BEFORE THE INDEPENDENT HEARINGS PANELS APPOINTED TO HEAR AND MAKE RECOMMENDATIONS ON SUBMISSIONS AND FURTHER SUBMISSIONS ON PLAN CHANGE 1 TO THE NATURAL RESOURCES PLAN

 UNDER
 Schedule 1 of the Resource Management Act 1991 (the Act)

 IN THE MATTER OF
 Hearing
 Submissions
 and
 Further Submissions on Plan Change 1 to the Natural Resource Plan

STATEMENT OF REBUTTAL EVIDENCE OF MARY O'CALLAHAN ON BEHALF OF WELLINGTON REGIONAL COUNCIL HEARING STREAM 2 – OBJECTIVES AND ECOSYSTEM HEALTH AND WATER QUALITY POLICIES 28 MARCH 2025

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INTRODUCTION

- 1 My full name is Mary Elizabeth O'Callahan. I am a planning consultant employed by GHD Ltd.
- 2 I have reviewed the planning evidence and submitter statements of:
 - 2.1 Transpower New Zealand Limited Letter from Rebecca Eng [Submitter 177]
 - 2.2 Horokiwi Quarries Limited Letter from Pauline Whitney [Submitter 2]
 - 2.3 Wellington Branch of New Zealand Farm Forestry Association Supplementary evidence from Eric Cairns [Submitter 26]
 - 2.4 China Forestry Group submission from Hamish McGregor [Submitter 288]
 - 2.5 Wellington International Airport Limited Statement of evidence from Kirsty O'Sullivan [Submitter 101]
 - 2.6 Friends of Waiwhetu Stream Letter from Michael Ellis [Submitter 284]
 - 2.7 Guildford Timber Company Limited, Silverstream Forest Limited and The
 Goodwin Estate Trust Planning Statement from Chris Hansen [Submitter 210]
 - 2.8 Winstone Aggregates Statement of planning evidence from Charles Horrell [Submitter 206]
 - 2.9 Rosco Ice Cream Ltd Letter from David Gibson [Submitter 220]
 - 2.10 Letter from Pat van Berkel [Submitter 282]
 - 2.11 Forest & Bird Statement of evidence from Samantha Grace Dowse [Submitter 261]
 - 2.12 Upper Hutt City Council Statement of evidence from Gabriela Nes [Submitter 225]
 - 2.13 Wellington City Council Statement of evidence from Joe Jeffries [Submitter33]
 - 2.14 NZ Transport Agency Waka Kotahi Statement of evidence from Catherine Lynda Heppelthwaite [Submitter 275]
 - 2.15 Te Rūnanga o Toa Rangatira Statement from Aimee Rei-Bishop [Submitter216]

- 2.16 Porirua City Council Statement of evidence from Vanessa Alison Rodgers [Submitter 240]
- 2.17 Wairarapa Federated Farmers Statement of evidence from Peter Matich [Submitter 193]
- 2.18 Wellington Water Limited Statement of evidence from Paula Margaret Hunter [Submitter 151]
- 2.19 Meridian Energy Limited Statement of evidence from Christine Anne Foster [Further Submitter 47]
- 2.20 Hutt City Council Statement of evidence from Torrey James McDonnell [Submitter 211]
- 3 I have provided responses to the above statements, other than where issues are already addressed in my section 42A reports, where the author agrees with my recommendations, or where the issue is intended to be dealt with in a future hearing stream.

QUALIFICATIONS, EXPERIENCE AND CODE OF CONDUCT

4 My qualifications and experience are set out in paragraphs 15 – 19 of my Section 42A Report dated 28 February 2025. I repeat the confirmation given in that report that I have read and agree to comply with the Code of Conduct for Expert Witnesses.

RESPONSES TO SUBMITTER EVIDENCE AND STATEMENTS

- 5 This section responds to submitter evidence and further statements filed in relation to the issues and submissions allocated to both the Objectives and Ecosystem Health and Water Quality policies topics.
- 6 Appendix 1 sets out all the amendments sought by submitters through their evidence/statements. Appendix 2 sets out my recommended amendments in response to submitter evidence/statements. Within Appendix 2, my Section 42A report recommended amendments are shown in <u>red underlined</u> or <u>strikethrough</u> and further amendments recommended in this rebuttal evidence are shown in <u>blue underline</u> or <u>strikethrough</u>.
- 7 I note that several of the submitter statements and planning evidence filed for this hearing are supportive of specific amendments to PC1 which I outlined in my section 42A reports. I

have not responded to these in my rebuttal statement. The tables below set out my responses to remaining planning issues that I have identified within the submitter evidence.

Row number	Summary of evidence from Transpower (Rebecca Eng)	Response
1.	Chapter 13: Maps – Map 77 - Attachment A, page 6. Relief sought in submission: Amend GIS mapping of riverine environments described in Map 77 to accurately reflect the habitat extents covered by Schedule F1. Letter of support stated that Transpower appreciates the officer exploring the matter. It is noted that Schedule F1 and map layer 77 are operative. The issue from Transpower's perspective is that PC1 introduces new rules and policies for these areas. As such the correct identification is relevant and of importance.	As an update to my initial response to this point at paragraph 356 of my Objectives section 42A report, I confirm that advice from Council officers has informed my full response on this matter below. Map 77 sets out the riverine environments that are habitats of nationally threatened freshwater species. These habitats are listed in Schedules A2, Schedule F1 and F2 of the NRP. There are no rules within PC1 that reference Map 77, but there are rules that refer to Schedule F1. I note that Schedule F1 is also referred to in the rules of the operative NRP. Schedule F1 (which is also the base layer for Map 77) is based on the REC 2.4 river layer and is not spatially accurate to the land parcel level and so pragmatism is used when applying these rules. I am advised that this is well understood and has been implemented like this since the notification of the proposed NRP. This is also reflected in disclaimers on the PDF map and the GIS viewer. As there is no available mapping of rivers to individual parcel level within which the Schedule F1 values (e.g. fish) are located, there is no ability to reconcile the map accuracy in the way sought by Transpower. Accordingly, as I understand it, if the river is not physically located on the land in question (in this case, the location of the Päuatahanui substation), then Schedule F1 will not apply. That is, plan users should assume the online GIS maps are indicative of the location of Schedule F1 values. Accordingly, I am unable to recommend changes to Map 77 in response to the Transpower submission, as the desired level of detail is not available on a catchment wide basis.

Row number	Summary of evidence from Winstone Aggregates (Charles Horrell)	Response
1.	Winstone raised concern over the level of improvement required in the timeframe (2040) with some attributes required to improve by two or more states (e.g., periphyton and <i>E.coli</i>), which would appear to require significant land use change. Associated with this, Winstone raised concern that there has been a lack of cost / benefit analysis undertaken to understand the impact of those targets and timeframes. Paragraph 6.1. How the methods (policies and rules) proposed through PC1 are intended to achieve those TAS and the costs of those methods on the sector and the critical supply of aggregate to infrastructure and housing development. Most notably, it is unclear whether quarrying activities will be captured in the rule framework and whether they fall within the rules relating to greenfield development or not. Evidence notes this issue does not appear to have been addressed for this hearing. Winstone reserves its position on the TAS until after rule application is clarified. Paragraph 6.2	I note this issue is primarily about the methods (i.e. rules) to achieve the TAS and whether they will apply to the submitter. This matter is not covered by Hearing Stream 2. I note that the Belmont Quarry is located within the Te Awa Kairangi urban streams part-freshwater management unit (part-FMU). Accordingly, the target attribute states (TAS) in Table 8.4 for that part-FMU are applicable to this activity. The submitter will be more familiar than I am on the contaminants and effects associated with quarrying activities to understand which TAS are relevant to its activities. PC1 hasn't specifically accommodated quarry activities in the rules – I expect this will need to be addressed through the Earthworks and Stormwater section 42A reports in response to quarry related submissions. That aside, in terms of the impact of the objectives on this activity, my understanding is, where there is a required improvement indicated by the TAS in Table 8.4, then the quarry operator should anticipate a need to contribute a commensurate reduction to that required overall at the part-FMU level upon application of the objectives to consent applications under section 104 of the RMA, if its discharges are a contributor to that TAS not being met.
2.	The Section 42A report has replaced the reference to 'freshwater bodies' in WH.O1 with relevant defined terms for the intended waterbodies from the RMA and the NRP: i.e., rivers, lakes, natural wetlands and groundwater. While he supports those changes which further clarify the direction under this objective, particularly in ensuring that artificial waterbodies are not unintentionally captured, he questions whether it would be more efficient and effective to use the broader term of 'surface water body' as defined in the NRP. Paragraph 7.3.	I consider the terminology used in my recommended objective amendments is suitable to the situation and consistent with other waterbody references within the PC1 objectives. I note the definition of 'river' in the RMA excludes artificial watercourses also. Furthermore, the note I recommended in my section 42A report be included with the long-term vision objectives means that this objective is not intended to 'capture', i.e. be applied to consents, in any case.

Row number	Summary of evidence from Winstone Aggregates (Charles Horrell)	Response
3.	The section 42A recommended changes to Objective WH.O6 are supported. Winstone's queries the meaning of aquifer consolidation	While supporting my recommendations for WH.O6, Mr Horrell has queried a statement I made in my report on what aquifer consolidation means, as below:
	but does not ask for any changes. Paragraphs 7.4-7.7	"aquifer consolidation can be caused by over extraction. Such effects include land subsidence, contamination between aquifer layers and reduced ability for aquifers to recharge from rivers"
		Mr Horrell notes aquifer consolidation is a technical term which may be understood by experts, but in a policy sense he considers it remains subjective and could result in interpretation issues. He considers my explanation is wider than his understanding that "the extraction of groundwater leads to the compaction of the aquifer material, thereby lowering the water table" ² .
		I have checked with a Council groundwater scientist and as a result, I concur with Mr Horrell that lowering of groundwater is a consequence of aquifer consolidation. In the context of the Hutt Valley, the lowering of the water table and potential changes to the confining layer (the Petone marine beds) is the key risk. Accordingly, my statement above was unclear in that it omitted this effect. Lowering of the water table would impact available water supply and increase the risk for contamination. The effects I listed in the quoted section above can also arise from aquifer consolidation. I consider the objective drafting remains suitable, despite the omission in my section 42A report assessment.
4.	WH.O9 and P.O6 - Winstone sought changes to WH.O9 and P.O6 to remove clause (c) which, as notified, set unrealistic requirements and would not account for seasonal shifts in water quality and ecological condition. While noting my changes to (c) assist in resolving Winstone's concerns (particularly as it relates to progressive improvement), he considers that there remains uncertainty as to how	I agree with Mr Horrell's revisions to clause (c) of these objectives as they make the intended approach clearer and avoid the risk of literal interpretation from a single monitoring record or natural variation.

¹ From my section 42A report ² From Mr Horrell's statement of evidence

Row number	Summary of evidence from Winstone Aggregates (Charles Horrell)	Response
	clause (c) will be implemented as drafted and could result in perverse	The amended wording is included in Appendix 2 to this evidence for both WH.O9 and
	outcomes. Paragraphs 7.8 -7.11. He suggests the change in blue at	P.O6, noting I have also inserted 'at the better state' into P.O6 to match the wording in
	Paragraph 7.12:	WH.O9. This is necessary for clarity.
	(c) where any attribute in any river or river reach is in a better state	
	than the target attribute state based on long term monitoring data,	
	that attribute is at least maintained at the better state in every river	
	or river reach , and	

Table 3 Response to evidence from Guildford Timber Company Limited, Silverstream Forest Limited and Goodwin Estate Trust (Chris Hansen)

Row number	Summary of evidence from Guildford Timber Company Limited, Silverstream Forest Limited and Goodwin Estate Trust (Chris Hansen)	Response
1.	Refers to section 42A report on Objective O18 submission where it says it is unclear whether the submitters support the retention of the objective or retention of the icon and therefore makes no recommendation. Mr Hansen suggests it is clear the submitters supported the objective and there is no reference to the icon. Paragraphs 8 and 9. A similar comment is made regarding Objective O19 at paragraph 12/13. WH.O9 and P.O6 - Paragraphs 33-36. Supports section 42A change to delete 'at least' from one of clauses (b) and (c) of these objectives where this occurs. The evidence notes that the submitter does not wish to pursue matter, where I had not adopted this request.	Mr Hansen is referring to page 96 of my section 42A report for the Objectives topic (Issue 15). On the basis that Mr Hansen considers the relief sought has been supported by me, I have amended the recommended decision for these submission points in the spreadsheet that formed Appendix 5 to the section 42A (which records the recommended decisions on submissions). I have not reproduced this appendix at this stage, but am able to, if required by the Panels. I note that while the submitter is no longer seeking deleting 'at least' from both clauses (b) and (c) of WH.O9 and P.O6, I consider it should in fact be removed from both, for consistency. The words 'at least' are redundant and potentially could lead to interpretation issues, particularly if it is included in one but not the other similar sub- clauses of these objectives. The key test where TAS do not require improvements, is they are maintained. While further improvement maybe beneficial environmentally, it is not a requirement of the NPS-FM nor do I consider it is reasonable to include policy wording that may be interpreted as requiring more improvement beyond meeting

	TAS. Accordingly, I have recommended deleting 'at least' from clause (b) in each of
	WH.O9 and P.O6, similar to my earlier recommendation for clause (c) of these
	objectives.

Table 4 Response to evidence from Wellington Branch of NZ Farm Forestry Association (Eric Cairns)

Row number	Summary of evidence from Wellington Branch of NZ Farm Forestry Association (Eric Cairns)	Response
1.	Support removal of reference to 'more natural state' in WH.O2 and P.O2 and change to TAS in WH.O9 for visual clarity (suspended fine sediment) in Mangaroa River for the Te Awa Kairangi rural streams and rural mainstems part FMU. The lack of evidence that forestry is degrading waterways supports contention that there is insufficient stringency of argument to warrant overriding a National Environmental Standard.	There are no specific planning issues to respond to in this material relevant to the objectives or ecosystem health policies topics being considered in Hearing Stream 2. In relation to the 'evidence' to support regulation of forestry in PC1, I note the National Environmental Standards for Commercial Forestry (NES-CF) allows regional plans to be more stringent than the NES-CF in certain circumstances. Namely, Regulation 6 of the NES-CF includes provision for regional councils to make rules for forestry activities in regional plans more stringent than the NES-CF if the rule gives effect to an objective developed to give effect to the NPS-FM or policies 11, 13, 15 and 22 of the NZCPS; and/or to protect significant habitats of indigenous flora or fauna in section 6(c) RMA. These issues will be addressed in Hearing Stream 3.

Table 5 Response to evidence from Pat van Berkel

Row number	Summary of evidence from Pat van Berkel	Response
1.	Considers section 42A misunderstood submission. It was interpreted as a monitoring requirement but in fact it is a future project planning requirement. Submitter recommends that a staged plan through to	I agree with the submitter that at paragraph 106 of my section 42A objectives report, I misunderstood the submitters' request. I have subsequently considered the request for an 'implementation plan' for how to get to 'wai ora' by 2100. I have reviewed the decisions version of RPS Change 1, given the RPS contains a similar objective for wai

Row number	Summary of evidence from Pat van Berkel	Response
number	2100 be published, in the form of a timeline, that clearly shows the future steps to achieving wai ora, healthy waters. Paragraph 1.	 ora by 2100. The methods for the RPS Change 1 freshwater objectives and policies do not set out a plan or methods for getting to wai ora. However, it does recognise the role of Action Plans in regional plans at Policy 12, which specifically references achieving the relevant long-term visions for freshwater in the RPS. Method FW.1 of RPS Change 1 is a method that requires Freshwater Action Plans, but the scope of this method is limited to achieving TAS (i.e., the period to 2040) rather than long term wai ora. Likewise, the methods in PC1 do not clearly relate to the wai ora outcome by 2100, as they also focus on the 2040 period. Albeit Method M36 refers to the defined term 'environmental outcomes', which includes the outcomes contained within the PC1 wai ora objectives at WH.01 and P.01. Schedule 27 (Freshwater action plan requirements) also refers to environmental outcomes, but only in the context of relevant TAS (i.e. the shorter time period). Accordingly, I consider there is an implementation gap for the long-term vision of wai ora across both the RPS Change 1 and PC1. So, on this basis, I recommend additional content be added to the methods section of PC1 to respond to this gap and Mr van Berkel's submission. While Mr van Berkel requests the future wai ora timeline be published now, I recommend the wai ora freshwater action plan(s) and timeframe be developed only following development and implementation of the more immediate freshwater action plan requirements, towards the end of the period to 2040. This is on the basis that there is a significant volume of non-regulatory plans and actions to be undertaken to meet the 2040 requirements, so my view is that should be the focus for Council, mana whenua and community resourcing in the initial period. Thus, a better
		more informed plan is likely to be possible, once progress towards the 2040 imperatives is underway. Wording for this new method M36A is included in Appendix 2 to this statement and I have recommended the long-term implementation plan be in place by 2036.

Row number	Summary of evidence from Pat van Berkel	Response
2.	Maps searchable in pdf – paragraph 131 of section 42A says it is addressed in paragraph 137. It is not. Paragraph 4.	I have communicated this concern with relevant Council GIS officers, who have committed to making the necessary changes to provide for searchable text in the PDF maps when the Council reissues PC1 as part of the decisions version of PC1, i.e., following completion of the hearing process.
3.	Who is responsible for achieving wai ora needs to be clear. Paragraph 10.	As noted above, I have now recommended PC1 include a new method M36A as set out in Appendix 2 to this evidence. This method requires the establishment of an implementation plan for the wai ora long-term visions including assigning specific responsibilities. The Council will hold overall responsibility for this, as for the other Freshwater Action Plans.

Table 6 Response to evidence from Forest & Bird (Samantha Dowse)

Row number	Summary of evidence from Forest & Bird (Samantha Dowse)	Response
1.	WH.O1 – generally agrees with section 42A recommended changes but seeks that 'deteriorated' is replaced with 'degraded' in the Āhua (natural character) bullet point. Paragraph 21. Reason - clause (b) of objectives WH.O2 and P.O2 use 'where degraded' in reference to natural form and character, and other objectives proposed through PC1 use the term 'where degraded' to direct improvement outcomes in waterbodies. Use of 'where deteriorated' in objective WH.O1 would depart from this approach in drafting leading to inconsistency in terms used in the plan. It is also more consistent with the NPS-FM. Paragraphs 22-26.	I do not agree with replacing 'deteriorated' in WH.O1 with 'degraded' as the latter is a defined term in the NPS-FM which essentially means when a TAS site for a FMU or part-FMU is below national bottom line or not achieving the specified TAS. In the context of PC1, this relates to the proposed 2040 timeframe, whereas 2100 is the timeframe set for WH.O1. If the use of my undefined term 'deteriorated' were replaced with the defined term 'degraded', it would in my opinion, have the effect of curtailing natural character improvements once TAS were met. The intent of the long-term visions is improvements may go beyond the natural character improvements expected through the TAS from improvements to ecosystem health.

Row number	Summary of evidence from Forest & Bird (Samantha Dowse)	Response
2.	The Āhua (natural character) bullet point covers a limited number of matters and in the brackets includes natural character rather than natural form and character. Recommends a change so the brackets include both natural form and natural character to be consistent with the NPS-FM and objective WH.O2 (as recommended to be amended by with section 42A). Paragraphs 28/29. Seeks: <u>Āhua (natural form and character) is restored where deteriorated</u> degraded and freshwater bodies exhibit their natural <u>qualityies form</u> and character, rhythms, range of flows, form, hydrology and character including biophysical, ecological, geological, geomorphological, and morphological aspects, natural movement of water and sediment, hydrological and fluvial processes, their natural location and courses, indigenous flora and fauna, culturally significant species, and colour and clarity of water.	My understanding is this drafting has been developed to refine at a more detailed regional plan level in PC1, the vision statements in RPS Change 1 which give effect to Clause 3.3 of the NPS-FM and were developed in consultation with mana whenua, and/or by reference to content in the Ngāti Toa Statement and Te Mahere Wai. WH.O1 reflects a different timeframe and broader outcomes than those of WH.O2, which mostly explains in words the outcomes the TAS in WH.O9 will achieve. So accordingly, it is appropriate and expected that they will contain different outcomes and terminology, if this best reflects the mana whenua (and wider community's) long-term visions for freshwater. Notwithstanding this, I generally understand 'natural character' and 'natural form and character' to be the same thing in real terms, so I am comfortable if the words are replaced as sought by this submitter, subject to any concerns arising from mana whenua as to this. Accordingly, I have included this amendment in my Appendix 2. This also requires removing the bolding, as natural form and character is not a defined term in the NRP or PC1, whereas natural character is defined in the NRP.
3.	 WH.O2 and P.O2 - generally agrees with section 42A recommended changes, but seeks amendments to clause (b) to align with Appendix 1B of the NPS-FM. For WH.O2: natural form and character is maintained, or where degraded, improvement has been made to the hydrologyical and fluvial processes of rivers, biophysical, ecological, geological, geomorphological and morphological aspects, natural movement of water and sediment, natural location and course of rivers, the extent of indigenous flora and fauna, the presence of culturally significant species and the colour and clarity of water and erosion processes, 	I do not support including this detail into WH.O2 and P.O2, because the scope of PC1, specifically the policies and rules set out to achieve the numeric objectives, does not manage all these aspects of natural form and character (e.g., geomorphological and morphological aspects).

Row number	Summary of evidence from Forest & Bird (Samantha Dowse)	Response
	including bank stability, are improved and sources of sediment are reduced to a more natural level, and the extent and condition of indigenous riparian vegetation is increased and improved, supporting ecosystem health, and For P.O2: natural form and character is maintained, or where degraded, improvement has been made to limit erosion processes, including bank stability, are improved to significantly reduce the sedimentation rate in the harbour to a more natural level hydrological and fluvial processes, biophysical, ecological, geological, geomorphological and morphological aspects, natural movement of water and sediment, natural location and course of rivers, the extent of indigenous flora and fauna, the presence of culturally significant species and the colour and clarity of water, and the extent and condition of indigenous riparian vegetation is increased and improved, supporting ecosystem health, and	
4.	 WH.O10 and P.O7 – agrees with them but it is not clear whether or why other waterbodies that are not specifically mentioned in the objectives are excluded from it. The health and wellbeing of all waterbodies and freshwater ecosystems must be maintained or improved, not just a subset of them in order to give effect to the NPS-FM. Paragraph 50. To give effect to the NPS-FM and ensure consistency across the PC1 objectives, she recommends (at paragraph 52): 	I do not support these amendments because these objectives were intended to respond to the submitter's request for interim targets in relation to the PC1 TAS. Upon reflection, I consider my initial drafting is not as clear, given this request to also include groundwater, wetlands and margins. The requirement for interim timeframes only relates to TAS under Clause 3.11(6). There are no TAS associated with groundwater, natural wetlands, or margins of waterbodies in PC1. So, while I do not agree that these objectives need to include groundwater, natural wetlands, or margins of waterbodies, I accept that they need redrafting to better reflect their intended purpose. I have provided new drafting in Appendix 2 which refer to TAS and make it clear that these objectives are the interim target for the first time step to 2030.

Row number	Summary of evidence from Forest & Bird (Samantha Dowse)	Response
	Objective WH.O10 By 2030, there is no further decline of the health and wellbeing of Te Whanganui-a-Tara's lakes and rivers groundwater, rivers, lakes and natural wetlands, and their margins Objective P.O7 By 2030, there is no further decline of the health and wellbeing of Te Awarua-o-Porirua's rivers groundwater, rivers, lakes and natural wetlands, and their margins.	
5.	 WH.P1 and P.P1 - Overall agrees with the section 42A recommendations to amend the policy and the reasons for doing so, however, the use of 'where deteriorated' rather than 'where degraded' is not consistent with the wording used in other PC1 provisions and as set out earlier in her evidence, the phrase 'where degraded' gives better effect to the NPS-FM. Paragraph 54. Policy 5 of the NPS-FM requires freshwater to be managed to ensure the health and well-being of waterbodies is maintained, where it is not degraded. The PC 1 objectives and rule framework already require maintenance (in addition to improvements of degraded water bodies and freshwater ecosystems), which gives effect to the maintenance directive in Policy 5 of the NPS-FM. She recommends the following (paragraph 57): Aquatic ecosystem health will be maintained where not degraded and improved, where deteriorated degraded, improved by: 	This policy provision, which sets out at a high level how the plan will manage for improvements to meet the 2040 outcomes. As it specifically refers to management of water flows, levels and groundwater, it is not appropriate to utilise the defined term of degraded, which relates only to TAS. The broader undefined term is more suitable here. I consider it would be helpful for this policy to reference maintenance where met, as in some cases, specific changes will be needed to the way activities and discharges are managed, just to maintain the water quality TAS. For example, to maintain metal loads may require treatment if pollutants are predicted to increase from more use of roads in the future through traffic increasing. Accordingly, I have included additional wording for this second point in my Appendix 2.

Row number	Summary of evidence from Forest & Bird (Samantha Dowse)	Response
6.	Comments are provided on the notified wording of Policies WH.P2 and P.P2 that it does not meet the requirements NPS-FM and NZCPS nor does Schedule 30, with respect to financial contributions and aquatic compensation. Support is provided for the deletion of WH.P2 and P.P2. Paragraph 66- 70.	I have not addressed the validity of the financial contributions approach in PC1 discussed here, so to not predetermine a view as it is due to be considered as part of Hearing Stream 4 (stormwater). I note that I am not the reporting officer for that topic.

Table 7 Response to evidence from Wellington Water (Paula Hunter)

Row number	Summary of evidence from Wellington Water (Paula Hunter)	Response
1.	 Wellington Water is concerned there is a lack of information about baseline states, and therefore it is not possible to determine whether TAS parameters are appropriate and achievable. The TAS and coastal water objective provisions do not recognise the complexities and practicalities in determining the contribution an intermittent discharge makes to not achieving the TAS and coastal objectives and in turn the level of improvement required in a wastewater network or stormwater system to achieve the TAS and coastal objectives. It is acknowledged that the section 42A report proposes a number of amendments and additions to the TAS and coastal objectives tables, but Wellington Water is not in a position to determine the implications of these changes. 	I agree with Ms Hunter that where there are still numeric targets without a baseline or existing state value, and no specific scientific evidence to understand how stringent they are and how improvements (where required) can be reasonably met, it is not possible to understand whether the objectives have been set appropriately. Also relevant is what activities the uncertain targets might affect in a consenting situation and whether they are reasonable. I acknowledged this challenge with PC1 at paragraph 289 of my section 42A report. Dr Valois and Dr Greer comment on the remaining missing TAS data for rivers in their rebuttal evidence. As a result of this I propose the following arising from Dr Valois' rebuttal statement: Dissolved oxygen at all sites – I recommend deleting the TAS for the four sites Dr Valois indicates that monitoring is not proposed to be undertaken in the future. In reviewing the discussion in Dr Greer's rebuttal evidence, it appears that this attribute can be managed to some extent through non-regulatory methods, e.g., riparian planting. Where TAS are set more stringently than national bottom lines (NBL) I have

Row number	Summary of evidence from Wellington Water (Paula Hunter)	Response
	Wellington Water has made a decision not to actively pursue some aspects of the relief sought in relation to the TAS and coastal objectives, and timeframes for achieving them (with those matters to instead be addressed by its client councils) and the reasons for this will be addressed in Wellington Water representations at the hearing. Paragraph 7.1 to 7.6.	recommended in my table below that the science team provide advice to the Panels at the hearing where indicated (either verbally at Hearing Stream 2, or during Hearing Stream 5 if more time is needed), in order to assist the Panels with decision making on the appropriateness of the TAS setting, in the absence of baseline data. Periphyton biomass at some sites – I recommend deleting the TAS for the soft bottomed locations where periphyton biomass is low risk (Taupō S. @ Plimmerton Domain, Pāuatahanui S. @ Elmwood Br., and Waiwhetū S. @ Whites Line East) and is not proposed to be undertaken in the future – these changes are shown in Appendix 2 to my evidence except for one where it was already shown in PC1 as N/A. For the remainder of the currently unmonitored sites where the target is set more stringently than NBL, I have requested the science team provide advice to the Panels, as above. Where set at NBL, I have concluded that the TAS setting is appropriate in the absence of information. Dissolved copper and zinc at non-urban sites – these sites are now recommended to be deleted based on Dr Valois' rebuttal evidence that there is no intention to monitor rural or forested sites. Fish IBI – missing for some sites, as noted in Dr Greer's rebuttal statement. A summary of my recommendations in respect of the insufficient data issues and recommended actions and amendments proposed as part of this rebuttal statement is provided in table format in Appendix 3. At the time of writing, input is still needed from the coastal scientist on the muddiness objectives for Makara Estuary also, as these are not supported by existing state data either. This is noted in Appendix 3. I agree with Ms Hunter's comments there are significant complexities and practicalities of determining the contribution a discharge makes to not achieving the TAS and coastal objectives and in turn the level of improvement required in a

Row number	Summary of evidence from Wellington Water (Paula Hunter)	Response
		wastewater network or stormwater system to achieve the TAS and coastal objectives. PC1 has attempted to simplify the first step by not requiring dischargers to work out their proportional contribution, rather the policy approach is a commensurate contribution. That is, if the load reduction to meet the TAS is 80%, then each discharger of that contaminant is expected to make an 80% reduction to their impacts. This is irrespective of whether their activities are 100% of the issue, or less than this. Notwithstanding this, I acknowledge the level of improvement required in a wastewater network or stormwater system to achieve the commensurate reduction is still highly complex in terms of connecting the engineering solutions with predicted science, but this is not specifically a problem with PC1, rather, it's the reality of solving complex environmental issues and the current national direction of the NPS-FM.
2.	Objective O5 – seek to retain Objective O5 as it is important to the source protection of drinking water and should apply to each Whaitua section. Paragraphs 8.4-8.6.	I agree the source protection for drinking water is important, particularly for Te Whanganui-a-Tara (TWT). However, the wording in the objective sought by Ms Hunter to be retained for these whaitua is already captured within sub-clause (h) of WH.O2 – amendments to the wording for this clause were outlined in paragraph 189 of my section 42A report and the associated appendix. The support offered by O5 for source protection is in my opinion the same as that provided by WH.O2(h), so on this basis, there is no need to retain application of O5 for TWT. I recommend no changes in response to this issue. There is a gap for Te Awarua-o-Porirua (TAoP) as a similar clause is not included here. While limited water is sourced within this whaitua for use by people and livestock, I understand some rural domestic takes exist. Accordingly, I have added the TWT clause
3.	Objective O6 – Seeks the following amendments: The social, economic, cultural and environmental benefits of: (a) taking and using water are recognised, when managing water.	into P.O2 as well, which is set out in Appendix 2 to this statement. This submission point was considered in the Overarching topic in Hearing Stream 1 in Table 6 of my section 42A report. The submission is regarded as being out of scope, as the amendments sought would apply region-wide, but the scope of PC1 did not

Row number	Summary of evidence from Wellington Water (Paula Hunter)	Response
	(b) managing stormwater for the safety of people and property (c) disposing of wastewater to achieve public health outcomes are recognised and provided for when managing water. Support the application of Objective O6 to the Whaitua sections of the NRP and amendments sought by Wellington Water. There needs to be an anchor in the Whaitua objectives that supports the cascade of policies and rules that are specific to stormwater network and wastewater networks. At paragraphs 8.7-8.10.	include a region-wide amendment to this objective. The scope of the change to O6 is just that it would not apply to the TWT and TAoP whaitua. In terms of the substantive change sought, I remain concerned that it does not align well with the NPS-FM and the Te Mana o te Wai hierarchy. I further note that the NRP does not include an objective of the nature sought here to 'anchor' existing NRP stormwater and wastewater policies and rules, so there is no change to this situation.
4.	Objectives O18, O19, O25 and O28 – seeking that these objectives continue to apply to rivers, lakes, groundwater or coastal water within Whaitua Te Whanganui-a-Tara and Te Awarua-o-Porirua Whaitua until the issues with the TAS and CWO as set out above are addressed. Paragraph 8.11.	While some of these existing NRP objectives are narrative in nature (so potentially less directive) others are numeric and seek different and sometimes directly overlapping outcomes, but they're not necessarily more or less stringent than the PC1 outcomes. For example, the enterococci objectives in Table 3.3 of Objective 18 are not the same as those in WH.O3 and P.O3. In some locations, the notified PC1 objectives are more stringent (e.g. ≤ 200 enterococci). However, my recommended amendments to the coastal enterococci targets are less stringent in that they recognise that ≤ 500 enterococci is not expected to be achievable by 2040 in all locations. Accordingly, it would make the plan internally conflicting and application of it through consenting far too complex were both sets of objectives retained within the NRP for these whaitua. I recommend no changes in response to this issue. If Ms Hunter intended that both sets of objectives apply in the interim as PC1 progresses through the hearing, decision and appeal processes, then this is already accommodated through normal decision making under section 104(1)(b)(vi) of the RMA.

Row number	Summary of evidence from Wellington Water (Paula Hunter)	Response
5.	Note associated with Objectives WH.O2 and P.O2 – The inclusion of the note is supported in principle. Paragraphs 8.12-8.13.	Ms Hunter outlines she supports a note I proposed in my section 42A report relating to application of the long-term wai ora objectives to resource consent applications. Just to clarify, there is no note shown in Appendix 4 to my section 42A report for WH.O2 and P.O2 as referenced by Ms Hunter, and the proposed note quoted is for WH.O1 and P.O1 and was set out as such. I note Ms Hunter supports the note at paragraphs 8.12-8.13 and therefore I presume this means she supports inclusion of the note where I've included it, at WH.O1 and P.O1.
6.	Objectives WH.O1, WH.O2 and P.O1, P.O2 – support the inclusion of the new wai ora state relating to water use for social and economic benefits and new clause (i) in Objectives WH.O2 and P.O2 in principle but recommends that the provisions are amended to include "public health" as well as social and economic benefits. Paragraphs 8.14 and 8.15. Amend timeframe to 2060, as addressed by client councils. At Appendix A, page 7.	I consider public health benefits are already captured by social benefits, as 'social' effects refer to any impact of activities or policies on people. Accordingly social benefits would encompass public health aspects. I address the timeframe issues later in this table, in response to more detailed territorial authority planning evidence on this matter.
	Amendments to clause (b) do not include changes sought by Wellington Water, but the inclusion of "maintained, or where degraded, improvement has been made" assists in achieving the outcomes sought by Wellington Water. At Appendix A, page 7.	
7.	Objective WH.O9 and P.O6 – the inclusion of new clause (d) in Objectives WH.O9 and P.O6 supported in principle, but Wellington Water is still considering the implications of this direction and intends to address it in Hearing Stream 4. Paragraph 8.17.	I note Ms Hunter does not support including the prioritisation content that I added to objectives WH.O9 and WH.O6 in an objective. This was done specifically in response to WWL's submission points \$151.003 and \$151.004 addressed at paragraphs 289-297 of my section 42A report. My view is the content is significantly more helpful to WWL in a consenting situation within an objective (or policy) than in a method. The structure of the plan change policies (and the hearing streams for considering PC1) do not easily allow for consideration across the wastewater and stormwater topics (e.g.

Row number	Summary of evidence from Wellington Water (Paula Hunter)	Response
	Recommends the prioritisation be included as a plan method rather than being embedded in a plan objective and the method should be drafted as guidance to enable some flexibility. Paragraph 8.18. Wellington Water sought the following amendment to clause (a) of Objectives WH.O9 and P.O6: "where a target attribute state in Table 8.4 is not met, the state of that attribute is improved in all rivers and river reaches in the part Freshwater Management Unit so that the target attribute state is met within the timeframe indicated within Table 8.4 <u>or meaningful progress has been made</u> ". Suggests that "or meaningful progress has been made" be replaced "or ongoing progress towards meeting the target has been demonstrated." to provide greater clarity. Paragraph 8.20. Amendment to Schedule 31 and 32 also suggested but acknowledges that this can be addressed at Hearing Stream 4. Paragraph 8.23.	at policy level) to prioritise between these activities. So, my proposed amendments at WH.O9 and P.O6 better achieve guidance on prioritisation between TAS that affect the activities of WWL. Notwithstanding this, I am happy to consider alternative wording or revision into a method, if this is provided by Ms Hunter. Ms Hunter's suggestion for additional wording at clause (a) of Objectives WH.O9 and P.O6 is not supported as this has the effect of reducing certainty of expectations for every TAS, including those that are readily achievable. I consider timeframes further below.
8.	Objective WH.O3 - Amendments to the objective do not include changes sought by Wellington Water, but the inclusion of "where deteriorated" assists in achieving the outcomes sought by Wellington Water and seeks amendment of the timeframe to 2060 as addressed by client councils. At Appendix A, page 6.	Ms Hunter fails to acknowledge that a timeframe extension has already been accommodated by my recommendations for the coastal objectives based on the primary evidence of Dr Wilson that indicated the notified PC1 enterococci targets would not be achievable at certain locations. That is, the targets for two Wellington Harbour locations and Owhiro Bay (Table 8.1A) and 4 locations in Porirua Harbour (Table 9.1A) have been amended to 50% improvement towards meeting <500 enterococci. This change means that more time will be available to fully meet the generally suitable bathing standard at these locations, as the objectives only require 'half the work' to be done by 2040.

Row number	Summary of evidence from Wellington Water (Paula Hunter)	Response
9.	Objective WH.O8 - seeks amendment of the timeframe to 2060 as addressed by client councils. At Appendix A, page 8.	Dr Greer addressed achievability issues for the freshwater primary contact sites in his statement of primary evidence at paragraphs 177-180. Accordingly, I understand that only one of the three primary contact sites that require an improvement, being the Te Awa Kairangi/Hutt River @ Melling Bridge is impacted by the wastewater or stormwater network. Thus, it is the only site that needs to be prioritised by WWL.
		Accordingly, I have considered whether the timeframe of 2060 is reasonable for this TAS. As I address below in relation to HCC evidence in Table 8, Row 2, I am recommending adjustments to the timeframes for a few of the river wide <i>E.coli</i> TAS (in Table 8.4 of PC1). This includes the Te Awa Kairangi urban streams part-FMU which contributes to water quality at the Te Awa Kairangi/Hutt River @ Melling Bridge primary contact site. Accordingly, it is a necessary consequential amendment to my recommendations below in Table 8, Row 2 to also adjust the timeframe for this related TAS. An amendment is set out in Appendix 2.
10.	Objective WH.10 and Objective P.O7 – concerns about how new objective WH.10 and P.O7 proposed in section 42A report will be applied in practice. At paragraphs 8.26-8.29.	In recommending the inclusion of new objectives WH.10 and P.O7, my primary intention was to satisfy the NPS-FM expectation for 10 yearly interim objectives, where long term objectives were set. I noted that the PC1 TAS objectives were in my opinion medium term objectives rather than long term, so interim objectives were perhaps not strictly required here. Another benefit was it would encourage state of the environment monitoring and reporting of progress at this time.
		In considering the evidence of Ms Hunter, I now acknowledge that these objectives could inappropriately become a focus in a consenting situation, which runs the risk of a perverse outcome where the interim outcome is more of a focus than the 'end goals' for 2040. Having this interim date in an objective may also lead to short term consents, which could be a distraction, risking funding set aside for network improvements being diverted to protracted or duplicated consent processes.

Row number	Summary of evidence from Wellington Water (Paula Hunter)	Response
		Accordingly, I recommend the Panels include a note that prioritises meeting the TAS objectives to avoid the interim objectives being a distraction for consent applicants and those assessing such applications from focusing on satisfying the timeframe for meeting the TAS objectives.
11.	Policies WH.P4, P.P4 and Tables 8.5 and 9.5 – additional information required to understand the implications of these policies. At paragraph 9.4.	Dr Greer has considered this issue in his rebuttal statement.
	 Additional information required: a. A detailed assessment of the implications of the TAS provisions on a sub-catchment basis to determine appropriateness of the requirements (in the context of a 2040 timeframe), and implications for sub-catchment prioritisation. b. How sediment load reductions will be measured in the future. 	
	 c. How would proportionate contribution to sediment be measured and any reduction in this contribution be measured. 	

Row number	Summary of evidence from Wellington Water (Paula Hunter)	Response
	 Further assessments to address the uncertainty regarding the modelled correlation between sediment loads and visual clarity 	

Table 8 Response to evidence from Hutt City Council (Torrey James McDonnell)

Row number	Summary of evidence from Hutt City Council (Torrey James McDonnell)	Response
1.	Objective WH.O1 – HCC sought removal of "note" from the objective, because it is not clear whether the text below was an advisory note or part of the objective and adding a qualifier that "All freshwater bodies have planted margins <u>where possible</u> ", for the reason that Te Whaitua te Whanganui-a-Tara has been heavily modified, and it is not physically possible for all waterbodies to have planted margins. Paragraph 15. Support the recommendation in section 42A report to add the qualifier "where practicable". Paragraph 16. Where the section 42A report has recommended the replacement of "freshwater bodies" with "rivers and streams", wetlands should also be included. Paragraph 17. The reasoning for the addition of an advice note is unclear as it is not addressed in Section 3.6 of the Section 42A Hearing Report: Objectives. The advice note overrides RMA requirements relating to considering plan objectives in decision-making on consents under	Mr McDonnell supports most of my amendments to WH.O1 and P.O1. For the exceptions to this, I do not agree with him that wetlands should be referenced within the second bullet point, as the PC1 scope does not include policies or rules relevant to wetlands and wetland margin planting is not a focus for the policies and rules in either the NES-F or the NRP. The focus, from a water quality and ecosystem health perspective, for these objectives I understand it is, planting margins of rivers and lakes. I also note Mr McDonnell's concern about the new note he says overrides resource consent decision making under section 104 of the RMA. I do not agree this is a concern, as the note simply clarifies these objectives are not critical in terms of consenting, given the existing structure of the NRP does not include issue statements, vision statements or similar explanatory text to help set the context for objectives and policies. Most other territorial authorities and infrastructure providers ³ appear unconcerned or actively supported the new note in their evidence as a pragmatic solution to avoid this future vision statement distracting from the key objectives for consent applications ⁴ . The key objectives (referenced in the note) are designed to

³ Transpower, Horokiwi Quarries, Winstone Aggregates (however suggests use of "surface water body" rather than "rivers, lakes, natural wetlands and groundwater", Guildford Timber et al, UHCC, Meridian, NZTA (generally supportive with editorial suggestions)

⁴ WH.O2 to WH.O9 and P.O2 to P.O6

Row number	Summary of evidence from Hutt City Council (Torrey James McDonnell)	Response
	Section 104 and is therefore ultra vires and should be deleted. Paragraph 19.	achieve progressive implementation of the outcomes sought in WH.O1 and P.O1 in any case.
	Minor grammatical improvements recommended. Paragraph 20.	Commas and 'ands', consistent with the grammatical style of other provisions in PC1 have been added to the bullet points in WH.O1 and P.O1 as set out in Appendix 2.
2.	Objective WH.O3: Table 8.1 Coastal water objectives; and Objective WH.O8: Table 8.4 Target attribute states for rivers Seeks timeframe for TAS for E. coli and enterococci coastal water objectives be amended from 2040 to 2060. The recommended TAS are unaffordable and unachievable for Hutt City ratepayers by 2040.	The HCC evidence differs somewhat to that of the other territorial authorities, in that it seeks to retain the notified TAS rather than the minimum required improvements (MRIs) under the NPS-FM, but seeks to push the timeframe out to 2060, as per their submission. WCC supports the relaxation of the TAS <u>and</u> seeks more time (to 2060) to achieve
	Paragraph 32. 2060 timeframe is preferable, but supports the notified TAS themselves, as these are ambitious and align with mana whenua and community aspirations. Paragraph 33.	them ⁵ . UHCC appear to be unconvinced there is benefit offered by my recommendation to relax the TAS and requests a 2060 timeframe ⁶ but do not state a clear position as to whether they support these reduced targets or not.
		PCC is concerned about 3 part-FMUs that were not adjusted to MRIs in my recommendation. It supports the relaxation of the targets <u>and</u> seeks more time (to 2060) to achieve them ⁷ .
		The targets for the part-FMUs do not align with territorial authority boundaries, so it is likely going to be difficult for the Panels to accommodate these different desired approaches for <i>E.coli</i> TAS and timeframes for some part-FMUs.
		At the time of writing the section 42A report, there was insufficient detail within the economics work to inform <i>E.coli</i> TAS at the part-FMU level. This was a factor of delays experienced obtaining inputs from other parties for this work. Accordingly, in the absence of this, I relied on the 'achievability' guidance adopted in Dr Greer's evidence

⁵ Paragraph 61, evidence of Joe Jeffries on behalf of WCC

 ⁶ Paragraphs 47-48, evidence of Gabriela Nes on behalf of UHCC
 ⁷ Paragraph 7.75, evidence of Vanessa Rodgers on behalf of PCC

Row number	Summary of evidence from Hutt City Council (Torrey James McDonnell)	Response
		 to inform this. Subsequently, further breakdown of the costs at a part-FMU level has been undertaken, as set out in the rebuttal evidence of Mr Walker. Mr Walker also provides his expert opinion on some timeframe adjustments recommended to make sure that the targets are affordable and achievable for the territorial authorities and their ratepayers. His suggested adjustments only affect part-FMUs with large costs, so they differ to the assumptions used in Dr Greer's evidence for achievability, including his rebuttal statement. I consider Mr Walker's findings to be the most reliable indicator for the appropriateness of the objectives in terms of affordability and achievability (i.e. ability to mobilise and deliver the necessary construction works) so I have relied on this and revised my recommendations as follows:
		 FMUs – these changes are annotated in Appendix 2: Te Rio o Porirua and Rangituhi Wainuiomata urban streams
		 Amend the timeframe from 2040 to 2060 for the <i>E.coli</i> TAS for the following part-FMUs: Te Awa Kairangi urban streams
		 Waiwhetū Stream Wellington urban
		 Amend the timeframe from 2040 to 2060 for the dissolved copper and dissolved zinc TAS for the following part-FMU: Waiwhetū Stream
		The dissolved copper and dissolved zinc recommendation should be treated as a preliminary recommendation at this stage, as while it has been recommended to be adjusted in economic evidence, I am conscious that some improvements will likely

Row number	Summary of evidence from Hutt City Council (Torrey James McDonnell)	Response
		arise independent of those associated with upgrades to the existing stormwater network assumed for the purpose of that work. The PC1 rules applicable to stormwater discharges associated with urban infill development, and through normal household maintenance activities (e.g. roof replacements) are expected to contribute to improvements within this part-FMU (and others). Accordingly, I have recommended to Council that further modelling work be undertaken by the science team on this, as part of the stormwater topic hearing (Hearing Stream 4) to understand if such improvements are material, and if so, potentially the adjustments to this TAS might not be warranted. This can be revisited in the integration hearing (Hearing Stream 5) in due course.
3.	Objective WH.O8 – it is unclear why HCC's relief sought is recommended to be rejected based on advice from Dr Greer and the section 42A report fails to address HCC's concerns. Paragraph 38. The Panel should accept the relief sought by HCC and amend timeframe to 2060.	I have amended this timeframe to 2060 for Te Awa Kairangi/Hutt River @ Melling Bridge, for the reasons outlined in response to a similar point in the planning evidence for WWL addressed above at Table 7, Row 9. Also included there are reasons why no other primary contact sites need the timeframe adjusted.

 Table 9 Response to evidence from Wairarapa Federated Farmers (Peter Matich)

Row number	Summary of evidence from Wairarapa Federated Farmers (Peter Matich)	Response
1.	Policies WH.P1 and P.P1 – need accurate baseline states. Paragraph 4.5.	While Mr Matich makes comments about the need for baseline states for these policies, I agree with Mr Matich that baseline or existing state data is needed in the objectives (to which the policies relate), or alternatively the Panels need to be provided with an understanding of whether the objectives have been set

Row number	Summary of evidence from Wairarapa Federated Farmers (Peter Matich)	Response
		appropriately. I addressed this issue above in response to evidence from Ms Hunter for WWL ⁸ .
2.	Objective WH.O1 – freshwater bodies and CMA wai ora by 2100) – section 42A report recommends amending the second bullet point to "All freshwater bodies rivers and lakes have planted margins, where practicable". His view is that the addition of "where practicable" introduces uncertainty to the implementation of the aim. He recommends the deletion of the aim of riparian planting from the objective. Paragraph 5.6.	I disagree that adding 'where practicable' introduces uncertainty. It is a frequently used term in planning documents and in this context, enables consideration of physical constraints and the like, for some locations not to be planted. I understand that planted riparian margins provide important sediment reduction and ecosystem health improvements so Mr Matich's suggested removal of this aspect of the long-term vision entirely detracts from outcomes sought by 2100. I recommend no changes in response to this issue.
3.	An additional bullet point should be added to objective P.O1 to provide for harbour sedimentation to be "reduced to a more natural level" to keep aims simple and more achievable. At paragraph 5.21.	I have considered Mr Matich's evidence that refocusing the 'natural state' reference in P.O1 to the harbour sedimentation matter is clearer and more suitable than the current drafting of natural state where possible for all waters. I also understand this was the key long-term focus for the TAoP committee through the WIP. Accordingly, I have amended the relevant bullet point to P.O1 to reflect Mr Matich's evidence and the submission of the Wairarapa Federated Farmers.
4.	Objective WH.O2 – 2040 timeframe is not achievable and "increasing the extent of indigenous riparian vegetation" is not a practical aim. The new paragraph b) should be amended as follows (b) natural form and character is maintained, or where degraded, improvement has been made to the hydrology of rivers, and erosion-processes, including bank stability, are-improved-and sources of sediment are reduced to a more natural level, and the extent and condition of indigenous riparian vegetation is increased and improved, supporting ecosystem health, and	I remain of the view that a reference to increasing the extent and condition of riparian vegetation is appropriate in this objective. At a whaitua level, this narrative outcome is easily observed, non-regulatory methods can support it, and it is expected to be achievable given these FMUs include both urban and rural land use, and large areas of regional parks. There is plenty of opportunity for riparian planting to be increased and the objective does not seek that this occurs everywhere. I do not consider there is a need to reference specific activities in the new clause (i) drafted to provide for social and economic use benefits. This encapsulates primary

⁸ Table 7, Row 1

Row number	Summary of evidence from Wairarapa Federated Farmers (Peter Matich)	Response
	 Prefer the additional wording for the additional clause proposed in the section 42A report (i) people and communities can provide for social and economic use benefits, and reliability of freshwater supply for primary production is supported, provided that the health and well-being of waterbodies and ecosystems is not compromised. 	production already and there are an endless number of other social and economic use benefits that would need to be listed, to fairly cover them at a more nuanced level, as sought by Mr Matich. I recommend no changes in response to this issue.
5.	Objectives WH.O3 and P.O3 and Tables 8.1 and 9.1 (coastal water objectives) – preference is to test the realism of the suggested amended targets through the freshwater action plan process incorporated in a future plan change or variation. Paragraphs 5.36 and 5.47.	Mr Matich's suggestion of a plan change that simply required action plans to 'test' realism of targets, without TAS actually being set out in objectives in that plan change, does not align with the NOF process set out in the NPS-FM.
6.	Objective WH.O5 – WFF is seeking that clause a) be amended to read: "a) water quality, habitats, water quantity and ecological processes are at a level where the state of aquatic life is maintained, or meaningfully improved where degraded, to achieve the target attribute states in Table 8.2 <u>are not met</u> , and" Paragraph 5.42. Clause d) should either be deleted or made more certain because there is no measurement for the effectiveness of this aim. Paragraph 5.45.	I have reworded clause (a) in a similar manner to Mr Matich's suggested rewording on the basis that the reference to 'degraded' in this objective was not as clear as the language sought by Mr Matich of TAS 'not met' which is used in other TAS objectives in PC1. I agree with Mr Matich that a measurement of the width of vegetation sought by this objective around the lakes would assist with the effectiveness of it and avoid any risk of uncertainty (e.g. that it applied catchment wide). I have drafted an amendment based on guidance from Council officers for a riparian planting width of 20 metres other than where physical constraints might prevent this, such as tracks and parts of the lake perimeter that are naturally devoid of significant vegetation. This amendment is included in Appendix 2

Row number	Summary of evidence from Wairarapa Federated Farmers (Peter Matich)	Response
7.	Objectives WH.O9 and P.O6 and Tables 8.4 and 9.2 – it is functionally better to develop timeframes in a more iterative way through the freshwater action plan process - therefore does not support the 2040 timeframe. Paragraph 5.56.	As above, I do not believe this approach aligns with the NOF process in the NPS-FM.

Table 10 Response to evidence from Upper Hutt City Council (Gabriela Nes)

Row number	Summary of evidence from Upper Hutt City Council (Gabriela Nes)	Response
1.	It is not obvious the submission points listed in paragraph 13 of the evidence have been considered by the section 42A author. Paragraph 14.	None of these points were assigned by the Council to the Objectives or Ecosystem Health and Water Quality policies topics. Some were addressed in the Overarching report (Hearing Stream 1) and others are yet to be considered in the Forestry and Stormwater topics in Hearing Streams 3 and 4 respectively ⁹ .
2.	 WH.O2 - section 42A changes are supported, but seeks (b) is amended as follows due to it being difficult to interpret: (b) natural form and character is maintained, or where degraded₇; (i) improvement has been made to the hydrology of rivers₇ and erosion processes, including bank stability, are improved and (ii) sources of sediment are reduced to a more natural level, and (iii) the extent and condition of indigenous riparian vegetation is increased and improved, supporting ecosystem health, and 	I consider the suggested edits make the link to the applicable values less clear and edits are not needed for readability. Having the text in a single clause is clearer in terms of linking the actions (the content in the middle of the clause), to the two values from Appendix 1 of the NPS-FM, i.e. natural form/character and ecosystem health at either end of the clause. I have provided a non-tracked version here to assist readability. (b) natural form and character is maintained, or where degraded, improvement has been made to the hydrology of rivers, bank stability, sources of sediment are reduced, and the extent and condition of indigenous riparian vegetation is increased and improved, supporting ecosystem health, and

⁹ Overarching topic S225.002, 003, 004, 007, 013; 023 and 027; Forestry topic S225.017, Stormwater topic S225.026

Row number	Summary of evidence from Upper Hutt City Council (Gabriela Nes)	Response
	Also notes that 2040 referenced in (a) which is cross referenced to WH.O9 is unachievable and seeks this cross reference is removed. Paragraph 22.	
3.	WH.O6 - amendments proposed to this objective in the section 42A report appear to make the objective more onerous than the notified version of PC1. Unclear at this stage whether there will also be proposed amendments to policies that give effect to this objective, in future hearing streams. As such, reserves position until the hearings where relevant policies are addressed. Paragraph 26.	I note that there are no groundwater policies or rules included in the scope of PC1 for TWT so I do not expect the objective amendments can lead to amendments to policies in the manner envisaged by Ms Nes. The redrafting to WH.O6 referenced here responded to concern from another submitter on use of the word 'protect' in the objective, suggesting the new wording better aligned with NPS-FM language. I am comfortable with either 'protect' or 'maintained or improved where degraded' being used in this objective.
4.	WH.O9 – generally supports section 42A changes. However, suggests an inconsistent application of the amendment of 'all river and river reaches' within the subclauses. It is not clear why this has been changed in subclause (a) but there are still references to 'rivers and river reaches' in subclause (b) and (c). Recommends that this drafting is amended to be consistent for sense and clarity.	I have amended WH.O9 and P.O6 to align my earlier amendment across both these objectives and have removed some further references to 'river reaches', for consistency with earlier amendments made. Noting that I consider the first reference to 'river reach' in clause (c) of WH.O9 and WP.O6 is appropriate to retain as that is to 'catch' rivers where the upper reaches are in a better state than the TAS site – it is appropriate that such 'reaches' are maintained at this better state.
5.	2040 versus 2060 - the 2040 timeframe is highly unachievable due to the level of investment, resources and infrastructure projects it requires over the next 16 years. This remains the case even with the reduced TAS recommended by the section 42A report. Paragraph 34. Notes the original PC1 was drafted on a 2060 timeframe and the section 32 addendum identifies why the 2040 dates were included as notified. This does not fulfil the section 32 requirements. Paragraph 37. Paragraphs 37-50 get into more detail on this and achievability issues. Concludes that the 2060 timeframe is the only appropriate	Refer to response above on similar evidence from HCC at Table 8, Row 2.

Row number	Summary of evidence from Upper Hutt City Council (Gabriela Nes)	Response
	approach to the achievement of water quality targets for the region, given the real-world financial and resource implications (and in fact impossibilities) which would be required for a 2040 timeframe. Even with a longer timeframe, this still represents a significant rates increase. Seeks 2060 date is put in Table 8.4 and any other place referred to. Paragraphs 48 and 50.	
6.	WH.09 (d) and (e) - agrees with section 42A that prioritising areas where human health is most likely to be impacted by poor water quality is an appropriate approach and but that prioritisation in an objective is not usual drafting and as such could be more appropriate in a supporting prioritisation policy which implements the objective, but happy to leave this to the discretion of the Hearing Panel. Paragraph 51.	Refer to response above on similar evidence from WWL requesting it be contained in a method ¹⁰ . While a policy is preferrable than WWL's suggestion of a method, the 'activity based' nature of the plan change policies means this would likely require a new policy to be drafted and for this to be considered in a future hearing stream. Accordingly, my amendments at WH.O9 and P.O6 achieve the requested guidance on prioritisation between TAS that affect the activities of territorial authorities and WWL. Notwithstanding this, I am happy to consider alternative wording or revision
	 Acknowledges the section 42A report has sought to make it clear that any single consent cannot achieve the 'state of the environment' outcomes sought by the TAS by making amendments to subclause (e). However, as drafted in Appendix 4, it does not adequately reflect this intent and is still subject to interpretation by a processing planner in the future who may seek to implement section 104 tests against a resource consent application – such as will be required when WWL's global stormwater and wastewater network discharge consents are renewed. Paragraph 52. Seeks the edit in green to clause (a): (a) where a target attribute state in Table 8.4 is not met, the state of that attribute is improved throughout in all rivers and river reaches in the part Freshwater Management Unit so that it 	into policy approach, if this is provided by submitters. Ms Nes' amendments to clause (a) do not work well for improving the understanding of how this objective is applied to a consenting situation. Each TAS entry is an objective and so the 'it' in Ms Nes' drafting is presumably meant to be a consent application? The objective is not written specifically for consenting, rather it is written as an environmental outcome, so 'it' in her drafting does not make sense to me. The state of the attribute is what must be improved, not the discharge or a consent application specifically. As I understand it, the policies and rules provide further guidance on how to apply the TAS to a specific consent application and therefore it is unnecessary to attempt to duplicate this in the objectives also. For example, the chapeau of Rule WH.R14 refers to 'a reductioncommensurate with what is required in the receiving environment to meet the TAS'.

¹⁰ Table 7, Row 7

Row number	Summary of evidence from Upper Hutt City Council (Gabriela Nes)	Response
	<u>contributes towards achieving the target attribute state is met</u> within the timeframe indicated within Table 8.4, and	
7.	WH.O10 - considers that given the amendments she proposes to WH.O9 to extend the implementation timeframe to more long-term timeframe of 2060, that WH.O10 should be amended to a 2040 date – reflecting the interim phase while still being cognisant of the lag time likely to be needed to see such results in the monitoring. Alternatively, this objective should be deleted. Paragraphs 64/65.	I responded to issues raised in the planning evidence for WWL on the new interim objectives I recommended in my section 42A report. I agree with Ms Nes if there are 2060 timeframes adopted by the Panels in their decision, then it would be preferrable to have an interim objective referencing 2040. As I have recommended now that there be some TAS set for 2040 and others set for 2050 and 2060, I have also drafted further interim content for WH.O10 and P.O7 to accommodate this scenario.
		The revised interim objectives are included in Appendix 2 for consideration by the Panels.

Table 11 Response to evidence from Wellington City Council (Joe Jeffries)

Row number	Summary of evidence from Wellington City Council (Joe Jeffries)	Response
1.	2040 timeframe - the WCC submission sought amendment of the timeframe for achieving TAS and Coastal Water Objectives (CWO) from 2040 to 2060. Paragraph 21. This affects WH.O2, P.O2, WH.O3, P.O3, Tables 8.1 and 9.1, WH.O5 and Table 8.2, WH.O8 and Table 8.3, Tables 8.4 and 9.2, WH.P4 and Table 8.5 and Tables 9.3 and 9.4. Notes	I have addressed the target setting, timeframe and interim target matters already in relation to the WWL and UHCC planning evidence ¹¹ .

¹¹ Table 9 Row 7 Table 8, Row 2

Row number	Summary of evidence from Wellington City Council (Joe Jeffries)	Response
	some are outside of WCC jurisdiction but focusses as a package of the 2040 date.	
	Open to an approach of reducing the stringency of the targets rather than the timeframes for achieving them in principle, the viability of this approach depends on the appropriateness and achievability of the specific targets recommended. Additionally, the ability to reduce the stringency of TAS is constrained by the minimums specified in the NPS- FM. Paragraph 26.	
	Understands the section 42A concern about the risk that a 2060 timeframe poses for delaying commencement of any action. But the risks associated with long term targets can be addressed by adopting interim targets for achieving the TAS as is required under clause 3.11 of the NPS-FM. Considers that this is the more appropriate planning response to the section 42A concern. Paragraph 27.	
	Understands that all the section 42A recommended TAS for <i>E.coli</i> relevant to Wellington City, are equal to the minimums specified in the NPS-FM. This provides no scope to reduce the TAS further where concerns with achievability remain. By contrast the NPS-FM does provide flexibility on the timeframes for achieving TAS. Paragraph 28.	
	The 2040 timeframe for achieving either the notified or section 42A recommended targets has also not been justified in terms of benefits outweighing costs under a section 32 evaluation and the section 42A approach means that a 2060 timeframe for achieving the TAS and CWO has not been properly assessed as a reasonably practicable alternative option to the notified and section 42A 2040 timeframe as required by a section 32(1)(b) evaluation. Paragraph 32.	

Row number	Summary of evidence from Wellington City Council (Joe Jeffries)	Response
	Neither the notified nor section 42A recommended versions of the TAS and Coastal Water Objectives have been demonstrated as the most appropriate means of achieving the purpose of the plan change in terms of section 32 of the RMA. Paragraph 33. Recommends amending the timeframe for achieving the targets to 2060 as it is more practically achievable, it meets the minimum requirements of the NPS-FM, it is more affordable for ratepayers, and it more appropriately balances economic costs with environmental benefits. Paragraph 34.	
	The statements of evidence of Mr Walker and Mr O'Neil demonstrate that a 2040 timeframe for achieving either the notified or section 42A recommended targets is both practically unachievable and unaffordable to ratepayers. By contrast, a 2060 timeframe for achieving the targets will be challenging but significantly more achievable and affordable for rate payers on an annual basis. Paragraph 49. Seeks work is done to establish appropriate interim targets. Paragraph 61.	
2.	Section 32 - the notified version of PC1 set a 2040 timeframe for achieving TAS and Coastal Water Objectives. PC1 was originally drafted by officers with a 2060 timeframe for achieving TAS and CWO, but this was amended to a 2040 timeframe by the Regional Council one week before notification. It is not clear whether the notified section 32 evaluation assesses the costs and benefits of a 2040 or 2060 timeframe, but it appears to be based on an assessment of the 2060 timeframe. If that is correct, this would mean that the 2040 timeframe for achieving the TAS and CWO has not been effectively assessed under section 32. Paragraphs 51/52.	I consider the critique of the section 32 and 32AA reporting is unhelpful to the Panels in understanding and making decisions on the key matters of contention for this hearing stream, which in the context of this evidence are the <i>E.coli</i> and metal TAS settings and the timeframe for meeting them. I responded to 35 submissions that raised concern about the lack of quantified costs and benefits for PC1 in paragraphs 177-179 of my Overarching Matters section 42A report for Hearing Stream 1. The consistent theme in these submissions was that the section 32 was predominantly qualitative in nature, with submitters seeking quantified economic analysis. Quantified cost information is exactly what I have worked on with the GWRC and Mr Walker in preparing for this hearing and now the

Row number	Summary of evidence from Wellington City Council (Joe Jeffries)	Response
	The section 32AA evaluation appended to the section 42A report does not assess the merits of the 2040 timeframe specifically nor does it assess the 2060 timeframe as a reasonably practical alternative to 2040. Paragraph 52. Any targets that go beyond the minimum requirements of the NPS-FM in particular warrant greater justification in terms of the benefits outweighing the costs. Paragraph 57.	expectation from this planning statement and other territorial authority statements is that further qualitative planning analysis also be completed. With respect, I do not believe this will materially assist with decision making as the key 'missing content' is in the expert evidence. In responding to substantive concerns about costs still being seen as unaffordable by the territorial authorities, I have again put my efforts into shaping up the economic evidence to respond to this in a way that has enabled me to revisit my initial recommendations in the limited time available to respond to submitter evidence. I consider my focus is appropriate to the situation and has responded to the key themes noted in the submissions received and now their evidence, albeit the reporting expectations of the territorial authorities may not be able to be fully satisfied in the time available to me.

Table 12 Response to evidence from Porirua City Council (Vanessa Rodgers)

Row number	Summary of evidence from Porirua City Council (Vanessa Rodgers)	Response
1.	TAS and timeframes – generally supports the changes to the TAS but is still concerned with timeframes. Paragraph 4.1. Seeks 2060 with interim targets. Paragraph 4.3. A more realistic timeframe of 2060 for achieving the Revised TAS would still provide an ambitious, but feasible pathway for achieving the long-term vision for 2100. Paragraph 7.48. In Porirua, 3 part-FMUs in the section 42A exceed the minimum required by the NPS-FM. The TAS for E.coli in these three areas should be amended from 'C' Band to 'D' Band, so that it is consistent with the approach taken across all relevant TAS. Paragraph 4.2. Recommend	Mr Walker has addressed the previously recommended TAS from the section 42A report for the three part-FMUs noted in Porirua (Pouewe, Taupō and Takapu), using load reductions provided by Dr Greer part FMUs). That evidence indicates that the recommended C state TASs are not significantly contributing to affordability or achievability issues so on this basis I am satisfied they are appropriate in terms of impact on municipal wastewater costs. However, I note that Pouewe, Taupō and Takapū are identified as predominately rural part-FMUs in Dr Greer's rebuttal statement at Table 4. In Table 6 he notes that my recommended TAS adjustment for Pouewe means it is no longer included in his table

Row number	Summary of evidence from Porirua City Council (Vanessa Rodgers)	Response
	TAS for <i>E.coli</i> to be set at the MRI – i.e. one band improvement on the baseline state as required in the NPS-FM, noting section 42 recommended a higher TAS – effectively two bands from the baseline. This is unnecessary and not sufficiently justified. Paragraph 7.24. Takapū FMU might need only a 15% load reduction to shift water quality from Band E up to Band D; however, the effort (or intervention) and investment required to achieve that 15% might be more significant than is apparently assumed. The section 42A report recommends a TAS of Band C because of assumed ease of achieving Band D but has done this in the absence of knowing the cost or practicality of achieving this. Specifically, the economic evidence did not assess this recommendation. Paragraph 7.26. The load reductions required for Pouewe and Taupo are very close to the threshold of 50% – within 1-2% - and therefore would still be very challenging to meet to Band D. It would be even more difficult to meet Band C. The specific load reduction required to meet Band C (as recommended by the section 42A reporting officer) has not been provided in her report, nor in Dr Greer's evidence. Paragraph 7.30.	of 'difficult to meet without significant mitigation and/or land-use change that goes beyond what is required by the regulatory provisions of PC1'. However, Taupō and Takapū, which are both noted as still being in this table of difficult to meet TAS, but notes that this is primarily due to rural, rather than urban <i>E.coli</i> sources. So based on this new information, I consider dropping the <i>E.coli</i> TAS to MRIs is appropriate for the Taupō and Takapū part-FMUs as the economic evidence did not cover the rural <i>E.coli</i> sources. This is on the basis that high targets in rural catchments noted in Dr Greers Table 6 (rebuttal evidence) would likely require very significant destocking, materially beyond that envisaged through the PC1 rural provisions. The amendment 'band' for Taupō and Takapū are included in Appendix 2, but the new numeric values for the table will need to be provided at the hearing, as they need to be confirmed by the Council's science team.

Row number	Summary of evidence from Porirua City Council (Vanessa Rodgers)	Response
2.	The section 32 report and associated technical reports have not adequately addressed, assessed, and considered other reasonably practicable options for the objectives. Also considers that a s32AA evaluation should have been undertaken in October 2023 following the fundamental change by GW's Councillors to the proposed timeframe for achieve the TASs, from 2060 to 2040. Paragraph 5.10. Paragraphs 7.51-7.59 contain further section 32 criticisms. A significant issue is that it does not consider other more reasonably practicable options for achieving the TAS for <i>E.coli</i> , and therefore justifying the proposed approach as the most appropriate. MfE guidance on section 32 reports states at section 3.2 that other alternatives could include 'requiring different timeframes for achieving the same outcome'; and 'seeking to either fully or partially achieve identified community outcomes'. Paragraph 7.61. As a minimum, these options should have been further explored in relation to the TAS for <i>E.coli</i> and for enterococci. Reasonably practicable options for Objectives P.O2, P.O3 and P.O6 (and related Tables 9.1 and 9.2) would include different timeframes to achieve the objective – for example an option to achieve by 2040 and an option to achieve by 2060 (or later).	I set out my response to similar concerns from the WCC planner on the section 32 report issues above ¹² , which are relevant here also. In addition, I note that the primary statement of economic evidence of Mr Walker did compare the different timeframes, so this information was available to Ms Rodgers for this hearing.

¹² Table 11, Row 2

Row number	Summary of evidence from Porirua City Council (Vanessa Rodgers)	Response
3.	WIP - section 5.12 of the section 32 report states that the WIP forms part of the Council's approach to implement the NPS-FM. Notes that the WIP is a non statutory document that has not been subject to the same evaluation of costs and benefits and community-wide public consultation requirements that RMA plans are required to undergo. PC1 appears to implement many of the recommendations of the WIP, including the 2040 timeframe to achieve <i>E.coli</i> TAS, but without adequate analysis of costs and benefits as required by section 32 of the RMA. Paragraph 6.10.	I note that all the territorial authorities were involved in preparation of the WIPs that informed PC1. The Te Awarua-o-Porirua Whaitua Implementation Programme (WIP) committee who oversaw this work included elected members from PCC and WCC. The Te-Whaitua-te-Whanganui-a-Tara WIP committee included elected members from HCC, UHCC and WCC. Accordingly, I consider the territorial authorities had the opportunity to shape the approach and the material made available to the committees to inform their approach to target setting and decision making. Mr Sharp has presented evidence on the WIP processes and will be available to answer any questions the Panels have about it at the hearing. I further note the community planning process was completed because it is prescribed by the NPS-FM.
4.	The section 42A report recommends relaxing the <i>E.coli</i> TAS in some part-FMUs where the targets are considered unaffordable and impractical to achieve within the 2040 period, as well as reducing the stringency of some enterococci targets (together, the Revised TAS). The Revised TAS are intended to be achievable and affordable. In order to satisfy s32AA, expect an updated economic assessment to be provided that demonstrates that the Revised TAS are indeed affordable and achievable. There is no economic assessment provided to justify the Revised TAS for <i>E.coli</i> at Pouewe, Takapu and Taupo part-FMUs, or the Revised TAS for metals recommended in the section 42A report. In the absence of this analysis, it is impossible to definitively state that the recommended changes are achievable and affordable. Paragraph 7.3	This gap has been addressed in the rebuttal evidence of Mr Walker and recommendations arising are discussed in relation to the planning evidence of HCC above ¹³ .

¹³ Table 8, Row 2

Row number	Summary of evidence from Porirua City Council (Vanessa Rodgers)	Response
5.	MRI - in terms of stormwater, dissolved copper and zinc are not included as a compulsory attribute in the NPS-FM and they do not have a MRI, or a national bottom line. However, unlike <i>E.coli</i> , Mr Walker has not provided economic assessment of NPS-FM minimum requirements in relation to dissolved copper and zinc – that is, that no target is required. Paragraph 7.15. Reasonable alternatives considered through the section 32 evaluation	There was no requirement for economic evidence to consider the alternative of no target for copper and zinc, as that is obvious in that it would require no cost, and therefore no impact on rates.
	and through the plan change process (including after considering submissions) should include the option of meeting the minimum standards set out in the NPS-FM. Paragraph 7.16.	
6.	Interim targets required, with respect to freshwater TAS, does not give effect to Clause 3.11(6) of the NPS-FM, nor its associated MfE guidance, and that interim targets are required. Paragraph 7.38. MfE guidance on the National Objectives Framework of the NPS-FM	My view is the NPS-FM requires interim targets for long term objectives, it does expressly refer to 10-year intervals. In any case, my section 42A report did recommend drafting for interim targets through proposed WH.O10 and P.O7. I've also updated the drafting of these interim targets to support the now recommended
	states that 'for timeframes longer than 10 years, councils must set interim target states, at intervals of no longer than 10 years, as stepping stones'. Given 2040 is more than 10 years away, and that the delivery of the work programme to achieve the TAS far exceeds 10 years, she considers that Change 1 in respect of freshwater targets should set out interim TAS, as required by the NPS-FM and further supported through MfE guidance. Paragraph 7.40.	
	She notes the section 42A recommendation for a new Objective P.O7 which would provide an interim objective preventing further decline of the health and wellbeing of TAOP's rivers. It is unclear whether this is in response to Clause 3.11(6) of the NPS-FM. If so, I do not consider that it meets the requirements of that clause. Paragraph 7.43. She then	

Row number	Summary of evidence from Porirua City Council (Vanessa Rodgers)	Response
	compares the long-term vision of 2100 in P.O1 and states given the long-term timeframe to year 2100, there is an unreasonable expectation on achieving <i>E.coli</i> targets set in PC1 in a comparatively short period of time. Paragraph 7.45.	
7.	P.P2 - as notified does not give effect to NPS-UD and other concerns. Paragraph 8.5 - Paragraph 8.11.	As noted in my section 42A report, I have recommended deleting this policy. The substantive issues raised here should be considered in Hearing Stream 4.

Table 13 Response to evidence from Wellington International Airport Limited (Kirsty O'Sullivan)

Row number	Summary of evidence from Wellington International Airport (Kirsty O'Sullivan)	Response
1.	 Objective WH.O1 – in general is supportive of the changes but does not consider the amendments proposed to this Objective to address the concerns raised in WIAL's submission [Section 7 from page 18]. Specifically: Natural character (first bullet), the changes would capture artificial and highly modified coastline which is not appropriate, suggests adding in "to extent practicable". [7.7 -7.14] At risk and threatened species (third bullet), sets an outcome that may not be practically achievable – suggest adding in "where naturally present" to address the concern. [7.15] Proposed new note, supported in principle, but considers it should also exclude notices of requirement. [7.16] – [7.17] Social and economic benefits, new bullet in wai ora description, supported but considers express reference to RSI should be included 	I disagree with Ms O'Sullivan that the note should also include notices of requirement, as the regional plan objectives are only relevant to the consideration of regional resource consents. Notices of requirement only authorise section 9 land use (section 176(1) of the RMA). Regional consents are still required for designated activities. In terms of the other requests, I am concerned that too many caveats significantly detract from the intention of this long-term vision, which also needs to remain consistent with . Given the note, I consider this objective should not be particularly concerning for infrastructure providers in terms of consent processes. I do not consider there is a need to reference specific activities in the new clause I have drafted to provide for social and economic use benefits. This encapsulates regionally significant infrastructure (RSI) and there are endless other social and economic use benefits that would need to be listed, to fairly cover them at a more nuanced level, as sought by Ms O'Sullivan. Existing NRP provisions for RSI will apply

Row number	Summary of evidence from Wellington International Airport (Kirsty O'Sullivan)	Response
		to any RSI activities impacted by PC1 in any case, so there is no need to duplicate such special provisions in the plan change objectives.
2.	WH.O2 – generally supports 42A report and reasoning but seeks addition of " <u>including by providing for the operational and functional requirements of RSI</u> " in (i).	As above, I do not consider it is necessary to duplicate RSI considerations in these provisions. The social and economic benefits language already encapsulates the airport's activities as a lifeline utility, RSI and an enabler of other economic and social benefits. These clauses are subject to the <i>'health and well-being of</i>
3.	WH.O3 – generally supports 42A report and reasoning but seeks insertion of a new subclause to recognise social and economic benefits (and RSI) similar to additions to WH.O1 and WH.O2. Supports amendments to Table 8.1 and 8,1A.	waterbodies, freshwater ecosystems and coastal waters not being compromised'. my opinion, RSI is better enabled by not including the additional wording sought b Ms O'Sullivan as the provisions at O9, O10, O11 and many policies will take precedence, as they are not caveated as arises with Ms O'Sullivan's suggested amendments.
4.	WH.P1 and WH.P2 Appears to support changes to WH.P1 and not seek further changes [10.4] – [10.5]. Supports deletion of WH.P2 [10.6]-[10.7].	No response required, if my understanding of Ms O'Sullivan's evidence is correct.
5.	Interpretation of "river" – raises concerns that Map 79 identifies several rivers over impervious areas of the Airport which have been historically reclaimed and do not align with any rivers of the Airport's stormwater management system. Accepts WIAL did not submit on this but wants the map to be corrected and the definition of "river" under the RMA relied on instead.	This map uses the same base information that I discussed previously in relation to the Transpower statement above ¹⁴ . Accordingly, I am unable to recommend changes to Map 79 in response to this feedback, as the desired level of detail is not available on a catchment wide basis.

¹⁴ Table 1, Row 1

Row number	Summary of evidence from China National Forestry Group (CR Richards)	Response
1.	WH.O1/P.O1 – It is CFG's view that the identified points raised in GWRC expert evidence reflect some of the concerns underlying its submission point. The issue is not that the targets should be abandoned or considered wrong but rather what is the feedback loop that is built into the system to recognise the potential for increasing stochastic events as a result of climate change influence?	This is a technical issue, to be addressed by the Council science team.
	CFG considers that it and GWRC are not in a position to predict accurately how these changes may materialise in the region, but that we can expect increased frequency and severity of storm events. That could lead to significant increases in sediment delivery and pressures on ecosystem health.	
	CFG remains concerned not about the existence of the TAS baselines and setting of targets which are necessary management, but by how the system is to differentiate between expected efficacy of actions to meet targets based around recently established and measured baselines and the possibility that concurrently the 'natural state' of water bodies is or will be challenged by matters over which there is little control.	
	Supports WFFA position re adjusted target for Mangaroa.	

Row number	Summary of evidence from China National Forestry Group (CR Richards)	Response
2.	 WH.O9/P.O9 – CFG acknowledges amendments made, but seeks further amendments as per page 11: (a) where a target attribute state in Table 8.4 is not met, the state of that attribute is improved sufficiently where required within throughout in all rivers and river reaches in the part Freshwater Management Unit so that the target attribute state is met within the timeframe indicated within Table 8.4 Also comments on how subclauses (b), (c) and (e) work. 	The rewording suggested introduces interpretation uncertainty into the objective and on this basis, I do not support it.
3. 4.	 WH.P4 – CFG supports WFFA's position on this policy seeking that the new TAS still be regarded as interim. TAS tables 8.8 and 9.2 – CFG supports WFFA position that TAS for suspended fine sediment in the Mangaroa should be an interim TAS. 	Setting or drafting wording to the effect that TAS are interim in their 'effectiveness' is not provided for in the NOF process of the NPS-FM. Interim target attribute states only relate to where long timeframes for achieving TAS are set. On this basis, I do not support the suggestion of interim, i.e., 'draft, subject to change TAS'. Any changes or adjustments to TAS would require a further plan change or variation to action.
5.	WH.O6 – CFG questions whether amendment to (b) that seeks that saltwater intrusion be avoided and that there be no landward movement of the saltwater/freshwater interface can be achieved in the face of predicted sea level rise.	In their submission on this objective, CFG simply noted their stance as "support" for WH.O6. No changes or explanation were sought. I consider the application of this objective is no different to manging the any impact that might also arise or be influenced by climate change. RMA plans cannot regulate (i.e. require consents for) the consequences of climate change (only potentially, the causes). Likewise, when a consent applicant seeks consent, climate change exacerbation of human induced effects is likely relevant, but not the climate change effects in the absence of a consent or human activity.

Row number	Summary of evidence from Te Rūnanga o Toa Rangatira (Aimee Rei- Bishop)	Response
1.	Supportive of many of the proposed amendments in section 42A report and the retention of the 2100 and 2040 objectives but concerned that the 2040 target is being watered down. Page 3. Key areas of concern include:	I respond to the key areas of concern below, in relation to the more detailed comments from Ms Rei-Bishop on behalf of Te Rūnanga o Toa Rangatira (Ngāti Toa).
	 Reduced sedimentation targets as part of coastal water objectives (Table 9.1). Lower enterococci targets for sites within the harbour: Waka Ama, Rowing Club and Water Ski Club (Table 9.1A). Lower <i>E.coli</i> targets at Taupō Stream, Horokiri Stream and Waiohata (Duck Creek) and Te Kenepuru Stream (Porirua Stream) Table 9.2. 	
2.	 Removal of Table 9.3 – contaminant load reductions. P.O2 - considers the plan should contain dedicated targets to achieve natural form and character and indigenous riparian vegetation while noting this will require a range of statutory and non-statutory methods. Paragraph 2c. 	I note the comment requesting 'dedicated' targets to achieve natural form and character and indigenous riparian vegetation here. While these requests were not requested in the Ngāti Toa submission, 'habitat quality' / 'natural character index' targets (which I understand are numeric in nature) were requested in submissions by EDS and Forest & Bird. I addressed that request at paragraphs 313-314 of my section 42A report, concluding because bed disturbance objectives, policies and rules are not covered by the scope of PC1, they should not be included. I understand that bed activity (modification) is the key activity managed by natural character index targets. Natural form and character values will be managed and improved as a consequence of the water quality and

Table 15 Response to evidence from Te Rūnanga o Toa Rangatira (Aimee Rei-Bishop)

Row number	Summary of evidence from Te Rūnanga o Toa Rangatira (Aimee Rei- Bishop)	Response
		ecosystem health TAS under PC1, but not through objectives impacting bed aspects of natural form.
		In terms of 'dedicated' targets for indigenous riparian vegetation, I do not recall any submissions that sought a numeric target of this nature be added to PC1 objectives, so I consider this request is both out of scope of the plan change, and potentially, any other party's submissions made on the change, particularly if Ms Rei-Bishop is intending a 'numeric' target in her request for a dedicated target. The relevant objective narrative wording is simply for indigenous riparian vegetation to be increased and improved. I support the current objective wording on the basis of likely scope issues, and because the submitter has not provided sufficient indication on the nature and quantum for the target sought, assuming a numeric target was the intention.
		This does not prevent non-regulatory methods responding to drivers for a 'dedicated' target'. Non-regulatory methods are likely to be most effective to improve riparian vegetation in any case as it is difficult to regulate for more vegetation (i.e., in the absence of a development needing an RMA approval), particularly in urban catchments with fragmented landholdings. Potentially, the Freshwater Action Plan content of PC1 (Hearing Stream 5) might provide an opportunity for further consideration of these matters.
3.	 P.O3 - seeking an explanation and rationale behind changes to the mean sedimentation rate in the coastal water objectives on Table 9.1. Paragraph 3c. Seeking a plain English explanation of enterococci targets and how they are calculated. Paragraph 3f. Concerned that the enterococci 2040 targets for the Waka Ama, Rowling Club and Water Ski Club sites on Table 91A within Te Awarua o Porirua are 	The explanation on the change to the sedimentation rate in Table 9.1 is provided in the primary evidence of Dr Melidonis at paragraphs 70-75. It has been recommended by the scientist to change from the PC1 levels of 1mm and 2mm/year to 2.7mm and 3.2mm/year. This is because the pre-human geological natural sedimentation rate was not accounted for in the PC1 (or WIP) targets, and it should be because sedimentation of harbours is both a natural and a human induced process, but the plan should only be managing and responding to human induced activities.

Row number	Summary of evidence from Te Rūnanga o Toa Rangatira (Aimee Rei- Bishop)	Response
	set too low. Suggests a two-tier target with an interim target for 2040 and another for 2050. Paragraph 3h-i. Note that the objective will require an assessment of cultural health of mahinga kai and the evidence to be presented by Ngāti Toa at Hearing Stream 2 will be essential to track the achievement of the objective. Paragraph 3k. This objective will require ongoing monitoring and improvement of access to the Porirua Harbour foreshore, and currently parts are inaccessible. The plan needs to provide a dedicated target to achieve this objective.	 I have adopted Dr Melidonis' recommended amended coastal water objective because I consider the new sedimentation rate objectives are more appropriate. The notified version would essentially be set at a level of natural state, which is too onerous for this location as it may have required a return to full native forest cover for all the catchments feeding into Onepoto Arm and Pāuatahanui Inlet to meet this, which is unrealistic. The revised numbers have been set with consideration of national guidance and local estimated deposition rates. The new numbers still require a substantial reduction of sediment from contributing activities to reduce current sedimentation rates. The request for a plain English explanation of the Enterococci targets has been provided in the rebuttal evidence of Dr Wilson. I acknowledge the concern of Ngāti Toa with the effective lowering of the coastal enterococci targets within the harbour at the Waka Ama, Rowing Club and Water Ski Club sites in Table 8.1A, by the fact my new target only requires half of the improvements by 2040, whereas the notified PC1 targets required all. I understand this is an erosion of outcome expected by mana whenua through the WIP and the notified PC1 targets, and that this is undesirable from a cultural perspective. The recommendation has been based on the anticipated achievability of the original target, as highlighted in the primary evidence of Dr Wilson. However, the targets as drafted still require timely and material improvements towards ≤500 enterococci, and safer connection with freshwater, compared to the situation without PC1. I agree with Ms Rei-Bishop that where I have recommended a coastal objective with a target that requires half the improvement (i.e. 50%) to swimmable standard (i.e., ≤500 enterococci per 100 mL) by 2040, there should be a further target, i.e., timeframe, for making the rest of the improvements needed to get to ≤500 enterococci per 100 mL specified in the plan. I have no technical input to gu

Row number	Summary of evidence from Te Rūnanga o Toa Rangatira (Aimee Rei- Bishop)	Response
		Ms Rei-Bishop that 2050 would be a suitable date for this. This is on the basis that I have recommended an adjusted period for meeting the contributing freshwater <i>E.coli</i> to 2050 (Te Rio o Porirua and Rangituhi) as above in response to the territorial authority evidence and further economic evidence.
		In response to Ms Rei-Bishop's request for cultural monitoring, to track cultural health of mahinga kai. This was not requested in the Ngāti Toa submission, but I note their submission supported the plan change as notified, with the exception of a request relating to a policy and rule activity status for unplanned greenfield development. However, on the basis that my amendments to some targets from the notified PC1 affects mahinga kai, it is reasonable to consider this request. But in the absence of any drafting or direction from the submitter on how she wishes this to be accommodated in the plan change, I have been unable to consider this request further, at this stage, but I can if proposed drafting is provided. Ms Rei-Bishop's request for improved access to Porirua Harbour through a dedicated target is in my view, beyond the scope of PC1. The scope of the plan change does not cover access to the Porirua Harbour foreshore, or remedying parts that are inaccessible.
4.	 P.O6 - supportive of the insertion of clause (e) to target improvements in the existing wastewater and stormwater networks. Paragraph 4b. But concerned about the reduction of the <i>E.coli</i> TAS for Taupō Stream, Horokiri Stream, Kenepuru Stream (Porirua Stream) and Waiohata (Duck Creek). Paragraph 4f. Notes the location identifier for the Porirua Milk Depot monitoring site requires updating. 	I acknowledge the concern about changes to the E.coli TAS and appreciate that the further reduced targets I have recommended in response to other evidence will exacerbate this concern. I have based my updated recommendations in consideration of further context outlined in the rebuttal evidence presented by Dr Greer. As a result of this, I now understand that a 1-step change is necessary in terms of achievability for the Taupō and Takapū part-FMUs also, given the rural nature of these catchments and the lack of provision (or scope) of PC1 for wholesale destocking rural land to meet the E.coli targets. The Taupō and Takapū changes are not related to urban wastewater networks. The Pouewe TAS is retained at a 2-step change as per my section 42A recommendation.

Row number	Summary of evidence from Te Rūnanga o Toa Rangatira (Aimee Rei- Bishop)	Response
		A timeframe changes to 2050 for the Te Rio o Porirua and Rangituhi part-FMU, is urban wastewater related, in response to territorial authority concerns on costs, and arise from the rebuttal evidence of Mr Walker which responds to their concerns. His evidence examines, at a part-FMU level, the affordability factors. In my opinion, the impact in terms of affordability for the community to meet the objectives is an important factor in the appropriateness of them, and the likely success in achieving the long-term improvements sought through the WIPs. Regarding her footnote 1 on page 7, I have updated the identifier for the Porirua Milk Depot monitoring site in Appendix 2 to respond to this feedback.
5.	P.O7 - there is no supporting information in PC1 which explains what 'no further decline' in Objective P.O7 by 2030 actually means.	 P.O7 was not intended to offset the less stringent attribute sites specifically. It simply responded to submissions seeking an interim target to reflect NPS-FM guidance on interim limits. Given I have now recommended some extensions to the timeframes in response to evidence from territorial authorities and further economic analysis, I have developed an alternative 'interim objective', as set out in Appendix 2. I acknowledge that the timeframe extensions will likely cause further concern for Ngāti Toa. The interim target objectives have been substantially redrafted, and I think are clearer now on what they require.
6.	Policy P.P4 - If there are no longer targets to reduce contaminant loads in the harbour, then how do you manage land use and discharges to reduce contaminant loads?	The objectives still require a reduction in the sediment to meet the harbour sedimentation rate, it's just specific load reduction is no longer specified in PC1 for the reasons outlined in Dr Melidonis' statement of primary evidence. The metal load reductions initially thought to be necessary to offset potential increases in 'natural' metal accumulation from reduced sedimentation are no longer thought to be necessary, based on Dr Wilson's ecotoxicology evidence.

Row number	Summary of evidence from Te Rūnanga o Toa Rangatira (Aimee Rei- Bishop)	Response
		Coastal targets for the harbour sedimentation rate and metal concentrations are retained in Table 9.1, which are the key targets for PC1, and which have relevance to land use and discharges consents.

Row Summary of evidence from NZTA (Catherine Heppelthwaite) Response number P.O1 and WH.O1 – generally supportive but suggest an editorial Given much of the content in these objectives differs, it seems unnecessary to me 1. consideration – the chapeau clauses of WH.O1 and P.PO1, which are that the chapeaus align. almost identical, could be re-organised to be consistent. Paragraph 6.3. 2. P.O3 – support the inclusion of "where deteriorated" but it would be I have considered this request, including reviewing dictionary definitions. My helpful for "deteriorated' to be defined. Paragraph 6.4. intended meaning was something similar to the defined term 'degraded' in the NPS-FM but not this, as the NPS-FM term relates specifically to freshwater and this objective covers coastal water. The dictionary meaning for 'deteriorated' includes 'worsening'. The intention of its use in WH.O3 and P.O3, and WH.P1 and P.P1 is to refer to where targets are not met. However, the context for the use of deteriorated in WH.O1 is not in relation to targets, rather just generally where natural character is poor. Accordingly, given the different contexts in which this word is used, I consider it is preferrable that it is not defined, so the context can be considered in terms of the objective in which its used.

Table 16 Response to evidence from NZTA (Catherine Heppelthwaite)

Row number	Summary of evidence from NZTA (Catherine Heppelthwaite)	Response
3.	P.P1 – The limited nature of the s32 assessment makes it difficult to assess the benefits and costs of the effects (including economic) that are anticipated from the implementation of the provisions such as achieving the outcomes sought in the relevant Tables in the 2040 timeframe. Further consideration should be given to extending the time frame for 2060. Paragraph 6.15.	In response to further economic analysis that responds to territorial authority evidence, I have made recommendations for some of my revised TAS (per my section 42A report) to also have a longer timeframe. In the context of stormwater related targets, this only applies to the Waiwhetu part-FMU. My understanding is there are no state highway assets within this part-FMU ¹⁵ . I have no evidence from either Dr Greer that suggests there are achievability issues (at Table 6 of his rebuttal statement) with any metal targets other than Waiwhetu Stream for zinc (and there no state highways there) and Wai-O-Hata for copper, which includes the recent SH1 Transmission Gully alignment. Based on a comment in Ms Heppelthwaite's evidence where she indicates that existing state highway networks are likely to require improvement <u>other than</u> Transmission Gully, the achievability issues for Wai-O-Hata presumably do not specifically relate to the state highway network here (I'm assuming she means because it already includes high quality stormwater treatment). Accordingly, there does not appear to be any state highway related evidence indicating that a longer timeframe might be needed for NZTA to be confident of alignment with P.P1 or the TAS objectives. I note also the coastal objectives for metals do not require improvement, rather maintenance is the intention of the numeric targets, along with reduction of any localised ecotoxicity effects (via other provisions in PC1) ¹⁶ .

 ¹⁵ Refer to PC1 mapping on GWR GIS site which includes a state highway layer <u>GWRC Web Map Viewer</u>
 ¹⁶ WH.P5, WH.P10(c)(iii), WH.R9, P.P5, P.P10, P.R8 and Schedule 31 clause (j)

Row number	Summary of evidence from NZTA (Catherine Heppelthwaite)	Response
4.	 WH.O2 – support changes to provide for a trajectory of improvement within the chapeau clause and new clause (ii) to recognise the social and economic benefits. Paragraph 6.17. Minor wording change to (a) to improve clarity: (a) water quality, habitats, aquatic life, water quantity and ecological processes are at a level where the state of aquatic life ecosystem health is maintained, or where degraded, meaningful progress has been made towards improvement where degraded in accordance with WH.O9, and 	I agree with Ms Heppelthwaite's rewording and have included it in Appendix 2 to this statement. I have also updated the wording in the similar objective, P.O2.
5.	Tables 8.1 and 9.1 CWO, Tables 8.4 and 9.2: Freshwater TAS, Tables 8.5 and 9.5 Visual Clarity TAS – if the tables are to be retained it is her opinion that they must remain at objective / policy level as regional goals; the individual parameters must not become 'values' for assessing either a consent application or imposed as consent conditions. Recommends a note similar to that proposed by the section 42A report for WH.O1 and P.O1 which clarifies the purpose of the each of the TAS/CWO Tables as follows: <i>Note: Table [8.1] sets out targets to 2040. Therefore, resource consent applicants do not need to demonstrate their proposed activities comply with individual parameters of the Tables.</i>	Dr Greer's rebuttal evidence explains how the TAS and coastal objectives are intended to apply to consenting. I think it is preferrable that guidance on the application of objectives is provided within relevant policies, as it needs to also reflect the localised ecotoxicity effects, which are separate to considerations for the wider environmental outcomes sought. Consent applicants need to contribute wider environmental outcomes where TAS and/or coastal water objectives are not met. Accordingly, a note is not sufficiently robust in this case. This matter should be revisited in Hearing Stream 4 if further guidance on the application of the objectives is needed in the case of specific discharges like NZTAs, which are covered in specific PC1 rules.

 Table 17 Response to evidence from Friends of Waiwhetu Stream (Michael Ellis)

Row number	Summary of evidence from Friends of Waiwhetu Stream (Michael Ellis)	Response
1.	The submitter raises concerns with the new 2060 target for achieving the minimum swimmable water quality. Deeply disappointed by the extended timeline. Urges Panel to prioritise the Waiwhetu Stream.	No response required – issues already canvased in section 42A report.

CORRECTION TO SUBMISSION NUMBERS

- 8 In paragraphs 3 and 25 of my Section 42A report for Objectives, I stated that "a total of 609 submission and 751 further submission points were received and categorised to the 'Objectives' topic." These counts were totalled during the initial stages of my reporting, however throughout the process of my report, I considered it more appropriate for particular submission points to addressed in other reporting topics (such as the Rural Land Use topic). Those submission points were reallocated however the number of submission and further submission points was not updated. I confirm that my Section 42A report addressed a final total of 565 submission and 706 further submission points. This correction does not affect the recommendations made in that Section 42A report.
- 9 Similarly, I reported "*a total of 193 submissions and 58 further submissions*" in my Section 42A report for Ecosystem Health and Water Quality policies. I now confirm that a final total of 190 submission and 311 further submission points were addressed in that Section 42A report.

SECTION 32AA ASSESSMENT

10 I understand there is a requirement for a further section 32AA assessment given the changes I have recommended to provisions, including TAS, in this rebuttal statement. Given that targets and provisions may warrant further changes because of information presented and considered at the hearing, it is my intention to include an updated section 32AA for the Panels as part of my right of reply, to capture all recommended changes post my section 42A report collectively.

DATE:

28 MARCH 2025 MARY O'CALLAHAN TECHNICAL DIRECTOR PLANNING, GHD