

Appendix 2: Further Recommended Amendments to Provisions – Hearing Stream 2 – Objectives and Ecosystem Health and Water Quality policies – updated for hearing 7/4/25 (Tables 8.4 and 9.2 only)

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~~.

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.~~

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:

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.

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 the community 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, ~~where practicable, 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** ~~where naturally present in those environments, 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.~~



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 c~~ Coastal water quality, ~~and the health and wellbeing of ecosystems and habitats in Te Whanganui-a-Tara is maintained, or improved where deteriorated~~, to achieve the coastal water objectives set out in Table 8.1 ~~and 8.1A~~, and by 2040:

- (a) sediment inputs into Mākara Estuary are reduced, and
- ~~(b) high contaminant concentrations, including around discharge points, are reduced, and~~
- (c) diversity, abundance, composition, structure and condition of **mahinga kai** species and communities has increased, and
- (d) **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) 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) 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) **mana whenua** and communities can 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**, and
- ~~(i) for coastal areas not covered by Table 8.1, in addition to relevant matters in (a)-(h) above:~~
- ~~• fish and benthic invertebrate communities are resilient and their structure, composition and diversity are maintained, and~~
 - ~~• there is no increase in the frequency of nuisance macroalgal blooms, and~~
 - ~~• phytoplankton levels are maintained and monitored in applicable areas of point source discharges and locations that experience riverine mouth closures with limited water mixing.~~

Table 8.1: Coastal water objectives

				Coastal Water Management Units (Map 83)						
Parameter	Unit	Statistic	Timeframe	Te Whanganui-a-Tara (Harbour and estuaries)		Mākara Estuary		Wainuiomata Estuary-Other Estuaries		Wai-Tai
				Current state	Target	Current state	Target	Current state	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		N/A	M N/A	no data	M	no data	M	
Phytoplankton	mg chl-a/m ³			Maintain or improve						
Copper in sediment	mg/kg	Mean of replicate samples		13.7	M <32.5	N/A	Maintain or improve N/A	no data	M	
Zinc in sediment	mg/kg			113.8	M <200	N/A	Maintain or improve N/A	no data	M	
Muddiness	% >50% 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	95 th %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.

All current state data = most recent available as at 2025

Table 8.1A: Coastal water enterococci objectives

Site	Current State ¹	Target ²
<i>Te Whanganui-a-Tara (Harbour and estuaries)</i>		
Petone Beach at Water Ski Club	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
<i>Wai Tai</i>		
Lyall Bay at Tirangi Road	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	Current State ¹	Target ²
Ōwhiro Bay	1051	Maintain or improve 50% improvement towards meeting 500
<i>Mākara and Wainuiomata Estuaries</i>		
No monitoring sites	no data	Maintain or improve
<i>Any other locations</i>		
No monitoring sites	no data	Maintain 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



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 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	
		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	
		95 th %ile		0.024				0.005				
Escherichia coli (E. coli) ²	/100mL	Median		125	A		A	23	A		A	A
		%>260/100mL		174				0				
		%>540/100mL		0				0				
		95 th %ile		350				186				
Cyanobacteria (planktonic) ²	Total biovolume mm ³ /L	80 th %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 AM		Insufficient data		≥7.5 AM		

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.



Objective WH.06

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



Objective WH.07

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



Objective WH.08

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.

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

Objective WH.09

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.
- (e) the targets in Table 8.4 are managed and monitored at a **part Freshwater Management Unit** level, by the Council on behalf of mana whenua and the wider community, and, where specific policies and rules are included in this chapter of the plan to manage an activity, and:
 - (i) when the specific policies and rules are fully satisfied, then the target attribute states can be considered to be consistent with this objective; 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				Part FMU default TAS [†]	Hutt R. @ Boulcott				Part FMU default TAS [†]	Mangaroa R. @ Te Marua				Part FMU default TAS [†]	Hulls Ck adj. Reynolds Bach Dr.				Part FMU default TAS [†]								
				Baseline		TAS [†]			Baseline		TAS [†]			Baseline		TAS [†]			Baseline ²		TAS [†]										
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	92 nd %ile	By 2040 unless otherwise indicated	Insufficient data		≤50	A	M	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	0.002	A	M ¹	M	0.008	A	M ¹	A	0.008	A	M ¹		A							
		95 th %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	M ¹	A	0.2	A	M ¹	A
		95 th %ile		0.3						0.3						0.6					0.4										
Suspended fine sediment	Black disc (m)	Median		4	A		M ¹			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	≤40 20		79		≤20 30														
		95 th %ile		290					1,250	≤1,200		2,450	≤1,000 1200		13,000		≤1,200 13,000														
Fish	Fish-IBI	Latest		Insufficient data		≥34	A		Insufficient data	≥34	A	M	Insufficient data	≥34	A	Insufficient data	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	M												
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	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																
Dissolved inorganic nitrogen ⁴	mg/L	Median		0.15	M ¹		↓		0.2	M ¹		M	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 n/a	B Improve within C band	↓										
		95 th %ile				≤1.4			0.6						≤1.4		3.6		≤1.8 n/a												
Dissolved zinc	µg/L	Median				≤2.4	A		0.5	A		A			≤2.4	A	8.0	C	≤8 n/a	B Improve within C band											
		95 th %ile				≤8			1.9						≤8		19.2		≤15 n/a												
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				Part FMU default TAS ¹	Black Ck @ Rowe Parade				Part FMU default TAS ¹	Wainuiomata River D/S of White Br.				Part FMU default TAS ¹	Mākara S. @ Kennels				Part FMU default TAS ¹				
			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/m ²	92 nd %ile	By 2040 unless otherwise indicated	Insufficient data		≤200 120	CB	M	Insufficient data		≤200	C	M	324	D	≤200	C B	‡	Insufficient data		≤200	C				
Ammonia (toxicity)	mg/L	Median		0.027	B	≤0.02 0.027	A B	‡	0.025	B	≤0.03 0.025	A B	‡	0.004	A	M ¹	A	M	0.005	A	M ¹	A	M			
		95 th %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		0.4		A		A
		95 th %ile		0.9					0.7		0.4		1.2													
Suspended fine sediment	Black disc(m)	Median		1.1	A		A		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	C D by 2060	‡	1250	E	≤430 260	C D by 2050	‡	100	B	≤100	A	‡	375	E	≤260	D	‡			
		%>260/100mL		73		≤34			86		≤34 50			18		≤18			62		≤50					
		%>540/100mL		42		≤20			71		≤20 30			7		≤5			32		≤30					
		95 th %ile		5,800		≤1200			4,360		≤4200 4,360			1,000		≤540			6,500		≤3.85 0					
Fish	Fish-IBI	Latest		Insufficient data		≥34	A	M	Insufficient data	B**	≥34	A	M	Insufficient data		≥34	A	M	Insufficient data	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	M	
Macroinvertebrates (1 of 2)	MCI	Median		55.4	D	≥90	C		99**	D**	≥90	C		‡	109.5	C	≥110	B		‡	107.3	C	M ¹	C		
	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	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	M	20		C	≤13	A	M	85		D	≤27	C	‡		
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	0.56		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		‡	0.021		≤0.018		‡	0.011		≤0.012		‡	0.027		≤0.018 0.025		‡				
		95 th %ile	0.049		≤0.049 0.42			0.035		≤0.035			0.023		≤0.023 0.017			0.064		≤0.064 0.064						
Dissolved copper	µg/L	Median	1.0	C	≤1	A C by 2050		1.0	C	M ¹	C	M	Insufficient data		≤1	A	M	Insufficient data		≤1	A	M				
		95 th %ile	4.0		≤1.4 4.3	2.0				C	≤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	‡								≤2.4	A				≤2.4	A
		95 th %ile	51.5		≤45 42	71.2	≤42	C		≤8	≤8															
Ecosystem metabolism	g-O ₂ -m ⁻² -d ⁻¹	N/A ⁵	M																							

By 2040
unless
otherwise
indicated

				Part Freshwater Management Unit for Korokoro catchment (Map 79)*				Part Freshwater Management Unit for Wellington urban catchment (Map79)*										Island rivers part Freshwater Management Unit TAS¹	
				Korokoro Stream				Kaiwharawhara Stream					Wellington urban						
				Korokoro S. @ Cornish St. Br.				Part FMU default TAS¹	Kaiwharawhara S. @ Ngaio Gorge				Part FMU default TAS¹	Karori S. @ Mākara Peak					Part FMU default TAS¹
				Baseline		TAS¹			Baseline		TAS¹			Baseline		TAS¹			
Parameter	Unit	Statistic	Timeframe	Numeric**	State**	Numeric	State		Numeric	State	Numeric	State		Numeric	State	Numeric	State		
Periphyton biomass²	mg chl-a/m²	92 nd %ile	By 2040 unless otherwise indicated	Insufficient data		≤120	B	M	191	D	≤200	C	!	Insufficient data		≤200	C	M	
Ammonia (toxicity)	mg/L	Median		0.002	A	≤0.03	A		0.004	A	M¹	A		0.009	A	M¹	A		
		95 th %ile		0.007		≤0.05			0.031			B		0.026		B			
Nitrate (toxicity)	mg/L	Median		0.51	A	≥1	A		1.1	B		M¹		B	1.3	B	≤1.0		B
		95 th %ile		0.93		≥≤1.5			1.5					M	1.6		M		
Suspended fine sediment	Black disc (m)	Median		3.8	A	≥2.95	A		3.2	A	E		A	3.2	A	M	A		
Escherichia coli (E. coli)	/100mL	Median		40	B	≤130	B		530	E	≤130 260	G D	1400	E	≤130 260	G D by 2060			
		%>260/100mL		18%		≤30			73		≤34.50		97		≤34.50				
		%>540/100mL		9%		≤10			50		≤20.30		83		≤20.30				
		95 th %ile		965		≤1,000			5,150		≤1,200 4,550		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 assessment³				N/A³	G	!	Insufficient data		N/A³	G	!	Insufficient data		N/A³	G	!	
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 sediment²	%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	Insufficient data		≥7.5	A	M	Insufficient data		≥7.5	A			
		7-day mean minimum				≥8.0				≥8.0					≥8.0				
Dissolved inorganic nitrogen⁴	mg/L	Median		0.51		≤0.26	1.14		M¹	1.29			M¹						
Dissolved reactive phosphorus⁴	mg/L	Median		0.015	C	≤0.006	0.037		≤0.018 0.025	0.035									
		95 th %ile		0.020		≤0.021	0.064		≤0.054 0.064	0.062									
Dissolved copper	µg/L	Median		0.3	A	≤1	A	1.3	C	≤1.3 n/a	B Improve within C band		1.3	D	≤1.3	C			
		95 th %ile		0.5		≤1.4		2.8		≤1.8 n/a			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			
		95 th %ile		0.5		≤8		12.8		≤8 12.8			43.0		≤42				
Ecosystem metabolism	g O₂.m⁻².d⁻¹	N/A⁵		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:



Objective WH.O10

By 2030, there is no further decline of the health and wellbeing of Te Whanganui-a-Tara's lakes and rivers.

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 overall 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 overall 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.



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.**

the freshwater **environmental outcomes** must contribute to the:

- (i) 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 c~~Coastal water quality, and the health and wellbeing of ecosystems and habitats in Pāuatahanui Inlet, Onepoto Arm and the open coastal areas of Te Awarua-o-Porirua is maintained, or improved **where deteriorated**, to achieve the coastal water objectives set out in Table 9.1 and 9.1A, and by 2040:

- (a) sediment and metal loads entering the **harbour arm catchments** either via freshwater bodies or directly are significantly reduced, and
- ~~(b) high contaminant concentrations, including around discharge points, are reduced, and~~
- (c) the diversity, abundance and condition of **mahinga kai** has increased so that **mana whenua** access to healthy **mahinga kai** has increased, and
- (d) **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) 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) 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) **mana whenua** and communities can 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**, and
- (i) for coastal areas not covered by Table 9.1, in addition to relevant matters in (a)-(h) above:
 - fish and benthic invertebrate communities are resilient and their structure, composition and diversity are maintained, and
 - there is no increase in the frequency of nuisance macroalgal blooms, and
 - phytoplankton levels are maintained and monitored in applicable areas of point source discharges and locations that experience riverine mouth closures with limited water mixing.

Table 9.1: Coastal water objectives

				Coastal Water Management Units (Map 82)								
				Onepoto Arm				Pāuatahanui Inlet				Open coast
Parameter	Unit	Statistic	Timeframe	Intertidal		Subtidal		Intertidal		Subtidal		
				Current state	Target	Current state	Target	Current state	Target	Current state	Target	
Enterococci	cfu/100 mL	95 th %ile	2040	≤500				≤200				≤200
Macroalgae	EQR	Latest score	N/A 2040	0.71	M	no data	M	0.71	M	no data	M	Maintain or Improve
Copper in sediment	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	mg/kg			53.9	M ≤200	172.5	M ≤305	32.5	≤100	74.7	≤100	
Muddiness	% >50% mud	Latest score		13.5	M	no data	M	13.5	M	no data	M	
	% 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.

All current state data = most recent available as at 2025

Table 9.1A: Coastal water objectives - enterococci

Site	Current state ¹	Target ²
<i>Te Awarua-o-Porirua Harbour</i>		
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
<i>Open Coast</i>		
Karehana Bay at Cluny Road	408	M 500
Plimmerton Beach at Bath Street	628	M 500
Plimmerton at South Beach	738	M 500
Titahi Bay at Bay Drive	293	M 200
Titahi Bay at Toms Road	218	M 200
Titahi Bay at South Beach Access Road	458	M 500
<i>Any other locations</i>		
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.05



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

the values of connected **surface water bodies** in places where groundwater flows to surface water **are maintained, or improved where degraded.**



Objective P.06

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.
- (f) the targets in Table 9.2 are managed and monitored at a **part Freshwater Management Unit** level, by the Council on behalf of mana whenua and the wider community, and, where specific policies and rules are included in this chapter of the plan to manage an activity, and:
 - (i) when the specific policies and rules are fully satisfied, then the target attribute states can be considered to be consistent with this objective; 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				Part FMU default TAS [†]	Horokiri S. @ Snodgrass				Part FMU default TAS [†]	Duck Ck @ Tradewinds Dr. Br.				Part FMU default TAS [†]	Pāuatahanui S. @ Elmwood Br.				Part FMU default TAS [†]		
			Baseline		TAS [†]			Baseline		TAS [†]			Baseline		TAS [†]			Baseline		TAS [†]				
Parameter	Unit	Statistic	Numeric	State	Numeric	State		Numeric	State	Numeric	State		Numeric	State	Numeric	State		Numeric	State	Numeric	State		Numeric	State
Periphyton biomass	mg chl-a/m²	92 nd %ile	N/A ²				M	436 ³	D	≤120	B	↓	Insufficient data 31.8**	A**	≤120	B	↓	Insufficient data	≤120	B	↓			
Ammonia (toxicity)	mg/L	Median	0.011	B ⁴	≤0.03	A	↓	0.002	A	M ¹	A	M	0.013	A ⁴	M ¹	A	M	0.005	A	M ¹	A	M		
		95 th %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				M ¹	A	M	0.5		B ⁴	≤1				A	↓
		95 th %ile	2.1		≤1.5		1.1	1.6		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	B-C D	↓	370	E	≤130	B-C	↓	703	E ⁴	≤130	C-D	↓	275	E	≤130	C-D	↓		
		%>260/100mL	96		≤30 50			63					≤30 34		92			≤30 34					55	≤20
		%>540/100mL	62		≤40 30			32					≤40 20		59			≤40 20					18	≤34 ≤18
		95 th %ile	5,299		≤1,000 5,299		4,950	≤1,000 1,200				4,783	≤1,200		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	↓					
Macroinvertebrates (1 of 2)	MCI	Median	75.9**	D**	≥100	B	115.0	B		≥130	A	104**	D**		≥100	B	↓	101.2		D	≥105	B		
		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	M		0.4	C	≥0.40	C	M		
Deposited fine sediment ³	%cover	Median	N/A ⁶				10	A	A	6%		A**		60	D		≤27	C	↓					
Dissolved oxygen	mg/L	1-day minimum	Insufficient data				M ¹	M	Insufficient data			M ¹	Insufficient data		M ¹		M	Insufficient data		M ¹	M			
		7-day mean minimum					0.41 ⁴	≤1.03	↓	0.64	0.48 ⁴			0.33										
Dissolved inorganic nitrogen ⁷	mg/L	Median	0.017 ⁴				M ¹	M	0.011		M ¹		0.018 ⁴		M ¹	M		0.014				M ¹	M	
Dissolved reactive phosphorus ⁷	mg/L	95 th %ile	0.047 ⁴						0.026			0.05 ⁴		0.022										
Dissolved copper	µg/L	Median	0.61	D ⁴	≤1	B	↓	0.03	A ⁴	M ¹	A	M	0.47	C ⁴	≤1	A-B	0.06	A ⁴	M ¹	A				
		95 th %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	M	A	M	1.96	B ⁴			≤2.4 8	A-B	0.11	A ⁴
		95 th %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)*					Island rivers TAS¹
				Te Rio o Porirua and Rangituhi					
				Porirua S. @ former Milk Depot				Part FMU default TAS²	
				Baseline		TAS³			
Parameter	Unit	Statistic	Timeframe	Numeric	State	Numeric	State		
Periphyton biomass	mg chl-a/m²	92 nd %ile	By 2040 unless otherwise indicated	Insufficient data-45.6**	A**	≤120	B	↓	
Ammonia (toxicity)	mg/L	Median		0.006	A	M¹	A	M	
		95 th %ile		0.034					
Nitrate (toxicity)	mg/L	Median		0.9	B	≤0.9	A	↓	
		95 th %ile		1.6		≤1.5			
Suspended fine sediment	Black disc (m)	Median		1.7	A	M¹	A	M	
Escherichia coli (E. coli)	/100mL	Median		1400	E	≤ 130 260	G D by 2050	↓	
		%>260/100mL		95		≤ 20.50			
		%>540/100mL		83		≤ 34.30			
		95 th %ile		6950		≤ 1200 6.950			
Fish	Fish-IBI	Latest		Insufficient data		M¹		M	
Fish community health (abundance, structure and composition)		Expert assessment⁵		Insufficient data		N/A⁶		C	↓
Macroinvertebrates (1 of 2)	MCI	Median		87.0	D	≥90	C		
	QMCI	Median		4.3		≥4.5			
Macroinvertebrates (2 of 2)	ASPM	Median		0.3	D	≥0.3	C		
Deposited fine sediment³	%cover	Median		20	C	M¹	C	M	
Dissolved oxygen	mg/L	1-day minimum		Insufficient data		M¹		M	
		7-day mean minimum							
Dissolved inorganic nitrogen⁷	mg/L	Median		0.92					
Dissolved reactive phosphorus⁷	mg/L	Median		0.018					
		95 th %ile		0.034					
Dissolved copper	µg/L	Median		1.1	C	M¹	C		
		95 th %ile		2.6					
Dissolved zinc	µg/L	Median		7.5	D	≤7.5	C	↓	
		95 th %ile		58		≤42			
Ecosystem metabolism	g O₂.m⁻².d⁺	N/A⁸		M⁸					

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:



Objective P.O7

By 2030, there is no further decline of the health and wellbeing of Te Awarua-o-Porirua's rivers.

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.



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

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

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:~~

- ~~stabilise stream banks to reduce stream bank erosion; and~~
- ~~the progressively shadeing 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:

- 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 9.4 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 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

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

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

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



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...

