#### BEFORE THE INDEPENDENT HEARINGS PANELS APPOINTED TO HEAR AND MAKE RECOMMENDATIONS ON SUBMISSIONS AND FURTHER SUBMISSIONS ON PROPOSED CHANGE 1 TO THE REGIONAL POLICY STATEMENT FOR THE WELLINGTON REGION

UNDERSchedule 1 of the Resource Management<br/>Act 1991 (the Act)IN THE MATTER OFHearing Submissions and Further<br/>Submissions on Proposed Change 1 to the<br/>Regional Policy Statement for the<br/>Wellington Region

### RIGHT OF REPLY OF STUART FARRANT ON BEHALF OF WELLINGTON REGIONAL COUNCIL

**HEARING STREAM 5 - FRESHWATER** 

20 December 2023

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#### **RIGHT OF REPLY AUTHOR**

- 1 My full name is Stuart Farrant. I am an Ecological Engineer and the Water Sensitive Design lead for Morphum Environmental Ltd. My evidence of 30 October 2023 for Hearing Stream 5, at paragraphs 5-11, sets out my qualifications and experience.
- I have prepared this Reply in response to Minute 18 in respect of the matters raised during
  Hearing Stream 5 Freshwater and Te Mana o te Wai.
- 3 I confirm that I am continuing to abide by the Code of Conduct for Expert Witnesses set out in the Environment Court's Practice Note 2023, as applicable to this Independent Panel hearing.

#### SCOPE OF REPLY

- 4 This Reply follows Hearing Stream 5 held on 20<sup>th</sup> November 2023.
- 5 Minute 18 requested that the Section 42A report author and I submit a written Right of Reply as a formal response to matters raised during the hearing.
- 6 The Reply covers responses to several questions where the Panel has sought a response from me as a technical expert.

## RESPONSE TO MATTERS RAISED IN MINUTE [18] (COUNCIL'S REPLY AND REQUEST FOR INFORMATION SOUGHT FROM SUBMITTERS DURING THE HEARING)

7 Points below provide a response to the matters raised in Minute 18 with the same numbering used. I have only responded to matters relevant to my area of expertise and therefore not all numbering is sequential.

g. Can Ms Pascall, in conjunction with the Reporting Officer for HS3 (Climate Change) and any technical experts who presented evidence for Council, please review alignment and workability of the nature based solutions provisions with the HS5 provisions regarding hydrological control, hydraulic neutrality and water sensitive urban design. Do these provisions and definitions work as a cohesive, easy to understand and implement suite of provisions across the RPS? Please review the appropriateness of definitions when considering this issue. Are the directions to regional and district plans and for consent applications clear, consistent, workable and for an RMA purpose?

- 8 I have considered the definition of nature-based solutions as it relates to urban freshwater matters and the proposed hydrological controls in particular.
- 9 The definition of 'nature-based solutions' provides a broad description of actions or activities to either use or mimic natural process to respond to a range of development

related issues, including freshwater health and flood resilience. The global move towards a focus on nature-based solutions reflects the increasing understanding that we need our future communities to be better integrated with the natural processes that underpin the provision of ecosystem services across a wide range of human and ecological facets.

- 10 Provisions in Change 1 relating to hydrological control, water sensitive urban design and, to a lesser extent hydraulic neutrality, comprise a smaller subset of the broad suite of naturebased solutions with a specific focus on stormwater management to protect freshwater values and provide community resilience.
- 11 As an example, the proposed provisions for Hydrological Control are worded to directly reflect the intention to mimic the natural flow regime of urban streams as a means to protect downstream receiving environments and the indigenous biodiversity they support.
- 12 Whilst the proposed provisions of Change1 have intentionally focussed on the outcome sought (rather than methods to achieve this) there will be interrelated opportunities to then pursue further Nature Based Solutions (such as increased urban tree canopy) through specific implementation of water sensitive design strategies which seek wider co-benefits as part of strategies to meet proposed hydrologic Controls. I would consider that the proposed provisions in Change 1 are therefore very well aligned with the wider aspirations to adopt more nature based solutions.

#### Policy FW.X Hydrological control for urban development

u. What are the Officer's and Mr Farrant's views on Wellington Water's relief to not include the methodology in Policy FW.X, but just to include the outcome and require the regional plan to develop the methodology? Have your views on Policy FW.X and the appropriateness of the proposed hydrological control standards changed at all in light of the evidence Ms Lockyer presented during the hearing? Is it appropriate to require the regional plan to proscribe the methodology?

- I remain unsure what Wellington Waters relief seeks as I would consider that the proposed
  Hydrological Control provisions are intentionally and specifically focussed on the outcome
  sought rather than the methodology.
- 14 The outcome sought is to ensure that the discharge of stormwater from urban development aligns with a natural hydrological regime which will require volumetric controls with the methodology of how this is best achieved not specified on the anticipation that this would be developed as part of subsequent guidance. Conversely the inference that the RPS could adopt a more static retention depth metric (such as retention of 10mm rainfall depth) is an example of jumping to a method rather than outcome.

As discussed in my previous evidence and at the hearing this static metric is often unrealistic and limits the opportunity for developments to be more innovative and integrated in how they achieve the desired hydrological outcome sought. I have not changed my opinion having considered the evidence provided and presented by Ms Lockyer and support the proposed approach as the best way to support industry to achieve the intended outcomes to protect freshwater outcomes. I am of the opinion that the RPS should provide only the outcomes sought with the methodology of how this is achieved best captured in subsequent technical design guidelines.

# v. Can Mr Farrant and the Reporting Officer please consider the relief by PCC and others suggesting that this refer to the state of the land prior to the development in question rather than 'undeveloped state' – or do you still consider that this 'locks in' flows from impervious areas or other 'prior to development' aspects that will prevent effective hydrological control.

- 16 There were points raised by submitters related to both the preference for 'pre development' to be (a) based on a more detailed analysis of the vegetated landscape (such as mapping areas of grass, scrub and forest) in greenfield development or for it to be (b) based on the pre development condition of existing urban areas for infill development scenarios. In development of the recommended hydrological control provisions careful consideration was given to the balance between ease of application and the importance of providing meaningful freshwater protections. I will discuss the two scenarios separately here.
  - 16.1 In seeking hydrological controls to mitigate the adverse impacts of urban development, it is recognised that a pre European landcover would provide the greatest level of protection and opportunity for enhancement for freshwater systems. However, it was considered that this could be overly onerous given the change in practice necessitated by Hydrological Controls and the level of uncertainty of the hydrological impact of the different forest types which once existed across the Wellington region. It was therefore decided by the Council that adopting the 'pastoral state' as a proxy for pre-development landcover can support a more regionally consistent approach and avoid the need for complex landuse mapping and hydrological modelling to demonstrate compliance with the policy. It is also worth noting that future calibration of modelling inputs will be considerably easier against pastoral landcover (as has already been undertaken for Porirua's Northern Growth Area) and that the vast majority of greenfield development is undertaken on pastoral landcover due to existing

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landuse and increasing protection of regenerating native vegetation and Significant Natural Areas (SNAs). Whilst I would not be fundamentally opposed to Wellington Water's proposal to require more comprehensive pre development landuse analysis I would suggest it would add significant complexity for an expectation of only marginal benefit.

- 16.2 Where development involves the redevelopment of existing urban landcover (infill development) I consider that it is important to seek improvements in freshwater outcomes in accordance with the principles of Te Mana o te Wai and aspirations to enhance freshwater outcomes. Whilst it is recognised that some potential land development scenarios (such as large unoccupied structures on land with poor infiltration capacity) could be difficult to meet the full outcomes sought by the hydrological control requirements these must be regarded as the exception with a clear opportunity to use urban redevelopment as a point in time to seek lasting freshwater improvements. The guidance recommended by Ms Pascall around hydrological control could easily provide specificity of where full compliance could be considered to be not practical.
- 16.3 In summary, I would suggest that the application of hydrological control for redevelopment of existing urban areas should not be based on the existing urban landcover as this will either add significant complexity or lock in the poor freshwater outcomes we see now for another full development cycle.

#### w. There was some discussion at the hearing about a 'carve out' for the Wellington City Zone given the extent of impervious surfaces. Do you have any comments on this?

- 17 I consider that there is no basis to include a 'carve out' for the Wellington City Zone. The urban part of Wellington includes multiple urban waterways including Kumutoto, Waimapihi and Waitangi streams, which all include remnant open sections in headwaters.
- 18 These waterways (and others) are understood to hold significant cultural values and have supported Kāinga, māra and wairua since the times of Nga Tara and more recently Taranaki Whānui, Te Ātiawa and Ngāti Toa.
- 19 These streams also support ecological values with the currently piped reaches of these waterways still providing passage for indigenous species to move between the forested headwaters to the coast.

- 20 Aspirations to work towards the enhancement and ultimate daylighting of some or all of these waterways will be completely dependent on the existing poor condition (in terms of both water quality and quantity) being mitigated which can realistically only be achieved through proactive integrated stormwater management including hydrological control.
- 21 It is also noted that in most instances, due to high occupancy rates relative to site coverage, most inner-city redevelopment sites could very easily achieve the proposed hydrological control metrics with potential to support the ongoing enhancement of the mauri of these once vibrant urban waterways. Opportunities to pursue an integrated approach which adopts a more integrated response to mitigate council controlled roading infrastructure alongside private land development could be readily sought to support the principles of Te Mana o te Wai.

DATE:

RC

20 December 2023 Stuart Farrant Water Sensitive Design Lead – Morphum

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