

ROTORUA DISTRICT PLAN  
TE PŪRONGO WĀHANGA 42A MŌ TE  
PANONITANGA MAHERE TUAWARU E TŪTOHUTIA  
ANA (NGA WHAKARITENGA MO NGA TURARU-A-  
TAIAO –)

SECTION 42A REPORT FOR PROPOSED PLAN  
CHANGE 8 (NATURAL HAZARDS)

ADDENDUM 3 – Response to Matters Arising During the  
Hearing

May 2026

# 1. INTRODUCTION

1. This addendum to the Section 42A Report for Plan Change 8 (Natural Hazards) (“PC 8”) to the Rotorua District Plan has been prepared to respond to matters raised by submitters at the hearing, as well as matters of clarification sought by the Hearings Panel. This addendum should be read in conjunction with the Section 42A Report and the previous addenda to that report.
2. It has been prepared by Simon Thurston (in relation to wildfire) and Kim Smith (in relation to other matters).
3. Updated recommended changes to the annotated text of the District Plan and recommended decisions on submissions are provided in Appendix 2 and Appendix 3 respectively.
4. Since the hearing, the Ministry for the Environment has published the [National Policy Statement for Natural Hazards Implementation Guide](#) (6 May 2026) (“NPS-NH Implementation Guide”). While this is a non-statutory guide, it provides additional context on the intended operation of the National Policy Statement for Natural Hazards (“NPS-NH”) and is referred to in this addendum where relevant

## 2. MEANING OF PROPORTIONATE UNDER THE NPS-NH & RELATIONSHIP TO ‘ACCEPTABLE RISK’

1. Commissioners sought clarification of the meaning of “proportionate” under the risk-based proportionate approach required under the NPS-NH and the relevance of the costs of any risk management to a proportionate approach.
2. “Proportionate” is used in the NPS-NH’s sole objective, as well as Policy 2, as follows:
  - 2.1 *Objective*
    1. *Natural hazard risk to people and property associated with subdivision use and development is managed using a risk-based proportionate approach.*
  - 2.2 *Policies*
    - ...
    2. *Natural hazard risk associated with subdivision, use and development must be managed using an approach that is proportionate to the level of natural hazard risk.*
3. Clause 3.3(2) of the implementation section further states that

*When managing natural hazard risk associated with subdivision, use and development, decision-makers must apply mitigation measures, including location and design, for the purposes of ensuring that...high or medium natural hazard risk is avoided or mitigated proportionate to the level of risk.*
4. The definitions in the NPS-NH clarify that the levels of risk referred to in clause 3.3(2) are those assessed under the risk matrix provided in Appendix 1 of the NPS-NH.
5. Clause 3.3(3) of the implementation section then states that decision-makers, when applying the proportionate approach to medium and high natural hazard risks, must take into account the cost effectiveness of mitigation measures relative to the level of anticipated risk.
6. In my view, a proportionate approach under this objective and policy means that the planning response (i.e., whether and how subdivision, use and development is enabled, conditioned, or restricted, and what mitigation is required) should be scaled to the seriousness of the natural hazard risk. As indicated by

clause 3.3(3), consideration of costs is part of that proportionate approach. In my view, this means that costs need to be commensurate with the level of risk being managed.

7. The approach of taking the costs of risk management into account when determining the appropriate 'treatment' for risks is consistent with international risk management concepts. For example, ISO 31000:2018 (Risk management — Guidelines) describes risk treatment as selecting and implementing options for addressing risk and indicates that selecting the most appropriate treatment option(s) involves balancing the expected benefits (in terms of achieving objectives and reducing risk) against the costs, effort and disadvantages of implementation. This reflects the general principle that risk should be reduced to an acceptable/tolerable level in a way that is proportionate and makes efficient use of resources.
8. The Waikato Regional Policy Statement ("WRPS") also acknowledges the potential to consider costs by seeking to reduce the risk from hazards to acceptable or tolerable levels (Objective HAZ-O1) and the corresponding definition of acceptable that includes 'the cost of further reducing risk is largely disproportionate to the benefits gained'.
9. Consideration of costs is not explicitly addressed in the Bay of Plenty Regional Policy Statement ("BOPRPS"), which instead seeks 'low' risk at the development (i.e., site/activity) scale (Policy NH-4B). In that respect, the BOPRPS could be interpreted as setting a more conservative risk outcome than the NPS-NH, narrowing the range of proportionate responses otherwise available under the NPS-NH. However, in my view, because 'low' risk is not defined in the BOPRPS at the development scale, there remains scope to take costs into account, provided the outcome achieved can still properly be characterised as low risk.
10. The recommended definition of acceptable risk in PC 8 is:

*risk that is minor, and the costs of further reducing risk are largely disproportionate to the benefits gained*

11. This is intended to align with both regional policy statements by recognising that, where risk is minor, the proportionality of additional mitigation remains relevant. However, further consideration of the qualifier "largely" is provided in section 4.1, below.
12. A related matter is that the Hearings Panel questioned how clause 3(d) of SDNH-P1 would operate in the absence of the last clause, which I recommended be deleted in response to the BOPRC submission (S\_45\_10).

*SDNH-P1: When assessing whether natural hazard risks associated with subdivision or land use are acceptable, and identifying risks that must be avoided or mitigated:*

...

*3. Take into account:*

...

1. *d. For developments activities undertaken by tangata whenua, the cultural significance of the site or activity, which may justify acceptance of a higher level of natural hazard risk.*

13. I considered that the clause, referring to "higher levels of risk" was not confusing when read with the overarching objective, expressed through the definition of acceptable risk, focuses on "risk that is minor and where the costs of further reducing risk are largely disproportionate to the benefits gained" (para 15, page 50, Section 42A Report). However, in my view, clause 3(d) still recognises that, for development activities undertaken by tangata whenua, the cultural significance of a site or activity may be a relevant consideration in determining what management response is proportionate in the circumstances. That is, to the extent that the concept of acceptable risk incorporates consideration of whether the costs of

further risk reduction are disproportionate to the benefits gained, there remains scope for those matters to be considered through the overall policy framework and the proportionate approach, notwithstanding the deletion of the last clause.

### 3. ABSENCE OF A RISK MATRIX IN THE PROVISIONS

1. The submission from Kainga Ora stated that PC 8 should contain a risk hierarchy approach (as expressed in the draft NPS-NH) and sought that parameters of management be linked to levels of risk with terms “high risk”, “moderate risk” and “low risk” (see for example submission points S\_42\_01 and S\_42\_11). The Hearings Panel asked for further clarification, asking why a risk matrix is not embedded in the recommended changes to the District Plan and whether this matters.
2. In my view, it would not be helpful, or indeed appropriate, to replicate the risk matrix in the NPS-NH in the District Plan. It would, for example, be complex and difficult to administer if used as a series of consent triggers/thresholds.
3. The risk matrix and corresponding direction also do not provide a sufficiently detailed decision-making framework to incorporate into objectives, policies or matters of discretion. For most development (that is, excluding ‘very high risk’), the direction in the NPS-NH is only high level: risk is to be avoided or mitigated in a manner proportionate to the level of risk.
4. I also do not consider the risk matrix to capture all of the matters that influence risk and decisions about its management. For example, the NPS-NH, although not explicit in this respect, is focused on the development scale (the risk to people living in the development and to the land and buildings of the development). In my view, while this scale is important, it does not cover the fuller understanding of risk encouraged by the BOPRPS or National Adaptation Plan, which also consider risk at larger scales (from the community to national). When these scales are also considered, different perspectives arise to potentially inform policy development, such as the relevance of cumulative exposure.
5. In my view, the more practical approach is to use the matrix to assist in considering whether the District Plan is directing the right types of proposals to the right level of scrutiny.
6. Lastly, I note that the NPS-NH Implementation Guide confirms that the NPS-NH is intended as a temporary measure to address a gap until the new planning framework is established, and that it is intended to apply primarily to resource consenting decisions as a baseline to lift practice (see, for example, pages 5 and 11). In my view, that supports an approach where the District Plan does not attempt to replicate the full risk matrix framework within its provisions. While the guide indicates that this policy direction may be carried over into the new planning framework, there remains uncertainty as to how, and to what extent, that will occur.
7. The guide also supports the view that the risk matrix is not intended to be comprehensive. After explaining that, aside from the avoidance of “very high” risk, the NPS-NH does not direct exact outcomes, the guide notes that natural hazard risk management is highly context-specific – communities will have different risk exposure, social and economic drivers and tolerance to risk (page 7).

### 4. DEFINITIONS

#### 4.1 Risk

1. The Hearings Panel questioned the reference to “impact on objectives” in the definition of risk in the District Plan (which was not proposed to be amended as part of PC 8):
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*The chance of something happening that will have an impact on objectives. It may be an event, action, or lack of action. It is measured in terms of consequences and likelihood.*

*In relation to contaminated land and hazardous substances: risk is the chance of something happening that will have an impact on the environment.*

2. I consider that this definition generally aligns with international risk management standards, including the definition of risk in AS/NZS ISO 31000:2018, which refers to the “effect of uncertainty on objectives”. In this context, “objectives” is intended to refer broadly to the things sought to be achieved or protected through risk management, rather than specifically to District Plan objectives.
3. I acknowledge that the wording may create some confusion in the context of a District Plan, which itself contains objectives. However, as no submissions sought amendments to this definition, I have not recommended any changes at this stage.

## 4.2 Acceptable Risk

1. The Hearings Panel questioned whether “largely” adds substantive meaning to the recommended definition of acceptable risk:

*risk that is minor, and the costs of further reducing risk are largely disproportionate to the benefits gained.*

2. While the terminology reflects the wording used in the Waikato Regional Policy Statement, I agree that it adds little in practice and can be deleted without undermining alignment with either regional policy statement. The recommended changes to the District Plan text in Appendix 2 are updated accordingly.

## 4.3 Building Importance Levels

1. The Hearings Panel had several questions relating to definitions for building importance level.
2. As context, the District Plan already includes a definition of building of low importance, which is used to define permitted activity thresholds in relation to some hazards:

***Building of Low Importance:*** *In relation to buildings within NH Natural Hazards, means buildings posing low risk to human life and the environment, and a low economic cost, should the building fail. These are typically small (less than 30m<sup>2</sup>) non-habitable buildings, such as sheds, barns, and the like, that are not normally occupied, though they may have occupants from time to time.*

3. To address submissions relating to gaps in management for building conversions and the need for a more proportionate response to management of hazards, I recommended in the Section 42A Report that the definition of building of low importance be amended and that a more complete typology of building importance levels be included in the District Plan. The recommended definition removed the reference to the Natural Hazards Chapter (since this was proposed to be included in the separate definition of “building importance level”) and simplified the first sentence to refer to risk to life and property:

***Building Importance Level 1 / Building of Low Importance:*** *Buildings presenting a low degree of risk to life and property. These are typically small (less than 30m<sup>2</sup>) non-habitable buildings, such as sheds, barns, and the like, that are not normally occupied, though they may have occupants from time to time.*

4. The Hearings Panel questioned whether reference to 30m<sup>2</sup> in the definition of Building Importance Level 1/Building of Low Importance is intended to provide a definite threshold. On reflection, I consider that submissions seeking proportionality in approach and clarity around gaps in the provisions for conversions/changes in use would be better addressed by providing additional certainty and using 30m<sup>2</sup> as a threshold for non-farm buildings:

***Building Importance Level 1 / Building of Low Importance:*** Buildings less than 30m<sup>2</sup>, and farm buildings, that are not normally occupied, although they may be occupied from time to time.

5. This amended definition also reflects approaches in various other instruments, as set out in Appendix 1 to the Section 42A Report.
6. The Hearings Panel also questioned whether marae should be included in Building Importance Category 4 – Structures with special post disaster functions. While I acknowledge the important role that marae often have after disasters, I recommend that this be left to the facts of the individual application as not all marae may intend to serve this purpose.

## 4.4 Other Definitions

1. Further matters relating to definitions that arose during the hearing in relation to specific hazards are addressed in the relevant sections below.

# 5. STRATEGIC DIRECTION

## 5.1 Adaptive Approach Sought by Waikato Regional Council

1. I noted in Addendum 2 to the Section 42A Report that the letter tabled by Lisette Balsom on behalf of Waikato Regional Council (“WRC”) prior to the hearing continues to seek inclusion of adaptation-related language in Objective SDNH-O2 and Policy SDNH-P1. I recommended accepting WRC’s relief in relation to the objective, but not the policy. The wording sought is as follows:

*SDNH-O2 - Land use, subdivision and development are resilient and adaptive to the current and future effects of climate change.*

*SDNH-P1: When assessing whether the natural hazard risks associated with subdivision or land use are acceptable, and identifying risks that must be avoided or mitigated:*

...

*Enable and support short, medium and long term adaptation planning approaches to manage changing climate risks, ensuring that planning decisions remain responsive to evolving hazard information and future climate scenarios.*

2. In my view, the District Plan contributes to climate change adaptation, as described in the National Adaptation Plan 2022, by helping to guide how land use and development respond to actual and expected climate effects. The District Plan does this by establishing standards and policy direction that influence design practices and land use as part of that adjustment process. On that basis, I considered it appropriate to accept the relief in relation to the strategic objective.
3. However, I do not consider adaptation language appropriate in Policy SDNH-P1. That policy is directed to activity-scale assessment of natural hazard risk for new development, whereas the wording sought by WRC describes a broader strategic exercise that is better implemented through a range of planning and funding tools, rather than through the District Plan alone.
4. I am also concerned that expressly referring to adaptation planning in SDNH-P1 could have unintended consequences by shifting attention away from the need to appropriately avoid or mitigate natural hazard risk at the time development occurs and toward managing those risks at some later point. In this context, I considered that WRC’s concerns are already adequately addressed through clause (3)(a) of SDNH-P1, which requires consideration of the effects of climate change.
5. The Hearings Panel has asked whether, if adaptation language is not included in Policy SDNH-P1, it nevertheless has an appropriate place in the objectives, given that policies are to implement objectives.

6. In my view, adaptation serves a different function in the objective than it would in the policy. At the objective level, it signals a broader strategic outcome of responding to changing climate conditions, including changes in land use and development patterns over time. That outcome may be implemented through a range of District Plan provisions and methods, rather than through SDNH-P1 alone.
7. However, I acknowledge the Hearings Panel's concern that retaining adaptation in the objective, while omitting it from the implementing policy, may create uncertainty about how that outcome is to be achieved. I also consider that the concept of resilience is sufficiently broad to encompass adaptation, in the sense of responding and adjusting to climate-related risks over time. Therefore, I support its removal from the objective.

## 5.2 Absence of 'Remedy' in Policy SDNH-P1 and Relationship to Matters of Control/Discretion

1. The Hearings Panel noted that Proposed Policy SDNH-P1 refers only to avoiding and mitigating risks and does not include remedying risks. The Hearings Panel questioned whether the omission of "remedy" was intentional. Policy SDNH-P1 states:

*When assessing whether the natural hazard risks associated with subdivision or land use are acceptable, and identifying risks that must be avoided or mitigated...:*

2. In my view, that approach is consistent with section 31 of the Resource Management Act 1991, which identifies among the functions of territorial authorities the control of actual or potential effects of the use, development or protection of land, including for the purpose of the avoidance or mitigation of natural hazards. In that context, it is appropriate that Policy SDNH-P1 is framed in terms of avoiding or mitigating natural hazard risk.
3. This approach is also consistent with the direction of the NPS-NH, which similarly focuses on avoidance or mitigation of natural hazard risk rather than remedying risk (Policy 4).
4. However, there is some inconsistency between Policy SDNH-P1 and the wording of the natural hazard matters of control and discretion throughout the District Plan. PC 8 sought to align these provisions and generally proposed wording that referred to avoiding or mitigating risks. However, in some instances, the term "remedied" was used (NH-R1, NH-R6, and NATC-R3). The submission from BOPRC identified these inconsistencies and sought amendments to include "mitigated" throughout (S\_45\_20).
5. In response, I initially recommended that the full phrase "avoided, remedied, or mitigated" be used consistently throughout the provisions. However, on reflection, I consider that this recommendation did not appropriately reflect either the intent of the natural hazard provisions or the approach taken in the NPS-NH. In my view, natural hazard risk management should focus on avoiding or mitigating risks, rather than remedying them. I have therefore amended my recommendation on the relevant BOPRC submission points accordingly. I consider that the inclusion of remedy in the track changes in several instances was an error in the drafting of the track changes, which can be corrected.
6. The matters of control and discretion in Appendix 2 have also been amended to reflect this approach.

## 5.3 Use of Mātauranga Maori

1. In the Section 42A Report I recommended, in response to several submissions, that strategic policy SDNH-P1 be amended as follows to provide elaboration in information that could potentially be relied upon when determining the best available information.

*When assessing whether the natural hazard risks associated with subdivision or land use are acceptable, and identifying risks that must be avoided or mitigated:*

1. ...

- 2. Use the best available information, including scientific, technical and, where relevant, mātauranga Māori, together with applicable relevant national and regional guidance.*

2. The Hearings Panel asked for an example where Mātauranga Māori may be used and I provided the example of generational knowledge of the behaviour of geothermal systems / features. The Hearings Panel asked whether any further guidance could be provided.
3. I do not consider that additional wording or guidance external to the District Plan is necessary within the policy framework. The policy does not prescribe the use of Mātauranga Māori but rather recognises that, where relevant and available, Mātauranga Māori may contribute to understanding natural hazard risk alongside other information sources. The nature and extent of such knowledge will necessarily vary depending on the locality and the relevant iwi or hapū context and their willingness to share such information.

## 6. APPROACH TO HAZARD MAPPING

### 6.1 Geoservice Presentation

1. As a point of clarification, the geoservice presentation at the hearing showed the operative District Plan's Fault Avoidance Overlay, which is recommended to be removed if PC 8 is approved. The New Zealand National Faults Database will instead be displayed through Geoservice. Table 2.6.1 (pages 29 to 33) of the Section 42A Report sets out the hazard information that will be displayed through Geoservice as a result of PC 8.

## 7. FLOODING PROVISIONS

### 7.1 High Lake Levels at Lake Ōkāreka

#### 7.1.1 Need for District Plan Management of High Lake Levels

1. I continue to support the need for District Plan provisions to manage the risks associated with high lake levels at Lake Ōkāreka notwithstanding lake level management by BOPRC. As explained by Peter Cochrane in his primary evidence, there remains uncertainty regarding the effectiveness and timeliness of operational responses, the availability of long-term funding for outlet maintenance and operation, and the ability to maintain current or higher discharge rates under future consenting regimes. This uncertainty is demonstrated in Mr Cochrane's rebuttal evidence that shows that for Lake Ōkāreka lake levels on occasions fall below and rise above their minimum and maximum operating ranges.

#### 7.1.2 Static Overlay v 'Described' Overlay with Hazard Mapping Sitting Outside the Plan

1. Having considered the written submissions, the presentations by the Lake Ōkāreka Community Association ("LOCA") and BOPRC, and the evidence of Peter Cochrane, I continue to support the use of a static overlay to manage risks through the District Plan, rather than a 'described' (and therefore potentially dynamic) overlay.
2. In the specific context of Lake Ōkāreka, I consider that the need for certainty outweighs the benefits of consistency with the wider district and the flexibility to respond to changing information, for the following reasons:

- Recent infrastructure works undertaken by BOPRC are not reflected in the Lakes Design Levels Report, which remains a point of concern for submitters regarding its use in defining a probabilistic flood event under the “described” overlay approach. I also consider that categorisation of a the overlay as a “high lake level resilience” rather than a “flood hazard” area defined probabilistically may be considered more reasonable by the affected landowners in relation to their concerns about property marketing and insurance.
  - The management of lake levels through infrastructure and operational protocols introduces complexity and uncertainty in predicting flood levels (in terms of, for example, future funding and consenting conditions), which is likely to remain difficult to fully resolve even if design levels are reviewed in the future.
  - The complexity associated with management of the lake creates a risk that the extent of a ‘described’ overlay would remain contested, with differing professional opinions potentially advanced at consenting stage, resulting in inefficiency and inconsistency in decision-making.
  - A static overlay, supported by an appropriate policy and rule framework, provides greater certainty about where residual risks are to be managed and clearer expectations regarding the role of land use management in reducing long-term exposure to those risks.
3. While there may still be scope for debate at the consenting stage under a static overlay approach, for example where a landowner seeks approval for a replacement building that does not meet minimum floor level requirements, in my view the potential for dispute and inconsistency can be reduced through a clear policy and rule framework that expressly identifies the overlay as a method for managing risk, including residual risks that remain despite infrastructure works and operational lake management.
  4. I also acknowledge that, while the static resilience area approach was supported by the Lake Ōkāreka Community Association, Mr Ivamy and Ms McKay for BOPRC have continued to oppose it during further consultation. Ms McKay does not consider that the circumstances or uncertainty in flood probability estimation necessitate a bespoke approach for Lake Ōkāreka. Mr Ivamy recommends that all flood level references are dynamic (i.e. mapped outside the plan) for the reasons outlined in BOPRC planning and engineering evidence on this matter .
  5. The questions from the Hearings Panel suggested concern about whether the situation for Lake Ōkāreka is materially different from that of other lakes, which may also have lake levels managed to some extent. I understand that lake level interventions have occurred at six of the major lakes, including Lake Ōkāreka, as detailed below (*Lake Level and Volume Summary of the Rotorua Lakes*, Environment Bay of Plenty Internal Report 2004/08; *Lake Rotoma Background Information*, Environment Bay of Plenty Environmental Publication 2009/05):
    1. Lake Rotorua                      1972-1973: Ohau Channel enlarged then, due to drop in lake levels, channel control structure (gabion baskets) built  
1989: Ohau weir/control structure installed to control discharge
    2. Lake Rotoiti                        1982: Natural rock bar at the outlet of the lake into the Kaituna River altered and Okere Control Gate structure installed.
    3. Lake Rotomā                        Control weir and pipeline diverts water to Lake Rotoehu through an open channel (water right obtained mid 1970’s but construction date not confirmed).
    4. Lake Ōkāreka                        1963: Pipeline and pump installed to divert water to Waitangi Stream then into Lake Tarawera  
1965: Gravity pipeline installed.

2021: Major outlet upgrade works completed, including replacement and upsizing of outlet pipes.

5. Lake Rotomahana Following the 1886 Tarawera eruption, the historic natural outlet system was substantially altered. An outlet/control structure now conveys excess water from Lake Rotomāhana to Lake Tarawera via the Kaiwaka channel/outlet system. Date of construction of the present structure not confirmed.
6. Lake Rerewhakaaitu Mid 1960s: Outlet structure on northern tributary acts as outfall during high lake levels and discharges into the Mangaharakeke Stream (a tributary of the Rangitaiki River).
6. A key difference for Lake Ōkāreka, however, is that the 2021 upgrades are not reflected in the Lakes Design Levels Report, reinforcing submitter concern about relying on that report for a probabilistic ‘described’ overlay.
7. In addition, compared with Lake Rotorua and Lake Rotoiti, intervention at Lake Ōkāreka appears to have had a more significant impact on high lake levels. It is difficult to isolate the effect of intervention from historic data alone, because other factors, particularly weather patterns, have not been constant. However, the available information indicates that the gap between pre-intervention high lake levels and post-intervention design levels is materially greater for Lake Ōkāreka than for Lake Rotorua and Lake Rotoiti, notwithstanding that the design levels do not yet reflect the most recent upgrade at for Lake Ōkāreka (refer to Table 1 below).

*Table 1 Comparison of Historic High Lake Levels Pre-Intervention and 2022 Design Levels<sup>1</sup>*

	Highest Lake Levels Pre Intervention	2022 Design Levels Report 1%AEP based on post intervention data	Difference
Lake Ōkāreka	356.16 (1962)	354.63	~ 1.5m
Lake Rotorua	280.79 (1962)	280.52	~ 0.3m
Lake Rotoiti	~279.8 (early 1960s)	279.60	~ 0.2m

8. In the context of Lake Ōkāreka, a static overlay based on high lake levels calculated before the most recent upgrade provides a method that potentially builds some resilience into development for residual risk associated with this reliance on lake management, notwithstanding that residual risk may be difficult to calculate in probabilistic terms. In my view, the role of the District Plan is not simply to react to changes in lake management infrastructure by updating design levels, but to help shape resilient development outcomes.
9. I acknowledge that the approach to residual risk at Lake Rotomā may also warrant further consideration given that developed areas are exposed to high lake levels and my reading of existing information is that intervention may have had a significant impact on high lake levels. However, this would require further technical consideration. In any case, submissions have not been received to provide scope for consideration of the approach in relation to other managed lakes.

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<sup>1</sup> Data for Lake Okareka and Lake Rotorua downloaded from the Bay of Plenty Environmental Data Portal – sites FL150407 and FJ330944; data for Lake Rotoiti from *Lake Level and Volume Summary of the Rotorua Lakes*, Environment Bay of Plenty Internal Report 2004/08

### 7.1.3 Bespoke Rules and Policy

1. In response to submissions expressing concern about the restrictions imposed at Lake Ōkāreka, I recommended that bespoke provisions apply within the High Lake Level Resilience Area (section 3.9.2.3 of the Section 42A Report). Compared with the notified provisions, these provisions were intended to provide greater certainty and flexibility for existing landowners by enabling a broader range of additions, alterations and replacement buildings without resource consent, while continuing to manage new development and intensification that would increase future exposure to flooding risk and reliance on lake level management infrastructure (refer to Table 4.1.3.1 in Addendum 2 for a summary of the differences between the notified and recommended provisions).
2. The Hearings Panel sought clarification as to why I recommended a different approach to new buildings compared with replacement buildings. I agree that, from the perspective of occupants and owners of individual properties, the risks associated with flooding may be similar. However, I consider there is a broader distinction in terms of community exposure and long-term reliance on infrastructure used to manage lake levels. I also consider there to be a relevant distinction in terms of the costs and implications of regulation, with restricting reasonable redevelopment associated with existing established uses potentially having greater costs than restricting uses that have not yet been established.
3. I nevertheless acknowledge that this issue is not straightforward. The evidence of Peter Cochrane indicates that flood risk within the recommended Resilience Area is not uniform, with risks generally increasing closer to the lake edge. Having considered the concerns raised by LOCA and the evidence presented at the hearing, I am no longer satisfied that a broad avoidance approach to all new development across the entirety of the Resilience Area is sufficiently proportionate.
4. I therefore support retaining the High Lake Level Resilience Area, but with a rule (NH-R5A) that closely aligns with the lower flood hazard areas in Rule NH-R4, setting out the same activity status for new buildings and additions but based on a fixed design level elevation rather than a described level. As noted by BOPRC in consultation, this would be more permissive of new development than the Addendum 2 version, which did not permit new buildings, and would not address increased exposure to the same extent.
5. I recommend that the rules are supported by an amended policy (NH-PBA) specific to the Lake Ōkāreka High Lake Level Resilience Area, which requires building design measures based on a specified elevation and consideration of building location and access at subdivision stage. I consider this approach provides certainty about how risks, including residual risks, will be managed in the context of a managed lake.
6. The recommended policy and rule are:

*NH-PBA Manage the risks to people, property and the environment associated with high lake levels at Lake Ōkāreka by:*

1. *Identifying the Lake Ōkāreka High Lake Level Resilience Area, based on an elevation of 355.33 m (Moturiki 1953), to provide certainty about where to manage risks associated with high lake levels, including residual risks.*
2. *Requiring new buildings and larger additions to existing buildings to incorporate design measures to mitigate the risks of building inundation, based on a design flood level of 355.33 m (Moturiki 1953).*
3. *Managing subdivision to limit exposure to high lake levels, including through consideration of building location and access.*

**NH-R5A Buildings located in the High Lake Level Resilience Area – Lake Ōkāreka**

<p><b>Applicable Spatial Layers</b></p> <p><b>All Zones</b></p>	<p><b>1 Activity Status: Permitted</b></p> <p><b>Where:</b></p> <p>a. The building is a new building, or has an increase in the building importance level, or</p> <p>ii. is an addition to an existing building.</p> <p><b>Performance Standards</b></p> <p>a. Except as provided in b), the floor level of any new building shall be above 355.33 m (Motuiki 1953).</p> <p>b. The minimum floor level performance standard in a) shall not apply to:</p> <p>i. Additions of less than 20m<sup>2</sup> to an existing building where there is no increase in building importance level.</p> <p>ii. Buildings of building importance level 4 (building of low importance).</p>	<p><b>2 Activity Status: Restricted Discretionary</b></p> <p><b>Where:</b></p> <p>i. Compliance is not achieved with the performance standards for rule NH-R5A1.</p> <p><b>Matters of Discretion</b></p> <p>a. Building in areas susceptible to flooding NH-MD1.</p>
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7. In reaching this view I have taken into account:

- Concerns raised by some submitters about a lack of consistency between the bespoke rule framework for Lake Ōkāreka and Rule NH-R4 (now recommended to be split into Rule NH-R4A and NH-R4) addressing flooding more generally across the district.
- The residual risk and uncertainty associated with lake level management and climate change. In my view, continuing to design to levels calculated prior to recent upgrades provides some resilience for these uncertainties.
- The complexity of calculating probabilistic flood levels in the context of a managed lake, and the corresponding benefits of using a fixed design level to provide greater certainty for plan implementation and development outcomes.
- The general support amongst submitters for managing building design, including floor levels, as a key method for reducing risks associated with building inundation from high lake levels.
- That matters relating to building inundation risk, particularly floor levels and the arrangement of habitable and non-habitable spaces, are often integral to the design of a development proposal, influencing gradients, earthworks, building layout and foundation design, and therefore may not lend themselves well to a controlled activity framework as suggested by LOCA.
- The likely limited practical ability to materially improve access arrangements through conditions on land use consent within established development areas, as sought by LOCA. By contrast, the existing restricted discretionary subdivision framework within the Lakes A Zone, including discretion over the extent to which natural hazard risks are avoided or mitigated, provides greater scope to consider building location and access arrangements at the subdivision stage.

- The potential for servicing matters to be addressed through detailed engineering design and service connection processes.
8. I have not recommended that a risk assessment rule equivalent to Rule NH-R4 for higher flood hazard areas apply within the Lake Ōkāreka High Lake Level Resilience Area. This is because, based on existing development patterns, that intensification within the existing developed area is most likely to occur at some elevation above the lake edge. Meanwhile, the existing restricted discretionary subdivision framework provides an opportunity to consider broader risk mitigation measures, including building location and access, should further development be proposed in more vulnerable parts of the lake edge environment. However, I have recommended that this be supported by wording in the proposed policy with a direction to manage subdivision to limit exposure to high lake levels, including through consideration of building location and access.
  9. Mr Ivamy and Ms McKay for BOPRC, have considered my explanation above but continue to support the requirement for risk assessment in the original notified provisions under NH-R4. Mr Ivamy states that the risk assessment can take into account the residual risk to new development in the defended area at Lake Ōkāreka as required by SDNH-P1(3)(c) (residual risk including the potential failure of structural hard defences) (comms, 4 June 2026). However, the higher flood hazard area where risk assessment would apply would be limited in extent (it appears to encroach only on two residential units currently) and I consider it unlikely that new development would trigger this requirement.
  10. However, I also acknowledge that, having further reflected on the risks associated with lake flooding described in the evidence of Peter Cochrane, I am not completely confident that the approach to managing flooding in the District Plan comprehensively addresses all risks associated with prolonged inundation (such as ongoing access constraints and building damage due to prolonged exposure to low flood levels) in every circumstance. While the subdivision provisions and existing risk assessment framework for higher flood hazard areas in NH-R4 provides scope to consider such matters, it may be that stronger controls on development location are warranted in some circumstances, potentially extending beyond the defined higher flood hazard area. However, no submissions sought relief of that nature, and I therefore consider this more appropriately addressed through future plan review processes informed by further technical assessment.

## 7.2 Overland Flowpaths

1. The Hearings Panel had several questions relating to how proposed Rule NH-R5 and the similar performance standards for earthworks would be implemented.
2. Paula Meredith has provided additional evidence to further explain how overland flowpaths are identified in practice, the assistance that the land development team provides in identifying overland flowpaths in relation to consent applications, and the benefits of rules/standards to protect the function of overland flowpaths.
3. Having considered this evidence, I continue to support PC 8's proposal to introduce a new Rule NH-R5 and similar performance standards for earthworks. I also continue to support the extension of these rules and standards to the Rural 2 Zone in response to the submission by BOPRC (S\_45\_23 and S\_45\_31).
4. I also agree with Ms Meredith that the proposed title to Rule NH-R5 is misleading and I support the amendment she suggests, which involves renaming the rule to "Changes to Overland Flowpaths". I consider this would partly address the concerns of the Rotorua Planning Consultants Group by clarifying the scope of the rule.

## 8. WILDFIRE PROVISIONS

### 8.1 Definition of Wildfire

1. The Hearings Panel questioned the proposed definition of wildfire, particularly whether there was an intended difference between wildfires and human induced fires. As drafted, the proposed definition is intended to encompass wildfires as well as structural fires which have the potential to spread and develop into wildfires.

### 8.2 Clarification as to What Was Notified and What is Being Sought by Fire and Emergency New Zealand

1. The Operative District Plan currently includes performance standards for subdivision requiring a water supply for firefighting purposes. PC 8 proposes removing this requirement from the Rural 1 and Reserve 1 zones, while extending it to specified land uses in the Rural 2 and Rural 3 zones, and to habitable buildings within the Settlement and Bush Settlement Management Areas of the Lakes A zone. As was confirmed during the hearing, “habitable building” is defined in the provisions for the Lakes A Zone but only the term “habitable room” is defined in the main part of the District Plan. This is why specified land uses within the Rural zone chapter (RURZ) are required to determine where the rule is to be applied.
2. Fire and Emergency New Zealand (FENZ), in its submission, seeks to reinstate the subdivision standard across all zones (within scope) and to extend the requirement to land use activities (potentially all buildings) across all zones. I do not believe that the requirement should be extended to all land use activities and I also have concerns that this was not notified for submissions.

### 8.3 Basis for Differentiation in the Rural Zones

1. The Hearings Panel queried the rationale behind the Council’s decision to differentiate between the Rural 1, Rural 2, and Rural 3 Zones in relation to water supply provisions in non-reticulated areas.
2. Given the higher dwelling density within the Rural 2 and Rural 3 zones, it was determined in the Section 32 Report that water supply provisions should prioritise protecting a greater number of properties from wildfire risk. In contrast, the Rural 1 Zone has a much lower density of development, and therefore the overall risk to people and property is considered to be reduced.

### 8.4 Response to Section 32AA Assessment Provided by Fire and Emergency New Zealand

1. A Section 32AA assessment from FENZ was requested by the Hearings Panel during the hearing. The assessment was in respect of firefighting water supply being extended to the Rural 1 and the Conservation Zone, as well as requiring firefighting water supply for all land use activities in the Rural 1 zone. The assessment was provided by FENZ Friday 8 May 2026.
2. In their section 32AA assessment, FENZ concludes that broader firefighting water supply requirements would be an efficient and effective response to wildfire risk in non-reticulated areas.
3. In particular, FENZ seeks to retain the existing subdivision requirements for fire fighting water supply, including in Rural 1 and Conservation (Reserve 1) areas, and to extend land use requirements to a wider range of rural development. FENZ considers that firefighting water supply is most appropriately addressed at the subdivision and development stage, when servicing can be integrated into site design and provided by those creating the demand and risk.

4. The assessment from FENZ identifies a range of benefits from that broader approach, including improved emergency response capability, reduced reliance on water shuttling or tanker deployment, reduced risk to life and property, lower potential for fire spread and environmental damage, and improved resilience to future drought and wildfire conditions. FENZ also considers that the costs of providing firefighting water supply are generally modest, predictable and manageable when addressed upfront, and that the risks of not acting are greater, particularly in rural and unreticulated parts of the district.
5. I accept that FENZs assessment identifies legitimate benefits associated with broader provision of firefighting water supply for both subdivision and land use, and that this is one possible response available to the Hearings Panel. However, I do not consider it necessary or proportionate at this stage to adopt the full extent of relief sought by FENZ. In my view, the lower density and more varied circumstances of less densely populated rural areas mean that a more flexible response remains appropriate, rather than imposing a more prescriptive district-wide requirement across all subdivision and land use activity in those areas.
6. For that reason, I prefer an intermediate approach that builds on the existing policy framework for subdivision in rural areas. Specifically, I recommend amending Policy NH-P5 to make it clearer that subdivision design in rural areas and at the rural-urban fringe should consider measures that may help reduce wildfire risk, including firefighting water supply where appropriate. This would enable firefighting water supply to be considered as a mitigation response in the less densely populated zones through the subdivision process, without requiring the more directive and comprehensive regulatory approach sought by FENZ.
7. I have proposed the following amendment to Wildfire Policy NH-P5 which would allow discretion at the time of consent for Council to consider the need for firefighting water supply in the less densely populated zones such as the Rural 1 zone:

**Policy NH-P5 Mitigate the risks of wildfire associated with development by:**

- 1. Requiring firefighting water supply for activities in more densely populated zones and papakāinga to reduce the risk of wildfire occurring.**
- 2. Encouraging subdivision design in rural areas and at the rural-urban fringe to consider the potential risks of wildfire and, where appropriate, include measures that may help reduce the risks. Such measures may include:**
  - a. identifying suitable locations for building platforms and accessways that reduce exposure to wildfire hazards and facilitate egress;**
  - b. facilitating access for emergency services; and**
  - c. choice of plant species to reduce the risk of fire.**

**d. firefighting water supply**

8. No further changes to the rules are considered necessary as the subdivision matters of discretion or control relating to natural hazards are considered sufficiently broad enough to enable implementation of this policy.

## 9. FAULT RUPTURE PROVISIONS

### 9.1 Relationship between National Guidance, the National Database and PC 8 Provisions

1. The Hearings Panel questioned the extent to which the provisions reflect the different categories identified in the New Zealand Active Faults Database and the origin of the building importance levels. In

this regard, additional explanation regarding the attributes in the recommended provisions and their relationship to the Ministry for the Environment's [Planning for development of land on or close to active faults: A guideline to assist resource management planners in New Zealand](#) (Kerr et al., 2003) ("**2003 Guidance**") is provided below.

2. The 2003 Guidance sets out the approach for mapping "Fault Avoidance Zones" around faults. Mapping of faults in the Operative District Plan and the updated New Zealand Active Faults Database is based on this approach. PC 8's definition of Fault Rupture Hazard Overlay is also intended to reflect the approach set out in the guidance. However, terminology is changed to "overlay" for consistency with the national planning standards and to reflect that development need not always "avoid" active faults.
3. The 2003 Guidance also sets out a risk-based approach, based on life safety, for considering the appropriateness of building in the "Fault Avoidance Zones" (Fault Rupture Hazard Overlay). This is in the form of a matrix of the fault recurrence interval (as an indicator of the future probability of fault rupture) and building importance categories. The lower the building importance category, the shorter the acceptable recurrence period. The 2003 Guidance also accepts that the acceptable recurrence interval for previously subdivided or developed sites may be less than for greenfield sites. For example, the minimum acceptable recurrence interval suggested for timber framed single-storey residential building (class 2a) in an FAZ is >3,500 years on a greenfield site and >2,000 years on previously developed or subdivided sites.
4. Building importance category definitions are also set out in a table in the 2003 Guidance and are similar to those used in seismic design standards. The categories proposed for the Section 42A Report closely align with these, but with some differences as explained in Appendix 2 of the Section 42A Report. One of the key differences is that single residential buildings are recommended to be included in the same category – 2a. It is noted that most buildings, other than single residential buildings and buildings of low importance, are within category 2b "buildings not in other categories".
5. Each fault identified in the New Zealand Active Faults Database has information on its 'recurrence interval class'. This reflects and enables the implementation of this risk-based approach in the 2003 Guidance (noting, however, that many faults in the Rotorua district do not yet have a recurrence interval assigned).
6. My review of previous resource consents suggests that the risk-based approach in the 2003 Guidance is already being given weight in decision-making on applications relating to active faults. In response to submitter concerns regarding the costs and proportionality of fault rupture management, the Section 42A report recommends incorporating this risk-based framework into the thresholds for when resource consent is required for land use activities within more developed zones. This would improve certainty and reduce the need for some resource consent applications.
7. I have recommended limiting this refinement to more developed zones, recognising that there may still be opportunities to reduce risk in less developed areas and that, in less intensely developed zones with potentially larger lots, the opportunity costs of managing fault rupture risk may be lower. The specific zones identified in the Section 42A report are recommended as a proxy for existing developed areas
8. New Zealand Active Faults Database also includes a categorisation of tectonic origin as 'definite', 'likely', 'possible' and 'unknown'. This reflects varying levels of confidence about the existence of a fault as explained in the definition of terms provided in GNS's report to RLC (GNS, 2025):

*Tectonic origin: the likelihood that the feature is an active fault – definite; likely; possible; unknown.*

9. This degree of confidence about tectonic origin is not explicitly mentioned in the 2003 Guidance. Based on the evidence of Kelvin Berryman (para 41), I recommended in the Section 42A Report that buildings up to building importance category 2a (that is, buildings of low importance and single residential buildings) are permitted without the need for resource consent at land use stage. This approach is not sourced from

the guidance but is considered proportionate, recognising that the risks associated with possible and unknown faults are likely to be less than those associated with definite and likely faults.

10. I also note that the 2003 Guidance provides examples of a more nuanced approach to fault rupture hazard that takes account of fault complexity, including whether deformation is concentrated along a well-defined trace or distributed across a wider zone (Tables 11.1 and 11.2). However, the guidance does not provide detailed direction on how such distinctions should be translated into district plan policies or matters of discretion. At this stage, it is considered that these matters are best addressed on a case-by-case basis through expert assessment as part of any consent application.
11. How this approach is recommended to be incorporated into the definitions and rules is set out below.

## 9.2 Definitions

1. As noted above, I have recommended, based on the evidence of Kelvin Berryman (para 41), that 'possible' faults are distinguished from 'likely' faults to enable some difference in their management with respect to lower building importance categories. The recommended definitions in the Section 42A Report are:

**Fault Rupture Hazard Area** *the area around an likely active fault trace that includes the likely area of fault rupture plus an additional width of at least 20m on either side to allow for secondary ruptures and uncertainty in the location of future deformation.*

*Note: the New Zealand Active Fault Database provides information to identify possible faults and the corresponding Possible Fault Rupture Hazard Area, but this may be supplemented by other information*

**Possible Fault Rupture Hazard Area** *the area around a possible active fault trace that includes the likely area of fault rupture (assuming an active fault trace is confirmed) plus an additional width of at least 20m on either side to allow for secondary ruptures and uncertainty in the location of future deformation.*

*Note: the New Zealand Active Fault Database provides information to identify possible faults and the corresponding Possible Fault Rupture Hazard Area, but this may be supplemented by other information*

2. These definitions were intended to reflect the categories in the New Zealand Active Faults Database. As the Hearings Panels' questions suggest that there is a lack of clarity, the following amendments (highlighted green) are recommended:

**Fault Rupture Hazard Area** *the area around an definite or likely active fault trace that includes the likely area of fault rupture plus an additional width of at least 20m on either side to allow for secondary ruptures and uncertainty in the exact location of future deformation. Note: the New Zealand Active Fault Database provides information to identify the fault avoidance area but may be supplemented by other information.*

*Note: the New Zealand Active Fault Database provides information to identify the fault avoidance area but may be supplemented by other information.*

**Possible Fault Rupture Hazard Area** *the area around a possible active fault trace, including features identified as potential fault traces by a suitably qualified expert but with an unknown origin, that includes the likely area of fault rupture (assuming an active fault trace is confirmed) plus an additional width of at least 20m on either side to allow for secondary ruptures and uncertainty in the exact location of future deformation.*

*Note: the New Zealand Active Fault Database provides information to identify possible faults and the corresponding Possible Fault Rupture Hazard Area, but this may be supplemented by other information*

### 9.3 Rule Drafting

1. The Hearings Panel noted concerns about the rule drafting with respect to identifying differences in the rules for the Fault Rupture Hazard Area and Possible Fault Rupture Hazard; an error in the reference to building importance level 2 instead of 2a; the treatment of exceptions and the potential to frame more positively; and ambiguity about whether it is the activity and use of the building that is managed or the construction with respect to building conversions.
2. These concerns are proposed to be addressed with the following alternative rule drafting. For consistency, the terminology ‘buildings and their use’ is also recommended to be carried over into the flooding and geothermal rules.

Fault Rupture Lines									
NH-R1	Buildings and their use in the Fault Rupture Hazard Area or Possible Fault Rupture Hazard Area								
Applicable Spatial Layers	<p>Activity Status: Restricted Discretionary</p> <p>Where:</p> <p>a. The building:</p> <p>i. is a new building; or</p> <p>ii. has an increase in building importance level</p> <p>b. Except that this rule does not apply to:</p> <p>i. a Building Importance Level 1 building;</p> <p>ii. a Building Importance Level 2a building in the Possible Fault Rupture Hazard Area;</p> <p>iii. a replacement building within the existing footprint that does not increase the building importance level; and</p> <p>iv. buildings and their use on existing lots in Residential Zones, Commercial Zones, Business and Innovation Zones or the Lakes A Zone Settlement Management Area or Bush Settlement Management Area, where the recurrence interval of the active fault affecting the site is consistent with the minimum recurrence interval in the table below:</p> <table border="1"> <thead> <tr> <th>Building Importance Category</th> <th>Minimum Recurrence Interval – Existing Developed Areas</th> </tr> </thead> <tbody> <tr> <td>2a and 2b</td> <td>&gt;2,000 years</td> </tr> <tr> <td>3</td> <td>&gt;5,000 years</td> </tr> <tr> <td>4</td> <td>&gt;20,000 years</td> </tr> </tbody> </table> <p>Matters of Discretion:</p> <p>a. The extent to which natural hazard risks are avoided or mitigated and whether the activity would worsen any natural hazard;</p> <p>b. The extent to which the risk arising from locating a building within a Fault Rupture Hazard Area is managed, as set out in a natural hazard assessment report from a suitably qualified expert, identifying the potential location of the fault line, its recurrence interval and any subsequent building design and location requirements or restrictions on use.</p>	Building Importance Category	Minimum Recurrence Interval – Existing Developed Areas	2a and 2b	>2,000 years	3	>5,000 years	4	>20,000 years
Building Importance Category	Minimum Recurrence Interval – Existing Developed Areas								
2a and 2b	>2,000 years								
3	>5,000 years								
4	>20,000 years								

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## 9.4 Challenging Active Fault Information

1. The Hearings Panel asked for clarification about how active fault information can be challenged.
2. I have considered how Council has responded to challenges to date by reviewing the geotech reports addressing active faults that were compiled for the fault mapping review. This suggests that a small number of resource consent or building consent applications (around 1 to 2 per year) seek to challenge or add to information on active faults with respect to specific development sites. These generally include the following components:
  - Examination of topographic information.
  - In most cases, undertaking trenching near the building site to investigate whether a fault bisects the building site and the recurrence interval of the fault rupture at the site.
  - Assessment of the recurrence interval from analysis of geological features in the landscape and/or displaced geological layers in the trench and other geological information from the area.
  - Determining, where possible, using all available information, the location of the fault, its complexity and the recurrence interval of fault rupture.
3. It is Council's intention to compile relevant geotech reports every few years and send these to GNS (now Earth Sciences NZ) for their consideration and review of the active fault mapping.
4. It is also worth noting that many applicants may choose not to challenge or clarify fault information but instead change their development plans to the mapped areas. It is difficult to know the extent to which this occurs, but it should be acknowledged as part of the cost of the fault management through the District Plan and Building Act. The recommended approach to bring the RI-building importance category matrix forward into the rule thresholds for specific zones is intended to improve the efficiency of the provisions.

# 10. GEOTHERMAL HAZARD PROVISIONS

## 10.1 Geothermal Report Approach

1. Questions by the Hearings Panel suggested that further clarity was required around why the approach of a permitted activity subject to provision of an assessment of geothermal hazards and mitigation options was preferred in Plan Change 9 for the Rotorua Geothermal System and is now proposed to be extended to other geothermal systems. In this regard, the Section 32 Assessment of Rule NH-R8 provided to the hearings panel for Plan Change 9 is provided in Appendix 1 as additional background information.
2. In summary, this approach was preferred because it provides an efficient way to manage geothermal risk (recognising that the risk is highly variable) by requiring hazard and mitigation assessment that builds on existing processes under the Building Act.
3. The approach was supported by BOPRC. WRC also supported the approach and that it be extended to other geothermal systems as now proposed by PC 8 (para 38, evidence of Hannah Craven).

## 10.2 Building Conversions

1. At the hearing, BOPRC continued to seek that Rule NH-R8 address conversion activities requiring building consent or PIM as a reasonable and proportionate response to their submission expressing concern that

the rules requiring assessment of geothermal hazards and mitigation options did not capture conversion of non-habitable buildings to habitable spaces that do not require building consent.

2. I remain of the view that the risks associated with conversion of non-habitable spaces to habitable use are likely to be low and that there would be limited value in extending Rule NH-R8 to capture conversion activities requiring a PIM or building consent for the reasons provided in the Section 42A Report and addendum 2:
  - Because the site is already developed the hazards and risks are more likely to be understood and managed.
  - There are few instances when only a PIM is required and, where a building consent is sought for works that could give rise to geothermal hazard concerns, the Building Code continues to provide a mechanism for managing risks to building occupants. Relevant compliance clauses within the Building Code relating to hazardous agents, including heat and gas, are outlined in the Section 32 Report (section 11.5.2 page 102).
3. However, in the event that the Hearings Panel wish to accept the relief sought by BOPRC, I provide the following alternative drafting that addresses partial and full conversions through reference to ‘habitable room’, which is already defined in the District Plan, and an increase from Building Importance Level 1 (typically non-habitable buildings) to a higher building importance level. At this stage, the additional clause (1)(b)(3) has not been included in Appendix 2.
4. Mr Ivamy has been provided opportunity to review this alternative wording and supports it for the reasons provided in the BOPRC planning evidence on this matter. He considers that the addition of the change to include building importance category would be an improvement because it would cover both building and room conversion situations.

NH-R8 <b>New Buildings, and Additions to Buildings and their use in the Rotorua Geothermal Systems Overlay</b>		
<b>Applicable Spatial Layers</b>  Rotorua Geothermal Systems Overlay: All Zones	<b>2.</b> <b>1</b>  <b>Activity Status:</b> Permitted  <b>Where:</b> <u>A building consent can be sought for the activity and is sought.</u>  <b>Performance Standards:</b> a. <u>Subject to b), a</u> report by a suitably qualified and experienced person <u>or persons</u> shall be submitted at the time of application for <u>a Project Information Memorandum or</u> building consent, which identifies <ol style="list-style-type: none"> <li>i. the extent of geothermal hazards on the site, including:               <ol style="list-style-type: none"> <li><u>1.</u> Geothermal surface features;</li> <li><u>2.</u> Geothermal gas;</li> <li><u>3.</u> Heated ground;</li> <li><u>4.</u> Corrosive ground,</li> <li><u>5.</u> Ground collapse; and</li> <li><u>6.</u> Bores and other geothermal infrastructure.</li> </ol> </li> <li>ii. <u>A report or reports by a suitably qualified and experienced person shall</u></li> </ol>	<b>3.</b> <b>2.</b>  <b>Activity Status:</b> Restricted Discretionary  <b>Where:</b> Compliance is not achieved with the performance standards for NH-R8(1)  <b>Matters of Discretion:</b> a. Measures to manage the risks to people and property on and off site from geothermal hazards.

	<p><del>also be submitted at the time of application for building consent detailing</del> how measures to mitigate geothermal risks to people and property on the site and surrounding sites have been incorporated into the design of the development, such as:</p> <ol style="list-style-type: none"> <li><u>1.</u> Building design;</li> <li><u>2.</u> Site layout and design, for example locations of venting structures, yards and outdoor living space; separation between buildings; surface treatment; fencing materials; and maintenance of access to bores;</li> <li><u>3.</u> Limits on impervious surface site coverage; and</li> <li><u>4.</u> Stormwater management.</li> </ol> <p>b. <u>Performance standard a) shall <del>only</del> apply if</u></p> <ol style="list-style-type: none"> <li>i. <u>the <del>building is</del> <del>footprint</del>:</u> <ol style="list-style-type: none"> <li>1. <u>a new building; or</u></li> <li>2. <u>an addition to footprint of an existing building of more than 20 m<sup>2</sup>;</u> <u>or</u></li> <li>3. <u>results in the conversion of a non-habitable room to a habitable room or the conversion of a Building Importance Level 1 building to a higher building importance level; and</u></li> </ol> </li> <li>ii. <u>a building consent or project information memorandum is required in association with the building work.</u></li> </ol> <p><u>Exception:</u></p> <p><u>This rule does not apply to alterations that do not increase the building footprint by more than 20m<sup>2</sup>.</u></p>	
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10. It is noted that ‘habitable room’ is already defined in the main part of the District Plan as follows:

*a space used for activities normally associated with domestic living, including a bedroom, but excludes any conservatory, bathroom, laundry, toilet, pantry, walk-in wardrobe, corridor, hallway, lobby, clothes-drying room, or other space of a specialised nature occupied neither frequently nor for an extended period.*

## 11. ADDITIONAL CLARIFICATIONS AND CORRECTIONS

1. The updated recommended changes to the District Plan text in Appendix 2 also address matters of clarification and minor errors noted by the Hearings Panel or technical experts. These are shown highlighted in green. Key changes include:
  - a) Addressing inconsistency in terminology lower/low and higher/high flood hazard area by retaining the ‘lower’ and ‘higher’.

- b) Moving descriptions of higher and lower flood hazard areas to the definitions to simplify Rule NH-R4; and to simplify SUB-R43 for consistency.
- c) Clarifying that the intention of the reference to land and buildings in the assessment criteria for SUB-R42 is limited to the development enabled by the subdivision.
- d) Clarifying in Policy NH-PA that anticipated flood depths in the 1% AEP event (including climate change) are used as the primary basis for determining the appropriate flood risk management response and whether a more detailed site-specific flood risk assessment is required, rather than being treated merely as an indicative “signal” of risk.

## APPENDICES

Appendix 1: Section 32 Assessment of Rule NH-R8 provided for Plan Change 9

Appendix 2: Updated Recommended Changes to the District Plan Text.

Appendix 3: Updated recommended decisions on submissions.

# APPENDIX 1

**Table 2: Table showing the Section 32 Analysis for the options for managing geothermal assessments**

Description of Option	Option 1	Option 2	Option 3	Option 4
	Performance standard requiring geothermal assessment of hazard and how mitigation addressed in the development to be submitted at the time of building consent and Restricted Discretionary Activity if performance standard not met.	Controlled Activity for new buildings (and additions over xm <sup>2</sup> ) in the Geothermal System – with control potentially limited to matters of site layout and surface treatment.	Restricted Discretionary Activity for new buildings (and additions over xm <sup>2</sup> ) in the Geothermal System – with control potentially limited to matters of site layout and surface treatment.	Controlled Activity for new buildings and additions over xm <sup>2</sup> with potential for permitted activity if site investigation confirms gas and heat thresholds (and other risk factors) not exceeded.
Efficiency and Effectiveness of Achieving Objectives	<p>All options provide opportunity to consider issues not well addressed under the Building Act – site layout and surface treatment.</p> <p>Most developments expected to submit required assessments to avoid uncertainty of resource consent requirement.</p> <p>The mitigation recommendations will be written in the context of a specific development and are unlikely to provide sufficient clarity in the nature of enduring conditions. Consideration of compliance is therefore limited to the development at a point in time - the time of building consent. Therefore, some reduced effectiveness over option 3 but may not be significant.</p> <p>Greater efficiency – avoids resource consenting costs as most developments expected to submit assessments and avoid resource consent fees.</p> <p>Likely to still make use of thresholds and other risk factors with respect to</p>	<p>As key hazard mitigation solutions relating to the building are addressed through Building Code it may be sufficient to limit matters of control to site layout (avoidance of confined spaces, setbacks, provision of access) and surface treatment.</p> <p>In contrast to option 1, a controlled activity would provide opportunity to impose conditions requiring ongoing compliance e.g with respect to site-specific limits on impervious surfaces. However, monitoring compliance with respect to any non-building conditions is likely to be challenging. Enforcement will be most likely on complaint. Therefore, although there may be some increased effectiveness over option 1, it may not significantly improve effectiveness.</p> <p>Low efficiency – heat and gas issues not present on all sites in the system. A large number of activities are likely to trigger consent that may not increase geothermal risks.</p>	<p>Similar to option 2 but would provide opportunity to refuse resource consent if mitigation options not considered sufficient. However, much of the key hazard mitigation solutions are likely to involve building design, which is assessed against the Building Code in any case. With respect to site layout and surface treatment - it may be enough to ensure these issues are considered and risk reduction measures incorporated into design. The potential to refuse resource consent may not add significantly to effectiveness.</p> <p>Like option 2, provides opportunity to impose conditions requiring ongoing compliance e.g. with respect to site-specific limits on impervious surfaces.</p> <p>Low efficiency – heat and gas issues not present on all sites in the system. A large number of activities are likely to trigger consent that may not increase geothermal risks.</p>	<p>This is a variation on option 2 which would improve efficiency by providing a pathway for permitted activities (no resource consent fees), provided that developments can satisfy performance standards (perhaps requiring site testing of heat and gas levels) to prove an absence of risk factors.</p> <p>The major obstacle to implementation of this option at the present time is the finalisation of appropriate thresholds (and other risk factors) to provide the pathway for activities to proceed as permitted activities.</p> <p>Another efficiency issue with this option is that thresholds will be difficult to refine if knowledge improves and practice evolves (will require a plan change).</p>

	hazard assessment practice promoted by the Council and potentially what constitutes a SQEP. However it will be simpler to review and improve practice through review of practice notes / guidelines – also improves efficiency.			
Costs and Benefits	<p>Site testing and other hazard investigation costs likely to be similar across all options</p> <p>Lowest costs. No resource consent fees. Professional fees likely to be similar for all options.</p>	<p>Site testing and other hazard investigation costs likely to be similar across all options</p> <p>Additional costs – while professional fees likely to be similar as for option 1, applicants must also pay resource consent fees.</p>	<p>Restricted Discretionary status increases uncertainty for developers</p> <p>Site testing and other hazard investigation costs likely to be similar across all options</p> <p>Additional costs – while professional fees likely to be similar, applicants must also pay resource consent fees.</p>	<p>Site testing and other hazard investigation costs likely to be similar across all options</p> <p>Reduced costs over option 2 and 3– pathway for avoiding resource consent fees through site testing and absence of other risk factors.</p>
Risks				Risk that knowledge evolves of appropriate risk factors and there are costs and delays updating plan.
Summary	Most appropriate option at the present time.	Low efficiency and not considered an appropriate option.	Low efficiency and not considered an appropriate option.	Could be an appropriate option but only once there is a high degree of confidence in thresholds and risk factors.