

**Before the Hearings Panels  
At Greater Wellington Regional Council**

**Under** Schedule 1 of the Resource Management Act 1991

**In the matter of** Proposed Change 1 to the Regional Policy Statement for the Wellington Region

**Hearing Stream** 3 (Climate Change)

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**Statement of evidence of Michael David Rachlin on behalf of Porirua City Council (S30)**

**Planning**

**Topic:** Climate resilience and nature-based solutions

**Date:** 14 August 2023

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## **INTRODUCTION:**

- 1 My full name is Michael David Rachlin. I am employed as a Principal Policy Planner by Porirua City Council (**PCC**).
- 2 I have prepared this statement of evidence on behalf of PCC to provide planning evidence in support of its submission to Greater Wellington Regional Council's (the **Council**) Proposed Change 1 (**Change 1**) to the Regional Policy Statement for the Wellington Region (**RPS**).
- 3 Specifically, this statement of evidence relates to the matters in Hearing Stream 3, Climate Change - Climate resilience and nature-based solutions. I have previously presented evidence on behalf of PCC in relation to Hearing Stream 1 – General Submissions. In Hearing Stream 3 I have also prepared evidence in relation to the “Climate Change – General” topic.
- 4 I am authorised to provide this evidence on behalf of PCC.

## **QUALIFICATIONS AND EXPERIENCE**

- 5 My qualifications and experience are as stated in paragraphs 5 – 10 and Appendix A of my statement of evidence dated 13 June 2023, filed in advance of hearing stream 1.

## **Code of conduct**

- 6 Although I am employed by PCC, I am giving this evidence in my capacity as a planning expert. I have read the Code of Conduct for Expert Witnesses set out in the Environment Court's Practice Note 2023. I have complied with that Code when preparing my written statement of evidence and I agree to comply with it when I give any oral evidence. Except where I state I rely on the evidence of another person, I confirm that the issues addressed in this statement of evidence are within my

area of expertise, and I have not omitted to consider material facts known to me that might alter or detract from my expressed opinions.

## **SUMMARY**

7 My name is Michael Rachlin. I have been asked by PCC to provide planning evidence in support of its submission to Change 1. I note that while I am an employee of PCC, I am acting as an independent planning expert and the views I express in this evidence are my own.

8 My statement of evidence addresses the following matters:

- Issue 2 – Definition for nature-based solutions
- Issue 3 – Objective CC.4: Nature-based solutions
- Issue 4 – Climate-resilient urban areas (Policy CC.4 & Policy CC.14)
- Definition for climate resilience
- Issue 5 – Ecosystems and habitats that provide nature-based solutions (Policy CC.7 and Policy CC.12)
- Issue 7 – Objective CC.5: Increasing regional forest cover
- Issue 8 – Supporting increased forest cover (Policy CC.6, Policy CC.18, Method CC.4)
- Issue 9 – Definitions: Highly erodible land, permanent forest, and plantation forest
- Issue 10 – Water resilience and climate-change adaptation (Policy FW.8)
- Comments on s42A report
- General submissions

## SCOPE OF EVIDENCE

- 9 My statement of evidence addresses the matters set out in paragraph 8 above.
- 10 In preparing my evidence, I have reviewed the Section 42A report<sup>1</sup>, s32 evaluation, statements of evidence<sup>2</sup> and associated technical reports for Change 1.
- 11 The Section 42A Report responds to 17 of PCC's submission points (which have been allocated to this hearing stream).<sup>3</sup>
- 12 PCC's submission raised a number of concerns with the provisions in Change 1 being considered through Hearing Stream 3. I have summarised these in my statement of planning evidence for "Climate Change – General":
- 13 I agree with the issues raised in PCC's submission relating to the above matters.
- 14 My statement of evidence concentrates on those provisions of Change 1 for this topic that are of direct relevance to PCC as a territorial authority. I have not addressed PCC's submission on provisions relating solely to regional functions and regional plans due to resource constraints.
- 15 For the purposes of this statement of evidence I have adopted the structure of the s42A report.

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<sup>1</sup> Section 42A Hearing Report Hearing Stream 3 – Climate Change - Climate resilience and nature-based solutions.

<sup>2</sup> HS3 Climate Change GWRC Statement of Evidence - Technical Evidence Jake Roos Climate Change General, HS3 Climate Change GWRC Statement of Evidence - Technical Evidence Stuart Farrant Climate Resilience and Nature-Based Solutions.

<sup>3</sup> The identified submission points are S30.0123, S30.099, S30.0116, S30.0120, S30.0105, S30.0108, S30.007, S30.008, S30.0109, S30.0126, S30.085, S30.060, S30.062, S30.082, S30.028, S30.030, and S30.031.

## ISSUE 2 DEFINITION FOR NATURE-BASED SOLUTIONS

16 PCC submission S30.0108 sought that the definition for “nature-based solutions” be deleted, or amended so that it provided clear and appropriate direction to plan users. The submission noted:

- *It lacks the necessary specificity required for a definition to enable effective and efficient implementation in a regulatory framework (district plan and regional plan).*
- *The lack of clarity is illustrated by the need to include a wide range of examples*

17 The s42A report author is recommending that the definition be simplified and amended as follows:

Actions to protect, enhance, or restore natural ecosystems, and the ~~incorporation of natural elements into built environments use of engineered systems that mimic natural processes~~, to reduce greenhouse gas emissions and/or strengthen the resilience and well-being of ~~humans~~ people, indigenous biodiversity, and ~~the~~ natural and physical resources ~~environment~~ to the effects of climate change.

18 The list of examples included in the notified definition are now proposed to be retained as a Note to the definition, to provide examples of nature-based solutions.

19 In my opinion, any definition of nature-based solution needs to sit alongside the definition of Green Infrastructure, as mandated by the National Planning Standards. Part 14.1 to the National Planning Standards directs that:

*Where terms defined in the Definitions List are used in a policy statement or plan, and the term is used in the same context as the*

*definition, local authorities must use the definition as defined in the Definitions List. However, if required, they may define:*

- terms that are a subcategory of, or have a narrower application than, a defined term in the Definitions List. Any such definitions must be consistent with the higher level definition in the Definitions List.*
- additional terms that do not have the same or equivalent meaning as a term defined in the Definitions List.*

20 In my opinion the definition for nature-based solutions needs to be drafted in a way that achieves mandatory direction 14.1.b. above, namely for additional terms which do not have the same or equivalent meaning as Green Infrastructure. The notified and s42A versions of the definition have considerable overlap with the definition for Green Infrastructure<sup>4</sup>, particularly by including reference to “..that mimic natural processes”.

21 I also consider that both the notified definition of nature-based solutions and the amended version proposed by the reporting officer read as a description of the concept of nature-based solutions. Reference to “action” in my view is also inappropriate since actions should be addressed in policy direction. Actions to protect, restore or enhance natural ecosystems should be contained in policy direction and not a definition.

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<sup>4</sup> Defined in the National Planning Standards as:

means a natural or semi-natural area, feature or process, including engineered systems that mimic natural processes, which are planned or managed to: (a) provide for aspects of ecosystem health or resilience, such as maintaining or improving the quality of water, air or soil, and habitats to promote biodiversity; and (b) provide services to people and communities, such as stormwater or flood management or climate change adaptation.

22 I agree with the reporting officer that nature-based solutions can extend beyond what is included within the definition of Green Infrastructure. In my assessment nature-based solutions are those that use or manage natural resources in a way that contribute to a reduction in greenhouse gas emissions and/or an increase in resilience to the effects of climate change. For example, planting forests to sequester carbon and maintaining peatland to retain carbon stores.

23 While I appreciate that the National Adaptation Plan (**NAP**) and the International Union for the Conservation of Nature include definitions for nature-based solutions on which the notified and s42A version are based, it is important that these terms are adapted in a way that is appropriate for application in a resource management system context, and so that they align with the requirements of the National Planning Standards.

24 Given the above, I would recommend the following definition for nature-based solution:

*Nature-based solution: means the use or management of natural resources in a way that contribute to a reduction in greenhouse gas emissions and/or an increase in resilience to the effects of climate change.*

25 In paragraph 79 of the s42A report, the reporting officer states that examples were included in the notified version as, in her opinion, nature-based solutions were a relatively new concept for the resource management sector. I respectfully disagree with this statement. While the term, nature-based solution is new, the concept and actions it encompasses are not new to resource management. I address this point later and provide some (but not all) examples from the Porirua Proposed District Plan. The main point being that nature-based solutions are already embedded into, and applied in, the resource management system.

26 S32AA evaluation: I consider that my amended definition is more efficient and effective than the notified or s42A versions since it is drafted as a definition, removes duplication with a mandatory definition, and is clearer. As such, it will aid the efficient implementation of the RPS.

### **Issue 3: Objective CC.4: Nature-based solutions**

27 PCC submission S30.007 sought that the objective be amended so that it was clear what the outcome sought was. The submission noted that a small minor improvement in one part of the region would achieve the objective. It also stated that it not clear whether the focus of the objective was achieving social and environmental outcomes, or the use of nature-based solutions (which is a method to achieve outcomes).

28 The s42A report recommends some minor changes to align it with the language in the RMA.

29 In my opinion the objective (as amended) does not describe an outcome but rather the means (methods) to achieving an outcome. Nature-based solutions are a subset of climate change adaptation actions and climate change mitigation actions, which themselves are actions to achieve the outcomes of reducing greenhouse gas emissions in the region and increased climate-resilience. These actions should be identified and provided for in policy directions. As such, I do not consider that the notified or s42A version of the objective is the most appropriate way to achieve the purpose of the Act. Below I discuss how the objective can be amended.

30 I agree with the reporting officer that the National Adaptation and Emission Reduction Plans seek the prioritisation of nature-based solutions<sup>5</sup>. I also consider, given the directions in the National Planning Standards, that the objective should refer to Green Infrastructure, since

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<sup>5</sup> Section 42A report at [77].



this includes some of the tools included in the umbrella term, “nature-based solutions”. I therefore recommend that the objective be amended to:

*Nature-based solutions and Green Infrastructure are prioritised in how the Region reduces emissions and becomes climate-resilient.*

31 This amended wording ensures that the outcome is clearly identified and has had genuine regard to National Adaptation and Emission Reduction Plans. In so doing, I consider it appropriately achieves the purpose of the Act, particularly when considered alongside the other Climate Change objectives.

32 The above objective would work alongside the others I recommended in my statement of evidence for the Climate Change – General topic. For the Panels’ ease of reference, I set these out below together with the above objective, listed as Objective CC.3:

**Objective CC.1**

Management of natural and physical resources contribute to a 50% reduction in net *greenhouse gases emissions* from 2019 levels by 2030 and net-zero emissions by 2050 in the Wellington region.

**Objective CC.2**

Management of natural and physical resources contribute to increased *climate-resilience* in the Wellington region.

**Objective CC.3 – Nature-based solutions**

*Nature-based solutions* are prioritised in how the Region reduces emissions and becomes *climate-resilient*.

**Objective CC.4**

Mana whenua/tangata whenua are empowered to make decisions to achieve *climate-resilience* in their communities.

33 The above analysis represents my s32AA evaluation.

#### Issue 4: Climate-resilient urban areas (Policies CC.4 and CC.14)

34 PCC submissions S30.062 and S30.028 sought that these policies be deleted or alternatively amended to provide clear and appropriate direction in line with the objectives. The submissions also sought definitions for terms used in the policies, including “resilience” and “climate-resilient”. In relation to policy CC.4 the PCC submission noted:

*The policy is implemented by another policy it refers to. It needs to be clearer to the exact actions to be undertaken. The policy relies on an understanding of what a climate-resilient urban area is (which is not currently identified in the RPS) and has the effect of elevating Policy CC.14 from a "consider" policy to a "shall" policy without the necessary level of justification. While the explanation to the policy sets out what is intended by a climate resilient urban area, this description is unclear and lacks the necessary certainty for regulatory controls in RMA plans. For example, it is unclear what is meant by "withstand" as used in this context, it is also unclear how is this to be measured and how will we know when we have created urban environments that can withstand the conditions listed in the explanation. It also assumes that all tools and levers are in RMA plans and fails to identify the role of other tools which lie outside of the control of RMA plans, such as:*

- *the Building Code;*
- *three water policies under the new Three Water entities; and*
- *management of public spaces such as transport corridors, parks and reserves, and the DOC estate.*

*The policy should be drafted in way that recognises that RMA plans can contribute to achieving climate-resilient urban areas, but they alone cannot achieve them.*

*It relies on a definition for "nature-based solution" which lacks the necessary specificity, certainty and clarity required for terms used in a RMA regulatory framework (see Council submission point on this definitions).*

- *It relies on a number of terms that have not been defined. These include "climate-resilient urban area", "urban greening", "urban cooling", "water sensitive urban design", "resilience". The lack of definitions for these terms creates uncertainty for applicants, councils, and other stakeholders.*
- *The policy includes requirements that will not be within the knowledge of the consent authority or applicants, for example suburb-scale tree canopy cover.*
- *The policy would require councils to undertake assessments of tree cover regularly and assess applications against their impact of the current knowledge base, which may be altered by resident action, such as removing trees (either legally or illegally). This would be onerous on both council's and applicants.*
- *The policy duplicates controls under other statutes and regulations such as the Building Code.*
- *Relies on application of tests for which no policy guidance has been provided to determine when these are met. Examples include; "strengthen" in (d), "efficient" in (e), "withstand" in (f).*
- *Clause (f) does not specify the timeline for "predicted" nor whose prediction is to be applied. The clause duplicates the Building Code.*
- *No threshold is included and as drafted would apply to all resource consents, change, variation or review of RMA plans regardless of scale and type of activity. For example, a dormer window breaching a height in relation to boundary standard in a district plan may trigger this policy consideration. As such the policy will have a regulatory reach that has not been justified by the s32 evaluation.*
- *In regard to (a), why are these targets not included in the relevant objective? Further, is there data available to assess this against?*

- *In regard to (c), it is unclear what sort of targets are meant. This needs to be reframed to acknowledge can only address new development. What does "provide for actions and initiatives" mean in a consent process? This needs to be thought through into what this actually means in terms of implementation. How are we supposed to have regard to this?*
- *In regard to (f), this is most appropriately handled under the building act and other acts determining the design resilience of different pieces of infrastructure (such as Electricity (Safety) Regulations 2010) and any amendments needed to capture the resilience of new buildings to predicted environmental changes. The Building Act already has requirements for different resilience elements (salt spray, wind zones etc.). These are regularly updated. Similarly, there are engineering standards for a wide range of infrastructure to ensure that it is resilient. Assessment of applications may not be the most effective way of implementing resilience in that area.*

*GWRC also need to consider how the canopy cover policy aligns with the restrictions under s76(4A), whereby territorial authorities cannot include rules in their plans that prohibit or restrict the felling, trimming, damaging or removal of a tree or trees on a single urban environment allotment, unless the tree(s) are described in a schedule in the district plan, which includes a description of the tree(s) and the specific street address or legal description. While territorial authorities may be able to include rules requiring canopy cover for new development, they are unable to then prevent the removal of those trees, without complying with the requirements of s76 RMA.*

36 I agree with these concerns and do not consider that the significant amendments to Policies CC.4 and CC.14 recommended by the s42A report overcome them. In addition, I have the following concerns regarding the “workability” of these policies:

- How is “suburb-scale” defined and does it include rural areas? Is this scale of tree cover appropriate in all “suburbs” regardless of topography and wildfire risk. I address wildfire risk further below.
- The s42A report is silent on the requirements and implications of s76 RMA.

- What is actually intended by these policies in relation to the design of buildings and infrastructure over and above the requirements of the Building Act<sup>6</sup>, the requirements for lifeline utilities under the Civil Defence Emergency Act 2002, and infrastructure specific regulations such as the Electricity (Safety) Regulations 2010?
- Inappropriate level of prescriptiveness that duplicates other regulations and statutes.

37 Above, I have referred to wildfire risk. I consider this represents an example of a tension in options for climate-resilience.

38 Submissions to the Porirua Proposed District Plan sought the ability to remove vegetation from Significant Natural Areas where they were close to buildings due to fire risk. Reference was made to guidance from Fire and Emergency New Zealand (FENZ).

39 FENZ guidance documents<sup>7</sup> recommend creating a defensible space around houses by clearing flammable materials including vegetation. This includes:

- a zone 10m from homes where vegetation should be removed, lawns should be kept mown and watered, gravel and rock should be used rather than mulch, and low-flammable species should be planted; and

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<sup>6</sup> National Adaptation Plan Action 7.4 is to update regulatory requirements to ensure buildings are designed and constructed to withstand more extreme climate hazards. The lead agency is MBIE and it is intended to update the Building Code performance requirements, identify and add climate hazards not currently in the Building Code.

<sup>7</sup> Fire and Emergency New Zealand (2006) Fire Smart home owner's manual; Fire and Emergency New Zealand (2018) Get fire safe at the interface brochure; Fire and Emergency New Zealand website webpage – Protect your home from outdoor fires

- a zone out to 30m from homes where trees should be thinned, and clusters of highly flammable plants should be avoided.

40 Another fire management guidance document from Scion<sup>8</sup> recommends a defensible space around houses of 30 to 50m. This guidance recommends replacing high flammability native species like manuka and kanuka with low flammability species like kawakawa and karamu.

41 I use the above, as an example, of how this matter can play out at property level during district plan processes and the fact that it raises the issue of what is “climate-resilience”. Is it by encouraging 30% tree cover in every “suburb” across the Wellington region, or by allowing territorial authorities flexibility in determining how to achieve climate resilience, based on the specific features, characteristics and outcomes sought for their districts, and in a way that works alongside other statutes and regulations.

42 In my statement of planning evidence for the Climate Change - General topic I also noted that Change 1 had not articulated what a climate-resilient region was or looked like, including the anticipated environmental results for the Climate Change chapter. I also identified that climate change is dynamic and that what is climate-resilient may change over time. In view of this I consider that any policy direction on this matter should:

- Provide high level direction, leaving it to territorial authorities informed by regional guidance such as the Regional Emissions Reduction Plan and Regional Climate Change Impacts Assessment and Adaptation Plan, to identify specific tools and methods to increase resilience; and

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<sup>8</sup> Scion Research (2018) Flammability of native plant species brochure.

- Provide topic specific policy direction where appropriate. For example, the operative Natural Resources Plan Policies 83, 84, 85 and 86 already require stormwater management strategies and water-sensitive urban design. These are implemented by a suite of rules, including Rule R49 to Rule R53, which promote the development and implementation of stormwater management strategies at catchment or sub-catchment scale, with these needing to conform with Schedule N to the Natural Resources Plan. A policy directing district plans to support the implementation of stormwater management strategies and water sensitive urban design by providing for them would, in my view, be appropriate.

43 Earlier I disagreed with the reporting officer’s opinion that “nature-based solutions” are new to resource management. To illustrate this, I have briefly identified some of the provisions of the Porirua Proposed District Plan that represent “nature-based solutions” intended to increase resilience:

- As identified in my statement of evidence for Hearing Stream 1, appropriately 17% of the land area in Porirua has been scheduled as a Significant Natural Area in the PDP. This ensures the protection of these ecologically important areas.
- Community gardens<sup>9</sup> are a permitted activity in all residential zones and conservation activity<sup>10</sup> is a permitted activity in all zones.

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<sup>9</sup> Defined as: means land used as a garden operated by a group or collective for the purpose of growing plants, vegetables or fruit on a not for profit basis and excludes any retail activity.

<sup>10</sup> Defined as: means the use of land for activities undertaken for the purposes of maintaining, protecting and/or enhancing the natural, historic and/or ecological values of a natural or historic resource. It may include activities which assist to enhance the public’s appreciation and recreational enjoyment of the resource and includes:

- (a) planting;
- (b) pest and weed control;

- The avoidance of risk sensitive development (including residential) in areas of high natural and coastal hazard risk, with these areas being mapped and identified in overlays in the planning maps.
- *Soft engineering measures*<sup>11</sup> are a permitted activity when undertaken by a statutory agency or their contractors within a Natural or Coastal Hazard Overlay<sup>12</sup>.
- Policy direction<sup>13</sup> that states that hard engineering measures will only be allowed for the reduction of the risk from coastal hazards when, amongst other matters, they can demonstrate that soft engineering measures would not provide an appropriate level of protection in relation to the significance of the risk.
- 20m setbacks for structures and buildings from the coastal marine area and waterways 3m or more in width and a 5m setback where waterway is less than 3m in width.
- Esplanade reserves and esplanade strips to be taken in accordance with s230 of the RMA.
- Requirement under the Medium Density Residential Standards (as directed by Schedule 3A to the RMA) for a 20% landscaped area for each residential site. The Hearing Panels might wish to note that seeking an increase above 20% landscaped area, for example to 30% of a site, would require specific evaluation by the territorial authority

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(c) plant and tree nurseries; and

(d) track construction.

<sup>11</sup> Defined as: means a form of hazard mitigation that uses natural elements to provide protection to private properties, public space and infrastructure. It includes sacrificial fill, vegetation planting, beach nourishment and dune restoration.

<sup>12</sup> CE-R5 and NH-R3

<sup>13</sup> CE-P17



as a “qualifying matter” under s77R<sup>14</sup> of the RMA to demonstrate its appropriateness.

- Requirement for street trees on new roads classified as Access roads or Collector roads<sup>15</sup>.
- Ancillary transport network infrastructure<sup>16</sup> is a permitted activity and this includes landscaped gardens, which in my opinion extends to rain gardens.
- Requirement for onsite retention of silt and sediment during earthworks<sup>17</sup>.
- Urban design guides<sup>18</sup> address the layout of developments including location and planting of trees, landscaping and building orientation to manage climatic effects on residential amenity. The design guides for the commercial zones also address wind effects associated with

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<sup>14</sup> A matter is not a qualifying matter under section 77O(j) in relation to an area unless the evaluation report referred to in section 32 also—

- (a) identifies the specific characteristic that makes the level of urban development required within the relevant paragraph of policy 3 inappropriate; and
- (b) justifies why that characteristic makes that level of urban development inappropriate in light of the national significance of urban development and the objectives of the NPS-UD; and
- (c) includes a site-specific analysis that—
  - (i) identifies the site to which the matter relates; and
  - (ii) evaluates the specific characteristic on a site-specific basis to determine the geographic area where intensification needs to be compatible with the specific matter; and
  - (iii) evaluates an appropriate range of options to achieve the greatest heights and densities provided for by policy 3 while managing the specific characteristics.

<sup>15</sup> INF-S3 – Design of roads

<sup>16</sup> INF-R22

<sup>17</sup> INF-S14 and EW-S5

<sup>18</sup> Residential Design Guide, Metropolitan Zone Centre Design Guide, Mixed Use Zone Design Guide, Local Centre Zone Design Guide, and Large Format Retailing Design Guide.

taller buildings. These are intended to complement building performance standards under the Building Code.

- 44 Other district plans in the region also have nature-based solutions provisions. For example:

Upper Hutt District Plan

- Controls on development such as buildings and earthworks in ponding areas, stream corridors, and overflow paths<sup>19</sup>.
- Protection of Urban Tree Groups<sup>20</sup>.
- Development standard EW-S4 controls earthworks on erosion prone land, while EW-S6 requires sediment and run-off controls for earthworks.

Kāpiti Coast District Plan

- Setback requirements for buildings from waterways of 10m where the waterway has a width of 3m or more, and 5m for smaller waterways<sup>21</sup>.
- All new residential buildings must have rainwater tanks and a grey water re-use system<sup>22</sup>.
- Earthwork standard 5 requires erosion and sediment controls.
- Controls on trimming and removal of indigenous vegetation<sup>23</sup>.

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<sup>19</sup> For example, rules NH-R10, NH-R15, and NH-R16.

<sup>20</sup> For example, removal is a discretionary activity under UTG-R8.

<sup>21</sup> NH-FLOOD-R2.

<sup>22</sup> INF standards 1 and 2.

<sup>23</sup> Rules ECO-R1 to ECO-R15.

45 The above is only a sample of the “nature-based solutions” contained in the Porirua Proposed District Plan and other district plans and is intended to illustrate that these are not new to resource management and, that district plans already employ a variety of methods to increase climate-resilience. Nature-based solutions is simply a term to describe certain types of actions and it is not necessary to repeat the term in lower order district and regional plans. The above is also not intended to signal that further nature-based solution provisions are not appropriate or necessary, simply that within and of themselves, they are not unknown in resource management, including district plans.

46 In view of the above, I consider that Policy CC.4 and CC.14 should be replaced (in relation to district plans only) with the following three policies:

District ~~and regional~~ plans shall include objectives, policies, rules and/or methods to provide for increased climate-resilience, including by prioritising the use of nature-based solutions and green infrastructure.

District plans shall include objectives, policies, rules and/or other methods that enable, where appropriate, the implementation of stormwater management strategies and water sensitive urban design.

District plans shall include objectives, policies, rules and/or other methods that recognise and provide for the role of esplanade reserves and esplanade strips in increasing climate-resilience.

47 In addition, I would include the Natural Resources Plan’s definition for stormwater management strategies as well as water sensitive urban design, already recommended by the reporting officer. The definition would need minor amendments to reference the Natural Resources Plan. Below is the stormwater management strategy definition:

A strategic document, required by Rule R53 of the Natural Resources Plan for the Wellington region, that links stormwater asset management and land use planning (including state highways) with water quality outcomes. A stormwater management strategy describes how sub-catchments within a stormwater network will be managed, through time, in accordance with any relevant objectives identified in the Plan.

48 I would also recommend including the definition of Green Infrastructure from the National Planning Standards, as follows:

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

(a) provide for aspects of ecosystem health or resilience, such as maintaining or improving the quality of water, air or soil, and habitats to promote biodiversity; and

(b) provide services to people and communities, such as stormwater or flood management or climate change adaptation

49 The above recommended policies do not include a “consideration” policy. I do not support such a policy for the following reasons:

- It is unclear how such a policy would work alongside the existing “nature-based solutions” provisions in district plans such as those identified for the Porirua Proposed District Plan.
- Many of the matters included in the policy duplicate controls other statutes and regulations including the Natural Resources Plan and the Building Act.
- The policy, even as amended by the S42A report, is very broad in scope and continues to be uncertain including reference to

undefined terms such as “urban cooling” and “urban green space”. I do not agree with the reporting officer that the term, “green space” is well understood. In my opinion, it is open to a wide interpretation, and this is demonstrated in the definition recommended in the s42A report only if the Hearing Panels are minded including one. Any piece of “landscaping” would meet the definition including poorly maintained, low level shrubs that can be found in car parking areas for large format stores and industrial areas.

***Definition for climate-resilience***

50 As identified earlier the PCC submission sought the inclusion of a definition for climate-resilience. The s42A report has recommended the following:

Climate-resilience/Climate-resilient/ Resilience and Resilient (in relation to climate change or natural hazards) – The capacity and ability of natural and physical resources, including people, communities, businesses, infrastructure, and ecosystems, to withstand the impacts and recover from the effects of climate change, including natural hazard events.

51 I support the introduction of such a definition, but would recommend that it is worded as follows:

Climate-resilient/climate-resilience/resilience/resilient: (in relation to climate change or natural hazards) means the region is able to respond, at any one time, to predicted changes to climate and associated effects on the severity/frequency of natural hazards<sup>24</sup> in a way that maintains the function and structure of the region.

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<sup>24</sup> As defined by the RMA.

For the purposes of this definition, responds includes the ability to prepare for, recover from and adapt to climate change impacts.

***Conclusion for Policies CC.4 and CC.14***

52 I agree with PCC’s submissions regarding the “workability” of these policies as notified and as amended in the s42A report for the reasons I have set out. I agree with intent of the policy directions but believe they need amending to better recognise that resource management plans are one of the responses to achieving increased climate resilience and that district plans already include a range of provisions implementing nature-based solutions.

53 Duplication of controls, as embedded in the notified and s42A versions of the policies, is not the most efficient and effective way to achieve the climate change objective of increased climate-resilience.

54 Overall, I consider that my recommended policies are more efficient and effective and have better regard to the National Adaptation and Emissions Reduction Plans, and provide direction which appropriately recognises that territorial authorities and district plans are already addressing the matter (and need to be able to continue to do so, with flexibility for a wide scope of action).

55 The above analysis represents my s32AA evaluation for the three new policies and new definitions for “green infrastructure”, “stormwater management strategy” and “climate-resilience/resilient”.

**ISSUE 5 - ECOSYSTEMS AND HABITATS THAT PROVIDE NATURE-BASED SOLUTIONS (POLICIES CC.7 AND CC.12)**

56 PCC submission S30.031 sought that Policy CC.7 be amended so that it provided clear and appropriate direction to plan users in line with the objectives, including what was meant by "actions", "natural ecosystems", "natural elements", and "resilience". Submission S30.060

opposed Policy CC.12 and sought that it be deleted or amended so that it provided clear and appropriate direction to plan users in line with objectives and amend that it should only apply to resource consents.

57 In relation to Policy CC.12 the PCC submission was concerned that:

- *This policy is unclear as to its intent and how it is supposed to be engaged for resource consents, plan changes/variations or reviews.*
- *It relies on definitions for "nature-based solution", "climate change adaptation" and "climate change mitigation" which lack the necessary specificity, certainty and clarity required for terms used in a RMA regulatory framework (see Council submission points on these definitions).*
- *Due to uncertainty created by the definitions combined with the low effects threshold, application of this policy as a consideration will have a regulatory reach that has not been justified by the s32 evaluation.*
- *The requirement to avoid adverse effects is a high regulatory bar considering the definition of 'nature-based solution' applies to everything from estuaries and rivers to street trees. "Avoid" is a higher regulatory bar than that sought by the RPS for SNA which provides for the application of the effects management hierarchy.*
- *Includes an effects threshold unrelated to the outcome sought in Objective CC.4.*
- *This policy should only apply to resource consents so it does not conflict and/or duplicate earlier regulatory policies that apply to the development of regional and district plans*

58 In relation to Policy CC.7 the submission supported the intent of the policy but noted the following concerns:

- *Council supports the intent of this policy, and has already attempted to enable 'soft- engineering measures' in our Proposed District Plan. This is defined clearly as follows:*

*means a form of hazard mitigation that uses natural elements to provide protection to private properties, public space and infrastructure. It includes sacrificial fill, vegetation planting, beach nourishment and dune restoration.*

- *The definition of 'nature-based solution' relies on a common understanding of a number of terms used in that definition, such as "actions", "natural ecosystems", "natural elements", and "resilience", since those terms are not themselves defined.*
- *Further, a lack of clarity and regulatory certainty with this policy would likely lead to interpretation issues, and could require a regulatory framework that applies to all development regardless of scale and regardless of activity type. The s32 evaluation report does not identify why this level of regulatory reach is appropriate.*
- *It is difficult to reconcile the examples used in the definition with the creation of a regulatory framework that captures all development and infrastructure regardless of scale, as required by Policy CC.7.*
- *Amend policy so that it provides clear and appropriate direction to plan users in line with objectives, including what is meant by "actions", "natural ecosystems", "natural elements", and "resilience".*

59 I agree with PCC's submission on these policies and note that the S42A report is recommending that:

- Policy CC.7 is amended to a non-regulatory policy that seeks working with and supporting landowners, mana whenua/tangata whenua, and other key stakeholders to protect, restore or enhance ecosystems that provide nature-based solutions to climate change.
- Policy CC.12 be deleted.

60 I agree with the reporting officer that the above recommendations are more efficient and effective in achieving the climate change objectives. They support the work already being undertaken by PCC and the "nature-based solutions" provisions in the Porirua Proposed District Plan.



## ISSUE 7 - OBJECTIVE CC.5: INCREASING REGIONAL FOREST COVER

61 PCC submission S30.008, supported the intent of this objective but sought that it be amended so that it was clear what the outcome sought is, and/or reword as follows:

By 2030, there is an increase in the area of permanent forest in the Wellington Region, ~~maximising benefits for carbon sequestration, indigenous biodiversity, land stability, water quality, and social and economic wellbeing.~~

62 In my opinion, this objective states a means to an end and does not articulate the outcome sought. Increasing tree cover in the region is a “nature-based solution” action to achieve the objectives of increased climate-resilience and reduction in greenhouse gases, as well as other outcomes in relation to indigenous biodiversity, land stability, and water quality. Indeed, the notified and s42A definition of “nature-based solutions” included *planting forests to sequester carbon*. As such, I consider it to be more akin to a policy.

63 I consider that I am supported in my assessment that objective CC.5 is an action (policy) and not an outcome within its own right, by the following from paragraph 255 of the s42A report:

*While expanding the area of permanent indigenous forest in the region will provide significant benefits for a wide range of values and contribute to other RPS objectives, it is my understanding that to achieve the necessary drawdown of carbon to limit warming to 1.5°C will require an increase in exotic species, as well as indigenous species, in the short-medium term.*

*(my emphasis)*

64 In other words, the reporting officer has identified that expanding the area of permanent forest in the region is an action that helps achieve

multiple outcomes (objectives) including reducing carbon emissions, increasing climate-resilience, and other RPS objectives. Indeed, the policies identified for this objective state the following:

- Policy CC.6: *“Regional plans shall include objectives, policies, rules and/or methods that support an increase in the area and health of permanent forest in the region to contribute to achieving net-zero greenhouse gas emissions by 2050, while...”*
- Policy CC.18: *“Promote and support the planting and natural regeneration of forest to maximise the benefits for carbon sequestration, indigenous biodiversity, erosion control, freshwater and coastal ecosystems, and the social and economic well-being of local communities...”*

65 It is clear to me that policies CC.6 and CC.18 provide the necessary policy direction on increasing the area of forest in the region, as a “nature-based solution” action that achieve the objectives of the RPS, without a need for Objective CC.5.

66 I consider Objective CC.5 is an unnecessary objective and is not the most appropriate way to achieve the purpose of the Act. As such I recommend that the objective is deleted. Scope for this comes from S163.016 [Wairarapa Federated Farmers].

67 If the Hearing Panels are minded to retain Objective CC.5, then I would recommend that it be as amended by the reporting officer in paragraph 270 of the s42A report. I agree that the amendments are necessary for the reasons identified by the reporting officer.

**ISSUE 8 - SUPPORTING INCREASED FOREST COVER (POLICY CC.6, POLICY CC.18 AND METHOD CC.4)**

68 In relation to these provisions PCC submission sought the following:

- **Policy CC.6:** S30.030 supported the intent of this policy but sought that it be amended so that it provided clear and appropriate direction to plan users in line with objectives, and/or reworded as follows:

Regional plans shall include objectives, policies, rules and/or methods that support an increase in the area of permanent forest ~~in the region to contribute to achieving net-zero greenhouse gas emissions by 2050, while...~~

- **Policy CC.18:** S30.082 sought that the policy be deleted or amended to refer to the regional council only. The submission was concerned that the Regional Policy Statement should not direct when and how territorial authorities will use their powers under the Local Government Act or under other statutes such as the management of reserves under the Reserves Act 1977. These are matters for councils to determine at their discretion and in response to the concerns and issues for their communities.
- **Method CC.4:** PCC did not submit on this method.

69 As I identified at the start of my statement of evidence, I am only addressing those provisions that direct action by PCC. Since Policy CC.6 is directed at regional plans and PCC did not submit on Method CC.4, I only address Policy CC.18 here.

70 I agree with the concerns of the PCC submission regarding the consequences of Policy CC.18. As worded, the notified and s42A versions of this policy have the effect of directing and influencing how PCC is to use its powers under the Local Government Act or under other statutes

such as the management of reserves under the Reserves Act 1977. I consider the use of the active verb, “promote” together with clauses a. and b. represent a form of overreach in their level of prescription and direction to territorial authorities in these matters.

71 I also note that the reporting officer at paragraph 305 states that, “I consider that ‘support’ is the most appropriate verb as the Council cannot require landowners or others to plant or allow the regeneration of forest; and ‘support’ includes approaches to both promote and enable an increase in forest”. (my emphasis). In this sense, then use of the term “promote” and “support” in the policy chapeau appears to be a duplication. In my opinion, use of “support” is appropriate in the context of Policy C.18 as it provides discretion for local authorities to determine the actions and methods appropriate to their districts and communities to achieve the desired outcomes.

72 I consider that the issues with this policy would be overcome by deleting the term “promote” at the start of the policy together with clauses a. and b. and leaving these requirements as part of Method CC.4. The amended policy would read:

~~Promote and~~ support the planting and natural regeneration of permanent forest to maximise the benefits for carbon sequestration, indigenous biodiversity, erosion control, freshwater and coastal ecosystems, and the social, cultural, and economic well-being of local communities.

~~a) To promote and incentivise the planting and regeneration of permanent indigenous forest in preference to exotic species, and~~

~~b) prioritising planting and regeneration of permanent indigenous forest particularly on highly erodible land and in catchments where water quality targets for sediment are not reached, and in areas where it will support significant indigenous biodiversity values.~~

73 As I noted earlier, conservation activity<sup>25</sup> is a permitted activity in all zones in the Porirua Proposed District Plan. This is an example of how the district plan supports the actions under Policy CC.18.

74 The commentary and assessment undertaken above represents my s32AA evaluation for amended Policy CC.18.

#### **Issue 9 - Definitions: Highly erodible land, Permanent Forest, Plantation Forest**

##### ***Definition – highly erodible land***

75 PCC submission S30.0105 sought that the term be deleted or alternatively amended so that it provides clear and appropriate direction to plan uses. The submission was concerned that the first sentence of the definition required a level of assessment and judgement inappropriate for a definition. It is unclear what a protective cover of deep rooted woody vegetation is and how this would be determined. The second sentence is appropriately certain.

76 The s42A report recommends that the definition is amended

Land at risk of severe mass-movement erosion (landslide, earthflow, and gully) if it does not have a protective cover of deep-rooted woody vegetation. ~~Land classified as very high (red) according to the erosion susceptibility classification in the National Environmental Standards for Plantation Forestry 2017.~~

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<sup>25</sup> Defined as: means the use of land for activities undertaken for the purposes of maintaining, protecting and/or enhancing the natural, historic and/or ecological values of a natural or historic resource. It may include activities which assist to enhance the public's appreciation and recreational enjoyment of the resource and includes:

- (a) planting;
- (b) pest and weed control;
- (c) plant and tree nurseries; and
- (d) track construction.

77 I agree with the PCC submission. The definition, as amended by the reporting officer, requires two determinations:

- Whether the land is at risk of severe mass movement erosion; and
- Whether it has a protective cover of deep-rooted woody vegetation

78 This level of prior determination in a definition lacks regulatory certainty for users of the Regional Policy Statement. To me this demonstrates that the relevant land area needs to be identified and mapped, rather than left to a definition, to provide certainty.

79 The reporting officer states that she has, spoken “.....to staff with expertise in land management and they advise that this term is commonly used and well-understood by the land management sector, including landowners.....” (my emphasis).

80 In my opinion, it would have been appropriate for this advice to be attached to the s42A report since it has been relied upon to inform the reporting officer’s recommendation. I am not clear who the staff were nor the nature of their expertise, except in “land management”. I also consider that users of the RPS should not have to rely on land management experts to understand and apply a definition in a regulatory RMA document.

81 Notwithstanding the above concerns, I note that the term is used in provisions primarily focussed on the Council. As such, on balance, I would support the retention of the definition. However, I see this as an interim solution and would recommend that a Method be added along the following lines:

By December 2024, Greater Wellington Regional Council shall identify and map highly erodible land to help give effect to Policies CC.6 and CC.18.

### **Definitions – Permanent Forest and Plantation Forestry**

82 I agree with the reporting officer's recommended amendments to these definitions for the reasons set out in the s42A report.

### **Issue 10 - Water resilience and climate-change adaptation (Policy FW.8)**

83 PCC submission S30.085 sought that the policy be amended to clarify that the regional council is responsible for supporting rural communities. The s42A report is recommending that the policy be amended as follows:

Policy FW.8: Land use adaptation – non regulatory

Promote and support water resilience and climate change adaptation in land use practices and land use change including:

- a. ~~P~~preparing and disseminating information about climate resilient practices,
- b. promoting water resilience in Freshwater Farm Plans, ~~and~~
- c. supporting primary sector groups and landowners in researching and promoting climate resilient and lower-emission land uses and pathways to move to new land uses, and
- d. prototyping, researching, and promoting nature-based solutions that support water resilience, such as swales and bunds.

84 In my opinion this policy raises similar issues to Policy CC.18 in that, as worded, the notified and s42A versions of this policy have the effect of directing and influencing how PCC is to use its powers under the Local Government Act. I consider that the requirements of clauses a. to d. represent a form of overreach in their level of prescription and direction to territorial authorities in these matters, beyond their functions under s31 to the RMA. They require PCC to undertake research of nature-based solutions, to promote water resilience in Freshwater Plans, and to prepare and disseminate information about climate resilient practises. These are all non-RMA matters and I do not consider it appropriate for the Regional Policy Statement to direct Porirua City Council in this way.

85 I would recommend that the policy is amended to relate only to the Council.

#### **S42A report**

86 At paragraph 200 the reporting officer has made the following comments:

*I do not agree with WCC and HCC that territorial authorities will necessarily provide for nature-based solutions without the direction of Change 1, noting the level of opposition from a number of territorial authorities to these provisions in Change 1 on the basis of their (sic) being no statutory requirement, the request that they be a regional council concern only, as well as resistance to provide for nature based solutions as part of plan changes to give effect to the NPS-UD Intensification Planning Instrument requirements.*

87 I am concerned about this statement and its categorisation of territorial authorities as resistant to nature-based solutions. Earlier I set out some of the Porirua Proposed District Plan provisions that provide for “nature-based solutions”. I would also draw attention to PCC’s non-RMA activities, such as:

- Te Kukuwai o Toa - Urban constructed wetland, as identified in the statement of evidence of Stuart Farrant for the Council<sup>26</sup>. This was undertaken by PCC in partnership with Ngāti Toa and Ministry for the Environment.
- Rautaki o Te Ao Hurihuri Porirua City Council’s Climate Change Strategy 2021–2024.

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<sup>26</sup> Statement of evidence of Stuart Farrant on behalf of Wellington Regional Council Technical evidence – [Climate-resilience and nature-based solutions], dated 7<sup>th</sup> August 2023.



- Climate Action Plan (underway).
- Supporting activities such as planting days to restore the harbour edge for Te Awarua-o-Porirua.

88 In relation to Porirua’s Intensification Planning Instrument, decisions on this are still awaited from the Independent Hearing Panel. As such the final form of this instrument is not within the knowledge of the reporting officer.

89 I would also observe that as a result of submissions, including those from Porirua City Council, the reporting officer has recommended extensive and significant amendments to the Change 1 provisions allocated to the climate resilience and nature-based solutions topic. This includes deletion of Policy CC.12.

90 I recognise that more needs to be done to deliver appropriate nature-based solutions, including possible changes to the Porirua Proposed District Plan, but I do not agree that PCC is resistant to nature-based solutions.

**Remaining general submissions**

91 In table 1 below I identify the general submissions allocated to this topic and provide brief commentary on them and associated s42A recommendations.

Submission	S42A report recommendation	Comments
<p><b>S30.0116</b>  The real value of regional policy statements is to provide policy direction that either does not exist at a national level or exists at a national level but needs to be articulated at a regional level. Council is concerned about the many provisions in Proposed Change 1 that either duplicate or are inconsistent with matters now comprehensively addressed by national direction. In some instances, they duplicate national direction without giving specific guidance in a Wellington Region context.</p>	<p>Reject</p>	<p>I have identified in my statement of evidence how the Change 1 climate change provisions risk duplicating matters more appropriately addressed in other regulations and statutes, for example the Building Act.</p> <p>I have also identified how these objectives have failed to have genuine regard to the National Adaptation and Emissions Reduction Plans.</p>

Submission	S42A report recommendation	Comments
<p><b>S30.0120</b> In addition to the relief sought as set out in our submission, as outlined above Council considers that the best course of action would be to withdraw much of Proposed Change 1, or otherwise work with councils on a variation to significantly amend most of its contents.</p>	Reject	This submission point was addressed in Hearing Stream 1
<p><b>S30.0123</b> Council opposes all "consideration" policies since they often duplicate or conflict with "regulatory" policies, and represent regulatory overreach without sufficient s32 evaluation or other evidence. We consider that they will create unnecessary regulatory costs due to the way they are drafted. They assume a level of knowledge and expertise on a range of matters generally not available to consent authorities, and in some cases represent a transfer of s31 functions to territorial authorities.</p>	Reject	<p>There are two consideration policies allocated to this topic: CC.12 CC.14</p> <p>The reporting officer has recommended that Policy CC.12 be deleted and Policy CC.14 significantly re-structured.</p> <p>I have supported the deletion of Policy CC.12 and recommended that Policy CC.14 should also be deleted and replaced by a regulatory policy. My comments on this are at paragraph 49.</p>

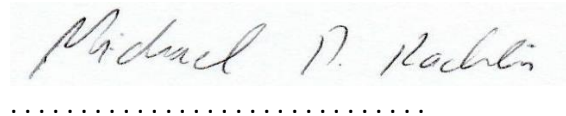
Submission	S42A report recommendation	Comments
<p><b>S30.099</b> Add any further definitions for any terms that are unclear and where a definition would assist in interpretation and implementation, including any relevant terms proposed to be introduced in response to submissions.</p>	<p>Accept in Part</p>	<p>I have recommended additional definitions for:</p> <p>Climate-resilient/resilience</p> <p>Stormwater Management Strategies</p> <p>Green Infrastructure</p>

**CONCLUSION**

- 92 PCC raised a number of concerns relating to the provisions proposed through Change 1 to the RPS, including in relation to those being considered in Hearing Stream 3 within the ‘Climate resilience and nature-based solutions’ topic.
- 93 Having read and considered the Section 42A Reports and associated evidence, I have recommended amendments Change 1 provisions included in this topic. I consider those amendments more appropriately respond to the concerns of PCC than the recommendations contained in the Section 42A Reports.

94 I consider that without these amendments, Change 1 may result in unacceptable costs for the territorial authorities that must give effect to the RPS through their district plans, including Porirua City Council.

**Date:** 14/08/2023



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