Before the Hearings Panel
At Greater Wellington Regional Council

Under The Resource Management Act 1991

In the matter of Proposed Change 1 to the Natural Resources Plan for the Wellington Region.

Hearing Topic Hearing Stream Two: Objectives and Ecosystem health policies.

Statement of evidence of Gerry O'Neill on behalf of Wellington City Council

Date: 14 March 2024

INTRODUCTION

1. My full name is Gerard James O'Neill. I am employed as the Principal Advisor of Waste, Water and Resilience in the Infrastructure Group at Wellington City Council (WCC).

2. I hold the qualifications of a Bachelor of Science in Chemistry (1988 University of Stirling), and a Diploma in Civil Engineering (2010, Otago Polytechnic).

3. I have 15 years of civil engineering experience in New Zealand including managing teams responsible for water operations and delivery of capital projects, including wastewater treatment plants, water treatment plants, reservoir construction, network renewals and asset management.

4. I have 14 years local government experience working for Waitaki District Council, Horowhenua District Council and Wellington City Council. I have 2 years' experience working at Wellington Water, and 3 years' experience working as a Senior Advisor for the Ministry for the Environment.

5. I have prepared this statement of evidence on behalf of WCC to provide corporate evidence on matters relevant to WCC's submission to Greater Wellington Regional Council's (GWRC) Proposed Change 1 (PC1) to the Natural Resources Plan for the Wellington Region (NRP).

6. I would like to acknowledge the economic evidence Mr. Walker has prepared on behalf of GWRC, which my evidence largely addresses. I consider the economic evidence prepared by Mr. Walker to be reasonable and provides an approximate estimate of costs (within limitations) to enable discussion. My evidence provides WCC's engineering perspective on the affordability and achievability of the outcomes required by Proposed Plan Change 1 to the Natural Resources Plan for the Wellington Region.

7. In preparing my evidence, I have reviewed:
    - 7.1 WCC's Submission on Proposed Change 1 to the Natural Resources Plan, dated 7 December 2023.
    - 7.2 GWRC's Technical Evidence (Economics), dated 28 February 2025.

EXPERT WITNESS CODE OF CONDUCT

8. While this is a local authority hearing, I have read the Code of Conduct for Expert Witnesses set out in the Environment Court's Practice Note 2023.

I have complied with the Code of Conduct in preparing my evidence and will continue to comply with it while giving oral evidence before the Hearings Panel. My qualifications as an expert are set out above. 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.

SCOPE OF EVIDENCE

9. My statement of evidence addresses the following matters:
    9.1 The affordability of meeting the proposed 2040 timeframe for achieving the proposed targets.
    9.2 The practicalities of delivering the proposed targets within the proposed 2040 timeframe.

10. My evidence is limited to the general affordability and practical difficulties of delivering the infrastructure likely required to meet the proposed targets, such as removing constructed overflows, increasing pipe sizes, completing pump station upgrades and installing rain gardens. An analysis of what upgrades will be required and where they will be required to comply with the proposed targets has not been completed at this time. My evidence does not contain an analysis on the relative costs of delivering PC1 for proposed freshwater TAS for E. coli and dissolved zinc and copper, nor for E. coli for comparing to the minimum requirement improvement (MRI) to meet the National Policy Statement for Freshwater Management 2020. Mr. Walker has already undertaken a comparative analysis of these matters.

11. I have not omitted to consider any material fact known to me that might alter or detract from any opinion I have expressed.

BACKGROUND

12. I draw your attention to WCC's submission to GWRC on PC1 dated 7 December 2023. WCC's submission is that improvements will be challenging to achieve, requiring significant investment and over a long period of time. This is at a time when many Territorial Authorities in the region, including WCC, have well-publicised funding constraints that limit our opportunity to make swift changes.

13. I acknowledge the conclusion in GWRC's Technical Evidence (Economics) that the 2040 timeframe is both unaffordable and unachievable. Nevertheless, I would like to provide some additional context on behalf of WCC to support the conclusion that this timeframe is both unaffordable and unachievable.

14. Collectively, WCC's Three Waters network (drinking water, wastewater and stormwater) includes 2,653 km of pipes, 65 reservoirs, 103 pump stations, and three treatment plants.

15. Wellington's networks were historically designed to allow wastewater to overtop into the stormwater network, during periods of high flow, using constructed overflows. The purpose of these constructed overflows was to mitigate the public health risk of discharging sewage directly onto Wellington's streets. These constructed overflows were designed as an integral part of the wastewater, and stormwater networks, and will be difficult and expensive to remove.

AFFORDABILITY

16. WCC committed $1.8 billion for water infrastructure in the Long-Term Plan 2024-34. This expenditure was derived following a period of consultation and was limited by the community's ability to pay. The $1.8 billion budget is insufficient to address WCC's water issues. At the time Wellington Water advised it needed $30 billion to fix the region's pipes. It is noted that due to other pressing infrastructure issues, Wellington Water is only planning on replacing 1km of pipe this financial year. When the water reforms are implemented, it is anticipated water rates will need to increase further to address issues resulting from historic underfunding. The community's ability to pay will be further strained.

17. Greater Wellington Regional Council's Technical Evidence (Economics) uses the *Funding Local Government: Report of the Local Government Rates*, 2007 (the Shand report) when assessing the affordability of the Proposed Change 1 to the Natural Resources Plan. I question the suitability of the Shand report to assess affordability. The 18-year-old Shand report's assessment that affordability problems arise where rates exceed 5% of gross household income was conducted in different economic circumstances when house prices were lower, and before the cost-of-living crisis.

18. Greater Wellington Regional Council's Technical Evidence (Economics) assessment is limited to the affordability of rates and excludes other costs to

the community. However, these costs still need to be paid, and an assessment of affordability on the community should encompass the complete costs of the proposals. These include costs to NZTA, Wellington Airport, costs to private homeowners to comply with regulations, development, debt servicing and maintenance costs (covered in more detail later).

19. As the limited three waters capital budget is consumed by a growing number of unplanned reactive renewals, less budget is available for planned improvements to the network and associated infrastructure. While the exact condition of the network is unknown, Wellington's three waters infrastructure is old and deteriorating. (Wellington Water has assessed the condition of some of its assets, however, the confidence rating of these assessments is varied). It is known that planned renewal works are regularly deferred to pay for reactive renewals, and the incidence of these reactive renewals is increasing.

20. The maintenance costs of the new infrastructure are likely significant, and the impact of this on affordability has not been assessed by GWRC. Unless sufficient budget is provided for maintenance, such as for flushing pipes, clearing blockages and attending rain gardens, the infrastructure becomes ineffective. It is difficult to determine maintenance costs based on the information provided.

21. To provide some assessment of maintenance costs I used a very rough guide. I have assumed maintenance costs of 50% based on WCC's Long Term Plan, where approximately for every $100 of water Capex, WCC provides $50 of Opex. Using this ratio, a wastewater and stormwater Capex requirement of $5.4 billion would require $2.7 billion in Opex costs (a total of $8.1 billion). Should the Capex requirements be as high as $10 billion, then a total of $15 billion would be required. Due to the methodology used to determine these maintenance costs, there is a high degree of uncertainty, and actual costs could be considerably higher or lower.

22. The infrastructure required to achieve the targets is difficult to quantify at a high level, to provide an accurate estimate of costs. Preventing wastewater overtopping into a stormwater pipe during periods of exceptional high flow would require a larger wastewater pipe; however, this may require the downstream wastewater pipe to also be replaced with a larger pipe, and the pipe downstream of this. These costs would need to be assessed on a case-by-case basis, and the costs required to remove a single constructed overflow could be significant.

23. In addition, it is unclear whether lower, less stringent requirements would reduce these costs in the short term. It is entirely possible that the costs required to replace an asset to meet the less stringent proposed targets are no different to the costs required to meet more stringent targets. It cannot be assumed that reducing the stringency of the targets will result in the costs reducing to the same proportion. Providing for a longer time frame to 2060 is better suited to managing the affordability and achievability problem.

PRACTICALITIES

24. I consider it will be difficult for WCC to meet the targets by 2060. It will not be possible to meet them by 2040, for the reasons outlined below.

25. With the Government's Local Water Done Well reforms, I anticipate there will be an increased demand on contractors and consultants across New Zealand. There will therefore be limited resources available to deliver the infrastructure upgrades required to meet the proposed targets within the 2040 timeframes.

26. Contractors and consultants require time to increase their capability for an increased workload, including to source funding, purchase equipment, recruit and train staff, etc.

27. Wellington business owners and the public already consider the level of construction around Wellington to be unacceptable, and there is limited public appetite for increased works in the Wellington CBD. The proposed targets will necessitate increased construction within Wellington City, which will frustrate locals and business owners. A detailed analysis of what upgrades will be required and where they will be required to comply with the proposed targets has not been completed at this time. However, WCC has received ample feedback from the public and Wellington business owners regarding the impacts current construction is already having on their lives and livelihoods.

28. In my opinion, the proposed 2040 timeframe is unachievable, as the network is deteriorating faster than it can be fixed. Wellington Water's Chief Executive, Pat Dougherty, presented to GWRC in November 2024, saying the growing backlog meant even if all councils opened their chequebooks today, it would be 11 years until the region's pipes would be back to the state they currently are. In practical terms, even without any financial constraints, it will

require 11 years to achieve the current network condition, leaving only 4 years for the improvements required prior to 2040. With the existing financial constraints, I believe it is impossible.

29. It is worth noting that due to the network condition, much of WCC's budget is required for reactive renewals. Constraints around the reactive nature of these renewals, and the requirement for imminent solutions do not provide an opportunity to consider, develop and plan for improvements to the wider network, such as increased pipe size, or extending the scope of work.

CONCLUSION

30. A detailed analysis of what upgrades will be required and where they will be required to comply with the proposed targets has not been completed at this time. However, based on the information available, I conclude the proposed timeframe of 2040 to meet the lower MSI target is unaffordable, and unachievable. This is in agreement with the conclusion in GWRC's Technical Evidence (Economics) that the 2040 timeframe is both unaffordable and unachievable.

31. Over the next 35 years, Wellington will be renewing its water infrastructure. These renewals will provide opportunities to include network improvements such as the proposed targets in the planned works. It would be preferable for planned renewals to be prioritised based on risk, (including the criticality of assets, the condition of the asset and the consequence of failure) and for network improvements to be included as part of these works, rather than as standalone construction works. A longer time frame of 2060 would be better suited to this type of planned approach.

Date: 14/03/2025

Gerry O'Neill

Gerry O'Neill
Principal Advisor of Waste, Water and Resilience
Wellington City Council