



# Waimatā – Pakarae Catchment Advisory Group – Hui 3

**Date: 21 May 2024**

**Subject: Values, Environmental Outcomes and FMU options**

## 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 the last wānanga we began conversations around Freshwater Management Units (FMUs), Values and Environmental Outcomes. These are all important parts of the plan which will end up driving the decisions made about what objectives, policies, rules, limits and targets are contained within the catchment plan.

In this wānanga we will progress our conversations to:

- Develop a refined list of values
- Achieve consensus on FMUs
- Start linking Values, Environmental outcomes, and Action Plans & Limits.

Refining our thinking around these parts of the plan will help us set appropriate targets for water quality and actions for improving the state of freshwater where it is not providing for the values and outcomes we identify.

## 2. Freshwater values

In hui 2 the advisory group considered the compulsory and additional values provided in the NPS-FM and identified their own values. We have tabulated the values with comments provided in **Table 1**.

*Table 1: Values identified through Hui 2 workshop*

Values		Comments
Compulsory values (NPS-FM)  Note: Every waterbody is deemed to have these values – but it is useful to know how important/prominent/significant they are	Ecosystem health	Strong support from the group for all compulsory values. The view is that all waterbodies should be considered in terms of ecosystem health. Also, modified watercourses.
	Human contact	
	Threatened species	Targets will vary depending on what can be achieved per waterbody within planning timeframes.
	Mahinga kai	Particularly important waterbodies, and locations within waterbodies, significant for human contact, threatened species, and mahinga kai to be identified, improved, and protected. E.g., protection and improvement of inanga spawning areas.

Values		Comments
for a particular waterbody.		<p>The compulsory value 'Human contact' addresses health risks affected by water quality (pathogens). This is important for a range of activities, incl. waka ama, kayaking, swimming, surfing, and activities around bridges. It is also important for recreation in tidal areas, near shore areas, and lagoons. Contact recreation is a key value in this catchment area. <i>A key issue is wastewater overflows.</i></p> <p>Degraded waterbodies should also be improved over time. Smaller tributaries may present the best opportunities for improving values.</p> <p><i>Mapping work to be undertaken (e.g., Darwin Road swimming hole, springs, pa tuna, etc.)</i></p>
Values that must be considered (NPS-FM)	Natural form and character	General support from the group for natural form and character. Strong views on allowing waterbodies to function naturally (and for identification of nature-based solutions).
	Wai tapu	Cultural values were strongly supported, including aspects such as wai tapu.
	Transport and tauranga waka	Transport and tauranga waka is relevant for historical waka landings and routes (such as the Kopuawhakapata), and waka ama. <i>Mapping work to be undertaken (e.g., historical waka routes, etc.)</i>
	Fishing	Fishing was recognised as important, in terms of mahinga kai. This is in freshwater and coastal areas affected by freshwater.
	Drinking water supply	The importance of water for domestic water supply, animal drinking water, (across the catchment) and irrigation (in certain areas) was noted.
	Animal drinking water	
Additional values (identified by the community and advisory group)	Flood mitigation	<p>The advisory group recognised the ecosystem service provided by natural channels, floodplains, and vegetation in storing flood waters and trapping sediment and woody debris.</p> <p>The importance of sustainable land use was stressed, linking land use to freshwater values. Action plans and management to address the causes and effects of freshwater degradation.</p>

Values		Comments
	Kaitiekitanga	The group, both mana whenua and broader group membership, expressed a desire for provision for kaitiekitanga, for the community to be enabled to take care of their environment.
	Māori freshwater values – <i>further work required</i>	Māori freshwater values have been extensively discussed, incl. wahi tapu, pa sites, noho kainga, taonga species, etc., and customary locations.
	Taonga species	
	Mahinga kai in lagoons, estuaries, and coastal near shore waters	
	Recreation in lagoons, estuaries, and coastal near shore waters	The unique values of coastal settlements was noted, and the need to manage for those values.

As a reminder, relevant questions when considering values:

- *How important is this value in the FMUs?*
- *Does it differ between FMUs? Is it rural or urban?*
- *Where is it important?*
- *What is the current state of this value?*
- *Does anything need to change?*
- *How are we going to make those changes?*
- *What can reasonably be achieved and over what time?*

The more we know about our freshwater values, the easier it is to craft environmental outcomes that are aligned to them.

**Group exercise:**

1. Are the values comprehensive?
2. What values are missing?

### 3. Environmental Outcomes

For each FMU we are required to set Environmental Outcomes for the values found there.

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.

The environmental outcomes also link to the long-term vision - when the outcomes are achieved, the vision is achieved.

Environmental Outcome statements need to be written in such a way that they can be used to assess how effective the catchment plan and action plans are in achieving the environmental outcome. When the environmental outcomes are achieved, they should fulfil the long-term vision for the catchment.

Our development of environmental outcomes will be iterative as we progress through the steps of the NOF.

Some suggested outcomes are provided below as a primer for conversation at our hui:

<b>Compulsory values</b>	
<b>Value</b>	<b>Environmental outcome</b>
Ecosystem health	<i>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.</i>
Human contact	<p><i>Visitors and locals can enjoy swimming in waterways with clear water, low sediment and low bacterial contamination.</i></p> <p><i>Waka ama paddlers can practice year-round along the Waimatā awa with no risk of infection from contact with water or sediment.</i></p> <p><i>The water quality of Hamanatua, Turihaua and Pouawa lagoons are safe for whanau and visitors to swim and play in and enhance the destination appeal for recreation and summer camping.</i></p>
Threatened species	<i>Water quality, quantity, and habitat are suitable for taonga threatened species and they are able to flourish.</i>
Mahinga kai	<i>Mana whenua can sustainably harvest mahinga kai plants and animals that are important to them, for whānau and marae events, year-round.</i>
<b>Values that must be considered</b>	
<b>Value</b>	<b>Environmental outcome</b>
Natural form and character	<i>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.</i>
Wāhi tapu	<i>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.</i>
Transport and tauranga waka	<i>The historical cultural significance related to transport and tauranga waka is recognised, and waka activities can take place safely.</i>
Fishing	<i>Waterways are able to support healthy populations of kanae, inanga and tuna. Fish stocks increase in abundance.</i>

Drinking water supply	<i>Tributary streams and springs within the catchment continue to provide for safe domestic use.</i>
Animal drinking water	<i>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.</i>
<b>Catchment specific values</b>	
<b>Value</b>	<b>Environmental outcome</b>
Flood mitigation	<i>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</i>
Kaitiekitanga	<i>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.</i>
Taonga species	<i>Native wetlands, trees, birds and animals are abundant enough to support cultural practices and collection</i>
Mahinga kai in lagoons, estuaries, and coastal near shore waters	<i>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 the repo and on the whenua.</i>

#### 4. Freshwater Management Units (FMUs)

The NPS-FM does not mandate a single correct or preferred way to identify FMUs. Each FMU should reflect the unique circumstances of each region. These will dictate what target attributes, freshwater environmental objectives, limits and flows to set. The definition of FMUs is intentionally flexible, so councils can determine the spatial scale best suited to their region. The FMUs (one or more) in a region must include all freshwater bodies.

When setting FMU boundaries, councils should work with tangata whenua and the community to consider:

- the hydrological, geographical, social, political and cultural characteristics of the region, including the cultural connections of tangata whenua and communities to place
- practical issues with managing freshwater to give effect to the NPS-FM, which may result in subdividing or grouping the units further, after considering these characteristics.

Council previously suggested two FMUs (more details in **Appendix 1**), namely **Rural FMU** and an **Urban FMU**. This was based on the relatively distinct values between urban areas and rural areas. It was also based on drivers of freshwater degradation being different between urban and rural areas.

In terms of freshwater management (identifying management measures and action plans), these address the drivers of freshwater degradation, ensuring that values and the associated environmental outcomes are achieved. This was the primary reason for setting up management units at the urban and rural scale.

The advisory group suggested the creation of a third FMU to be considered, namely a **Coastal Settlement Areas FMU**. **Table 2** outlines the pros and cons of this third FMU.

Questions to assess the proposed Coastal Settlement Areas FMU:

- Are freshwater and coastal values in coastal settlement areas different to freshwater and coastal values in Urban FMU (i.e. Gisborne City)?
- Are the drivers of degradation in coastal settlement areas different to those in the Rural FMU and Urban FMU?
- Would establishment of a Coastal Settlement Areas FMU result in a different freshwater management approach than for Rural and/or Urban FMU?
- Would establishment of a Coastal Settlement Areas FMU result in better freshwater and coastal outcomes?
- Would regional plan freshwater provisions be different if having three rather than two FMUs?

In summary:

***Will the additional FMU result in different management or environmental outcomes?***

*Table 2: The pros and cons of developing a third FMU - Coastal Settlement Areas.*

Pros	Cons
Unique social and cultural values of coastal settlements directly considered.	These values are unlikely to be managed for differently, whether we have two or three FMUs.  Complexity of differentiating between freshwater bodies in the Gisborne urban area of the Wainui Stream catchment and the downstream coastal settlement; this is one catchment, arguably with the majority highly urbanised (not coastal settlement) and affecting the downstream waterbody. Separating it out from the urban area presents a challenge.
Lagoons, estuaries, and near shore environments considered in terms of their benefits in coastal settlements / areas.	Already considered within the two proposed FMUs; no need for a separate FMU to consider these (the NPS-FM already requires these to be considered in the proposed Rural FMU and Urban FMU).
Unique drivers of degradation could be considered, if applicable.	Drivers of degradation do not appear to be different to those in the rural and urban FMUs.
Contamination from septic tanks could be a distinct driver. However, faecal source tracking does not show human sources of contamination in the Hamanatua; Wainui is showing contamination from human bacteria.	More work required to rule out contamination from septic tanks, particularly in the Wainui Stream catchment. Could be due to the GDC public wastewater network.

<p>Area-specific freshwater provisions could be considered for the regional plan, if not already adequately catered for in the plan / other proposed FMUs.</p>	<p>Not aware of any significantly different management and action planning outcomes, no freshwater plan provisions that would be different in these areas as opposed to other freshwater, lagoon, estuary, or near-shore areas important for contact recreation.</p> <p>Unsure of benefit of having an additional section in the plan for these areas, when the plan can provide for them without creation of a third FMU; plan redundancy / duplication likely.</p>
<p>Reporting specifically for these areas would be bespoke to unique values in these areas.</p>	<p>Reporting requirements can be included in the two FMU proposal, addressing any unique values.</p>
<p>Target states can be set specifically for the values in these areas.</p>	<p>Currently insufficient monitoring data for target setting in waterbodies in coastal settlements catchments, apart from the Wainui Stream and Hamanatua stream catchments.</p> <p>Target states can and would be set specifically for the values in these areas without the suggested third FMU.</p>
<p>No change in monitoring; these areas are monitored whether two of three FMUs.</p>	

All management requirements for meeting freshwater, lagoon, estuary, and near shore values in coastal settlement areas can be included within the proposed Rural FMU and an Urban FMU.

The unique character of coastal settlements, as related to freshwater management, can be addressed within action plans and management measures that the advisory group identifies (through later hui) for rural and urban areas.

Council recognizes that the Rural and Urban FMUs are parts of the same hydrological catchments, and what takes place in one affects the other. Our management approach will therefore consider the interconnectivity, have regard to the other FMU, and will align with the principle of ki uta ki tai.

## 5. Next step: water quality

Once we have determined the vision, values, FMUs and environmental outcomes for the catchment, we need to look at how well the current state of the catchment is meeting these and what is required to ensure the vision and environmental outcomes are met.

We'll do this by looking at ways to measure water quality, which the NPS-FM refers to as attributes. These are things like the amount of nutrients, bacteria and sediment in the water. We also need to consider the life and health of aquatic ecosystems, using attributes such as Macroinvertebrate Community Indicator (MCI) (for aquatic insects) and the fish biotic index.

**The focus of the next hui will be on developing an understanding of water quality in each FMU and whether it is meeting the environmental outcomes. From this we will develop target attribute states for each water quality attribute.**

## Appendix 1: Previous FMU suggestions

### Rural FMU

All rural areas in the Waimatā and Pakarae catchments.

Common issues	Common pressures / drivers
<ul style="list-style-type: none"><li>• Sediment (agricultural sources)</li><li>• Phosphorus (related to sediment)</li><li>• <i>E.coli</i> (agricultural sources)</li><li>• Temperature (agricultural use)</li><li>• Habitat degradation (agricultural impacts)</li></ul>	<ul style="list-style-type: none"><li>• Livestock farming (cattle and sheep)</li><li>• Commercial forestry</li><li>• Agricultural disturbance</li><li>• Rural objectives and values</li></ul>

Recognising that these areas are upstream of the urban area and will impact on the values found there. The health of the Urban FMU will, in part, depend on improvements made in the Rural FMU.

### Urban FMU

The Gisborne Urban area in this catchment planning area, including Wainui and Okitu, and the Tūranganui River.

Common issues	Common pressures / drivers
<ul style="list-style-type: none"><li>• Sediment (urban sources)</li><li>• <i>E.coli</i> (urban sources)</li><li>• Temperature (urban transformation)</li><li>• Habitat degradation (urban transformation)</li><li>• Urban pollution (e.g., heavy metals)</li></ul>	<ul style="list-style-type: none"><li>• Urban transformation</li><li>• Contaminants (stormwater, wastewater)</li><li>• Landfills</li><li>• Urban objectives and values</li></ul>