BEFORE THE INDEPENDENT HEARING PANEL APPOINTED TO HEAR AND MAKE DECISIONS ON SUBMISSIONS AND FURTHER SUBMISSIONS ON PROPOSED PLAN CHANGE 56 TO THE HUTT CITY COUNCIL DISTRICT PLAN

IN THE MATTER of the Resource Management Act 1991 (the

Act)

AND

IN THE MATTER of Hearing of Submissions and Further

Submissions on Proposed District Plan Change

56 to the Operative District Plan under

Schedule 1 of the Act

SUPPLEMENTARY EVIDENCE OF IAIN NICHOLAS DAWE ON BEHALF OF WELLINGTON REGIONAL COUNCIL

21 APRIL 2023

Introduction

- During the presentation of my evidence at the hearing on 12 April 2023, the Hearing
 Panel requested that I provide the following by 21 April 2023:
 - a) To provide a track change version of the amendments that I have sought to Rule 14H 2.9 (new residential units in the High Coastal Hazard Area) to reduce the number of residential units on a site to no more than one; and
 - b) To provide a section 77J assessment for the amendments sought.

Amendments sought to Rule 14H 2.9 (New residential units in the High Coastal Hazard Area)

2. The track change version of the amendments that I have recommended to Rule 14H 2.9 (new residential units in the High Coastal Hazard Area) to reduce the number of residential units on a site to no more than one is set out below:

AMENDMENT 433 [Chapter 14H Natural Hazards (Rules)]

Add new Rule 14H 2.9 New residential units in the High Coastal Hazard Area

Rule 14H 2.9 New residential units in the High Coastal Hazard Area

- 1. New residential units in the High Coastal Hazard Area are a permitted activity where:
 - a. The total number of residential units on a site is no more than two one
- 2. New residential units in the High Coastal Hazard Area are a non complying activity where:
 - a. Compliance with 14H 2.9(1)(a) cannot be achieved

Section 77J assessment

3. I have reviewed the section 32 evaluation undertaken by Hutt City Council in respect of including the tsunami and inundations high hazard areas as a new qualifying matter. I have included the relevant section 32 evaluation in Attachment 1 to this evidence and have include my additional evaluation under section 77J of my recommended amendments in track changes.

ATTACHMENT 1

Coastal Hazard – Tsunami, high hazard area (a new qualifying matter) Coastal Hazard – Inundation, high hazard area (a new qualifying matter)

Additional information under sections 77J and 77P of the RMA

3(a)(i) Why the area is subject to a qualifying matter

Probabilistic tsunami modelling has been undertaken by GNS Science. This includes the inundation extent for a 1-in-100-year tsunami event, identified as a medium high coastal hazard risk due to the potential impacts and its recurrence interval. This modelling incorporates 1m of sea level rise.

Coastal <u>bathtub</u> inundation modelling has been undertaken for Hutt City by NIWA. This includes the inundation extent for a 1% AEP storm event at current sea level (2022). This has produced a mapped area identified as a high coastal hazard risk due to the current level of inundation risk and that it will be exacerbated due to future sea level rise. In this area it is reasonably anticipated that, during the lifetime of a new building it will be impacted by coastal inundation during a 1% AEP storm event.

It is acknowledged that bathtub modelling is not as accurate as dynamic numerical modelled and can miss subtle local variations in topography. It is suitable as a first pass to identify broadly where coastal inundation risks exist, but more detailed modelling will be required to refine this work.

Until this is undertaken for the fuller district plan review, it is recommended that a precautionary approach be applied to this mapping.

Sea level rise is a measurable change occurring the region. The most recent analysis of sea level trends for Wellington shows that sea level has been rising steadily at rates averaging 2.1 mm/yr since records began in 1899, in line with the trend seen globally as measured on tide gauges and with satellite altimetry¹. This is driven dominantly by a mix of thermal expansion of the oceans as a result of global warming and ice melt. The trend is not reversing and sea level will continue rising for at least the next several hundred years as a result of a lag between the more rapid warming of the atmosphere and the much slower process of heat transfer and uptake by the oceans.

The two most plausible mid-range scenarios of the latest Intergovernmental Panel on Climate Change (IPCC) report AR6 indicate that sea level rise for Hutt City is forecast to be in the order of 0.74 to 0.96 m over the next 100 years with a range of 0.53 to 1.26 m².

Additionally, in the Wellington region, including Hutt City, there is a ongoing trend of tectonic subsidence that has been measured by GNS Science on its continuous GPS network since the late 1990s¹ and more recently with satellite altimetry as presented in the NZ Sea Rise programme². The data shows that Hutt City is subsiding at rates in the order of 3.0 mm/yr, effectively adding the current rate of sea level rise.

<u>Factoring this into the sea level trends analysis, the forecast *relative* sea level rise for Hutt City over the next 100 years will be in the order of 1.07 to 1.29 m with a range of 0.84 to 1.62 m².</u>

Sea level rise is a hazard multiplier that compounds a lot of natural and coastal hazards that already affect the Hutt City coastline. These impacts include; coastal erosion; inundation; surface flooding; enhanced storm surge and tsunami impacts due to elevated mean sea level; impeded drainage at storm water outfalls and streams and; groundwater interactions pushing up the water table leading to longer incidences of pluvial/surface flooding during rain storm events (that will also be exacerbated by climate change).

Policy 3 of the NZCPS outlines adopting a precautionary approach towards proposed activities

whose effects on the coastal environment are uncertain, unknown, or little understood, but potentially significantly adverse with particular regard to the use and management of coastal resources potentially vulnerable to effects from climate change, so that:

- a) avoidable social and economic loss and harm to communities does not occur;
- b) <u>natural adjustments for coastal processes, natural defences, ecosystems, habitat and</u> species are allowed to occur; and
- c) the natural character, public access, amenity and other values of the coastal environment meet the needs of future generations.

There is a credible risk from erosion and inundation from both tsunami and storm surge in the high hazard overlays, both presently and from future impacts as a result of sea level rise but, there are uncertainties around the exact timing these effects will start to have significant impact. Thus, it is appropriate to give effect to Policy 3 of the NZCPS for this plan change as a natural hazard qualifying matter to reduce the intensification under the MDRS. Reducing the intensification in high hazard coastal areas gives effect to this precautionary approach policy.

Policy 25 of the NZCPS addresses subdivision, use, and development in areas at risk from coastal hazards. It states that in areas potentially affected by coastal hazards over at least the next 100 years:

- a) avoid increasing the risk of social, environmental and economic harm from coastal hazards;
- b) avoid redevelopment, or change in land use, that would increase the risk of adverse effects from coastal hazards;
- encourage redevelopment, or change in land use, where that would reduce the risk of
 adverse effects from coastal hazards, including managed retreat by relocation or removal
 of existing structures or their abandonment in extreme circumstances, and designing for
 relocatability or recoverability from hazard events;
- d) <u>encourage the location of infrastructure away from areas of hazard risk where practicable;</u>
- e) <u>discourage hard protection structures and promote the use of alternatives to them,</u> <u>including natural defences; and</u>
- f) consider the potential effects of tsunami and how to avoid or mitigate them.

Policy 27 of the NZCPS outlines strategies for protecting areas of significant existing development likely to be affected by coastal hazards and provides a range of options for reducing coastal hazard risk that should be assessed including; "(a) promoting and identifying long-term sustainable risk reduction approaches including the relocation or removal of existing development or structures at risk".

In evaluating these options, the policy states that the approaches should focus on risk management that reduces the need for hard protection structures and similar engineering interventions and take into account the nature of the coastal hazard risk and how it might change over at least a 100-year timeframe, including the expected effects of climate change.

<u>Limiting housing development in the high hazard coastal overlays will give effect to these parts of</u>
<u>Policies 25 and 27, such that there will be no increase in the risk from coastal hazards and tsunami.</u>

<u>In summary</u>, The New Zealand Coastal Policy Statement 2010 states that, in areas potentially affected by coastal hazards over at least the next 100 years:

- avoid increasing the risk of social, environmental and economic harm from coastal hazards
- avoid redevelopment, or change in land use, that would increase the risk of adverse

effects from coastal hazards (policy 25 (b)) and

consider the potential effects of tsunami and how to avoid or mitigate them (policy 25 (f)).

For these reasons, the <u>high</u> tsunami <u>and high coastal hazard inundation overlays have has</u>-been considered <u>a as</u> qualifying matter<u>s under section 77I of the RMA</u>.

3(a)(ii) Why the qualifying matter is incompatible with the level of development permitted by the MDRS or as provided for by policy 3 for that area

The MDRS and Policy 3 of the NPS-UD would enable a high level of development in areas where higher order direction states that the risk from natural hazards should be avoided. Due to the level of risk to people, property and infrastructure, and that the impacts of climate change will exacerbate these risks, it is inappropriate to fully enable the MDRS or Policy 3 in the tsunami high hazard area. For this reason, the number of units per site enabled by the MDRS is proposed to be reduced within the tsunami high hazard overlay and a restricted discretionary activity introducing matters of discretion to incorporate mitigation measures and provide for safe evacuation routes for commercial sites with more than 10 employees and/or accessibility to the public.

The While the NZCPS requires avoidance of social, environmental and economic harm within this area, s77J is limited to an assessment of the degree of application of the MDRS and Policy 3. As such, it is appropriate that the application of this qualifying matter reduces the MDRS requirements to permit three units per lot to only allowing one unit per lot. This will also reduce largely retains the existing level of development provided for in the Operative District Plan, which is 2 units per site within the operative General Residential Activity Area.

3(b) Impact that limiting development capacity to accommodate the qualifying matter will have on the provision of development capacity

Application of this qualifying matter will affect approximately 870 <u>existing</u> residential properties. <u>Limiting the number of units per lot to one This</u> will result in approximately <u>870 1740</u> potential dwellings <u>over the long term</u> that would otherwise be permitted under the MDRS not being enabled due to high tsunami hazard risk.

According to the latest data from Statistics New Zealand, as of June 2021, the approximate number of households in Hutt City is 46,560, housing an estimated 108,800 people. Thus, 870 residential properties represents 1.8% of the total housing stock affected by application of this qualifying matter.

3(c) Costs and broader impacts

Reducing the permitted level of development within the identified tsunami high hazard tsunami and coastal inundation overlays area addresses the significant risk to people, property and infrastructure from a potential tsunami event.

While this restricts development within the overlay, higher levels of development are a non-complying activity due to the significance of the risk to people, property and infrastructure from a 1-in-100-year tsunami event <u>and a 1% AEP inundation event</u>. Because of this, higher levels of development in <u>these</u> the high tsunami hazard areas are discouraged.

Applying this qualifying matter largely ensures that the number of dwellings, beyond <u>maintenance</u> <u>or alterations to the existing housing that is allowed under what is currently enabled in the</u> operative District Plan, addresses the significant economic and social risks relevant to the hazard and/or is avoided.

The 870 households affected have a combined Government Valuation (GV) according Land Information New Zealand (LINZ) in the order of \$800 Million. Market values are typically more than the GV and considering the infrastructural investment to supply utilities to these houses including power, internet, telecoms, water, waste water, sewerage and roading, the total economic value of the assets at risk in this area run to well over one billion dollars and is probably closer to two billion dollars.

Allowing 2 houses per lot, as per the operative district plan in residentially zoned areas, could produce housing investment in the order of \$1.6 billion at present day rates. Allowing the minimum requirements under the MDRS of three houses per lot could push this to around \$2.5 billion in new housing investment.

Considering the value of the utility infrastructural to support this level of development, the total value of assets at risk in the high hazard tsunami areas could be in the order of 2.5 - 3.5 billion dollars respectively. This is estimated at present day values, but the figure would appreciate over time, exposing the community and council assets to increasing economic risk over time.

The costs of allowing development to intensify in the high coastal hazard and tsunami overlays is not limited to the economic value of the assets exposed to the risk. When natural disasters occur and property and infrastructure is damaged, there are typically pressures on council to spend money on hard engineered protection structures such as seawalls.

The average cost per linear meter of a seawall varies depending on factors such as the physical location, geology, materials, design, construction and consenting requirements and can range from \$15,000 to \$50,000 or more, depending on these factors. In the Wellington region, it is not uncommon for construction costings to be in the order of \$15-70 million per lineal kilometer of seawall, with a design life from 30 -50 years. In addition, the cost of a seawall is not limited to the initial capital expenditure but, by necessity includes ongoing maintenance and repair costs, which can add substantially to the lifetime operating costs of the infrastructure.

Taking consideration that around 8.5 km of the Hutt City coastline is backed by residential housing, it would cost in the order of one third to half a billion dollars (at present day value) to protect these areas from the risks posed by coastal hazards and tsunami.

Overall, the economic and social benefits to addressing tsunami <u>and coastal hazards</u> to ensure risk to people, property and infrastructure is managed, outweigh the costs of restricting development. Further assessment of these can be found in the evaluation of the proposed policies and rules of the proposed plan change, in the Section 32 evaluation report.

4(a) How the provisions of the district plan allow the same or a greater level of development than the MDRS

The proposed provisions provide a lower level of permitted development than the MDRS on affected sites by controlling the number of dwellings permitted. Within the tsunami <u>and coastal inundation</u> high hazard overlay, there are approximately 870 residential properties affected to some degree. Within these sites, housing development would be restricted to one unit per lot. This is a reduction from two per lot permitted under the operative district plan and a reduction from three directed under the MDRS.

17 (12 excluding access legs) properties within the operative Special Residential Activity Area are affected by this hazard to some degree. These are noted because the proposed plan change increases the number of dwellings permitted to two per site. This is to ensure simplicity and consistency of provisions for the proposed medium density activity area.

4(b) How modifications to the MDRS as applied to the relevant residential zones are limited to only those modifications necessary to accommodate qualifying matters and how they apply to any spatial layers including:

- any operative district plan spatial layers; and
- any new spatial layers proposed for the district plan.

The qualifying matter is limited to the proposed Coastal Hazard Overlay – Tsunami, High Coastal Hazard Area spatial overlay. This is the area identified to be at risk of a 1% AEP storm event, incorporating 1.5m modelled sea level rise.

The qualifying matter is limited to the proposed Coastal Hazard Overlay – Inundation, Medium High Coastal Hazard Area spatial overlay. This is the area identified to be at risk of inundation during a modelled 1% AEP inundation event.

¹Bell, R., Denys, P. & Hannah, J. (2018), Update on relative sea-level rise and vertical land motion: Wellington region. Prepared for Greater Wellington regional Council. NIWA Client Report No: 2019007HN.

²These data and projections can be found at the NZ SeaRise Project: https://www.searise.nz/

Natural Hazards – Policies and rules associated with coastal hazard risk

The proposed policies and rules associated with coastal hazard risk are:

Policies

- 14H 1.1 Levels of Risk
- 14H 1.8 Additions to buildings within the Medium Coastal Hazard Area and High Coastal Hazard Area
- 14H 1.9 New residential units within the Low Coastal Hazard Areas
- 14H 1.10 New residential units in the Medium Coastal Hazard Area
- 14H 1.11 New residential units in the High Coastal Hazard Area
- 14H 1.12 Subdivision, Use and Development in the Petone Commercial Activity Area and Suburban Mixed Use Activity Area which will not be occupied by members of the public and within the Coastal Hazards Overlays
- 14H 1.13 Subdivision, Use and Development in the Petone Commercial Activity Area and Suburban Mixed Use Activity Area which will be occupied by members of the public and within the Coastal Hazards Overlays

Rules

- 14H 2.6 Additions to building within the Coastal Hazard Overlays
- 14H 2.7 New residential units in the Low Coastal Hazard Area
- 14H 2.8 New residential units in the Medium Coastal Hazard Area
- 14H 2.9 New residential units in the High Coastal Hazard Area
- 14H 2.10 Commercial activities or retail activities that are within the Petone Commercial Activity Area and Suburban Mixed Use Activity Area and within the Medium or High Coastal Hazard Overlays
- These policies and rules limit the permitted number of units per site to 2 in medium or high coastal hazard areas. In low coastal hazard areas 3 units per site are permitted. Development over and above these thresholds requires resource consent to mitigate or avoid risk to people, property, and infrastructure. The proposed policies and rules only apply to sites affected by the MDRS and NPSUD Policy 3 intensification requirements that are also located within a coastal hazard overlay.

Why these amendments are included in the plan change

Coastal hazards will have an increasing impact on the city into the future. The NZCPS requires the risk from coastal hazards with at least a 1:100 return period to be managed. This includes tsunami and coastal inundation hazards (including sea level rise). Modelling of these two coastal hazards has been undertaken.

A series of probabilistic tsunami scenarios were mapped for the following return periods:

- 1:100 years;
- 1:500 years; and
- 1:1000 years.

Tsunami hazards can have limited warning time and the potential impacts on properties and life can be severe. Because of this, it is appropriate to consider tsunami risk from a range of scenarios. All modelled coastal areas (modelling has not been completed for the Pencarrow and Wainuiomata Coasts) are impacted by this hazard.

A series of sea level rise maps have been modelled to identify the City's coastal inundation hazards. The sea level rise was based on the MfE guidance (Coastal Hazards and Climate Change: A Guidance Manual for Local Government in New Zealand 2017). While the full extent of modelled sea level rise is occurring over a longer time frame, relative sea level is currently rising at an increasing rate and will continue into the future. As such, current decisions about future development in coastal areas must factor in sea level rise to ensure that the risk from this hazard does not increase with time.

Coastal hazards are not currently addressed in the operative District Plan, and, when considering the effects of climate change, will have an increasingly significant impact on the city into the future. When considering the intensification requirements of the MDRS and NPS-UD, it is therefore necessary to address the risk to people, and their property, and infrastructure from coastal hazards to ensure the level of development enabled is appropriate and resilient to impacts from coastal hazards into the future. Fully implementing the MDRS and NPS-UD Policy 3 in these areas will lead to increased environmental, economic, social and cultural risk over time.

As such, coastal hazards have been added to the plan as a qualifying matter and limit the MDRS (to the extent possible through the IPI process) to address the risk. The policies and rules largely maintain the existing level of development enabled by the operative District Plan but provide restrictions on the number of dwellings that would otherwise be enabled through the MDRS and the intensity of commercial use otherwise enabled through the NPS-UD. This is important to ensure that the risk to coastal communities is managed when implementing the IPI, while additional hazard assessment beyond the scope of this plan change is ongoing.

The RMA sets additional evaluation requirements for accommodating qualifying matters in an IPI. The additional information required for incorporating natural hazards as a qualifying matter in the proposed plan change is provided in Appendix 5 of this report.

How these provisions achieve the purpose of the RMA

Section 6(h) of the RMA, the NZCPS, and the RPS provide direction on how natural hazard risk needs to be managed and addressed within District Plans. The proposed provisions are consistent with this higher order direction to the extent possible within the scope of s77G, 77I and 77J for the provision and assessment of qualifying matters applied through the IPI process.

Benefits (including Opportunities for Economic Growth and Employment)

Environmental

- Application of this qualifying matter will help to protect areas that contain high value and sensitive ecosystems.
- Increased awareness of risk may lead to natural resilience measures and restoration of coastal areas

Economic

The direct economic benefits derived from the proposed provisions include:

- Reducing the damage to future properties and developments from coastal hazard events by limiting the number of dwellings enabled in high and medium hazard areas;
- Reduced costs to recover from coastal hazards (such as clean-up, repairing damage, loss of productivity);
- Communities that experience less damage in a coastal hazard event are able to recover faster. This ensures significantly reduced economic impacts from when a coastal hazard event occurs as the loss of productivity and employment opportunities are not as large or significant;
- Reduced costs for property owners, the community and the Council to respond to future coastal
 hazard events as they have been planned for. This includes the modelled impact of climate change
 now and into the future; and
- Greater public awareness of coastal hazard risk may help to prepare coastal communities for hazard events. Increased community preparedness for coastal hazards can help to minimise damage or loss to property and infrastructure in hazard events.

Social

- The risk from coastal hazard events will not increase when compared to the existing situation. As such, new developments greater than 2 dwellings that are in Coastal Hazard Overlays will have mitigation measures built in to ensure that the development and its occupiers are not as significantly impacted by, and can evacuate from, future coastal hazard events. This will reduce the potential for future social costs such as displacement of residents and subsequent health and wellbeing issues.
- The construction of buildings that respond to the coastal hazard risk will make them less susceptible to damage during a coastal hazard event, increasing the safety of the occupants, and reducing the social impacts that come from coastal hazard events.
- Greater public awareness of coastal hazard risk may help to prepare coastal communities for hazard events. Increased community preparedness for coastal hazards can help to minimise injury and loss of life in hazard events.

Costs

Economic

- There will be increased costs for development of more than 2 dwellings within coastal hazard areas because of the need to incorporate mitigation measures. These costs may not be significant in the context of the overall development as many of the proposed measures could include matters such as:
 - o Increased floor heights
 - Setting buildings back from high and medium hazards areas
 - Ensuring safe evacuation routes
- These measures may be able to be incorporated into developments at the time of construction, without presenting significant additional costs;
- There will be a greater requirement to go through the resource consent process when compared to the operative District Plan. As such, there will be the direct costs associated with this process;
- For some property owners there may be a loss of development potential due to the hazards present on the site.

Social

• Most coastal communities are aware of coastal hazards to some extent. However, for many parties this will be the first time this information will be readily accessible and visually portrayed on a map. The incorporation of climate change modelling also means the extent of coastal hazards may be greater than these communities may expect, particularly for low lying areas that are further inland, such as Moera, Alicetown and Waiwhetū. This new information may impact on the social wellbeing of owners and occupiers of properties that are within the Coastal Hazard Overlays.

Cultural

• It is recognised that the proposed provisions may impact on tangata whenua aspirations to further develop their land which may be located within a Coastal Hazard Overlay. The proposed provisions are also likely to increase costs where development is possible.

Risk of Acting or Not Acting if Information is Uncertain or Insufficient

The information used to inform the proposed policies and methods is considered to be certain and sufficient. This is because:

- The expert assessment provided shows that coastal hazards affect the City and that some of the potential impacts represent a significant risk to life and property.
- The expert assessments also show that for each coastal hazard, the severity of the hazard varies within each overlay. As such, a nuanced approach is required where in high hazard areas development generally needs to be avoided, whereas in low and medium hazard areas development should be able to proceed providing appropriate mitigation measures are implemented to address the risk from the hazard. This has been conservatively applied to align with the scope provided for in the IPI.
- Section 6(h) of the RMA and higher order guidance (NZCPS and RPS) provides direction on how
 natural hazard risk must be managed and addressed within District Plans. To fully implement this
 direction, a comprehensive review of Natural Hazards in the District Plan is required but is unable to
 be achieved through the scope of the IPI. As such, the proposed policies and methods are consistent
 with higher order guidance to the degree possible to manage building density under s77G, 77I and
 77J of the RMA.
- The proposed provisions allow Council to undertake its function under s31(1)(b)(i) of the RMA.
- The existing District Plan provisions are resulting in an increase in risk with time as they currently have little or no consideration of some of the coastal and natural hazards proposed for inclusion in

this plan change. As such, the status quo is not a realistic option and new provisions (as proposed) are required to ensure that intensification required through the MDRS and NPS-UD Policy 3 address natural hazard risk within the City.

New Zealand has experienced a significant number of large natural hazard events in the last decade (Christchurch Earthquake Sequence, Kaikoura Earthquake, Gisborne Floods, Dunedin Floods, West Coast Floods and Southland Floods). There have been significant social and economic costs from these events. Some of these costs could have been avoided if there had been better recognition of natural hazard risks when some of the impacted communities were developed. The proposed provisions seek to ensure that future development is undertaken in a manner to ensure that these future social and economic costs do not continue to increase.

Efficiency and Effectiveness

The proposed provisions are considered to be the most efficient and effective in achieving the proposed objectives because:

- Acknowledging that a more comprehensive review of natural hazards is needed to give full effect to
 higher order direction (s6(h), NZCPS and RPS), the proposed provisions give effect to these to the
 extent possible within the scope of s77G, 77I and 77J for the provision and assessment of qualifying
 matters applied through the IPI process and implement a clear, transparent, and consistent
 framework within the District Plan;
- While the proposed provisions will result in some additional economic costs, it is considered that the
 resulting benefits to future occupants and the recovery of the City following a natural hazard event
 outweigh these costs. It is also noted that the additional costs to a development to incorporate
 mitigation measures into the design are often considerably less than the costs that result from
 damage (or repeated damage) from a natural hazard event;
- The proposed provisions would assist with the transfer of costs for addressing natural hazard risk from future property owners and local and central government onto developers at the time the developments are undertaken;
- It is recognised that there are potential significant cultural costs to be borne by the local tanga
 whenua community due to lost development potential of cultural land. Consideration was given to
 whether an alternative framework was required to allow for the cultural aspirations of these
 communities to be met. However, this was decided against because:
 - the proposed provisions largely maintain the existing level of permitted development in hazard areas;
 - Alternative frameworks would not give sufficient consideration to the higher order direction; and
 - Being more permissive in the Natural Hazard Overlays could put life and future developments at considerable risk, which would result in worse outcomes for these communities in the longer term.
- Acknowledging that a more comprehensive review of natural hazards is needed to give full effect to higher order direction (s6(h), NZCPS and RPS), the proposed provisions give effect to these to the extent possible within the scope of s77G, 77I and 77J for the provision and assessment of qualifying matters applied through the IPI process;
- The proposed provisions relate to the natural hazards that have the potential to have the greatest impact on the City of Lower Hutt;
- They take a nuanced approach to the management of natural hazard risk and development, where
 the activity status of the consent and the resulting direction provided within the policy is directly
 relative to the risk presented by the development;
- The proposed policies and rules will ensure there is no increase in the natural hazard risk
 experienced as a result of the implementation of the MDRS and NPS-UD Policy 3 when compared to
 the status quo. This is achieved by either discouraging development beyond existing permitted
 levels in high hazard areas or by requiring mitigation measures to address the risk from the natural
 hazard.

Other Reasonably Practicable Options for Achieving the Objectives

No coastal hazard provisions

While this is the simplest approach for plan users, this approach would enable higher density development than the proposed provisions in areas of significant coastal hazard risk. Council would not be executing its responsibilities under s31(1)(b)(i).

More restrictive coastal hazard provisions

Acknowledging that a more comprehensive review of coastal hazards is needed to give full effect to higher order direction (s6(h) and RPS), the proposed plan change is restricted under sections 77G, 77I and 77J to only apply modifications of the MDRS to extent necessary to accommodate these as a qualifying matter.