Appendix 1: Further Recommended Amendments to Provisions – Hearing Stream 2 – Objectives and Ecosystem Health and Water Quality policies – right of reply 14 May 2025

This document sets out only the provisions of the notified version of Plan Change 1 for which submissions were specifically received.

Provisions as notified are shown in black text. Additions are underlined and deletions are ~~struck through~~. Section 42A recommended amendments are shown in red text. Additions are underlined and deletions are ~~struck through~~.

Further amendments recommended in this rebuttal evidence are shown in blue underline or ~~strikethrough~~.

Further amendments recommended in the hearing and/or this right of reply evidence are shown in green underline or ~~strikethrough~~.

Primary contact sites

~~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.

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~~:

(a) **Whaitua** Te Whanganui-a-Tara Objectives – WH.O1, WH.O2, WH.O4 and WH.O5, and

(b)Te Awarua-o-Porirua **Whaitua** Objectives – P.O1, P.O2 and P.O4

Objective O2

Remove 'not applicable' icon.

Method M34

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

Wellington Regional Council in conjunction with **mana whenua** will develop and implement a programme to improve water quality for **contact recreation** and **Māori customary use** in the first priority fresh and coastal water bodies identified in Schedule H2.

6.16 Freshwater Action Plan programme

Add new method below M36 as follows:

FW

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 for the Wellington Region.

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

(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 catchment communities, 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.

Objective WH.O1

The health of ~~all freshwater bodies~~ rivers and lakes and their margins, **natural wetlands**, groundwater and the coastal marine area within **Whaitua** Te Whanganui-a-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
- 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.

FW Objective WH.O2

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) 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

~~(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.

Objective WH.O3

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

~~(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**.

Table 8.1: Coastal water objectives

Parameter	Unit	Statistic	Timeframe	Coastal Water Management Units (Map 83)						
				Te Whanganui-a-Tara ~~(~~Harbour ~~and estuaries)~~		Mākara Estuary		~~Wainuiomata Estuary~~ Other Estuaries[2]		Wai Tai
				Current state[1]	Target	Current state[1]	Target	Current state[1]	Target	
~~**Benthic marine invertebrate diversity**~~	~~Subjective - State of ecosystem health and level of disturbance~~		By 2040	~~Maintain or improve~~						Maintain ~~or improve~~
Macroalgae	EQR	Latest score		no data	M	no data	M	no data	M	
~~**Phytoplankton**~~	~~mg chl-*a*/m^3~~			~~Maintain or improve~~						
Copper in sediment[3]	mg/kg	Mean of replicate samples		13.7	~~M~~ <32.5	N/A	~~Maintain or improve~~ N/A	no data	M	
Zinc in sediment[3]	mg/kg			113.8	~~M~~ <200	N/A	~~Maintain or improve~~ N/A	no data	M	
Muddiness	% >~~50~~ 25% mud	Latest score		no data	M	no data	≤5	no data	M	
	% of sample			62.3	M	no data	<10	no data	M	
Sedimentation rate	~~Current:Natural~~ mm/year	5-year mean		no data	~~M~~ N/A	no data	~~≤2:1~~ Improve	no data	M	
~~**Enterococci**~~	~~cfu/100 mL~~	~~95th %ile~~		~~≤200~~		~~Maintain or improve~~		~~Maintain or improve~~		

M = Maintain; Maintenance in the state of a target will be assessed through:

- Benchmarking against the baseline threshold and trend analysis or appropriate statistical analysis; and
- Taking the impact of climate and human activity into account.

1. All current state data = most recent available as at 2025
2. Other Estuaries refers to Korokoro, Kaiwharawhara, Te Awa Kairangai/Hutt, Waiwhetu and Wainuiomata estuaries, as shown on Map 83

3. Copper and zinc objectives have been set to maintain concentration levels within the following bands to allow for natural accumulation rates only

	Copper	Zinc	Description of band
A	<32.5	<100	Low risk of unacceptable effects
B	32.5 to <65	100 to <200	Low risk of unacceptable effects
C	65 to <270	200 to <305	Increased risk of toxicity-related effects

Table 8.1A: Coastal water enterococci objectives

Site (Map 85a)	Timeframe	Current State[1]	Target[2]
Te Whanganui-a-Tara (Harbour and estuaries)			
Petone Beach at Water Ski Club	2040	574	~~200~~ 500
Petone Beach at Sydney Street		920	~~200~~ 500
Petone Beach at Kiosk		660	~~200~~ 500
Sorrento Bay		356	200
Lowry Bay at Cheviot Road		256	200
York Bay		233	200
Days Bay at Wellesley College		208	200
Days Bay at Wharf		148	200
Days Bay at Moana Road		272	200
Rona Bay at N end of Cliff Bishop Park		474	~~200~~ 500
Rona Bay at Wharf		249	200
Robinson Bay at HW Shortt Rec Ground		156	200
Robinson Bay at Nikau Street		101	200
Wellington City Waterfront at Shed 6		1365	~~200~~ 50% improvement towards meeting 500
Whairepo Lagoon		404	~~200~~ 500
Wellington Harbour at Taranaki St Dive Platform		1800	~~200~~ 50% improvement towards meeting 500
Oriental Bay at Freyberg Beach		51	200
Oriental Bay at Wishing Well		200	200
Oriental Bay at Band Rotunda		423	~~200~~ 500
Balaena Bay		315	200
Hataitai Beach		254	200
Shark Bay		185	200
Mahanga Bay		148	200
Scorching Bay		28	200
Worser Bay		253	200
Seatoun Beach at Wharf		173	200
Seatoun Beach at Inglis Street		220	200
Breaker Bay		51	200
Wai Tai			
Lyall Bay at Tirangi Road	2040	452	~~Maintain or improve~~ 500
Lyall Bay at Onepu Road		165	~~Maintain or improve~~ 200
Lyall Bay at Queens Drive		149	~~Maintain or improve~~ 200
Princess Bay		23	~~Maintain or improve~~ 200
Island Bay at Surf Club		574	~~Maintain or improve~~ 500
Island Bay at Reef St Recreation Ground		896	~~Maintain or improve~~ 500
Island Bay at Derwent Street		142	~~Maintain or improve~~ 200

Site (Map 85a)	Timeframe	Current State[1]	Target[2]
Ōwhiro Bay		1051	~~200~~ 50% improvement towards meeting 500
Any other locations			
No monitoring sites	2040	no data	M~~aintain or improve~~

1. As at 17 December 2024, 5-year summer 95th percentile Cfu/100 ml
2. Cfu/100 ml 95th %ile

M = Maintain; Maintenance in the state of a target will be assessed through:

- Benchmarking against the baseline threshold and trend analysis or appropriate statistical analysis; and
- Taking the impact of climate and human activity into account.

Objective WH.O5

FW

By 2040 the health and wellbeing of the Parangarahu Lakes and associated **natural wetlands** are on a trajectory of improvement towards wai ora, such that:

(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 where these are not met, to provide for ecosystem health, and

~~(b) the lakes are not impacted by submerged invasive plants and support healthy native aquatic plants, and~~

~~(c) the lakes function as a productive nursery with breeding habitats of indigenous species, and~~

(d) riparian vegetation of at least 20 metres is present around the perimeter of each lake, other than where physical constraints may prevent this, and

(e) the diversity, abundance, composition, structure and condition of **mahinga kai** species and communities has increased, and

(f) **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

(g) **huanga** of **mahinga kai** and **Māori customary use** for locations identified in Schedule B (**Ngā Taonga Nui a Kiwa**) are maintained or improved.

Table 8.2: Target attribute states for lakes

				Part Freshwater Management Units (Map 80)								Other lakes default TAS[1]
				Lake Kōhangatera				Lake Kōhangapiripiri				
				Baseline		TAS[1]		Baseline		TAS[1]		
Parameter	Unit	Statistic	Timeframe	Numeric	State	Numeric	State	Numeric	State	Numeric	State	
Phytoplankton[2]	mg chl-a/m^3	Median	By 2040	5.0	C	≤2	A	1.5	A	M	A	M
		Maximum		35		≤10		6.0				
Total nitrogen[2]	mg/m^3	Median		480	B	M	B	660	C	≤500	B	
Total phosphorus[2]	mg/m^3	Median		40	C	≤20	B	43	C	≤20	B	
Ammonia (toxicity)[2]	mg/L	Median		0.005	A	M	A	0.003	A	M	A	
		95th %ile		0.024				0.005				
Escherichia coli (E. coli)[2]	/100mL	Median		125	A		A	23	A		A	
		%>260/100mL		174				0				
		%>540/100mL		0				0				
		95th %ile		350				186				
Cyanobacteria (planktonic)[2]	Total biovolume mm^3/L	80th %ile		0.248	A		A	0.008	A		A	
Submerged plants (natives)	Native Condition Index (% of max)	Latest		81.4	A		A	35.7	C	≥75	A	
Submerged plants (invasive species)	Invasive Impact Index (% of max)	Latest		15.6	B		B	61.5	C	≤25	B	
Lake-bottom dissolved oxygen[3]	mg/L	Annual minimum		Insufficient data		~~≥7.5 A~~ M		Insufficient data		~~≥7.5 A~~ M		

[1] M = Maintain; I = Improve. Maintenance, improvement or deterioration in the state of an attribute will be assessed through:

- Benchmarking against the TAS thresholds and trend analysis or appropriate statistical analysis; and
- Taking the impact of climate and human activity into account.

[2] Baseline state based on limited data collected over a period that is inconsistent with the monitoring requirements and baseline period defined in the National Policy Statement for Freshwater Management 2020.

[3] Baseline state unknown; further monitoring needed to determine whether the attribute needs to be improved to the TAS or be maintained at a better state.

FW

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

(~~b~~c) ~~protect~~ groundwater quality and groundwater dependent ecosystems are maintained, or improved where degraded, and

(~~c~~d) ~~protect~~ ecosystems in connected **surface water bodies** are maintained, or improved where degraded, and

(~~d~~e) ~~ensure that~~ groundwater is of sufficient quality for human and stock drinking water, and

(~~e~~f) ~~ensure~~ there is not~~ a~~ long-term decline in mean annual groundwater levels~~, including artesian pressures~~, and

(~~f~~g) ~~avoid~~ **aquifer** consolidation is avoided, and

(h) **aquifer** pressures are maintained, and

(i) social and economic use benefits are enabled where (a)-(h) are not compromised.

FW

Objective WH.O7

~~The physical integrity of aquitards is protected so that confined **aquifer** pressures are maintained.~~

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 8.3~~2040~~:

(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.

Table 8.3: Primary contact site objectives in rivers

Parameter		**Timeframe**	***Escherichia coli* September to April inclusive**			
Unit			**cfu/100 mL**			
Statistic			**95th percentile**			
			Baseline*		**TAS**	
Water body	**Primary contact site (Map 85)**		**Numeric**	**State**	**Numeric**	**State**
Te Awa Kairangi/Hutt River	@Birchville	By 2040	122	Excellent	M	Excellent
	@Maoribank Corner		123	Excellent	M	Excellent
	@Poets Parks		117	Excellent	M	Excellent
	@Upstream Silverstream Bridge		164	Good	M	Good
	@Taita Rock		~~Insufficient data~~ 178**	Good	~~Maintain at or improve to~~ M	Good
	@Melling Bridge	By 2060	704	Poor	≤540	Fair
Pākuratahi River	@Hutt Forks	By 2040	199	Good	M	Good
	@Kaitoke Campground		~~Insufficient data~~ >3000**	Poor	~~Maintain at or improve to~~ ≤540	Fair
Akatarawa River	@Hutt Confluence		420	Fair	M	Fair
Wainuiomata River	@Richard Prouse Park		966	Poor	≤540	Fair

* baseline states as at 7 September 2017, except where indicated

** current state, as at October 2023

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

(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 discharge on the achievement of the target attribute states will be required.

Table 8.4: Target attribute states for rivers

				Part Freshwater Management Units for Te Awa Kairangi, Ōrongorongo and Wainuiomata (Map 79)*																	
				Ōrongorongo, Te Awa Kairangi and Wainuiomata small forested and Te Awa Kairangi forested mainstems					Te Awa Kairangi lower mainstem					Te Awa Kairangi rural streams and rural mainstems					Te Awa Kairangi urban streams				
				Whakatikei R. @ Riverstone					Hutt R. @ Boulcott					Mangaroa R. @ Te Marua					Hulls Ck adj. Reynolds Bach Dr.				
				Baseline		TAS[1]			Baseline		TAS[1]			Baseline		TAS[1]			Baseline[2]		TAS[1]		
Parameter	Unit	Statistic	Timeframe	Numeric	State	Numeric	State		Numeric	State	Numeric	State		Numeric	State	Numeric	State		Numeric	State	Numeric	State	
Periphyton biomass[2]	mg chl-a/m^2	92nd %ile	By 2040 unless otherwise indicated	Insufficient data		≤50	A		284	D	≤120	B		220	D	≤120	B		Insufficient data		≤200	C	
Ammonia (toxicity)	mg/L	Median		0.002	A	M[1]	A		0.002	A	M[1]	A		0.002	A	M[1]	A		0.008	A	M[1]	A	
		95th %ile		0.004					0.003					0.01					0.012				
Nitrate (toxicity)	mg/L	Median		0.1	A		A		0.2	A		A		0.4	A		A		0.2	A		A	
		95th %ile		0.3					0.3					0.6					0.4				
Suspended fine sediment	Black disc (m)	Median		4	A	M[1]	A		2.4	C	≥2.95	A		1.5	D	≥2.22 ≥1.67	CD		1.2	A		A	
Escherichia coli (E. coli)	/100mL	Median		22	A		A		58	D	≤58	C		170	D	≤130	B C		1,100	E	≤130 260	C D by 2060	
		%>260/100mL		5					18		≤18			35		≤30 34			100		≤34 50		
		%>540/100mL		3					8		≤8			18		≤10 18			79		≤20 30		
		95th %ile		290					1,250		≤1,200			2,450		≤1,000 1,200			13,000		≤1,200 13,000		
Fish	Fish-IBI	Latest		Insufficient data		≥34	A		Insufficient data		≥34	A		Insufficient data		≥34	A		Insufficient data 36**	A**	≥34	A	
Fish community health (abundance, structure and composition)		Expert assessment[3]		Insufficient data		N/A[3]	A		Insufficient data		N/A[3]	B		Insufficient data		N/A[3]	B		Insufficient data		N/A[3]	C	
Macroinvertebrates (1 of 2)	MCI	Median		129.6	B	≥130	A		109.1	C	110	B		118.3	C	≥118.3	B		93.2**	D**	≥90	C	
	QMCI	Median		7.0		≥7			5.5		5.5			5.7		≥5.7			3.3**		≥4.5		
Macroinvertebrates (2 of 2)	ASPM	Median		0.56	B	≥0.6	A		0.4	B	M[1]	B		0.5	B	M[1]	B		0.31**	C**	≥0.3	C	
Deposited fine sediment[2]	%cover	Median		25	C	≤13	A		5	A		A		0	A		A		11	B	M[1]	B	
Dissolved oxygen	mg/L	1-day minimum		Insufficient data		≥7.5	A		Insufficient data		≥7.5	A		Insufficient data		≥7.5	A		Insufficient data		≥7.5	A	
		7-day mean minimum				≥8.0					≥8.0					≥8.0					≥8.0		
Dissolved inorganic nitrogen[4]	mg/L	Median		0.15		M[1]			0.2		M[1]			0.44		M[1]			0.24		M[1]		
Dissolved reactive phosphorus[4]	mg/L	Median		0.008		≤0.006 0.008			0.004					0.010		≤0.006			0.018				
		95th%ile		0.011		≤0.011			0.008					0.015		≤0.015			0.027				
Dissolved copper	µg/L	Median		Insufficient data		≤1	A		0.3	A	M[1]	A		Insufficient data		≤1	A		1.9	C	≤1.4 ≤1.8	B Improve within C band	
		95th %ile				≤1.4			0.6							≤1.4			3.6		≤1.8 ≤2.5		
Dissolved zinc	µg/L	Median				≤2.4	A		0.5	A		A				≤2.4	A		8.0	C	≤8 <8	B Improve within C band	
		95th %ile				≤8			1.9							≤8			19.2		≤15 <19.2		
Ecosystem metabolism[5]	g O_2 m^{-2} d^{-1}	N/A[5]		M																			

				Part Freshwater Management Units for Te Awa Kairangi, Ōrongorongo and Wainuiomata (Map 79)*														Part Freshwater Management unit for South-west coast, Mākara and Ōhariu catchment and Parangarahu Lakes (Map 79)*				
				Waiwhetū Stream					Wainuiomata urban streams					Wainuiomata rural streams					Parangarahu catchment streams and South-west coast rural streams				
				Waiwhetū S. @ Whites Line East					Black Ck @ Rowe Parade					Wainuiomata River D/S of White Br.					Mākara S. @ Kennels				
				Baseline		TAS[1]			Baseline[2]		TAS[1]			Baseline		TAS[1]			Baseline		TAS[1]		
Parameter	Unit	Statistic	Timeframe	Numeric	State	Numeric	State		Numeric	State	Numeric	State		Numeric	State	Numeric	State		Numeric	State	Numeric	State	
Periphyton biomass[2]	mg chl-a/m²	92nd %ile	By 2040 unless otherwise indicated	~~Insufficient data~~		~~≤200~~ 120	~~C~~B	~~M~~	Insufficient data		≤200	C	~~M~~	324	D	~~≤200~~ 120	~~C~~ B	~~I~~	Insufficient data		≤200	C	
Ammonia (toxicity)	mg/L	Median		0.027	B	~~≤0.02~~ 0.027	~~A~~ B	~~I~~	0.025	B	~~≤0.03~~ 0.025	~~A~~ B	~~I~~	0.004	A	M[1]	A	~~M~~	0.005	A	M[1]	A	~~M~~
		95th %ile		0.076		~~≤0.05~~ 0.076			0.066		~~≤0.05~~ 0.066			0.025					0.023				
Nitrate (toxicity)	mg/L	Median		0.5	A	M[1]	A	~~M~~	0.4	A	M[1]	A	~~M~~	0.2	A		A		0.4	A		A	
		95th %ile		0.9					0.7					0.4					1.2				
Suspended fine sediment	Black disc(m)	Median		1.1	A		A	~~M~~	1.3	D	≥2.22	C		2.1	D	≥2.22	C		1.6	D	≥2.22	C	
Escherichia coli (E. coli)	/100mL	Median		495	E	~~≤130~~ 260	~~C~~ D by 2060	~~I~~	1250	E	~~≤130~~ 260	~~C~~ D by 2050	~~I~~	100	B	≤100	A	~~I~~	375	E	≤260	D	~~I~~
		%>260/100mL		73		~~≤34~~ 50			86		~~≤34~~ 50			18		≤18			62		≤50		
		%>540/100mL		42		~~≤20~~ 30			71		~~≤20~~ 30			7		≤5			32		≤30		
		95th %ile		5,800		~~≤1200~~ 5,800			4,360		~~≤1200~~ 4,360			1,000		≤540			6,500		≤3,850		
Fish	Fish-IBI	Latest		Insufficient data		≥34	A	~~M~~	~~Insufficient data~~ 30**	~~B~~**	≥34	A	~~M~~	Insufficient data		≥34	A	~~M~~	~~Insufficient data~~ 46**	~~A~~**	≥34	A	
~~Fish community health (abundance, structure and composition)~~		~~Expert assessment[3]~~		~~Insufficient data~~		~~N/A[3]~~	~~C~~		~~Insufficient data~~		~~N/A[3]~~	~~C~~		~~Insufficient data~~		~~N/A[3]~~	~~B~~		~~Insufficient data~~		~~N/A[3]~~	~~C~~	
Macroinvertebrates (1 of 2)	MCI	Median		55.4	D	≥90	C		99**	D**	≥90	C	~~I~~	109.5	C	≥110	B	~~I~~	107.3	C	M[1]	C	~~M~~
	QMCI	Median		2.2		≥4.5			4.1**		≥4.5			4.9		≥5.5			5.1				
Macroinvertebrates (2 of 2)	ASPM	Median		0.1	D	≥0.3	C	~~I~~	0.40**	B**	≥0.3	C		0.4	B	≥0.6	A		0.4	B		B	
Deposited fine sediment[2]	%cover	Median		30	D	≤29	C		11	A	M[1]	A		20	C	≤13	A		85	D	≤27	C	~~I~~
Dissolved oxygen	mg/L	1-day minimum		Insufficient data		≥7.5	A	~~M~~	Insufficient data		≥7.5	A	~~M~~	~~Insufficient data~~		~~≥7.5~~	~~A~~	~~M~~	Insufficient data		≥7.5	A	~~M~~
		7-day mean minimum				≥8.0					≥8.0					~~≥8.0~~					≥8.0		
Dissolved inorganic nitrogen[4]	mg/L	Median		0.56		M[1]		~~M~~	0.5		M[1]			0.17		M[1]			0.42		M[1]		
Dissolved reactive phosphorus[4]	mg/L	Median		0.024		~~≤0.018~~ 0.024		~~I~~	0.021		≤0.018		~~I~~	0.011		≤0.01		~~I~~	0.027		~~≤0.018~~ 0.025		~~I~~
		95th%ile		0.049		~~≤0.049~~ 0.42			0.035		≤0.035			0.023		≤0.023			0.064		~~≤0.054~~ 0.064		
Dissolved copper	µg/L	Median		1.0	C	≤1	~~A~~ C	~~I~~	1.0	C	M[1]	C	~~M~~	Insufficient data		≤1	A	~~M~~	Insufficient data		≤1	A	~~M~~
		95th %ile		4.0		~~≤1.4~~ 4.0			2.0							≤1.4					≤1.4		
Dissolved zinc	µg/L	Median		18.3	D	~~≤8~~ 18.3	~~B~~ C by 2050		11.2	D	≤11.2	C	~~I~~			≤2.4	A				≤2.4	A	
		95th %ile		51.5		~~≤15~~ 42			71.2		≤42					≤8					≤8		
~~Ecosystem metabolism~~	~~g O_2 m^{-2} d^{-1}~~	N/A[5]		~~M~~																			

				Part Freshwater Management Unit for Korokoro catchment (Map 79)*					Part Freshwater Management Unit for Wellington urban catchment (Map79)*									Island rivers part Freshwater Management Unit TAS[1]
				Korokoro Stream					Kaiwharawhara Stream					Wellington urban					
				Korokoro S. @ Cornish St. Br.					Kaiwharawhara S. @ Ngaio Gorge					Karori S. @ Mākara Peak					
				Baseline		TAS[1]		Part FMU default TAS[1]	Baseline		TAS[1]		Part FMU default TAS[1]	Baseline		TAS[1]		Part FMU default TAS[1]	
Parameter	Unit	Statistic	Timeframe	Numeric**	State**	Numeric	State		Numeric	State	Numeric	State		Numeric	State	Numeric	State		
Periphyton biomass[2]	mg chl-a/m²	92nd %ile	By 2040 unless otherwise indicated	Insufficient data		≤120	B	M	191	D	≤200	C	I	Insufficient data		≤200	C	M	M
Ammonia (toxicity)	mg/L	Median		0.002	A	≤0.03	A		0.004	A	M[1]	A	M	0.009	A	M[1]	A		
		95th %ile		0.007		≤0.05			0.031					0.026					
Nitrate (toxicity)	mg/L	Median		0.51	A	≥1	A		1.1	B		B		1.3	B	≤1.0	B		
		95th %ile		0.93		~~≥~~ ≤1.5			1.5					1.6		M			
Suspended fine sediment	Black disc (m)	Median		3.8	A	≥2.95	A		3.2	A		A		3.2	A	M	A		
Escherichia coli (E. coli)	/100mL	Median		40	B	≤130	B	I	530	E	≤~~130~~ 260	C D	I	1400	E	≤~~130~~ 260	C D by 2060	I	
		%>260/100mL		18		≤30			73		≤~~34~~ 50			97		≤~~34~~ 50			
		%>540/100mL		9%		≤10			50		≤~~20~~ 30			83		≤~~20~~ 30			
		95th %ile		965		≤1,000			5,150		≤~~1,200~~ 5,150			4,550		≤~~1,200~~ 4,550			
Fish	Fish-IBI	Latest		36	A	≥34	A	M	~~Insufficient data~~ 36**	A**	≥34	A	M	~~Insufficient data~~ 24**	C**	≥34	A	M	
~~Fish community health (abundance, structure and composition)~~		~~Expert assessment[3]~~				~~N/A[3]~~	~~C~~	I	~~Insufficient data~~		~~N/A[3]~~	~~C~~	I	~~Insufficient data~~		~~N/A[3]~~	~~C~~	I	
Macroinvertebrates (1 of 2)	MCI	Median		113	C	≥130	A		81.9	D	≥92.4	C		91.8	D	≥91.8	C		
	QMCI	Median		5.1		≥6.5			2.8		≥4.5			3.1		≥4.5			
Macroinvertebrates (2 of 2)	ASPM	Median		0.57	B	≥0.6	A		0.25	D	≥0.3	C		0.29	D	≥0.3	C		
Deposited fine sediment[2]	%cover	Median		6%	A	≤13	A		20	C	≤13	A		25	C	≤19	B		
Dissolved oxygen	mg/L	1-day minimum		Insufficient data		≥7.5	A	M	Insufficient data		≥7.5	A	M	Insufficient data		≥7.5	A		
		7-day mean minimum				≥8.0					≥8.0					≥8.0			
Dissolved inorganic nitrogen[4]	mg/L	Median		0.51		≤0.26			1.14		M[1]			1.29		M[1]			
Dissolved reactive phosphorus[4]	mg/L	Median		0.015	C	≤0.006		I	0.037		≤~~0.018~~ 0.025			0.035					
		95th%ile		0.020		≤0.021			0.064		≤~~0.054~~ 0.064			0.062					
Dissolved copper	µg/L	Median		0.3	A	≤1	A	M	1.3	C	≤1.3	B Improve within C band	I	1.3	D	≤1.3	C		
		95th %ile		0.5		≤1.4			2.8		≤~~1.8~~ ≤2.5			5.9		≤4.3			
Dissolved zinc	µg/L	Median		0.5	A	≤2.4	A		6.1	B	≤~~2.4~~ 6.1	A B		16.2	D	≤16.2	C		
		95th %ile		0.5		≤8			12.8		≤~~8~~ 12.8			43.0		≤42			
~~Ecosystem metabolism~~	~~g O_2 m^{-2} d^{-1}~~	~~N/A[5]~~		M															

[1] M = Maintain; I = Improve. Maintenance, improvement or deterioration in the state of an attribute will be assessed through:

- Benchmarking against the TAS thresholds and trend analysis or appropriate statistical analysis; and
- Taking the impact of climate and human activity into account.

[2] Baseline state based on limited data.

~~[3] The A,B,C and D states to be assigned on the basis of fish community health reflecting an excellent, good, fair and poor state of aquatic ecosystem health respectively.~~

[4] Median concentration targets reflect the nutrient outcomes required by Clause 3.13 of the National Policy Statement for Freshwater Management 2020

~~[5] Further monitoring needed to define baseline state and develop attribute state framework.~~

* Baseline states as at 7 September 2017, except where indicated

** Current state, as at 30 June 2024

Add a new objective within Chapter 8:

FW **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:

(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

(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.

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 activities align with this objective, where it can be demonstrated that target attribute states will be met within the timeframe prescribed for that target.

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
- 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.

FW

Objective P.O2

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 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

(h) 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:~~

(i) 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.~~

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 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

~~(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

~~(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**.

Table 9.1: Coastal water objectives

Parameter	Unit	Statistic	Timeframe	Coastal Water Management Units (Map 82)								
				Onepoto Arm				Pāuatahanui Inlet				Open coast
				Intertidal		Subtidal		Intertidal		Subtidal		
				Current state[1]	Target	Current state[1]	Target	Current state[1]	Target	Current state[1]	Target	
~~*Enterococci*~~	~~cfu/ 100 mL~~	~~95th %ile~~	~~2040~~	~~≤500~~				~~≤200~~				~~≤200~~
Macroalgae	EQR	Latest score	~~N/A~~ 2040	0.71	M	~~M~~ N/A		0.71	M	~~M~~ N/A		Maintain ~~or improve~~
Copper in sediment[2]	mg/kg	Mean of replicate samples		3.9	~~M~~ <32.5	19.5	~~M~~ <32.5	3.8	~~M~~ <32.5	9.9	~~M~~ <32.5	
Zinc in sediment[2]	mg/kg			53.9	~~M~~ <200	172.5	~~M~~ <305	32.5	<100	74.7	<100	
Muddiness	% >~~50~~ 25% mud	Latest score		13.5	M	~~M~~ N/A		13.5	M	~~M~~ N/A		
	% of sample			9.3	M	94.5	M	9.4	M	63.0	M	
Sedimentation rate	mm/year	5-year mean		2.7	~~1~~≤2.7	9.8	~~1~~≤2.7	1.9	~~2~~≤3.2	2.8	~~2~~≤3.2	

M = Maintain; Maintenance in the state of a target will be assessed through:

- Benchmarking against the baseline threshold and trend analysis or appropriate statistical analysis; and
- Taking the impact of climate and human activity into account.

1. All current state data = most recent available as at 2025

2. Copper and zinc objectives have been set to maintain concentration levels within the following bands to allow for natural accumulation rates only

	Copper	Zinc	Description of band
A	<32.5	<100	Low risk of unacceptable effects
B	32.5 to <65	100 to <200	Low risk of unacceptable effects
C	65 to <270	200 to <305	Increased risk of toxicity-related effects

Table 9.1A: Coastal water objectives - enterococci

Site	Current state[1]	Target[2]
Te Awarua-o-Porirua Harbour		
Waka Ama	2680	~~500~~ 50% improvement towards meeting 500
Rowing Club	1820	~~500~~ 50% improvement towards meeting 500
Paremata Bridge	378	~~200~~ 500
Water Ski Club	1083	~~500~~ 50% improvement towards meeting 500
Open Coast		
Karehana Bay at Cluny Road	408	~~M~~ 500
Plimmerton Beach at Bath Street	628	~~M~~ 500
Plimmerton at South Beach	738	~~M~~ 500
Tītahi Bay at Bay Drive	293	~~M~~ 200
Tītahi Bay at Toms Road	218	~~M~~ 200
Tītahi Bay at South Beach Access Road	458	~~M~~ 500
Any other locations		
No monitoring sites	-	M

1. As at 17 December 2024, 5-year summer 95th %ile Cfu/100 ml
2. Cfu/100 ml 95th %ile

M = Maintain; Maintenance in the state of a target will be assessed through:

- Benchmarking against the baseline threshold and trend analysis or appropriate statistical analysis; and
- Taking the impact of climate and human activity into account.

Objective P.O5

FW 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.

Objective P.O6

FW 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

(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.

Table 9.2: Target attribute states for rivers

				Part Freshwater Management Units (Map 78)*																				
				Taupō					Pouewe					Wai-O-Hata					Takapū				
				Taupō S. @ Plimmerton Domain					Horokiri S. @ Snodgrass					Duck Ck @ Tradewinds Dr. Br.					Pāuatahanui S. @ Elmwood Br.				
				Baseline		TAS[1]			Baseline		TAS[1]			Baseline		TAS[1]			Baseline		TAS[1]		
Parameter	Unit	Statistic	Timeframe	Numeric	State	Numeric	State	Part FMU default TAS[1]	Numeric	State	Numeric	State	Part FMU default TAS[1]	Numeric	State	Numeric	State	Part FMU default TAS[1]	Numeric	State	Numeric	State	Part FMU default TAS[1]
Periphyton biomass	mg chl-a/m²	92nd %ile	By 2040 unless otherwise indicated	N/A[2]				M	436[3]	D	≤120	B	I	Insufficient data 31.8**	A**	≤120	B	I	Insufficient data		≤120	B	I
Ammonia (toxicity)	mg/L	Median		0.011	B[4]	≤0.03	A	I	0.002	A	M[1]	A	M	0.013	A[4]	M[1]	A	M	0.005	A	M[1]	A	M
		95th %ile		0.051		≤0.05			0.013					0.044					0.018				
Nitrate (toxicity)	mg/L	Median		0.4	B[4]	≤1	A		0.6	A		A		0.5	B[4]	≤1	A	I	0.3	A		A	
		95th %ile		2.1		≤1.5			1.1					1.6		≤1.5			0.8				
Suspended fine sediment	Black disc (m)	Median		1.2	A[4]	≥0.93	A	M	2.3	C		C		1.2	A[4]	≥0.93	A	M	1.8	D	≥2.22	C	
Escherichia coli (E. coli)	/100mL	Median		735	E[4]	≤130 ≤260	B C D	I	370	E	≤130	B C	I	703	E[4]	≤130	C D	I	275	E	≤130 260	C D	I
		%>260/100mL		96		≤30 50			63		≤30 34			92		≤30 50			55		≤20 50		
		%>540/100mL		62		≤10 30			32		≤10 20			59		≤10 30			18		≤34 ≤18		
		95th %ile		5,299		≤1,000 5,299			4,950		≤1,000 1,200			4,783		≤4,200			6,050		≤1,200 ≤6,050		
Fish	Fish-IBI	Latest		Insufficient data 46**	A**	M[1]		M	Insufficient data 42**	A**	M[1]		M	Insufficient data		M[1]		M	Insufficient data 42**	A**	M[1]		M
Fish community health (abundance, structure and composition)		Expert assessment[5]		Insufficient data		N/A[5]	B		Insufficient data		N/A[5]	A		Insufficient data		N/A[5]	B		Insufficient data		N/A[5]	B	
Macroinvertebrates (1 of 2)	MCI	Median		75.9**	D**	≥100	B	I	115.0	B	≥130	A	I	104**	D**	≥100	B	I	101.2	D	≥105	B	I
	QMCI	Median		3.5**		≥5			6.0		≥6.5			4.3**		≥5			3.8		≥5.25		
Macroinvertebrates (2 of 2)	ASPM	Median		0.17**	D**	≥0.4	B		0.5	B	M[1]	B	M	0.34	C**	≥0.4	B		0.4	C	≥0.40	C	M
Deposited fine sediment[3]	%cover	Median		N/A[6]					10	A		A		6%	A**			M	60	D	≤27	C	I
Dissolved oxygen	mg/L	1-day minimum		Insufficient data		M[1]		M	Insufficient data		M[1]		M	Insufficient data		M[1]			Insufficient data		M[1]		M
		7-day mean minimum																						
Dissolved inorganic nitrogen[7]	mg/L	Median		0.41[4]		≤1.03		I	0.64					0.48[4]					0.33				
Dissolved reactive phosphorus[7]	mg/L	Median		0.017[4]		M[1]		M	0.011					0.018[4]		M[1]			0.014				
		95th%ile		0.047[4]					0.026					0.05[4]					0.022				
Dissolved copper	µg/L	Median		0.61	D[4]	≤1	B	I	0.03	A[4]	M[1]	A		0.47	C[4]	≤1	A B	I	0.06	A[4]	M[1]	A	
		95th %ile		4.69		≤1.8			0.12					2.93		≤1.4			0.27				
Dissolved zinc	µg/L	Median		3.91	C[4]	≤2.4	A		0.07	A[4]		A		1.96	B[4]	≤2.4 8.	A B		0.11	A[4]		A	
		95th %ile		32.25		≤8			0.23					13.04		≤8 15			0.48				
Ecosystem metabolism	g O_2 m^{-2} d^{-1}	N/A[8]		M																				

				Part Freshwater Management Units (Map 78)*					
				Te Rio o Porirua and Rangituhi					Island rivers TAS[1]
				Porirua S. @ Milk Depot				Part FMU default TAS[1]	
				Baseline		TAS[1]			
Parameter	Unit	Statistic	Timeframe	Numeric	State	Numeric	State		
Periphyton biomass	mg chl-a/m^2	92nd %ile	By 2040 unless otherwise indicated	~~Insufficient data~~ 45.6**	A**	≤120	B	~~I~~	M
Ammonia (toxicity)	mg/L	Median		0.006	A	M[1]	A	~~M~~	
		95th %ile		0.034					
Nitrate (toxicity)	mg/L	Median		0.9	B	≤0.9	A	~~I~~	
		95th %ile		1.6		≤1.5			
Suspended fine sediment	Black disc (m)	Median		1.7	A	M[1]	A	~~M~~	
*Escherichia coli (E. coli)*cj	/100mL	Median		1400	E	≤~~130~~ 260	~~C~~ D by 2050	~~I~~	
		%>260/100mL		95		≤~~20~~ 50			
		%>540/100mL		83		≤~~34~~ 30			
		95th %ile		6950		≤~~1200~~ 6,950			
Fish	Fish-IBI	Latest		Insufficient data		M[1]		~~M~~	
~~Fish community health (abundance, structure and composition)~~		~~Expert assessment[5]~~		~~Insufficient data~~		~~N/A[5]~~	~~C~~		
Macroinvertebrates (1 of 2)	MCI	Median		87.0	D	≥90	C	~~I~~	
	QMCI	Median		4.3		≥4.5			
Macroinvertebrates (2 of 2)	ASPM	Median		0.3	D	≥0.3	C		
Deposited fine sediment[3]	%cover	Median		20	C	M[1]	C	~~M~~	
Dissolved oxygen	mg/L	1-day minimum		Insufficient data		M[1]		~~M~~	
		7-day mean minimum							
Dissolved inorganic nitrogen[7]	mg/L	Median		0.92					
Dissolved reactive phosphorus[7]	mg/L	Median		0.018					
		95th%ile		0.034					
Dissolved copper	µg/L	Median		1.1	C	M[1]	C		
		95th %ile		2.6					
Dissolved zinc	µg/L	Median		7.5	D	≤7.5	C	~~I~~	
		95th %ile		58		≤42			
~~Ecosystem metabolism~~	~~g O_2 m^{-2} d^{-1}~~	N/A[8]		M[8]					

[1] M = Maintain; I = Improve. Maintenance, improvement or deterioration in the state of an attribute will be assessed through:

- Benchmarking against the TAS thresholds and trend analysis or appropriate statistical analysis; and
- Taking the impact of climate and human activity into account.

[2] All rivers in **part Freshwater Management Unit** naturally soft bottomed and unlikely to support periphyton growth (River Environment Classification group = WW/L/SS).
[3] Baseline state based on limited data.
[4] Baseline state based on eWater Source model results. Further monitoring needed to confirm whether the attribute meets the TAS.
[5] The A,B,C and D states to be assigned on the basis of fish community health reflecting an excellent, good, fair and poor state of aquatic ecosystem health respectively.
[6] All rivers in **part Freshwater Management Unit** naturally soft bottomed (River Environment Classification group = WW/L/SS).
[7] Median concentration targets reflect the nutrient outcomes required by Clause 3.13 of the National Policy Statement for Freshwater Management 2020
[8] Further monitoring needed to define baseline state and develop attribute state framework.
* Baseline states as at 7 September 2017, except where indicated
** Current state, as at 30 June 2024

Add a new objective within Chapter 9:

FW **Objective P.O7**

The following interim targets apply within Te Awarua-o-Porirua:

(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 Table 9.2 with a timeframe for improvement set at 2050, the state of that attribute must be improved by 50% of the overall 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 activities align with this objective, where it can be demonstrated that target attribute states will be met within the timeframe prescribed for that target.

Schedule 28: Stormwater Contaminant Treatment

...

Target Load Reductions

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 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.

...

Policy WH.P1: Improvement of aquatic ecosystem health

Aquatic ecosystem health will be improved, where deteriorated, by:

(a) progressively reducing the load or concentration of contaminants, particularly sediment, nutrients, pathogens and metals, entering water, and

(b) restoring habitats, and

(c) 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

(d) ~~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.~~

Aquatic ecosystem health will be maintained, where healthy.

~~**Policy WH.P2 Management of activities to achieve target attribute states and coastal water objectives**~~

~~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 Freshwater Action Plans, by:~~

~~(a) prohibiting **unplanned greenfield development** and for other greenfield developments **minimising** the contaminants and requiring financial contributions as to offset adverse effects from residual **stormwater** contaminants, and~~

~~(b) encouraging **redevelopment** activities within existing urban areas to reduce the existing urban contaminant load, and~~

~~(c) imposing **hydrological controls** on urban development and **stormwater** discharges to rivers~~

~~(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.~~

FW **Policy WH.P4: Achievement of the visual clarity target attribute states**

To achieve the visual clarity target attribute states in Table 8.4 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 ~~reduced~~ as set out in Table 8.5.

Table 8.5: Sediment load reductions required to achieve the visual clarity target attribute states

Part Freshwater Management Unit	Target attribute state site	Timeframe	Median visual clarity 'baseline' 2012-2017 (m)	~~Baseline dSedNet mean annual load (t/year)~~	~~% reduction in baseline dSedNet mean annual load~~ Suspended sediment load reduction from 'baseline' to meet visual clarity target
Te Awa Kairangi rural streams and rural mainstems	Mangaroa River at Te Marua	2040	1.5	~~10,965~~	~~-51%~~ -17%
Te Awa Kairangi lower mainstem	Hutt River at Boulcott	2040	2.4	~~102,303~~	~~-24%~~ -25%
Wainuiomata urban streams	Black Creek at Rowe Parade end	2040	1.3	~~382~~	-50%
Wainuiomata rural streams	Wainuiomata River downstream of White Bridge	2040	2.1	~~12,243~~	~~-7%~~ -8%
Parangārehu catchment streams and south-west coast rural streams	Mākara Stream at Kennels	2040	1.6	~~4,437~~	~~-34%~~ -38%

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

FW

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 shade~~ing~~ streams where nutrient reductions alone will be insufficient to achieve the periphyton target attribute states in Table 8.4.

Policy P.P1: Improvement of aquatic ecosystem health

Aquatic ecosystem health will be improved, where deteriorated, by:

(a) progressively reducing the load or concentration of contaminants, particularly sediment, nutrients, pathogens and metals, entering water, and

(b) restoring habitats, and

(c) 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

(d) ~~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.~~

Aquatic ecosystem health will be maintained, where healthy.

~~Policy P.P2 Management of activities to achieve target attribute states and coastal water objectives~~

~~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 Freshwater Action Plans, by:~~

~~(a) prohibiting **unplanned greenfield development** and for other greenfield developments **minimising** the contaminants and requiring financial contributions as to offset adverse effects from residual **stormwater** contaminants, and~~

~~(b) encouraging **redevelopment** activities within existing urban areas to reduce the existing urban contaminant load, and~~

~~(c) imposing **hydrological controls** on urban development and **stormwater** discharges to rivers, and~~

~~(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.~~

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.~~

~~**Table 9.3: Harbour arm catchment contaminant load reductions**~~

~~Coastal Water Management Unit (Map 82)~~	~~Contaminant~~	~~Timeframe~~	~~% reduction in baseline total load~~
~~Onepoto Arm~~	~~Sediment~~	~~By 2040~~	~~40%~~
	~~Zinc~~		~~40%~~
	~~Copper~~		~~40%~~
~~Pāuatahanui Inlet~~	~~Sediment~~		~~40%~~
	~~Zinc~~		~~40%~~
	~~Copper~~		~~40%~~

~~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.~~

Table 9.4: Part Freshwater Management Unit sediment load reductions required to achieve the visual clarity target attribute state

Part-Freshwater Management Unit	Target attribute state site	Timeframe	Median visual clarity 'baseline' 2012-2017 (m)	~~Baseline dSedNet mean annual load (t/year)~~	~~% reduction in baseline dSedNet mean annual load~~ Suspended sediment load reduction from 'baseline' to meet visual clarity target
Takapū	Pāuatahanui Stream at Elmwood Bridge	By 2040	1.8	~~2311~~	~~24%~~ 26%

Policy P.P25: 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 shade~~ing~~ streams where nutrient reductions alone will be insufficient to achieve the periphyton target attribute states

Policy P65: National Policy Statement or Freshwater Management requirements for discharge consents

Schedule H2

Apply a 'not applicable' icon to all of Schedule H2 such that it does not apply within the TWT and TAoP whaitua:

Schedule H2: Priorities for improvement of fresh and coastal water quality for contact recreation and Māori customary use…