Waimatā – Pakarae Catchment Advisory Group – Hui 6

Date: 24 September 2024

Subject: Moving from high-level into the detail #2

1. Introduction

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

In previous wānanga we considered Long Term Visions, Freshwater Management Units (FMUs), Values and Environmental Outcomes, and have started looking at attributes.

We are now moving into the practical / implementation half of the process (as illustrated in **Appendix 1**).

In this wānanga we will progress our conversations to:

- Affirm FMUs
- Affirm values and environmental outcomes
- Consider Baseline Attribute States (BAS) and Target Attribute States (TAS)
- Start putting together long-term visions

2. Freshwater Management Units

Two FMUs are proposed.

- Urban
- Rural

How have we addressed key concerns regarding FMU selections?

- ***Many values are the same, and we could just have one large FMU.***

  We consider there are sufficient unique values per FMU to warrant creation of two FMUs. While many values are the same, separating the catchment into a Rural and Urban FMU will promote a focus on management and action plans that are bespoke to place-based drivers.

There are two distinct communities (urban and rural) that have substantially different values, outcomes and concerns that merit independent consideration / plan development. The community 'naturally' recognises differences between urban and rural areas.

- ***The need to cater for values of coastal / beach settlements.***

  The same attributes are relevant to both beach settlements and urban freshwater / coastal waters values.
  - *E. coli* / *Enterococci*
  - Sediment
  - Woody debris (potential additional attribute)

  We will set water quality targets relative to the values. We will develop management and action plans that are bespoke to place-based drivers. Monitoring and reporting will address any unique values. If warranted, bespoke rules can be developed for the Tairāwhiti Resource Management Plan (TRMP) either as region-wide rules or area-specific provisions.

- ***Linking urban issues to rural drivers.***

  The NPS-FM requires integration of ki uta ki tai – taking a holistic catchment approach.
  Key rural attributes affecting downstream urban areas comprise *E. coli*, sediment, and woody debris.
  We will set water quality targets (Target Attribute States, or TAS for short) for the Rural FMU to achieve rural values. We will also set TAS for the Rural FMU to achieve Urban FMU values. We will develop management and action plans that address both rural and urban place-based drivers. Monitoring and reporting will address links between Rural and Urban FMUs.

- ***Adopting a practical approach that focusses on what we do***

  We consider that this is achieved by establishing two FMUs that have different drivers of degradation, are vastly different in terms of what can be achieved and how quickly, and consequently inherently require different management.

What are we aiming to achieve in each FMU?

<u>Urban FMU</u>

Developing limits, management, and action plans that address the drivers of degradation in urban environments, enabling achievement of target attribute states, which ultimately achieve long-term visions for urban areas.

<u>Rural FMU</u>

Developing limits, management, and action plans that address the drivers of degradation in rural (and linked urban) environments, enabling achievement of target attribute states, which ultimately achieve long-term visions for rural areas (and support achievement of urban long-term visions).

3. Values and Environmental Outcomes

We have provided draft values and environmental outcomes to the advisory group for review. The revised table with changes made based on feedback received to date is provided in **Appendix 2**.

Tangata whenua have been developing Māori freshwater values and environmental outcomes. These will be added to the table once drafting has been completed.

The advisory group is asked to review the table and provide any 'final' feedback. The next steps in the NOF process rely on a final set of values and environmental outcomes, although changes / additions are of course possible later.

We will not discuss values and environmental outcomes at this hui – instead please provide us your written feedback by email.

4. Long-term visions

While long-term visions sit at the pinnacle of the NOF process, these are often difficult to describe at the start of this regulatory process. By working through values and environmental outcomes, we start appreciating what suitable long-term visions could look like.

The NPS-FM defines long-term visions as below:

(2) Long-term visions:

a. may be set at FMU, part of an FMU, or catchment level; and
b. must set goals that are ambitious but reasonable (that is, difficult to achieve but not impossible); and
c. identify a timeframe to achieve those goals that is both ambitious and reasonable (for example, 30 years after the commencement date).

(3) Every long-term vision must:

a. be developed through engagement with communities and tangata whenua about their long-term wishes for the water bodies and freshwater ecosystems in the region; and
b. be informed by an understanding of the history of, and environmental pressures on, the FMU, part of the FMU, or catchment; and
c. express what communities and tangata whenua want the FMU, part of the FMU, or catchment to be like in the future.

(4) Every regional council must assess whether each FMU, part of an FMU, or catchment (as relevant) can provide for its long-term vision, or whether improvement to the health and well-being of water bodies and freshwater ecosystems is required to achieve the vision.

Only through engagement with communities and tangata whenua can Council identify long-term visions. A critical aspect comprises timeframes for achieving long-term visions.

We have reached a stage where we can begin developing long-term visions. We will conduct a **workshop** exercise to develop a 'strawman' for long-term visions. Examples of long-term visions are provided in **Appendix 6**.

5. Baseline Attribute States (BAS) and Target Attribute States (TAS)

We started considering BAS (summarised in **Appendix 3**) and TAS (regulatory detail provided in **Appendix 4**) at the last hui and will explore BAS and TAS in more detail at this hui.

We will focus on attributes related to two key catchment issues and achieving Environmental Outcomes (**Appendix 5**) - sediment and *E. coli*. Sediment and *E. coli* are key issues that affect most values.

We will use this opportunity to consider relevant limits, management, and action planning.

The below compulsory NOF attributes are relevant to these issues:

Attributes requiring limits

- Suspended fine sediment – Ecosystem health
- Escherichia Coli (*E. coli*) – Human contact

Attributes requiring action plans

- Deposited fine sediment
- Escherichia Coli (*E. coli*) – Primary contact sites

Review of Council monitoring data shows that our waterways are performing poorly in terms of these attributes.

Generally, when sediment attributes perform poorly, then other attributes perform poorly (e.g., MCI, Fish-IBI, and Dissolved Reactive Phosphorus). Several values are negatively affected by sediment, not just ecosystem health. Similarly, *E. coli* affects more than just human contact values, but also cultural values such as mahinga kai. Addressing sediment and *E. coli* has multiple benefits.

Questions:

- What is the current baseline? How does that compare to the reference state condition?
- What are the drivers of degradation?
- What can be done about the drivers? What tools are available?
- How long will it take to see improvements?
- How does it differ between urban and rural FMUs?

We will conduct a **workshop** exercise, keeping in mind / considering:

- Where do we want to be in 10, 20, and 30 years? Consider the bands in **Appendix 3** as traffic lights.
- How does that balance the needs of all sectors of the community?
- What can be done to achieve that?
- What regulatory and non-regulatory measures can we rely on?
- Who resources the mahi?
- Are our aims realistic?

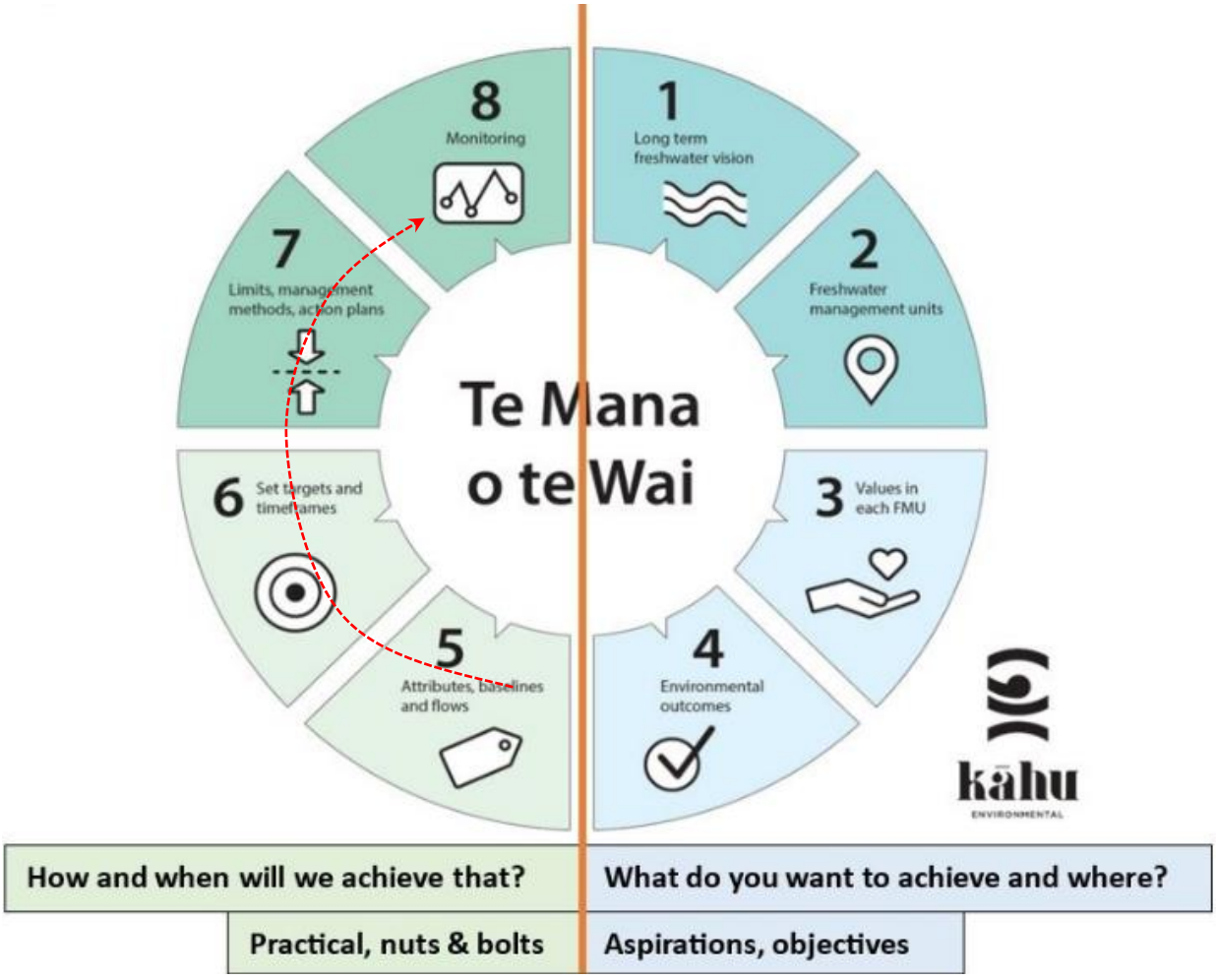
Note: At this stage of the process, we are exploring these with currently available information, to develop narrative TAS – a description of where we want to end up. This will be considered / validated through an expert panel that will consider whether targets are practically achievable.

6. Next step: Continuing the TAS discussion

After this hui, we will move onto the other attributes, always in consideration of the environmental outcomes sought, which aim to achieve the values identified. We will start with attributes closely linked to sediment and E. coli, such as Macroinvertebrate Community Indicator (MCI) (for aquatic insects) and the fish biotic index. We will also consider whether additional attributes are needed to be able to assess progress against environmental outcomes.

In a future meeting we will also provide details on water quantity and allocation, consider the effects of quarries and borrow pits, we will set up a session specifically on forestry.

Appendix 1 NOF process



Appendix 2 Environmental Outcomes

Urban FMU

Values Identified	Example Environmental Outcomes
Ecosystem health *This refers to the extent to which an FMU or part of an FMU supports an ecosystem appropriate to the type of water body (for example, river, lake, wetland, or aquifer).* *There are 5 biophysical components that contribute to freshwater ecosystem health, and it is necessary that all of them are managed. They are:* *Water quality – the physical and chemical measures of the water, such as temperature, dissolved oxygen, pH, suspended sediment, nutrients and toxicants* *Water quantity – the extent and variability in the level or flow of water* *Habitat – the physical form, structure, and extent of the water body, its bed, banks and margins; its riparian vegetation; and its connections to the floodplain and to groundwater* *Aquatic life – the abundance and diversity of biota including microbes, invertebrates, plants, fish and birds* *Ecological processes – the interactions among biota and their physical and chemical environment such as primary production, decomposition, nutrient cycling and trophic connectivity.* *In a healthy freshwater ecosystem, all 5 biophysical components are suitable to sustain the indigenous aquatic life expected in the absence of human disturbance or alteration (before providing for other values).*	The water quality and flows in the rivers, streams and wetlands support a diverse and abundant range of native biota including invertebrates, plants, fish, and birds.

Human contact *This refers to the extent to which an FMU or part of an FMU supports people being able to connect with the water through a range of activities such as swimming, waka, boating, fishing, mahinga kai, and water skiing, in a range of different flows or levels.* *Matters to take into account include pathogens, water clarity, deposited sediment, plant growth (from macrophytes to periphyton to phytoplankton), cyanobacteria, other toxicants, and litter.*	Visitors and locals can swim and play in waterways with clear water, low sediment and low bacterial contamination. Waka ama and other water sports can be practiced year-round along the Waimatā awa with no risk of infection from contact with water or sediment, and no health & safety risks associated with woody debris. The water quality of Hamanatua, Turihaua and Pouawa lagoons is safe for the community, whanau and visitors to swim and play in and enhance the destination appeal for recreation and summer camping. The water quality of the Wainui Stream Mouth is safe for the community, whanau and visitors to swim and play in.
Threatened species *This refers to the extent to which an FMU or part of an FMU that supports a population of threatened species has the critical habitats and conditions necessary to support the presence, abundance, survival, and recovery of the threatened species. All the components of ecosystem health must be managed, as well as (if appropriate) specialised habitat or conditions needed for only part of the life cycle of the threatened species.*	Water quality, quantity, and habitat are suitable for taonga threatened species and they are able to flourish.
Mahinga kai – kai is safe to harvest and eat *Mahinga kai generally refers to freshwater species that have traditionally been used as food, tools, or other resources. It also refers to the places those species are found and to the act of catching or harvesting them. Mahinga kai provide food for the people of the rohe and these sites give an indication of the overall health of the water. For this value, kai would be safe to harvest and eat. Transfer of knowledge is able to occur about the preparation, storage and cooking of kai. In FMUs or parts of FMUs that are used for providing mahinga kai, the desired species are plentiful enough for long-term harvest and the range of desired species is present across all life stages.*	*Freshwater, estuarine, and near-shore* 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.

Mahinga kai – Kei te ora te mauri (the mauri of the place is intact). *In FMUs or parts of FMUs that are valued for providing mahinga kai, customary resources are available for use, customary practices are able to be exercised to the extent desired, and tikanga and preferred methods are able to be practised.*	*Freshwater, estuarine, and near-shore* Whānau, from kaumātua to mokopuna, can undertake their local and unique mahinga kai customs and practices (tikanga and kawa, in the ways of their tīpuna) in awa, repo, lagoons, and wai tai
Natural form and character *The FMU or part of the FMU has particular natural qualities that people value. Natural qualities may include exceptional, natural, or iconic aesthetic features.* *Matters contributing to the natural form and character of an FMU are its biological, visual and physical characteristics that are valued by the community, including:* *its biophysical, ecological, geological, geomorphological and morphological aspects* *the natural movement of water and sediment including hydrological and fluvial processes* *the natural location of a water body and course of a river* *the relative dominance of indigenous flora and fauna* *the presence of culturally significant species* *the colour of the water* *the clarity of the water.*	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. Existing crossings and access structures are protected from erosion, soft engineering methods for erosion protection are preferred where possible. The riparian environment is improved through planting to reduce the impact of bank erosion on this value. Floodplains are protected from further modification.
Wai tapu *Wai tapu represent the places in an FMU or part of an FMU where rituals and ceremonies are performed, or where there is special significance to tangata whenua.* *Rituals and ceremonies include, but are not limited to, tohi (baptism), karakia (prayer), waerea (protective incantation), whakatapu (placing of rāhui), whakanoa (removal of rāhui), and tuku iho (gifting of knowledge and resources to future generations).* *In providing for this value, the wai tapu are free from human and animal waste, contaminants and excess sediment, with valued features and unique properties of the wai protected. Other matters that may be important are that there is no artificial mixing of the wai tapu and identified taonga in the wai are protected.*	Wāhi 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. Their historical cultural value is recognised. Mana whenua connections are acknowledged and enabled.
Transport and tauranga waka	The historical cultural significance related to transport and tauranga waka is recognised, and waka activities can take place safely.

The FMU or part of the FMU is navigable for identified means of transport. *Transport and tauranga waka generally refers to places to launch waka and watercraft, and appropriate places for waka to land (tauranga waka).*	<u>Note</u>: Waterways are regionally significant from a transport and tauranga waka perspective, on account of related whakapapa, heritage values, and cultural significance related to transport and tauranga waka.
Fishing *The FMU or part of the FMU supports fisheries of species allowed to be caught and eaten.* *For FMUs or parts of FMUs valued for fishing, the numbers of fish are sufficient and suitable for human consumption. In some areas, fish abundance and diversity provide a range in species and size of fish, and algal growth, water clarity and safety are satisfactory for fishers. Attributes will need to be specific to fish species such as salmon, trout, tuna, lamprey, or whitebait.*	Waterways are able to support healthy populations of kanae, inanga and tuna. Fish stocks increase in abundance. Fishing is an integral part of whānau life, both in terms of day-to-day activities and sustenance, as well as manaakitanga. Fishing was also fundamental to trade, traditional economies, and cultural exchange.
Drinking water supply *The FMU or part of the FMU can meet people's drinking water needs. Water quality and quantity is sufficient for water to be taken and used for drinking water supply.* *Matters affecting the suitability of water for drinking include:* *physical, chemical, and microbiological contamination (for example, bacteria and cyanotoxins, viruses, protozoa and other pathogens)* *any other contaminants identified in drinking water standards issued under the Health Act 1956 or any other legislation* *the effects of contamination on drinking water treatment processes and the safety of drinking water, and its aesthetic value (that is, appearance, taste, and smell).*	Tributary streams and springs within the catchment continue to provide for safe domestic use.
Flood mitigation *People and property in urban areas are protected from the effects of flooding to property and health and safety.*	Floodplains and river channels naturally flood during heavy rainfall events, with intact riparian margins slowing flows and trapping sediment and woody debris.

Natural flows *Waterways in urban areas are protected from the effects of stormwater flows*	Waterways are protected from higher volume, more frequent, and longer duration stormwater flows during heavy rainfall events.
Urban water availability *'Freedom to use water'. Water is critical for whānau enjoyment and wellbeing, not just from drinking water perspectives, but also recreation and mental wellbeing. Water restrictions have a big impact on whānau. E.g., in summer entertainment often is water play with hosepipes etc. The community is to a large extent not well off and this activity is commonplace. Being able to use water for gardening is also part of recreation. There needs to be a sustainable water supply that prevents water restrictions.*	Water supply is available for year-round enjoyment and community benefit.
Kaitiekitanga *The obligation of tangata whenua to preserve, restore, enhance, and sustainably use freshwater for the benefit of present and future generations.*	Mana whenua can access and connect with waterways, lagoons, and estuaries to undertake their mahi as kaitieki, undertaking restoration and monitoring actions, in-line with their mātauranga, tikanga, and kawa.
Taonga species *Taonga species are central to the identity and wellbeing of many Māori. For generations these species have sustained tangata whenua and helped transfer customary practices and knowledge from one generation to the next.* *Customary practices and knowledge are transferred from one generation to the next.*	Native taonga plant, bird and animal species are abundant enough to support cultural practices and collection. Taonga species flourish.

Rural FMU

Values Identified	Example Environmental Outcomes
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Matters to take into account include pathogens, water clarity, deposited sediment, plant growth (from macrophytes to periphyton to phytoplankton), cyanobacteria, other toxicants, and litter.	The water quality of Hamanatua, Turihaua and Pouawa lagoons is safe for the community, whanau and visitors to swim and play in and enhance the destination appeal for recreation and summer camping.
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Mahinga kai – kai is safe to harvest and eat *Mahinga kai generally refers to freshwater species that have traditionally been used as food, tools, or other resources. It also refers to the places those species are found and to the act of catching or harvesting them. Mahinga kai provide food for the people of the rohe and these sites give an indication of the overall health of the water. For this value, kai would be safe to harvest and eat. Transfer of knowledge is able to occur about the preparation, storage and cooking of kai. In FMUs or parts of FMUs that are used for providing mahinga kai, the desired species are plentiful enough for long-term harvest and the range of desired species is present across all life stages.*	*Freshwater, estuarine, and near-shore* *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.*
Mahinga kai – Kei te ora te mauri (the mauri of the place is intact). *In FMUs or parts of FMUs that are valued for providing mahinga kai, customary resources are available for use, customary practices are able to be exercised to the extent desired, and tikanga and preferred methods are able to be practised.*	*Freshwater, estuarine, and near-shore* *Whānau, from kaumātua to mokopuna, can undertake their local and unique mahinga kai customs and practices (tikanga and kawa, in the ways of their tīpuna) in awa, repo, lagoons, and wai tai*
Natural form and character	

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Wai tapu *Wai tapu represent the places in an FMU or part of an FMU where rituals and ceremonies are performed, or where there is special significance to tangata whenua.* *Rituals and ceremonies include, but are not limited to, tohi (baptism), karakia (prayer), waerea (protective incantation), whakatapu (placing of rāhui), whakanoa (removal of rāhui), and tuku iho (gifting of knowledge and resources to future generations).* *In providing for this value, the wai tapu are free from human and animal waste, contaminants and excess sediment, with valued features and unique properties of the wai protected. Other matters that may be important are that there is no artificial mixing of the wai tapu and identified taonga in the wai are protected.*	Wāhi 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. Their historical cultural value is recognised. Mana whenua connections are acknowledged and enabled.
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Fishing *The FMU or part of the FMU supports fisheries of species allowed to be caught and eaten.* *For FMUs or parts of FMUs valued for fishing, the numbers of fish are sufficient and suitable for human consumption. In some areas, fish abundance and diversity provide a range in species and size of fish, and algal growth, water clarity and safety are satisfactory for fishers. Attributes will need to be specific to fish species such as salmon, trout, tuna, lamprey, or whitebait.*	Waterways are able to support healthy populations of kanae, inanga and tuna. Fish stocks increase in abundance, and the community can eat from the awa. Fishing is an integral part of whānau and community life, both in terms of day-to-day activities and sustenance, as well as manaakitanga. The importance of fishing for trade, traditional economies, and cultural exchange, is recognised.
Drinking water supply *The FMU or part of the FMU can meet people's drinking water needs. Water quality and quantity is sufficient for water to be taken and used for drinking water supply.* *Matters affecting the suitability of water for drinking include:* *physical, chemical, and microbiological contamination (for example, bacteria and cyanotoxins, viruses, protozoa and other pathogens)* *any other contaminants identified in drinking water standards issued under the Health Act 1956 or any other legislation* *the effects of contamination on drinking water treatment processes and the safety of drinking water, and its aesthetic value (that is, appearance, taste, and smell).*	Tributary streams and springs within the catchment continue to provide for safe domestic use.
Animal drinking water *The FMU or part of the FMU meets the needs of farmed animals.* *Water quality and quantity meets the needs of farmed animals, including whether it is palatable and safe.*	The streams, rivers and groundwater provide sufficient quantities of healthy drinking water needs for livestock. This is done in such a way that other identified values of the river are not compromised.
Flood mitigation	

People and property in urban areas are protected from the effects of flooding to property and health and safety.	Floodplains and river channels naturally flood during heavy rainfall events, with intact riparian margins slowing flows and trapping sediment and woody debris. Land use practices promote natural in-stream processes and hydrology and reduce sediment and woody debris entering waterways
Kaitiekitanga *The obligation of tangata whenua to preserve, restore, enhance, and sustainably use freshwater for the benefit of present and future generations.*	Mana whenua can access and connect with waterways, lagoons, and estuaries to undertake their mahi as kaitieki, undertaking restoration and monitoring actions, in-line with their mātauranga, tikanga, and kawa.
Taonga species *Taonga species are central to the identity and wellbeing of many Māori. For generations these species have sustained tangata whenua and helped transfer customary practices and knowledge from one generation to the next.* *Customary practices and knowledge are transferred from one generation to the next.*	Native taonga plant, bird and animal species are abundant enough to support cultural practices and collection. Taonga species flourish.

Appendix 3 Baseline States

		Ammonia				
Planning area	**Site**	**Median**	**A.S.**	**95th**	**A.S.**	**Overall A.S**
Waimatā	Waimatā River at Monowai Bridge	0.021	A	0.136	B	B
Waimatā	Pakarae River at Pakarae Station Bridge	0.026	A	0.108	B	B
Waimatā	Waimatā River at Goodwins Rd Bridge	0.029	A	0.142	B	B
Waimatā	Waimatā River at Grant Rd	0.036	B	0.125	B	B
Waimatā	Kopuawhakapata Stream at Hirini St	0.102	B	0.349	B	B
Waimatā	Hamanatua Stream at Okitu Bridge	0.021	A	0.237	B	B
Waimatā	Wainui Stream at Pare Street	0.059	B	0.282	B	B

		Nitrate-N				
Planning area	**Site**	**Median**	**A.S.**	**95th**	**A.S.**	**Overall A.S**
Waimatā	Waimatā River at Monowai Bridge	0.013	A	0.403	A	A
Waimatā	Pakarae River at Pakarae Station Bridge	0.015	A	0.683	A	A
Waimatā	Waimatā River at Goodwins Rd Bridge	0.012	A	0.427	A	A
Waimatā	Waimatā River at Grant Rd	0.052	A	0.494	A	A
Waimatā	Kopuawhakapata Stream at Hirini St	0.46	A	1.26	A	A
Waimatā	Hamanatua Stream at Okitu Bridge	0.017	A	0.274	A	A
Waimatā	Wainui Stream at Pare Street	0.153	A	1.555	B	B

		DRP				
Planning area	**Site**	**Median**	**A.S.**	**95th**	**A.S.**	**Overall A.S**
Waimatā	Waimatā River at Monowai Bridge	0.012	C	0.052	C	C
Waimatā	Pakarae River at Pakarae Station Bridge	0.013	C	0.027	B	C
Waimatā	Waimatā River at Goodwins Rd Bridge	0.014	C	0.037	C	C
Waimatā	Waimatā River at Grant Rd	0.022	D	0.034	C	D
Waimatā	Kopuawhakapata Stream at Hirini St	0.11	D	0.26	D	D
Waimatā	Hamanatua Stream at Okitu Bridge	0.013	C	0.055	D	D
Waimatā	Wainui Stream at Pare Street	0.26	D	0.494	D	D

		E.coli								
Planning area	**Site**	**% > 540**	**A.S.**	**% >260**	**A.S.**	**Median**	**A.S.**	**95th**	**A.S.**	**Overall A.S**
Waimatā	Waimatā River at Monowai Bridge	28	D	50	D	280	E	11,080	D	E
Waimatā	Pakarae River at Pakarae Station Bridge	22	D	42	D	170	D	2,855	D	D
Waimatā	Waimatā River at Goodwins Rd Bridge	20	C	27	B	74	A	2,343	D	D
Waimatā	Waimatā River at Grant Rd	12	C	34	C	150	D	1,108	C	D
Waimatā	Kopuawhakapata Stream at Hirini St	86	E	93	E	1,550	E	12,200	D	E
Waimatā	Hamanatua Stream at Okitu Bridge	29	D	39	D	180	D	2,300	D	D
Waimatā	Wainui Stream at Pare Street	56	E	79	E	630	E	7,720	D	E

Clarity derived from clarity tube

Planning area	Site	Median	A.S.	Confidence in A.S.
Waimatā	Waimatā River at Monowai Bridge	0.71	C	Moderate
Waimatā	Pakarae River at Pakarae Station Bridge	0.62	C	Moderate
Waimatā	Waimatā River at Goodwins Rd Bridge	0.54	D	High
Waimatā	Waimatā River at Grant Rd	0.40	D	High
Waimatā	Kopuawhakapata Stream at Hirini St	0.53	D	High
Waimatā	Hamanatua Stream at Okitu Bridge	0.88	B	High confidence above NBL, low confidence in band (A/B/C)
Waimatā	Wainui Stream at Pare Street	0.92	B	High confidence above NBL, low confidence in band (A/B/C)

Planning area	Site	MCI (5 year median)	Attribute State	QMCI (5 year median)	Attribute State	ASPM (medain)	Attribute State
Waimatā	Makahakaha Stream	94	C	3.835	D	0.2	D
Waimatā	Pakarae River at Pakarae Station Bridge	52	D	2.11	D	0.11	D
Waimatā	Pakarae Trib at Whangara Rd	76	D	2.54	D	0.17	D
Waimatā	Pakarae trib Stevens Road	92	C	4.05	D	0.27	D
Waimatā	Waimatā River at Goodwins Rd Bridge	84	D	3.3	D	0.2	D
Waimatā	Waimatā River at Monowai Bridge	79	D	4.44	D	0.35	C
Waimatā	Wainui Str at Heath Johnston Park	71	D	3.86	D	0.13	D
Waimatā	Waiomoko River at SH35 Bridge						
Waimatā	Whakauranga Br at West Ho Rd	109	C	4.71	C	0.54	B

Appendix 4 Target Attribute States (NPS-FM text)

The council and community must set target attribute states at or above the bottom line and plan what actions they will take to meet these targets. They are required to improve or at the very least maintain the current state of waterways. Regions can choose to add additional attributes, or higher targets.

The regional council must then work out what needs to be managed to achieve the target attribute states (for example, contaminants, habitat or land use).

Councils must monitor and report on the extent to which the target attribute states are being achieved.

Target Attribute States requirements are described in detail on the NPS-FM (as pasted below).

In essence, TAS:

- Must be set at or above the baseline state of that attribute.
- If the baseline state of an attribute is below any national bottom line for that attribute, the target attribute state must be set at or above the national bottom line.
- Have timeframes specified.

    - May be of any length of time.
    - If long timeframes, then 10-year interim targets.
    - Generally, not more than 30 years, but can be.

    (links in with the long-term vision, with goals that are ambitious and reasonable)

- Setting TAS requires a practical look at what is possible over set timeframes – it brings in the reality of implementation.

3.11 Setting Target Attribute States

(1) In order to achieve the environmental outcomes included as objectives under clause 3.9, every regional council must:

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

(2) 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.

(3) The target attribute state for the value human contact must be set above the baseline state of that attribute, unless the baseline state is already within the A band of Tables 9 or 10 in Appendix 2A, as applicable.

(4) Despite subclauses (2) and (3), if the baseline state of an attribute is below any national bottom line for that attribute, the target attribute state must be set at or above the national bottom line (*see* clauses 3.31, 3.32, and 3.33 for exceptions to this).

(5) Every target attribute state must:

a. specify a timeframe for achieving the target attribute state or, if the target attribute state has already been achieved, state that it will be maintained as from a specified date; and
b. for attributes identified in Appendix 2A or 2B, be set in the terms specified in that Appendix; and
c. for any other attribute, be set in any way appropriate to the attribute.

(6) Timeframes for achieving target attribute states may be of any length or period but, if timeframes are long term:

a. they must include interim target attribute states (set for intervals of not more than 10 years) to be used to assess progress towards achieving the target attribute state in the long term; and
b. if interim target attribute states are set, references in this National Policy Statement to achieving a target attribute state can be taken as referring to achieving the next interim target attribute state.

(7) Every regional council must ensure that target attribute states are set in such a way that they will achieve the environmental outcomes for the relevant values, and the relevant long-term vision.

(8) When setting target attribute states, every regional council must:

a. have regard to the following:
    i. the environmental outcomes and target attribute states of any receiving environments
    ii. the connections between water bodies
    iii. the connection of water bodies to receiving environments; and
b. use the best information available at the time; and
c. take into account results or information from freshwater accounting systems (*see* clause 3.29).

3.12 How to Achieve Target Attribute States and Environmental Outcomes

(1) In order to achieve the target attribute states for the attributes in Appendix 2A, every regional council:

a. must identify limits on resource use that will achieve the target attribute state, and any nitrogen and phosphorus exceedance criteria and instream concentrations set under clause 3.13, and include the limits as rules in its regional plan(s); and
b. may prepare an action plan; and
c. may impose conditions on resource consents to achieve target attribute states.

(2) In order to achieve the target attribute states for the attributes in Appendix 2B, every regional council:

a. must prepare an action plan for achieving the target attribute state within a specified timeframe; and
b. may identify limits on resource use, and any nitrogen and phosphorus exceedance criteria and instream concentrations set under clause 3.13, and include them as rules in its regional plan(s); and
c. may impose conditions on resource consents to achieve target attribute states.

(3) In order to achieve any other target attribute state or otherwise support the achievement of environmental outcomes, a regional council must do at least one of the following:

a. identify limits on resource use and include them as rules in its regional plan(s)
b. prepare an action plan
c. impose conditions on resource consents to achieve target attribute states.

(4) Where the same attribute provides for more than one value, it is the most stringent target attribute state applying to those values that must be achieved.

3.13 Special Provisions For Attributes Affected by Nutrients

Appendix 5 Considering TAS within the framework

	Category	Values Identified	Environmental Outcomes	Compulsory attributes / Attributes or other measures potentially to be developed	Targets Attribute States	Management and action planning - next step in the process	~ What does this look like in practice in that FMU?
Urban FMU	**Compulsory**	**Ecosystem health**	The water quality and flows in the rivers, streams and wetlands support a diverse and abundant range of native biota including invertebrates, plants, fish, and birds.	Rivers Suspended Fine Sediment Deposited Fine Sediment (Wadeable rivers)	**What can feasibly be achieved?** **What is the TAS required to achieve the environental outcome(s)?** **What do we need to do to achieve the TAS?** **How long will it take to achieve the TAS and by inference, the environmental outcome?**	Action plans Land use rules Discharge rules Iwi / hapū management plans **Key drivers:** - Urban transformation - Stormwater contaminants - Hydrological changes (impervious areas, engineered flows) - Landfills **Aspects to be managed within the Rural FMU:** - Sediment from rural areas - E. coli from rural areas	**For example:** - Addressing 'urban stream syndrome' - Stormwater treatment - Hydrological controls, incl. Floodplain protection - Works in watercourses - Riparian shading / planting - Fish passage improvements, stormwater infrastructure - Habitat improvements - Urban corridors - Better compliance and enforcement
		Human contact	Visitors and locals can enjoy swimming in waterways with clear water, low sediment and low bacterial contamination. Waka ama and other water sports can be practiced year-round along the Waimatā awa with no risk of infection from contact with water or sediment, and no health & safety risks associated with woody debris. The water quality of Hamanatua, Turihaua and Pouawa lagoons is safe for the community, whanau and visitors to swim and play in and enhance the destination appeal for recreation and summer camping. The water quality of the Wainui Stream Mouth is safe for the community, whanau and visitors to swim and play in.	Rivers Escherichia Coli (E. Coli) Escherichia Coli (E. Coli) (Primary Contact Sites) Lagoons and estuaries Enterococci Sediment quality Kai hoe waka	**What can feasibly be achieved?** **What is the TAS required to achieve the environental outcome(s)?** **What do we need to do to achieve the TAS?** **How long will it take to achieve the TAS and by inference, the environmental outcome?**	Action plans Land use rules Discharge rules Iwi / hapū management plans **Key drivers:** - Wastewater (network issues) - Wastewater issues (septic tank issues) **Aspects to be managed within the Rural FMU:** - Sediment from rural areas - E. coli from rural areas	**For example:** - Preventing inflow & infiltration (DrainWise) - Woody debris removal - Septic tank audits - Supporting infrastructure

	Category	Values Identified	Example Environmental Outcomes	Compulsory attributes / Attributes or other measures potentially to be developed		Management and action planning - next step in the process	~ What does this look like in practice in that FMU?
Rural FMU	**Compulsory**	**Ecosystem health**	The water quality and flows in the rivers, streams and wetlands support a diverse and abundant range of native biota including invertebrates, plants, fish, and birds.	<u>Rivers</u> Suspended Fine Sediment Deposited Fine Sediment (Wadeable rivers)	**What can feasibly be achieved?** **What is the TAS required to achieve the environental outcome(s)?** **What do we need to do to achieve the TAS?** **How long will it take to achieve the TAS and by inference, the environmental outcome?**	Action plans Land use rules Discharge rules Iwi / hapū management plans **Key drivers:** - Livestock farming / agricultural transformation - Contaminants associated with farming - Hydrological changes (land drainage, change in land cover) - Forestry development	**For example:** - Farm Environment Plans - Fencing - Wetland protection - Watercourse restoration - Riparian shading / planting - Fish passage improvements, farm culverts - Retiring non-productve land - Better compliance and enforcement - Improved forestry controls
		Human contact	Visitors and locals can enjoy swimming in waterways with clear water, low sediment and low bacterial contamination. Waka ama and other water sports can be practiced year-round along the Waimatā awa with no risk of infection from contact with water or sediment, and no health & safety risks associated with woody debris. The water quality of Hamanatua, Turihaua and Pouawa lagoons is safe for the community, whanau and visitors to swim and play in and enhance the destination appeal for recreation and summer camping.	<u>Rivers</u> Escherichia Coli (E. Coli) Escherichia Coli (E. Coli) (Primary Contact Sites) <u>Lagoons and estuaries</u> Enterococci Sediment quality	**What can feasibly be achieved?** **What is the TAS required to achieve the environental outcome(s)?** **What do we need to do to achieve the TAS?** **How long will it take to achieve the TAS and by inference, the environmental outcome?**	Action plans Land use rules Discharge rules Iwi / hapū management plans **Key drivers:** - Farm runoff - Livestock in streams	Included in the above examples.

Appendix 6 Examples of long-term visions

Mōtū

The mauri of freshwater is protected and enhanced for the full extents of the Upper Mōtū and the Upper Waioeka – Otara Catchments.

The Mōtū River and its tributaries continue to be recognized locally and internationally as a significant destination for back country trout fishing. The waterways are safe for swimming, fishing and the harvesting of mahinga kai.

The outstanding natural and scenic values of Te Wai o Ngahere FMU are maintained and protected from degradation. The FMU remains a bastion of high ecosystem health and ensures the catchment continues to be an important place for education, recreation and biodiversity.

The productive landscape of the Farmlands and Settlements FMU continues to provide for the productive and economic wellbeing of the Mōtū community. Sediment and E.coli no longer make their way into the waterways.

Sediment inputs are reduced across the Upper Mōtū and Upper Koranga rivers and riverbank erosion is substantially reducted. Suspended and deposited sediment levels in the rivers have reduced to levels above national bottom linesand there is a corresponding improvement in fish and freshwater insect health and abundance within the catchment area.

The natural form and character of the Mōtū River is improved – targeted recovery work along the riparian margin naturalises the channel morphology, reduces streambank erosion and supports freshwater biodiversity.

Nga Uri o Te Kooti Rikirangi

Te Maungārongo comprises an important part, he taonga tuku iho, of the cultural, ecological, and socio-economic landscape of Ngā Uri o Te Kooti Rikirangi. Traditionally, this area provided an important site for the gathering and growing of food and the wide range of materials necessary for the well-being of the people.

It also has profound historical significance for Te Kooti Rikirangi, our ancestor. The overall aspiration of Ngā Uri o Te Kooti Rikirangi for Te Maungārongo is its restoration as a taonga, recognising the significant past, while looking at the present, and casting our eyes to a sustainable future.

We recognise its regional significance and potential for whānau and the wider community.

Ūawa (in development)

Freshwater in the Ūawa Catchment is the lifeblood of the whenua from the smallest puna to the largest awa. The catchment is cared for by kaitiaki in accordance with the traditions, ancestral practices and tikanga of tāngata whenua who retain their strong connections to the waterways. Over the next 30 years:

a) *Changes in landuse practices mean that steep and unstable parts of the catchment are protected by forests that reduce erosion and improve the level of sedimentation of waterbodies;*
b) *Riparian areas and wetlands throughout the catchment are restored in a network of habitat areas and linkages within a supportive agriculture and forestry production system;*
c) *Freshwater plants, animals and ecosystems are a focus of restoration resulting in improved ability to support food gathering and mahinga kai;*
d) *Water quality within the catchment is maintained or improved to a level that supports the health of people;*
e) *Culture, traditions, access and whakapapa links to wai are revived enabling the people of the catchment to retain their identity;*
f) *The mauri of wetlands, rivers and springs are maintained, or restored to a standard that provides for the relationship of tāngata whenua to wai; and*
g) *Everyone who lives and works in the catchment is acknowledged for their role in enhancing the health of the wai.*