Appendix 4: Section 32AA Evaluation [updated 14 May 2025]

This document sets out the provisions of the notified version of Proposed Plan Change 1. Provisions as notified are shown in black text. Additions are <u>underlined</u> and deletions are <u>struck through</u>.

Section 42A recommended amendments are shown in red text. Additions are <u>underlined</u> and deletions are struck through. Black text in the right-hand column is my section 32AA evaluation at the section 42A report phase.

Rebuttal recommended amendments are shown in blue text. Additions are <u>underlined</u> and deletions are <u>struck through</u>. Section 32AA evaluation for changes arising in the rebuttal evidence are also in <u>blue text</u>.

Right of reply recommended amendments are shown in green text. Additions are <u>underlined</u> and deletions are struck through. Section 32AA evaluation for changes arising in the reply evidence are also in green text.

Purple text indicates explanatory and clarification notes for the purposes of this appendix and do not form part of recommended amendments.

The section 32AA assessment follows alongside for each of the provisions where amendments have been recommended by the officer.

Text of provision with recommended amendments shown	Evaluation of amendment (section 32AA assessment)
2.2 Definitions	
Environmental outcomes Environmental outcomes means the outcomes for values that apply to an FMU or part FMU as required by the National Policy Statement for Freshwater Management 2020 that are set out in for:	

Text of provision with recommended amendments shown	Evaluation of amendment (section 32AA assessmen
(a) Whaitua Te Whanganui-a-Tara Objectives – WH.O1, WH.O2, WH.O4 and WH.O5, and	• removing the use of 'environmental outcomes' within its own definition.
(b) Te Awarua-o-Porirua Whaitua Objectives – P.O1, P.O2 and P.O4	
Primary contact sites for Whaitua Te Whanganui-a-Tara are shown on Map 85. means a site identified by the Wellington Regional Council that it considers is regularly used, or would be regularly used but for existing freshwater quality, for recreational activities such as swimming, paddling, boating, or watersports, and particularly for activities where there is a high likelihood of water or water vapour being ingested or inhaled. Note: the identified sites are shown on Map 85.	The recommended amendment to this definition and the related removal of application of Schedule H2 improves the effectiveness of the plan as it explains the meaning of the term in line with the NPS-FM and provides suitable guidance to plan users to understand the purpose of these sites, as w as directing plan users to the map which shows their locations. Furthermore, removing duplication between Schedule H and the primary contact sites and objectives relevant to <i>E.coli</i> and enterococci removes duplication and risk of uncertainty with having two types of provisions directing 'improvements' for contact recreation with different targets.
3 Objectives	
Objective O2 Remove 'not applicable' icon.	The amendment better aligns with the RMA. Retaining this objective throughout the region is considered to be more appropriate in achieving the purpose of the RMA than the notified version which seeks to remove application of this objective for TWT and TAoP. It covers natural resources, recognising their contribution to social, economic and cultural wellbeing, and the health of people and communitie and directing that this be recognised in their management. In not inherently inconsistent with Te Mana o te Wai and the hierarchy of obligations, as the objective is not specifically directed to use of and impacts on water.

Text of provision with recommended amendments shown	Evaluation of amendment (section 32AA assessment)
Apply a 'not applicable' icon to Policy P65 such that it does not apply within the TWT and TAoP whaitua:	Clause 16 change to an icon is included in the decisions version of PC1 in accordance with the proposal to include one on page 21 of the notified version of PC1.
Policy P65: National Policy Statement for Freshwater Management requirements for discharge consents	
[]	
6 Other methods	
Apply a 'not applicable' icon to M34 such that it does not apply within the TWT and TAoP whaitua:	
Method M34: Improving water quality in priority water bodies []	
Method M36A: Long-term wai ora vision Freshwater Action Plan Wellington Regional Council will implement a programme to define and implement methods to reach wai ora by 2100 within a Freshwater Action Plan or Plans for Whaitua Te Whanganui-a-Tara and Te Awarua-o-Porirua Whaitua, and in accordance with the long-term freshwater vision objectives of the Regional Policy Statement.	The recommended new method improves the effectiveness and efficiency of the plan by addressing an implementation gap for the long-term vision of wai ora across both the RPS Change 1 and PC1, as the methods in PC1 (as notified) also focus on the 2040 period and do not clearly address the wai ora outcome by 2100.
 The long-term wai ora Freshwater Action Plan(s) will be: (a) developed in partnership with mana whenua, and be informed by engagement with catchment communities, territorial authorities and stakeholders, and 	The inclusion of a specific reference to territorial authorities clarifies that they are considered key stakeholders for the Freshwater Action Plan(s) to implement the long-term vision of wai ora.

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- (b) prepared and published by 2036, and
- (c) include methods to progressively deliver, monitor and review progress towards the long-term visions set out in objectives WH.O1 and P.O1, and
- (d) Identify responsibilities for implementing specific aspects of the plan(s).

Freshwater Action Plan(s) may be prepared for, or incorporate, refined actions for any aspect of wai ora identified in partnership with **mana whenua** and following engagement with the community, territorial authorities and any affected stakeholders.

Wellington Regional Council will monitor the effectiveness of the long-term wai ora Freshwater Action Plan(s) as appropriate and, at a minimum of 5 yearly intervals from the date of publication.

without this, there is no means of providing for their achievement.

8 Whaitua Te Whanganui-a-Tara

Objective WH.01

The health of all freshwater bodies rivers and lakes and their margins, natural wetlands, groundwater and the coastal marine area within Whaitua Te Whanganuia-Tara is progressively improved and is wai ora by 2100.

Note

In the wai ora state:

- Āhua (natural character natural form and character) is restored where
 deteriorated and freshwater bodies exhibit their natural quality, rhythms, range of
 flows, form, hydrology and character to the extent practicable, and
- All freshwater bodies rivers and lakes have planted margins, other than where physical constraints may prevent this, and

The amendments to Objective WH.O1 are considered to be the most appropriate way to achieve the purpose of the Act because they provide greater certainty to plan users and resource consent applicants about how the objectives are intended to be implemented i.e. the objective is a long-term objective that does not need to be applied to resource consent assessments, as it is supported by shorter term objectives which are more specific and achievable within the life of the plan. The amendments also provide for use of freshwater resources to support social, economic, environmental and cultural wellbeing while at the same time setting an expectation to protect and restore freshwater

- All freshwater bodies rivers and lakes and their margins, natural wetlands, groundwater and coastal waters have healthy functioning ecosystems and their water conditions and habitat support the presence, abundance, survival and recovery of At-risk and Threatened species and taonga species, and
- Mahinga kai and kaimoana species are healthy, plentiful enough for long term harvest and are safe to harvest and eat or use, including for manuhiri and to exercise manaakitanga, and
- Mana whenua are able to undertake customary practices at a range of places throughout the catchment, and
- Water is able to be used for social and economic use benefits, provided that the health and well-being of waterbodies, freshwater ecosystems and coastal waters is not compromised.

Note: Objectives WH.O2 to WH.O9 set out what is needed to achieve progressive implementation of this long-term objective up to 2040. Therefore, resource consent applicants do not need to demonstrate their proposed activities align with this objective.

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bodies wherever possible. In doing so, the amendments give effect to the NPS-FM and the principle of Te Mana o te Wai.

The replacement of 'natural character' with 'natural form and character' is considered appropriate to achieve the purpose of the Act as it is consistent with the wording of the NPS-FM, albeit 'natural character' and 'natural form and character' are generally understood to be the same thing in practical terms.

The inclusion of 'to the extent practicable' with reference to the restoration of āhua enables consideration of practicability and physical constraints, improving the effectiveness and efficiency of the plan in achieving the overall sustainable purpose of the RMA whilst also progressing the wai ora state.

Specifying exceptions for planted margins for rivers and lakes enables practicability in circumstances with physical constraints (such as access tracks and locations that are naturally devoid of vegetation), therefore improving the practical effectiveness and efficiency in achieving the wai ora state.



Objective WH.02

The health and wellbeing of Te Whanganui-a-Tara's groundwater, rivers and **natural** wetlands and their margins are on a trajectory of measurable improvement towards wai ora, such that by 2040:

- (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
- (b) <u>natural form and character is maintained, or where degraded, improvement has</u> <u>been made to the hydrology of rivers and erosion processes, including bank</u>

The recommended amendments to Objective WH.O2 are considered the most appropriate to achieve the purpose of the Act because:

- The amendments in the chapeau and clause (a) clarify the relationship of the environmental outcome objectives and the TAS objectives that do the 'measuring'. The amendment also better supports implementation of clause 3.9 of the NPS-FM as the clauses are linked to relevant values.
- The amendment in clause (g) better recognises the kayaking and rafting value of Te Awa Kairangi in response

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

- (c) the extent and condition of indigenous riparian vegetation is increased and improved, and
- (d) the diversity, abundance, composition, structure and condition of **mahinga kai** species and communities are increased, and
- (e) huanga of mahinga kai and Māori customary use for locations identified in Schedule B (Ngā Taonga Nui a Kiwa) are maintained or improved, and
- (f) mana whenua can more safely connect with freshwater and enjoy a wider range of customary and cultural practices, including mahinga kai gathering, and
- (g) mana whenua and communities can more safely connect with freshwater and enjoy a wider range of activities, including swimming, and fishing, kayaking and rafting food gathering, and
- (h) freshwater of a suitable quality is available for the health needs of people-, and
- (i) people and communities can provide for social and economic use benefits, provided that the health and well-being of waterbodies and ecosystems is not compromised.

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- to submissions and RPS direction and in doing so supports social wellbeing.
- The recommended deletion of clause (e) ensures all freshwater is considered in relation to the key NPS-FM values, not just those in Schedule B. This change more appropriately gives effect to the NPS-FM.

Shifting the placement of the 'where degraded' within clause (a) clarifies where ecosystem health is to be maintained or improved.

The deletion of 'improved' in clause (c) and clarification with 'ands' in clause (b) are appropriate to address a mismatch of linking language for 'improvement' with sources of sediment being 'reduced'.

Objective WH.03

The health and wellbeing of coastal water quality ecosystems and habitats in Te Whanganui-a-Tara is:

(a) maintained, or improved where deteriorated, to achieve the coastal water coastal water management unit objectives set out in Tables 8.1 and 8.1A, and by 2040; and

(a)(b) sediment inputs into Mākara Estuary are reduced, and

The recommended amendments to Objective WH. O3 are considered the most appropriate to achieve the purpose of the Act because:

 The amendments to the chapeau (now clause (a)) offer clearer guidance for plan users by specifying that the intention of the objective is to require improvements in coastal water quality and health where specific parameters are not met. This ensures the objective aligns

- (b)(c) in addition to the coastal water management unit wide copper and zinc objectives in Table 8.1, high contaminant concentrations, including around stormwater discharge points, are have reduced where causing significant adverse effects, and
- (d) fish and benthic and intertidal invertebrate communities are resilient and their structure, composition and diversity are maintained, and
- (e) there is no increase in the frequency of nuisance macroalgal blooms, and
- (f) phytoplankton levels are maintained and monitored in applicable areas in the vicinity of point source discharges and locations that experience riverine mouth closures with limited water mixing, and
- (c)(g) diversity, abundance, composition, structure and condition of **mahinga kai** species and communities has increased, and
- (d)(h) huanga of mahinga kai and Māori customary use for locations identified in Schedule B (Ngā Taonga Nui a Kiwa) are maintained or improved, and
- (e)(i) the extent and condition of estuarine seagrass, saltmarsh and brackish water submerged macrophytes are increased and improved to support abundant and diverse biota, and
- (f)(j) coastal areas support healthy functioning ecosystems, and their water conditions and habitats support the presence, abundance, survival, and recovery of At-risk and Threatened species and taonga species, and
- (g) mana whenua can safely connect with the coastal marine area and enjoy a wider range of customary and cultural practices, including mahinga kai gathering and tauranga waka, and
- (h)(k) mana whenua and communities can more safely connect with use the coastal marine area and enjoy a wider range of activities, including food gathering, and swimming, paddling, Māori customary use and tikanga.

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- with the overarching purpose of the RMA, particularly in promoting the enhancement of coastal water quality, supporting social, economic, cultural and environmental wellbeing.
- The deletion of clause (g) removes duplication with clause (h). Additionally, amendments to clause (h) better reflect the intent and scope of PC1, placing emphasis on the suitability of coastal waters for human use, rather than physical access.
- The inclusion of defined terms in the NRP in Clause (h) provides greater certainty for plan users and resource consent applicants, ensuring clearer interpretation and application of the objective.

Changes to the accompanying table respond to scientific recommendations to refine the key parameters for ecosystem health and revise the metal targets to maintain within a 'band' to accommodate for natural accumulation. The reply amendments include a new footnote that explains and defines the metal bands. The amendment to (c) resolves a conflicting expectation for metals between this clause and the 'maintenance' within a band approach within the table, which allows for natural accumulation rates only. These amendments clarify the intent of the clause to apply to 'hot spot' stormwater contaminants which accumulate in specific localised locations.

Retaining the first part of the objective chapeau and shifting the remainder of the chapeau into clause (a) is appropriate as it:

Text of provision with recommended amendments shown	Evaluation of amendment (section 32AA assessment)
[refer Appendix 1 for Tables 8.1 and 8.1A]	Clarifies that the objective relates to 'coastal' water quality and ecosystem health; and
	• Clarifies that the first 'objective' is to achieve the targets in the tables.
	The addition of clauses which set 'alternative criteria' relating to fish, benthic and intertidal invertebrates, nuisance macroalgal blooms and phytoplankton assist the objective as they are 'measures' to manage negative water quality and ecosystem health impacts.
	The amendments also provide clarification that mana whenua and communities can 'more' safely use the coastal marine area. This recognises that it is not scientifically possible to assert that water will be safe for swimming and food gathering, just that it is 'safer' for these activities.
	Revisions to include the enterococci targets in a new table listing the Council's coastal primary contact monitoring sites have been made to assist plan interpretation and application of these objectives to specific locations of high use, rather than everywhere which is unnecessary and less effective and efficient, as the Council is not able to or intending to monitor this parameter throughout the coastal marine areas of the TWT whaitua. Changes to some enterococci targets to reduce the stringency via the "50% toward meeting 500" objective reflect the significant load reduction necessary for some highly contaminated locations and my concern that full compliance to the swimmable standard is unlikely to be achievable by 2040. Accordingly, taking account of affordability and practical implementation issues, this change

Text	of provision with recommended amendments shown	Evaluation of amendment (section 32AA assessment)
		will assist with providing objectives that appropriately achieve the purpose of the Act.
		Accordingly, the amended objective is more appropriate than the PC1 notified version, as interpretation uncertainty and achievability issues have been addressed.
By 20	ective WH.O5 040 the health and wellbeing of the Parangarahu Lakes and associated natural ands are on a trajectory of improvement towards wai ora, such that:	The recommended amendments to Objective WH.O5 are considered the most appropriate to achieve the purpose of the Act.
<u>(a)</u>	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 where these are not met, to provide for ecosystem health, and	Removing clauses (b) and (c) improves clarity for plan users by eliminating duplication with the submerged plants TAS included in Table 8.2 and addressing lack of clear alignment with a specific value.
(b)	the lakes are not impacted by submerged invasive plants and support healthy native aquatic plants, and the lakes function as a productive nursery with breeding habitats of indigenous	Clause (c) also duplicates part of the outcome in clause (a) and extends beyond the Council's responsibilities under the RMA. Its removal ensures the objective better aligns with the Council's role and the overall purpose of the RMA.
<u>(d)</u>	riparian vegetation of at least 20 metres is present around the perimeter of each lake, other than where physical constraints may prevent this, and	The replacement of 'where degraded' with 'not met' in clause (a) clarifies the intent of the objective and is consistent with the wording used in other TAS objectives in PC1.
<u>(e)</u>	the diversity, abundance, composition, structure and condition of mahinga kai species and communities has increased, and	A measurement of the width of vegetation sought around lakes in clause (d) improves effectiveness and avoids risk of
<u>(f)</u>	mana whenua can more safely connect with and enjoy waterbodies to undertake a wider range of customary and cultural practices, including mahinga kai gathering, and	uncertainty (for example, application catchment-wide). Additionally, specifying exceptions for riparian vegetation enables practicability in circumstances with physical constraints (such as tracks and locations that are naturally
<u>(g)</u>	huanga of mahinga kai and Māori customary use for locations identified in Schedule B (Ngā Taonga Nui a Kiwa) are maintained or improved.	devoid of significant vegetation), therefore improving the effectiveness and efficiency of the objective.

Text of provision with recommended amendments shown	Evaluation of amendment (section 32AA assessment)
[refer Appendix 1 for Table 8.2]	Clarification that mana whenua can 'more' safely connect with and enjoy waterbodies recognises that it is not scientifically possible to assert that water will be safe for customary and cultural practices, just that it is 'safer' for these activities.
Objective WH.O6 Groundwater flows and levels, and water quality, are maintained at levels that Groundwater health and integrity, including the confining layers of the aquifer system, are maintained and protected such that: (a) ensure base flows or levels in surface water bodies and springs are supported, and (b) salt-water intrusion is avoided and there is no landward movement of the salt-water/freshwater interface, and (bc) protect groundwater quality and groundwater dependent ecosystems are maintained, or improved where degraded, and (ed) protect ecosystems in connected surface water bodies are maintained, or improved where degraded, and (de) ensure that groundwater is of sufficient quality for human and stock drinking water, and (ef) ensure there is not a long-term decline in mean annual groundwater levels; including artesian pressures, and (fg) avoid aquifer consolidation is avoided, and (h) aquifer pressures are maintained, and (ii) social and economic use benefits are enabled where (a)-(h) are not compromised.	 The recommended amendments to Objective WH.O6 are considered the most appropriate to achieve the purpose of the Act because: The amendments provide greater clarity to plan users and resource consent applicants about the intent of the objective and what activities it applies too. The amendment to clauses (b) and (c) more appropriately give effect to the direction of Policy 5 of the NPS-FM. New clause (d) recognise the importance of groundwater usage, ensuring sufficient reliability for the needs of communities.

	Text of provision with recommended amendments shown	Evaluation of amendment (section 32AA assessment)
≋FW	Objective WH.07 The physical integrity of aquitards is protected so that confined aquifer pressures are maintained.	The recommended deletion of Objective WH.O7 is considered the most appropriate to achieve the purpose of the Act as it ensures that issues related to maintaining groundwater health and integrity are not separated.
≋FW	Objective WH.O8 Primary contact sites within Te Awa Kairangi/Hutt River, Pākuratahi River, Akatarawa River and Wainuiomata River are suitable for primary contact by ensuring that by the timeframe indicated within Table 8.32040: (a) Escherichia coli concentrations are at least maintained, or improved where the target attribute states in Table 8.3 are not met, and (b) there is low risk of health effects from exposure to benthic cyanobacteria. [refer Appendix 1 for Table 8.3]	Additional content is included in the table accompanying this objective to improve plan clarity and the appropriateness of the objective settings through inclusion of additional current data content. The recommended amendment to the chapeau and the date for meeting one of the objectives for one of the primary contact sites to 2060 is considered the most appropriate to achieve the purpose of the Act. It ensures clarity of the objective in relation to Table 8.3 and aligns the Melling Bridge site with the date I have proposed for the contributing part-FMU <i>E. coli</i> TAS, in recognition of the financial and implementation feasibility associated with necessary wastewater network improvements expected to be necessary to achieve these targets.
≋FW	 Objective WH.O9 Water quality, habitats, natural form and character, water quantity and ecological processes of rivers are maintained or improved by ensuring that: (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 the target attribute state is met within the timeframe indicated within Table 8.4, and (b) where a target attribute state in Table 8.4 is met, the state of that attribute is at least maintained in all rivers within the part Freshwater Management Unit, and 	The recommended amendments to Objective WH.O9 are considered the most appropriate to achieve the purpose of the Act because: The amendments will help guide the prioritisation of subcatchment improvements Amendments to the chapeau to reference natural form and character will give effect to the NPS-FM and better relate outcomes to the applicable values.

- (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
- (d) where a huanga of mahinga kai and Māori customary use for locations identified in Schedule B (Ngā Taonga Nui a Kiwa) and is not achieved, the state of the river or river reach is improved.
- (d) where improvements are required to existing wastewater or stormwater networks:
 - (i) prioritise *E.coli*/enterococci reductions that contribute to achieving the targets for **primary contact site** locations in Table 8.3, ahead of coastal targets in Table 8.1A and then the broader **part Freshwater**Management Unit *E.coli* targets in Table 8.4.
 - (ii) prioritise dissolved copper and dissolved zinc reductions in locations where macroinvertebrate target attribute state(s) in Table 8.4 are not met once the priorities in clause (i) above have been addressed, and
- (e) the targets in Table 8.4 are managed and monitored at a **part Freshwater**Management Unit level, by the Council, and, where specific policies and rules are included in this chapter of the plan to manage an activity or discharge, and
 - (i) when the specific policies and rules are fully satisfied, then the activity or discharge can be considered to be consistent with the target attribute states; or
 - (ii) when the specific policies and rules are not satisfied, then an assessment of the impact of an activity or discharge on the achievement of the target attribute states will be required; or
 - (iii) where policies and rules are not included in this chapter to manage the proposed activity, then an assessment of the impact of an activity or

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- The insertion of Clause (e) clarifies the nature of the objective and who is responsible for meeting the targets.
- Changes to the accompanying table respond to scientific recommendations to refine the key attributes for ecosystem health. They also improve the achievability of targets, with consideration for the costs and practicability of achieving the required improvements within the specified timeframe.

The deletion of 'at least' from clause (b) as well as clause (c) avoids redundant words and potential interpretation issues.

The inclusion of 'long term monitoring data' in clause (c) makes the intended approach clearer and avoids the risk of literal interpretation from a single monitoring record or natural variation.

The addition of references to 'discharge' in clause (e) improves consistency in the application to both activities and discharges.

Current state data has been included where available, for those TAS where data meeting the 'baseline' requirements of the NPS-FM were not available.

Changes to the timeframe and standards for *E. coli* in the table allow for the financial and implementation feasibility challenges associated with wastewater network improvements expected to be necessary to achieve targets in some part-FMUs. This will assist with providing for objectives that appropriately achieve the purpose of the Act.

Some stormwater (copper and zinc) objectives have been adjusted for technical or scientific reasons, as outlined in Dr

Text of provision with recommended amendments shown	Evaluation of amendment (section 32AA assessment)
discharge on the achievement of the target attribute states will be required.	Greer's evidence statements. Numbers for 'improve within C state' TAS that I recommend for achievability reasons have now been added to provide a measurable level for the expected improvement. These have been inserted in
[refer Appendix 1 for Table 8.4]	accordance with Dr Greer's reply evidence based on available guideline values that provide thresholds between the B and C band values (where available). These correspond to a 90% species protection level which is considered appropriate.
	Other changes in the table generally respond to the technical scientific evidence of Dr Greer and provide for more scientifically robust objectives that are an appropriate reflection of the requirements of the NPS-FM.
Add a new objective within chapter 8:	The recommended insertion of Objective WH.O10 is considered the most appropriate to achieve the purpose of the Act because:
Objective WH.O10 The following interim targets apply within Te Whanganui-a-Tara: (a) For all target attribute states which require an improvement, no deteriorating trend is sought by 2030, unless due to a naturally occurring process. (b) For any target attribute state in Tables 8.3 or 8.4 with a timeframe for improvement set at:	 it establishes a 'no further decline' imperative by 2030 in line with the 10 year interim targets required by the NPS-FM. it reflects the intended purpose of the objective by referring to TAS and clarifying that the objective is an interim target for the first time step to 2030.
(i) 2050, the state of that attribute must be improved by 50% of the improvement required in the part Freshwater Management Unit by 2040, and	 it accommodates a scenario where the Panels adopt an extended implementation timeframe for some TAS of 2060.
(ii) 2060, the state of that attribute must be improved by 50% of the improvement required in the part Freshwater Management Unit by 2040, and 75% by 2050.	• it supports the longer objective timeframes now recommended for some TAS in some part-FMUs.

Text	t of provision with recommended amendments shown	Evaluation of amendment (section 32AA assessment)
active state	e: Sub-clause (a) of this objective is intended for state of the environment orting. Resource consent applicants do not need to demonstrate their proposed vities align with this objective, where it can be demonstrated that target attribute es will be met within the timeframe prescribed for that target.	
(a) (b) (c) (d)	atic ecosystem health will be improved, where deteriorated, by: progressively reducing the load or concentration of contaminants, particularly sediment, nutrients, pathogens and metals, entering water, and restoring habitats, and enhancing the natural flow regime of rivers and managing water flows and levels, including where there is interaction of flows between surface water and groundwater, and co-ordinating and prioritising work programmes promoting non-regulatory methods that seek to improve aquatic ecosystem health, in accordance with M36-M45 of the plan-in catchments that require changes to land use activities that impact on water. atic ecosystem health will be maintained, where healthy.	The recommended amendments improve the effectiveness of the policy and provide suitable guidance to plan users about the actions that are expected to improve aquatic ecosystem health and where improvement is needed. There are not expected to be any additional costs beyond those previously considered in the section 32 report. There are benefits for plan users as recommended amendments make it clear that improvements are only necessary in degraded waterbodies, which may also assist with focusing available funding on improving priority locations rather than obliging this everywhere throughout the whaitua. The amendments also make clear that work programmes are non-regulatory methods which may also include other non-regulatory actions outside of methods identified in the plan. The clarification of aquatic ecosystem health to be maintained where healthy improves the effectiveness of the policy by addressing a policy gap where aquatic ecosystem health is
	icy WH.P2 Management of activities to achieve target attribute states coastal water objectives	not deteriorated. The recommended amendments remove unnecessary duplication with the requirements of more specific provisions (policies, rules and schedules) of PC1 and the NRP and support implementation by deferring guidance on the

Text of provision with recommended amendments shown **Evaluation of amendment (section 32AA assessment)** management of activities to the relevant activity specific Target attribute states and coastal water objectives will be achieved by regulating discharges and land use activities in the Plan, and non-regulatory methods, including provisions. Freshwater Action Plans, by: There are expected to be no additional costs as the direction provided by this policy is already included in the more activity prohibiting unplanned greenfield development and for other specific provisions of the plan. developments minimising the contaminants and contributions as to offset adverse effects from residual In relation to stock exclusion, recommended amendments contaminants, and support implementation of the plan change by removing a policy clause that was inconsistent with the detailed policy encouraging redevelopment activities within existing urban areas to reduce the provisions of the plan. existing urban contaminant load, and In relation to riparian planting, recommended amendments (c) imposing hydrological controls on urban development and stormwater (to this policy and WH.P27 below) address a gap in PC1 as discharges to rivers notified related to the use of riparian planting to support (d) requiring a reduction in contaminant loads from urban wastewater and improvements to aquatic ecosystem health by reducing stormwater networks, and effects of nutrients in diffuse charges and sediment through stabilising stream banks. stabilising stream banks by excluding livestock from waterbodies and planting riparian margins with indigenous vegetation, and requiring the active management of earthworks, forestry, cultivation, and vegetation clearance activities, and soil conservation treatment, including revegetation with woody vegetation, of land with high erosion risk, and requiring farm environment plans (including Freshwater Farm Plans) to improve farm practices that impact on freshwater. Policy WH.P4: Achievement of the visual clarity target attribute states The amendments to the sediment load reductions in the table respond to the new scientific evidence on the annual To achieve the visual clarity target attribute states in Table 8.4 in part Freshwater sediment load levels that are expected to be necessary to Management Units where the target attribute state is: meet the visual clarity TAS in those part-FMUs where the objectives identify an improvement is necessary. The numbers

Text of provision with recommended amendments shown **Evaluation of amendment (section 32AA assessment)** met, the mean annual sediment load must be at least maintained, and have been updated to reflect the latest modelling predictions on the annual level of reduction expected. In the case of 'Te where it is not met, a percentage reduction in the mean annual sediment load Awa Kairangi rural streams and rural mainstems' part-FMU, must be-achieved reduced as set out in Table 8.5. this is a material reduction to recognise the natural colour issues in the Mangaroa area due to the presence of peat. The other changes are minor, and where a slightly larger load [refer Appendix 1 for Table 8.5] reduction is recommended, this is simply reflective of the slight deterioration of existing conditions against the target in the time elapsed since the initial modelling work was completed. Costs will reduce for the 'Te Awa Kairangi rural streams and rural mainstems' part-FMU as the TAS for this location is reduced (more lenient), and so this load reduction is also reduced. The plan effectiveness benefit is the better alignment between this policy and the associated TAS objectives it gives effect to. The environmental benefits are unchanged other than for 'Te Awa Kairangi rural streams and rural mainstems' where the TAS (and this load reduction) has now been set at a more realistic level, in light of the revised provisions accommodating the natural impacts to visual clarity, i.e., the previous target would have been unachievable due to natural sources impacting visual clarity. The amendment to the table adding 'from baseline' to the suspended sediment load reduction column assists with plan interpretation, i.e., this percentage reduction applies to the baseline numbers in the table, rather than any alternative interpretation that could arise without this. Accordingly, the

plan change is more effective in this regard.



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Policy WH.P27: Promoting stream shading riparian planting to improve aquatic ecosystem health

Contribute to the achievement of aquatic ecosystem health by promoting riparian planting to:

- (a) stabilise stream banks to reduce stream bank erosion; and
- (b) the progressively shadeing streams where nutrient reductions alone will be insufficient to achieve the periphyton target attribute states in Table 8.4.

Recommended amendments address a gap in PC1 as notified related to the use of riparian planting to stabilise stream banks and reduce sediment to support improvements to aquatic ecosystem health.

The proposed amendments will not lead to any material additional costs for landowners as the amendment just recognises the dual benefits achieved by the regulatory and non-regulatory methods for planting in PC1.

Any costs are outweighed by the benefits afford by additional climate resilience and the positive social and environmental benefits through improvements to water quality achieved through the proposed amendments.

9. Te Awarua-o-Porirua Whaitua

Objective P.O1

The health of Te Awarua-o-Porirua's groundwater, rivers, lakes, **natural wetlands**, estuaries, harbours and coastal marine area is progressively improved and is wai ora by 2100.

Note

In the wai ora state:

- The values of Ngāti Toa Rangatira are upheld by way of revitalising and protecting Ngāti Toa Rangatira practices and tikanga associated with Te Awarua-o-Porirua, and is a taonga of Ngāti Toa Rangatira and must be respected by others
- Mauri is restored and harbour sedimentation is reduced to a more natural level waters are in a natural state, where possible, and
- Ecological health is excellent in freshwater and coastal water environments, and

The amendments to Objective P.O1 are considered to be the most appropriate way to achieve the purpose of the Act because:

- The amendment to the first bullet point under the 'Note' of the objective provides a specific and measurable resource management outcome to support cultural wellbeing for Ngāti Toa Rangatira. This clarification supports plan implementation.
- The remaining amendments to the objective provide greater certainty to plan users and resource consent applicants about how the objectives are intended to be implemented i.e. the objective is a long-term objective that does not need to be considered in resource consent assessments as it is supported by shorter term objectives which are more specific and achievable within the life of

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- Rivers flow naturally, with ripples riffles, runs and pools, and the river beds are stony, and
- Mahinga kai, taonga, mahinga ika and kaimoana species are healthy, abundant, diverse, present across all stages of life, sizeable, and able to be culturally harvested by mana whenua, and
- Mahinga kai, taonga, mahinga ika and kai moana species are safe to harvest and eat or use, including for mana whenua to exercise manaakitanga, and
- Mana whenua and communities are able to undertake a full range of activities, and
- Mana whenua are able to undertake cultural activities and practices, and
- Water is able to be used for social and economic use benefits, provided that the health and well-being of waterbodies, freshwater ecosystems and coastal waters is not compromised.

Note: Objectives P.O2 to P.O6 set out what is needed to achieve progressive implementation of this long-term objective. Therefore, resource consent applicants do not need to demonstrate their proposed activities align with this objective.

- the plan. The amendments also provide for use of freshwater resources to support social, economic, environmental and cultural wellbeing while at the same time setting an expectation to protect and restore freshwater bodies wherever possible. In doing so, the amendments give effect to the NPS-FM and Te Mana o te Wai.
- Refocusing the 'natural state' reference to the harbour sedimentation matter is clearer and more suitable than the previous drafting of natural state where possible for all waters.

≋FW

Objective P.02

Te Awarua-o-Porirua's groundwater, rivers, lakes and **natural wetlands**, and their margins are on a trajectory of measurable improvement towards wai ora, such that by 2040:

- (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, meaningfully improved in accordance with P.O6, and
- (b) natural form and character is maintained, or where degraded, improvement has been made to limit erosion processes, including bank stability, are improved to

The recommended amendments are considered to be the most appropriate for the following reasons:

- The amendments in the chapeau and clause (a) clarify the relationship of the environmental outcome objectives and the TAS objectives that do the 'measuring'.
- The amendments also better support implementation of clause 3.9 of the NPS-FM as the clauses are linked to relevant values.

- significantly reduce the sedimentation rate in the harbour to a more natural level, and the extent and condition of indigenous riparian vegetation is increased and improved, supporting ecosystem health, and
- (c) the extent and condition of indigenous riparian vegetation is increased and improved, and
- (d) the diversity, abundance and condition of **mahinga kai** are increased so that **mana whenua** are able to harvest healthy **mahinga kai** for their people, and
- (e) huanga of mahinga kai and Māori customary use for locations identified in Schedule B (Ngā Taonga Nui a Kiwa) are maintained or improved, and
- (f) mana whenua are able to more safely connect with freshwater and are able to practice their customary and cultural practices, including mahinga kai gathering, and
- (g) mana whenua and communities can more safely connect with waterbodies and enjoy a wider range of activities, including swimming, paddling and fishing food gathering, and
- (xx) freshwater is available for the health needs of people, and
- (hi) people and communities can provide for social and economic use benefits, provided that the health and well-being of waterbodies and ecosystems is not compromised, and,

the freshwater environmental outcomes must contribute to the:

- (ij) the freshwater environmental outcomes must contribute to the maintenance and improvement of the health and wellbeing of estuaries, harbours and open coastal areas., and
- (j) protection and restoration of sites within significant values.

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The recommended deletion of clause (e) ensures all freshwater is considered in relation to the key NPS-FM values, not just those in Schedule B. This change more appropriately gives effect to the NPS-FM.

The inclusion of 'where degraded' in clause (a) is consistent with the wording in Objective WH.O2. The inclusion of a clause for freshwater for the health needs of people is also consistent with Objective WH.O2.

Shifting the reference to 'freshwater environmental outcomes' into clause (i) now amended to be clause (j) rather than as standalone paragraph clarifies the direction of the objective with respect to freshwater environmental outcomes. The deletion of clause (j) directing the protection and restoration of sites within significant values is appropriate because this matter is more clearly covered by Objective P.O4 of PC1 relating to species protection and improvement and as such, does not need to be duplicated in this objective.

Objective P.O3

The health and wellbeing of coastal water quality, ecosystems and habitats in Pāuatahanui Inlet, Onepoto Arm and the open coastal areas of Te Awarua-o-Porirua is:

- (a) maintained, or improved where deteriorated, to achieve the coastal water coastal water management unit objectives set out in Table 9.1 and 9.1A, and by 2040;, and
- (a)(b) sediment and metal loads entering the harbour arm catchments either via freshwater bodies or directly are significantly reduced, and
- (b)(c) in addition to the coastal water management unit wide copper and zinc objectives in Table 9.1, high contaminant concentrations, including around stormwater discharge points, are have reduced where causing significant adverse effects, and
- (d) fish and benthic invertebrate communities are resilient and their structure, composition and diversity are maintained, and
- (e) there is no increase in the frequency of nuisance macroalgal blooms, and
- (f) phytoplankton levels are maintained and monitored in applicable areas of point source discharges, and
- (c)(g) the diversity, abundance and condition of **mahinga kai** has increased so that **mana whenua** access to healthy **mahinga kai** has increased, and
- (d)(h) huanga of mahinga kai and Māori customary use for locations identified in Schedule B (Ngā Taonga Nui a Kiwa) are maintained or improved, and
- (e)(i) the extent and condition of estuarine seagrass, saltmarsh and brackish water submerged macrophytes are increased and improved to support abundant and diverse biota, and

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The recommended amendments to Objective P. O3 are considered the most appropriate to achieve the purpose of the Act because:

- The amendments to the chapeau offer clearer guidance for plan users by specifying that the intention of the objective is to require improvements in coastal water quality and health where specific parameters are not met. This ensures the objective aligns with the overarching purpose of the RMA, particularly in promoting the enhancement of coastal water quality, supporting social, economic, cultural and environmental wellbeing.
- The deletion of clause (g) removes duplication with clause (h). Additionally, amendments to clause (h) better reflect the intent and scope of PC1, placing greater emphasis on the suitability of coastal waters for human use, rather than physical access.
- The inclusion of defined terms in the NRP in Clause (h)
 provides greater certainty for both plan users and resource
 consent applicants, ensuring clearer interpretation and
 application of the objective.

Changes to the accompanying table respond to scientific recommendations to refine the key parameters for ecosystem health and revise the metal targets to maintain within a 'band' to accommodate for natural accumulation. The reply amendments include a new footnote that explains and defines the stormwater bands. The amendment to (c) resolves a conflicting expectation for metals between this clause and the 'maintenance' within a band approach within the table, which allows only for natural accumulation rates only. The amendments clarify the intent of the clause to apply to 'hot

- (f)(j) coastal areas support healthy functioning ecosystems, and their water conditions and habitats support the presence, abundance, survival, and recovery of taonga species and At-risk and Threatened species, and
- (g) mana whenua are able to safely connect with and access the coastal marine area and practice their customary and cultural tikanga, and
- (h)(k) mana whenua and communities can more safely connect with use the coastal marine area and enjoy a wider range of activities, including food gathering, swimming, and paddling, Māori customary use and tikanga.

[refer Appendix 1 for Tables 9.1 and 9.1A]

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spot' stormwater contaminants which accumulate in specific localised locations.

Retaining the first part of the objective chapeau and shifting the remainder of the chapeau into clause (a) is appropriate as it:

- Clarifies that the objective relates to 'coastal' water quality and ecosystem health; and
- Clarifies that the first 'objective' is to achieve the targets in the tables.

The addition of clauses which set 'alternative criteria' relating to fish, benthic and intertidal invertebrates, nuisance macroalgal blooms and phytoplankton assist the objective as they are 'measures' to manage negative water quality and ecosystem health impacts.

The amendments also provide clarification that mana whenua and communities can 'more' safely use the coastal marine area. This recognises that it is not scientifically possible to assert that water will be safe for swimming and food gathering, just that it is 'more safe' for these activities.

Revisions to include the enterococci targets in a new table listing the Council's coastal primary contact monitoring sites have been made to assist plan interpretation and application of these objectives to specific locations of high use, rather than everywhere which is unnecessary and less effective and efficient, as the Council is not able to or intending to monitor this parameter throughout the coastal marine areas of the TWT whaitua. Changes to some enterococci targets to reduce the stringency via the "50% toward meeting 500" objective reflect the significant load reduction necessary for some

	Text of provision with recommended amendments shown	Evaluation of amendment (section 32AA assessment)
		highly contaminated locations and my concern that full compliance to the swimmable standard is unlikely to be achievable by 2040. Accordingly, taking account of affordability and practical implementation issues, this change will assist with providing objectives that appropriately achieve the purpose of the Act.
		Accordingly, the amended objective is more appropriate than the PC1 notified version, as interpretation uncertainty and achievability issues have been addressed.
≋FW	Objective P.O5 Groundwater flows and levels, and water quality, are maintained at levels that protect ensure that: (a) groundwater dependent ecosystems are maintained, or improved where degraded, and (b) the values of connected surface water bodies in places where groundwater flows to surface water are maintained, or improved where degraded.	The recommended amendments to Objective P.O5 are considered the most appropriate to achieve the purpose of the Act as the amendment clarify that improvements are only required to degraded water, better aligning with the NPS-FM.
≋FW	 Objective P.O6 Water quality, habitats, natural form and character, water quantity and ecological processes of rivers are maintained or improved by ensuring that: (a) where a target attribute state in Table 9.2 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 the target attribute state is met within the timeframe indicated within Table 9.2, and (b) where a target attribute state in Table 9.2 is met, the state of that attribute is at least maintained in all rivers within the part Freshwater Management Unit, and 	The recommended amendments to Objective P. O6 are considered the most appropriate to achieve the purpose of the Act because: The amendments will help guide the prioritisation of subcatchment improvements Amendments to the chapeau to reference natural form and character will give effect to the NPS-FM and better relate outcomes to applicable values.

- (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 at the better state in every river or river reach, and
- (d) where a huanga of mahinga kai and Māori customary use for locations identified in Schedule B (Ngā Taonga Nui a Kiwa) is not achieved, the state of the river or river reach is improved.
- (e) where improvements are required to existing wastewater or stormwater networks:
 - (i) prioritise *E.coli*/enterococci reductions that contribute to achieving the targets for coastal locations noted in Table 9.1As, ahead of broader **part**Freshwater Management Unit *E.coli* targets in Table 9.2.
 - (ii) prioritise dissolved copper and dissolved reductions in locations where macroinvertebrate target attribute state(s) in Table 8.4 are not met once the priorities in clause (i) above have been addressed, and
- (f) the targets in Table 9.2 are managed and monitored at a part Freshwater Management Unit level, by the Council, and, where specific policies and rules are included in this chapter of the plan to manage an activity or discharge, and:
 - (i) when the specific policies and rules are fully satisfied, then the activity or discharge can be considered to be consistent with the target attribute states; or
 - (ii) when the specific policies and rules are not satisfied these are not satisfied, then an assessment of the impact of an activity or discharge on the achievement of the target attribute states will be required; or
 - (iii) where policies and rules are not included in this chapter to manage the proposed activity, a specific assessment of the impact of an activity or discharge on the achievement of the target attribute states is required.

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- The insertion of Clause (e) clarifies the nature of the objective and who is responsible for meeting them.
- Changes to the accompanying table respond to scientific recommendations to refine the key attributes for ecosystem health. They also improve the achievability of targets, with consideration for the costs and practicability of achieving the required improvements within the specified timeframe.

The deletion of 'at least' from clause (b) as well as clause (c) avoids redundant words and potential interpretation issues.

The inclusion of 'long term monitoring data' in clause (c) makes the intended approach clearer and avoids the risk of literal interpretation from a single monitoring record or natural variation. The inclusion of 'at the better state' is consistent with the wording in Objective WH.O9.

The addition of references to 'discharge' in clause (e) improves consistency in the application to both activities and discharges.

Current state data has been included where available, for those TAS where data meeting the 'baseline' requirements of the NPS-FM were not available.

Changes to the timeframe and standards for *E. coli* in the table allow for the financial and implementation feasibility challenges associated with wastewater network improvements expected to be necessary to achieve targets in some part-FMUs. This will assist with providing for objectives that appropriately achieve the purpose of the Act.

Text of provision with recommended amendments shown	Evaluation of amendment (section 32AA assessment)
[refer Appendix 1 for Tables 9.2, 9.1A and 8.4]	Some stormwater (copper and zinc) objectives have been adjusted for technical or scientific reasons, as outlined in Dr Greer's evidence statements. Other changes in the table generally respond to the technical scientific evidence of Dr Greer and provide for more scientifically robust objectives that are an appropriate reflection of the requirements of the NPS-FM.
Add a new objective within chapter 9:	The recommended insertion of Objective P. O7 is considered the most appropriate to achieve the purpose of the Act because:
Objective P.O7	
The following interim targets apply within Te Awarua-o-Porirua:	 it establishes a 'no further decline' imperative by 2030 in line with the 10 year interim targets required by the NPS-
(a) For all target attribute states which require an improvement, no deteriorating	FM.
trend is sought by 2030, unless due to a naturally occurring process. (b) For any target attribute state in Table 9.2 with a timeframe for improvement set at 2050, the state of that attribute must be improved by 50% of the overall	• it reflects the intended purpose of the objective by referring to TAS and clarifying that the objective is an interim target for the first time step to 2030.
improvement required in the part Freshwater Management Unit by 2040. Note: Sub-clause (a) of this objective is intended for state of the environment reporting. Resource consent applicants do not need to demonstrate their proposed	• it accommodates for a scenario where the Panels adopt an extended implementation timeframe for some TAS of 2060.
activities align with this objective, where it can be demonstrated that target attribute states will be met within the timeframe prescribed for that target.	it supports the now recommended longer objective timeframes for some TAS in part-FMUs.
Policy P.P1: Improvement of aquatic ecosystem health	The recommended amendments improve the effectiveness of
Aquatic ecosystem health will be improved, where deteriorated, by:	the policy and provide suitable guidance to plan users about the actions that are expected to improve aquatic ecosystem
(a) progressively reducing the load or concentration of contaminants, particularly sediment, nutrients, pathogens and metals, entering water, and	health and where improvement is needed. There are not expected to be any additional costs. There are
coamont, nationto, patriogono ana motato, enternig water, ana	benefits for plan users as recommended amendments make it

Text of provision with recommended amendments shown **Evaluation of amendment (section 32AA assessment)** (b) restoring habitats, and clear that improvements are only necessary in degraded waterbodies, which may also assist with focusing available enhancing the natural flow regime of rivers and managing water flows and funding on improving priority locations rather than obliging levels, including where there is interaction of flows between surface water and this everywhere throughout the whaitua. groundwater, and The amendments also make clear that work programmes are non-regulatory methods which may also include other nonco-ordinating and prioritising work programmes promoting non-regulatory regulatory actions outside of methods identified in the plan. methods that seek to improve aquatic ecosystem health, in accordance with M36-M45 of the plan-in catchments that require changes to land use activities The clarification of aquatic ecosystem health to be maintained that impact on water. where healthy improves the effectiveness of the policy by addressing a policy gap for where aquatic ecosystem health is Aquatic ecosystem health will be maintained, where healthy. not deteriorated. Policy P.P2 Management of activities to achieve target attribute states and The recommended amendments remove unnecessary duplication and inconsistency with the requirements of more coastal water objectives specific provisions (policies, rules and schedules) of PC1 and Target attribute states and coastal water objectives will be achieved by regulating the NRP and support implementation by leaving management discharges and land-use activities in the Plan, and non-regulatory methods, including of activities to be directed by relevant activity specific Freshwater Action Plans, by: policies. (a) prohibiting unplanned greenfield development and for other greenfield There are expected to be no additional costs as the direction provided by this policy is already included in the more activity developments minimising the contaminants and requiring financial specific provisions of the plan. contributions as to offset adverse effects from residual stormwater contaminants, and In relation to stock exclusion, recommended amendments support implementation of the plan by removing requirements encouraging redevelopment activities within existing urban areas to reduce the that were inconsistent with the activity specific provisions of existing urban contaminant load, and the plan change, noting there are no stock exclusion requirements for TAoP. imposing hydrological controls on urban development and stormwater discharges to rivers, and In relation to riparian planting, recommended amendments (to this policy and P.P25 below) address a gap in PC1 related

Text of provision with recommended amendments shown (d) requiring a reduction in contaminant loads from urban

(d) requiring a reduction in contaminant loads from urban wastewater and stormwater networks, and

- (e) stabilising stream banks by excluding **livestock** from waterbodies and planting riparian margins with indigenous vegetation, and
- (f) requiring the active management of earthworks, forestry, cultivation, and vegetation clearance activities, and
- (g) soil conservation treatment, including revegetation with woody vegetation, of land with high erosion risk, and
- (h) requiring farm environment plans (including Freshwater Farm Plans) to improve farm practices that impact on freshwater.

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to the use of riparian planting to both support improvements to aquatic ecosystem health by reducing effects of nutrients in diffuse charges and sediment loss through stabilising stream banks.

Policy P.P4: Achievement of the visual clarity target attribute states

To achieve the visual clarity target attribute states in Table 9.2 in part Freshwater Management Units where the target attribute state is:

- (a) met, the mean annual sediment load must be at least maintained, and
- (b) where it is not met, a percentage reduction in the mean annual sediment load must be-achieved as set out in Table 9.4.

Contaminant load reductions

To achieve the coastal water objectives in Table 9.1 the Plan will manage land use activities and discharges into freshwater bodies and the coastal marine area to meet the sediment, zinc and copper load reductions for each harbour arm catchment as set out in Table 9.3.

The amendments to the sediment load reductions respond to the new scientific evidence on the annual sediment load levels that are expected to be necessary to meet the part-FMU (Takapū) requiring an improvement (in Table 9.4). The load reduction numbers have been updated to reflect latest modelling predictions on the annual level of reduction likely needed to meet the improvement specified in the associated objective. In the case of the Table 9.3 coastal sediment and metal load reductions, that content has been removed on the basis that the load reductions required for sediment were not sufficiently certain for inclusion in the plan. In addition, the metal load reductions to offset for PC1 sediment load reductions are no longer required to manage ecotoxicology effects based on the new science undertaken as preparation for this hearing.

Text of provision with recommended amendments shown	Evaluation of amendment (section 32AA assessment)
In addition to the harbour arm catchment load reductions, the mean annual sediment load must be reduced in the Takapū part Freshwater Management Unit as set out in Table 9.4 by 2040 to achieve the visual clarity target attribute states in Table 9.2.	Costs will reduce for the new (more lenient) Porirua Harbour sedimentation rate objectives that accommodate natural sedimentation rates. This is not materially affected by the removal of the sediment load targets.
[refer Appendix 1 for Table 9.4]	The metal load reductions have also been removed on the basis of further scientific evidence. This has been on the basis that there are no ecosystem toxicity effects needing to be avoided by metal load reductions commensurate with the expected sediment load reductions for the Porirua Harbour. On this basis, the revised policy better aligns with the technical evidence and the objectives and is more effective as a result.
	The environmental benefits are arguably lessor for the Porirua Harbour arm catchments but more realistic as previously they essentially required management of sedimentation to natural state (pre-human) levels. The objectives now discount natural state sedimentation and do not penalise unnecessarily for metal loads where such limits are not justified from an ecotoxicology perspective.
	The amendment Table 9.4 adding 'from baseline' to the suspended sediment load reduction column assists with plan interpretation, i.e., this percentage reduction applies to the baseline numbers in the table, rather than any alternative interpretation that could arise without this. Accordingly, the plan change is more effective in this regard.
Policy P.P25: Promoting stream shading riparian planting to improve aquatic ecosystem health	Recommended amendments address a gap in PC1 as notified related to the use of riparian planting to stabilise stream banks and reduce sediment to support improvements to aquatic ecosystem health.



Text of provision with recommended amendments shown **Evaluation of amendment (section 32AA assessment)** The proposed amendments will not lead to any material Contribute to the achievement of aquatic ecosystem health by promoting riparian additional costs for landowners as the amendment really just planting to: recognises the dual benefits achieved by the regulatory and stabilise stream banks to reduce stream bank erosion; and non-regularly methods elsewhere in PC1 which relate to riparian planting. Noting also that landowner costs are the progressively shadeing streams where nutrient reductions alone will be insufficient to achieve the periphyton target attribute states expected to be offset by funding provided by the Porirua Harbour Riparian Programme focused on encouraging planting to reduce sediment loss. Any costs are outweighed by the benefits afford by additional climate resilience and the positive social and environmental benefits through improvements to water quality achieved through the proposed amendments. 12 Schedules Apply a 'not applicable' icon to all of Schedule H2 such that it does not apply within Refer to assessment undertaken for the definition of 'primary the TWT and TAoP whaitua: contact sites. Schedule H2: Priorities for improvement of fresh and coastal water quality for contact recreation and Māori customary use [...] **Schedule 28: Stormwater Contaminant Treatment** The recommended change to Schedule 28 is to clarify the application of the objectives and will achieve the purpose of [...] the Act consistent with the improvements required by the **Target Load Reductions** NPS-FM. To minimise the negative effect of stormwater discharges from new and redeveloped impervious surfaces on the achievement of the target attribute states for dissolved copper and zinc (Table 8.4 and Table 9.2) and the coastal objectives for copper and zinc in sediment (Table 8.1 and Table 9.1), all new and redeveloped impervious

Text of provision with recommended amendments shown	Evaluation of amendment (section 32AA assessment)
surfaces are to be treated to meet an equivalent target load reduction for copper and zinc to those set out for a raingarden/bioretention device, as per Table 1.	
[]	