

## WHAITUA KĀPITI COMMITTEE

The Whaitua Kāpiti Committee was convened for its tenth meeting at 9.30 A.M on 11 and 12 October 2023, at El Rancho, Waikanae.

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### **Committee members present:**

#### *Mana Whenua Whare*

Dr. Mahina-a-rangi Baker (*Taurite*) – Ātiawa ki Whakarongotai Charitable Trust  
Dr. Aroha Spinks – Ngā Hapū o Ōtaki  
Caleb Royal – Ngā Hapū o Ōtaki  
Naomi Solomon – Ngāti Toa Rangatira  
Sharlene Maoate-Davis – Ātiawa ki Whakarongotai Charitable Trust  
Shane Parata – Ngāti Toa Rangatira (Day 1)

#### *Kāwanatanga House*

Jenny Rowan (*Taurite*) – Kāpiti Coast community representative  
Jocelyn Prvanov – Kāpiti Coast District Councillor  
Kerry Walker – Kāpiti Coast community representative  
Pātaka Moore – Kāpiti Coast community representative  
Penny Gaylor – Greater Wellington Regional Councillor (Day 1)

### **Committee member apologies:**

Monique Leith, Kāpiti Coast community representative

### **Facilitator:**

Dr. Kathie Irwin, Greater Wellington Regional Council Contractor (Kathie Irwin & Associates), Tangata Whenua Whare

### **Additional attendees:**

#### *Mana Whenua whare*

Claire Gibb – Mana Whenua Whare Co-ordinator, Ātiawa ki Whakarongotai Charitable Trust  
Torrey McDonnell - Planner, GWRC Contractor (Incite)  
Aaria Dobson-Waitere  
Dr. Russell Death - Professor of Freshwater Ecology

#### *Kāwanatanga House*

Michele Frank – Catchment Manager Kāpiti Coast, Catchment, GWRC  
Phill Barker – Senior Policy Advisor, Environmental Policy, GWRC  
Ames Donovan (*Minutes*) – Senior Catchment Advisor, GWRC  
Brent King – Team Leader Evaluation & Insights, GWRC (Day 1)  
Chloë Nannestad – Policy Advisor, GWRC (Day 1)  
Adele Dawson – Planner, GWRC Contractor (Incite)  
Rita O'Brien – Stormwater & Coastal Engineer, Kāpiti Coast District Council

9:00 am – Gather at venue, tea, and coffee.

9:45 am – Start

## **1. KARAKIA, MIHI AND WELCOME**

10.45am - Morning Tea

## **2. ORIENTATION AND HEALTH AND SAFETY**

## **3. RECEIVE AND APPROVE UPDATED FRESHWATER VISIONS FOR KAIMAHI**

Mana Whenua Whare highlighted a change to the item 3 of the agenda noting that our role is to signal the principles that are driving the plan and not write every single word of the plan.

## **4. MODELLING APPROACH (Mana Whenua whare)**

**Modelling approach scope. Proposed decision – To confirm focus of November and December meetings and pursue to modelling approach to support remaining meetings.**

- Modelling approach scope. Proposed decision – To confirm focus of November and December meetings and progress to modelling approach to support remaining meetings.
- Reps met from each whare to discuss methods of modelling to inform the WIP and change plan decision-making process.
- The committee are building a framework through which decisions will be made.
- Proposed method is to construct the model, work programme and make decisions to progress.
- In this hui we need to look at Values, Environmental Outcomes, Attributes, and the conceptual framework.
- Most of the Attributes have been identified through the NPS-FM process. However additional ones include mahinga kai. The NPS-FM deliberately doesn't specify attributes for mahinga kai, recognising they need to be developed by MANA WHENUA at the ground level.

*Refer to - Mana and Māramatanga*

- The slide shows the relationship between the different parts of the system and how they impact on each other.
- Important to hold in mind we are here for two days to build a flow chart. Important to put this into context, so we don't dive too much into the details of the exact words. At this stage they don't really change what we will see in the flowchart.
- The one that takes the time, from my experience, is creating the picture of the system.
- **Dr. Death:** Often a focus on flooding means that other outcomes are overlooked or separated and partitioned off. Just looking at economic return of flooding mitigation doesn't include the other outcomes which needs to be acknowledged, such as carbon sequestration or biodiversity, and typifies a Western science approach.
- This is building the structure of a model: What are the values that are important for decision making, how will we measure it and what are the relationships that will impact the different

parts of the system. If we get the model right it can live in perpetuity, past the WIP and the plan change.

- There are 22 attributes (nb: from the NOF) that we need to apply. We are determining how the attributes fit together in the system and the outcomes we want. There is likely to be more than one measure of mahinga kai.

*Refer to November hui*

- A lot of the bottom lines are already set. But we don't need to set the target band at this stage until we run the modelling and understand what we need to do to shift the band.
- In caucus – identify any target attributes/bottom lines not predetermined. This would be for any attributes not in the NPS-FM.
- Through running the model, we can see what it's going to take to get the bottom line up. That's where we take the model and understand what state the rest of the system needs to be in to impact the bottom line. It's at that point in time it's important to understand the current state. We need to be identifying the parts of the system where the current state is such that we aren't achieving the bottom lines and then look at the influencing factors.
- We can then identify what we'd need to do to get to an A, B or C.
- Important for the committee to determine what is driving the current state.

*Refer to December hui*

- Discuss and recommend options for meeting the targets.
- **Dr. Death:** My recommendation is to stick to the technical measures already identified in the NPS-FM (nb: the 22 NOF attributes). Because you already have this legal framework in place. They aren't necessarily perfect, but they have already been developed with grading measures. Suggest the committee develops measures for mahinga kai specifics you want.
- **Dr Death:** If you focus on just one measure in any one catchment there could be other major issues. Where if you have to get 22 right, there is greater chance that the overall system is actually improving. It's strategic to build this, because it determines what the key measures are that will help us understand the actual holistic health of the water.
- **Dr Death:** There is a balance to be achieved, "As simple as possible but no simpler". Phosphorus, sediment levels are good proxies for lots of things. *E. coli* isn't a good measure but there are associated measures. Hard to measure *Campylobacter* in water, but its appearance on watercress is one way to detect it.
- To date we've used four key boxes 1- human health, 2 – particular species (depending on water body either tuna or watercress), 3 – a social measure, 4 – Intergenerational knowledge transfer (could be combined with social purpose, it's in the narrative of the NPS). When you can't harvest or have contact with water, this creates a loss of knowledge and impacts the practice of mahinga kai. And when you can't participate in mahinga kai our people are disconnected from the awa and their history.
- By introducing those measures into the system there is a legal requirement that these attributes are monitored. Noting that cost isn't an appropriate consideration in the decision-making around attribute selection.
- **Facilitator:** Cost considerations can negatively impact decision making; example of a Kohanga Reo case which became a Treaty Claim that the tribunal upheld (Appendix 1).

- Mana Whenua Whare are proposing this is our approach going forward, subject to Russell scoping his work, but principally this is the approach that the committee would take over the next three hui.

- **AGREED: Committee members supported the Mana Whenua proposal to introduce mahinga kai measures into the modelling approach.**
- **AGREED: Unanimous support for the proposed meeting programme for the remainder of 2023 and its being underpinned by the proposed modelling methodology.**

- Comments of support include: Excited about it carving a Kāpiti Whaitua approach to the process and the mahinga kai thinking elevates it as a real value add; Good to have a forward work programme and key areas to focus on; Appreciate the level of direct leadership that is needed in this, and appreciate that the outcomes will determine data collection and not the other way around; Excited to see the model to come to life; Like how it brings the Te Tiriti model together; Like how it brings the data into a system which shows how it's connected; Am pleased that it brings together western science and Mātauranga Māori. Will help us understand what the drivers are.
- GW kaimahi: Are comfortable with what is being offered and its use in decision-making over the next few months.

## 5. FRESHWATER VALUES (Incite planners)

### Structure of the session:

- Kāwanatanga Whare – Present assessment of the extent of compulsory and other national values that must be assessed. Also, propose and define any additional values.
- Mana Whenua Whare – Present assessment of the extent of compulsory and other national values that must be assessed, including mahinga kai and wai tapu. Also, propose and define any additional values.
- Workshopping to develop a table of compulsory, other national and additional values with their definition and the extent of where they occur, to a decision template.

### Key discussion points:

- **Mana Whenua:** Does the table reflect values as you have heard them from the respective whare and if so, how much do we need to relook at it?
- **Kaimahi:** Some if it was district-wide and some of it was very specific so I think we need to test it at an FMU level. Similarly, the feedback from Ngāti Toa was broader, but we need a discussion on which ones apply to the respective FMUs.
- **Kāwanatanga:** Raise the proposed “urban use” value: We need to consider both how we use water and how we put it back into the system. There are some major growth projections occurring but not throughout the whole district; these will affect specific urban catchments.
- **Kaimahi:** Currently, the NOF values include no reflection of the residential footprint on our environment.
- **Kāwanatanga:** GWRC shared three state of the environment documents, which included land usage information. Argue that by adding the “urban use” value, it closes this loop.
- **Mana Whenua:** In the NPS it talks about urban development and impact on/interactions with freshwater, are we doing someone else’s job by including this “urban use” value?

- **Kaimahi:** There is a relationship between both Policy Statements (NPS-FM and NPS-UD). Could be a myriad of values and when we are coming up with measurements and targets, we are factoring in the urban footprint in our decision making around it.
  - **Mana Whenua:** If the proposed “urban use” value is about the value that water provides for people to live, I think of providing space for that through land use and drinking supply. So, should this value be about people being provided with space to reside in the catchment?
  - **Kāwanatanga:** We are the second fastest growing region in the country and we need something to recognise the pressures on our waters; maybe that means we might need to say no to some of the development if we are to live sustainably.
  - **Kāwanatanga:** The pressures of development on freshwater include contamination, more potential run-off from areas that were previously natural and now hard impervious services. Needing some controls in place that council can use to mitigate it happening in the first place.
- **AGREED:** For ‘urban use’ to not be a separate value. Instead to be acknowledged as Residential terminology alongside, Industrial and Commercial use values that are in the NPS.
  - **ACTION:** Kaimahi directed to examine potential outcomes around urban development using design standards or other methods to ensure meeting the targets required for water quality and neutrality.

Lunch

## 6. ENVIRONMENTAL OUTCOMES AND VALUES – SMALL GROUP DISCUSSION

### a. **Workshopping to develop a shared set of environmental outcomes for the whitua that meets the requirements of the NPS-FM, to a decision templates**

#### **NHOŌ - Outcome 1&2**

- The wider community recognising and understand the whakapapa and significance of waterways to Mana Whenua (Chloe) Clause 1.7 changed mythology to pūrākau.
- Question around the groundwater outcome, kaimahi will follow up. Want to make it more high level to include contaminant and nutrient loads. Implication in outcome 2 as well as clarification around long-term. Question on consolidation.
- Remove S’s from kupe Māori words (i.e., singular are plural).
- Recognition of natural springs.

#### **AKW -Outcome 3&4**

- Outcome 4 amend- Clarify that it’s indigenous threatened species.
- For the other Whitua threatened species listed.

#### **Ngāti Toa – Outcomes 5, 6, 7 (**

- Drop off item 6, intent is to maintain natural state.
- Outcome 6: no change
- Outcome 7: Take no. 7.2 climate change and it needs another name, maybe urban and rural land use.

## Urban use

- The model needs to reflect that land use has different environmental impacts.
  - Need to identify residential land use.
  - Is there an ability to separate out the use from commercial, urban, irrigation and split it into land use?
  - It's not trying to allow for it, it's finding a way to manage it better. It's about being able to protect things. There is nothing to say that industrial zones can't be put into the plan.
  - We don't want to allow for new industrial sites to be put into other FMUs.
  - **Mana Whenua:** identification of land use is a value, what we are retaining should be the value. We are trying to combine the things we don't want with the things we want.
  - Mana Whenua proposal: Different land uses are recognised. Sounds like people are happy with the ticks on rural but perhaps a need to split commercial and industrial. All are likely to have a residential use except Kāpiti Island.
  - **Kāwanatanga:** important to revisit Outcome 7 about hydrologic neutrality. If this was achieved it would stop a lot of contaminated and excess water entering the stormwater system.
  - **Kaimahi:** We do not recommend including "hydraulic neutrality" as it's problematic to measure.
  - **Mana Whenua:** It's already in the planning requirement framework.
  - **Kāwanatanga:** With increased intensification, more water is going into our stormwater system.
  - **Mana Whenua:** There is an opportunity to add requirements to the consent conditions, so that they fund the ongoing monitoring of the development.
  - **Kāwanatanga:** Trying to future proof the design of the new developments. Hear that it might be in the model but it can't come out of nowhere, so we need a bit of commentary – let's include the intent around residential and new development outcomes.
- **AGREED** – Outcome 7 to be modified so that the hierarchy of obligations in Te Mana o Te Wai are not just met but that they continue to be met. It's potentially an exposing paragraph. Wordsmithing required.
- Wai tapu and not wāhi tapu –The relationship between values and monitoring as it might be so sacred you don't want people to go there to conduct monitoring [Note: wai tapu is in the NPS-FM, wāhi tapu is how this related concept is expressed in the NRP].
  - **Mana Whenua:** Not the biggest fan of wai tapu narrative, it's not reflective of how we might interpret tapu and noa. We could identify a value of wāhi tapu which could be applied i.e., to Waitawa.
- **AGREED: MANA WHENUA to caucus the outcomes which can capture wāhi tapu without having to codify it in one value and bring back to Tiriti whare**
  - **Whaitua Committee request** – kaimahi to double check that seagrass recovery would be captured in other outcomes etc.
- ### 7. FMU OBJECTIVE FEEDBACK
- **Whareroa:** Change boundary to area of interest.
  - **Wainui:** Add outcome of tauranga waka and aiming for continuous riparian cover over the entire stream length.

- **Kāpiti Island:** Outcome around mahinga kai - requires monitoring protocols due to cultural sensitivity.
- **Kāwanatanga:** Think that Kāpiti Island needs to be handled very carefully. It's not populated and hugely sensitive and needs to be treated with reverence. Needs to be acknowledged that it doesn't need the intensity that we are applying to the other FMUs.
- **Mana Whenua:** The less human interaction there is with the water body the less there is to say.
- **Kāwanatanga:** Our whare didn't go through a number of these sections in our caucus due to time pressures.
- **Mana Whenua:** Outcome 13.3 - identified the need to support the suppression of weed species in the Waimeha. Watercress is exotic so need to determine whether it's considered a weed – to ensure that there isn't a perverse outcome where it can be interpreted as needing removal. Watercress is the reason that mahinga kai doesn't refer to indigenous plants.

**Thursday October 12<sup>th</sup> - 9:00 am – Start at Elm Centre meeting room**

**8 . FRESHWATER ATTRIBUTES**

- a. **Kāwanatanga – Present attributes (measures) for compulsory and other national values assigned across the FMUs.**
- **Kāwanatanga:** Propose to include two additional attributes (developed by Greater Wellington from previous Whaitua processes) of dissolved copper and dissolved zinc as they are good measures for urban impact on water quality, as well as good measures for ecosystem health.
  - **Mana Whenua:** This a real resource management issue. The way that Mana whenua have addressed heavy metals is through testing and we have generated results around copper and zinc at different sites around Kāpiti. Do we look to measure it in plant matter like watercress who uptake it easily or in the water?
  - **Mana Whenua:** Not sure of the best scientific method or if there is a broader set of metals we should be looking at. For example, boron and arsenic have been high in parts of Kāpiti. Could there just be one attribute around heavy metal attributes? Think the cost is quite low to test for others.
  - **Kāwanatanga:** What decisions do we put into the modelling now? Also, constructing a heavy metal index could be committed as an action?
  - **Mana Whenua:** Rather than having a box saying copper or zinc, we have the three bands: "human health standard", "environmental health standard" and "both". The heavy metal standards for Australasia set the standards and that can be the attribute. Means you are testing for a suite of different things. In the Whareroa we have observed wonky galaxias (īnanga), which is indicative of heavy metals. That's the impact you are trying to manage.
  - **Mana Whenua:** The human health one is significant. We have a rāhui there as people can't harvest and it's difficult to regulate it. Fits into the public health space. We know if heavy metals are being taken up by watercress, the fish, the bugs, the people, will all be affected.

- **Mana Whenua:** Interested in Ōtaki, Mana Whenua women were the only ones employed by the gardens and were handling chemicals and there is a legacy of greater incidence of cancer. We need to prevent the community from being exposed to chemicals.
- **Kāwanatanga:** if we measure copper and zinc, we need to think about the how i.e., dissolved vs undissolved?
- **Kaimahi:** We don't want to measure things for the sake of it or limit it to stormwater discharge, its more broadly about land use. It's about trying to work out what is the best indicator.
- **Mana Whenua:** And then you get a result, what do we do with that? Even remediation of contaminated sites is getting into some long-term responses. Heavy metals are not the necessarily the biggest issue for our awa. How can we influence the leachate levels?
- **Kaimahi:** Already some standards in place for leachate.
- **Mana Whenua:** There is an existing lever, but would this mean that every time there is an exceedance that they'd have to do something about it. We might then identify these as part of a catchment plan and then look to act.
- **Kaimahi:** Note the existing National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (2011) – NESCS. We would need investigative work to take a sample upstream to understand the impact of different sites. An action plan approach is a good one.
- **Mana Whenua:** There will be actions required that aren't tied to consents. Managing campylobacter is another. A contaminant attribute that is focused on exceedances for heavy metals for environmental health and physical health. I don't feel that we have all the info we need to decide on that one.

- **Request from Kāwanatanga:** To provide more information on contaminated sites, historical intrusion, current state and maps of key sites for each.

- **Mana Whenua:** There needs to be a picture created of what "good" looks like. From memory there are levels of the contaminants measured regarding their impact on animals. There are national guidelines that provide the numbers.
- **Kaimahi:** Is it robust enough to reflect what we are trying to achieve and our relevant species?
- **Mana Whenua:** We hear you and there is an internal standard that will be suitable as a starting point and the expert, Russell, can help us too. It will all come together.
- **Kāwanatanga:** Raise the issue of contaminated land being used for residential zoning.
- **Mana Whenua:** Exposure to air and water can make something [a contaminant] that was stable unstable. Quite aside from where we land with the attributes, surely there is a need for a policy that makes it harder to open uncontaminated land.
- **Kaimahi:** *The National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health* is very focussed on human health as opposed to environmental health, it doesn't really manage it.
- **Mana Whenua:** There are a lot of sub-divisions that aren't testing for contaminants or they put them into storage ponds that then are connected to the groundwater. It does raise the issue of testing but maybe it means we can be more targeted with the monitoring.
- **Facilitator:** There is a request for mapping of contaminated land, is that something that both caucus' support, historic, current, and future plans.
- **Mana Whenua:** Is there clarity on what info needs to be generated? There needs to be an options analysis on what could be tested.



- **Kaimahi:** The points to note are that copper and zinc are really around the environmental health, fish health and human health. Boron and arsenic are also identified and we will talk to the scientists around what we could be monitoring.

**Request** - a scoping statement will be prepared and sent to both Taurite to ensure clarity on what work will be provided, regarding heavy metals, with an urgent timeline.

**b. Mana Whenua Whare - Present attributes (measures) for compulsory values, including mahinga kai, and other national values assigned across the FMUs.**

- Watercress and eels. Both short and longfin tuna. While we could monitor the number, we thought it was a good indicator to measure the growth rate, the number of years to get to a certain weight, average weight gain. Caleb has completed research into how the grades could align with certain sizes.
- Wanted to identify indicators and attributes that, as a rule, could apply across the whole Whaitua.
- We don't currently get watercress in the Waikanae and Ōtaki rivers because they are channelised and restrained. It could grow there if it was left to meander more as you'd get the slow-moving waters; this would then mean that watercress could be an indicator for the natural character index.
- The tuna was going to get complicated with trying to average the grades so when we take tuna for kai, we age them and can then find out what the average growth rate is. Where restoration occurs, where your waterways are healthy, growth rates are higher. On average it takes 26 years to get to 700 grams.
- In areas where restoration has occurred it's 63g growth per year – instead of it being 27 grams per year. It would probably be easier and more targeted to focus on what is our average growth per year and we want to see it increasing.
- There aren't any measures for mahinga kai. We don't think it's necessary or practical to come up with 22 so we are trying to develop measures that encapsulate many of the values.

What are we accounting for.

1. Kai is safe – watercress – testing for *E.coli*, Campylobacter, heavy metals  
Tuna condition – diseases, parasites, heavy metals  
Human health
2. Access and practice
3. Food security
4. Transfer of knowledge – māramatanga measure
5. Abundance – catch per unit effort, relative abundance, ~~3/4, presence or absence~~ of (tuna, īnanga/whitebait, watercress) and tuna growth rate.
6. Range of species – NPS-FM has Indigenous Biodiversity Index (IBI)
7. Mauri
8. Whakapapa (Likert scale on people's connection with nature) and wairua (environmental stress impact survey)

Is there an opportunity for using social surveys with the wider community too? Not just necessarily something that it's important for Māori. Sense that from a resource management perspective if they can codify an approach, it's beneficial.

**AGREED** - Mana Whenua Whare to provide supporting references to kaimahi.

## 10:45 am - Morning tea

- **Mana Whenua:** Would like to run through what we have discussed today and hear from Russell if they are things that he can work with. We will start with the potential mahinga kai attributes. We took the NPS-FM mahinga kai and identified narratives that would support it. Loosely grouped around the safety of consuming mahinga kai. There is a measure of tuna for ecosystem health.
- **Kaimahi:** Where in management pathways do these aspects influence? We can tease this out as the work develops.
- **Dr. Death:** There are models that relate to land use and freshwater impact i.e., riparian margins, converting farmland to ngahere [forest]. I'd be tempted to drop the watercress. The alternative would be to have the target written as campylobacter, which can be measured in water, but I do have a good model that relates land use to water volume and I don't know what research has been done on watercress and campylobacter. The testing can be done at water supply points, but it is expensive.
- **Kāwanatanga:** Could you do an *E.coli* test and then do a campylobacter one based on the results?
- **Kaimahi:** Problematic. Would prefer testing tuna rather than watercress but we do need to be careful about using ratepayer funding for testing.
- **Dr. Death:** Tuna like macrophytes in the water. There will be situations where campylobacter might be in a plant but not in the water. It's very easy to focus on what you're worried about, but you have to try and make this model as simple as it can be. I don't think I could do that [referring to using an *E.coli* test to indicate campylobacter].

**AGREED** - as a starting point that campylobacter will be measured within water as an attribute for human health in the modelling.

**Mana Whenua:** Other sectors of government should be supporting action in this space but it sits in a regulatory dead zone. They land in the environmental space but have a health impact. We at this table can't be limited by considerations to council budgets. We [Māori] are at a greater risk of poor health and we bear the brunt of these decisions.

- **Kāwanatanga:** Hoping that an outcome of this process is that those doors to other agencies open.
- **Mana Whenua:** We know that Canadian geese are an issue. Also wondering how many triggers do you need to build an effective model?
- **Dr. Death:** Don't want to discourage you from putting things in the model that you want but I am trying to balance it with creating something that works.
- **Mana Whenua:** We might not currently have the data and capacity, but do we need to build it into the system for the future.
- **Dr. Death:** I can model campylobacter in the water back to land use. I can't model healthy watercress back to anything currently. The simpler it can be the more likely you will end up with something that you can use. It will be a case of, is it good enough and fit for purpose – i.e., can it tell us, if intensification happens at Waikanae, will it impact the water quality? I recommend that we measure campylobacter in the water.
- **Kāwanatanga:** Appreciate that we don't want to over-complicate it. So, this is a model that will be supported by monitoring, but should a system be set up to still do some of the measurements, but sit outside of the model for monitoring?

- **Mana Whenua:** we want a trigger that means we can communicate to the public that waterbodies are not safe to eat from and then we have regular monitoring to know when it's ok to eat from them. But then that also allows us to get rid of the Canadian geese. I think we keep it as part of the monitoring rather than outside, we want to make sure that the system responds to mahinga kai.
- There is a large foraging community around that we don't have much information on, but what's the condition of that food that they are foraging? This could be helpful for other parts of our community and how we can make citizens aware of some of the changes that we are advocating for on behalf of their health.
- While we have "Kai is safe" there a need for an additional tuna condition attribute.
- **Dr. Death:** We can combine abundance and mass with the knowledge that Caleb has on fish locations.
- **Mana Whenua:** We know the conditions that tuna thrives in, 20-degree temperature. Their ability for growth is exponential and the limiting factor is ecosystem health. Abundance and condition don't always correlate, i.e., abundance doesn't mean good condition. Would focus on monitoring based on condition. We don't care how many eels we have in a catchment it's the condition of them and we want to see the growth rate of those eel improving.
- **Mana Whenua:** There is a correlation between macroinvertebrates and animal and tuna health, but also eels will keep surviving just eating invertebrates without fish being present. We would rather drop away from the ecosystem measurements and focus on fish. Strong relationship with the IBI [Indigenous Biodiversity Index], linking it with land use is challenging but there are numerous models that we can draw on and maybe that's a decision box in the tool.
- There is also the fish passage work that has been done too by Greater Wellington.

**AGREED** – To have tuna condition as an attribute in the model, with a focus on quality.

- **Mana Whenua:** As well as tuna condition, do we need to also measure abundance?
- To measure this: there would be a net that would be set to catch tuna over one night.
- **Dr. Death:** What does the measure of good condition look like? A catch to be free of disease. You'd have a schedule of this what we'd be looking for: absence of fungal disease, spots on their bodies and worms in their gut...everything is doable but the more you add, the greater the margin of error. I'm strong on not including it.
- **Mana Whenua:** Abundance is important from a mahinga kai perspective, - does it provide for the food needs of our community. Condition and abundance will be aggregated.

**AGREED** – for the Tuna attribute to reflect both abundance and condition in the model.

- **Mana Whenua:** Social attribute to complete the compliment of māramatanga. Proposed that we include and integrate 'The transfer of knowledge'.
- **Dr. Death:** There is a lot of research that supports connecting people to water, the wai and nature. In the model we need to link it back to another attribute, which could be ecosystem health.
- **Kaimahi:** There were composite attributes in the Te Whanganui-a-Tara WIP, and one of the issues was around toxic algae and how it was being managed and communicated as this was creating a disconnect – i.e., telling the community to fear the water. The community said we need a different future for this awa for our wellbeing.
- We've talked about safety and abundance. Are we now talking about the ability to be able to practice mahinga kai?

- **Mana Whenua:** In the Environmental Distress Survey people share the impact of the changes they are seeing.

**AGREED:** for the model to integrate a social attribute aggregate.

- **Mana Whenua:** Will the model apply to lakes as well as streams and rivers?
- **Dr. Death:** It would be a different model.

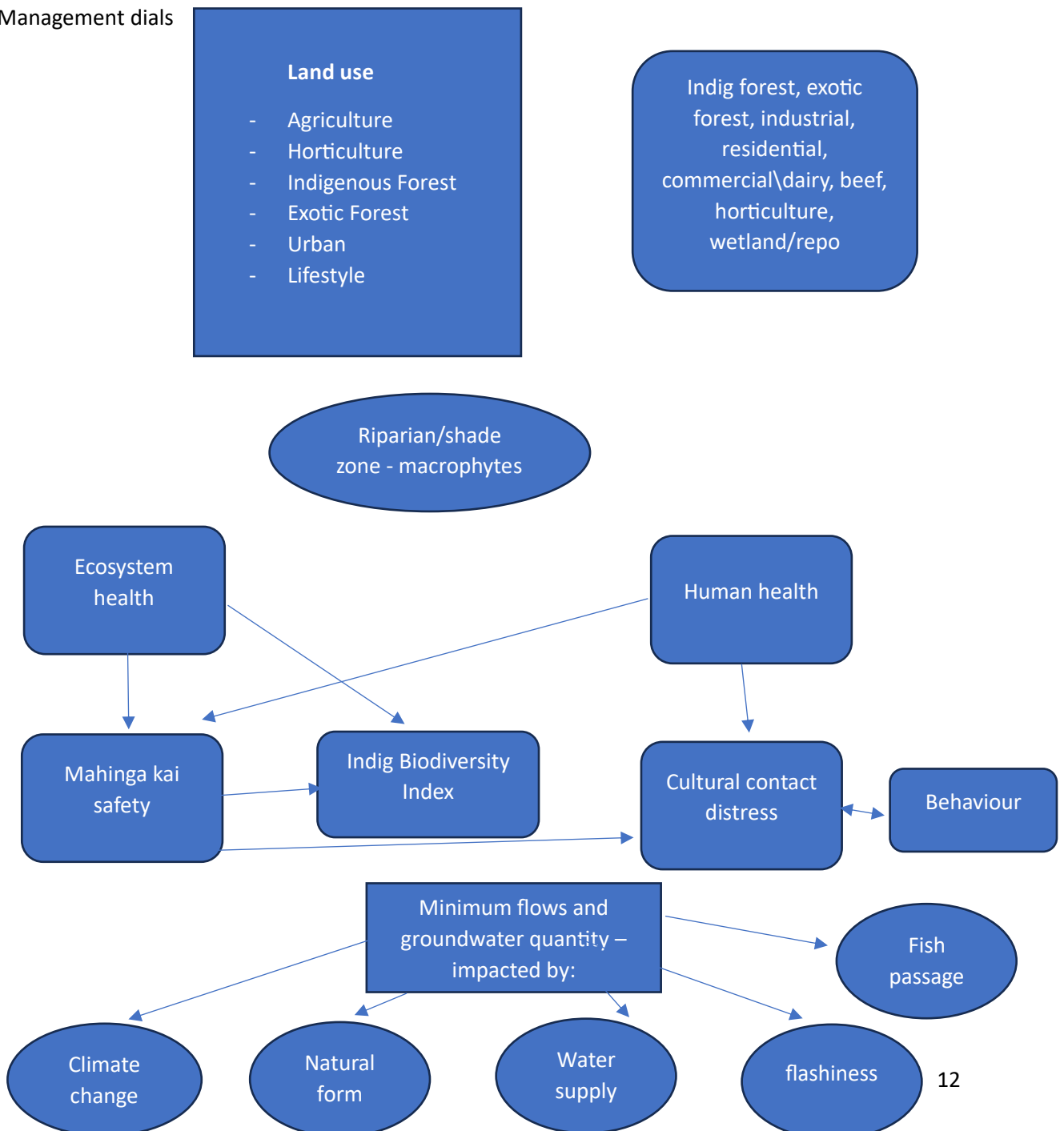
**Request** - a list of the new proposed attributes to help build the model after lunch.

- **Mana Whenua:** Say we get a poor IBI [Indigenous Biodiversity Index] we might focus on inanga spawning sites in the next year.
- **Dr. Death:** The model isn't covering everything.

**Lunch 12:30pm – 1:15pm**

### 9. DEVELOPING THE MODEL

Management dials



- **Dr. Death:** There are so many heavy metals that would be a model in and of itself. If heavy metals are an issue, then it would be on the Council to investigate.
  - **Mana Whenua:** There is a standard per heavy metal; you would identify the method that you would use to measure that standard and then you would measure if you have exceeded that standard. The assumption is that if one is exceeded then you would need to take significant steps to improve it. The settings come from elsewhere like ANZECC [Australian and New Zealand Environment and Conservation Council]. Recommend heavy metals being in there.
  - **Mana Whenua:** We could do a million things to improve water quality across the different land uses, this tool will help us to prioritise what actions we take. As a committee we are setting standards but trying to do that in relation to knowing what action will impact what.
  - **Dr. Death:** It will help us understand the thing we could change to make the desired impact we want to see. Riparian planting is excellent for stopping campylobacter and phosphorous entering waterways. Most birds aren't in high enough density to cause campylobacter to the same level as dairy. You have a box for intact riparian zone, one for no riparian zone and one for artificial zone.
  - **Mana Whenua:** The effects of pest plants i.e., willow, macrophytes, which drop debris into the water and also how that impacts flooding. It's in every stream that isn't shaded. Does it contribute to flashiness?
  - **Dr. Death:** Flashiness is about how quickly water gets from the land to the river/stream. Sediment will be picked up as part of ecosystem health. Ecosystem health, human health and IBI and Mahinga Kai are compulsory values.
  - **Mana Whenua:** Waitohu quarry and fine sediment – industrial land use. The sediment is so fine it gets suspended in water and then gets deposited. It will be captured through the sediment attribute in the NPS. The best way to manage it is to not let it get into the water.
  - In terms of implementation, you get the monitoring results and then what happens? Does council go out and investigate? It is difficult to provide an abatement notice as you need to see it discharging.
  - The quarry has a consent. They were required to put in mitigations as part of it.
  - **Kaimahi:** The idea of this monitoring is to work together to provide an indication of whether we are achieving what we want to achieve.
  - **Mana Whenua:** If someone else is seeking a consent, does that mean they shouldn't be provided one if it's shown that an FMU is at the bottom level. But that's not equitable for existing users to continue to meet the quota and others not being able to join the system.
  - There will need to be a range of policies and regulations that need to be put into the plan. Maybe the category should be good management.
  - **Kāwanatanga:** Logging and slash is a concern. Years of misuse with forestry blocks and there is a huge impact. It is a huge risk if local government aren't prepared to follow this up. The end of this conversation has to be a shot across the bow from mana whenua and community to councils to implement enforcement.
  - **Mana Whenua:** Within the WIP we should be calling out that the crown needs to fund environmental monitoring, separate to the ratepayers funding. We can say in the WIP that this is needed to give effect to the plan.
- |  |
|--|
| - <b>AGREED</b> - that the WIP needs to be an inter-agency document. |
|--|
- **Kāwanatanga:** Need to have clear rules to make enforcement easier.
  - **Kaimahi:** One tricky aspect in KCDC is that a lot of the network is piped. In places like Ōtaki and Waikanae it is often piped into streams, and this makes it hard to know where illegal

discharges are coming from. There are also issues with asset ownership and interface so source control is really a Greater Wellington responsibility and KCDC manage the network. Currently, there is little in the plan around quality. This plan will create that lever internally as a statutory requirement, same with resource consents conditions.

- In KCDC it's hard to retrofit devices due to the low fall and lack of space. Enviropods can be used and occasionally constructed wetlands and ponds. Even the open channel network as it has been constrained, there isn't enough room for the streams to meander. Many of our rivers are deemed natural but they were modified so they have degrading banks and are soft-bottomed.
- **Kaimahi:** In some catchments we have a lot of old septic tanks and people don't know how to look after them.
- **Dr. Death:** Not aware of any information on septic tanks that could be linked to a model. But could create the model and then have boxes that show aspects which are on our radar and important – like groundwater, lakes, etc. It would be a great way to tag that we are bringing information together and record it. The model goes both ways. If you want this, then you'd need to consider this and might need to change what we are doing.

**AGREED** - The conceptual model as discussed above will be developed by Russell.

## 10. NEXT STEPS/AGENDA FOR FUTURE HUI

### Nov 1 –

- draft feedback what's in/what's out
- current state
- monitoring
- Comms

### Nov 8 –

The model's outputs and drivers (Dr. Death)

### Dec 6 – (Unpopulated at this stage, includes draft WIP review)

## 11. CLOSING COMMENTS, RECAP KEY ACTIONS AND AGREEMENTS

- **Dr. Death:** My work is dependent on receiving the GWRC data evidence.
- **Mana Whenua:** we'll press on with the things that can't be modelled, like ground water, lakes, wetlands. GWRC current state information.
- **Kaimahi:** We will pull together those requests quickly and then require some prioritisation from the committee.
- **Mana Whenua:** Request for officials to advise on what to prioritise.
- **Dr. Death:** To provide a scope and GWRC to sort contract.
- **Kaimahi:** Will discuss and recommend the specialists such as wastewater and solid waste to bring to future committee hui. ½ a day for groundwater, lakes and wetlands, topics not covered by the model.
- **Mana Whenua:** In an ideal world we'd have the model working but because of the timing we'll need to push forward. The model will allow us to adopt and build on as time goes on. Was going to ask if and when the committee looks to address monitoring? Unclear about where the decision about the monitoring regime gets made.

- **Kaimahi:** In the ToR there is a requirement for you to provide a monitoring point, that's a specific decision, but also from a management recommendation perspective you get to make some. We will tee up someone from that space to meet with the committee to help you form those recommendations. There are monitoring points and then also the monitoring system.
- **Mana Whenua:** What are the monitoring implications for the model?
- **Dr. Death:** There is potential for the model to be extrapolated to the whole catchment.
- **Mana Whenua:** That might fit in with current state, monitoring, and drivers.
- **Kāwanatanga Whare request** - Kaimahi to provide information to the committee on current monitoring – where the sites are and how often are they monitored.
- **Facilitator:** There is an opportunity to integrate the Whaitua as a case study into a workshop with KCDC leadership. This could include key messages about what's coming down the pipeline for them. This will be about the method so that they can be assured that the Whaitua is at the cutting edge of Kaupapa Māori design.
- **Kamahi:** Rita advised that she could attend, contribute content and that she'd provided updates early on to the councillors.

- **ACTION:** 07 November opportunity for attending KCDC environmental committee. Jocelyn to arrange for a time on her committee to provide an update to KCDC council.
- **ACTION:** Greater Wellington to do some work in the communications space around how the WIP can be promoted to the community. Recognising that the communications plan needs to consider risk. Opportunity to promote that this an outcome of Te Mana o Te Wai (legislative requirement, every region producing them).

4:30pm – Finish and Depart

- The set time for individual Whare caucus and feedback time post-lunch has been removed from this agenda at the Facilitator's suggestion, due to the nature of the substantial topics allowing to instead stay together in wānanga mode and progress the kōrero needed on multiple topics. This still leaves the Caucus option open to be activated when appropriate to the point reached on the topic at hand.
- Minutes and logistical administration will be circulated for approval following the meeting. The Taurite will notify edits or confirm approval of the minutes by email back to Kathie and Whāia. Approved minutes, reports and presentations will be uploaded to the Whaitua website and Committee SharePoint site.

## CONFIRMED ACTION REGISTER

Note that all actions captured during the Committee meeting must be clearly stated as an action and providing instruction to minute taker to note down. If there is no clear instruction to capture an action, it will be included in the requests log/eddy.

Opened	Action	Owner
11/10/23	Item 4 – Modelling Approach <ul style="list-style-type: none"> <li>Provide a link and any brief context to the SLUR (GW contaminated land) database.</li> </ul>	GWRC
11/10/23	Item 5 - Outcomes 1&2 <ul style="list-style-type: none"> <li>Clause 1.7 changed mythology to pūrākau</li> <li>Make groundwater outcome more high level to include contaminant and nutrient load</li> <li>Remove ‘S’s’ from kupe Māori words</li> <li>Recognition of natural springs</li> </ul>	GWRC
11/10/23	Item 5 – Outcomes 3&4 <ul style="list-style-type: none"> <li>Amend Outcome 4 to clarify that it’s <u>indigenous</u> threatened species.</li> </ul>	GWRC
11/10/23	Item 5 – Outcomes 5, 6, 7 <ul style="list-style-type: none"> <li>Drop off item 6, intent is to maintain natural state.</li> <li>Take no 7.2 climate change and it needs another name, maybe urban and rural land use to recognise differing land use.</li> <li>Outcome 7 requires modification so that it’s not just met but that it continues to be met.</li> </ul>	GWRC
11/10/23	Item 6 – Mana Whenua Whare to caucus the outcomes which can capture wāhi tapu without having to codify it in one value.	MANA WHENUA WHARE
11/10/23	Item 6 - Kaimahi to double check that seagrass recovery would be captured in other outcomes etc.	GWRC
12/10/23	Item 8 - Mana Whenua Whare to provide supporting references to Kaimahi	



## REQUESTS LOG/EDDY

Note that all requests said during the Committee meeting by either of the Whare will be captured in this request log/eddy. If it was not clearly stated or instructed to be captured as an action, it will stay here until it is officially confirmed as an action.




Opened	Request	Owner
11/10/23  1	Kaimahi to double-check that seagrass recovery would be captured in other outcomes etc.  Requested from: Te Tiriti Whare (item 5)	GWRC
12/10/23  2	For the Whaitua Committee to receive more information on contaminated sites, historical intrusion, current day and maps of key sites for each.  Requested from: Kāwanatanga Whare (item 8)	GWRC
12/10/23  3	A scoping statement will be prepared and sent to both Chairs to ensure clarity on what work will be provided, regarding heavy metals.  Requested from: Te Tiriti Whare (item 8)	GWRC
12/10/23  4	Kaimahi to provide information to the committee on current monitoring – where the sites are and how often are they monitored.  Requested from: Kāwanatanga Whare (item 8)	GWRC

## DECISIONS LOG

Note that all decisions captured during the Committee meeting must be clearly stated as an action and providing instruction to minute taker to note down. If there is no clear instruction to capture a decision, it will be included in the requests log/eddy.

Opened	Decision	Update
11/10/2023	Item 4 - Committee supported the Mana Whenua proposal to introduce mahinga kai measures into the modelling approach.	
11/10/2023	Item 5 – Outcome 1&2 <ul style="list-style-type: none"> <li>• Clause 1.7 changed mythology to ‘pūrākau’</li> <li>• Make groundwater outcome include contaminant and nutrient loads and recognise natural springs</li> <li>• Remove S’s from kupe Māori words</li> <li>• Recognition of natural springs</li> </ul>	
11/10/2023	Item 5 – Outcome 3&4 <ul style="list-style-type: none"> <li>• Outcome 4 amend- Clarify that it’s <u>indigenous</u> threatened species.</li> <li>• For the other Whaitua threatened species listed.</li> </ul>	
11/10/2023	Item 5 – Outcome 5, 6 and 7 <ul style="list-style-type: none"> <li>• Drop off item 6, intent is to maintain natural state.</li> <li>• Outcome 6: no change</li> <li>• Outcome 7: Take no 7.2 climate change and it needs another name, maybe urban and rural land use.</li> </ul>	
11/10/2023	Item 5 - Mana Whenua Whare to caucus this and to review the outcomes which can capture this sort of thing without having to codify it in one value.	
12/10/2023	Item 8 - as a starting point campylobacter will be measured within water as an attribute for human health.	
12/10/2023	Item 8 - the tuna attribute to reflect both abundance and condition.	
12/10/2023	Item 8 - for the model to integrate a social attribute aggregate.	
12/10/2023	Item 9 – The conceptual model to be developed by Dr. Russell Death.	

## Appendix 1 - Resources reference

Tabled by	Title	Document
Penny Gaylor	<p><u>A pilot study:</u> The Potential for Lead and Cadmium Contamination of Watercress in the Waiwhetu Stream.</p> <p>Author(s): Chris Webber Penny Fairbrother Kelly Chisholm Megan Callaghan</p>	<p> Massey University Group Research Proje</p> <p>Note – we do not have permission to publish</p>
Kathie	<p>Matua Rautia: The report on the Kohanga Reo Claim</p> <p>Author(s): Waitangi tribunal Report 2012</p>	<p> WT-Matua-Rautia-Report-on-the-Kohanga</p> <p>Note – we do not have permission to publish</p>
Kathie	<p>Whānau Taketake Māori – Recessions and Māori resilience</p> <p>Author(s): Kahukore Baker Te Whakatōhea Te Ūpokorehe</p>	<p> Whanau-taketake-Maori_0.pdf</p> <p>Note – we do not have permission to publish</p>