



Southern Tairāwhiti Catchment Advisory Group – Hui 4

Date: 13 August 2025

Subject: Values and Outcomes, Water Quality and Quantity

1 Introduction

The National Policy Statement for Freshwater Management (NPS-FM) 2020 provides a framework for achieving the community's long-term vision for freshwater. It's called the National Objectives Framework – or 'NOF'. It represents a series of steps that our group will work through to develop the Southern Tairāwhiti Catchment Plan.

In Hui 3, we discussed Data sovereignty, Outstanding Waterbodies, and Management Areas.

In Hui 4 we dive deeper into values and environmental outcomes, water quality and Target Attribute States (TAS), and water quantity (potential limits and allocation).

We will also undertake site visits, this time looking at a catchment draining towards Tairāwhiti.

Our sites for this hui hikoi are:

- Te Wherowhero Lagoon
- Pākōwhai Stream
- Browns Beach.

2 Values recap

The NPS-FM uses freshwater values as a way to drive the development of environmental outcomes. Determining the values can also be helpful to ensure that the long-term vision reflects all the things that are needed for the catchment.

The NPS-FM has four **compulsory values**:

- Ecosystem Health
- Human Contact
- Threatened Species
- Mahinga Kai.

Every waterbody is deemed to have these values – but it is useful to know how important or significant they are for a particular waterbody.

Alongside these compulsory values, we also need to consider if there are any of the other NPS-FM values that are relevant to the catchment. Additional **NPS-FM Values** are:

- Natural Form and Character
- Animal Drinking Water
- Wai Tapu
- Drinking Water Supply
- Transport and Tauranga Waka



- Fishing
- Irrigation, cultivation and the production of food and beverages
- Commercial and Industrial Use
- Hydro – electric power generation.

Other freshwater values applying to an FMU or part of an FMU may also be identified.

We have summarised the values assessments undertaken at Hui 2 (**Table 1**), where we worked in teams to rank values, scored them in terms of perceived current state, and considered where the values may be most applicable (where/location).

The non-summarised outcomes are included in the agenda pack for Hui 4. In Hui 4 we will consider additional values identified in other catchments.

Table 1 Summary of values exercise

Compulsory values	Overall rank	State	Location / Where
Ecosystem Health	9.5	1 to 10	All waterbodies. Specifically identified waterbodies: Whakapunake, Doneraille Park, Te Reinga, Hangaroa.
Human Contact	9	4 to 7	Specifically identified: Doneraille - Hangaroa - Ruakaka (incl. Doneraille Park and the downstream waterfall), Te Reinga confluence, Pakowhai Stream. Te Wherowhero?
Mahinga Kai	9	2 to 5	Specifically identified: Hangaroa Te Reinga, Pakowhai Stream, Rangiwaho, Wharerata, Maraetaha. Te Wherowhero?
Threatened Species	9.5	2 to 7	Specifically identified: Hangaroa Te Reinga, Pakowhai Stream, Tarakihiaui, QEII blocks, Te Wherowhero.
Values that have to be considered	Overall rank	State	Location / Where
Natural Form and Character	9	1 to 10	Specifically identified: Hangaroa River, Tiniroto lakes, Lagoon, Te Reinga Falls, Te Wherowhero, Te Rawai, Kiteroa, Pakowhai.
Wai tapu	9	6 to 10	Special areas of history and practices. Specifically identified: Hangaroa at Ruakaka, Hangaroa, Te Reinga, Maraetaha/Wharerata, Te Reinga, Roto, Te Kowhai.
Fishing	7.5	4 to 6	Specifically identified: Te Reinga, Falls x Kautarahae, Hangaroa, Mangapoike, Ruakituri, Te Wherowhero, Maraetaha.
Drinking Water Supply	9	5 to 8	Specifically identified: Maranga-Mahaanui, Hangaroa/Mangapoike, Te Reinga, Puahaihai; Water supply dams.
Transport and Tauranga Waka	Not considered		
Animal drinking water	8	5 to 7	Farming areas. Specifically identified: Te Reinga, Te Rawai, Hangaroa.
Irrigation, cultivation and the production of food and beverages	8	6 to 7	Farms. Specifically identified: Mangapoike, Hangaroa.



Commercial and Industrial Use	Not considered		
Hydro – electric power generation	Not considered		
Further / Additional values	Overall rank	State	Location / Where
Flood mitigation	9	3 to 8	Specifically identified: Te Reinga village, marae, Mangapoike/Nuhaka, Hangaroa, Te Wherowhero, Te Muriwai.
Kaitiakitanga or Guardianship	9.5	5 to 7	Specifically identified: Te Reinga, Mangapoike, Hangaroa. Also, Pakowhai and Maraetaha, and Te Wherowhero.
Māori freshwater values	9.5	2 to 7	Specifically identified: Hangaroa, Mangapoike, Ngati Kohatu; also, other areas.
Tourism as a freshwater value	8	0 to 3	Specifically identified: Hangaroa, Nuhaka, Te Reinga.

Key takeaways from the assessment of values:

- Most values scored high, difficult to differentiate.
- Fishing scored relatively low at 7.5, but this is still moderately high.
- The current state varied significantly, depending on waterbody and land use effect.
- Specifically important areas were identified. For some values, all areas were considered important.

In terms of the scoring:

- One person ranked the values differently in terms of land use. *Is this something we want to explore more?*
- One person scored some values more than 10; for the purpose of summarizing the outcomes, we applied the maximum score (10).

Questions:

- Are there any further additional values not included in the NPS-FM or identified to date?
- Are there important sites / areas missing?

3 Environmental Outcomes

We are required to set Environmental Outcomes for the values identified.

An environmental outcome identifies what we want for the future state of our waterways in relation to a particular value. **It describes what success looks like for each value.**

We have included potential attributes to consider for measuring success against environmental outcomes in the table below.

Table 2 Table of proposed environmental outcomes and attributes

Value	Environmental Outcomes	Attributes
Ecosystem Health (Compulsory Value)	<p>E-01 The water quality, flows, and habitat in the rivers, streams, estuaries, and wetlands support a diverse and abundant range of native species including invertebrates, plants, fish, and birds.</p> <p>E-02 Catchments are considered holistically, mountains to the sea, ki uta ki tai, and managed with downstream values in mind. Areas of coastal and</p>	Compulsory Ecosystem Health attributes. Also, estuarine attributes and fish passage.



	<p>freshwater interface such as estuaries and river mouths maintain healthy physical and ecological connections between the coastal and freshwater systems.</p> <p>E-03 No further wetlands are drained, wetland rehabilitation is encouraged, wetlands are protected as provided for in the NES-FW.</p>	<p>Wetland extent and condition.</p> <p><i>Are there any locations that warrant special attention?</i></p>
Human Contact – Swimming (Compulsory Value)	<p>E-04 Rural runoff is managed to mitigate water quality effects on recreational areas. The water quality at primary contact sites improves over time.</p> <p>E-05 Water quality in rural waterholes and swimming spots is safe for the community, whānau and visitors to swim and play in during the swimming season (Oct – April).</p> <ul style="list-style-type: none"> Bacterial contamination is reduced so that the waterbodies meet standards for recreational use. <p>E-06 The risk of infection from contact with water or sediment continually decreases over time.</p>	<p>Compulsory Human Health attributes.</p> <p><i>Are there any locations that warrant special attention?</i></p>
Mahinga kai (Compulsory Value)	<p>E-07 Mana whenua can sustainably harvest mahinga kai plants and animals that are important to them, for whānau and marae events, year-round. Mahinga kai is safe to eat or use.</p> <p>E-8 Whānau, from kaumātua to mokopuna, can undertake their local and unique mahinga kai customs and practices (tikanga and kawa, and reo, in the ways of their tīpuna) in awa, repo, lagoons, and wai tai. The people are healthy. Kai can be harvested at sufficient levels that marae and whānau are able to offer manaakitanga in accordance with tikanga.</p>	<p>Attributes need to be developed.</p> <p><i>Any indicator / important species / resources?</i></p> <p><i>Freshwater versus estuarine?</i></p> <p><i>Access?</i></p> <p><i>Health?</i></p> <p><i>Kaitiekitanga?</i></p> <p>We will explore MfE Mahinga kai guidance.</p> <p>Qualitative versus quantitative.</p> <p><i>Are there any locations that warrant special attention?</i></p>
Threatened Species (Compulsory Value)	<p>E-9 Water quality, quantity, and habitat are suitable for threatened species and they are able to flourish. The populations of species that have become threatened increase in the rivers, streams and wetlands.</p> <p>E-10 Fish passage is uninterrupted so that threatened species can maintain all parts of their life cycle.</p> <p>E-11 Riparian areas are sufficient in width and in good health to support breeding populations.</p>	<p>Attributes need to be developed.</p> <p><i>Any important species?</i></p> <p><i>Freshwater versus estuarine?</i></p> <p><i>Are there any locations that warrant special attention?</i></p>
Natural Form and Character (Other Value That Must be Considered)	<p>E-12 The existing natural character of the rivers and streams is maintained. Further straightening or relocation of the rivers and streams is minimised and damming of the main rivers is avoided.</p> <p>E-13 Waterways are protected from higher volume, more frequent, and longer duration flows during heavy rainfall events.</p>	<p>Rapid Habitat Assessments</p> <p>Extent of riparian habitat</p> <p>Floodplain modification</p>



	<p>E-14 Existing crossings and access structures are protected from erosion, soft engineering methods for erosion protection are preferred where possible.</p> <p>E-15 The riparian environment is improved through planting to reduce the impact of bank erosion on this value. Natural character is improved over time.</p> <p>E-16 Floodplains are protected from further modification.</p> <p>E-17 River mouths and estuaries are protected from further modification.</p> <ul style="list-style-type: none"> Environmental outcomes strengthen resilience of waterways and riparian areas to mitigate impacts of climate change/ higher and more frequent rainfall. 	<p><i>Are there any locations that warrant special attention?</i></p>
<p>Drinking Water supply</p> <p>(Other Value That Must be Considered)</p>	<p>E-18 Tributary streams and springs within the catchment continue to provide for safe domestic use.</p> <p>E-19 The municipal supply is adequate to assure year-round water supply.</p> <p>E-20 Activities are managed to protect the drinking water supplies of ahi kaa and marae.</p>	<p>Extent to which there is a reliable supply of safe drinking water to marae and settlements.</p> <p>Protection of municipal water supply.</p> <p><i>Are there any locations that warrant special attention?</i></p>
<p>Wai Tapu</p> <p>(Other Value That Must be Considered)</p>	<p>E-21 Wai tapu sites and other culturally important freshwater sites, areas, and routes, including associated mātauranga, are recognised by their original Te Reo Māori names, safeguarded against unauthorised use and impact through land-legal, planning, and other mechanisms, and whānau are able to actively manage these places.</p> <p>E-22 Their historical cultural value is recognised. Mana whenua connections are acknowledged and enabled.</p> <p>E-23 Wai tapu are protected and continue to connect whanau and hapu to their whakapapa.</p> <p>E-24 Wai tapu are free from human and animal waste, pollutants and excess sediment. Identified taonga in the wai are protected.</p>	<p>Protection of sites.</p> <p>Access to sites.</p> <p>Recognition of significance.</p> <p>Ability to practice kaitiekitanga.</p> <p><i>Are there any locations that warrant special attention?</i></p>
<p>Fishing</p> <p>(Other Value That Must be Considered)</p>	<p>E-25 Trout fishing continues, with recognition of waterways significant for trout fishing.</p> <p>E-26 The catchment continues to support healthy populations of fish for fishing. The numbers are sufficient and suitable for people to consume. Fish stocks increase in abundance.</p> <p>E-27 Fishers can access waterways to fish at a range of locations. Fishing in waterways remains a valued experience for locals and visitors alike.</p>	<p>The health of the trout population.</p> <p>Visitor numbers.</p> <p><i>Are there any locations that warrant special attention?</i></p>
<p>Animal Drinking Water</p> <p>(Other Value That Must be Considered)</p>	<p>E-28 Healthy drinking water is provided for stock, while not impacting on other values of the FMU.</p>	<p><i>Any required? Do we need to measure this?</i></p>



Irrigation, Cultivation, and Production of Food and Beverages (Other Value That Must be Considered)	E-29 Expansion of irrigation to support economic activities is supported where this does not impact on other values of the catchment. E-30 Continued sustainable livestock farming that protects freshwater. E-31 Continued commercial forestry that protects freshwater.	Extent of land irrigated. <i>What about the health / sustainability of farming communities?</i>
Commercial and Industrial Use Hydro-Electric Power Generation (Other Value That Must be Considered)	Not meaningfully applicable to this FMU.	N/A
Flood mitigation (Additional value)	E-32 Floodplains and river channels naturally flood during heavy rainfall events, with intact riparian margins slowing flows and trapping sediment and woody debris. E-33 No further loss of flood storage capacity in floodplains. E-34 Woody debris does not reduce flood conveyance.	Floodplain modification <i>How about woody debris management?</i>
Kaitiakitanga (Additional value)	E-35 Mana whenua can access and connect with waterways, lagoons, and estuaries to undertake their mahi as kaitiaki, undertaking restoration and monitoring actions, in-line with their mātauranga, tikanga, and kawa. E-36 The ability for tangata whenua to express their mana motuhake over their areas of interest for the purpose of meaningful decision making.	<i>How to measure / provide for this?</i> <i>Are there any locations that warrant special attention?</i>
Environmental stewardship (Additional value)	E-37 Everyone who lives and works in the catchment is acknowledged for their role in enhancing the health of the environment and downstream water quality. E-38 The community can access and connect with waterways, lagoons, and estuaries to undertake restoration work and monitoring actions, in-line with community aspirations.	<i>How to measure / provide for this?</i> <i>Are there any locations that warrant special attention?</i>
Taonga species (Additional value)	E-39 Native taonga plant, bird and animal species are abundant enough to support cultural practices and collection. Taonga species flourish.	Attributes need to be developed. <i>Any important species? Freshwater versus estuarine?</i> <i>Are there any locations that warrant special attention?</i>
Māori freshwater	Are there others that need to be identified and managed? <i>Examples from other catchment management plans:</i>	Attributes need to be considered.



values identified	Mauri Whakapapa Whanaungatanga Waiora Wairua Te Ihi Manaakitanga	<i>Difficult to measure, quantitative versus qualitative.</i>
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Questions:

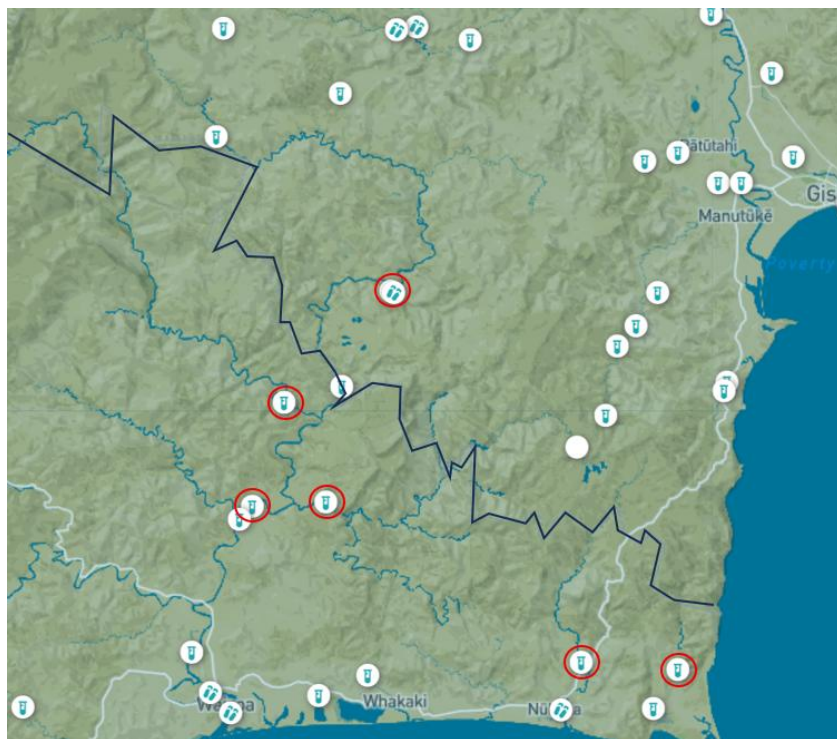
- Does the set of environmental outcomes enable achievement of the long term vision?
- Does the set of attributes collectively enable measurement of progress against environmental outcomes?

4 Water Quality and Target Attribute States

We will take a closer look at water quality in the catchment. This is necessary as we must consider current water quality and set targets for our waterways – to maintain or improve water quality. There are several compulsory water quality attributes in the NPS-FM.

For detailed water quality information, please review the Background Document that was shared as part of Hui 1 agenda pack. Alternatively, you can find the background document online through this [link](#).

We also considered data from the Hawkes Bay Regional Council (HBRC). These sites are available on the Land Air Water Aotearoa (LAWA) website [here](#). Below is the map of monitoring sites. The red-circled sites are HBRC monitoring sites.



The data is included in the agenda pack for Hui 4.

We will focus on key water quality issues in Hui 4.

Note:



- We have included both monitored and modelled information.
- In some cases, there are inconsistencies between the models and actual data.
- We give more weight to monitored data. We also consider such implications on other waterways.

Key issues:

- **Sediment**

Suspended fine sediment is a significant issue in the Hangaroa.

It may also be a significant issue in the Pakowhai, Maraetaha, and other similar waterways. We don't have data on those waterways.

Deposited fine sediment is likely a significant issue across the FMU.

This is a significant issue in the Maraetaha (based on monitoring data), and other similar waterways. We don't have data on other waterways.

- ***E. coli***

E. coli is a significant concern across all areas that are farmed for livestock.

It is also a significant issue at primary contact sites and will be affecting mahinga kai in Te Wherowhero lagoon and potentially other mahinga kai sites.

- **Periphyton**

Periphyton appears to be a moderate issue in some of the waterways.

No data is available for rivers flowing to Hawkes Bay. Periphyton is likely to be a significant issue in some of these waterways (based on observation), e.g., the Hangaroa.

A key component of the Catchment Plan is identifying Target Attribute States and the timeframes to achieve them. In order to achieve the environmental outcomes, every regional council must:

- set a target attribute state for every attribute identified for a value; and
- identify the site or sites to which the target attribute state applies.

The target attribute state for every value with attributes (except the value human contact) must be set at or above the baseline state of that attribute. Target Attribute States must have timeframes associated with them.

We recognize that improving water quality is not a fast or easy process. The timeframes to achieve the Target Attribute States should be ambitious but realistic.

Below is the suggested approach for Target Attribute States:

- **Where the baseline is above the National Bottom Line, within Bands A or B**, the target will be to maintain the current state.
- **Where the baseline is above the National Bottom Line, within Band C**, the target will be to improve on the current state.
- **Where the baseline is below the National Bottom Line, within Bands D or E**, the target will be to improve water quality to the extent that it changes to Band C or higher.
- We will set targets for 10, 20, and 30 years, while acknowledging that we will not achieve aspirational targets within those planning timeframes.



Questions:

- What can we do about these issues?
- How does that affect Target Attribute States?
- Do they vary in different locations?
- Are there any waterways that require specific Target Attribute States?

In Hui 4 we will workshop Target Attribute States and co-develop a table similar to the Waimatā-Pākarāe Catchment Plan example in **Appendix 1**.

The above is based on considering priorities and acknowledging what can be realistically achieved within planning timeframes. They relate to this planning process and acknowledge that targets can and will likely be amended within future planning processes.

5 Water Quantity

In resource management, the term “water quantity” is used to describe the amount of water present in our freshwater bodies (both surface water and groundwater). Water quantity naturally varies with climate, land cover, the underlying geology and over time. However, water quantity is also influenced by human activities, such as abstracting water, changing land cover or damming waterbodies.

Water quantity is important for achieving environmental outcomes, freshwater values and visions. Changes in flows impact aquatic ecosystem health and freshwater values associated with mahinga kai, turanga waka, wāhi tapu sites or the mauri of the waterbody. Social wellbeing is influenced by river flows in terms of the recreational and amenity values rivers provide. Lower flows, particularly in summer, and degraded water quality affect our ability to swim safely.

Groundwater levels are similarly a critical component for aquatic ecosystem health. Many of our streams, springs and wetlands are dependent on inflows from underlying groundwater to maintain their health, particularly providing baseflows¹ during dry periods.

5.1 Current TRMP approach

Permitted takes

Some small abstractions from surface water and groundwater are permitted under rules of the Tairāwhiti Resource Management Plan (TRMP), which means they can occur without resource consent. Permitted takes are as follows:

- The taking and use of surface water, spring water or groundwater at rates of less than 5 litres/second to a maximum of 10m³ per day per property provided that the take and use is not for irrigation of more than one hectare.
- The taking and use of surface water, spring water or groundwater for the purpose of stock drinking water at rates of less than 5 litres/second per property (or at not less than 1km from another take on the same property).

Minimum flows and Allocation Blocks

For rivers and streams: Minimum flows are the level at which water takes must cease or reduce. Where no specific limits are set, default minimum flows for rivers are 90% of the Mean Annual Low Flow (MALF) or 100%

¹ Level of water seeped into a river/stream channel from groundwater source. This often happens over a long time and with a certain delay.



of MALF for waterbodies identified as important aquatic ecosystem waterbodies in the TRMP. The default total amount of water that can be allocated is 30% of MALF.

For groundwater: The TRMP includes a default approach of allocation of 30% of the average annual rainfall recharge for groundwater that isn't directly connected to surface water. The extent to which groundwater may be connected to surface water springs/streams and form part of their recharge is also considered.

5.2 TRMP Review

As part of developing the new region-wide freshwater rules, we are considering some changes to how we manage water quantity at a regional level. Some of the options being considered are:

- Reducing the default provisions (where the catchment plan does not set limits) so that allocation is no more than 20% of MALF in rivers with a mean flow of less than 5000 l/s.
- Reducing the amount of allocation for groundwater from coastal aquifers susceptible to saline intrusion to 15% of annual average recharge.
- Providing policy to guide the takes of water during high flows for storage.
- Setting out allocation priorities that elevate domestic drinking water above other uses.
- Restricting the maximum % that can be granted to a single user so that one user cannot take all the water available for abstraction.
- Encouraging a reciprocal approach to water takes – whereby the water user demonstrates positive environmental outcomes as part of the activity.
- Recognising mana whenua rights and interests by providing for a % allocation of water for specified uses:
 - Supporting marae or papakāinga
 - Environmental enhancement
 - Development of Māori owned land
- Policy and a consent regime that recognises and supports development of community water supplies – including full water supply systems and also community drinking water stations/public taps and water carrier services.

5.3 Water Demand in the Southern Tairāwhiti Catchment area

Council commissioned Aqualinc to undertake a regional water assessment in 2021. The final report can be found [here](#). The report identified that the major demands for water use in the Southern Tairāwhiti Catchment were from stock drinking water, water for residential use, and a small amount of irrigation.

Based on estimates of stock numbers, the largest use of water in the Southern Tairāwhiti Catchment is drinking water for stock.

The Muriwai community has recently been serviced with town supply. No other settlements in the catchment are serviced with domestic water supply. Residential water needs are currently met from rainwater tanks, and small groundwater (spring) takes.

Unique to the Southern Tairāwhiti Catchment is the Gisborne City municipal drinking water supply that sits within the Mangapoike Catchment. Within the catchment there are 3 large dams which supply drinking water to the city year-round, with contributions from both the Te Arai and Waipaoa Rivers. The municipal drinking



water supply is currently managed through the Regional Freshwater Plan and so has been discussed as part of the Regional Freshwater Advisory Group. You can find more information on the report to the Regional Freshwater Advisory Group [here](#).

Irrigation Demand and other Commercial Uses in the Southern Tairāwhiti Catchment area

There is currently one consented water-take in the Southern Tairāwhiti Catchment area:

- A surface water take from the Maraetaha River to irrigate 19.8 ha of citrus. The maximum take limit is 11l/s up to a maximum daily volume of 690m³ and a maximum annual volume of 66,337m³.

Council has only one flow monitoring site in the Southern Tairāwhiti Catchment area – which is on the Maraetaha No.3 Bridge. We rely on Hawke’s Bay Regional Council’s monitoring sites for additional flow information. As with water quality information, more information on our monitoring sites can be found in the Background Document that was shared as part of Hui 1 agenda pack or visit this [link](#).

Setting Minimum Flows

Normally, minimum flows are set to ensure a level of habitat availability for key species found in the river. Fieldwork and modelling to inform habitat availability has not been carried out in the rivers of the Southern Tairāwhiti Catchment, likely due to there being little demand for large quantities of water to date.

Fish needs are a key element in determining instream flow levels because fish are considered an “indicator species” – if the fish are doing well, then generally other instream resources are too. Fish prefer water with a certain depth and velocity, and these preferences vary for different species of fish and at different life stages.

Groundwater availability

Council does not have any monitoring bores within the Southern Tairāwhiti Catchment. It is possible that there are groundwater sources, particularly in the Muriwai area, but little is known about the quality and quantity of these sources.

Questions:

- Are there areas in the Southern Tairāwhiti Catchment that may be developed in the future and would require water? (Thinking about where minimum flows may need to be set).
- What fish species should be used as the Southern Tairāwhiti Catchment Indicator Species for setting minimum flows?

6 Next steps:

In Hui 5, we will start discussing Action Plans, which are the methods to achieve the environmental outcomes for each value.



Appendix 1: Waimatā-Pakarae Catchment Plan example

Attributes Requiring Limits on Resource Use									
Attribute	Monitoring Sites	Baseline Attribute Band	Baseline Numeric Attribute State	Target Attribute Band	Target Numeric Attribute State	Description	Timeframe to Achieve Target State	Interim Target Attribute State	Freshwater value supported by this Target Attribute State
						(From attribute text)			
Periphyton (trophic state) in rivers (mg chl-a/m2)	Pākarāe River at Pakarāe Station Bridge	B Band (Exceed between 50 and 120 no more than 17% of samples)	117 (Exceed between 50 and 120 no more than 17% of samples)	B Band	Exceed between 50 and 120 no more than 17% of samples	Occasional blooms reflecting low nutrient enrichment and/or alteration of the natural flow regime or habitat.	Maintain current state		Ecosystem Health, Human Contact – Swimming, Mahinga kai, Natural Form and Character, Recreation.
	Waimatā River at Monowai Bridge	C Band (Exceed between 120 and 200 no more than 17% of samples)	127 (Exceed between 120 and 200 no more than 17% of samples)	B Band	Exceed between 50 and 120 no more than 17% of samples	Periodic short-duration nuisance blooms reflecting moderate nutrient enrichment and/or moderate alteration of the natural flow regime or habitat.	2046	N/A	
	Etc.								
Suspended fine sediment (visual clarity in metres)	Hamanatua Stream at Okitu Bridge	A Band (Sediment class 2)	1.29 (Visual clarity > 0.93)	A Band (Sediment class 2)	Visual clarity > 0.93	Minimal impact of suspended sediment on instream biota. Ecological communities are similar to those observed in natural reference conditions.	Maintain current state		Ecosystem health, Human Contact – Swimming, Mahinga kai, Threatened Species, Natural



	Pākarae River at Pakarae Station Bridge	B Band (Sediment class 2)	0.89 (Visual clarity < 0.93 and > 0.76)	B Band (Sediment class 2)	Visual clarity < 0.93 and > 0.76	Low to moderate impact of suspended sediment on instream biota. Abundance of sensitive fish species may be reduced.	Maintain current state		Form and Character, Wai Tapu, Transport and Tauranga Waka, Fishing, Animal Drinking Water, Irrigation, Cultivation, Recreation.
	Waimatā River at Monowai Bridge	B Band (Sediment class 2)	0.77 (Visual clarity < 0.93 and > 0.76)	B Band (Sediment class 2)	Visual clarity < 0.93 and > 0.76		Maintain current state		
	Waimatā River at Goodwins Bridge	C Band (Sediment class 2)	0.62 (Visual clarity < 0.76 and > 0.61)	B Band (Sediment class 2)	Visual clarity < 0.93 and > 0.76		2056	N/A	
	Etc.								
Escherichia coli (E.coli) (cfu/100mL)	Hamanatua Stream at Okitu Bridge	D Band (Median) D Band (95th percentile)	174 (Median > 130) 2,300 (95th percentile > 1,200)	C Band (Median) C Band (95th percentile)	Median < 130 95th percentile < 1,200	For at least half the time, the estimated risk is <1 in 1,000 (0.1% risk). The predicted average infection risk is 3%.	2046	By 2036: Median concentration <130 95th Percentile <1800	Human Contact – Swimming, Mahinga kai, Wai Tapu, Transport and Tauranga Waka, Recreation.
	Pākarae River at Pakarae Station Bridge	D Band (Median) D Band (95th percentile)	240 (Median > 130) 1,750 (95th percentile > 1,200)	C Band (Median) C Band (95th percentile)	Median < 130 95th percentile < 1,200		2046	By 2036: Median concentration <130 95th Percentile <1800	
	Etc.								
Attributes Requiring Action Plans									
Attribute	Monitoring Sites					Description			



		Baseline Attribute Band	Baseline Numeric Attribute State	Target Attribute Band	Target Numeric Attribute State	(From attribute text)	Timeframe to Achieve Target State	Interim Target Attribute State (by 2036)	Environmental Outcome Supported by this Target Attribute State
Deposited Fine Sediment (Percentage cover)	Whakauranga Bridge at West Ho Road	D Band	38 (Median)	C Band	Median % fine sediment cover > 19 and < 29	Moderate to high impact of deposited fine sediment on instream biota. Sensitive macroinvertebrate species may be lost.	2056	By 2041: Median % fine sediment cover < 35	Ecosystem health, Human Contact – Swimming, Mahinga kai, Threatened Species, Natural Form and Character, Wai Tapu, Fishing, Cultivation, Recreation.
	Pākarāe Trib at Whāngārā Road	D Band	62.5 (Median)	C Band	Median % fine sediment cover > 19 and < 29		2056	By 2041: Median % fine sediment cover < 55	
	Etc.								
Escherichia coli (E.coli/100 mL) (Primary contact sites during the bathing season)	Hamanatua Stream at Okitu Bridge	D Band - Poor (95th percentile)	2,300 (95th Percentile > 540)	B Band - Good	95th percentile < 540	Estimated risk of Campylobacter infection has a 1 – 5% occurrence, 95% of the time.	2056	By 2041: 95th percentile < 1,150	Human Contact – Swimming, Mahinga kai, Wai Tapu, Recreation
	Pākarāe River at Pakarae Station Bridge	D Band - Poor (95th percentile)	1,750 (95th Percentile > 540)	C Band - Fair	95th percentile < 540		2056	By 2041: 95th percentile < 875	
	Etc.								