

**Before the Hearings Panel  
At Wellington City Council**

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

**In the matter of** the Proposed Wellington City District Plan

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**Hearing Stream 5 (Three Waters) Reporting Officer Right of Reply of  
Maggie Cook on behalf on Wellington City Council  
Date: 28 August 2023**

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## INTRODUCTION

1. My name is Maggie Cook. I am employed as a Senior Planning Advisor at Wellington City Council (the Council).
2. I have prepared this Reply in respect of the matters in Hearing Stream 5 relating to the Three Waters chapter (THW).
3. I have listened to submitters in Hearing Stream 5, read their evidence and tabled statements, and referenced the written submissions and further submissions relevant to the Hearing Stream 5 topics.
4. My Three Waters Section 42A Report sets out my qualifications and experience as an expert in planning.
5. 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. I have not omitted to consider material facts known to me that might alter or detract from the opinions I express.
6. Any data, information, facts, and assumptions I have considered in forming my opinions are set out in the relevant part of my evidence to which it relates. Where I have set out opinions in my evidence, I have given reasons for those opinions.

## SCOPE OF REPLY

7. This Reply follows Hearing Stream 5 held from 1 August to 7 August 2023. **Minute 33: Directions Following Hearing Stream 5** released by the Panel on 14 August 2023 requested that the relevant Section 42A report authors submit a written Right of Reply as a formal response to matters raised during the course of that hearing stream. The Minute requires this response to be submitted by 28 August 2023.
8. This Reply, therefore, includes:
  - (i) Responses to specific matters and questions raised by the Panel in Minute 33.
  - (ii) Commentary on additional matters that I consider would be useful to further clarify or that were the subject of verbal requests from the Panel at the hearing.

**Responses to specific matters and questions raised in Minute 33:**

*Advice from legal counsel on the proposed policy approach for hydraulic neutrality (THW-O3, THW-P5 and subsequent rules) that will require developers to reduce the stormwater runoff from sites as if the sites were undeveloped – that is, under pasture. In particular, what authority is there for policies and rules that seek to retrospectively reduce the stormwater effects of existing development through requirements on new development?*

9. I refer the Panel to Mr. Whittington’s Hearing Stream 5 Right of Reply submission.

*If the Panel did not accept the proposed approach to hydraulic neutrality as recommended by the Council’s reporting officer (in terms of the meaning of ‘undeveloped site’), and concluded that the existing environment should be baseline for determining hydraulic neutrality, what changes to the PDP would be required?*

**I consider the functional changes required to the PDP would be as follows:**

10. Remove the definition of undeveloped state and add definition of pre-developed state:  
  
“The state of the site prior to the current development”
11. Amend Three Waters chapter to replace references to undeveloped state with pre-developed state in relation to Hydraulic Neutrality. As a consequence, Wellington Water Limited would need to change the modelling approach for implementation. The justification of this approach was described in paragraphs 19-27 of Ms Nitsche’s evidence.
12. Redraft Objective THW-O3 wording to reflect the requirement to meet a lessor outcome.
13. Changing the approach to assessing flows based on the pre-development rather than undeveloped state would also require an assessment of whether the District Plan is giving effect to the NPS-FM 2020, particularly the fundamental concept Te Mana o Te Wai and s3.5(4) requirements to promote positive effects of urban development on health and well-being of water bodies, freshwater ecosystems, and receiving environments and the Regional Policy Statement (RPS), particularly the policy direction indicated in Plan Change 1, as required by 75(3)(c).

**If the panel is of the mind to change the proposed approach, I suggest further work be**

**appropriate for the Three Waters chapter and the Proposed District Plan:**

14. Further investigation and consideration would be required to determine whether it would then be necessary to amend the rule framework to limit development dependant on local stormwater network capacity to ensure there is no increase density in areas that are underserved and at a greater risk of flooding. Further investigation would also be required into whether limiting development based on local stormwater infrastructure is also applicable to 1-3 residential units as enabled by the MDRS.

**Qualifying Matter**

15. Stormwater infrastructure constraints would need to be assessed against section 77I of the RMA to determine if three water infrastructure capacity limitations would meet the test to be a qualifying matter under the Medium Density Residential Standards. This has the potential to impact the District Plan’s ability to give effect to the NPS-UD 2020 as development capacity would need to be re-assessed taking into consideration Wellington’s infrastructure capacity constraints.

**Rationale to PDP proposed approach**

16. To remind the panel of the background behind the proposed approach, I note that to balance the requirements set out by the NPS-FM 2020 and NPS-UD 2020 with our existing infrastructure pressure, WCC decided not to not consider stormwater infrastructure capacity in the rule framework or as a qualifying matter. Therefore, it was determined that the most practicable method to address the need to mitigate the adverse effects of development on three waters infrastructure and the receiving environment, and enable development was to require on-site stormwater solutions to capture stormwater runoff determined by modelling peak flow and volumes to an undeveloped state. I direct the Panel to the s32 report for Three Waters<sup>1</sup>,

*“The provisions in the Three Waters chapter seek to ensure that new development is serviced by appropriate three waters infrastructure and that a suitable level of service within the three waters network is maintained. To achieve this, the use of on-site mitigation measures, such as stormwater detention tanks or other measures to manage stormwater flows and volumes, and wastewater detention tanks may be required in some situations. This is to ensure that in the short to medium term the level of service provided by the three waters network does not*

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<sup>1</sup> S32 report Three Waters, page 7.

*degrade further. In the longer term as new upgrades to the three waters network occurs, the level of service will improve, helping to reduce the number of discharges of wastewater into the local environment and reducing the peak discharge rates of stormwater from urban sites.”*

17. Without appropriate design and mitigation, development in the city can have an adverse effect on neighbours and downstream users including by increasing the flood risk to people and property. If stormwater runoff from new development can be discharged at pre-development flow rates without any additional detention measures, with the existing infrastructure constraints<sup>2</sup>, continued aging of the infrastructure and increased frequency and intensity of storm events, there will still be greater adverse effects on Wellington’s stormwater network<sup>3</sup>.

#### **Equity and infrastructure cost**

18. As per s106 of the Local Government Act, Development contributions (DCs) cannot be used to fund the vast bulk of these costs. The Local Government Act, which enables DCs, requires DCs to be charged commensurate with the infrastructure needed from new development. It is a requirement to demonstrate that those who pay DCs contribute to the additional impacts on the network by determining who benefits from the proposed infrastructure improvements. DCs cannot legally be used to push the full cost of an improved system onto new development when most of the benefit will accrue to existing properties.
19. If development was limited based on network capacity, considerable public investment would be required to enable development as required under the NPS-UD 2020. Wellington Water’s assessment of water supply, wastewater and stormwater services as they relate to predicted urban growth in Wellington City, concluded the cost to expand and upgrade the infrastructure is as follows<sup>4</sup>:

- Cost Band A, B, C and D \$10M - \$100M, applicable to seven suburbs: Crofton Downs, Lyall Bay, Ngaio, Aro Valley, Mount Victoria, Berhampore, and Brooklyn.
- Cost Band E \$100M - \$200M, applicable to 10 suburbs: Kelburn, Khandallah, Kilbirnie, Miramar, Mount Cook, Newlands, Newtown,

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<sup>2</sup> The Mayoral Taskforce on the Three Waters Report, page 17.

<sup>3</sup> <https://wellington.govt.nz/-/media/your-council/plans-policies-and-bylaws/plans-and-policies/a-to-z/spatial-plan/three-waters-assessment---growth-catchments-mahi-table-and-cost-estimates-march-2021.pdf>

<sup>4</sup> <https://wellington.govt.nz/-/media/your-council/plans-policies-and-bylaws/plans-and-policies/a-to-z/spatial-plan/three-waters-assessment---growth-catchments-mahi-table-and-cost-estimates-march-2021.pdf>

Pipitea, Thorndon, and Wellington Central

- Cost Band F \$200M - \$550M, applicable to five suburbs: Island Bay, Johnsonville, Karori, Tawa, and Te Aro.
- Wellington Water concluded that the comparatively high costs associated with Cost B and F suburbs were due to the challenges in:
  - Karori, which would require a new or extensive upgrades to the wastewater treatment plant;
  - Island Bay and Johnsonville, which would each require extensive flood protection; and
  - Tawa and Te Aro, which need multiple infrastructure upgrades for each of the three waters.

20. While these costs are irrespective of the district plan provisions, I note to the panel that instead of the traditional approach to infrastructure investment where the infrastructure investment is staged and costs are spread over a longer period of time to have greater intergenerational equity, to enable short to medium development capacity, significant investment in upgrades would be immediately required. The scale of investment required would lead to large increases in rates charges even as costs of living increase sharply, if a general rates increase were to be used to fund the stormwater improvements required to meet existing demand. This also has the impact of requiring residents who live in areas that do not have major impacts on the network to help fund areas that do.
21. An alternative that still uses a general or targeted rates approach is that parts of the city are divided into areas with small and large impacts on the network, with differentiated rates across these areas. One consequence of this approach would likely be those areas like the city centre, where development is already dense, would be required to pay significantly more. Whether a general rate or a more targeted rate is used, there will be an immediate cashflow impact on property owners, whether they intend to redevelop or not.
22. I also direct the panel to paragraphs 17-20 of Dr. Norman's supplementary evidence which outlined that requiring the full stormwater impact of a site (relative to its undeveloped state) to be included at the point of redevelopment has the benefit of only being triggered when redevelopment occurs. If this policy is clearly signalled to

the market, developers will take this impact (and cost) into account in determining the residual value they can pay for land. In this way, land values moderate to account for the true costs of infrastructure to adequately service that land, rather than being a cashflow cost upfront on all land regardless of intent to redevelop.

**Response to other matters raised at the hearing:**

23. I have considered questions from Mr. Schofield in relation to the justification for the recommended amendments made to THW-O3 in my rebuttal supplementary evidence. Having assessed the evidence from Ms. Williams, I recommend an amendment to the wording of the objective to align the objective with the intent of the chapter and the rest of the policy framework as follows. I note that this amendment is made on the basis that the hydraulic neutrality definition and objective/policy wording remain unchanged, i.e. referring to an undeveloped state.

**THW-O3 Hydraulic Neutrality**

The offsite stormwater peak flows and volumes as a result of subdivision, use and development in urban areas are reduced **as far as practicable** to be at or below peak flows and volumes of each site in an undeveloped state.

24. In relation to Mr. Daysh's question about the difference between the Proposed (PDP) and Draft District Plan's (DDP) versions of the Three Waters chapter, in relation to Hydraulic Neutrality, I note that there was a Hydraulic Neutrality provision framework in the DDP<sup>5</sup> though the term undeveloped state was not used, and the framework only related to large scale and non-residential development.
25. The other matters raised at the hearing that I wish to respond to relate to Mr. Stewart and Mr. Lewandowski's presentation on behalf of Stratum Management. Mr. Stewart noted that the definition of undeveloped state would be unworkable for smaller sites within the City Centre Zone as it would make the development cost prohibitive.
26. While I understand the requirement for on-site stormwater management will increase development costs, I direct the panel to Dr. Norman's supplementary evidence for further assessment of the costs to implement Hydraulic Neutrality. But I note that similar to any permitted rule framework, it will not be feasible for all

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<sup>5</sup> [WCC Draft District Plan](#), Page 80 – 82.

developments to meet the permitted activity rule, and the consenting pathway intentionally takes into consideration site constraints. Applications made under this rule would also be precluded from public and limited notification in order to provide some certainty to developers.

**Date:** 28 August 2023