# Ūawa Catchment Working Group

## Updated Vision, Values, Environmental Outcomes and Attributes

11 December 2024

At hui 5 we went through the draft vision, values and environmental outcomes and you provided feedback on these.

I have incorporated that feedback – and highlighted where I have changed things in yellow on the document. I also have left some comments in the document where I wasn't sure of something and wanted further feedback (green highlights).

Alongside this I have put attributes (the things we measure) for each of the environmental outcomes, where I have been able to identify these.

There are three types of attributes:

- **NPSFM attributes**. These are generally things the Council already measures so we have a good understanding of current state and trends and should be able to continue to monitor these
- **Tairāwhiti attributes**. Where possible I have tried to include similar attributes to those being used in other catchment plans. So while they might be targeted to specific locations in the Ūawa catchment we have an existing methodology developed, and it might be possible to monitor these as part of a wider monitoring programme at the same time as it is done in other catchments
- **Ūawa-specific atttributes**. These are attributes that have not been proposed elsewhere and would need a methodology and Ūawa – specific programme to be developed.

Please review the updated vision/values/environmental outcomes and provide any further feedback.

Also can you please carefully consider the proposed attributes. Are we measuring the right things to know if we are heading in the right direction?

# Vision

*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 kaitieki in accordance with the traditions, ancestral practices and tikanga of mana whenua who retain their strong connections to the waterways. Kaitiaki whenua care for their lands and manage these in accordance with good environmental practices. Over the next 100 years:*

a) *Changes in landuse practices mean that steep and unstable parts of the catchment are protected by actively managed forests in mosaic landscape that reduce erosion and improve the level of sedimentation of waterbodies*
b) *Freshwater bodies throughout the catchment are restored in a network of healthy ecosystems, habitat areas and linkages within supportive agriculture and forestry production systems;*
c) *Freshwater plants, birdlife, 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 maintained and enhanced enabling the people of the catchment to retain their identity;*
f) *The mana and mauri of wetlands, rivers and springs are maintained, or restored to a standard that provides for the relationship of mana whenua to wai;*
g) *Everyone who lives and works in the catchment plays a role in enhancing the health of the wai; and*
h) *Infrastructure development is resilient and supports the connectivity and function of communities while minimising impacts on freshwater bodies*

**Glossary**

| Kupu (word) | Meaning |
|---|---|
| awa | river |
| kaitieki | guardians |
| kaitiaki whenua | landowners |
| mahinga kai | traditional food gathering |
| mana | |
| mana whenua | those who hold traditional authority over the land |
| mauri | lifeforce |
| puna | spring |
| tikanga | correct procedures |
| wai | water |
| whakapapa | geneology |
| whenua | land |

# Freshwater Management Units

There are two Freshwater Management Units in the catchment plan area – the Ūawa – Hikuwai FMU and the Mangahauini FMU.

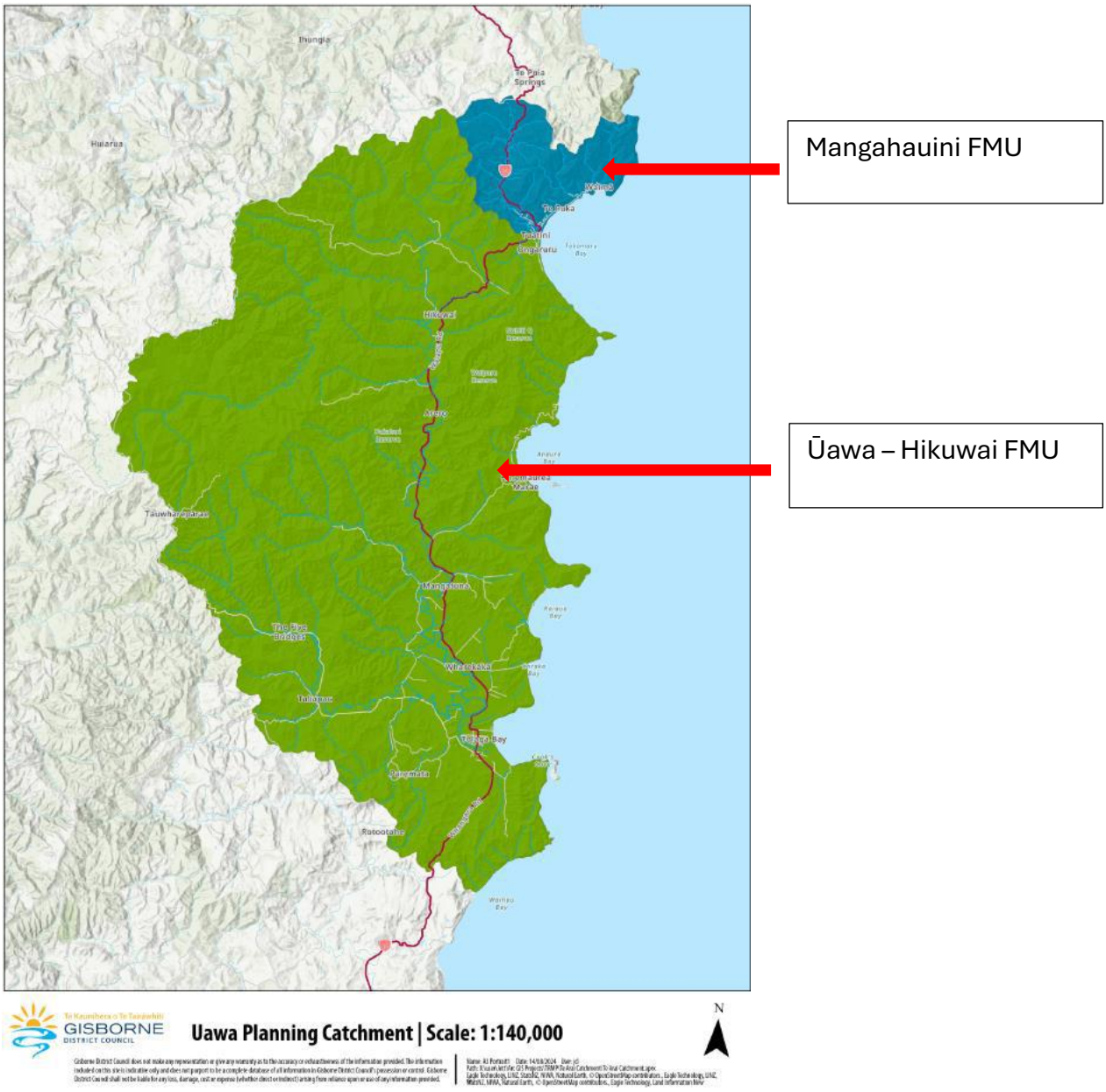


***Figure 1: Ūawa Catchment Plan FMUs***

# Values and Environmental Outcomes

| NPSFM Values | | Environmental Outcomes | Attributes Used to Monitor this Value and Outcome |
|---|---|---|---|
| **Ecosystem Health** | **Value**<br>The ability for Ūawa – Hikuwai FMU rivers to support thriving aquatic ecosystems enables people to thrive.<br><br>Freshwater ecosystems include springs, rivers, wetlands and lakes and their health is fundamentally connected to the health of the land. Mana whenua also recognise that their own wellbeing is intrinsically connected to the health of these ecosystems.<br><br>There are 5 biophysical components that contribute to freshwater ecosystem health, and it is necessary that all of them are managed. They are:<br>***Water quality*** – the physical and chemical measures of the water, such as temperature, dissolved oxygen, pH, suspended | **Environmental Outcome**<br>The water quality, quantity and habitats within the Ūawa – Hikuwai FMU support resilient ecosystems with diverse and abundant native species.<br><br>Waterbodies are managed and considered in their entirety including riparian areas and wetlands. | **NPSFM Attributes:**<br>• Macroinvertebrate Community Health (MCI/QMCI/ASPM)<br>• Dissolved Oxygen<br>• Deposited Sediment<br>• Visual Clarity<br>• Nutrients (nitrogen, phosphorus and ammonia)<br>• Fish index of bioitic integrity<br>• Periphyton |

| | | | |
|---|---|---|---|
| | sediment, nutrients and toxicants<br>***Water quantity*** – the extent and variability in the level or flow of water<br>***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<br>***Aquatic life*** – the abundance and diversity of biota including microbes, invertebrates, plants, fish and birds<br>***Ecological processes*** – the interactions among biota and their physical and chemical environment such as primary production, decomposition, nutrient cycling and trophic connectivity.<br><br>In a healthy freshwater ecosystem, all 5 components are suitable to sustain the indigenous aquatic life expected in the absence of human disturbance or alteration. | | |
| **Human Contact –** | **Value** | **Environmental Outcome** | **NPSFM Attributes:** |

| | | | |
|---|---|---|---|
| **Swimming** | Many of the rivers and streams within the Ūawa – Hikuwai FMU are used for swimming and bathing during the warmer months.<br><br>Swimming is valued as a recreational activity to all within the FMU.<br><br>Mana whenua value swimming because it enables them to connect physically and spiritually with their awa and maintain their whakapapa to wai and strong relationships to place.<br><br>Access and water quality impact peoples' ability to maintain strong connections to their waterways.<br><br>Pathogens, water clarity, deposited sediment, plant growth (from macrophytes to periphyton to phytoplankton), cyanobacteria, other toxicants, and litter all impact on swimming values. | People are able to enjoy swimming and bathing in waterways that are safe and healthy with low levels of algal growth and deposited sediment throughout the catchment during the swimming season (Oct – April). | • Deposited Sediment<br>• Visual Clarity<br>• Periphyton<br>• E.coli |

| | | | |
|---|---|---|---|
| **Mahinga kai** | **Value**<br>Mahinga kai is highly valued right across the Ūawa – Hikuwai FMU. For this value kai must be safe to harvest and eat.<br>Fundamental to mahinga kai is abundance. An abundant food source indicates a healthy waterway and reflects upon the ability and mana of whānau, hapū and iwi to exercise mana whakahaere, kaitiekitanga, and manaakitanga.<br><br>Mahinga kai practices enable whānau, hapū and iwi members to maintain traditional practices and allow for intergenerational transfer of knowledge. | **Environmental Outcome**<br>Native plants animals and ecosystems from the hills to the coast are well understood and managed to support long term food gathering | **NPSFM Attributes:**<br>• Macroinvertebrate Community Health (MCI/QMCI/ASPM)<br>• Dissolved Oxygen<br>• Deposited Sediment<br>• Visual Clarity<br>• Fish index of bioitic integrity<br>• Periphyton<br>• E.coli<br><br>**Tairāwhiti Attributes:**<br>• **Abundance of suitably sized eels that can be harvested at mahinga kai sites – using customary practices**<br>o Tuna numbers of suitable size available<br>• **Abundant whitebait migration**<br>o Whitebait abundance within the main river systems. |
| **Threatened Species** | **Value**<br>Despite a decline in abundance, remnant populations of threatened species are still present in the catchment. This includes tuna (long finned eel).<br><br>To support the threatened species in the catchment all the | **Environmental Outcome**<br>The populations of species that have become threatened increase in the rivers, streams and wetlands.<br><br>Fish passage is uninterrupted so that threatened species can maintain all parts of their life cycle. Riparian areas are sufficient in | **NPSFM Attributes:**<br>• Macroinvertebrate Community Health (MCI/QMCI/ASPM)<br>• Fish index of biotic integrity<br>• **Fish Passage** - number of man-made barriers to fish passage/% of waterbodies made inaccessible to migratory fish due to man-made barriers |

| | | | |
|---|---|---|---|
| | components of ecosystem health must be managed, as well as the specialised habitat or conditions needed for only part of the life cycle of the threatened species. | width and in good health to support breeding populations. | |
| **Natural Form and Character** | **Value**<br>Waterways within the Ūawa – Hikuwai FMU are are valued for their natural form and character. While some parts of the FMU are highly modified, the headwater areas are relatively unmodified and able to express natural processes and patterns. Matauranga Māori through placenames and history contribute further to better understanding of natural form and character in place.<br><br>Matters contributing to the natural form and character of an FMU are its biological, visual and physical characteristics, including:<br><br>• its biophysical, ecological, geological, | **Environmental Outcome**<br>The natural processes, connectivity to riparian areas and wetlands of waterbodies in the Ūawa – Hikuwai FMU is retained and supported by a return over time where possible to more natural rates of erosion.<br>The resilience of waterways and riparian areas to mitigate impacts of climate change/ higher and more frequent rainfall is strengthened. | **Tairāwhiti Attributes:**<br>• **Natural form and character of the river systems in the catchment**<br>○ Rapid Habitat Assessment Score (including the Pressure Assessment) |

| | | | |
|---|---|---|---|
| | geomorphological and morphological aspects<br>• the natural movement of water and sediment including hydrological and fluvial processes<br>• the natural location of a water body and course of a river<br>• the relative dominance of indigenous flora and fauna<br>• the presence of culturally significant species<br>• the colour of the water<br>• the clarity of the water. | | |
| **Drinking Water supply** | **Value**<br>Water quality and quantity is sufficient for water to be taken and used for drinking water supply. | **Environmental Outcome**<br>Activities are managed to protect the drinking water supplies of ahi kaa and marae. | **NPSFM Attributes:**<br>• Flow at identified springs/water sources<br>• E.coli at identified springs/water sources<br><br>**Ūawa specific Attribute:**<br>• Proportion of community who have access to safe and sufficient drinking water supply that meets health standards |
| **Wai Tapu** | **Value**<br>Wai tapu represent the places | **Environmental Outcome**<br>Wai tapu are protected and | **NPSFM Attributes:**<br>• E.coli |

| | | | |
|---|---|---|---|
| | where rituals and ceremonies are performed, or where there is special significance to tangata whenua.<br><br>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).<br><br>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. | continue to connect whanau and hapu to their whakapapa.<br>Historic puna are recognised XXXXX | **Ūawa specific Attributes:**<br>• Proportion of wai tapu sites and areas accessed safely and unimpeded by whānau**.**<br>• **Cultural health assessment**<br>○ I am thinking the use of a Cultural Health assessment method such as the Cultural Health Index might be useful for these sites – is that something of interest as an attribute? |
| **Transport and Tauranga Waka** | **Value**<br>The Ūawa River and parts of the Hikuwai and Mangaheia Rivers have places to launch waka and | **Environmental Outcome**<br>The waka culture of the Tolaga Bay community continues and is able to thrive. | **NPSFM Attributes:**<br>• Flow<br><br>**Ūawa specific Attributes:** |

| | | | |
|---|---|---|---|
| | appropriate places for waka to land (tauranga waka). | | • **Access to tauranga waka**<br>  ○ Proportion of tauranga waka sites where waka launching and landing is accessible and safe<br>• Something about biosecurity ? This was identified in the feedback as an issue |
| **Fishing** | **Value**<br>The numbers of kanae (mullet), inanga (whitebait) and tuna (long fin eel) are sufficient and suitable for people to consume. | **Environmental Outcome**<br>The Ūawa River continues to support healthy populations of fish for fishing. | **NPSFM Attributes:**<br>• Fish Index of Biotic Integrity<br><br>**Tairāwhiti Attributes:**<br>• **Suitable Riparian Areas to support fish habitat**<br>  ○ Rapid Habitat Assessment<br>• **Abundance of suitably sized kanae that can be harvested at mahinga kai sites – using customary practices**<br>  ○ Kanae numbers of suitable size available<br>• **Abundant whitebait migration**<br>  ○ Whitebait abundance within the main river systems |
| **Animal Drinking Water** | **Value**<br>Water quality and quantity meets the needs of farmed animals, including where it is palatable and safe. | **Environmental Outcome**<br>Healthy drinking water is provided for stock, while not impacting on other values of the FMU. | **NPSFM Attributes:**<br>• E.coli<br>• Flow |

| | | | |
|---|---|---|---|
| **Irrigation and Food Production** | **Value**<br>Water quality and quantity is suitable for irrigation and food production needs, including supporting the cultivation of food crops and the production of food from farmed animals | **Environmental Outcome**<br>Expansion of irrigation to support economic activities is able to be undertaken where this does not impact on other values of the FMU. | **Tairāwhiti attributes:**<br>• **Area of irrigation**<br>  ○ Ha of land under irrigation |
| **Tairāwhiti Wide Values** | | | |
| **Mauri** | **Value**<br>Mauri is reflected in the physical, spiritual and cultural wellbeing of people. The relationship between whenua, ngahere, moana and our people is essential in the assessment of mauri of wai. | **Environmental Outcome**<br>Mauri of the wai in the Ūawa – Hikuwai FMU is maintained or improved. | **Ūawa specific attribute:**<br>• **Cultural health assessment**<br>  ○ I am thinking the use of a Cultural Health assessment method such as the Cultural Health Index might be useful for these sites – is that something of interest as an attribute? |
| **Ūawa – Hikuwai FMU Specific Values** | | | |
| **Kaitiekitanga** | **Value**<br>Kaitiekitanga is the obligation of mana whenua to preserve, restore, enhance, and sustainably use fresh water for the benefit of present and future generations. Kaitieki whenua are also responsible for guardianship of the fresh waters on their land. | **Environmental Outcome**<br>Everyone who lives and works in the catchment is acknowledged for their role in enhancing the health of the environment and downstream water quality | **A standalone attribute is not proposed.**<br><br>**Other means:**<br>• Whānau and community groups will seek funding for undertaking restoration works. GDC partnership will be sought where appropriate.<br>• Cultural monitoring related to the NPS-FM to be undertaken by whānau, with outcomes |

| | | | |
|---|---|---|---|
| | | | shared by whānau for GDC reporting.<br>• Opportunities for reciprocity between whānau, surrounding landowners, and the wider community are explored. |
| **Whakapapa** | **Value**<br>Whakapapa relates to all living things and their interconnectedness and provides the genealogical framework that binds land to people. Whakapapa is interconnected between freshwater now and how it came to be. | **Environmental Outcome**<br>Use and engagement with wai honours the whakapapa of the awa. Management practices recognise mana whenua and kaitiaki and how practices affect whakapapa into the future. | **Is there an attribute that relates to this?** |
| **Taonga Tuku Iho** | **Value**<br>Taonga tuku iho are the treasures and cultural property handed down from ancestors. | **Environmental Outcome**<br>Whanau and hapu remain kaitieki over their Taonga tuku iho to ensure intergenerational transfer of knowledge | **Ūawa specific attribute:**<br>• **Access to Taonga Tuku Iho**<br>○ Proportion of Taonga Tuku Iho sites where these are managed by hapū or whanau in accordance with tikanga |
| **Firefighting water** | **Value**<br>With climate change and increased risk of drought there needs to be water accessible when there is a fire. | **Environmental Outcome**<br>There are enough locations and sufficient quantity of water to support firefighting activities across the FMU. | **Ūawa specific attribute:**<br>• **Distance to reliable Firefighting water source**<br>○ Some sort of measure about how easily/connected to a |

| | | | |
|---|---|---|---|
| | Groundwater is a key potential for firefighting water supply. | | firefighting water source the catchment is |
| **Whanaungatanga** | **Value**<br>Whanaungatanga is about forming and maintaining relationships and strengthening ties between whanau and communities. | **Environmental Outcome**<br>We undertake life-long learning to provide a well educated, thoughtful creative and motivated peope who manage our land water and coastal resources wisely and innovate to generate on-going prosperity | **A standalone attribute is not proposed.**<br><br>**Other means:**<br>• An annual outreach programme is developed yearly, for the purpose of engaging the community, including rangatahi, environmental groups, neighbours, collaborators, and whanaunga.<br>• Events are planned, such as Conservation Week, linking in with Raukumara Pae Maunga, Hauiti Centre of Excellence, etc. |
| **Manaakitanga** | **Value**<br>The process by which mana whenua show respect, generosity, and care for freshwater and for others. | **Environmental Outcome**<br>Kai is able to be harvested at sufficient levels that marae and whanau are able to offer manaakitanga in accordance with tikanga. | **Tairāwhiti Attributes:**<br>• **Abundance of suitably sized eels that can be harvested at mahinga kai sites – using customary practices**<br>  ○ Tuna numbers of suitable size available<br>• **Abundant whitebait migration**<br>  ○ Whitebait abundance within the main river systems. |

| | | | |
|---|---|---|---|
| **Wairua** | **Value**<br>Water supports the wairua of people. | **Environmental Outcome**<br>Mana whenua are proud of their capability as kaitiaki of the water with an abundant presence of native flora and fauna. | **Is there an attribute that relates to this?** |
| **Rangatiratanga/ Mana motuhake** | **Value**<br>Mana whenua practice their rights and obligations to manage freshwater resources.<br><br>Statutory agencies recognise rangatiratanga through joint decision making. | **Environmental Outcome**<br>We utilise our own knowledge and relationships within the Ūawa – Hikuwai FMU but also foster external links to science, innovation and markets to generate prosperity for the community<br><br>Mana whenua are the kaitieki over their kapata kai, drinking water and other traditional resources and participate in decision making that affects them. | **A standalone attribute is not proposed.**<br><br>**Other means:**<br>• Te Aitanga a Hauiti are recognised in formal RMA processes as mana whenua of the Ūawa – Hikuwai FMU |
| **Freshwater Interfaces** | **Value**<br>The mingling of freshwater and coastal waters, and surface waterbodies with groundwater provides critical habitats and ecosystems that are interconnected to and support the special character and nature of the catchment. | **Environmental Outcome**<br>Areas of coastal and freshwater interface such as estuaries and rivermouths maintain healthy physical and ecological connections between the coastal and freshwater systems. The interface between groundwater and surface water systems continue to support healthy ecosystems. | **Tairāwhiti Attributes:**<br>• **Fish Passage** - number of man-made barriers to fish passage/% of waterbodies made inaccessible to migratory fish due to man-made barriers<br>• Some sort of attribute around springs – or spring fed waterways? |
| **Waste management** | **Value**<br>Solid and liquid wastes are | **Environmental Outcome**<br>Solid and liquid wastes are | |

| | | | |
|---|---|---|---|
| | managed appropriately within the catchment | managed to support a circular approach to waste management which ensures that they do not lead to degradation of water quality in adjacent freshwaters | |