Petone

- The submitter notes that there is a lack of a definition for the “1% Flood Annual Exceedance Probability level”, suggests alternatives considerations for hazard mapping.
- Please see Section 13 for information on the 1% AEP event.
- The approach of applying design rainfall for developing the flood hazard overlays is because flooding in Lower Hutt is driven by river flows or extreme rainfall over the district. The probability of a given river flow or rainfall occurring in a given year is calculated through frequency analyses of available recorded flow and rainfall data.
- I recommend the use of the 1% AEP event in modelling for the flood hazard overlays is retained.

22.48 Lin Streefkerk (297) – Manor Park

- The submitter notes that their property or locality has not previously been affected by flooding.
- Please see Section 20.1.
- In addition to the above, it is noted that the predominance of the high flood hazard overlay in Manor Park is due to flooding from the Hutt River, as modelled by GWRC. However, Tiaki Wai modelling also indicates there is potential for flooding originating from the Western Hills above Manor Park.

- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.49 Lisa Bowker (17) - 438 Muritai Road, Eastbourne

- The submitter opposes the use of flood hazard overlays in the PDP, noting that there has historically been no flooding at their property.
- Please Section 20.1.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.50 Lisa Caddis (252) - 297 Muritai Road, Eastbourne

- The submitter raises multiple concerns. Issues related to the flood hazard overlays are listed below:
 - There is no history of flooding at their property.
 - Flooding is caused by stormwater infrastructure deficiencies rather than natural flooding.
- Please see Sections 20.1 and 20.3.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.51 Louise Kay Cameron (279) - 13 Karamu Street, Eastbourne

- The submitter raises a broad range concerns and queries. Issues related to the flood hazard overlays are listed below:
 - Flooding is caused by stormwater infrastructure deficiencies rather than natural flooding.
 - Future infrastructure improvements should be reflected in the overlays.
 - Property-specific mitigation has not been recognised.
- Please see Sections 20.3, 20.6, and 20.7.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.52 Lynn Kelleher (280) - 5 Karamu Street, Eastbourne

- The submitter raises a broad range concerns and queries. Issues related to the flood hazard overlays are listed below:
 - Flooding is caused by stormwater infrastructure deficiencies rather than natural flooding.
 - Future infrastructure improvements should be reflected in the overlays.
 - Property-specific mitigation has not been recognised.
- Please see Sections 20.3, 20.6, and 20.7.

- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.53 **Manor Park and Haywards Residents Community Incorporated Society (377, F10) - 30 Benmore Crescent Manor Park**

- The submitter opposes the flood hazard overlays mapped over 30 Benmore Crescent because the modelling does not account for the significant earthworks that have taken place at the location.
- A comparison of the modelled topography at 30 Benmore Cr against a DEM generated from the 2025 LiDAR survey confirms the modelling does not account the new earthworks, which may materially change modelled flooding across the site.
- I have reviewed a flood modelling report⁵ covering work completed by an independent party for the site.
- The flood modelling carried out for the site in 2022 uses RCP 8.5 to 2100 to increase rainfall due to climate change (which the author notes was acceptable at the time of the modelling) and a concurrent flow in the Hutt River of 2300m³/s (0.23% AEP).
- The Tiaki Wai modelling uses the RCP 8.5 to 2130 scenario to increase rainfall due to climate change, and a concurrent flow of 1244m³/s (10% AEP) in the Hutt River.

⁵ *Benmore Crescent Proposed Industrial Park Flood Assessment*. River Edge Consulting Limited, 2022

- While the Hutt River flow is significantly lower in the Tiaki Wai model, the higher rainfall (due to the climate change allowance) results in greater flows from the Dry Creek Catchment (55m³/s) relative to the independent modelling for the site (30m³/s).
- The Tiaki Wai modelling also shows the area receives overland flow from two adjacent catchments to the northeast; the catchment above the Holcim Ready-Mix Concrete site, and the Haywards Hill. These do not appear to be included in the flood modelling for 30 Benmore Cr.
- As a result, the independent flood modelling is potentially underestimating the flow arriving at the site.
- However, as noted above, the Tiaki Wai modelling does not take into account the earthworks that have taken place, so it is currently not possible to establish if it is acceptable to remove the flood hazard overlays from the site (with the exception of the stream corridor for Benmore Stream).
- Acknowledging the earthworks that have taken place, I recommend changing all the flood hazard overlays within the site to the low flood hazard overlay (with the exception of the stream corridor for Benmore Stream) until the Tiaki Wai modelling can be updated to include the site works or the independent modelling is updated to include the higher rainfall, and adjacent catchments.

22.54 Mark Blackham (450) - 396 Muritai Road, Eastbourne

- The submitter opposes the medium flood hazard overlay mapped on their property due to a broad range of

concerns. Issues related to the flood hazard overlays are listed below:

- There is no history of flooding at their property, or limited historical basis, that provides compelling evidence for this overlay on the submitter's property.
 - No accurate future modelling that provides compelling evidence for this overlay on the submitter's property. The hydraulic models contain assumptions and limitations that reduce reliability.
 - The flood zone outline on the submitter's property bears no resemblance to any historical flooding or the topography of the property.
 - Any surface flooding has been caused by stormwater infrastructure deficiencies rather than natural flooding.
- These issues are addressed in Sections 20.1, 20.2, 20.3, 20.4.
 - Further, a review of the flood hazard overlays at the submitter's property in the context of available topographic contours shows that the nature of the overlays, a high hazard area surrounded by a medium hazard area, itself surrounded by a low hazard area, reflect an area of ponding that would be expected based on the local topography.

- Alongside the common issues listed above the submitter has also highlighted the following points in support of their submission:
 - The suggested 1% AEP or 1 in 100-year flood analysis by Wellington Water is noted as best practice in the PDP but is hypothetical and not proven fact.
 - The Council has undertaken stormwater mitigation work to reduces stormwater flooding in the area.
- Please see Section 13 for information regarding the 1% AEP event. I note that while it is a hypothetical event, the science behind the calculation of the rainfall values applied is well established and adopted globally. I do not believe there is currently better information available to use for predicting extreme events.
- I have undertaken a review of the Council stormwater mitigation work described in the submission and note that the large stormwater drain and pump station are represented in the modelling that has been used to generate output for the flood hazard overlays.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.55 Mark Gunkel and Evangeline Gunkel (7)

- The submitter opposes in part the flood hazard overlays mapped on their property; however, no address has been specified. They have expressed concern regarding the following issues:

- The overlays are based on computer modelling, not site-specific assessments.
 - It is not clear how the hazard classification has been completed.
 - The mapping they have viewed does not distinguish between different levels of hazard.
- Please see the explanatory sections 11 and 16 for commentary on the modelling and flood hazard classification approach. Further, supporting documentation covering the model build and hazard classification process is available from the Council.
- Further, the flood hazard overlays presented in the PDP do distinguish between different levels of hazard; low, medium, and high.
- I acknowledge the limitations and assumptions associated with the hydraulic modelling and the constraints that do not enable site-specific assessments for all locations during the modelling and hazard classification process. Please see Section 20.4.
- Tiaki Wai (previously Wellington Water) and the Council did undertake community engagement sessions with allowed for the public to review the flood modelling output prior to the development of the flood hazard overlays. These sessions, and the information provided them, also provided the opportunity for the public to request property visits to sense check the model results at a given property.

- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.56 **Mary Lynskey and Christopher Lynskey (213) - 2 Cheviot Road, Lowry Bay**

- The submitter opposes the low and medium flood hazard overlays mapped on their property due to flood mitigation they have undertaken (based on Council advice), and stormwater infrastructure work in the catchment above their property.
- Considering the timing of the work described in the submission I expect the outcomes have been included in the modelling (I cannot confirm without more details regarding the work).
- If the outcomes have been included, then the modelled flooding occurs even with these outcomes in place, most likely due to the extreme nature of the modelled rainfall event.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.57 **Michael Kerslake (501) - 12 Ngaio St Eastbourne**

- The submitter raises a broad range concerns and queries. Issues relating to the flood hazard overlays are listed below:
 - Flooding is caused by stormwater infrastructure deficiencies rather than natural flooding.

- Future infrastructure improvements should be reflected in the overlays.
 - Property-specific mitigation has not been recognised.
- Please see Sections 20.3, 20.6, and 20.7.
 - I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.58 Michael Rachlin (232, F04)

- The submitter requests that the flood hazard overlays are amended to clearly identify Overland Flowpaths, Stream Corridors, and Ponding/inundation areas.
- Please see Section 16 for information on the adopted flood hazard classification approach.
- I do not hold a position on the submitter's request.

22.59 Michelle Fisher (489) - 283 Muritai Road, Eastbourne

- The submitter has expressed concern regarding the medium flood hazard overlay mapped on their property, specifically that it may have been developed simply from a review of the topography.
- It is noted that flood hazard overlays shown the property have been developed from modelling results. The modelling undertaken to generate this information is physics based, hydrodynamic modelling. I can confirm that the flood hazard overlays have not been generated from review of the local topography.

- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.60 **Mike Humphrey and Nic Hill (224) - 192 Normandale Road, Normandale**

- The submitter opposes the flood hazard overlay mapped on their property because of the following reasons:
 - They consider the overlay overstates the probability and impact of flooding.
 - The stream on, or adjacent to, their property does not present a risk to their home.
 - The mapping is incorrect at the road upstream of their property.
 - The PDP assumes all stream corridors are at high risk of flooding.
- I have reviewed the flood hazard overlay mapped at the submitter's property, and it is mapped due to the presence of the stream (and associated stream corridor) as is confirmed by the submission.
- Stream corridors represent a zone of high hazard due to the potential for high and/or fast flow, and erosion risk. Rules associated with the high flood hazard overlay apply only to the land covered by the stream corridor/high hazard extent.
- The incorrect mapping on the road upstream of the property is because the culvert beneath the road is not

represented in the model. I am unsure of the reason for this, possibly because information regarding the culvert was not available at the time of the model build.

- If the culvert was present in the model, it may convey all the runoff beneath the road, however runoff would still enter the stream corridor mapped on the property which would remain unchanged.
- I believe the land covered stream corridors should be avoided for development or careful consideration given to work within the corridor. I understand that the rules within the PDP provide the framework to ensure this.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.61 Mukesh Chandra (201) – Manor Park

- The submitter notes that their property or locality has not previously been affected by flooding.
- Please see Section 20.1.
- In addition to the above, it is noted that the predominance of the high flood hazard overlay in Manor Park is due to flooding from the Hutt River, as modelled by GWRC. However, Tiaki Wai modelling also indicates there is potential for flooding originating from the Western Hills above Manor Park.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.62 Natural Hazards Commission (327)

- The submitter has recommended the inclusion of an explanation of freeboard, and consideration of residual risk with regard to natural hazards.
- Section 15 provides an explanation of the Tiaki Wai approach to freeboard in their stormwater hydraulic models.
- The inclusion of freeboard is a consideration of residual flood risk in the context of the stormwater networks.
- The Tiaki Wai stormwater modelling does not account for residual flood risk from Te Awa Kairangi/Hutt River, as it is expected that this covered by GWRC.

22.63 Neha Punjabi (140)

- The submitter raises concerns regarding the accuracy of the modelling due to the limitations and assumptions associated with the models, and their appropriateness for use in the PDP context.
- Please see Section 20.4.
- In addition to the above, it is noted that the predominance of the high flood hazard overlay in Manor Park is due to flooding from the Hutt River, as modelled by GWRC. However, Tiaki Wai modelling also indicates there is potential for flooding originating from the Western Hills above Manor Park.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.64 Nicola Stent and Stuart Stent (393) - 6A Oriental St, Petone

- The submitter opposes the medium and high flood hazard overlays mapped on their property.
- A review of the flood modelling in the vicinity of the property identified by the submitter shows that during the simulated design event, the modelling generates results (depths >0.5m) that fall within the high Hazard category of Flood Hazard Planning Guidelines.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.65 Orlando & Franziska Ravera (459)

- The submitter opposes the high flood hazard overlay that has been mapped on their property because the stream does not present a risk to their home.
- No address is given for the property however, comments in the submission indicate there is a stream on or near their property which will be the cause of the high flood hazard overlay.
- The high hazard overlay is only applicable to the land covered by the overlay.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.66 **Palmer and Cook Developments Ltd (316) - 27 Waterloo Road, Hutt Central**

- The submitter opposes flood hazard overlay that has been mapped on their property.
- A review of the flood modelling at the submitter's property shows that during the simulated design event, the modelling generates results that fall within the medium hazard category of Flood Hazard Planning Guidelines.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.67 **Pamodh Panagoda (154) - 14 Martha Turnell Cres, Manor Park**

- The submitter raises multiple concerns. Issues relating to the flood hazard overlays are listed below:
 - Flooding is caused by stormwater infrastructure deficiencies rather than natural flooding.
 - The hydraulic models contain assumptions and limitations that reduce reliability.
- Please see Sections 20.3 and 20.4.

- In addition to the above, the submitter has also noted the flood risk associated with the Hutt River and work done to mitigate this risk.
- I am unable to provide comment on this as the modelling and mitigation work has been carried out by GWRC, as I am not familiar with it. However, Tiaki Wai modelling also indicates there is potential for flooding originating from the Western Hills above Manor Park.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.68 Patricia Cleland (367) - 8 Cheviot Road, Lowry Bay

- The submitter opposes the high flood hazard overlay mapped on their property, stating the hazard areas “must be interrogated for justification, transparency, and evidence”.
- I believe the modelling approach of Tiaki Wai works to achieve this with the requirement to manage model limitations and assumptions through the processes described in Section 20.4, along with the publication of the model build and hazard classification reporting.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.69 Patsy Jorgensen (208) - 28 Kotari Road, Days Bay

- The submitter opposes the low flood hazard overlay mapped across the upper part of Kotari Rd because of the following reasons.

- A lack of historical flooding.
 - Incorrect mapping of the stream on the stream on the northern side of Kotari Rd and the southern side of their property boundary.
- Please see Section 20.1 for commentary on the lack of historical flooding.
- Regarding the incorrect mapping, I have reviewed the relevant hydraulic model and can confirm there is an error in the flood hazard overlays at this location as they do not include the stream corridors described in the submission and represented in the model (see Section 21). The high flood hazard overlays in the vicinity of Kotari Rd is due to high modelled depths and/or velocity.
- I recommend the flood hazard overlays are updated to include the missing stream corridors. In the interim, I recommend the flood hazard overlays remain unchanged.
- Below are images of the current flood hazard overlays and the recommended update including stream corridors.



Current PDP flood hazard overlays (208)



Recommended inclusion of East Harbour stream corridors in the PDP flood hazard overlays



Legend for the flood hazard overlays

22.70 PBJ Properties Ltd (476) - 23 Fitzherbert St, Petone

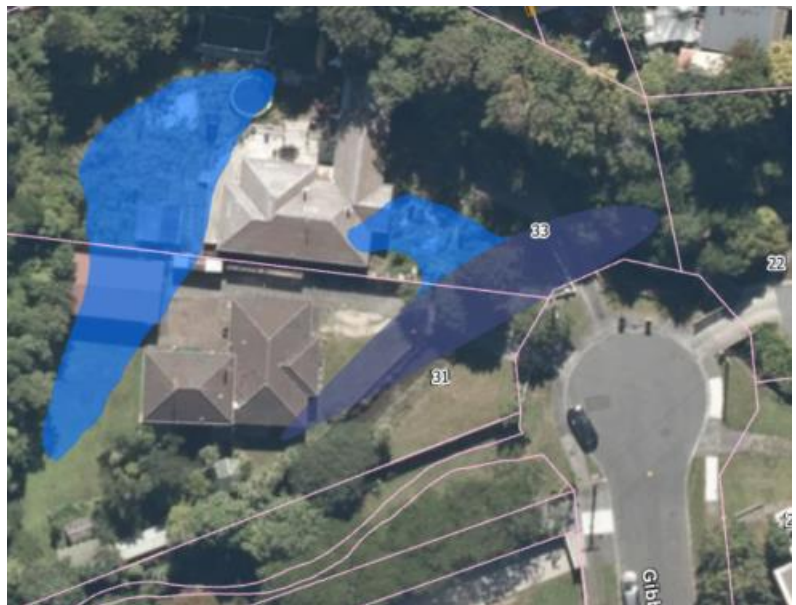
- The submitter opposes the high flood hazard overlay area on their property, asking what the documented evidence is for the decision to categorise the area as such, and why these specific areas are targeted.
- The extent of high flood hazard overlay has been set by hydraulic modelling and the Flood Hazard Planning Guidelines, both of which have associated documentation published for them. Further, areas have not been targeted, but rather have been identified through hydraulic modelling.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.71 Peter Borley (145) -31 Gibbs Crescent, Wainuiomata

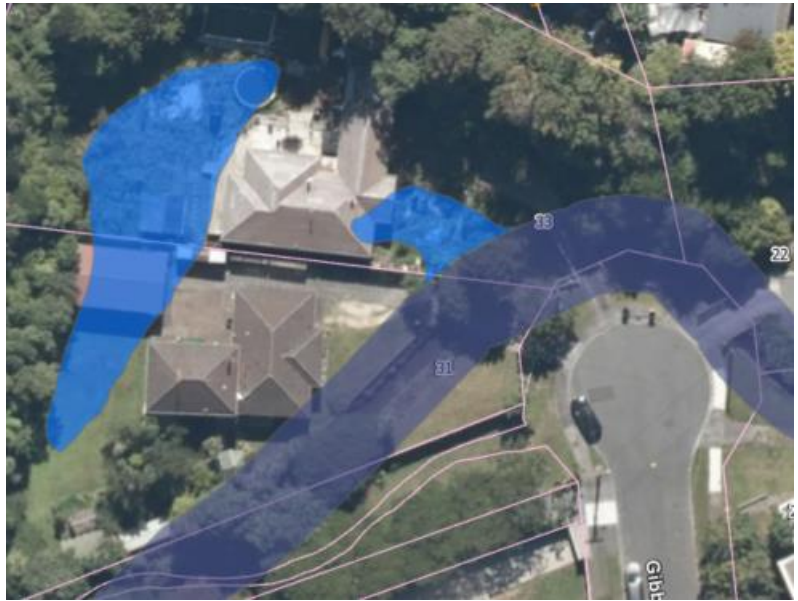
- The submitter opposes the flood hazard overlays mapped on their property as previous work on the stream by the Council has been successful to date in mitigating flood effects.
- I am not familiar with the work on the stream by the Council, however, given the dates provided in the submission it is likely that any mitigation work will have

been included in the modelling, which was begun in 2018.

- However, I have reviewed the location of the submitter's property relative to the flood hazard overlays and note there is an error in the flood hazard overlays at this location as they do not include the full extent of the stream described in the submission (see Section 21).
- I recommend the flood hazard overlays are updated to include the missing stream corridors. In the interim, I recommend the flood hazard overlays remain unchanged.
- Below are images of the current flood hazard overlays and the recommended update including stream corridors.



Current PDP flood hazard overlays (145)



Recommended inclusion of a stream corridor in the PDP flood hazard overlays (145)



Legend for the flood hazard overlays

22.72 Philip King (125) - 238 Marine Drive, Lowry Bay

- The submitter notes that their property or locality has not previously been affected by flooding.
- Please see Section 20.1.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.73 PTL Trust (397) - 212 Marine Drive, Lowry Bay

- The submitter notes that their property or locality has not previously been affected by flooding.
- Please see Section 20.1.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.74 Rafael Gonzalez-Montero (175) – Manor Park

- The submitter notes that their property or locality has not previously been affected by flooding.
- Please see Section 20.1.
- In addition to the above, it is noted that the predominance of the high flood hazard overlay in Manor Park is due to flooding from the Hutt River, as modelled by GWRC. However, TiakiWai modelling also indicates there is potential for flooding originating from the Western Hills above Manor Park.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.75 Richard Kelly (463) - 10 Bunratty Grove, Wainuiomata

- The submitter opposes the flood hazard overlays mapped on their property because of a lack of historical flooding and the representation of a small stormwater drain as being high hazard.
- Section 20.1 provides commentary on the lack of historical flooding.

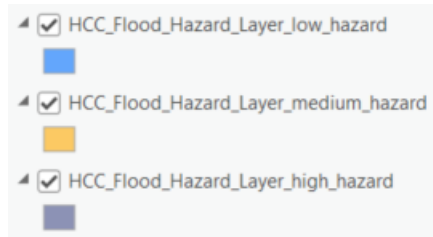
- I have reviewed the submitter's property in the flood model and the flood hazard overlays.
- The high flood hazard overlay is only present because the short stormwater drain in the reserve adjacent to the submitter's property has been designated as a stream corridor.
- I agree with the submitter that this drain should not represent a stream corridor, and the model results in the area do not reach depths or speeds that would be classified as high or medium hazard as per the hazard classification guidance document.
- I recommend removing the high flood hazard overlay at this location and replacing it with the low hazard overlay.
- Below are images of the current PDP flood hazard overlays and proposed updates relative to this submission.



Current PDP flood hazard overlays (463)



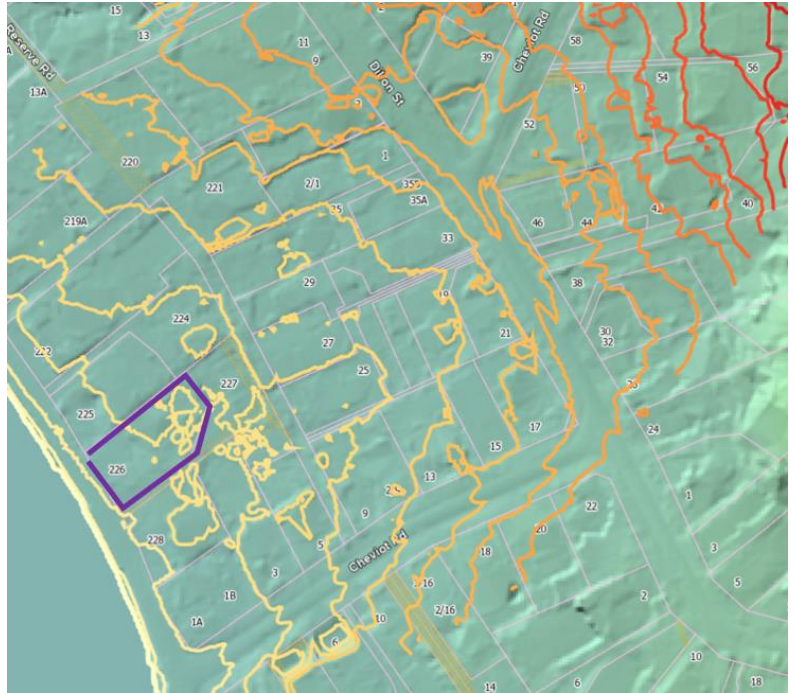
Proposed update to PDP flood hazard overlays (463)



Legend for the flood hazard overlays

**22.76 Richard Kemp and Honor Kemp (25) - 226 Marine Drive,
Lowry Bay**

- The submitter states that their property has not previously been affected by flooding, noting that there are no watercourses nearby that could give rise to flooding.
- Please see Section 20.1 regarding the non-occurrence of historical flooding.
- A review of the hydraulic modelling indicates flooding at the site is generated from runoff from the hill catchment above Cheviot Rd.
- Further, a review of available topographic contours shows that the property and adjacent properties sit in a low point in the catchment the was likely the old flow path for runoff draining from the hills.
- The image below shows the location of the property relative to the topographic contours (themed by decreasing elevation).



- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.77 Rohan Kulkarni (3) - 1/48, 2/48, and 52N Stanley St, Wainuiomata

- The submitter opposes the flood hazard overlay mapped at their property and surplus land.
- Hydraulic modelling of the locality shows there is flooding at the property and surplus land during the simulated extreme event.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.78 Rowan Swain & Kim Weber-Swain (317) - 273 Muritai Road, Eastbourne

- The submitter opposes the flood hazard overlays at their property and locality for the following reasons:

- There is no history of flooding at their property, or limited historical basis, that provides compelling evidence for this overlay on the applicant properties.
 - No accurate future modelling that provides compelling evidence for this overlay on the applicant properties. That is, the hydraulic models contain assumptions and limitations that reduce reliability.
 - The flood zone outline on the submitter's property bears no resemblance to any historical flooding or the topography of the property.
 - Any surface flooding has been caused by stormwater infrastructure deficiencies rather than natural flooding.
 - Future infrastructure improvements should be reflected in the overlays.
- These issues are addressed in Sections 20.1, 20.2, 20.3, 20.4, and 20.7.
- Alongside the issues listed above the submitter has also highlighted the following points in support of their submission:
 - The suggested 1% AEP or 1 in 100-year flood analysis by Wellington Water is noted as best practice in the PDP but is hypothetical and not proven fact.

- Please see Section 13 for information regarding the 1% AEP event. I note that while it is a hypothetical event, the science behind the calculation of the rainfall values applied is well established and adopted globally. I do not believe there is currently better information available to use for predicting extreme events.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.79 Sensible Solutions for Eastbourne (383) - Various

- The submitter comprises a group of residents who oppose the flood hazard overlays for the following reasons.
 - There is no history of flooding at their property, or limited historical basis, that provides compelling evidence for this overlay on the applicant properties.
 - No accurate future modelling that provides compelling evidence for this overlay on the applicant properties. The hydraulic models contain assumptions and limitations that reduce reliability.
 - The flood zone outline on the submitter's property bears no resemblance to any historical flooding or the topography of the property.
 - Any surface flooding has been caused by stormwater infrastructure deficiencies rather than natural flooding.

- The supporting documentation highlights the hydraulic models contain assumptions and limitations that reduce reliability.
 - Property-specific mitigation has not been recognised.
 - Future infrastructure improvements should be reflected in the overlays.
- These issues are addressed in Sections 20.1, 20.2, 20.3, 20.4, 20.6, 20.7, 20.8.
- Alongside the common issues listed above the submitter has also highlighted the following points in support of their submission:
 - The suggested 1% AEP or 1 in 100-year flood analysis by Wellington Water is noted as best practice in the PDP but is hypothetical and not proven fact.
 - The Council (and by extension Tiaki Wai) misuses and misrepresents feedback to generate the flood hazard overlays, with particular reference to the Social Pinpoint campaign.
- Please see Section 13 for information regarding the 1% AEP event. I note that while it is a hypothetical event, the science behind the calculation of the rainfall values applied is well established and adopted globally. I do not believe there is currently better information available to use for predicting extreme events.

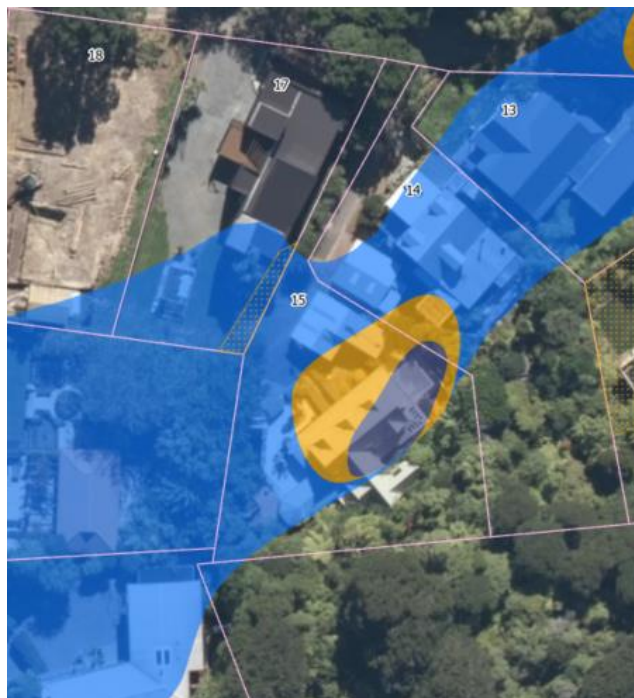
- The Social Pinpoint campaign was set up specifically to collect information for use in validating the hydraulic modelling, and this stated in the introductory pop-up of the website.
- I note also that there is no direct link between the community feedback and the PDP flood hazard overlays.
- The community feedback was used for validating the hydraulic modelling which, once reviewed and accepted, was then used to simulate the extreme event. The outputs of this simulation were then used the hazard classification process, with no reference back to the community feedback during the classification process.
- I recommend the flood hazard overlays remain unchanged at the locations specified in the submission.

22.80 Stephanie Middleton (352) - 15 Whiorau Grove, Lowry Bay

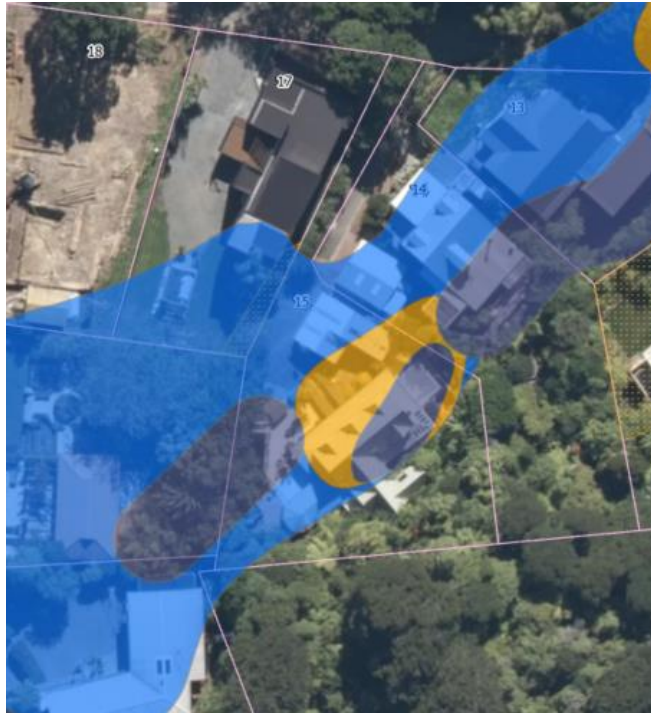
- The submitter opposes the high flood hazard overlay mapped on their property for the following reasons:
 - A lack of historical flooding.
 - Climate change assumptions are excessive or unrealistic.
- Please see Sections 20.1 and 20.5 for commentary on these issues.
- In addition to the above, the submitter also notes the high flood hazard overlay associated with the stream corridor is only restricted to their property, while in

reality the stream runs through multiple other properties.

- I have reviewed the relevant hydraulic model and can confirm there is an error in the flood hazard overlays at this location as they do not include the full extent of the stream described in the submission and represented in the model (see Section 21).
- I recommend the flood hazard overlays are updated to include the missing stream corridors. In the interim, I recommend the flood hazard overlays remain unchanged.
- Below are images of the current flood hazard overlays and the recommended update including stream corridors.



Current PDP flood hazard overlays (352)



Recommended inclusion of East Harbour stream corridors in the PDP flood hazard overlays (352)

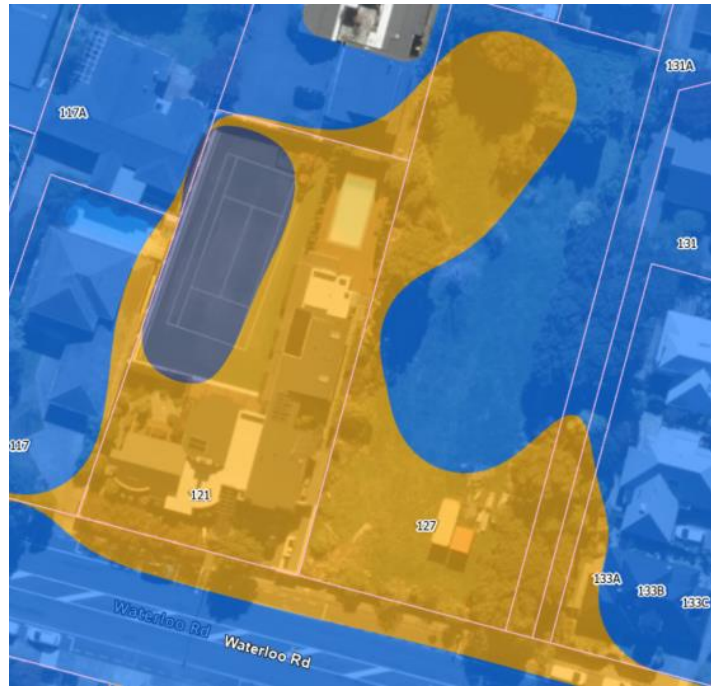


Legend for the flood hazard overlays

22.81 Stephen Flaunty (34) - 121 Waterloo Road, Hutt Central

- The submitter opposes the flood hazard overlay mapped at their property for the following reasons:
 - A lack of historical flooding.
 - The flood modelling is inaccurate.

- Property-specific mitigation has not been recognised.
- Please see Sections 20.1, 20.4, and 20.6 for commentary on these issues.
- A review of the model results show flooding arrives at the property from upstream of the property. The high flood hazard shown over the tennis court is due to modelled topography showing this area as lower than the adjacent ground. As a result, the modelled flooding is deeper as it crosses the tennis court, leading to the high hazard classification.
- Further, regarding the comments in the submission on the local drainage that has been installed, while this has not been included in the modelling, is it unlikely to have a material impact on flood levels during the simulated event. This is because the surrounding public stormwater network is entirely overwhelmed in the event, so there would be nowhere for the private drainage to discharge to.
- However, the high flood hazard on the submitter's property is small and the result of locally specific conditions, the lower ground of a single tennis court. As a result, I recommend removing the high flood hazard overlay mapped across the tennis court and replacing it with the medium flood hazard overlay.
- Below are images of the current PDP flood hazard overlays and proposed updates relative to this submission.



Current PDP flood hazard overlays (34)



Proposed update to PDP flood hazard overlays (34)



Legend for the flood hazard overlays

22.82 **Summerset Group Holdings Limited (326) - Various**

- The submitter opposes the high flood hazard overlay mapped at the location specified in the submission.
- They note there are multiple small, isolated area of high flood hazard with broader areas of medium and low flood hazard, ask for consideration of whether the small, isolated areas are appropriate.
- Further, the submitter highlights the change in flood hazard classification at the location specified in the submission between the Draft District Plan and the PDP.
- The change in flood hazard classification is discussed in Section 17.
- Regarding the small, isolated areas of high flood hazard, I note that during the hazard classification process, some filtering of these types of areas was undertaken. This is set out in Section 2.2 of WWL_Flood_hazard_process_Memo⁶, which notes the “tool’s aim is to integrate islands of different hazard classes with the surrounding class if the island is 150m² or smaller.”, indicating an area threshold of 150m².
- I recommend the flood hazard overlays remain unchanged at the locations specified in the submission.

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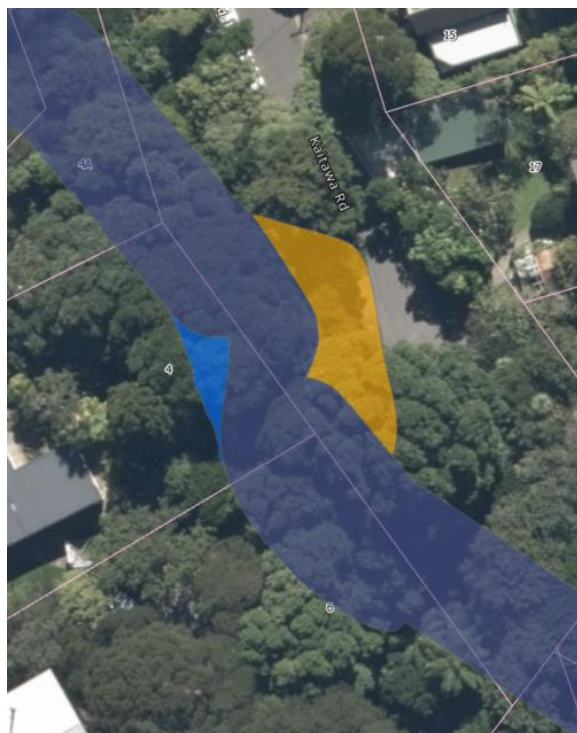
https://hccpublicdocs.azurewebsites.net/api/download/d764466f20cf454ba1010adf695ed15f/_dplanreview/2418b24e13451956440fa1cf1f98f86fd7c1

22.83 Susan Ewart (423) - 4 Kaitawa Road, York Bay

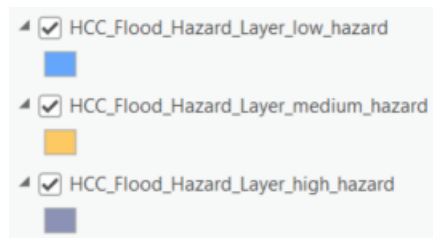
- The submitter opposes the high flood hazard overlay mapped at their property for the following reason:
 - A lack of historical flooding.
- Please see Section 20.1 for commentary on this.
- The submitter notes that there is a stream adjacent to their property but not within it, and that the high flood hazard overlay does not extend into other properties through which the stream flows.
- They also highlight that the stream is well below their property and the road.
- I have reviewed the relevant hydraulic model and can confirm there is an error in the flood hazard overlays at this location as they do not include the full extent of the stream described in the submission and represented in the model (see Section 21).
- I recommend the flood hazard overlays are updated to include the missing stream corridors. In the interim, I recommend the flood hazard overlays remain unchanged.
- Below are images of the current flood hazard overlays and the recommended update including stream corridors.



Current flood hazard overlays (423)



Recommended inclusion of East Harbour stream corridors in the PDP flood hazard overlays (423)



Legend for the flood hazard overlays

22.84 **Te Karearea Ltd and Roscoe Ice Cream Ltd (447) - 30 Benmore Crescent, Manor Park**

- The submitter opposes the flood hazard overlays mapped over 30 Benmore Crescent because the modelling does not account for the significant earthworks that have taken place at the location.
- A comparison of the modelled topography at 30 Benmore Cr against a DEM generated from the 2025 LiDAR survey confirms the modelling does not account the new earthworks, which may materially change modelled flooding across the site.
- I have reviewed a flood modelling report⁷ covering work completed by an independent party for the site.
- The flood modelling carried out for the site in 2022 uses RCP 8.5 to 2100 to increase rainfall due to climate change (which the author notes was acceptable at the time of the modelling) and a concurrent flow in the Hutt River of 2300m³/s (0.23% AEP).

⁷ *Benmore Crescent Proposed Industrial Park Flood Assessment*. River Edge Consulting Limited, 2022

- The Tiaki Wai modelling uses the RCP 8.5 to 2130 scenario to increase rainfall due to climate change, and a concurrent flow of 1244m³/s (10% AEP) in the Hutt River.
- While the Hutt River flow is significantly lower in the Tiaki Wai model, the higher rainfall (due to the climate change allowance) results in greater flows from the Dry Creek Catchment (55m³/s) relative to the independent modelling for the site (30m³/s).
- The Tiaki Wai modelling also shows the area receives overland flow from two adjacent catchments to the northeast; the catchment above the Holcim Ready-Mix Concrete site, and the Haywards Hill. These do not appear to be included in the independent modelling for 30 Benmore Cr.
- As a result, the independent flood modelling is potentially underestimating the flow arriving at the site.
- However, as noted above, the Tiaki Wai modelling does not take into account the earthworks that have taken place, so it is currently not possible to establish if it is acceptable to remove the flood hazard overlays from the site (with the exception of the stream corridor for Benmore Stream).
- Acknowledging the earthworks that have taken place, I recommend changing all the flood hazard overlays within the site to the low flood hazard overlay (with the exception of the stream corridor for Benmore Stream) until the Tiaki Wai modelling can be updated to include the site works or the independent modelling is updated to include the higher rainfall, and adjacent catchments.

22.85 The Francis Family Trust (443) - 1 Military Road, Boulcott

- The submitter opposes the low flood hazard overlay mapped on their property because other areas in the vicinity of the property are not affected.
- I note multiple other properties adjacent and across the road from the submitter's property are impacted by the low flood hazard overlay.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.86 Tim Louis (106) - 9 Woodvale Gr, Fairfield

- The submitter opposes the high flood hazard overlay mapped on their property because the stream does not present a risk to their home.
- The mapped high flood hazard overlay is present on the submitter's property is due to the presence of a stream (and associated stream corridor). The high hazard overlay is only applicable to the land covered by the overlay.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.87 Tom Brodie (11) – 438 Muritai Rd, Eastbourne

- The submitter notes that their property or locality has not previously been affected by flooding.

- Please see Section 20.1.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.88 Tom Hudig (288) – 48 Victoria St, Petone

- The submitter requests that the high flood hazard overlay is removed from their property as nearby properties in the surrounding are not affected in the same way.
- Hydraulic modelling indicates this area is impacted by flooding 0.25m to 0.5m deep leading to the medium hazard classification, with a very small amount of deeper flooding on the northwest corner of the submitter's property, leading to a small portion of high hazard.
- The lack of flooding shown on the nearby properties noted in the submission is due to the representation of the large buildings as voids in the model on these sites. Further discussion on this can be found in the Wellington Water Stormwater Modelling Specifications.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.89 Tony Brenton-Rule (268) - 10 Ngaio Street, Eastbourne

- The submitter raises a broad range concerns and queries. Issues relating to the flood hazard overlays are listed below:

- Flooding is caused by stormwater infrastructure deficiencies rather than natural flooding.
 - Future infrastructure improvements should be reflected in the overlays.
 - Property-specific mitigation has not been recognised.
- Please see Sections 20.3, 20.6, and 20.7.
 - I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.90 TTL Trust (412) - 18 Saulbrey Grove Woburn

- The submitter opposes the low flood hazard overlay mapped on their property because of a lack of historical flooding at their property.
- Please see Section 20.1 for commentary on this.
- I have also reviewed the modelling in the vicinity of the submitter's property and the high flood hazard overlay is present due to high (>0.5m) flood depths modelled at this location during the simulated event.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

**22.91 Upul Priyankara Angulugaha Gamage & Hewawasan
Sarukkalige Yashani Pradeepika Fernando (381) – 36 Manor
Park Rd, Manor Park**

- The submitter requests that the flood hazard overlays are amended at their property.
- The flood hazard overlays have been mapped at the submitter's property due to high modelled flood depths at the location.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.92 Verity Doak (89) - 2/196 Waiwhetu Road, Waterloo

- The submitter contends that the future climate change scenario used for the flood hazard overlays is too punitive for property owners as it represents a future hazard.
- The climate change approach has been adopted based on consideration of best practice guides and discussion with the Council and GWRC (Section 20.5).
- Use of a different climate change scenario, or lack thereof, may or may not, results in a different hazard classification at the submitter's property, however this exercise would be need to be completed to establish if this is the case.
- In the context of the adopted climate change scenario for the PDP flood hazard overlays, I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.93 Vicki McCabe (38) - Ford Road, Manor Park

- The submitter notes that their property or locality has not previously been affected by flooding.
- Please see Section 20.1.
- In addition to the above, it is noted that the predominance of the high flood hazard overlay in Manor Park is due to flooding from the Hutt River, as modelled by GWRC. However, Tiaki Wai modelling also indicates there is potential for flooding originating from the Western Hills above Manor Park.
- I recommend the flood hazard overlays remain unchanged at the location specified in the submission.

22.94 Waste Management NZ Limited (461, F39) - 30 Benmore Crescent, Manor Park

- The submitter supports in part the flood hazard overlays mapped over 30 Benmore Crescent. They highlight that the current PDP flood hazard overlays is based on modelling that does not account for the significant earthworks that have taken place at the location.
- A comparison of the modelled topography at 30 Benmore Cr against a DEM generated from the 2025 LiDAR survey confirms the modelling does not account the new earthworks, which may materially change modelled flooding across the site.

- I have reviewed a flood modelling report⁸ covering work completed by an independent party for the site.
- The flood modelling carried out for the site in 2022 uses RCP 8.5 to 2100 to increase rainfall due to climate change (which the author notes was acceptable at the time of the modelling) and a concurrent flow in the Hutt River of 2300m³/s (0.23% AEP).
- The Tiaki Wai modelling uses the RCP 8.5 to 2130 scenario to increase rainfall due to climate change, and a concurrent flow of 1244m³/s (10% AEP) in the Hutt River.
- While the Hutt River flow is significantly lower in the Tiaki Wai model, the higher rainfall (due to the climate change allowance) results in greater flows from the Dry Creek Catchment (55m³/s) relative to the independent modelling for the site (30m³/s).
- The Tiaki Wai modelling also shows the area receives overland flow from two adjacent catchments to the northeast; the catchment above the Holcim Ready-Mix Concrete site, and the Haywards Hill. These do not appear to be included in the independent modelling for 30 Benmore Cr.
- As a result, the independent flood modelling is potentially underestimating the flow arriving at the site.
- However, as noted above, the Tiaki Wai modelling does not take into account the earthworks that have taken

⁸ *Benmore Crescent Proposed Industrial Park Flood Assessment*. River Edge Consulting Limited, 2022

place, so it is currently not possible to establish if it is acceptable to remove the flood hazard overlays from the site (with the exception of the stream corridor for Benmore Stream).

- Acknowledging the earthworks that have taken place, I recommend changing all the flood hazard overlays within the site to the low flood hazard overlay (with the exception of the stream corridor for Benmore Stream) until the Tiaki Wai modelling can be updated to include the site works or the independent modelling is updated to include the higher rainfall, and adjacent catchments.

22.95 **Winstone Aggregates (444) – Belmont Quarry**

- The submitter opposes the flood hazard overlays mapped over the Belmont Quarry, as the overlays are static and will not reflect the evolving nature of the quarry landform.
- I believe this is a valid reason and support the removal of the flood hazard overlays within the quarry extent.

23 **References**

- *Benmore Crescent Proposed Industrial Park Flood Assessment*. River Edge Consulting Limited, 2022
- *Black Creek Stormwater Model Build*. Stantec, 2022
- *Climate change and variability – Wellington Region. Prepared for Greater Wellington Regional Council*. NIWA, 2017

- *Coastal hazards and climate change guidance*. Ministry for the Environment, 2024
- *Eastern Lower Hutt Stormwater Model Build*. Stantec, 2022
- *Flood Hazard Planning Guidance*. Greater Wellington Regional Council, 2023
- *Greater Wellington Flood Hazard Overlays – Hutt City Council District Plan memo*. Greater Wellington Regional Council, 2024
- *Petone Stormwater Model Build*. Stantec, 2023
- *Practice Note 2023*. Environment Court of New Zealand, 2022
- *Proposed District Plan / Part 2 – District Wide Matters / HAZARDS AND RISKS / Natural Hazards*. Hutt City Council, 2024
- *Regional Stormwater Hydraulic Modelling Specifications*. Wellington Water, 2023
- *Stokes Valley*. Stantec, 2023
- [Takiwa-NZ Searise website](#), Takiwa, 2022
- *The East Harbour Stormwater Catchment: Model Build Report*. Wellington Water, 2024
- *Western Hills Stormwater Catchment: Model Build Report*. Wellington Water, 2025.
- *WWL_Flood_Hazard_Process_Memo*. Stantec, 2024

Appendix B2: Coastal inundation evidence of Dr Scott Stephens

**Before the Hearings Panel
At Hutt City Council**

Under Schedule 1 of the Resource Management Act 1991

In the matter of the Proposed Lower Hutt District Plan

Between **Various**

Submitters

And **Hutt City Council**

Respondent

**Statement of evidence of Dr Scott Alexander Stephens on behalf of Hutt City
Council**

Date: 20 July 2026

INTRODUCTION

- 1 My full name is Scott Alexander Stephens.
- 2 I am employed by Earth Sciences New Zealand (ESNZ) as Principal Scientist – Coasts and Estuaries, and also hold the role of Chief Scientist – Multi-hazard Risk and Resilience, based in Hamilton. ESNZ was formed through the bringing together of the National Institute of Water and Atmospheric Research (NIWA) and GNS Science. Where relevant to this evidence I refer to my former employer, NIWA.
- 3 I have prepared this statement of evidence on behalf of Hutt City Council in respect of technical matters arising from submissions and further submissions on the coastal hazard provisions of the Proposed Lower Hutt District Plan (“the PDP”).
- 4 Specifically, this evidence relates to the Coastal Hazard Overlays – Inundation (the High and Medium Coastal Hazard Overlays) in Chapters NH – Natural Hazards and CE – Coastal Environment of the PDP, which are informed by the coastal inundation and sea-level rise assessment for the Hutt City District (Andrews et al. 2023¹).
- 5 I am authorised to provide this evidence on behalf of the Council.

QUALIFICATIONS AND EXPERIENCE

- 6 I hold a Doctor of Philosophy in Earth Science from the University of Waikato (2001).
- 7 I am a coastal-hazards scientist with approximately 25 years’ experience in this field. I specialise in extreme sea-level and wave analysis, extreme-value and joint-probability statistical techniques, and the mapping of coastal hazards for adaptation to sea-level rise.

¹ Andrews, C., Xu, Z., Wadhwa, S. (2023) Coastal inundation and sea level rise assessment for the Hutt City District, Prepared for Hutt City Council, June 2023, 51p.

- 8 I joined NIWA in 2001. I have held the positions of Coastal and Estuarine Physical Processes Scientist (2001–2015), Group Manager – Coastal and Estuarine Physical Processes (2016–2019) and Assistant Regional Manager, Hamilton (2019–2021). In 2021 I became Chief Scientist – Coasts and Estuaries, and in 2026 within ESNZ I hold positions of Principal Scientist – Coasts and Estuaries, and also Chief Scientist – Multi-hazard Risk and Resilience at ESNZ.
- 9 I am a co-author of the Ministry for the Environment’s Coastal hazards and climate change: Guidance for local government (2017 and 2024). I lead the Future Coasts Aotearoa MBIE Endeavour programme, and I have authored or co-authored numerous peer-reviewed papers and consultancy reports on coastal hazards, extreme sea levels and sea-level rise.
- 10 I have calculated extreme sea-level heights and their frequencies around the coastline of New Zealand for the purposes of national-scale coastal hazard assessments.
- 11 I have previously provided coastal inundation expert evidence for Hutt City Council in relation to Proposed Plan Change 56 (2023).

CODE OF CONDUCT

- 12 I have read the Code of Conduct for Expert Witnesses set out in the Environment Court’s Practice Note 2023. I have complied with the Code of Conduct in preparing my evidence and will continue to comply with it while giving oral evidence before the Hearings Panel. My qualifications as an expert are set out above. Except where I state I rely on the evidence of another person, I confirm that the issues addressed in this statement of evidence are within my area of expertise, and I have not omitted to consider material facts known to me that might alter or detract from my expressed opinions.

INVOLVEMENT WITH THE PROPOSED DISTRICT PLAN

- 13 The Coastal Hazard Overlays – Inundation in the PDP are informed by the coastal inundation and sea-level rise assessment for the Hutt City District (Andrews et al. 2023) – hereafter “the 2023 assessment”. I did not formally participate in the 2023 Assessment. I

helped to scope the project, and I undertook an informal advisor role to the staff who undertook the assessment. The 2023 assessment leveraged datasets and methods from previous NIWA coastal hazards assessments where I was directly involved.

14 As noted above, I provided coastal inundation expert evidence for Plan Change 56.

SUMMARY

15 I have been asked by Hutt City Council to provide evidence in relation to submissions on the Coastal Hazard Overlays – Inundation in the PDP.

16 The principal issues addressed in this statement of evidence are:

- the technical basis for the High and Medium Coastal Hazard Overlays;
- responses to the principal technical themes raised in submissions that challenge the accuracy of, or seek changes to, the overlays;
- the effect (if any) of existing coastal protection works, including the Tupua Horo Nuku / Eastern Bays shared path, on the modelled inundation;
- the sea-level rise scenarios adopted, and the sensitivity of the mapping to those scenarios; and
- how the modelled hazard events relate to the National Policy Statement on Natural Hazards.

17 In summary, in my opinion the overlays are based on robust and current methodology that is consistent with national policy and guidance. I do not recommend changes to the hazard mapping in response to the submissions, other than the potential for localised refinement of the High Coastal Hazard Overlay if as-built coastal edge levels were incorporated into the underlying digital elevation model, as discussed below.

SCOPE OF THIS EVIDENCE

18 I have not discussed matters raised in submissions that are outside my area of expertise as a coastal hazards scientist. My role has been limited to assessing coastal hazard exposure and the spatial extent of coastal hazard areas. I accordingly do not address matters raised that relate to planning, legal, economic, insurance, property value, enforcement, consultation and policy considerations associated with the use of hazard information within the District Plan. Where the appropriate response to a submission is a planning or policy judgement rather than a question of coastal hazard science, I identify that but do not express an opinion on it.

RESPONSE TO SUBMISSIONS

19 I have reviewed the submissions and further submissions listed in Table 1. I have grouped the matters raised into themes: themes challenging the accuracy of the overlays (Table 2); themes addressing coastal protection works or local adaptations (Table 3); themes addressing rules or downstream implications (Table 4, most of which fall outside my area of expertise); and submissions in support of the overlays (Table 5). I respond below to the themes that raise matters of coastal hazard science.

Table 1. Submissions reviewed.

Submitter	Submission number	Specific sites or areas
Adrian Palmer Family Trust	315	9 Toop St, Gracefield; 2-10 Wareham Place, Seaview; 2 Jackson Street, Petone; 10, 29 Udy Street, Petone; 6 Regent Street, Petone; 85 Fitzherbert St, Petone; 127 Gracefield Road, Gracefield; 411-413 Cuba Street, Alicetown; 21 Meachen Street, Seaview; 140 Hutt Road, Petone
Andrew Robinson and Robyn Robinson	380, F09	269 Muritai Rd Eastbourne
Antony and Penelope Orbell	281	3 Ngaio St Eastbourne
Argosy Property No. 1 Ltd	237	39 Randwick Road Moera; 147 Gracefield Road Gracefield; 19 Barnes Street Seaview

Submitter	Submission number	Specific sites or areas
Christopher John McHaffie and Mary Anne Malone	278	9 Ngaio St Eastbourne
David Surrey	427	No
Grant and Kristin Gunn	369	95 Oroua St Eastbourne
Ian and Raylene Caddis	433	618 Marine Drive Days Bay
Jennifer Gray	277	272 Muritai Road Eastbourne
Joe Jeffries	514	No
Kelvin Sanderson	95	129 Cuba St Petone
Kris Philip Connell	F03	269 Muritai Rd Eastbourne
Lars Schmidt	480	227 Marine Drive Lowry Bay
Laura Skilton	314	Petone
Louise Kay Cameron	279	13 Karamu Street Eastbourne
Lynn Kelleher	280	5 Karamu Street Eastbourne
Mary Spiers and Samuel Spink	479	267 Muritai Road Eastbourne
Michael Kerslake	501	12 Ngaio St Eastbourne
Natural Hazards Commission	327, F15	No
Nicola Stent and Stuart Stent	393	6A Oriental St Petone
PBJ Properties Ltd	476	23 Fitzherbert St Petone
Philip King	125	238 Marine Drive Lowry Bay
PTL Trust	397	212 Marine Drive Lowry Bay
Richard Kemp and Honor Kemp	25	226 Marine Drive Lowry Bay
Ron Beernink and Glenda McCallum	303	42 Fitzherbert St Petone
Sensible Solutions for Eastbourne	383	376, 1/376a, 2/376a, 396 Muritai Rd, Eastbourne; 95 Oroua St, Eastbourne; 15 Marine Pde, Eastbourne; 12 Puriri St, Eastbourne
Tom Hudig	288	11 Aurora St, Petone; 48 Victoria St, Petone; 231 Marine Drive, Lowry Bay

Submitter	Submission number	Specific sites or areas
Tony Brenton-Rule	268	10 Ngaio Street
TTL Trust	412	18 Saulbrey Grove Woburn

Table 2. Themes challenging the accuracy of the overlays.

Theme	Submission numbers
1. Remove coastal hazard overlays from specific properties or areas	025, 095, 125, 288, 315, 369, 380, 383, 393, 397, 412, 433, 476, F07
2. Property has experienced no historical coastal inundation or hazard impacts	025, 125, 288, 393, 397, 412
3. Insufficient evidence, modelling, peer review, transparency, or explanation of how overlays were derived	383, 433, 476, 480, F03, 369, 380, 427, F07
4. Questioning consistency of overlay application between neighbouring properties	288, 380, 479
5. Hazard categories (High/Medium/Low) are misleading and should be revised or replaced with probability-based descriptions	380, 514
6. Risk should be assessed and managed at the individual property scale rather than primarily through mapped hazard overlays and plan-wide controls (raise site and area-specific critiques)	237, 327, 514, F15, 427, F07, F09

Table 3. Themes addressing coastal protection works or local adaptations

Theme	Submission numbers
7. Existing coastal protection works (Tupua Horo Nuku/shared path/seawall) reduce risk and should be reflected in the overlays	025, 268, 279, 280, 288, 397, 480, 501
8. Existing adaptation actions, homeowner mitigation measures and local observations should reduce hazard ratings or overlay extent	268, 277, 278, 279, 280, 281, 369, 380, 501, F07
9. Natural coastal processes (gravel accretion/progradation, shoreline growth) are reducing coastal hazard risk and are not properly recognised	268, 277, 278, 279, 280, 281, 380, 501, F03

Table 4. Themes addressing rules or downstream implications.

Theme	Submission numbers
10. Coastal hazard overlays may adversely affect insurance, property values, property rights and financial wellbeing.	025, 268, 279, 281, 369, 380, 393, 397, 412, 433, 480, F03
11. Overlays create unnecessary restrictions on development, redevelopment, additions, subdivision or business activities	095, 237, 314, 315, 393, 514, F03, 303, 369, 380, 427, F07, F09
12. Request for more flexible rules allowing additions, conversions and redevelopment in coastal hazard areas where risk can be managed	237, 315, 514, 427, F09
13. Request for industrial/commercial carve-outs or recognition of economic importance of industrial land in coastal hazard areas	237, 315
14. Council should focus more on mitigation infrastructure and hazard reduction than regulatory overlays	095, 268, 278, 279, 280, 281, 501, 277, 278, 369, 380, F07, F09
15. Stormwater, drainage and infrastructure management are major contributors to current flooding risk	268, 278, 279, 280, 281, 433, 277, 278, 369, 380, F07, F09
16. Need for clearer communication, consultation, engagement and explanation to property owners	268, 278, 279, 280, 281, 433, 501, 369, 380, 427, F07
17. Recognition of continued urban growth and development opportunities in coastal areas despite hazard overlays	303, 427, 514

Table 5. Submissions in support of coastal hazard overlays.

Theme	Submission numbers
18. Support for retaining or strengthening coastal hazard overlays and precautionary planning	314, 327, F15
19. Support for stronger controls on intensification, subdivision and new development in hazard areas	303, 314, 327, F15
20. Climate change and sea-level rise should remain central to hazard planning	314, 327, F15
21. Need to manage residual risk even where protection structures exist	327, F15

Theme	Submission numbers
22. Preference for adaptive planning and long-term resilience over overlay removal	327, F15
23. Use of natural systems and green infrastructure as hazard mitigation	303, 327, F15
24. Need for clear evacuation and life-safety considerations in hazard areas	314, 327, F15

THEMES CHALLENGING THE ACCURACY OF THE OVERLAYS (TABLE 2)

THE TWO OVERLAYS

- 20 It is helpful to first summarise what the two overlays represent. The High Coastal Hazard Overlay (HCH) represents inundation potential from a large and rare (1% annual exceedance probability, or AEP) coastal storm-tide at present-day mean sea level. It tends to be restricted to locations close to, and somewhat inland of, the existing high-tide mark. The Medium Coastal Hazard Overlay (MCH) represents inundation potential from the same 1% AEP coastal storm-tide, plus an additional approximately 1.59 m of relative sea-level rise (RSLR) relative to the existing land surface, which might occur over approximately the next 100 years according to the scenario modelled.

THEME 2 – NO HISTORY OF COASTAL INUNDATION (025, 125, 288, 393, 397, 412)

- 21 Few properties lie within the HCH, and it is possible that properties within the HCH have experienced coastal hazards historically. However, we would not expect any historical coastal hazards within the majority of the MCH, because it represents a scenario approximately 100 years into the future for planning purposes. The absence of historical inundation at a property therefore does not indicate that the overlay is in error.

THEME 3 – SUFFICIENCY OF EVIDENCE, MODELLING AND TRANSPARENCY (383, 433, 476, 480, F03, 369, 380, 427, F07)

- 22 The derivation of the overlays is described in Andrews et al. (2023). The modelling uses high-resolution digital land-elevation models, robust extreme sea-level analysis based on sea-level and wave measurements and calibrated models, and numerical modelling of inundation. It follows the latest guidance on relative sea-level rise from MfE (2022²), which was adopted in MfE (2024³). The modelled RSLR is consistent with Category C – Land-use planning controls for existing coastal uses and assets (building additions) as specified in Table 8 of MfE (2024). In my opinion the assessment is based on robust, current and appropriately documented methodology.

THEME 4 – CONSISTENCY BETWEEN NEIGHBOURING PROPERTIES (288, 380, 479)

- 23 The mapped hazard categories are based on the modelled inundation extent associated with each scenario, and not on distance from the current shoreline. Properties at different distances from the coast may therefore fall within the same hazard category if they are predicted to be inundated under the same modelled scenario.
- 24 The two main controlling factors are the height of the sea and the height of the land surface relative to the height of the sea. The land surface elevation is based on an accurate digital elevation model derived from LiDAR. Properties may appear similar, but only those of relatively low land-surface elevation, where the modelling showed that seawater could flow, are identified. For a property to appear within the mapped inundation extent, the modelled water depth must be at least 10 cm relative to the local land surface; areas with shallower depths were deliberately filtered out.

² MfE (2022) Interim guidance on the use of new sea-level rise projections: Guidance for local government. Ministry for the Environment Publication ME1667. Wellington, Ministry for the Environment. 35 p. <https://environment.govt.nz/publications/interim-guidance-on-the-use-of-new-sea-level-rise-projections>

³ MfE (2024) Ngā pūmate takutai me te ārahitanga huringa āhuarangi. Coastal hazards and climate change: Guidance for local government. Ministry for the Environment Publication ME1805. Wellington, Ministry for the Environment. 144 p. + Appendices <https://environment.govt.nz/publications/coastal-hazards-and-climate-change-guidance>

THEME 5 – “HIGH/MEDIUM” LABELLING (380, 514)

- 25 I interpret the submitters’ argument to be that the labels can be misinterpreted as current risk categories. The High and Medium Coastal Hazard Overlays do not represent different probabilities of occurrence; rather, they represent inundation extents associated with different hazard scenarios. Consequently, while the terminology could potentially be misunderstood, the underlying hazard assessment remains scientifically valid. The MCH in particular is sensitive to the selected relative sea-level-rise scenario and planning timeframe, which I discuss further below.

THEME 6 – PROPERTY-SCALE RISK ASSESSMENT (237, 327, 514, F15, 427, F07, F09)

- 26 The submitters generally advocate a risk-based approach in which site-specific assessments may override the mapped overlays. I agree that the management of coastal hazards should be risk-based. However, the mapped overlays and the question of how risk should be implemented through the District Plan are distinct. The overlays provide a consistent basis for identifying areas potentially exposed to coastal hazards across the district. Whether a predominantly site-specific assessment framework should be adopted in place of mapped overlays raises planning and implementation matters – including consistency of decision-making, cumulative effects, long-term monitoring and administrative burden – that are a policy judgement rather than a question of hazard science. From a coastal hazard science perspective, the choice of future climate-change scenario is a key component of any risk-based approach, because future risk is strongly influenced by relative sea-level rise; I discuss this further below.

THEMES ADDRESSING COASTAL PROTECTION WORKS OR LOCAL ADAPTATIONS (TABLE 3)

THEME 7 – EXISTING COASTAL PROTECTION WORKS, INCLUDING THE TUPUA HORO NUKU / EASTERN BAYS SHARED PATH (025, 268, 279, 280, 288, 397, 480, 501)

- 27 Coastal erosion and coastal inundation are distinct hazards. The Coastal Hazard Overlays considered here are based on coastal inundation modelling, not coastal erosion modelling. The key technical question is therefore not whether the Tupua Horo Nuku / Eastern Bays shared path provides coastal protection in a general sense, but whether the constructed

landform would materially alter the modelled flow paths, water levels, or inland extent of the inundation scenarios used to define the overlays.

- 28 The shared path was built after the modelling was completed and is not factored into the overlay maps. It is a present-day modification to the coastal edge and can reasonably be regarded as a form of coastal adaptation. I understand from Council that the shared path is approximately level with the existing roadway, which is typically about 2 m NZVD2016 based on Hutt City Council GIS data. I note the precise as-built crest levels and the lateral continuity of the works are not known to me in detail, and this is an uncertainty factor in the following assessment.
- 29 The MCH is based on a 1% AEP coastal storm-tide event plus approximately 1.59 m of relative sea-level rise. Based on the sea levels used in Andrews et al. (2023), the relevant modelled sea levels for the MCH are approximately 4.41 m NZVD2016 or higher. A shared-path crest of about 2 m NZVD2016 is well below those levels. For the shared path to materially reduce the inland extent of the MCH it would need to form a continuous hydraulic barrier along the relevant waterfronts with crest levels above the modelled water levels and no lower flow paths; at approximately 2 m NZVD2016 it plainly does not. Furthermore, the MCH is a future-facing planning scenario: if sea level were to approach the levels included in the MCH scenario, the effects would almost certainly be noticed, and further adaptation decisions required, well before 1.59 m of relative sea-level rise was reached. In my opinion the presence of the shared path does not justify removing or reducing the MCH.
- 30 The situation is different for the HCH, which represents present-day inundation from a 1% AEP storm-tide event at present-day mean sea level (relevant sea levels of approximately 2.78–3.00 m NZVD2016; Table 3-1, Andrews et al. 2023). Present-day coastal edge works are more directly relevant to the HCH. A shared-path crest of about 2 m NZVD2016 is, however, also below the HCH modelled water levels, and so would not on its own be expected to exclude HCH inundation. A robust assessment would require the as-built levels of the shared path and associated coastal edge works to be incorporated into the digital elevation model, followed by a targeted hydraulic-connectivity review or, preferably, re-running the present-day inundation scenario. In my opinion this could

potentially refine the HCH in localised areas, but it would not alter the technical basis for the MCH. In practice this is not a high priority to resolve, because I understand that the only private property affected by the HCH overlay in the relevant area is located seaward of the shared path in any event.

THEME 8 – HOMEOWNER MITIGATION AND ADAPTATION ACTIONS (268, 277, 278, 279, 280, 281, 369, 380, 501, F07)

32. The submitters contend that existing adaptation actions – for example elevated floor levels, stormwater improvements, soak pits and retention infrastructure – should result in reduced hazard ratings or a reduced overlay extent. I acknowledge that such measures can reduce the consequences of natural hazard events for individual properties. However, the purpose of the overlays is to identify areas potentially exposed to coastal hazards over the planning timeframe, not to represent the effectiveness of site-specific mitigation. There is an important distinction between hazard and risk: adaptation measures may reduce risk for a particular property without altering the underlying hazard exposure the overlays are intended to identify, and their continued effectiveness depends on ongoing maintenance, ownership and performance during future events. In my opinion the submissions have not demonstrated that existing adaptation actions should be reflected through reductions in hazard ratings or overlay extent; site-specific measures are more appropriately considered through subsequent planning, engineering and consent processes.

THEME 9 – NATURAL COASTAL PROCESSES (268, 277, 278, 279, 280, 281, 380, 501, F03)

- 31 The modelling is based on a digital elevation model from LiDAR collected in 2021 for Hutt City through to Muritai, with 2013–2014 LINZ LiDAR used south of Muritai and along the open coast. While historical gravel accretion and shoreline growth may have reduced coastal hazard exposure at certain locations over recent decades, the assessment was intentionally based on contemporary topography and future sea-level-rise scenarios. It did not attempt to predict whether current accretion trends would continue, reverse or stabilise, and it does not consider past or future natural geomorphological change or coastal protection works (vertical land motion was allowed for through the relative sea-level-rise rate, not by deforming the DEM). Coastal erosion and coastal inundation are

distinct hazards; whether or not sediments have been accumulating historically, there is no guarantee that accumulation will continue after 1.59 m of relative sea-level rise, and it is plausible – even likely – that such rise would drive coastal recession.

THEMES ADDRESSING RULES OR DOWNSTREAM IMPLICATIONS (TABLE 4)

- 32 Most of the themes in Table 4 (themes 10, 11, 13, 16 and 17 – relating to insurance, property values and property rights; restrictions on development; industrial and commercial carve-outs and economic matters; communication and consultation; and urban-growth opportunities) raise planning, legal, economic and policy matters that are outside my area of expertise. Consistent with the scope of my evidence set out above, I do not comment on them. I address below only the technical elements of the remaining themes.

THEME 12 – FLEXIBILITY WHERE RISK CAN BE MANAGED (237, 315, 514, 427, F09)

- 33 From a coastal hazard science perspective, I agree that risk can often be reduced through site-specific design, mitigation and adaptation measures. However, the effectiveness of those measures depends on their design assumptions, maintenance, longevity and performance over time. Whether the District Plan should rely primarily on site-specific mitigation rather than a district-wide overlay framework is a planning and policy matter on which I do not express an opinion.

THEME 14 – MITIGATION INFRASTRUCTURE VERSUS REGULATORY OVERLAYS (095, 268, 277–281, 369, 380, 501, F07, F09)

- 34 Coastal hazard overlays and mitigation infrastructure serve different functions and are not direct alternatives. Overlays identify areas potentially exposed to hazards, whereas mitigation infrastructure seeks to reduce the consequences of those hazards. The existence of mitigation infrastructure does not necessarily eliminate hazard exposure, and its long-term performance may depend on future sea-level rise, maintenance, design standards and exceedance events. The appropriate balance between hazard identification, mitigation works and regulatory controls is a planning and governance matter.

THEME 15 – STORMWATER AND DRAINAGE CONTRIBUTIONS TO FLOODING (268, 277–281, 369, 380, 433, F07, F09)

35 Some submitters contend that observed flooding is primarily attributable to stormwater or drainage issues rather than coastal hazards. The assessment underpinning the overlays was not intended to evaluate the adequacy or performance of local drainage infrastructure. However, coastal hazard assessments identify areas potentially exposed to coastal hazard processes irrespective of the cause of any observed local flooding. Whether infrastructure upgrades are required to manage existing drainage problems is a separate matter from identifying areas potentially exposed to coastal inundation.

SUBMISSIONS IN SUPPORT OF THE OVERLAYS (TABLE 5)

36 The submissions in Table 5 generally support the retention of the overlays, a precautionary and risk-based approach, the consideration of climate change and sea-level rise, the management of residual risk, long-term resilience planning, and the use of evacuation, adaptation and hazard-mitigation measures. These matters are generally consistent with the coastal hazard assessment and mapping methodology underpinning the overlays. The submissions do not identify any issues with the technical hazard assessment that would require amendment to the mapping, and I do not recommend any changes to the overlays in response to them.

SEA-LEVEL RISE SCENARIOS

37 The coastal inundation assessment (Andrews et al. 2023) uses sea-level rise as a policy-framed planning scenario, linked to MfE guidance, NZCPS requirements and a 100-year planning horizon to 2130 (Minister of Conservation 2010⁴; MfE 2024). By contrast, the tsunami assessment (Burbidge et al. 2021⁵) uses sea-level rise as a modelling scenario

⁴ Minister of Conservation (2010) New Zealand Coastal Policy Statement 2010, as amended in 2025: 30. <file:///C:/Users/stephens/OneDrive%20-%20ESNZ/Papers/Reports/nz-coastal-policy-statement-2010-amended-2025.pdf>

⁵ Burbidge, D.R., Power, W.L.G., A. R., X., W. (2021) Hutt City Probabilistic Tsunami Hazard Maps, GNS Science Consultancy Report 2021/115, November 2021.

requested by Council to evaluate how tsunami inundation changes under higher sea levels. The coastal inundation sea-level-rise assumptions are therefore directly integrated into the planning framework, whereas the tsunami report largely treats sea-level rise as an external modelling input.

COASTAL INUNDATION ASSESSMENT

- 38 The coastal inundation assessment was explicitly developed within the coastal hazard planning framework set out in national policy and guidance. It adopts a 100-year planning timeframe to the year 2130 and applies relative sea-level-rise projections that incorporate both climate-driven sea-level rise and vertical land movement, using the SSP2-4.5, SSP5-8.5 and SSP5-8.5 H+ scenarios together with NZSeaRise vertical land movement estimates.
- 39 In particular, the MCH is based on approximately 1.59 m of relative sea-level rise, which corresponds to the SSP5-8.5 median projection plus vertical land movement for the Lower Hutt shoreline at approximately the year 2130. This is consistent with the framework set out in MfE guidance for planning decisions involving land-use change and development over a 100-year planning horizon (MfE 2024), and with the New Zealand Coastal Policy Statement, which requires coastal hazards to be identified, and increasing risk to be avoided, over at least 100 years (Minister of Conservation 2010). The adopted sea-level-rise assumptions are therefore not arbitrary assumptions created for the hazard modelling; they are directly linked to the planning framework within which the assessment was undertaken. In my opinion the adopted coastal inundation scenarios are consistent with the policy framework and current national guidance that informed the assessment.

TSUNAMI ASSESSMENT

- 40 By contrast, the tsunami modelling report uses 1.0 m of sea-level rise as a modelled sensitivity input (present-day Mean High Water Springs, and present-day MHWS plus 1.0 m of sea-level rise) rather than as a policy-derived planning outcome. In my view this does not invalidate the modelling; it demonstrates that tsunami inundation extent increases materially when 1.0 m of sea-level rise is applied. However, the tsunami report does not provide a specific policy justification for selecting 1.0 m, nor explicitly link the scenario to a particular planning horizon, climate pathway or relative sea-level-rise projection. From a

coastal hazards science perspective, a 1.0 m sea-level-rise tsunami scenario is technically reasonable as a sensitivity assessment. Whether it remains the most appropriate planning scenario for District Plan purposes is a policy and planning judgement. I note that, if the tsunami modelling were framed using the same 100-year planning horizon and relative sea-level-rise assumptions applied within the coastal inundation assessment, the resulting future sea-level-rise allowance would likely be greater than 1.0 m rather than lower.

SENSITIVITY TO CLIMATE-CHANGE ASSUMPTIONS AND SEA-LEVEL-RISE SCENARIOS

- 41 A number of submissions question the validity of the overlays on the basis that the future inundation scenarios are overly conservative, based on inappropriate sea-level-rise assumptions, or do not adequately account for future adaptation. In my opinion it is important to distinguish between the coastal hazard modelling itself and the policy decisions regarding the selection of future climate-change scenarios and planning timeframes.
- 42 The inundation modelling by Andrews et al. (2023) did not directly model future changes in storms, rainfall or wave climate. The principal climate-change factor incorporated was relative sea-level rise (RSLR), which includes both projected climate-driven sea-level rise and vertical land movement, and which directly influences the extent of mapped future inundation.
- 43 For the MCH, the District Plan adopts the SSP5-8.5 median scenario including vertical land movement to the year 2130, corresponding to a RSLR of approximately 1.6 m across the Hutt City coastal margin. Andrews et al. (2023) also evaluated the SSP2-4.5 median scenario (RSLR of about 1.18 m) and the SSP5-8.5 H+ scenario (median RSLR of about 2.04 m by 2130). The adopted scenario therefore sits between lower and higher plausible pathways that were explicitly evaluated. Relative to the adopted scenario, the SSP2-4.5 scenario is approximately 0.42 m lower and the SSP5-8.5 H+ scenario is approximately 0.44 m higher. Across the low-gradient coastal margins of much of Petone, Alicetown, Seaview, Eastbourne and parts of the Lower Hutt foreshore, differences of this magnitude would be expected to alter the inland extent of future inundation appreciably. The mapped extent of the MCH is therefore inherently sensitive to the selected RSLR scenario.

This is not a limitation of the modelling; it reflects the physical reality that coastal inundation exposure increases progressively as sea level rises.

- 44 In my opinion the selected SSP5-8.5 median scenario should not be interpreted as a scientific prediction of the most likely future sea level. Rather, it is a planning scenario selected from a range of plausible futures. The technical modelling demonstrates how inundation extent changes under that scenario; which scenario should be used for planning purposes is fundamentally a policy matter.
- 45 The second key factor is the chosen planning timeframe. The year 2130 was adopted because it provides a planning horizon of at least 100 years, consistent with Policies 24 and 25 of the NZCPS, and the MfE guidance recommends the use of RSLR projections to 2130 for most planning categories associated with long-lived development. Shorter horizons apply to some categories (for example, MfE planning category D, for short-lived, readily adaptable, low-consequence assets, for which a horizon to approximately 2075 may be appropriate). A substantially shorter timeframe would imply a lower RSLR allowance and a reduced future inundation extent, but that would represent a different planning approach rather than a change to the underlying hazard science.
- 46 The HCH differs fundamentally. It is based on present-day 1% AEP coastal inundation conditions and does not include future relative sea-level rise. It is therefore largely insensitive to the choice of SSP scenario, climate pathway or planning timeframe; the principal influences on the HCH are present-day coastal water levels, topography and any present-day modifications to the coastal edge.

RELATION TO THE NATIONAL POLICY STATEMENT ON NATURAL HAZARDS

- 47 A related question is how the modelled hazard events sit within the risk framework of the National Policy Statement on Natural Hazards (NPS-NH), for each of damage to property and potential for injury or fatalities, and whether this is consistent across the mapped hazard areas or varies within a given area.
- 48 The HCH and MCH are both based on coastal inundation from a storm-tide with 1% AEP, which Table 1 of the NPS-NH classifies as “Possible”. The likelihood of a 1% AEP event

occurring over a 100-year timeframe (104 years between 2026 and 2130) is 63%, which is “almost certain” (Table 1, NPS-NH). Under the Risk Matrix (Figure 1, NPS-NH), over a 100-year period a Possible event with Moderate consequences shifts to an almost-certain event with High consequences.

HIGH COASTAL HAZARD OVERLAY

49 For the HCH (1% AEP storm-tide at present-day mean sea level), and drawing on experience from recent very high storm-tide sea levels at Thames and Tauranga (5 January 2018) and Nelson / Tasman during ex-Tropical Cyclone Fehi (1 February 2018), the consequence level could be described as:

- Consequence: Moderate.
- Damage to property: some damage to land and non-structural damage to building(s); limited loss of use, repairs required.
- Potential for injury or fatalities: unsafe for people, with potential for injuries, although expected to be minor.

MEDIUM COASTAL HAZARD OVERLAY

In the year 2026 (no sea-level rise)

50 The MCH builds in 1.59 m of future relative sea-level rise and therefore extends inland far beyond the HCH. At present-day mean sea level, the consequence for areas of the MCH that lie outside the HCH could be described as:

- Consequence: Negligible.
- Damage to property: no loss of use, no building repairs required.
- Potential for injury or fatalities: no injuries.

In the future, after 1.59 m of relative sea-level rise

51 In the modelled scenario, the most inland extent of the MCH could be expected to have moderate consequences, similar to the present-day HCH, but there will be a gradient of consequence: the built environment at relatively low land elevations and closer to the present-day shoreline will have much worse consequences if no adaptation measures are taken. These relative consequences have not been quantified, but could be quantified using (for example) RiskScape software. I would hypothesise that, in the lowest-lying areas near the sea, on a stormy day and after 1.59 m of relative sea-level rise, the consequence would be at least:

- Consequence: Major.
- Damage to property: major damage to land and building(s), including structural damage; loss of use and substantial repair required.
- Potential for injury or fatalities: unsafe for people, with potential for many injuries, or critical injuries and/or fatalities.

52 I would also expect that the effects of sea-level rise will be felt at many properties well before 1.59 m of relative sea-level rise is reached, prompting adaptive action that would likely mitigate the consequences. That is, of course, the logic underlying the District Plan policies and rules within this overlay.

Signed:



Date: 20 July 2026

Appendix B3: Tsunami evidence of Dr David Burbidge and Ms Edith Bretherton

**Before the Hearings Panel
At Hutt City Council**

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

**Joint statement of evidence of Dr David Ross Burbidge and Ms Edith
Bretherton on behalf of Hutt City Council**

Date: 20 July 2026

INTRODUCTION

- 1 Our full names are Dr David Ross Burbidge and Ms Edith Victoria Bretherton. Dr Burbidge is employed as a geophysicist specialising in earthquake and tsunami hazard and risk assessments and tsunami forecasting at the New Zealand Institute for Earth Sciences (ESNZ), Lower Hutt, New Zealand. Ms Bretherton is employed as a senior natural hazards specialist at ESNZ, Lower Hutt, New Zealand.

ESNZ was formerly known as the Institute of Geological and Nuclear Sciences Limited (GNS Science).

- 2 We have prepared this statement of evidence on behalf of Hutt City Council in respect of technical related matters arising from the submissions and further submissions on the Lower Hutt Proposed District Plan (PDP).

- 3 Specifically, this statement of evidence relates to the matters in Chapter NH - Natural Hazards and CE - Coastal Environment where it relates to tsunami hazards.

- 4 We are authorised to provide this evidence on behalf of the Council.

QUALIFICATIONS AND EXPERIENCE

- 5 Dr Burbidge's academic qualifications comprise of a Doctor of Philosophy (Earth Sciences – 2000) from the Australian National University (ANU) and a Bachelor of Science (First Class Honours in Physics - 1996) also from the ANU.

- 6 He holds the position of Tsunami Team Leader at the ESNZ. He has worked at GNS Science (now ESNZ) since 2014, including four years as

the Head of Department for Tectonophysics (which included the Tsunami Team) before moving into his current role.

- 7 His previous work experience prior to coming the GNS Science comprises of one year working as a Research Scientist at the Defence Science and Technology Organisation (DSTO) in Australia and then 12 years working at Geoscience Australia (GA). At GA he was the Earthquake Hazard Section Leader for four years and for the rest of that a period he was a Research Geophysicist within that Section. During that time, he worked on a range of projects covering the fields of earthquake and tsunami hazard and risk assessment and tsunami monitoring and forecasting.
- 8 During his time at GNS Science (now ESNZ), he has been involved, or is currently involved, with the following relevant projects:
 - 8.1 He has led or contributed to, a range of tsunami inundation hazard modelling projects including projects for Hutt City Council, Wellington City Council, Hawkes Bay Regional Council, West Coast Regional Council, Bay of Plenty Regional Council and Environment Canterbury. In most cases these modelling hazard assessments were used to inform tsunami evacuation maps, but some, such as the one for the Hutt City Council, were designed primarily to inform land-use planning.
 - 8.2 He contributed to the 2021 update to the National Tsunami Hazard Model (NTHM). The NTHM estimates the maximum tsunami height off the coast which has a particular probability of being exceeded each year. The NTHM underpins the tsunami inundation hazard assessments listed above. He was second author on the final report for the 2021

update and is part of the team working on the current update planned for completion this year.

- 8.3 He is currently a member and is the current chair of the Tsunami Expert Panel for New Zealand and sit on the DART (Deep-Ocean Assessment and Reporting of Tsunamis) Technical Advisory and Steering Groups. He also leads the Tsunami Science Advisory and Monitoring project in the GeoNet Programme. He has provided tsunami advice through to emergency managers in these capacities during numerous tsunami responses during his time at ESNZ.
- 8.4 He currently one of the co-leaders of the National Tsunami Model (NTM) project funded by the Natural Hazard Commission (NHC). This project aims to extend the NTHM onshore and to use this onshore inundation to estimate the potential impact of a tsunami on the community, in particular on residential buildings.
- 8.5 He is also currently the project leader for the recently formed Strategic Science and Investment Fund (SSIF) Tsunami, Coastal Hazards and Coastal Change Project. The project conducts fundamental and applied research into these topic areas with the long-term aim to help reduce their potential impact on the New Zealand Community.
- 8.6 He is a member of American Geophysical Union and the Geoscience Society of New Zealand.

- 9 Ms Bretherton's academic qualifications comprise of a Master of Science (Physical Geography 2016), Bachelor of Science (Earth Science and Physical Geography), Graduate Diploma in Arts (2007) and Bachelor of Business (2005), all from Massey University.

- 9.1 She holds the position of Senior Natural Hazards Planner at ESNZ. She leads the Planning and Policy Research project under the Strategic Science Investment Fund (SSIF) in the Multi-Hazard and Risk programme (previously Improved Risk Governance), and the Science to Practice project in the “It’s our Fault” programme.
- 9.2 She has led multi-disciplinary teams researching policy levers to reduce risk from natural hazards and climate change. She has also been a member of the technical advisory group for Auckland Councils’ plan change 78 (now 120), Environment Southland Technical Advisory Group. She has coordinated expert witnesses for Wellington City District Council, Wairarapa District Councils and Hutt City District Council. She led multi-disciplinary peer reviews of tsunami risk assessments for Wellington City District Council.
- 9.3 Prior to joining GNS Science in 2022 she worked for the West Coast Regional Council as a Senior Planner from February 2018. She developed provisions including Natural Hazards for Te Tai o Poutini Plan (combined) District Plan for the West Coast. She also progressed the Coastal Plan review and was a support planner for the Regional Policy Statement and Land and Water Plan Change hearings.
- 9.4 Previous to this she was programme coordinator for the Auckland Unitary Plan March 2013 – November 2016. She moved into resource consent processing as the plan became operative at the West Auckland Planning Office.
- 9.5 She gained her accreditation as an RMA commissioner in 2022 and has acted as a Commissioner on the West Coast for the District Councils for hearings, commissioner only

decisions, commissioner led mediation, and s.357 commissioner referrals.

9.6 She is a full member of the New Zealand Planning Institute and has convened a special interest group for natural hazards, of which she is the establishment chair.

9.7 She is currently seconded on a part time basis to the Ministry for Cities, Environment, Regions and Transport (MCERT) formerly the Ministry for the Environment as a Senior Advisor in the Natural Hazards Policy Team.

CODE OF CONDUCT

10 We have read the Code of Conduct for Expert Witnesses set out in the Environment Court's Practice Note 2023. We have complied with the Code of Conduct in preparing my evidence and will continue to comply with it while giving oral evidence before the Hearings Panel. Our qualifications as an expert are set out above. Except where we state we rely on the evidence of another person, we confirm that the issues addressed in this statement of evidence are within our areas of expertise, and we have not omitted to consider material facts known to us that might alter or detract from my expressed opinions.

INVOLVEMENT WITH THE PROPOSED DISTRICT PLAN

11 Dr Burbidge was lead author of the study by Burbidge et al. (2021) - hereafter referred to as "the 2021 study" - which was commissioned as part of the PDP update process. The mapping in the 2021 study is the underlying data used to define the tsunami hazard areas in the PDP.

12 Dr Burbidge provided tsunami expert witness evidence for Plan Change 56.

SUMMARY

- 13 Our names are Dr David Burbidge and Ms Edith Bretherton
- 14 We have been asked by Hutt City Council to provide evidence in relation to submissions on tsunami in the PDP.
- 15 Our statement of evidence addresses multiple submissions and is in two formats:
- 15.1 Overview and Grouped Comments in the following sections.
- 15.2 Detailed responses to individual submissions in Table 1.

21.1 OVERVIEW AND GROUPED COMMENTS

Modelled hazard events alignment with the consequence table (table 2) from the National Policy Statement on Natural Hazards (NPS NH)¹.

The NPS NH outlines a risk assessment methodology that has a matrix of consequence and likelihood. It is noted that the method and purpose of the 2021 report was to understand inundation hazard, not life and property risk.

Using figure 1 in NPS NH, the annual exceedance probabilities (AEP) and annual recurrence intervals (ARI) likelihoods for are:

- 1% AEP / 50-100 year ARI “possible”,
- 1% - 0.2% AEP / 100-500 year ARI “unlikely”, and
- 0.2% to 0.02% AEP / 500-5000 year ARI “rare”.

¹ [07-07-20 - FINAL-NPS template.dotx](#)

Considering that there is an ensemble of tsunamis could occur within each of the timeframes, there would be a spectrum of effects for life safety and for property damage. This is because the modelling for each overlay is not simply a single event from a single earthquake but a probability-based assemblage.

Single events could be extracted from the model, and likely consequences from that event assessed.

Sea level rise (SLR) addition, and sensitivity of the underlying modelling to climate assumptions.

The modelled outputs in the 2021 report differentiate between current and future hazard by the addition of 1m of SLR. Both sets of outputs were produced in that study. The results from the model are highly sensitive to this addition of SLR; this is discussed in some detail in section 4 of the 2021 report and is illustrated in figures taken the report in Appendix A.

Turning to the New Zealand Coastal Policy Statement (NZCPS), the use of the recurrences selected in the PDP is supported. The NZCPS requires that natural hazards in the coastal environment and considered over at least the next 100-year timeframe. Therefore, a SLR increment is appropriate to be added to the tsunami overlays. A 1m SLR addition has been applied for consistency with neighbouring jurisdictions, and some projections for the Hutt Valley show this to be a medium range projection.

The alignment with the NPS NH is discussed earlier in this report specific to the tsunami overlays.

Impact of Tupua Horo Nuku / the Eastern Bays cycleway on the underlying modelling.

The 2021 report and modelling were undertaken prior to the construction of the cycleway. The modelling for the district plan predates the cycleway construction and was provided to the T&T engineers who designed the structure. The degree to which mitigation of a tsunami has been incorporated in the engineering design

is unknown to ESNZ. Interactions between coastal processes, and structures in the coastal environment are complex, and are likely to vary along the length of the structure, and in part dependent on materials used.

The interaction between the cycleway and the medium coastal hazard area is discussed in the responses to the coastal inundation submissions expert response.

DETAILED RESPONSES – TABLE 1

16 We have reviewed the general, site and area-specific critiques made by submitters, and provided response and recommendation as to whether the underlying modelling requires reassessment and reapplication at a district and site level.

Submitter	Submitter Number FS Submitter Number	Specific sites or areas	Relief Sought	Expert Witness Response	Expert Witness Recommendation
Adrian Palmer Family Trust	315	9 Toop St, Gracefield 2-10 Wareham Place, Seaview 2 Jackson St, Petone 10, 29 Udy St, Petone 6 Regent St, Petone 411-413 Cuba St, Alicetown 21 Meachen St, Seaview 140 Hutt Road, Petone	The submission seeks removal of the tsunami hazard overlay on 9 Toop Street and 6 Wareham Place.	No detail provided in submission as to why the overlay should be removed.	Retain overlay as notified on properties listed.

Antony and Penelope Orbell	281	3 Ngaio St Eastbourne	Not specific but inferred reduction or removal of identified hazard area.	Detail provided in submission does not question the assumptions and process of the hazard modelling.	Retain as notified.
Argosy Property No. 1 Ltd	237	39 Randwick Road Moera 19 Barnes St Seaview	Retain as notified tsunami overlay objectives and policies	The support is noted.	Retain overlay as notified on properties listed.
Christopher John McHaffie and Mary Anne Malone	278	9 Ngaio St Eastbourne	Not specific but inferred reduction or removal of identified hazard area.	Detail provided in submission does not question the assumptions and process of the hazard modelling.	Retain as notified.
Dave and Michaela O'Donovan	37	No	Hazard Identification on Maps The hazard map with the District Plan shows a large area of Petone as tsunami high risk. This is a relative high risk when considering the rest of the Hutt Valley. This area however is not high risk though when compared to other parts of NZ. This is because the likelihood of a tsunami being exactly oriented to enter through the Wellington harbour heads and reach Petone is very low. Areas of the north island on	The submitters attention is drawn to the underlying modelling from which the tsunami overlays have been developed. The modelling in the 2021 report has already taken into consideration both the probability of the earthquake and its location and orientation. The modelling also took into consideration any effects of the Wellington Harbour's heads may have on the tsunami. Tables 2.1, 2.2 and 2.3 in the 2021 report detail out the	Retain overlay as notified.

			both the east and west coasts (Wairarapa, Hawkes Bay, Kāpiti and the Wellington south coast) have similar earthquake probability that could result in a tsunami but much higher “high risk” as their coasts are exposed. Classify tsunami risk based on both earthquake probability and also orientation/ location of earthquake. This would see all of the Hutt Valley Tsunami Risk except Eastbourne being lowered. Definition of high or medium risk should be on the NZ wide scale. (I believe this could be easily done).	specific sources (local and distant) that have been used to develop the 1:100, 1:500 and 1:1000 overlays respectively. The grids used to model the tsunami are discussed in Section 3 of the report and they include the whole harbour, include the heads. We therefore feel that the evidence presented by the submitter does not mean that the Hutt Valley needs to be remodelled, and that the hazard or risk needs to be lowered accordingly. The NPS NH requires territorial authorities to undertake a risk-based approach within their jurisdiction, it does not require the territorial authority to assess their district against a national high or medium risk scale. No evidence is presented by the submitter as to why they “believe it could be easily done”.	

Grant and Kristin Gunn	369, F07	95 Oroua St Eastbourne	Not specific but inferred reduction or removal of identified hazard area.	Detail provided in submission does not question the assumptions and process of the hazard modelling.	Retain as notified.
Ian and Raylene Caddis	433	618 Marine Drive Days Bay	Not specific but inferred reduction or removal of identified hazard area.	Detail provided in submission does not question the assumptions and process of the hazard modelling.	Retain as notified.
Jennifer Gray	277	272 Muritai Road Eastbourne	Not specific but inferred reduction or removal of identified hazard area.	Detail provided in submission does not question the assumptions and process of the hazard modelling.	Retain as notified.
Joe Jeffries	514	No	<i>I oppose applying a “high” hazard ranking to tsunami areas based on a 1% AEP scenario inundation extent with 1m Sea Level Rise as this does not accurately reflect “high” hazard risk and is unnecessary to manage the specific hazard identified.</i> <i>Delete the High, Medium and Low categorisations for overlays and instead rename the tsunami and coastal inundation overlays around the information they are</i>	The modelled outputs differentiate between current 1% AEP and future risk by the addition of 1m SLR. Both sets outputs were produced for the modelling. The NPS NH and the NZCPS support the use of 1% AEP plus 1m SLR. The NZCPS requires that natural hazards in the coastal environment and considered over at least the next 100-year timeframe. Therefore, a SLR increment is appropriate to be	Retain overlay as notified. Consider amending policy to clarify what is required to meet the evacuation clause.

			<i>based on. Alternatively amend the Tsunami Hazard Overlay so that it applies to a 1% AEP scenario at today's sea level consistent with the approach to coastal inundation.</i> <i>It is also unclear how access to evacuation routes is specifically related to an addition to an existing building.</i>	added to the tsunami overlays. A 1m SLR addition has been applied for consistency with neighbouring jurisdictions, and some projections for the Hutt Valley show this to be a medium range projection. We note the request to change the names of the overlays. However, that is a communication matter not a technical matter. We agree it is unclear it is unclear how access to evacuation routes specifically relates to additions to existing buildings.	
Kelvin Sanderson	95	129 Cuba St Petone	The submitter queries which hazard overlays apply to their property and what mitigations are possible. Referring to the proposed maps, the site is in the tsunami low and tsunami medium overlays. The site is also in several other natural hazard overlays.	Mitigation of hazards at a community level would need to be included in a long term plan process, to secure funding to do so. Community / district wide protection from tsunami is not common place in New Zealand, and while is undertaken in Japan for instance, the is substantial cost and construction involved.	Retain overlay as proposed

			The submitter request that the hazard overlays are removed, and that the Council, and other public bodies mitigate the risk instead.		
Lars Schmidt	480	227 Marine Drive Lowry Bay	<i>I have assessed the tsunami hazard and flood plan and have found significant flaws. Please provide evidence that this mapping was reviewed by independent expert reviewers of the relevant disciplines.</i> <i>There are significant changes in the understanding of seismic hazard and these have been ignored. The research behind this plan is long outdated and cannot be considered. The plan change is therefore based on flawed data. I request the council to stop any flooding and tsunami risk, and seismic overlay risk plan changes until either a fair timeframe and budget is provided to challenge the current assumptions (estimate is 5-10 years), or the correctness of the</i>	The independent peer reviews of the tsunami risk assessment are contained within the acknowledgement section of the report. It is not clear which parts of the tsunami modelling the submitter finds to be flawed, and in need of revision. The underlying data was developed through the national tsunami hazard model programme (2021) and is subject to extensive scientific rigour. The Resource Management Act which considers subdivision, use and development (broader than the building itself), can and does take a longer timeframe. Specifically, the NZCPS stipulates that within the coastal environment, a timeframe of at least 100 years is used.	

			background research and information is confirmed by an independent peer review panel of subject matter experts.		
Laura Skilton	314	Petone	There are pockets in the tsunami overlays on the same parcel and the submitter queries have they been applied, based on actual ground level, and is the low and medium under the high? The submitter states that they have not read the detailed reports to create the rules and maps but does put forward some relief for the mapped overlays, and states that they find it difficult to believe that the mapping is accurate enough to have pockets of overlays, and a straight line would be simpler.	The mapping is based on actual ground levels, so is as accurate as possible, and does create pockets. The overlays are intended to work that the low and medium sit under the high, so the perceived wave “jumping” is in fact the lesser risk overlay peeping through.	Retain overlays as notified. Consider clarifying explanation of overlays stacking.
Lisa Bowker	17	438 Muritai Road Eastbourne	Purchased in 1978, no hazards identified, no indication of potential hazards, no hazards since. Seeks references to hazards be removed from property	The preparation of the district plan has resulted in hazards being identified. A tsunami not being experienced in the property owners experience	Retain overlay as proposed.

				does not preclude the potential for it to occur.	
Louise Kay Cameron	279	13 Karamu Street Eastbourne	Not specific but inferred reduction or removal of identified hazard area.	Detail provided in submission does not question the assumptions and process of the hazard modelling.	Retain as notified.
Lynn Kelleher	280	5 Karamu Street Eastbourne	Not specific but inferred reduction or removal of identified hazard area.	Detail provided in submission does not question the assumptions and process of the hazard modelling.	Retain as notified.
Mary Lynskey and Christopher Lynskey	213	2 Cheviot Road Lowry Bay	No specific relief sought for tsunami.	No relief sought or response to queries required	Retain as proposed
Michael Kerlake	501	12 Ngaio St Eastbourne	Not specific but inferred reduction or removal of identified hazard area.	Detail provided in submission does not question the assumptions and process of the hazard modelling.	Retain as notified.
Natural Hazards Commission	327, F15	No	Evacuation modelling by GNS Science shows that those in the eastern part of Petone, by the Hutt River mouth, may take more than 40 minutes to evacuate (see Appendix 5). This is more than the 30-minute requirement in CE-P14 and CE-P15. More residential development in	The differences between the arrival times for local faults detailed in from <i>Wang, X.; Mueller, C.; Power, W.L.; Lukovic, B. 2016. Arrival time estimates for local source tsunami for Wellington suburbs, GNS Science Report 2016/03. 53 p.; doi: 10.21420/G25C73</i> and simplified in Table 1 and	Consider amending policy clause relating to evacuation time to clarify if it is access to the evacuation route or being clear of the evacuation zone that is required. If specifying time to exit the evacuation zone consider more nuanced approach for neighbours with

			this area will likely increase the number of people in this area, which in turn will likely extend evacuation time beyond 40 minutes and increase casualties. There will be no time for official warnings to be made for these local events and the reliance will be on natural warnings for people to evacuate. Based on this information, we recommend that the policies relating to evacuation in CE-14 and CE-15 are deleted, and the cumulative hazards and risks for Petone are considered further in our suggested 'Petone Natural Hazards Precinct'.	those used to develop the Plan Change are highlighted. The purposes of these layers are different, and have different hazard parameters such as recurrence and certainty, and different faults. It is also noted that the evacuation time modelling was updated in <i>Lukovic B, Heron DW, Wang X, Power WL. 2017. Evacuation time estimates for local source tsunami for Wellington suburbs. Lower Hutt (NZ): GNS Science. 159 p. (GNS Science Report; 2017/05). doi:10.21420/G2FW2V</i> The underlying concern as to whether the evacuation time contained in the policies are appropriate and sufficient remains. It is possible that waves from some sources could arrive at different times across the community, which makes selecting one time challenging. One option could be to assign times for different neighbours	more specific minimum arrival times.

				within the District. Alternately, not specifying time, and referring assessments on appropriate evacuation time to evolving research may be more accurate and nuanced, but does provide greater uncertainty for plan users. We note that the policy current requires seeks the ability to access safe pedestrian evacuation routes, assuming the tsunami arrives within 30mins of fault rupture, not that the occupants can safely evacuate within 30 minutes. Clarifying the policy intent as to whether it is the access to an evacuation route which is critical, or safely evacuating may resolve the issue of timing between fault rupture, and access to an evacuation route.	
Nicola Stent and Stuart Stent	393	6A Oriental St Petone	Remove high hazard tsunami overlay, has never been impacted	The preparation of the district plan has resulted in hazards being identified. A tsunami not being experienced in the property owners experience	Retain overlay as proposed.

				does not preclude the potential for it to occur.	
Patricia Cleland	367	8 Cheviot Road Lowry Bay	All overlays must include interrogated for justification, transparency, and evidence. Any restriction, regardless of its intent must be clearly defined, justified and fairly applied, or else it risk setting a dangerous precedent that undermines public trust and confidence.	No specific relief sought. Justification, transparency and evidence can be found in the s.32 report	Retain as notified
PBJ Properties Ltd	476	23 Fitzherbert St Petone	The submission refers to Sites of Significance to Māori (SASM) and hazards, but the queries raised by the submitter only relate to SASM. It is inferred the same queries are also raised in relation to hazards. <i>How were the SASM's arrived at? What is the documented evidence for this decision? Why are these specific areas targeted? What does this mean for us as the property owners? Will this ruling impact on the value of our property? What is the extra</i>	No specific relief sought. Justification, transparency and evidence can be found in the s.32 report	Retain as notified

			<i>cost of all of this to the landowner? Will there be time delays?</i>		
Philip King	125	238 Marine Drive Lowry Bay	Property purchased in the 1960's no known hazards, not experienced any, remove.	The preparation of the district plan has resulted in hazards being identified. A tsunami not being experienced in the property owners experience does not preclude the potential for it to occur.	Retain overlay as proposed.
PTL Trust	397	212 Marine Drive Lowry Bay	Owned for 31 years, haven't experienced hazards, brick wall on top of concrete base. Protection structure. No specific relief evidence or statements about tsunami. Is the structure, and sea wall designed to mitigation tsunami?	The preparation of the district plan has resulted in hazards being identified. A tsunami not being experienced in the property owners experience does not preclude the potential for it to occur. The submitter notes they have a sea inundation protection structure in the form of a brick wall on a concrete base, it is not clear if the wall was designed to withstanding tsunami impacts. The 2021 report and modelling were undertaken prior to the construction of the cycleway. The modelling for the district plan predates the cycleway	Retain overlay as proposed.

				construction and was provided to the T&T engineers who designed the structure. The degree to which mitigation of a tsunami has been incorporated in the engineering design is unknown to ESNZ.	
Richard Kemp and Honor Kemp	25	226 Marine Drive Lowry Bay	Owned for 35 years, hasn't experienced hazards, 2m brick wall. The owner also notes <i>"Furthermore, the very extensive sea wall and walking and cycle shared path currently being constructed in Lowry Bay and other Eastern Bays has been designed to "improve the resilience of Marine Drive by providing protection against storms and waves, along with coastal erosion" [Sourced from HCC Tupua Horo Nuku Council website]. This project should alleviate concerns about natural hazards, not only for our Property but for all coastal properties in Lowry Bay".</i>	The preparation of the district plan has resulted in hazards being identified. A tsunami not being experienced in the property owners experience does not preclude the potential for it to occur. The submitter notes they have a 2m brick protection structure. It is not clear if the wall was designed to withstanding tsunami impacts. The 2021 report and modelling were undertaken prior to the construction of the cycleway. The modelling for the district plan predates the cycleway construction and was provided to the T&T engineers who designed the structure. The degree to which mitigation of a tsunami has been incorporated	Retain overlay as proposed.

				in the engineering design is unknown to ESNZ.	
Ron Beernink and Glenda McCallum	303	42 Fitzherbert St Petone	No relief sought for tsunami	No relief sought or response to queries required	Retain as proposed
Sensible Solutions for Eastbourne	383	95 Oroua St Eastbourne 376, 1/376A, 2/376A Muritai Road 2 Pukatea St Eastbourne 15 Marine Parade Eastbourne 12 Puriri St Eastbourne 606, 607, 607A, 608 Marine Drive Days Bay	No specific relief sought for tsunami	No relief sought or response to queries required	Retain as proposed
Tom Brodie	11	438 Muritai Road Eastbourne	Owned since 1978, never experienced hazards, remove.	The preparation of the district plan has resulted in hazards being identified. A tsunami not being experienced in the property owners experience does not preclude the potential for it to occur.	Retain overlay as proposed.
Tom Hudig	288	231 Marine Drive Lowry Bay 48 Victoria St Petone	I have lived here for 55 years. Regarding sea inundation: you are building a sea wall that	The preparation of the district plan has resulted in hazards being identified. A tsunami not	Retain overlay as proposed.

		11 Aurora St Petone	includes walk and cycle path in Lowry Bay to stop this in your words “designed to improve the resilience of Marine Drive by providing protection against storms and waves, along with coastal erosion”. In the 55 years we have lived here we have never had sea inundation even during the most intensive southerly storms. Since we have lived here we have not had any subsidence and the house shows no evidence of being unstable despite large earthquakes and torrential rains.	being experienced in the property owners experience does not preclude the potential for it to occur. The submitter notes they have a protection sea inundation structure in the form of a brick wall on a concrete base, it is not clear if the wall was designed to withstanding tsunami impacts. The cycleway structure, and its impact on tsunami is also highlighted. The modelling for the district plan predates the cycleway construction and was provided to the T&T engineers. The degree to which mitigation of a tsunami has been incorporated in the engineering design is unknown to ESNZ	
Tony Brenton-Rule	268	10 Ngaio Street	Not specific, but inferred reduction or removal of identified hazard area	Detail provided in submission does not question the assumptions and process of the hazard modelling.	Retain as notified.

REFERENCES

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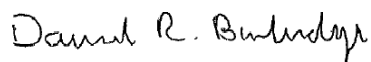
Lukovic B, Heron DW, Wang X, Power WL. 2017. Evacuation time estimates for local source tsunami for Wellington suburbs. Lower Hutt (NZ): GNS Science. 159 p. (GNS Science Report; 2017/05).
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New Zealand Coastal Policy Statement, Ministry for the Environment 2010 (amended 2025). [New Zealand Coastal Policy Statement | Ministry for the Environment](#)

Wang, X.; Mueller, C.; Power, W.L.; Lukovic, B. 2016. Arrival time estimates for local source tsunami for Wellington suburbs, GNS Science Report 2016/03. 53 p.; doi: 10.21420/G25C73

Signed:



David Ross Burbidge



Edith Victoria Bretherton

Date: 20/07/2026

Appendix A: Figures from the 2021 Report with and without sea level rise.

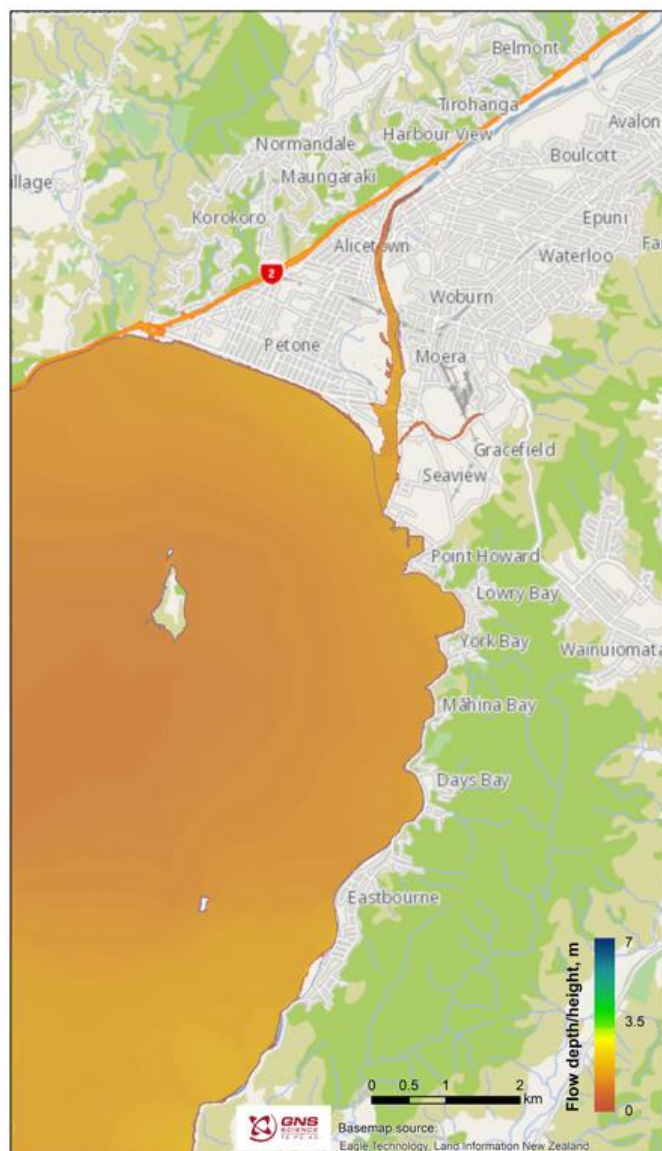


Figure 4.1 Probabilistic tsunami inundation map for Lower Hutt showing the median flow depths onshore and offshore tsunami heights with a 1-in-100-years chance of being exceeded per annum at current MHWS. Onshore values refer to flow depths, while offshore values refer to maximum tsunami heights.

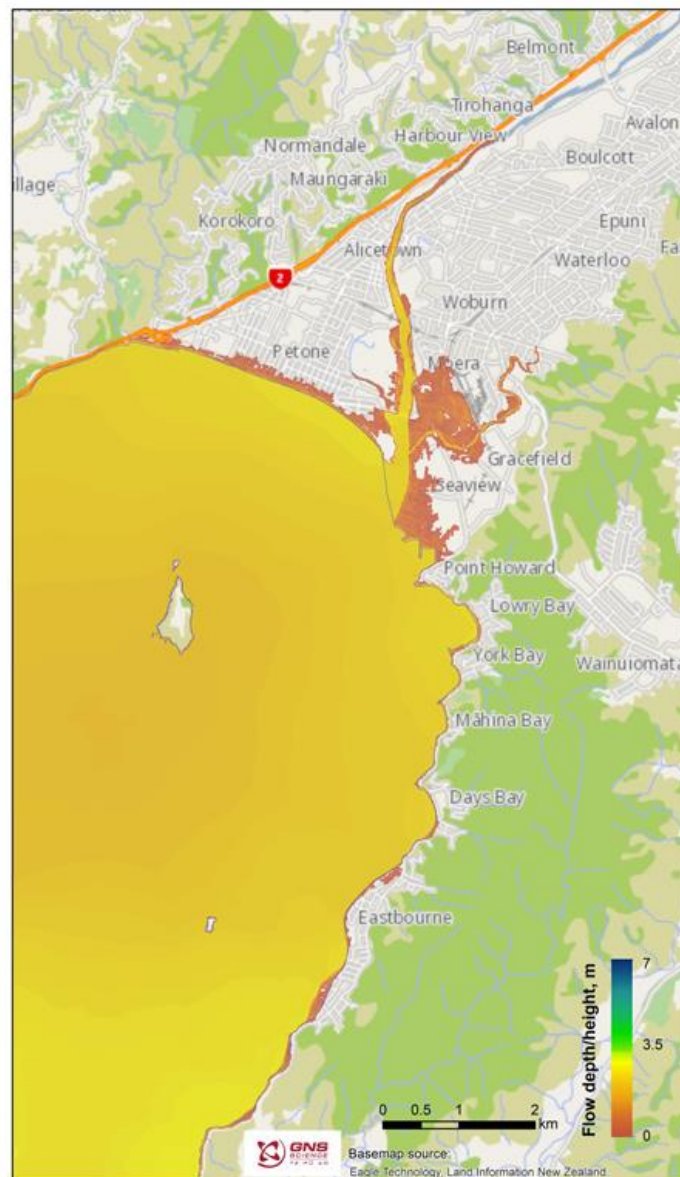


Figure 4.2 Probabilistic tsunami inundation map for Lower Hutt showing the median flow depths onshore and offshore tsunami heights with a 1-in-100-years chance of being exceeded per annum at current MHWS plus 1.0 m of sea-level rise. Onshore values refer to flow depths, while offshore values refer to maximum tsunami heights.

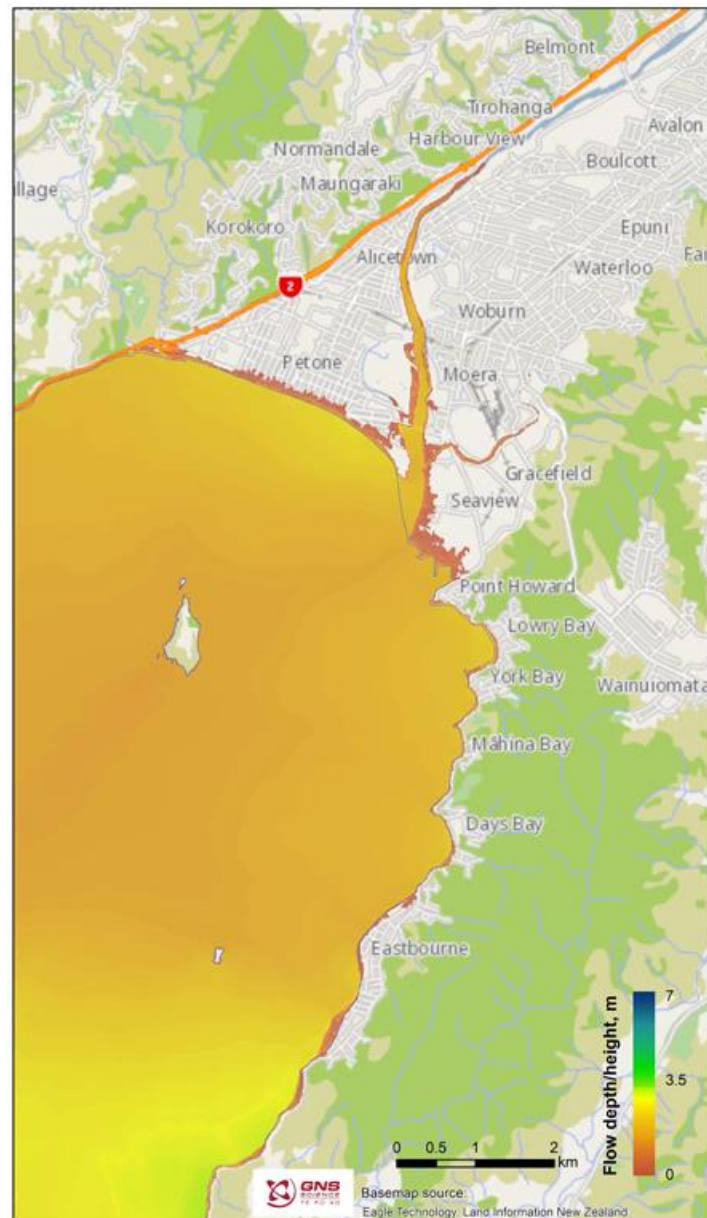


Figure 4.3 Probabilistic tsunami inundation map for Lower Hutt showing the median flow depths onshore and offshore tsunami heights with a 1-in-500-years chance of being exceeded per annum at current MHWS. Onshore values refer to flow depths, while offshore values refer to maximum tsunami heights.

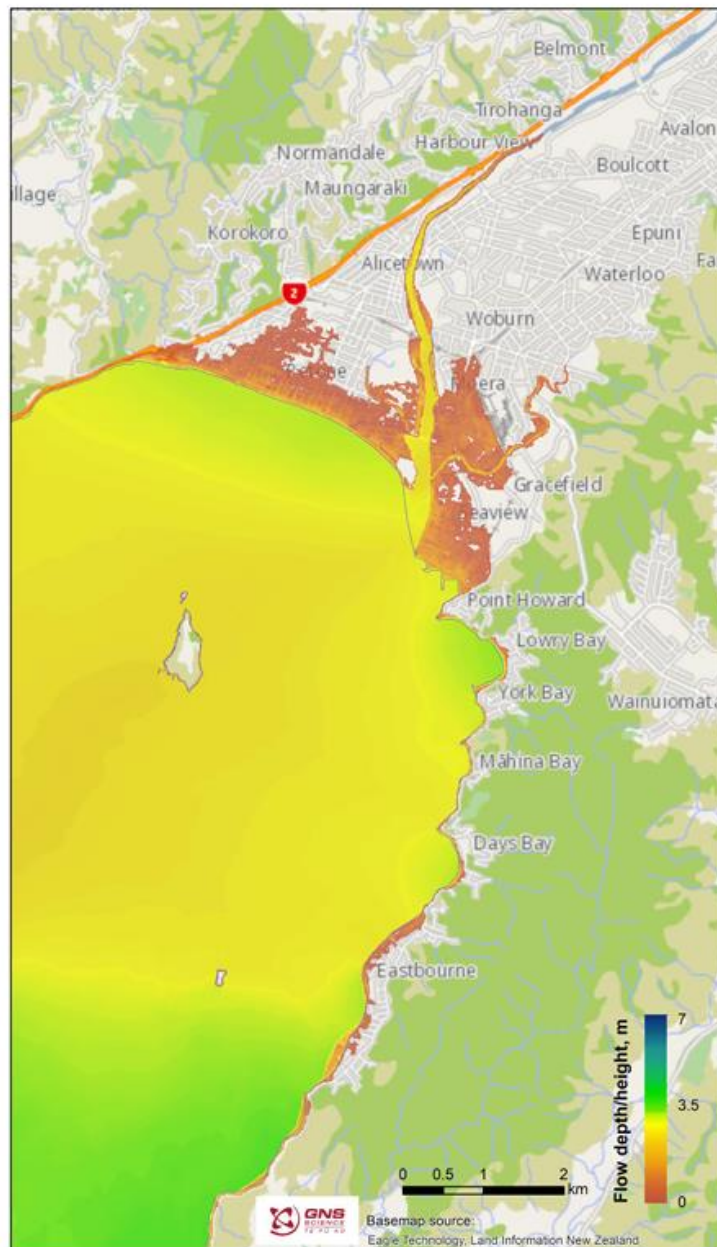


Figure 4.4 Probabilistic tsunami inundation map for Lower Hutt showing the median flow depths onshore and offshore tsunami heights with a 1-in-500-years chance of being exceeded per annum at current MHWS **plus 1.0 m of sea-level rise**. Onshore values refer to flow depths, while offshore values refer to maximum tsunami heights.

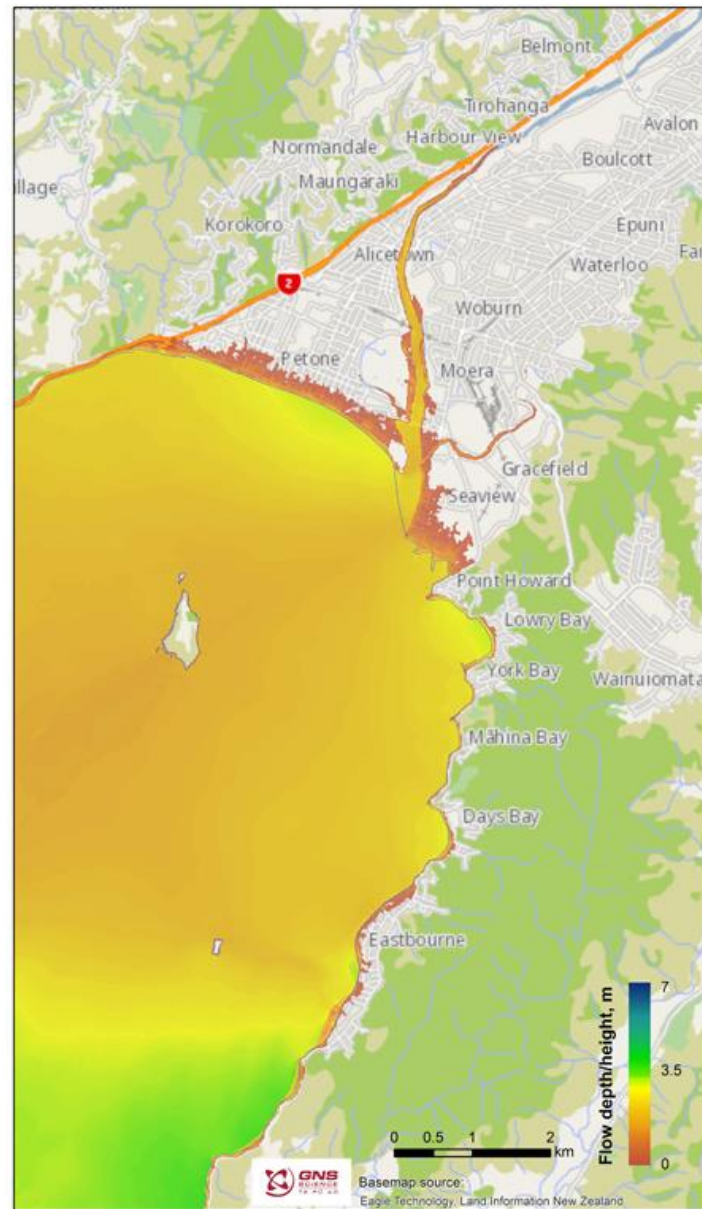


Figure 4.5 Probabilistic tsunami inundation map for Lower Hutt showing the median flow depths onshore and offshore tsunami heights with a 1-in-1000 years chance of being exceeded per annum at current MHWS. Onshore values refer to flow depths, while offshore values refer to maximum tsunami heights.

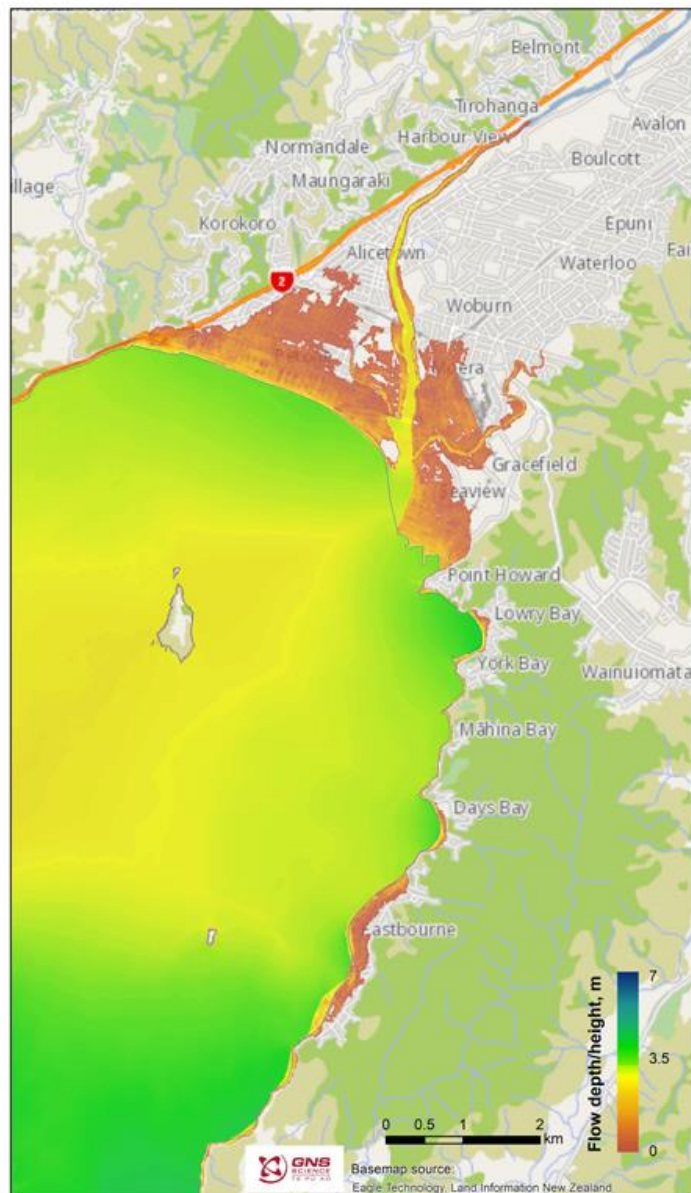


Figure 4.6 Probabilistic tsunami inundation map for Lower Hutt showing the median flow depths onshore and offshore tsunami heights with a 1-in-1000 years chance of being exceeded per annum at current MHWS **plus 1.0 m of sea-level rise**. Onshore values refer to flow depths, while offshore values refer to maximum tsunami heights.

Appendix B4: Fault rupture evidence of Dr Nicola Litchfield and Ms Edith Bretherton

**Before the Hearings Panel
At Hutt City Council**

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

**Joint statement of evidence of Dr Nicola Jane Litchfield and Ms Edith
Bretherton on behalf of Hutt City Council**

Date: 17 July 2026

INTRODUCTION

1 Our full names are Dr Nicola Jane Litchfield and Ms Edith Victoria Bretherton. Dr Litchfield is employed as a Principal Tectonic Geomorphologist / Earthquake and Ms Bretherton is employed as a senior natural hazards specialist, both at the New Zealand Institute for Earth Sciences (ESNZ), Lower Hutt, New Zealand.

ESNZ was formerly known as the Institute of Geological and Nuclear Sciences Limited (GNS Science).

2 We have prepared this statement of evidence on behalf of Hutt City Council in respect of technical related matters arising from the submissions and further submissions on the Proposed Hutt City District Plan (**PDP**).

3 Specifically, this statement of evidence relates to the matters in Chapter NH - Natural Hazards where it relates to active fault hazards.

4 We authorised to provide this evidence on behalf of the Council.

QUALIFICATIONS AND EXPERIENCE

5 Dr Litchfield holds the qualifications of Doctor of Philosophy (Geology – 2000) from the University of Otago, a Master of Science with First Class Honours (Geology – 1996) from the University of Canterbury, and a Bachelor of Science (Geology – 1993) from the University of Canterbury. She has worked for ESNZ, and predecessor organisations for 25 years including 4 years as a New Zealand Science and Technology Post-doctoral fellow (2001-2004) and currently hold the role of Principal Tectonic Geomorphologist / Earthquake Geologist. Since 1995 I have been involved in multiple active fault mapping, paleoseismology

and fault characterisation studies, seismic hazard assessments and providing active fault expert evidence.

- 6 She led active fault mapping studies for District Plans for Whakatāne, Upper Hutt City, Porirua, Kaikōura, Taupō, Wairarapa Councils, and Tairāwhiti / Gisborne Districts, and have reviewed studies for other regions (Hawke's Bay, Horizons, West Coast, Marlborough, Canterbury, Otago).

Her paleoseismology studies have included trenching studies of active faults around New Zealand (e.g., Wellington, Ohāriu, Masterton, Papawai, Alpine, Dunstan, Akatore, Titri, Mohaka Faults and several in the Taupō Rift).

Dr Litchfield was one of the leaders of the active fault earthquake source model for the 2010 NZ National Seismic Hazard Model (NSHM) and the NZ Community Fault Model version 1.0, which was a key input into the 2022 NSHM. I led development of the NZ Paleoseismic Site Database version 1.0 which also contributed to the 2022 NSHM.

She has provided active fault expert evidence for the Porirua City Council Proposed District Plan and Appeals, the Wellington City Proposed District Plan and the Wairarapa Combined District Plan.

She is member of the Geoscience Society of New Zealand, Seismological Society of America, American Geophysical Union, and New Zealand Archaeological Association.

She was a member of the team that received a New Zealand Society for Earthquake Engineering Commendation for the science response to the Christchurch Earthquakes in the Port Hills.

She leads the award-winning It's Our Fault: Nō Mātou Te Hapa programme aimed at improving resilience to earthquakes and associated hazards throughout the Wellington Region.

- 7 Ms Brethertons' academic qualifications comprise of a Master of Science (Physical Geography 2016), Bachelor of Science (Earth Science and Physical Geography), Graduate Diploma in Arts (2007) and Bachelor of Business (2005), all from Massey University.
- 8 She holds the position of Senior Natural Hazards Planner at ESNZ. She leads the Planning and Policy Research project under the Strategic Science Investment Fund (SSIF) in the Multi-Hazard and Risk programme (previously Improved Risk Governance), and the Science to Practice project in the "It's our Fault" programme.
- 9 She has led multi-disciplinary teams researching policy levers to reduce risk from natural hazards and climate change. She has also been a member of the technical advisory group for Auckland Councils' plan change 78 (now 120), Environment Southland Technical Advisory Group. She has coordinated expert witnesses for Wellington City District Council, Wairarapa District Councils and Hutt City District Council. She led multi-disciplinary peer reviews of tsunami risk assessments for Wellington City District Council.
- 10 Prior to joining GNS Science in 2022 she worked for the West Coast Regional Council as a Senior Planner from February 2018. She developed provisions including Natural Hazards for Te Tai o Poutini Plan (combined) District Plan for the West Coast. She also progressed the Coastal Plan review and was a support planner for the Regional Policy Statement and Land and Water Plan Change hearings.
- 11 Previous to this she was programme coordinator for the Auckland Unitary Plan March 2013 – November 2016. She moved into resource

consent processing as the plan became operative at the West Auckland Planning Office.

- 12 She gained her accreditation as an RMA commissioner in 2022 and has acted as a Commissioner on the West Coast for the District Councils for hearings, commissioner only decisions, commissioner led mediation, and s.357 commissioner referrals.
- 13 She is a full member of the New Zealand Planning Institute and has convened a special interest group for natural hazards, of which she is the establishment chair.
- 14 She is currently seconded on a part time basis to the Ministry for Cities, Environment, Regions and Transport (MCERT) formerly the Ministry for the Environment as a Senior Advisor in the Natural Hazards Policy Team.

CODE OF CONDUCT

- 15 We have read the Code of Conduct for Expert Witnesses set out in the Environment Court's Practice Note 2023. We have complied with the Code of Conduct in preparing my evidence and will continue to comply with it while giving oral evidence before the Hearings Panel. Our qualifications as an expert are set out above. Except where we state we rely on the evidence of another person, we confirm that the issues addressed in this statement of evidence are within my area of expertise, and I have not omitted to consider material facts known to me that might alter or detract from my expressed opinions.

SUMMARY

- 16 Our names are Dr Nicola Litchfield and Ms Edith Bretherton
- 17 We have been asked by Hutt City Council to provide evidence in relation to submissions on active fault hazard in the PDP.

18 Our responses to the individual submissions follow on Table 1.

DETAILED RESPONSES – TABLE 1

19 We have reviewed the critiques made by submitters and provided response and recommendation.

Submitter	Submitter Number FS Submitter Number	Specific sites or areas	Relief Sought	Expert Witness Response	Expert Witness Recommendation
Anish Punjabi	141	Ford Road, Manor Park	There is no relief sought specific to active fault hazard.	No evidence or commentary to respond to.	Retain as notified
Bhuvi Punjabi	144	Ford Road, Manor Park	There is no relief sought specific to active fault hazard.	No evidence or commentary to respond to.	Retain as notified
Neha Punjabi	140	No	There is no relief sought specific to active fault hazard.	No evidence or commentary to respond to.	Retain as notified
Pamodh Panagoda	154	14 Martha Turnell Cres Manor Park	There is no relief sought specific to active fault hazard.	No evidence or commentary to respond to.	Retain as notified
Te Kārearea Ltd and Rosco Ice Cream Ltd	447	30 Benmore Crescent Manor Park	There is no relief sought specific to active fault hazard.	No evidence or commentary to respond to.	Retain as notified

Signed:

A handwritten signature in blue ink, appearing to read "N Litchfield", written on a light-colored, slightly textured background.

Nicola Litchfield

A handwritten signature in blue ink, appearing to read "Edith Bretherton", written on a light-colored, slightly textured background.

Edith Bretherton

Date: 17 July 2026

Appendix B5: Slope stability evidence of Mr Pathmanathan Brabhaharan and Dr Dougal Mason



Hutt City Council **Slope Assessment Overlay**

Proposed District Plan Support

21 July 2026



Document distribution

Hutt City Council

Slope Assessment Overlay

Proposed District Plan Support

Report No. GER 2026 – 11

21 July 2026

Prepared for

Hutt City Council

Laings Road, Lower Hutt

Prepared by

WSP New Zealand Limited
L9 Majestic Centre, 100 Willis Street, Wellington, 6011
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Quality control	Name	Date	
Prepared by:	Danielle Barnhill Tegan Stoneman-Wills	16 July 2026	
Reviewed by:	P Brabhakaran Doug Mason	20 July 2026	
Approved by:	P Brabhakaran	21 July 2026	

Revisions

Rev	Date	Details
0	20 July 2026	Issue 1
1	21 July 2026	Issue 2



Disclaimer:

This report ('Report') has been prepared by WSP New Zealand Limited ('WSP') exclusively for Hutt City Council ('Client') in relation to support for the Slope Assessment Overlay in the Proposed District Plan ('Purpose') and in accordance with the Short Form Agreement with the Client dated 2 July 2026 ('Agreement').

This Report is based on information available to WSP at the time of preparation, including the Slope Failure Susceptibility Assessment (WSP, 2021), Slope Runout Assessment (WSP, 2025), and submissions provided by Hutt City Council for review. The Report has been prepared to provide technical commentary on matters relating to the methodology, interpretation, and intended application of the Slope Assessment Overlay.

This Report does not constitute a site-specific geotechnical assessment, landslide hazard assessment, or engineering evaluation of any individual property. No site inspections, site-specific investigations, or verification of property-specific conditions have been undertaken as part of this work unless explicitly stated.

The findings, opinions, and conclusions contained in this Report are subject to the assumptions and limitations identified herein and in the underlying assessments. WSP accepts no liability whatsoever for any use of, or reliance on, this Report for any purpose other than the Purpose, or by any person or organisation other than the Client.

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Appendix A – Technical Commentary on Submissions

1. Introduction

1.1 Qualifications, experience, and code of conduct

This report has been prepared with the direction and overview of *Pathmanathan Brabhaharan* and *Dougal Mason* of WSP. Their qualifications and experience are summarised below.

1.1.1 Pathmanathan Brabhaharan

Name: Pathmanathan Brabhaharan

Qualifications: BSc Engineering (Honours) | MSc Engineering, Master of Business Administration | Chartered Professional Engineer in New Zealand

Affiliations: Fellow, Engineering New Zealand | Fellow, NZ Society for Earthquake Engineering | Member, NZ Geotechnical Society, and by affiliation International Society for Soil Mechanics and Geotechnical Engineering | International Society for Rock Mechanics | Member, Structural Engineering Society.

Immediate Past President, NZ Society for Earthquake Engineering

Experience: Experience 43 years, including 37 years in New Zealand, specialising in Geotechnical, Earthquake and Civil Engineering, based in Wellington.

Natural hazard and associated risk assessment | Resilience of the built environment and infrastructure and risk.

Assessment of landslide hazards and risk, and provision of advice on the management of risk to the built environment through planning measures, landuse planning and District Plan regulations for a variety of districts – Wellington region, Tauranga and Bay of Plenty region, Auckland region, Whanganui, Blenheim, Queenstown-Lakes, Dunedin etc.

Research into landslide hazards following earthquakes and storms in New Zealand (Kaikoura | Christchurch) and overseas (China | Japan), and development of guidance on seismic design of slopes, slope guidelines for NZGS and training to practicing geo professionals.

Led the assessment of the slope susceptibility and runout and the slope assessment overlay for Hutt District, and previously earthquake induced landslide hazards for the Wellington region including Hutt City. Led the preparation of this report based on the review of submissions.

1.1.2 Dougal Mason

Name: Dougal Mason

Qualifications: PhD Engineering Geology | MSc Geology (Honours) | BSc Geology | BA History

Affiliations: Member, Engineering New Zealand | Member, NZ Geotechnical Society, and by affiliation International Association for Engineering Geology and International Society for Rock Mechanics | Member, NZ Society for Earthquake Engineering.

Experience: 22 years specialising in engineering geology and geohazards, of which 19 years based in Wellington. Assessment of landslide hazards and risk, and provision of advice on the management of risk to the built environment through planning measures, land use planning and District Plan regulations for a variety of districts – Hutt City, Tauranga City, Bay of Plenty Region, Auckland Region, Whanganui District, Blenheim.

Research into landslide hazards and performance of slopes following earthquakes and storms in New Zealand, and development of guidance on seismic design of slopes, and contribution to NZ Geotechnical Society slope stability guidance units for practitioners.

Delivered the assessment of slope failure susceptibility and runout and the slope assessment overlay for Hutt City. Contributed to the preparation of this report based on the review of submissions.

1.1.3 Code of conduct

We have read the Code of Conduct for Expert Witnesses set out in the Environment Court's Practice Note 2023. We have complied with the Code of Conduct in preparing our evidence and will continue to comply with it while giving oral evidence before the Hearings Panel. Our qualifications as experts are set out above. Except where we state we rely on the evidence of another person, we confirm that the issues addressed in this statement of evidence are within our areas of expertise, and we have not omitted to consider material facts known to me that might alter or detract from my expressed opinions.

1.2 Background

Hutt City Council (HCC) is undertaking a review of the District Plan (DP), including the introduction of a Slope Assessment Overlay, supporting the identification and management of slope instability hazards. The overlay has been developed to provide a district-scale planning tool that identifies where slope instability hazards may be present and where further geotechnical assessment is recommended as part of future development and subdivision activities. The Slope Assessment Overlay is intended to support hazard-informed land use planning and is not designed to determine hazard or risk at an individual property level.

The Slope Assessment Overlay is underpinned by two assessments – a Slope Failure Susceptibility Assessment (WSP, 2021) and a Slope Runout Assessment (WSP, 2025). The Slope Failure Assessment provides a district-wide appraisal of slope failure susceptibility by evaluating factors that are known to influence slope instability. This includes topography, soil / rock and geographic characteristics, lithology, land cover and proximity to faults and streams (WSP, 2021). The assessment classified land into five categories of slope susceptibility ranging from Very Low to Very High susceptibility. Information from the Slope Failure Assessment was used as an input dataset to develop a Slope Runout Assessment for Focus Activity Areas including the Hill Residential Activity Area, Landscape Protection Activity Area, General Residential Activity Area (in hill suburbs) and Rural Residential Activity Area. This identified areas that could be potentially affected by material originating from upslope failures (WSP, 2025).

Runout zones were derived from areas classified as Moderate, High and Very High susceptibility using empirically derived runout travel angles.

The landslide susceptibility and runout datasets were combined and reviewed in the context of the geomorphology of the Hutt City area from a 1:2,000 scale to produce the Slope Assessment Overlay. The resulting overlay represents areas potentially affected by slope instability and associated runout and has been developed as a screening tool to inform planning decisions and identify where site-specific geotechnical investigations may be required. The overlay replaces the existing approach whereby geotechnical assessments are generally required across all hill areas, thereby providing a more targeted and evidence-based mechanism for identifying where further assessment is warranted.

1.3 Purpose of the Slope Assessment Overlay

The Slope Assessment Overlay has been developed as a district-scale planning tool to support the identification and management of slope instability hazards within the Hutt City District Plan. The overlay is intended to assist HCC by identifying areas where slope instability processes may occur and where further geotechnical assessment may be required as part of future subdivision, development or land-use change. The overlay is based on district-wide landslide susceptibility and runout assessments, and is designed to provide a consistent, evidence-based screening tool for potential land instability hazard across Hutt City.

The Slope Assessment Overlay is not intended to determine hazard, risk or development suitability at an individual property scale. It instead is to function as a screening tool to identify areas where slope instability hazards may be present, and where more detailed site-specific investigations may be warranted. Site-specific geotechnical assessments can incorporate local ground conditions, engineering works, retaining structures, earthworks, drainage systems and other factors that cannot be reliably represented within a district-scale assessment, and provide a more site-specific understanding of hazard and risk at a site.

The inclusion of a property within the Slope Assessment Overlay does not indicate that slope failure is occurring, has occurred in the past, will occur in the future or that future development is inappropriate. It instead highlights to property owners that there is the potential for slope hazards, and additional geotechnical investigation and consideration is required to better understand site-specific conditions to inform future planning and development.

1.4 Interpretation and intended use of the overlay

The Slope Assessment Overlay is derived from district-scale landslide susceptibility and runout assessments that identify where slope instability processes may be present based on factors that are known to influence landsliding such as topography, soil characteristics, geology and land cover. The assessments are intended to identify the relative spatial distribution of slope instability hazards across Hutt City and provide a basis for hazard screening and land-use planning.

The assessment has been carried out as part of a district-wide study using 2013 and 2016 LiDAR data and 1:50,000 geology maps and other district and regional scale information. No site-specific data or analysis has been incorporated into the mapping.

The Overlay is suitable for the intended use to determine areas where slope instability processes may occur and where further geotechnical assessment may be required as part of future subdivision, development or land-use change.

However, the landslide susceptibility and runout assessments do not predict the likelihood or frequency of landslides occurring at a particular location and do not provide annual exceedance probabilities or recurrence intervals. Similarly, the assessments do not quantify the magnitude or severity of potential landslide events. The assessments instead identify areas that may be more susceptible to slope failure or could be affected by landslide runout and are intended to be used as a screening tool rather than a quantitative hazard or risk assessment.

The Slope Assessment Overlay is not a risk map and does not classify areas according to potential damage, consequence or overall risk level. The consequences associated with a future landslide event are likely to vary considerably across the mapped overlay area depending on the characteristics of any failure, local topography, location and type of development, and other site-specific factors. Assessment of consequences and/or risk requires site-specific investigation and cannot be reliably inferred from the overlay alone.

1.5 Climate Change Considerations

The landslide susceptibility and runout assessments which underpin the Slope Assessment Overlay have been developed using the best available information (for terrain, geology, and environmental conditions) at the time of assessment. The assessments do not explicitly model future climate change scenarios associated with increases in rainfall intensity or other climate-related drivers.

Climate change, however, may influence factors that are known to contribute to slope instability, including frequency and intensity of extreme rainfall events. As a result, climate change and associated changes in the intensity and frequency of rainfall may increase the likelihood of landslide occurrence in some locations in the future. This does not invalidate the overlay, as the mapping identifies areas where slope instability processes may occur based on the underlying terrain and geological conditions. The Slope Assessment Overlay highlights the importance of adopting a precautionary approach and undertaking site-specific assessment, including potential climate change effects, where development is proposed within the overlay.

1.6 Risk mitigation

Slope movements or failures could cause severe damage to the built environment and potentially cause fatalities. The risks to people and development from landslide hazards could be mitigated by a variety of measures. These could include avoiding developing areas of high landslide susceptibility; carrying out earthworks, stabilisation measures, structural measures; or development that is able to resist, tolerate or accommodate slope displacements. At a high level it would be prudent to avoid or use higher slope hazard areas for low intensity land use and use lower hazard areas for more intensive or sensitive land use. This will facilitate development with lower risk and lower cost, and which uses resources and land in a more sustainable manner.

Where developments are in areas susceptible to run-out from slope failures (rather than in areas susceptible to slope movement or failure), measures could potentially be considered to protect downstream developments by the construction of bunds or barriers to deflect the runout away from

development or create space for detention of the runout debris from potential slope failures, or alternatively avoiding areas susceptible to inundation from runout.

1.7 Report Purpose

This report has been prepared to support HCC's consideration of submissions related to the Slope Assessment Overlay. We have reviewed the submissions identified by HCC that relate to the overlay, its technical basis and methodology. The purpose of this report is to provide technical commentary on submissions relevant to the district-scale assessment methodology that underpins the Slope Assessment Overlay and to assist HCC in understanding how specific submission matters relate to the overlay's intended purpose and use.

2. Submission Responses

We have reviewed 56 submissions that have been highlighted by HCC to be potentially relevant to the Slope Assessment Overlay. Appendix A presents the response submissions with WSP's responses, focused only on the technical aspects of the overlay.

Key themes and trends within the submissions relating to the Slope Assessment Overlay include:

- The overlay being based on a district-scale desktop assessment and not informed by site-specific investigations, geotechnical assessments or property-level data.
- The absence of known historical landslide events or instability affecting individual properties.
- The perceived influence of vegetation on slope stability and landslide susceptibility.
- Requests for removal of properties from the overlay due to local site conditions and existing geotechnical structures, retaining walls, engineered building platforms and previous geotechnical assessments for individual properties.
- Concerns around the application of the overlay to individual properties, and the distinction between district-scale hazard screening and site-specific hazard assessment.
- Queries regarding the use of a binary overlay extent rather than displaying the underlying landslide susceptibility classifications (e.g. Very Low to Very High susceptibility).

General responses to some of the issues raised in the submissions are summarised in Section 3.

3. Conclusions

This report presents a review of the submissions identified by Hutt City Council that relate to the proposed Slope Assessment Overlay and provides technical commentary on the matters raised. The submissions reflect a range of perspectives regarding the interpretation and application of the overlay, particularly in relation to individual properties and site-specific conditions.

The Slope Assessment Overlay has been developed as a district-scale planning tool to support the identification and management of slope instability hazards across Hutt City. As such, the overlay is intended to be used as a hazard screening and planning mechanism, with site-specific investigations remaining the appropriate means of assessing local ground conditions, hazard, and risk where required.

We consider that the Slope Assessment Overlay will be a useful tool to manage potential effects from land instability.

We summarise below our responses to the general issues raised in the submissions.

- 1) The assessment has been developed using recognised landslide susceptibility and runout assessment methodologies, regionally consistent datasets, and established industry approaches commonly applied in New Zealand and internationally for district-scale natural slope hazard assessments. The assessment methodology, datasets, assumptions and limitations used to develop the landslide susceptibility, runout and geomorphological assessments are documented within the supporting technical reports. These reports set out the information sources, analytical approaches and assessment criteria used to identify areas potentially affected by slope instability processes across the district.
- 2) Some submissions query whether the reports have been peer reviewed. The reports have also been reviewed internally within WSP. Although the reports were not required to be externally peer reviewed, the approach adopted and used is consistent with approaches used for similar landslides susceptibility studies and land use planning approaches that have been peer reviewed and used across New Zealand, presented at conferences and published as technical papers.
- 3) The methodology for the overlay relies on regionally consistent datasets and broad-scale assessment techniques and is not intended to replicate site-specific geotechnical investigations. Rather, the purpose of the assessment is to provide a consistent and evidence-based planning framework for identifying areas where slope instability hazards may warrant consideration through the District Plan.
- 4) The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay is not intended to determine hazard or risk at a property scale, but is a screening tool designed to identify where site-specific geotechnical assessment may be required.
- 5) The proposed Slope Assessment Overlay itself does not adversely constrain land development and use but provides a high-level screening tool so that site specific geotechnical investigations could be carried out to assess the hazards and how the land may be developed in a way that takes into consideration the risk from slope instability and runout. Such site-specific

assessments will determine whether the land could be developed and what mitigation measures may be required for the specific development proposed.

- 6) The Slope Assessment Overlay provides a tool for the Council to require site specific geotechnical assessments as part of any future development. The overlay also highlights to property owners the presence of potential slope hazards, and enable them to proactively consider the siting, investigation, mitigation and design of any proposed development.
- 7) The development of the landslide susceptibility and runout zones are based on regional and district level datasets and LiDAR data, and no site investigations have been carried out in specific areas. Therefore, the susceptibility has been presented as district scale overlays and therefore should not be used to consider hazards at property specific level, except as a screening tool to consider slope potential hazards in the areas. The overlay considers the level of landslide susceptibility as well as the potential for runout and the geomorphological context of the area.
- 8) There may be earthworks, retaining walls and structures formed as part of existing developments or as part of current or proposed developments. Since the landslide susceptibility has been assessed at a district wide scale, it is not possible to assess such formed structures, the level of engineering carried out and therefore their landslide susceptibility at a property level. However, evidence of such engineering and associated reports or drawings can be used when site specific geotechnical assessments are carried out for any future development.
- 9) There is a misconception that there is a slope hazard only if there is evidence of past landslides at the property. The absence of recorded landslides or known instability on a property does not necessarily indicate that the land is free from slope instability hazards, as the assessment is based on factors known to influence slope failure, including topography, geology and land cover, rather than solely on historical events. Many slope failures are observed to occur on slopes not previously affected by slope instability, both in earthquake as well as storm events. Accordingly, the overlay identifies areas that may be susceptible to future slope instability and landslide runout, rather than only areas where landslides have occurred in the past.
- 10) Some submissions query why vegetated areas with trees are included in the Slope Assessment Overlay. While the presence of vegetation and trees generally enhances slope stability due to the root system and evapotranspiration removing water from the slope, this generally only enhances stability against shallow slope failures in rainfall conditions, but not deeper-seated failures in storm events, or earthquake induced failures. Also, the presence of trees could also add to the weight and reduce stability of slopes. Therefore, the presence of trees and vegetation does not necessarily remove the susceptibility to landslides.
- 11) There have been queries as to why the underlying landslide susceptibility maps have been prepared with Very Low to Very High susceptibility, whereas the Slope Assessment Overlay is binary, and thought to be areas of landslide hazard or no hazards. The purpose of the overlay is to cover areas where there are sufficiently significant landslide and runout susceptibility, to require site specific geotechnical investigations. The susceptibility and runout maps (with the varying degrees of susceptibility) and associated technical reports are available to inform site specific consideration of the slope hazards and the risk to the development proposed. The Slope Assessment Overlay does not mean that there are no slope hazards outside the area covered by the overlay.

- 12) Some have queried whether there is a relationship between the flood hazards and the Slope Assessment Overlay. The flood maps and slope maps have been developed independently, with generally flooding affecting flatter areas and slope susceptibility in sloping hillside areas, except where there could be runout from slope failures onto the flat areas adjacent to hillsides.

4. References

WSP, 2021. *Slope Failure Susceptibility Assessment: Hutt City District Plan Review*, s.l.: Hutt City Council.

WSP, 2025. *Slope Failure Runout Assessment - Hutt City District Plan Review*, s.l.: Hutt City Council.

Appendix A Technical Commentary on Submissions

Appendix A – Technical Commentary of Submissions

[also refer to general comments in Sections 2 and 3 of the Report]

Submission Number	Submitter	Site/Area	Submission Response
3	Rohan Kulkarni	1/48, 2/48, and 52N Stanley St Wainui	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay is not intended to determine hazard or risk at a property scale, but is a screening tool designed to identify where site-specific geotechnical assessment may be required. The proposed Slope Assessment Overlay itself does not adversely constrain land development and use but provides a high-level screening tool so that site specific geotechnical investigations could be carried out to assess the hazards and how the land may be developed in a way that takes into consideration the risk from slope instability and runout. Such site-specific assessments will determine whether the land could be developed and what mitigation measures may be required for the specific development proposed. The inclusion of the three properties within the overlay reflects a combination of the broader geomorphological area identified through the district-wide assessment and the presence of local terrain characteristics identified through the susceptibility and runout assessments. The district-wide methodology utilises regionally consistent datasets and LiDAR-derived topographic information, which can identify localised slopes, cut batters, earthworks and other terrain features represented within the landscape. The overlay reflects the combined consideration of landslide susceptibility, potential runout and geomorphological characteristics across the wider area. As such, the property's inclusion within the overlay is not based solely on the presence of steep slopes at a particular location, but on the broader assessment of slope instability processes undertaken at a district scale.
5	Seyedomid Zoie	20 Thomson Grove Stokes Valley	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay is not intended to determine hazard or risk at a property scale, but is a screening tool designed to identify where site-specific geotechnical assessment may be required. The absence of recorded landslides or known instability on the property does not necessarily indicate that the property is free from future slope instability hazards. The overlay is based on a district-scale assessment of factors that influence slope stability, including topography, geology, soil characteristics and land cover, and is intended to identify areas that may be susceptible to future slope instability or runout rather than only areas affected by past events. A review of the assessment outputs in the area where this property is located indicates that inclusion of this area within the overlay is consistent with the district-wide methodology used to identify areas that may be affected by slope instability processes, including both susceptibility and potential runout areas.
6	Jarred Gustafson and Paula Gentle	No	The Slope Assessment Overlay identifies areas that may be susceptible to slope instability based on a district-wide assessment. No property-specific hazard or risk assessments were undertaken during its development, and the overlay is not intended to be used to determine hazard or risk at an individual property level. It is intended as a broad-scale planning tool to support land-use decision-making by identifying locations where site-specific geotechnical assessment may be required for future subdivision or development.
7	Mark Gunkel and Evangeline Gunkel	No	The Slope Assessment Overlay identifies areas that may be susceptible to slope instability based on a district-wide assessment. It is intentionally a broad-scale, generalised planning tool designed to support land-use planning by identifying locations where site-specific geotechnical assessment may be required as part of future subdivision or development.

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[also refer to general comments in Sections 2 and 3 of the Report]

Submission Number	Submitter	Site/Area	Submission Response
			The overlay is underpinned by a Landslide Susceptibility Layer, which classifies land from Very Low to Very High susceptibility based on factors known to influence landsliding, together with areas potentially affected by landslide runout. These datasets have been combined into a single binary planning overlay that identifies areas where slope instability hazards may be present and further investigation may be warranted. No property-specific hazard or risk assessment has been undertaken as part of the development of the overlay, and it is not intended to confirm hazard or risk at an individual property level or replace site-specific geotechnical investigations. Instead, it provides a consistent, evidence-based screening tool to identify where more detailed assessment may be required. The underlying landslide susceptibility and runout layers are available to inform such assessment.
8	Jay Daley	10A Moana Road Days Bay	The Slope Assessment Overlay identifies areas with potential slope instability based on a district-wide assessment. It is not intended to determine hazard or risk at a property scale, but to identify where site-specific assessment may be required. The absence of recorded landslides or known instability on the property does not necessarily indicate that the property is free from slope instability hazards. The overlay is based on a district-scale assessment of factors that influence slope stability and runout, including topography, geology, soil characteristics and land cover, and is intended to identify areas that may be susceptible to future slope instability rather than only areas affected by past events. A review of the assessment outputs in the area where this property is located indicates that inclusion of this area within the overlay is consistent with the district-wide methodology used to identify areas that may be affected by slope instability processes, including both susceptibility and potential runout areas.
9	Teh Meng Hing	14 Main Road Wainuiomata	The Slope Assessment Overlay is intentionally a broad-scale, district-wide planning tool developed to identify areas where slope instability hazards may be present and where further investigation may be warranted. It is derived from district-scale landslide susceptibility and runout assessments using established methodologies and regionally consistent datasets that represent factors known to influence slope stability. The overlay is not intended to provide site-specific hazard determinations or replace detailed geotechnical investigations. Accordingly, it is not based on geotechnical assessments of individual properties but instead provides a consistent and evidence-based screening tool to support land-use planning and identify locations where site-specific geotechnical assessment may be required as part of future subdivision or development. This approach reflects standard natural hazard planning practice, whereby district-scale assessments are used to identify potential hazard areas and inform where more detailed investigations should subsequently be undertaken.
10	Judy Ryan	19A & 19B Mulberry St Maungaraki	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay is not intended to determine hazard or risk at a property scale, but is a screening tool designed to identify where site-specific geotechnical assessment may be required. The Slope Assessment Overlay is applied at a district scale and considers the broader topographic, geological and geomorphological setting of a site, including both potential landslide source areas and areas that may be affected by landslide runout. A review of the assessment outputs indicates that the overlay primarily affects the rear portion of the property where susceptibility and/or runout have been identified. While the front unit is located on relatively flat land and outside the principal hazard area, the property is held within a single land parcel, and the overlay reflects the mapped hazard extent affecting part of the site. The information reviewed indicates that the mapped overlay extent is consistent with the assessment methodology adopted for the district-wide assessment.

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[also refer to general comments in Sections 2 and 3 of the Report]

Submission Number	Submitter	Site/Area	Submission Response
13	Julia Neuhof	60 Pokohiwi Rd Normandale	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay is not intended to determine hazard or risk at a property scale, but is a screening tool designed to identify where site-specific geotechnical assessment may be required. While the dwelling may be located on relatively flat land, the assessment identified areas of susceptibility and potential runout in the area where the property is located. Some of these modelled areas may include small-scale topographic features, earthworks or local slopes represented within the underlying elevation data. Given the district-wide scale of the assessment, individual terrain features of this nature were not assessed on a property-by-property basis. The overlay therefore reflects the broader assessment of slope instability processes given the geomorphological setting of the area, rather than the conditions at the footprint of dwellings alone.
19	Terry Strickland and Mary Strickland	18 Thomson Grove Stokes Valley	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay is not intended to determine hazard or risk at a property scale, but is a screening tool designed to identify where site-specific geotechnical assessment may be required. The absence of recorded landslides or known instability on the property does not necessarily indicate that the property is free from future slope instability hazards. The overlay is based on a district-scale assessment of factors that influence slope stability, including topography, geology, soil characteristics and land cover, and is intended to identify areas that may be susceptible to future slope instability rather than only areas affected by past events. A review of the assessment outputs in the area where this property is located indicates that the inclusion of the area within the overlay is consistent with the district-wide methodology used to identify areas that may be affected by slope instability processes, including both susceptibility and potential runout areas.
21	Dean Tredrea and Rennie Tredrea	2 Bledisloe Cres Wainuiomata	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay is not intended to determine hazard or risk at a property scale, but is a screening tool designed to identify where site-specific geotechnical assessment may be required. The landslide susceptibility and runout assessments were developed using district-wide topographic and geomorphological datasets. As a result, the modelling process can identify small-scale slopes, local changes in topography, earthworks, cut batters, retaining features and other terrain expressions represented within the underlying spatial elevation data. Given the scale of the assessment and the extent of the study area, it is not practical to individually review localised features at property level that may influence the model outputs. Consequently, the overlay reflects both the underlying modelling results given the broader geomorphological context of the area, rather than a site-specific assessment of individual properties. Site specific geotechnical assessments would be able to consider features and hazards at a property level.
22	Eli Gilfedder	114 Cheviot Road Lowry Bay	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay is not intended to determine hazard or risk at a property scale, but is a screening tool designed to identify where site-specific geotechnical assessment may be required. The landslide susceptibility and runout assessments were developed using district-wide topographic and geomorphological datasets. As a result, the modelling process can identify small-scale slopes, local changes in topography, earthworks, cut batters, retaining features and other terrain expressions represented within the underlying spatial elevation data. Given the scale of the assessment and the extent of the study area, it is not practical to individually review localised features at property level that may influence the model outputs. Consequently, the overlay reflects both the underlying modelling results and the broader geomorphological context of the area, rather than a site-specific assessment of individual properties. Site specific geotechnical assessments would be able to consider features and hazards at a property level.

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[also refer to general comments in Sections 2 and 3 of the Report]

Submission Number	Submitter	Site/Area	Submission Response
23	Ron Muir	133 Park Road Belmont	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay is not intended to determine hazard or risk at a property scale, but is a screening tool designed to identify where site-specific geotechnical assessment may be required. The Slope Assessment Overlay has been developed from district-scale landslide susceptibility and runout modelling and incorporates geomorphological mapping to produce a consistent and practical planning layer. While portions of the property may appear relatively flat or gently sloping, the inclusion of the area in which the property is located within the overlay is consistent with the district-wide assessment methodology given the broader geomorphological setting of the area. The overlay should not be interpreted as indicating that all parts of a property are susceptible to slope instability, but rather that the property is located within an area identified through the district-scale assessment as potentially affected by slope instability processes.
24	Barry Godfrey	29 Walters St Avalon	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay is not intended to determine hazard or risk at a property scale, but is a screening tool designed to identify where site-specific geotechnical assessment may be required. Geotechnical investigations for the site provide valuable information regarding local ground conditions and a more detailed understanding of site-specific stability than is possible through a district-scale assessment such as the Slope Assessment Overlay. The Slope Assessment Overlay serves a different purpose to a geotechnical assessment which has been prepared for a specific development proposal. The overlay has been developed using a consistent district-wide methodology that considered landslide susceptibility, runout, and geomorphological characteristics across the wider area. The inclusion of the area in which the property is located within the overlay reflects its location within the wider geomorphological area identified through the district-wide assessment, rather than determination or suitability for development. Where geotechnical investigations and reports have been prepared, these are valuable to inform future development.
33	Neil Blackie	No	The Slope Assessment Overlay identifies areas that may be susceptible to slope instability based on a district-wide assessment. It is a broad-scale planning tool intended to support land-use decision-making by highlighting locations where site-specific geotechnical investigations may be warranted as part of future subdivision or development. The overlay is informed by a Landslide Susceptibility Layer, which categorises land from Very Low to Very High susceptibility according to factors that influence landslide occurrence, together with areas potentially affected by landslide runout. These datasets have been integrated into a single planning overlay that represents district-wide patterns of slope instability and associated geomorphological processes, rather than site-specific conditions, to inform where future geotechnical investigations would be appropriate. The underlying landslide susceptibility and runout layers are available to assist with such site-specific assessment. No property-specific hazard or risk assessment has been undertaken as part of the development of the overlay, and it is not intended to confirm hazard or risk at an individual property level or replace site-specific geotechnical investigations. Inclusion of areas within the overlay reflects the broader geomorphological setting and slope instability processes identified through the district-wide assessment and should not be interpreted as a site-specific assessment of existing instability. Rather, the overlay provides a consistent, evidence-based screening tool to identify where more detailed assessment may be required.
91	Jo-Ella Sarich	No	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay does not represent a property-specific slope stability assessment, nor does it assign a hazard or risk rating to individual properties. Rather, it has been developed using a combination of landslide susceptibility modelling, runout modelling and geomorphological assessment undertaken at a district scale. It is a screening tool designed to identify where site-specific geotechnical assessment may be required.

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[also refer to general comments in Sections 2 and 3 of the Report]

Submission Number	Submitter	Site/Area	Submission Response
			The landslide susceptibility assessment which underpins the overlay has considered a range of factors in addition to slope angle, including geology, geomorphology and land cover. As a result, the slope angle ranges described in the technical report should not be interpreted as the sole basis for inclusion within the Slope Assessment Overlay. The overlay reflects the combined consideration of susceptibility, runout potential and geomorphological characteristics, rather than any single factor in isolation. However, the district-wide study did not assess individual features, such as cut slopes, at a property level. The overlay is underpinned by a Landslide Susceptibility Layer, which classifies land from Very Low to Very High susceptibility based on factors known to influence landsliding, together with areas potentially affected by landslide runout. These datasets have been combined into a single binary planning overlay that identifies areas where slope instability hazards may be present and further investigation may be warranted. No property-specific hazard or risk assessment has been undertaken as part of the development of the overlay, and it is not intended to confirm hazard or risk at an individual property level or replace site-specific geotechnical investigations. Instead, it provides a consistent, evidence-based screening tool to identify where more detailed assessment may be required. The underlying landslide susceptibility and runout layers are available to inform such assessment.
97	Brent McKenzie	56 Miromiro Road Normandale	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay is not intended to determine hazard or risk at a property scale, but is a screening tool designed to identify where site-specific geotechnical assessment may be required. The site-specific topographic survey provides a more detailed representation of topographic conditions at the property than is available through the datasets used for the district-wide assessment. While the survey provides additional local detail, the property remains associated with areas of mapped susceptibility and potential runout and is located within a broader geomorphological setting identified through the district-wide assessment. The property's inclusion within the overlay reflects consideration of these factors at a district scale.
101	Susan Ellis	12 Bull Avenue Wainuiomata	The Slope Assessment Overlay identifies areas that may be susceptible to slope instability based on a district-wide assessment. It was developed using a range of factors known to influence slope instability, including topography, geology, geomorphology, land cover, and potential landslide runout. As a result, the overlay reflects the broader pattern of slope instability processes across the district rather than a property-by-property delineation of individual slopes or landforms. No property-specific hazard or risk assessments were undertaken as part of the overlay's development, and it is not intended to determine hazard or risk at an individual property level. Instead, the overlay serves as a screening tool to identify where more detailed, site-specific geotechnical assessment may be required to support future development. While portions of the property may not be on a steep slope, the inclusion within the overlay of the area within which the property is located reflects the outcomes of the district-wide assessment methodology and the broader geomorphological setting of the area. The overlay should not be interpreted as indicating that specific part of a property is located within or outside the overlay but is in an area where slope hazards should be considered.
110	Joerg Bruemmer	94 Pomare Rd Tirohanga	The Slope Assessment Overlay is not linked to the flood modelling.

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[also refer to general comments in Sections 2 and 3 of the Report]

Submission Number	Submitter	Site/Area	Submission Response
119	James Sunderland and Jocelyn Qian	11 Gribble Grove Stokes Valley	The Slope Assessment Overlay identifies areas that may be susceptible to slope instability based on a district-wide assessment. It is intended as a broad-scale planning tool and was not developed using site-specific investigations. As such, the overlay is not designed to determine hazard or risk for individual properties, but rather to indicate where further geotechnical assessment may be appropriate to support future development. The absence of recorded landslides or known instability on a property does not necessarily indicate that the land is free from slope instability hazards, as the assessment is based on factors known to influence slope failure, including topography, geology and land cover, rather than solely on historical events. Many slope failures are observed to occur on slopes not previously affected by slope instability, both in earthquake as well as storm events. Accordingly, the overlay identifies areas that may be susceptible to future slope instability and landslide runout, rather than only areas where landslides have occurred. The inclusion within the overlay of the area where this property is located is consistent with the district-wide methodology used to identify areas that may be affected by slope instability processes, including both susceptibility and potential runout areas.
122	John Wadham	23 Pomare Road Tirohanga	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment based on landslide susceptibility, runout potential and geomorphological characteristics. The overlay is not intended to determine hazard or risk at a property scale, nor does it provide site-specific geotechnical assessment. The overlay is instead a screening tool designed to identify where site-specific geotechnical assessment may be required. The assessment has been developed using recognised landslide susceptibility and runout assessment methodologies, regionally consistent datasets, and established industry approaches commonly applied in New Zealand and internationally for district-scale slope hazard assessments. While the assessment is not intended to replace site-specific investigations, it is considered appropriate for identifying areas that may be affected by slope instability processes and informing district-scale planning decisions. Inclusion within the overlay is not dependent on the presence of flooding or inundation hazards. The assessment considers a range of factors that influence slope instability, including topography, geomorphology, geology and land cover, together with potential landslide runout processes. The absence of recorded landslide activity or known instability at a property does not necessarily indicate that the land is free from slope instability hazards. Many slope failures are observed to occur on slopes not previously affected by slope instability, both in earthquake as well as storm events. The underlying assessment identifies areas that may be susceptible to future slope instability based on factors such as topography, geology, geomorphology and land cover, rather than solely on the occurrence of previously recorded events. The property's inclusion within the overlay reflects the outcomes of the district-wide landslide susceptibility, runout and geomorphological assessment methodology. The overlay should not be interpreted as a site-specific determination of hazard or risk, but rather as a screening tool identifying areas where slope instability processes may warrant consideration through the District Plan.
123	Rakesh Mehta	115 Main Road Wainuiomata	The Slope Assessment Overlay identifies areas of potential slope instability from a district-wide assessment. It is intended for screening purposes only and is not a measure of hazard or risk at the property scale. The absence of recorded landslides or known instability on the property does not necessarily indicate that the property is free from slope instability hazards. Many slope failures are observed to occur on slopes not previously affected by slope instability, both in earthquake as well as storm events. The Slope Assessment Overlay is based on a district-scale assessment of factors that influence slope stability, including topography, geology, soil characteristics and land cover, and is intended to identify areas that may be susceptible to future slope instability rather than only areas affected in the past.

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[also refer to general comments in Sections 2 and 3 of the Report]

Submission Number	Submitter	Site/Area	Submission Response
			A review of the assessment outputs for this property indicates that its inclusion within the overlay is consistent with the district-wide methodology used to identify areas that may be affected by slope instability processes, including both susceptibility and potential runout areas.
125	Philip King	238 Marine Drive Lowry Bay	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay is not intended to determine hazard or risk at a property scale, but is a screening tool designed to identify where site-specific geotechnical assessment may be required. The absence of recorded landslides or known instability on the property does not necessarily indicate that the property is free from slope instability hazards. Many slope failures are observed to occur on slopes not previously affected by slope instability, both in earthquake as well as storm events. The Slope Assessment Overlay is based on a district-scale assessment of factors that influence slope stability, including topography, geology, soil characteristics and land cover, and is intended to identify areas that may be susceptible to future slope instability rather than only areas affected by past events. The property's inclusion within the overlay reflects consideration of these factors at a district scale.
183	Eujin Au	32 Cypress Dr Maungaraki	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay is not intended to determine hazard or risk at a property scale but is a screening tool to identify where site-specific geotechnical assessment may be required. The purpose of the overlay is not to assess the performance of existing buildings or development. Instead, it identifies areas of land that have the potential for slope instability based on a district-wide assessment of susceptibility, runout potential and geomorphological characteristics. The presence of development or site-specific geotechnical investigations does not necessarily indicate an absence of slope instability processes. While geotechnical reports may provide a more detailed understanding of local ground conditions and site stability, the district-wide study was not intended to evaluate individual properties or buildings at a site-specific basis. The inclusion of the property within the overlay reflects the broader assessment of slope instability process undertaken at a district scale.
194	Steve Hobman	6 & 7 Catherine Grove Tirohanga	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay is not intended to determine hazard or risk at a property scale but is a screening tool to identify where site-specific geotechnical assessment may be required. The absence of known landslide events or evidence of instability does not necessarily indicate that land is free from slope instability hazards, as the overlay is intended to identify areas that may be susceptible to future slope instability processes rather than only areas affected by past events. Many slope failures are observed to occur on slopes not previously affected by slope instability, both in earthquake as well as storm events. The inclusion within the overlay of the area in which the property is located, reflects the outcomes of the district-wide susceptibility, runout and geomorphological assessment. While portions of the site may appear relatively flat, stable, or developed, the overlay reflects the broader assessment of slope instability processes within the surrounding area and should not be interpreted as indicating that all parts of the property are susceptible to slope instability. Given the district-wide scale of the assessment, it is not practical to review and refine every localised feature, earthwork, retaining structure or terrain variation on a property-by-property basis. The district-wide assessment did not evaluate individual cut slopes, retaining structures, earthworks, building platforms or site-specific development history. While these features may influence local site conditions, the property's inclusion within the overlay reflects the broader district-scale assessment methodology and the surrounding geomorphological setting. The overlay should not be interpreted as indicating that all parts of the property are susceptible to slope instability or that instability is currently occurring at the site.

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[also refer to general comments in Sections 2 and 3 of the Report]

Submission Number	Submitter	Site/Area	Submission Response
206	Lesley and Peter Glen	6 Sheehy Grove Wainuiomata	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment of landslide susceptibility, runout potential and geomorphological characteristics. The overlay is not intended to determine hazard or risk at a property scale, nor does it provide a site-specific geotechnical assessment. Rather, it is a screening tool designed to identify where further geotechnical assessment may be required. The absence of recorded instability does not necessarily indicate that a property is free from slope instability hazards. Many slope failures are observed to occur on slopes not previously affected by slope instability, both in earthquake as well as storm events. The assessment identifies areas that may be susceptible to future slope instability based on factors such as topography, geology, geomorphology and land cover, rather than solely on the occurrence of previously recorded landslide events. In this instance, the inclusion within the overlay of the area in which the property is located reflects its location within a broader geomorphological area identified through the district-wide assessment methodology. The overlay should not be interpreted as indicating that instability is currently occurring at the property. Rather, it reflects the wider pattern of slope instability processes identified through the district-wide assessment.
211	Lyn and Keith Bromley	No	The Slope Assessment Overlay identifies areas that may be susceptible to slope instability based on a district-wide assessment. It is intentionally a broad-scale, generalised planning tool designed to support land-use planning by identifying locations where site-specific geotechnical assessment may be required as part of future subdivision or development proposals. The underlying landslide susceptibility and runout layers are available to assist with such site-specific assessment. The overlay is underpinned by a Landslide Susceptibility Layer, which classifies land from Very Low to Very High susceptibility based on factors known to influence landsliding, together with areas potentially affected by landslide runout. These datasets have been combined into a planning overlay that reflects the broader pattern of susceptibility, runout and geomorphological characteristics across the district, rather than conditions at an individual property. No property-specific hazard or risk assessment has been undertaken as part of the development of the overlay, and it is not intended to confirm hazard or risk at an individual property level or replace site-specific geotechnical investigations. Inclusion within the overlay reflects the broader geomorphological setting and slope instability processes identified through the district-wide assessment and should not be interpreted as a site-specific assessment of existing instability. Rather, the overlay provides a consistent, evidence-based screening tool to identify where more detailed assessment may be required.
229	Roger McMillan et al	385 Hebden Cres Kelson	The Slope Assessment Overlay is intentionally a broad-scale, district-wide planning tool developed to identify areas where slope instability hazards may be present and where further investigation may be warranted. It is derived from district-scale landslide susceptibility and runout assessments using established methodologies and regionally consistent datasets that represent factors known to influence slope stability. While the presence of established vegetation may contribute to slope stability, this does not demonstrate that a property is free from future slope instability hazards. Slope failures do occur in vegetated areas, particularly during significant rainfall or earthquake events. The overlay is not intended to provide site-specific hazard determinations or replace detailed geotechnical investigations. Accordingly, it is not based on geotechnical assessments of individual properties but instead provides a consistent and evidence-based screening tool to support land-use planning and identify locations where site-specific geotechnical assessment may be required as part of future subdivision or development. The inclusion within the overlay of the area in which the property is located is consistent with the district-wide methodology used to identify areas that may be affected by slope instability processes, including both susceptibility and potential runout areas.

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[also refer to general comments in Sections 2 and 3 of the Report]

Submission Number	Submitter	Site/Area	Submission Response
230	Claudia and John Riley	Moores Valley Rd & Crowther Rd	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay is not intended to determine hazard or risk at a property scale, but is a screening tool to identify where site-specific geotechnical assessment may be required. The absence of recorded landslides or known instability on the property does not necessarily indicate that the property is free from slope instability hazards. Many slope failures are observed to occur on slopes not previously affected by slope instability, both in earthquake as well as storm events. The Slope Assessment Overlay is based on a district-scale assessment of factors that influence slope stability, including topography, geology, soil characteristics and land cover, and is intended to identify areas that may be susceptible to future slope instability rather than only areas affected by past events. While the presence of established vegetation may contribute to slope stability, this does not demonstrate that a property is free from future slope instability hazards. Slope failures do occur in vegetated areas, particularly during significant rainfall or earthquake events. A review of the assessment outputs indicates that inclusion of the area within the overlay is consistent with the district-wide methodology used to identify areas that may be affected by slope instability processes, including both susceptibility and potential runout areas.
252	Lisa Caddis	297 Muritai Road Eastbourne	The Slope Assessment Overlay is a broad-scale planning tool developed from landslide susceptibility and runout assessments to identify areas where slope instability hazards may be present and where further assessment may be warranted. The purpose of the overlay is not to confirm hazard or risk at an individual property, but to provide a consistent and evidence-based screening tool to support future subdivision and development decisions. The absence of recorded landslides or known instability on a property does not necessarily indicate that the land is free from slope instability hazards, as the assessment is based on factors known to influence slope failure, including topography, geology and land cover, rather than solely on historical events. Many slope failures are observed to occur on slopes not previously affected by slope instability, both in earthquake as well as storm events. Accordingly, the overlay identifies areas that may be susceptible to future slope instability and landslide runout, rather than only areas where landslides have occurred in the past. Therefore, the overlay is intended to inform the need for geotechnical assessments in areas with slope instability susceptibility.
282	Monique McDonald	21 Thomson Grove Stokes Valley	The Slope Assessment Overlay identifies areas with potential slope instability based on a district-wide assessment. The overlay is a broad-scale planning tool developed from landslide susceptibility and runout assessments to identify areas where slope instability hazards may be present and where further assessment may be warranted. The purpose of the overlay is not to confirm hazard or risk at an individual property, but to provide a consistent and evidence-based screening tool to support future subdivision and development decisions. The absence of recorded landslides or known instability on a property does not necessarily indicate that the land is free from slope instability hazards, as the assessment is based on factors known to influence slope failure, including topography, geology and land cover, rather than solely on historical events. Many slope failures are observed to occur on slopes not previously affected by slope instability, both in earthquake as well as storm events. Accordingly, the overlay identifies areas that may be susceptible to future slope instability and landslide runout, rather than only areas where landslides have occurred. A review of the assessment outputs for the area in which the property is located indicates that its inclusion of the area within the overlay is consistent with the district-wide methodology used to identify areas that may be affected by slope instability processes, including both susceptibility and potential runout.
285	Graham Mark	5 Tarras Grove Kelson	The Slope Assessment Overlay is a district-scale, evidence-based planning tool developed to identify areas that may have potential for slope instability across the district. The overlay has been derived from landslide susceptibility modelling, runout modelling and geomorphological assessment using regionally consistent datasets and established assessment methodologies. It is not intended to provide a site-specific geotechnical assessment, determine hazard or risk at an individual property, or assign a property-specific hazard classification. Rather, it is a screening tool used to identify where further site-specific geotechnical assessment may be warranted. The underlying landslide susceptibility and runout layers are available to assist with such site-specific assessment.

Appendix A – Technical Commentary of Submissions

[also refer to general comments in Sections 2 and 3 of the Report]

Submission Number	Submitter	Site/Area	Submission Response
			The absence of recorded landslides or known instability on the property does not necessarily indicate that the property is free from slope instability hazards. Many slope failures are observed to occur on slopes not previously affected by slope instability, both in earthquake as well as storm events. The overlay is based on a district-scale assessment of factors that influence slope stability, including topography, geology, soil characteristics and land cover, and is intended to identify areas that may be susceptible to future slope instability rather than only areas affected by past events. A review of the assessment outputs for the area in which this property is located indicates that the inclusion of the area within the overlay is consistent with the district-wide methodology used to identify areas that may be affected by slope instability processes, including both susceptibility and potential runout areas.
288	Tom Hudig	231 Marine Drive, Lowry Bay	The Slope Assessment Overlay identifies areas of potential slope instability from a district-wide assessment. It is intended for screening purposes only and is not a measure of hazard or risk at the property scale. The absence of recorded landslides or known instability on the property does not necessarily indicate that the property is free from slope instability hazards. Many slope failures are observed to occur on slopes not previously affected by slope instability, both in earthquake as well as storm events. The Slope Assessment Overlay is based on a district-scale assessment of factors that influence slope stability, including topography, geology, soil characteristics and land cover. It is intended to identify areas that may be susceptible to future slope instability rather than only areas affected by past events. A review indicates that inclusion within the overlay of the area in which the property is located is consistent with the district-wide methodology used to identify areas potentially affected by slope instability, including both susceptibility and landslide runout processes.
317	Rowan Swain & Kim Weber-Swain	273 Muritai Road Eastbourne	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay is not intended to determine hazard or risk at a property scale, but is a screening tool designed to identify where slope instability hazards may warrant site-specific geotechnical assessment. The landslide susceptibility and runout assessments were developed as district-scale planning tools and are not intended to provide site-specific geotechnical assessments of individual properties. Rather, they are used to identify areas where slope instability processes may be present and where further site-specific investigation may be warranted. This approach is consistent with standard natural hazard planning practice, whereby broad-scale assessments are used to inform land-use planning and identify circumstances where more detailed investigations may be required. The underlying landslide susceptibility and runout layers are available to assist with such site-specific assessment. The Slope Assessment Overlay is intentionally presented as a planning layer rather than a property-specific hazard or risk classification. The overlay is underpinned by landslide susceptibility mapping, runout modelling, and geomorphological assessment, and reflects the combined consideration of these factors. The overlay has been developed as a district scale planning tool and is not based on slope angle alone. The assessment considers a range of factors that influence slope instability, including topography, geology, geomorphology, land cover and potential landslide runout. The overlay therefore reflects the broader pattern of slope instability processes identified through the assessment rather than a property-by-property delineation of individual slopes or landforms. The landslide susceptibility and runout assessments were undertaken using recognised industry methodologies, regionally consistent datasets, and established assessment approaches commonly applied in New Zealand and internationally for district-scale hazard assessments. These methodologies are considered appropriate for identifying areas potentially affected by slope instability processes at a planning scale.

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[also refer to general comments in Sections 2 and 3 of the Report]

Submission Number	Submitter	Site/Area	Submission Response
347	Terry Pinfold and Ruth Gilbert	20 Taungata Road York Bay	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay is not intended to determine hazard or risk at a property scale, but is a screening tool designed to identify where site-specific geotechnical assessment may be required. The overlay is not derived solely from slope angle or the visible surface topography. It instead reflects the combined consideration of landslide susceptibility, runout and geomorphological characteristics that have been identified and assessed through the district-wide assessment. While parts of the property may be flat or gently sloping, the properties inclusion within the overlay reflects the outcomes of the district-wide assessment methodology and the geomorphological setting of the area. The overlay has been developed to represent the wider pattern of susceptibility, runout and geomorphological characteristics across the district and is therefore not intended to replicate individual topographic features or local variations in ground conditions. A review of the assessment outputs indicates that the area in which the property is located remains associated with mapped susceptibility and potential runout areas and forms part of the wider landform identified through the district-wide assessment. Accordingly, the mapped overlay extent reflects the combined assessment of slope instability processes undertaken at a district scale rather than the conditions at any single location within the property.
363	Sandra Michel-Shanks	39 Dalton Grove Stokes Valley	The Slope Assessment Overlay is a district-scale, evidence-based planning tool developed to identify areas that may have potential for slope instability across the district. Developed from landslide susceptibility modelling, runout modelling and geomorphological assessment, the overlay is not intended to provide a site-specific geotechnical assessment or determine hazard or risk at an individual property. It does not assess the design, condition, performance or effectiveness of retaining walls or earthworks within a property. Rather, the overlay is a screening tool used to identify where further site-specific geotechnical assessment may be warranted. Features within the property, such as being flat and terraced, and retaining walls on site, influence site conditions and stability. However, the district-wide assessment for susceptibility, runout and the overlay itself do not evaluate individual features or engineering work at a property level. The absence of recorded instability does not necessarily indicate that the property is free from slope instability hazards. Many slope failures are observed to occur on slopes not previously affected by slope instability, both in earthquake as well as storm events. The assessment identifies areas that may be susceptible to future slope instability based on factors such as topography, geology, geomorphology and land cover, rather than solely on the occurrence of past landslide events. While the dwelling may be located on a modified and relatively flat portion of the site, the inclusion within the overlay of the area in which the property is located reflects the broader slope instability processes and geomorphological setting identified within the wider area. The overlay should not be interpreted as indicating that all parts of the property are susceptible to slope instability or that instability is currently occurring at the site.
364	Wainuiomata Rural Community Association Incorporated	Moores Valley	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay is not intended to determine hazard or risk at a property scale, but is a screening tool designed to identify where site-specific geotechnical assessment may be required. The inclusion of the area within the Slope Assessment Overlay reflects the outcomes of the district-wide hazard assessment methodology. Consideration of whether the overlay should apply to particular zoning classifications or development contexts is a planning matter for Council rather than a technical assessment matter.

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[also refer to general comments in Sections 2 and 3 of the Report]

Submission Number	Submitter	Site/Area	Submission Response
367	Patricia Cleland	8 Cheviot Road Lowry Bay	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay is not intended to determine hazard or risk at a property scale, but is a screening tool designed to identify where site-specific geotechnical assessment may be required. There is no restriction implied in the overlay, but identified the need for site specific consideration of potential slope hazards. The assessment has been developed using recognised landslide susceptibility and runout assessment methodologies, regionally consistent datasets, and established industry approaches commonly applied in New Zealand and internationally for district-scale natural slope hazard assessments. The assessment methodology, datasets, assumptions and limitations used to develop the landslide susceptibility, runout and geomorphological assessments are documented within the supporting technical reports. These reports set out the information sources, analytical approaches and assessment criteria used to identify areas potentially affected by slope instability processes across the district. The methodology for the overlay relies on regionally consistent datasets and broad-scale assessment techniques and is not intended to replicate site-specific geotechnical investigations. Rather, the purpose of the assessment is to provide a consistent and evidence-based planning framework for identifying areas where slope instability hazards may warrant consideration through the District Plan. The overlay therefore represents the outcomes of a documented and evidence-based district-wide assessment and provides a framework for subsequent site-specific investigation where required. While site-specific information may provide a more detailed understanding of conditions at an individual property, this does not diminish the role of the overlay as a district-wide planning and hazard screening tool.
373	Kelson Heights Limited	64 Waipounamu Drive	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay is not intended to determine hazard or risk at a property scale, but is a screening tool designed to identify where site-specific geotechnical assessment may be required. Geotechnical investigations and certifications for earthworks provide valuable site-specific information regarding the performance and suitability of engineered landforms. However, as this is a district-wide assessment, it is not intended to review individual earthworks, geotechnical reports, engineered slopes or certification documents at a property-specific level. The inclusion of the site within the overlay reflects the outcomes of a district-wide assessment of landslide susceptibility, runout and geomorphology, rather than an assessment of completed earthworks or engineered site conditions. The overlay identifies areas where slope instability processes may warrant consideration at a planning level, whereas the geotechnical investigations relate to the design, construction and certification of the development. Such site-specific geotechnical investigations will be expected to take into consideration the earthworks and associated design that has been carried out.
375	Fiona Christeller	18 & 18A Taungata Road York Bay	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The Slope Assessment Overlay reflects the combined consideration of susceptibility, runout and geomorphological characteristics rather than any single hazard mechanism in isolation. The overlay is not intended to provide a site-specific geotechnical assessment or determine hazard or risk at an individual property. Rather, it is a screening tool used to identify where further site-specific geotechnical assessment may be warranted. The district-wide assessment was not intended to evaluate individual retaining walls, earthworks, building platforms, site development, or property-specific engineering measures. Such features may influence local site conditions but have not been assessed at a property-by-property basis as part of this district-wide study. The landslide susceptibility assessment considered a range of factors that influence slope instability, including topography, geology, geomorphology and land cover, rather than slope angle alone. As a result, inclusion within the overlay is not determined solely by the steepness of the land at a particular location. The final overlay reflects the combined consideration of landslide susceptibility, potential runout and geomorphological characteristics identified through the district-wide assessment.

Appendix A – Technical Commentary of Submissions

[also refer to general comments in Sections 2 and 3 of the Report]

Submission Number	Submitter	Site/Area	Submission Response
			The absence of recorded instability does not necessarily indicate that a property is free from slope instability hazards. The underlying susceptibility assessment identifies areas that may be prone to future slope instability based on factors such as topography, geology, geomorphology and land cover, rather than solely on the occurrence of historical landslide events.
380, F09	Andrew Robinson and Robyn Robinson	269 Muritai Rd Eastbourne	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay is not intended to determine hazard or risk at a property scale, but is a screening tool designed to identify where slope instability hazards may warrant site-specific geotechnical assessment. The landslide susceptibility and runout assessments were developed as district-scale planning tools and are not intended to provide site-specific geotechnical assessments of individual properties. Rather, they are used to identify areas where slope instability processes may be present and where further site-specific investigation may be warranted. This approach is consistent with standard natural hazard planning practice, whereby broad-scale assessments are used to inform land-use planning and identify circumstances where more detailed investigations may be required. The underlying landslide susceptibility and runout layers are available to assist with such site-specific assessment. The Slope Assessment Overlay is intentionally presented as a planning layer rather than a property-specific hazard or risk classification. The overlay is underpinned by landslide susceptibility mapping, runout modelling, and geomorphological assessment, and reflects the combined consideration of these factors. The overlay has been developed as a district scale planning tool and is not based on slope angle alone. The assessment considers a range of factors that influence slope instability, including topography, geology, geomorphology, land cover and potential landslide runout. The overlay therefore reflects the broader pattern of slope instability processes identified through the assessment rather than a property-by-property delineation of individual slopes or landforms. The landslide susceptibility and runout assessments were undertaken using recognised industry methodologies, regionally consistent datasets, and established assessment approaches commonly applied in New Zealand and internationally for district-scale hazard assessments. These methodologies are considered appropriate for identifying areas potentially affected by slope instability processes at a planning scale.
383	Sensible Solutions for Eastbourne	19 Ferry Road, Days Bay	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay is not intended to determine hazard or risk at a property scale, but is a screening tool designed to identify where slope instability hazards may warrant site-specific geotechnical assessment. There is no restriction implied in the overlay but identifies the need for site specific consideration of potential slope hazards. The landslide susceptibility and runout assessments were developed as district-scale planning tools and are not intended to provide site-specific geotechnical assessments of individual properties. Rather, they are used to identify areas where slope instability processes may be present and where further site-specific investigation may be warranted. This approach is consistent with standard natural hazard planning practice, whereby broad-scale assessments are used to inform land-use planning and identify circumstances where more detailed investigations may be required. The Slope Assessment Overlay is intentionally presented as a planning layer rather than a property-specific hazard or risk classification. The overlay is underpinned by landslide susceptibility mapping, runout modelling, and geomorphological assessment, and reflects the combined consideration of these factors.

Appendix A – Technical Commentary of Submissions

[also refer to general comments in Sections 2 and 3 of the Report]

Submission Number	Submitter	Site/Area	Submission Response
			The overlay has been developed as a district scale planning tool and is not based on slope angle alone. The assessment considers a range of factors that influence slope instability, including topography, geology, geomorphology, land cover and potential landslide runout. The overlay therefore reflects the broader pattern of slope instability processes identified through the assessment rather than a property-by-property delineation of individual slopes or landforms. The landslide susceptibility and runout assessments were undertaken using recognised industry methodologies, regionally consistent datasets, and established assessment approaches commonly applied in New Zealand and internationally for district-scale hazard assessments. These methodologies are considered appropriate for identifying areas potentially affected by slope instability processes at a planning scale.
387	Craig & Margaret Barker	18 Otira Grove Kelson	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay is not intended to determine hazard or risk at a property scale, but is a screening tool designed to identify where slope instability hazards may warrant site-specific geotechnical assessment. The topographical model used for the slope susceptibility assessments and runout predate the ongoing subdivision development and hence do not necessarily arise from recent development upstream of the property. Earthworks formation as part of subdivision development may change the slope runout from upstream developments, and this will depend on the nature and stability of slopes formed and modifications to runout pathways for debris from slope failures. These have not been considered as part of the development of the overlay or the review of submissions. This submission is not relevant to the methodology or inputs used to develop the Slope Assessment Overlay so has not been commented on. Any site-specific issues would need to be raised with the parties involved as an operational matter.
398	Katrina Jacobsen	7 Wyndrum Ave Waterloo	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay is not intended to determine hazard or risk at a property scale, but is a screening tool designed to identify where site-specific geotechnical assessment may be required. The absence of recorded instability does not necessarily indicate that the property is free from slope instability hazards. Many slope failures are observed to occur on slopes not previously affected by slope instability, both in earthquake as well as storm events. The assessment identifies areas that may be susceptible to future slope instability based on factors such as topography, geology, geomorphology and land cover, rather than solely on the occurrence of past landslide events. A review of the assessment outputs indicates that the inclusion within the overlay of the area in which the property is located reflects the broader geomorphological setting identified through the district-wide assessment, together with the outcomes of the landslide susceptibility and runout modelling. The overlay is therefore not solely reliant on the presence of steep slopes or visible instability at a particular location. The district-wide assessment was undertaken using regional datasets and desktop-based assessment methods and did not include site inspections or the evaluation of individual property features (including retaining walls).
416	David & Pauline Innes	353 Moores Valley Road	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay is not intended to determine hazard or risk at a property scale, but is a screening tool designed to identify where site-specific geotechnical assessment may be required.

Appendix A – Technical Commentary of Submissions

[also refer to general comments in Sections 2 and 3 of the Report]

Submission Number	Submitter	Site/Area	Submission Response
			The inclusion within the Slope Assessment Overlay of the area in which the property is located reflects the outcomes of the district-wide hazard assessment methodology which does not consider land ownership and does not consider whether it is publicly or privately owned. Consideration of whether the overlay should apply to particular zoning classifications or development contexts is a planning matter for the Council rather than a technical assessment matter. Riverbank erosion has not been considered as part of the slope susceptibility assessment.
423	Susan Ewart	4 Kaitawa Road York Bay	Submission relates to flood risk – not relevant for Slope Assessment Overlay.
427	David Surrey	No	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay is not intended to determine hazard or risk at a property scale, but is a screening tool designed to identify where site-specific geotechnical assessment may be required. The overlay is not based solely on slope angle and does not seek to identify only steep slopes. It considers a range of factors that influence slope instability, including topography, geology, geomorphology, land cover, and potential landslide runout. The Slope Assessment Overlay reflects the combined consideration of these factors across the wider landscape. As a result, portions of land that may appear relatively gentle or exhibit lower susceptibility in isolation may still be included within the overlay where they form part of the broader geomorphological setting or are associated with identified slope instability processes. Accordingly, the overlay is intended to represent the broader pattern of susceptibility, runout and geomorphological characteristics identified through the assessment, rather than refine individual areas of lower slope gradient at a property scale.
438	Sanna and Mark McGavin	46 Major Drive Kelson	The Slope Assessment Overlay is intentionally a broad-scale, district-wide planning tool developed to identify areas where slope instability hazards may be present and where further investigation may be warranted. It is derived from district-scale landslide susceptibility and runout assessments using established methodologies and regionally consistent datasets that represent factors known to influence slope stability. The overlay is not intended to provide site-specific hazard determinations or replace detailed geotechnical investigations. Accordingly, it is not based on geotechnical assessments of individual properties but instead provides a consistent and evidence-based screening tool to support land-use planning and identify locations where site-specific geotechnical assessment may be required as part of future subdivision or development. This approach reflects standard natural hazard planning practice, whereby district-scale assessments are used to identify potential hazard areas and inform where more detailed investigations should subsequently be undertaken. A review of the underlying assessment outputs indicates that the property's inclusion within the overlay is consistent with the district-wide methodology used to identify areas potentially affected by slope instability, including both susceptibility and landslide runout processes.
459	Orlando & Franziska Ravera		The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay is not intended to determine hazard or risk at a property scale, but is a screening tool designed to identify where site-specific geotechnical assessment may be required. The overlay should not be interpreted as a site-specific assessment of hazard or risk, nor an assessment of the adequacy of existing engineering measures.

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[also refer to general comments in Sections 2 and 3 of the Report]

Submission Number	Submitter	Site/Area	Submission Response
			Engineered features such as retaining structures and foundations designed to engineering standards can influence local site conditions. However, this district-scale assessment was not intended to evaluate individual properties, buildings, retaining structures, engineering design or site-specific geotechnical information at a property level. The overlay has been developed from landslide susceptibility modelling, runout modelling and a geomorphological assessment undertaken at a district scale. As a result, inclusion within the overlay reflects the broader assessment of slope instability processes and the surrounding geomorphological setting, rather than the specific design or performance of existing structures on an individual property. Accordingly, the presence of existing development or site-specific engineering measures does not necessarily preclude land from being included within the overlay, which reflects the outcomes of the district-wide assessment methodology.
465	Steven Penn & Nicola Cooper	46 Moores Valley Road Wainuiomata	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay is not intended to determine hazard or risk at a property scale but is a screening tool to identify where site-specific geotechnical assessment may be required. Retaining walls, earthworks, building platforms and other site-specific engineering measures may influence local site conditions; however, the district-wide assessment was not intended to evaluate individual properties or site-specific engineering works on a property-by-property basis. The overlay does not require an assessment of existing development and should not be interpreted as indicating that instability is currently occurring at the site. Rather, it provides a planning framework for considering slope instability hazards where future subdivision, development or earthworks are proposed. The overlay in the area therefore reflects the outcomes of the district-wide assessment methodology, including consideration of susceptibility, runout and geomorphological characteristics within the wider area.
469	The Brookfield Board and Scouts Aotearoa	562 Moores Valley Road Wainuiomata	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay is not intended to determine hazard or risk at a property scale, but is a screening tool designed to identify where site-specific geotechnical assessment may be required. The inclusion of the property within the Slope Assessment Overlay reflects the outcomes of the district-wide hazard assessment methodology. The vulnerability of the area to potential slope hazards is independent of the actual land use. Consideration of whether the overlay should apply to particular zoning classifications or development contexts is a planning matter for Council rather than a technical assessment matter.
473	Luke Scullion	No	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay has been developed from district-scale landslide susceptibility and runout assessments and is intended for land-use planning purposes. It does not replace site specific assessments. The underlying assessments are not being relied upon as site-specific assessments of individual properties. Instead, the overlay is used as a screening tool to identify areas where there may be greater potential for slope instability and where site-specific geotechnical investigation should be undertaken to confirm local conditions. The overlay therefore acts as a trigger for further assessment, rather than a definitive assessment of any individual property. Localised slope instability hazards may occur outside of the mapped overlay extent. This reflects the district-wide scale and intended purpose of the assessment. The overlay identifies land where slope instability processes are considered more likely to be present or warrant consideration based on the combined assessment of landslide susceptibility, runout and geomorphic characteristics. The presence of the overlay in an area where a property is located, should not be interpreted as indicating that a site-specific assessment has been undertaken or that hazard or risk has been confirmed for a property.

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[also refer to general comments in Sections 2 and 3 of the Report]

Submission Number	Submitter	Site/Area	Submission Response
479	Mary Spiers and Samuel Spink	267 Muritai Road Eastbourne	The Slope Assessment Overlay is intentionally a broad-scale, district-wide planning tool developed to identify areas where slope instability hazards may be present and where further investigation may be warranted. It is derived from district-scale landslide susceptibility and runout assessments using established methodologies and regionally consistent datasets that represent factors known to influence slope stability. The overlay is not intended to provide site-specific hazard determinations or replace detailed geotechnical investigations. Accordingly, it is not based on geotechnical assessments of individual properties but instead provides a consistent and evidence-based screening tool to support land-use planning and identify locations where site-specific geotechnical assessment may be required as part of future subdivision or development. This approach reflects standard natural hazard planning practice, whereby district-scale assessments are used to identify potential hazard areas and inform where more detailed investigations should subsequently be undertaken. A review of the assessment outputs indicates that the area in which the property is located is within an area potentially affected by landslide runout from upslope land identified as susceptible to slope failure. The inclusion of the area within the Slope Assessment Overlay is therefore consistent with the methodology used to identify areas that may be affected by slope instability processes.
493	Lynne Birch	No	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay is not intended to determine hazard or risk at a property scale, but is a screening tool designed to identify where site specific geotechnical assessment may be required. The Slope Assessment Overlay is underpinned by a Landslide Susceptibility Layer which classifies land from Very Low to Very High susceptibility to failure and is based on factors known to influence instability. This information, combined with the runout modelling, has been used to develop a single planning overlay that identifies land potentially affected by slope instability, where site specific geotechnical consideration may be required to support any development. The underlying landslide susceptibility and runout layers are available to assist with such site-specific assessment. Climate change, however, may influence factors that are known to contribute to slope instability, including frequency and intensity of extreme rainfall events. As a result, climate change and associated changes in the intensity and frequency of rainfall may increase the likelihood of landslide occurrence in some locations in the future. This does not invalidate the overlay, as the mapping identifies areas where slope instability processes may occur based on the underlying terrain and geological conditions. The Slope Assessment Overlay highlights the importance of adopting a precautionary approach and undertaking site-specific assessment, including potential climate change effects, where development is proposed within the overlay.
495	Peter Fahy	15 Sweetacres Drive Belmont	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay is not intended to determine hazard or risk at a property scale, but is a screening tool designed to identify where site specific geotechnical assessment may be required. A review of the assessment outputs for the area in which this property is located indicates that inclusion of the area within the overlay is consistent with the district-wide methodology used to identify areas that may be affected by slope instability processes, including both susceptibility and potential runout areas.
506	Rinu Abraham	131 Wainuiomata Road Wainuiomata	The Slope Assessment Overlay identifies areas of potential slope instability from a district-wide assessment. It is intended for screening purposes only and is not a measure of hazard or risk at the property scale. A review of the assessment outputs for this property indicates that its inclusion within the overlay is consistent with the district-wide methodology used to identify areas that may be affected by slope instability processes, particularly potential runout areas.

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[also refer to general comments in Sections 2 and 3 of the Report]

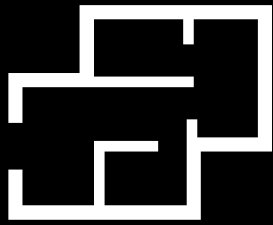
Submission Number	Submitter	Site/Area	Submission Response
			The inclusion within the Slope Assessment Overlay of the area in which the property is located reflects the outcomes of the underlying district-wide susceptibility, runout and geomorphological assessment methodology and is not based solely on aerial imagery. The overlay is intended to identify both potential landslide source areas, and land that may be affected by slope instability processes originating from surrounding areas. As such, inclusion within the overlay is not limited to properties containing steep slopes and is agnostic to land ownership. The overlay should not be interpreted as indicating that instability is currently occurring on the property, nor as a site-specific assessment of hazard or risk. Rather it identifies where slope instability processes may warrant further consideration and where site-specific geotechnical assessment may be required.
F03	Kris Philip Connell	269 Muritai Rd Eastbourne	The Slope Assessment Overlay identifies areas that may have potential for slope instability based on a district-wide assessment. The overlay is not intended to determine hazard or risk at a property scale, but is a screening tool designed to identify where slope instability hazards may warrant site-specific geotechnical assessment. The landslide susceptibility and runout assessments were developed as district-scale planning tools and are not intended to provide site-specific geotechnical assessments of individual properties. Rather, they are used to identify areas where slope instability processes may be present and where further site-specific investigation may be warranted. This approach is consistent with standard natural hazard planning practice, whereby broad-scale assessments are used to inform land-use planning and identify circumstances where more detailed investigations may be required. The Slope Assessment Overlay is intentionally presented as a planning layer rather than a property-specific hazard or risk classification. The overlay is underpinned by landslide susceptibility mapping, runout modelling, and geomorphological assessment, and reflects the combined consideration of these factors. The overlay has been developed as a district scale planning tool and is not based on slope angle alone. The assessment considers a range of factors that influence slope instability, including topography, geology, geomorphology, land cover and potential landslide runout. The overlay therefore reflects the broader pattern of slope instability processes identified through the assessment rather than a property-by-property delineation of individual slopes or landforms. The landslide susceptibility and runout assessments were undertaken using recognised industry methodologies, regionally consistent datasets, and established assessment approaches commonly applied in New Zealand and internationally for district-scale hazard assessments. These methodologies are considered appropriate for identifying areas potentially affected by slope instability processes at a planning scale.

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Appendix B6: Regional comparison of natural hazard modelling and policy approaches



URBANEDGE
P L A N N I N G L T D

Regional Comparison of District Plan Provisions – Wellington



PO Box 39071
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Lower Hutt 5045

QUALITY CONTROL

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EXECUTIVE SUMMARY

Lower Hutt City Council is undertaking a district plan review, including a review of the natural hazards chapter. This report was prepared to assist Lower Hutt City Council in preparing evidence for the hearing stream on this chapter. The purpose of this report is to compare the natural hazard mapping and rule frameworks used in district plans across the Wellington Region, with a particular focus on how the Proposed Lower Hutt District Plan aligns with, or differs from, those approaches. The report is a desktop analysis of district plan provisions and focuses on provisions within plans that apply a hazard-sensitive approach to the management of natural hazard risk.

The key findings of the review are:

- The Proposed Lower Hutt District Plan is broadly consistent with the regional approach to natural hazard mapping. Fault hazard and tsunami modelling align with the wider Wellington Region, while the slope stability mapping is similar to the approach used by Upper Hutt City Council. Coastal inundation modelling in the Proposed Lower Hutt District Plan is more conservative than the approach used by Wellington City Council and Porirua City Council. Flood modelling varies more significantly across the region, reflecting differences in when modelling was undertaken, the climate change assumptions applied, local rainfall variability, and whether modelling was prepared by Wellington Water or Greater Wellington Regional Council.
- The rule framework in the Proposed Lower Hutt District Plan is generally consistent with the regional approach, although it includes some refinements and localised differences. Flood hazards are the main area of difference, with the Proposed Lower Hutt District Plan providing for some hazard sensitive activities as permitted activities, which differs from the approach taken in other parts of the region.
- Overall, the regional approach is that as hazard risk increases, and as the sensitivity of an activity to that hazard increases, the activity status also becomes more restrictive, although there is some variability in the use of Restricted Discretionary and Discretionary activity statuses.

1 INTRODUCTION

1.1 Purpose and scope

This report outlines how the councils within the Wellington Region plan for natural hazards. Specifically, this report considers the mapping used to inform natural hazards as well as the rule activity statuses for different activities and how the rules are applied. This report reviews the following natural hazards:

- Slope stability
- Fault Hazard Overlay
- Flood hazard Overlay
- Liquefaction
- Mangaroa Peat Overlay (Upper Hutt only)
- Coastal Inundation
- Tsunami

1.2 Limitations and caveats

This report is a desktop analysis of the District Plan provisions in the region. This analysis has largely concentrated on the District Plan frameworks that used a hazard sensitive approach for the following reasons:

- They represent the most recent plan reviews in the region; and
- It allows for easier comparison of the provisions.

1.3 Structure of this report

Section 1: *Introduction* – providing the context, purpose and scope of the research

Section 2: *Results and findings of the District Plan analysis*

Section 3: *Summary of the findings*

2 Introduction

Within the Wellington context, many of the district councils have recently reviewed, or partially reviewed, the natural hazard provisions within their respective district plan. The exception is Kāpiti Coast District Council.

The vast majority of the district plans take a risk-based approach to the management of natural hazard risk. This is where the hazards are ranked as low, medium or high, and the activity status is determined by the sensitivity of the activity to the hazard. The more sensitive the activity is to a hazard, and the greater the hazard presented by the natural hazard, the more restrictive the provisions.

Within the Wellington context, all councils have slightly varying approaches to the natural hazards. The reasons for this include:

- Evolution of the Hazard Sensitivity approach to the management of natural hazard risk. This includes developing more nuanced approach to hazard risk management as a result of lessons learnt on previous versions of the approach;
- Differing local contexts that have resulted in some changes to the provisions;
- Changing legislative environment; and
- Differing decisions made by commissioners.

South Wairarapa District Council, Carterton District Council and Masterton District Council share a district plan: the Combined Wairarapa District Plan.

3 FINDINGS

The results of the analysis have been presented in tables, where the colours align with the resource consent activity status as follows:

	Permitted
	Controlled
	Restricted Discretionary
	Discretionary
	Non-Complying

3.1 Slope Stability

Wellington City Council, Kāpiti Coast District Council, and Porirua City Council manage slope stability through their general earthworks rules.

The Combined Wairarapa District Plan has an earthworks rule for works within flood hazard areas, but no slope stability rules.

Upper Hutt City Council has a Slope Susceptibility Overlay in their District Plan (based on slope angle of more than 26 degrees and including runout areas). While Upper Hutt City Council does not manage activities within the Slope Susceptibility Overlay, it does manage earthworks for building platforms for certain activities; this does not include runout areas.

The Proposed Lower Hutt District Plan includes a Slope Susceptibility Overlay in their District Plan (based on slope angle of more than 25 degrees). While the Proposed District Plan does not manage activities within the Slope Susceptibility Overlay, it does manage earthworks for building platforms for certain activities.

Rules

UPPER HUTT DISTRICT PLAN	
	Slope Susceptibility Overlay
Hazard Sensitive Activity	
Potentially Hazard Sensitive Activity	
Least Hazard Sensitive Activity	

PROPOSED LOWER HUTT CITY DISTRICT PLAN	
	Slope Susceptibility Overlay
Activities most sensitive to natural hazards	
Activities potentially sensitive to natural hazards	

Activities least sensitive to natural hazards	

APPLICATION OF RULES

	New Buildings	New Structures	Additions	Activities
Upper Hutt District Plan	✓ ¹	✗	✗	✓
Proposed Lower Hutt District Plan	✓ ²	✗	✗	✓

SUMMARY OF APPROACH

There is no difference in the approach for managing the risks from slope instability between the Upper Hutt District Plan and the Proposed Lower Hutt City District Plan. This applies to both the rule frameworks and the application of rules.

3.2 Fault Hazard Overlay

All councils within the Wellington Region map fault hazards within their district plan. The Combined Wairarapa Councils, Wellington City Council, Upper Hutt City Council, Porirua City Council and Proposed Lower Hutt District Plan map fault hazards based on the certainty of the known location of the fault hazard and the expected return period of the fault rupture. These maps were all undertaken using a consistent methodology of identifying fault hazards from LiDAR data as and fault studies.

Kāpiti Coast District Council maps faults that have ruptured within the last 125,000 years and that have a history indicating that they are likely to rupture again. There are different rules within the District Plan based on fault complexity (ie. how defined the fault trace is), together with the Building Importance Category.

Rules

WELLINGTON CITY DISTRICT PLAN			
	Low Hazard Overlay	Medium Hazard Overlay	High Hazard Overlay
Additions for Potentially Hazard Sensitive Activities		N/A	
Additions for Hazard Sensitive Activities		N/A	
Less Hazard Sensitive Activities		N/A	
		N/A	

¹ Insofar as it applies to earthworks for a building platform

² Insofar as it applies to earthworks for a building platform

Construction or conversion buildings to contain Potentially Hazard Sensitive Activities		N/A	
Construction or conversion buildings to contain Hazard Sensitive Activities		N/A	
		N/A	

UPPER HUTT DISTRICT PLAN			
	Low Hazard Overlay	Medium Hazard Overlay	High Hazard Overlay
Additions for Less Hazard Sensitive Activities	N/A		
Additions for Potentially Hazard Sensitive Activities	N/A		
Additions for Hazard Sensitive Activities	N/A N/A		
Less Hazard Sensitive Activities			
Potentially Hazard Sensitive Activities	N/A N/A		
Hazard Sensitive Activities	N/A		

COMBINED WAIRARAPA DISTRICT PLAN			
	Low Hazard Overlay	Medium Hazard Overlay	High Hazard Overlay
Additions for Less Hazard Sensitive Activities			
Additions for Potentially Hazard Sensitive Activities			
Additions for Hazard Sensitive Activities			
Less Hazard Sensitive Activities			
Potentially Hazard Sensitive Activities			
Hazard Sensitive Activities			

PORIRUA DISTRICT PLAN			
	Low Hazard Overlay	Medium Hazard Overlay	High Hazard Overlay

Additions for Less Hazard Sensitive Activities			
Additions for Potentially Hazard Sensitive Activities			
Additions for Hazard Sensitive Activities			
Less Hazard Sensitive Activities			
Potentially Hazard Sensitive Activities			
Hazard Sensitive Activities			

PROPOSED LOWER HUTT CITY DISTRICT PLAN			
	Low Hazard Overlay	Medium Hazard Overlay	High Hazard Overlay
Additions for Activities Least Sensitive to Natural Hazards	N/A	N/A	
Additions for Activities Potentially Sensitive to Natural Hazards	N/A	N/A	
Additions for Activities Most Sensitive to Natural Hazards	N/A	N/A	
New buildings and conversions of existing buildings to contain Activities Least Sensitive to Natural Hazards	N/A	N/A	
New buildings and conversions of existing buildings to contain Activities Potentially Sensitive to Natural Hazards	N/A	N/A	
New buildings and conversions of existing buildings to contain Activities Most Sensitive to Natural Hazards	N/A	N/A	

APPLICATION OF RULES

	New Buildings	New Structures	Additions	Activities
Wellington City District Plan	✓	x	✓	✓

Upper Hutt District Plan	✓	✓ ³	✓	✓
Combined Wairarapa District Plan	✓ ⁴	✗	✓	✓
Porirua District Plan	✓ ⁵	✗	✓	✓
Proposed Lower Hutt District Plan	✓	✓	✓	✓

SUMMARY OF APPROACH

All of the District Plans allow for Less Sensitive Activities (and associated additions) as a permitted activity in the fault hazard overlays.

Generally, the District Plans have new hazard sensitive activities in the high hazard area as a non-complying activity. Potentially Hazard Sensitive Activities are either a discretionary activity or a non-complying activity.

The approach to additions to Hazard Sensitive and Potentially Hazard Sensitive Activities is generally the same across Wellington City Council, Porirua City Council, Upper Hutt City Council and the Proposed Lower Hutt District Plan where additions are permitted up to a certain size and once this size is exceeded, they become a Restricted Discretionary Activity. The exception is the Combined Wairarapa District Plan which has additions for Hazard Sensitive and Potentially Hazard Sensitive Activities as either a Restricted Discretionary Activity or a Discretionary Activity depending on whether they are in a Medium or High Hazard Area.

Porirua City Council map different fault hazard overlays within their District Plan. There are different rules within the District Plan based on whether the subdivision, use or development is within 20m of the fault hazard or not.

While the Proposed Lower Hutt District Plan has a Controlled Activity status for the Wellington Fault Overlay, this only applies to very limited scenarios where there is an existing vacant site, as opposed to the general development of land in this area which requires consent as a Restricted Discretionary Activity.

The rule frameworks in each district plan apply to new buildings (including where they directly associated with an activity), additions, and activities (including conversions). The Upper Hutt District Plan applies rules to structures only in identified within the fault band, whereas the Proposed Lower Hutt District Plan applies rules to structures more generally.

3.3 Flooding

All councils in the Wellington Region map flooding based on a 1% AEP, or 1-in-100-year, flood event, but with different rainfall, climate change and sea level rise scenarios.

Wellington City Council mapping is based on a 1:100 year rainfall event assuming a 20% increase in rainfall under climate change and 1m sea level rise.

³ Applies only to new structures erected within the fault band as a Discretionary Activity

⁴ Insofar as it applies to buildings associated with the activity

⁵ Insofar as it applies to buildings associated with the activity

Porirua City Council uses a 1:100 year rainfall event assuming a 15% increase in rainfall under climate change and 1m of sea level rise.

Kāpiti Coast uses 1% AEP flood modelling in its District Plan. However, we were unable to find what assumptions had been used in this modelling as the data is quite dated.

Upper Hutt City Council uses a 1 in 100 year flood incorporating climate change to 2090 and freeboard. The District Plan does not base flooding rules on hazard sensitivity.

The Proposed Lower Hutt District Plan maps a 1% AEP flood event assuming an increased rainfall (20% assumption) and 1.59m sea level rise.

The combined Wairarapa District Plan uses the RCP 8.5H+ scenario (which is the most conservative climate change scenario). However, the sea level rise and rainfall assumptions for this scenario were not available at the time of preparing this report.

The reasons for different flood modelling scenarios within the Wellington Region includes:

- The organisation that undertook the modelling. There are different modelling scenarios between Wellington Water and Greater Wellington Region Council.
- When the modelling was undertaken. Generally, more recent modelling has used more conservative climate change scenarios when compared to earlier models; and
- Local variability in respect to changes in rainfall levels across the region.

WELLINGTON CITY DISTRICT PLAN			
	Low Hazard Overlay	Medium Hazard Overlay	High Hazard Overlay
Additions for Potentially Hazard Sensitive Activities			
Additions for Hazard Sensitive Activities			
Less Hazard Sensitive Activities			
Construction or conversion buildings to contain Potentially Hazard Sensitive Activities			
Construction or conversion buildings to contain Hazard Sensitive Activities			

COMBINED WAIRARAPA DISTRICT PLAN			
	Low Hazard Overlay	Medium Hazard Overlay	High Hazard Overlay

Additions for Less Hazard Sensitive Activities			
Additions for Potentially Hazard Sensitive Activities			
Additions for Hazard Sensitive Activities			
Less Hazard Sensitive Activities			
Potentially Hazard Sensitive Activities			
Hazard Sensitive Activities			

PORIRUA DISTRICT PLAN			
	Low Hazard Overlay	Medium Hazard Overlay	High Hazard Overlay
Additions for Less Hazard Sensitive Activities			
Additions for Potentially Hazard Sensitive Activities			
Additions for Hazard Sensitive Activities			
Less Hazard Sensitive Activities			
Potentially Hazard Sensitive Activities			
Hazard Sensitive Activities			

PROPOSED LOWER HUTT DISTRICT PLAN			
	Low Hazard Overlay	Medium Hazard Overlay	High Hazard Overlay
Additions for Activities Least Sensitive to Natural Hazards			
Additions for Activities Potentially Sensitive to Natural Hazards			
Additions for Activities Most Sensitive to Natural Hazards			

New buildings and structures and the Conversion of Existing Buildings for Activities Least Sensitive to Natural Hazards			
New buildings and structures and the Conversion of Existing Buildings for Activities Potentially Sensitive to Natural Hazards			
New buildings and structures and the Conversion of Existing Buildings for Activities Most Sensitive to Natural Hazards			

APPLICATION OF RULES

	New Buildings	New Structures	Additions	Activities
Wellington City District Plan	✓	✗	✓	✓
Upper Hutt District Plan	✓	✓ ⁶	✓	✓
Combined Wairarapa District Plan	✓ ⁷	✗	✓	✓
Porirua District Plan	✓ ⁸	✗	✓	✓
Proposed Lower Hutt District Plan	✓	✓	✓	✓

SUMMARY OF APPROACH

The District Plans allow for Less Hazard Sensitive Activities as a permitted activity in the Low Hazard Area. In the Medium and High Hazard Areas, the District Plans vary from having the activity status as either Restricted Discretionary, Discretionary or Non-Complying. However, when looking at the rationale, the general approach is to ensure that the less hazard sensitive activities do not impede flood waters or flood flows.

In the Porirua District Plan and Wellington District Plan, the High Flood Hazard Area are reflective of stream corridors with a set buffer on either side. These are active water channels, so it is not desirable to construct within this area. In the Proposed Lower Hutt City District Plan, the identification of High Hazard Areas for flooding has used a different methodology, based on flood depth and velocity. This different approach to the management of Less Hazard Sensitive Activities in the Proposed Lower Hutt District Plan is reflected in the rule framework.

⁶ Applies only to new structures erected within the 1% flood extent of the Te Awa Kairangi as a Discretionary Activity or structure within the stream corridor of the Pinehaven Flood Hazard Extent

⁷ Insofar as it applies to buildings associated with the activity

⁸ Insofar as it applies to buildings associated with the activity

The District Plans generally take a consistent approach where the construction of new Potentially Hazard Sensitive Activities and Hazard Sensitive Activities in the High Flood Hazard Area are a Non-Complying Activity.

The District Plans take differing and more nuanced approaches to the management of Potentially Hazard Sensitive Activities and Hazard Sensitive Activities in the Medium Hazard Area. Some of this difference is down to a nuancing of provisions. Both the Wellington City District Plan and the Proposed Lower Hutt District Plan have carveouts for significant commercial and industrial areas. This means the framework starts at a permitted activity standard for these carveout areas and then elevates. Outside of these carveout areas, the activity status is Discretionary (which is largely consistent across the district plans, with the exception that Wellington elevates to Non-Complying when a minimum floor level is not met).

The main area where the Proposed Lower Hutt District Plan is different to the Wellington and Porirua District Plans, but is aligned with the Combined Wairarapa District Plan, is that the construction of new residential units in the Low Hazard Area is a Permitted Activity as opposed to Restricted Discretionary Activity. This approach in the Proposed Lower Hutt District Plan reflects the existing practice in the City.

In summary, while there is some variation in the rule framework for the flood hazards across the District Plans, this has occurred for the following reasons:

- Changes in modelling which has resulted in changes to some of the rule frameworks;
- Nuancing of provisions involving areas which have been carved out due to their economic and social importance; and
- Evolution of the provisions over time in response to feedback and additional testing within applications.

The rule frameworks in each district plan apply to new buildings (including where they directly associated with an activity), additions, and activities (including conversions). The Upper Hutt District Plan applies rules to structures only in identified within the flood extent of Te Awa Kairangi, whereas the Proposed Lower Hutt District Plan applies rules to structures more generally.

3.4 Liquefaction

WELLINGTON CITY DISTRICT PLAN	
	Low Hazard Overlay
Less Hazard Sensitive Activities	
Potentially Hazard Sensitive Activities	
Hazard Sensitive Activities	

COMBINED WAIRARAPA DISTRICT PLAN	
	Low Hazard Overlay
Additions in all hazard sensitivity areas	

Less Hazard Sensitive Activities	
Potentially Hazard Sensitive Activities	
Hazard Sensitive Activities	

PROPOSED LOWER HUTT DISTRICT PLAN	
	Low Hazard Overlay
Additions in all hazard sensitivity areas	
Activities Least Sensitive to Natural Hazards	
Activities Potentially Sensitive to Natural Hazards	
Activities Most Sensitive to Natural Hazards	

APPLICATION OF RULES

	New Buildings	New Structures	Additions	Activities
Wellington City District Plan	✗	✗	✗	✓
Combined Wairarapa District Plan	✓ ⁹	✗	✓	✓
Proposed Lower Hutt District Plan	✓	✓	✓	✓

SUMMARY OF APPROACH

Wellington City Council and the Combined Wairarapa District Councils manage liquefaction through their district plans. The Proposed Lower Hutt District Plan proposes the same approach. Activities are generally permitted by both plans, except for some Hazard Sensitive Activities, which require consent as Restricted Discretionary Activities.

Kāpiti Coast District Council manages liquefaction risk where subdivision is to occur on peat or sand soils, by requiring supporting geotechnical information. This applies to all activities and zones and is not triggered by activity hazard sensitivity or level of risk.

⁹ Insofar as it applies to buildings associated with the activity

The rule frameworks apply differently under each district plan. Wellington City Council only apply liquefaction rules to activities, with the Combined Wairarapa District Council's applying rules to new buildings (where directly associated with an activity), additions, and activities. The Proposed Lower Hutt District Plan applies rules new buildings and structures, additions, and activities (including conversions).

3.5 Soft soils

Upper Hutt District Plan manages soft soils in Mangaroa through the Mangaroa Peat Overlay. The District Plan rules allow for activities in Less Hazard Sensitive areas, and only elevates the activity status for subdivision where building platforms are being created for Hazard Sensitive or Potentially Hazard Sensitive activities.

UPPER HUTT DISTRICT PLAN	
	Low Hazard Overlay
Less Hazard Sensitive Activities	
Subdivision that creates a building platform for Potentially Hazard Sensitive Activities	
Subdivision that creates a building platform for Hazard Sensitive Activities	

APPLICATION OF RULES

	New Buildings	New Structures	Additions	Activities
Upper Hutt District Plan	x	x	x	✓

This is a uniquely localised issue within Upper Hutt City and therefore this rule framework is not present in any other councils. The rule framework applies to all less hazard sensitive activities within the overlay area, and where building platforms are created through subdivision.

3.6 Coastal hazards

Wellington City Council, Porirua City Council and Lower Hutt City Council map coastal hazards within their district plans. Wellington City Council maps tsunamis for 1:100, 1:500 and 1:1000 year scenarios with 1m sea level rise, as well as existing coastal inundation with a 1:100 year storm and a 1:100 year storm with 1.43m sea level rise. Porirua City Council maps tsunamis for 1:100, 1:500 and 1:1000 year inundation extents with 1m of sea level rise, coastal hazards for current inundation risk and a 1:100 year storm surge with 1m sea level rise, and coastal erosion hazard for current risk and future risk with 1m sea level rise.

The Lower Hutt City Council maps tsunamis for the 1:100, 1:500 and 1:1000 year scenarios with 1m sea level rise, the existing coastal inundation extent with 1% AEP storm tide and wave setup, and the coastal inundation extent with 1.59m relative sea level rise and 1% AEP storm tide and wave set up.

The Combined Wairarapa District Plan states that a comprehensive coastal hazard assessment is yet to be undertaken for the Wairarapa and in the absence of such an assessment, a Foreshore Protection Area has been identified. This area incorporates the area 50 metres inland of the MHWS, with the exception of Riversdale where the Foreshore Protection Area has been mapped based on a local hazard assessment. Rules that apply in the Foreshore Protection Area are not determined based on hazard sensitivity or level of risk. Generally, non-habitable buildings and structures are permitted to a maximum floor area of 15m² and height of 3m, before the activity status elevates to Restricted Discretionary or Non-Complying. All new residential activities within the Foreshore Protection Area require consent as Non-Complying Activities.

The Kāpiti District Plan reviews in 2014 and 2017 did not include coastal hazard provisions and therefore coastal-hazard related provisions in the District Plan 1999 remain operative. There are no rules that apply to coastal hazards.

Upper Hutt City has no coastal boundaries and therefore does not have any coastal hazard mapping.

WELLINGTON CITY DISTRICT PLAN			
	Low Hazard Overlay	Medium Hazard Overlay	High Hazard Overlay
Additions for Less Hazard Sensitive Activities			
Additions for Potentially Hazard Sensitive Activities			
Additions for Hazard Sensitive Activities			
Less Hazard Sensitive Activities			
Construction or conversion of buildings to contain Potentially Hazard Sensitive Activities			
Construction or conversion of buildings to contain Hazard Sensitive Activities			

PORIRUA DISTRICT PLAN			
	Low Hazard Overlay	Medium Hazard Overlay	High Hazard Overlay
Additions for Less Hazard Sensitive Activities			
Additions for Potentially Hazard Sensitive Activities			
Additions for Hazard Sensitive Activities			
Less Hazard Sensitive Activities			

Potentially Hazard Sensitive Activities			
Hazard Sensitive Activities			

PROPOSED LOWER HUTT DISTRICT PLAN			
	Low Hazard Overlay	Medium Hazard Overlay	High Hazard Overlay
Additions for Activities Least Sensitive to Natural Hazards			
Additions for Activities Potentially Sensitive to Natural Hazards			
Additions for Activities Most Sensitive to Natural Hazards			
Construction or conversion of buildings to contain Activities Least Sensitive to Natural Hazards			
Construction or conversion of buildings to contain Activities Potentially Sensitive to Natural Hazards			
Construction or conversion of buildings to contain Activities Most Sensitive to Natural Hazards			

APPLICATION OF RULES

	New Buildings	New Structures	Additions	Activities
Wellington City District Plan	✓	✗	✓	✓
Porirua District Plan	✓	✗	✓	✓
Proposed Lower Hutt District Plan	✓	✓	✓	✓

SUMMARY OF APPROACH

The District Plans allow for Less Hazard Sensitive Activities and associated additions as a permitted activity in the Low, Medium and High Hazard Areas.

In the Low Hazard Area of the Coastal Hazard Overlays, the Wellington and Proposed Hutt City District Plans have Potentially Hazard Sensitive Activities as permitted, whereas the Porirua District Plan has these as a Controlled Activity.

In the Low Hazard Area of the Coastal Hazard Overlays, Wellington City and the Proposed Lower Hutt District Plans, have the majority of Hazard Sensitive Activities as permitted, with several exceptions elevated to Restricted Discretionary Activity status. The same exceptions apply to both Wellington City and the Proposed Lower Hutt District Plan.

Porirua City has all Hazard Sensitive Activities as a Restricted Discretionary Activity, which elevates to Discretionary, when the 1:1000 year tsunami floor level is not met.

For Medium Hazard Area of the Coastal Hazard Overlays, the Wellington and Proposed Lower Hutt District Plans have Potentially Hazard Sensitive Activities as permitted, which elevate to a Restricted Discretionary Activity status where the permitted activity standards are not met. For both of these district plans, the permitted framework applies to their carveout areas, with Potentially Hazard Sensitive Activities outside of these carveouts being Restricted Discretionary Activities.

Porirua City has all Potentially Hazard Sensitive Activities as a Restricted Discretionary Activity, which elevates to Discretionary when the floor level requirements for tsunami and inundation are not met.

For Medium Hazard Area of the Coastal Hazard Overlays, the Wellington and Proposed Lower Hutt District Plans have Hazard Sensitive Activities as permitted, which elevate to a Restricted Discretionary Activity where the permitted activity standards are not met. For both District Plans, the permitted framework applies to their carveout areas, with Potentially Hazard Sensitive Activities outside of these carveouts being a Discretionary Activity.

Porirua City has all Hazard Sensitive Activities as a Discretionary Activity in the Medium Hazard Overlay.

For High Hazard Area of the Coastal Hazard Overlays, the Wellington and Proposed Lower Hutt District Plans have Hazard Sensitive Activities as permitted, which elevate to a Restricted Discretionary Activity where the permitted activity standards are not met. For both of these District Plans, the permitted framework applies to their carveout areas, with Hazard Sensitive Activities outside of these carveouts being a Non-Complying Activity.

Porirua City has all Hazard Sensitive Activities as a Non-Complying Activity in the High Hazard Area.

The Combined Wairarapa District Plan takes a blunt approach to the management of natural hazard risk in the coastal environment. Rules that apply in the Foreshore Protection Area are not determined based on hazard sensitivity or level of risk. Generally, non-habitable buildings and structures are permitted to a maximum floor area of 15m² and height of 3m, before the activity status elevates to Restricted Discretionary or Non-Complying. All new residential activities within the Foreshore Protection Area require consent as Non-Complying Activities. It is, however, recognised that the Wairarapa has very different natural hazard risk exposure to coastal hazards when compared to Wellington, Porirua and Lower Hutt, due to the largely undeveloped nature of its coastline.

In summary, while there is some variation in the framework for the coastal hazards across the District Plans, this has occurred for the following reasons:

- Evolution of the provisions over time in response to feedback and additional testing within applications;

- Nuancing of provisions involving areas which have been carved out due to their economic and social importance; and
- Difference in natural hazard risk exposure within the coastal environment.

The rule frameworks in each district plan apply to new buildings (including where they directly associated with an activity), additions, and activities (including conversions). The Proposed Lower Hutt District Plan also applies rules to structures more generally.

4 SUMMARY

The Proposed Lower Hutt District Plan is broadly consistent with the regional approach to natural hazard mapping. Fault hazard and tsunami modelling align with the wider Wellington Region, while slope stability mapping is similar to the approach used by Upper Hutt City Council. Coastal inundation modelling is more conservative in Hutt City, using the largest sea level rise assumption in the region; by comparison, Wellington City Council and Porirua City Council use a 1m sea level rise assumption. Flood modelling varies more significantly across the region, reflecting differences in when the modelling was undertaken, local climate change assumptions, and whether the modelling was prepared by Wellington Water or Greater Wellington Regional Council. The Wairarapa Councils use the most conservative flood modelling assumptions, followed by Lower Hutt, while Wellington City Council and Porirua City Council are largely aligned.

In terms of the rule frameworks, the Proposed Lower Hutt District Plan is generally consistent with the approach taken across the region, although it includes some refinements. The fault hazard framework is broadly consistent with other district plans, with the Proposed Lower Hutt District Plan taking a slightly more nuanced approach. The slope stability framework is effectively the same as the Upper Hutt City District Plan approach. For tsunami and coastal inundation hazards, the rule framework is largely consistent with that of the wider region, with most of the refinement occurring in identified carveout areas. Flood hazards are the main area of difference: the Proposed Lower Hutt District Plan provides for some Hazard Sensitive Activities as permitted activities, which differs from other parts of the region. While there is local variability, the regional approach is that as hazard risk increases, and as the sensitivity of an activity to that hazard increases, the activity status also becomes more restrictive, noting differences in the application of Restricted Discretionary and Discretionary activity statuses.