

TAIRĀWHITI WAIPAOA CATCHMENT PLANNING ADVISORY GROUP

Hui agenda, minutes, and actions Hui #4 Held at Waikanae Surf Club on 11 October 2023 at 12:30pm

Group facilitator	Dr Jill Chrisp
Advisory Group members present	Stan Pardoe, Grant Vincent, Nick Briant, Tim Tietjen, Keith Katipa, Dave Hawea, Owen Lloyd, Bronwyn Wilson-Hokianga, Shanna Cairns, Leo Kelso, Stuart Davis, Dianne Irwin, Joss Ruifrok, Bella Hawkins
Council	Janic Slupski, Oliver Vetter, Ariel Yann le Chew, Paul Murphy, Sarah Thompson, Desiré du Plooy
	Lois Easton, Wolfgang Kanz
Apologies	Alan Haronga, Matawhero Lloyd, Samuel Lewis, Jacob Harrison, Phil Gaukrodger, Murray Palmer, Tim Rhodes, Nicki Davies

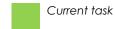
Agenda

Session 1 – General overview	
Karakia and whakawhanaungatanga	12:30
Welcome	
 Housekeeping 	
 Minutes and actions from hui #3 	
Session 2 – Waipaoa Catchment Plan	
Hui #3 recap and overview of today	12:45
Group exercise #1 – Report 1	13:00
 Draft environmental outcomes for NPS-FM values 	
Report back	
Group exercise #2 – Report 1 (cont)	13:50
 Waipaoa-specific environmental outcomes 	
Report back	
Leg stretch and cuppa tea	14:10
Session 3 – Introduction to water quality in the National Objectives	Framework
Laying the foundation – Report 2	14:20
Frequently used terminology	
Question and answer session	
Wrap-up and process check-in	14:45
Closing karakia	14:55



Summary of actions

Future action
* Refer to Parked List for summary



Notes:

- Each task is allocated a unique identifier e.g. T2 for ease of reference
- The numbering continues from previous meeting minutes

Task	Actions	Responsible	Due
T12	Provide opportunity for members to actively participate in the information analysis processes as we progress through plan development, for example establish specialised focus groups	Freshwater team	Ongoing
Т13	Develop an infographic representation of the freshwater process to illustrate how everything fits into the bigger picture	Freshwater team	13 Dec

Minutes

Session 1

Karakia and whakawhanaungatanga - welcome & housekeeping

- 1.1. The hui commenced with an opening karakia.
- 1.2. Minutes and actions from the hui held on 13 September were taken as read and accepted as a true reflection.
- 1.3. A reminder was given to members that assistance with accessing the portal can be obtained by contacting Oliver Vetter. Hard copies can be provided for pick up from Council reception upon request.
- 1.4. Council staff were acknowledged for ensuring that all contributions workshopped at the hui were captured correctly.

Session 2 – Waipaoa Catchment Plan

2. Recap of previous hui and overview of today

- 2.1. An overview was provided of values identified specific to the Waipaoa Catchment (hui #2) and values and environmental outcomes for national values, FMUs and the long-term vision (hui #3).
- 2.2. It was noted that not all environmental outcome statements could be drafted, particularly in cases where a clear understanding of appropriate statements was lacking for certain values.
- 2.3. The Group was informed that Council staff made a start and drafted potential environmental outcome statements that would apply across the catchment based on earlier discussions and feedback received.
- 2.4. The focus of this hui was on values where draft environmental outcomes have not been developed for both national values and Waipaoa-specific values.

3. Group discussion #1 – Draft environmental outcome statements

- 3.1. The Group split into five smaller groups to consider the draft statements for each of the catchment-wide values, Waipaoa Hill Country, Te Arai Te Uru, Turanga Flats, and Gisborne Urban. Where no environmental outcome was drafted, each group was asked to consider what the draft environmental outcome statement should be. Members were asked to have Te Mana o te Wai as part of the thinking.
- 3.2. All feedback was captured on flipcharts and is attached as **Appendix 1**. No feedback from group discussions were received on the day.

4. Group discussion #2 – Compulsory values that apply to each FMU and identifying potential environmental outcomes

4.1. For this group discussion, members chose one of the four FMUs (Waipaoa Hill Country, Te Arai te Uru, Turanga Flats, Gisborne Urban) to consider and discuss what the environmental outcomes should be for each Waipaoa-specific values for their chosen FMU.

4.2. All feedback was captured on flipcharts and is also included in **Appendix 1**.

Session 3 - Introduction to water quality in the National Objectives Framework

5. Laying the foundation – key terminologies and addressing queries

- 5.1. The last session outlined how water quality needs to be managed in a catchment plan under the National Objectives Framework (NOF).
- 5.2. Relevant terminologies were introduced to the Group:
 - 5.2.1. Limit Setting Attributes are rules that are set and included in the Regional Plan.
 - 5.2.2. **Action Planning Attributes** include actions Council and the community are doing collectively. Actions plans need to be reviewed every five years. Examples are riparian planting and wetland restoration.
 - 5.2.3. **Attribute State Bands** is a way of explaining how good or bad the water quality is for that band and range from A to E bands, with E being very poor.
 - 5.2.4. **National Bottom Lines** are set for the different values. Targets must be set above the National Bottom Line as per the NPS-FM requirement to enhance waterbodies where they are found to be degraded.
 - 5.2.5. **Degradation** is when water quality falls below a National Bottom Line, or there is a degrading trend. Action plans must address this degradation.
- 5.3. Baseline Attribute State for attributes in the Waipaoa Catchment were discussed. It was clear that the status quo needed to be improved.
- 5.4. Key points raised by the Group in this session:
 - 5.4.1. Timing and frequency of Council's environmental monitoring in Tairāwhiti. It was explained that Council has been conducting monthly monitoring for about 30 years. However, it has only been since around 2014 that Council has been aligning its monitoring practices with the requirements outlined in the national regulations.
 - 5.4.2. A suggestion was made for Council staff to explore regenerative farming as a potential solution to sustainable environmental practices.
 - 5.4.3. Substantial financial commitment is required by landowners. It was agreed that affordability and prioritisation are key factors and will need to be discussed further. The issue of landowner incentivisation needs to be taken to Council.

6. Wrap-up and process check-in

- 6.1. The December hui will deal with Target Attribute States and Interim Targets to meet the environmental outcomes, timeframes, and actions, including potential rules. Additional science work continues in the background to support the development of the plan.
- 6.2. Council staff proposed a separate workshop to be held on 15 November to discuss the Regional Policy Statement and its position in freshwater planning, and forestry. It was further recommended that the Regional Freshwater Planning Advisory Group and

- the Waipaoa Catchment Planning Advisory Group, combine into one group and have this full day workshop at Ohako Marae.
- 6.3. The facilitator recognised the Group's growth into a more cohesive entity and thanked members for their participation.

7. Tasks to be actioned

Task	Actions	Responsible	Due
T12	Provide opportunity for members to actively	Freshwater	Ongoing
	participate in the information analysis processes as	team	
	we progress through plan development, for example		
	establish specialised focus groups		
T13	Develop an infographic representation of the	Freshwater	13/12/23
	freshwater process to illustrate how everything fits	team	
	into the bigger picture		

8. Closing karakia

- 8.1. The hui closed at 15:00 with a karakia.
- 8.2. The next monthly hui will take place on 13 December, as the 15 November hui is earmarked for the combined workshop on the Regional Policy Statement and forestry at Ohako Marae.

PARKING LIST

The following matters have been captured from discussions during the **WAIPAOA CATCHMENT PLANNING ADVISORY GROUP** hui. They are captured here to be incorporated as supplementary recommendations in the Group's final report and/or responded to directly.

Parking List			
Reference	Item/Action	Date raised	Date addressed
T5	Organise site visits to discuss topic-specific catchment issues	12/7/23	tbc
Т6	Sub-projects Te Arai and Maungarongo wetlands to be covered at a future meeting	12/7/23	Date tbc
Т8	A wānanga is planned to further workshop Waipaoa catchment-specific cultural values at Ohako Marae	16/8/23	13/12/23
Т9	Data and digital sovereignty: need to consider Māori Data Sovereignty framework released by StatNZ, and what that means to our process (referring to inherent rights and interests that Māori have in relation to the collection, ownership and application of Māori data)	16/8/23	Being coordinated by Dianne Irwin, Ngāti Oneone and Council
T12	Provide opportunity for members to actively participate in the information analysis processes as we progress through plan development, for example establish specialised focus groups	11/10/23	Ongoing
т13	Develop an infographic representation of the freshwater process to illustrate how everything fits into the bigger picture	11/10/23	13/12/23

Appendix 1 – Written feedback at Waipaoa Advisory Group – Hui 3 (13 September 2023)

SESSION 1 – Reviewing the draft environmental outcome statements

Questions for consideration:

- 1. For each of these draft environmental outcome statements consider:
 - a. Are they right?
 - b. Are there things missing?
 - c. Are there things where you disagree?
 - d. Try and be specific and record this information on the flip charts
- 2. For the other National Values are there catchment wide elements that should be included in the environmental outcome statements?

Catchment-Wide Values

NPS-FM con	npulsory values – all FMUs – draft environmental outcome statements
Ecosystem health	The water quality, and river, stream and wetland flows support the naturally occurring range of native wildlife including tuaiwi - kore/invertebrates, rākau/plants, ika/fish and manu/birds. Key marker species such as kanae, kotare, koura, kākahi and tuna are abundant in their natural habitats.
Threatened species	The populations of our threatened species increase in the rivers, streams and wetlands. Habitat improvements enable threatened species to expand their range. Fish passage is uninterrupted so that threatened species can maintain all parts of their life cycle. Riparian areas are sufficient in width and in good health to support breeding populations. The freshwaters remain a national stronghold for tuna.
Mahinga kai	Mahinga kai and rongoa is accessible, safe to consume and is available for whānau and marae events all-year round, in the places where they historically occurred.
Human contact	Swimming is safe and healthy and accessible during the October to April swimming season at identified swimming spots.

Other NPSFM Values			
	Natural character	form	and
	 Animal dri 	nking v	vater
	• Fishing		
•	Drinking w	ater su	pply
	Transport waka	and	Tauranga
	• Wai tapu		
•	• Mauri		
	Irrigation production	and	l food

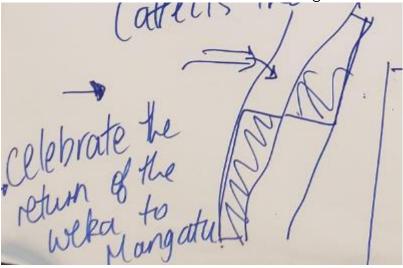
Ecosystem Health

- Land is the driver of degradation
- Needs water quantity
- Is eel an indicator species

- Important
- o But may not be indicator
- Can we be aspirational + see some species reintroduced
 - o Refer to anecdotes of where they once were
 - Supported by Threatened Species section
- Ecosystem health starts with land management

<u>Threatened Species</u>

- Need to consider species that are not just in the water -> riverine
- Need to include pest control in this
 - o affects the riparian vegetation
 - o eg. pigs / hares /rabbits
- Celebrate the return of weka to mangatu



- Animal Drinking Water?
 - o Is this a catchment wide value?

Mahinga Kai

- Supports communities
- Access is a huge issue
- People need to be able to access the river
- Don't do mass gardens
- Should be a supplement
- Hunting, access to eels + fish
- Regaining taste of weka, kereru

Human Contact

- Access is huge issue
- Swimming season might start more in November

Tūranga Flats FMU

Tūranga Flats specific - draft environmental outcome statements			
Irrigation	The Tūranga Flats retain their high levels of food production supported by efficient		
and food	and fooduse and reuse of water and water storage for irrigation.		
production	Good practice management of runoff and nutrients means the freshwater		
	impacts of food production from horticulture are reduced.		
Drinking	The Waipaoa River provides an important part of a healthy drinking water supply		
water	for Gisborne City and communities across the Tūranga Flats.		
supply			

Natural A high degree of flood protection is maintained within the FMU.

form and Alongside this, the number and extent of wetlands and their connection to character waterways is increased.

Other NPSFM Values		
•	Animal drinking water	
•	Fishing	
•	Mauri	
•	Wai tapu	

1.

- 1. Agree with retaining high levels of food production
- 2. Do we need to mention Managed Aquifer Recharge?
- 3. Dont use the word 'Horticulture' use 'food producers or primary industry'
- 4. Just food producers? Pharmaceuticals?
- 5. Agree with having storage in there
- 6. Are there any unintended consequences from including 'storage'? Can encouraging storage come back to bite us?

<u>2.</u>

- 1. Do we need to include aquifers in Drinking Water Source?
- 2. Otherwise agree with Environmental Outcome

- 1. Agree with flood protection
- 2. Not just wetlands
 - a. Needs to be broader include tributaries, riparian plants / corridors

<u>4.</u>

1. The water sources within this FMU are an important part of a healthy drinking supply for stock

<u>5.</u>

1. The Waipaoa River & its tributaries support fish populations for fishing

Second Group

- 1. Second point around managing nutrients not strong enough
 - a. Work with industry to form a better environmental outcome with genuine engagement
- 2. Re-word to have efficient use & reuse/storage first then food production. The outcome is efficient water use/storage/reuse/having enough water which allows for food production
- 3. Soil health missing from environmental outcome
 - a. Soil health provides filtering, reduces overland flow, reduces cracking which leads to water/nutrients entering tile drains quickly
 - b. Healthy soils part of the overall solution
- 4. Soil health is a value
 - a. Less chemicals
 - b. Its own 'system'
 - c. Less water need

Te Arai Te Uru FMU

Te Arai Te Ur	u FMU specific - draft environmental outcome statements
Transport and tauranga waka	Traditional tauranga waka ¹ are identified and access to them is restored.
_	Te Arai Te Uru remains an important source of drinking water for people in Manutuke, Gisborne City and the people of Rongowhakaata.
form and character	The natural form and character of Te Arai Te Uru is improved – targeted recovery work along the riparian margin naturalises the channel morphology, reduces streambank erosion and supports freshwater biodiversity. The connection between Te Arai Te Uru awa and the old Te Arai Loop is improved, supporting its restoration and habitat values.
	Stock are able to access safe and healthy drinking water, while not impacting on the high-priority values of the river.
•	Te Arai Te Uru continues to support a kanae, inanga and tuna fishery. Fish stocks increase in abundance.
and food	Priority is placed on irrigation to support food for local community use. Other irrigation and food production is supported where this does not impact on highpriority values of the FMU.
Mauri	Mauri of the wai in Te Arai Te Uru is maintained or improved.

Other NPSFM	Values .
•	Wai tapu

Tauranga Waka

- 2 parts upper + lower
 - Yes to lower
 - o In upper is the source of rakau

Drinking Water

- Include/Recognise Tamanuhiri
- Rongowhakaata & Tamanuhiri shared boundaries
- Shared awa
- Comes from Tamanuhiri (headwaters)
- Te Arai te Uru -> entrance to waka
- Maraetaha relationship with GDC
 - o Understanding that drinking waters are from Tamanuhiri

Natural Form

- Emerald Hills problem
 - o Bola, Gabrielle
- Prior to '48 flood
 - o Genesis for flood control scheme
 - Stock grazing kept bank tidy
 - Water was clean
- Landuse changes
 - o Keeping margins clean became a problem
 - o Fills up quicker then overflows
- River used to be wider

Animal drinking water

- Arai has poor flow in summer
 - Marae + homes now on town supply
 - Muriwai has supplementary (Pataka wai)
- Upper catchment
 - Stock crossing in environ plan addressed -> Maraetaha
 - Post Gabrielle
 - Use of dams for stock drinking
 - Need to look at reticulation

Fishing

- Need to clean up + restore awa
- Tuna used to be provided at hakari. Also Koura
- Joss Reforestation, of catchment
 - o Provides for more consistent baseflow
- Over extraction of drinking water
- Access is also important
- Create conditions for local populations to increase

<u>Irrigation</u>

- Shouldn't think priority should be
- Leaderbrand started in Te Arai
- Water permits an issue
- Focus on permitting based on supply

<u>Mauri</u>

- Will be restored w/ clean-up.
- Story about flapper ducks
- Customary practices
- Supply from headwaters
 - Need to maintain biodiversity
- Also about a resilience plan for the pipeline
 - o Patemaru key to that
- Mouth of Arai Traditional fishing grounds
- Jet skis were a problem
- Resilience pipeline Is fragile
 - o Patemaru
 - Need to have significant setbacks to protect
- Need to think about right plant right place
 - What are the sustainable filtering opps?
 - o How do we monitor?
 - Trial? Research?
- Wetlands, Agritecture e.g. John Grithins (Te Kuri)
- Land around Mcphails built up productive
- Livingstons, Papatu Titoki grew well
- How to support /incentivise landowners how do they get in the game?
 - fundina
 - progressional plan / staged
 - o exclusion, riparian, monitoring, engagement.

Gisborne Urban FMU

Gisborne Urban FMU - draft environmental outcome statements Natural A high degree of flood protection is maintained within the FMU. form and Alongside this the number and extent of wetlands and their connection to

Other NPSFM Values			
•	Animal drinking water		
•	Fishing		
•	Transport	and	Tauranga
W	aka		
• pr	Irrigation oduction	and	d food
•	Mauri		
•	Wai tapu		

character waterways is increased.

- Definition of 'high degree'
- Support flood protection
- Are the current locations of essential services appropriate?
- Linking into stormwater management integrated plan
 - Spatially map to avoid flooding i.e. secondary overflow paths
- Taruheru / Waikanae catchments
 - Freshwater / Estuarine improvements
- Risk of woody debris / sediment on estuary and key infrastructure
- Where do we place / focus investment post cyclone / recovery
- How responsive can council be post cyclone to enable action
 - Disaster planning / comms plan
- Appropriate planting to improve ecosystem health and allowing appropriate drainage where appropriate
- How do we work with water rather than against it
- Any areas available for reinstating swamps / wetlands to absorb & then slowly release storm rainfall?
- Rehabilitating natural ecosystems / mauri of the city rivers & streams
- Maintenance of drains
- Swale drains is helpful
 - No maintenance and diffuse pollutants
- Restoration of urban waterways
 - Much more attractive and a positive environmental outcome

Waipaoa Hill Country FMU

NOTE: no draft environmental outcome statement in the facilitator briefing document.

Other NPSFM	Values		
•	Animal dr	inking wate	r
• Ch	Natural naracter	Form	and
•	Drinking v	vater supply	/
•	Fishing		
•	Mauri		
•	Wai tapu		

Written notes

- Sustainable systems
 - o 'Rejuvenated wetlands, rivers, streams, and riparian strips'
 - o With details on what will actually be done actions, management, limits
 - Stopping / reducing sediment sources so that over time bed-loads in rivers reduces – link to 'Natural Form and Character'
- Flood control / prevention
 - o 'The land is managed to prevent flooding downstream'
 - Achieved through reinstatement of wetlands (sponges)
- Land management
 - 'The land is managed to support river baseflows, allow for rejuvenation'
 - Relevant to summer flows
 - 'Good practice management results in effective erosion and sediment control'
 - Significant sediment issues
 - Need to manage land according too geological constraints
 - o Forestry 'Well-managed forestry to enable land preservation while delivering commercial benefit'
 - o 'Limited / sensible livestock farming based on what the land can sustain'
- Biodiversity / Ecosystem Health / Threatened Species
 - o 'Apex species thrive'
 - o One species for water tuna
 - o One species for overall health incl. riparian margins Pekapeka
 - Not just about life in water, if Pekapeka are thriving then catchments are healthy and threats to wildlife managed
- Water storage
 - 'Water is stored for supporting water supply'
 - For irrigation and drinking water supply
- Mahinga kai
 - 'Our rivers sustain plant and animal life that supports communities'
- Ki uta ki tai
 - o 'All areas are accessible to migratory species (corridors)
 - Relevant to hill country 'catchment headwaters provide habitat within which aquatic life and other wildlife flourishes'
- Other points raised:
 - o Who pays for flood prevention?
 - o Is Forestry subsidizing everyone else, because they have to change their land use, lose money?
 - The outcomes can be ranked in terms of Te Mana o te Wai

From post-its

- Flood control
- Water retention
- Erosion
- Forestry
- Limited farming
- Rivers rejuvenation
- Wahi Tapu Preservation
- Restoration of wetlands
- Roading for forestry + usual use
- Wildlife redevelopment
 - o Weka, Kiwi, Moa?

Verbatim feedback:

- Selective farming only
- Forestry the sacrificial lamb previously thought that forestry was solution to flood control
 - Need good forestry practice
- Water retention another main key, to retain downstream base flow
 - Water retention as back-up supply (like storage)
 - Suggest damming, as to slow down the flow towards town
- Suggest zoning process for farming, marking out suitable and unsuitable land
 - o Like if dairying on flats, have higher chance of consent getting declined
- Used to have moa in the hill country. Weka was gone 30-40 years ago but recently came back.
- Facilitator shared how he have heard that pikapika (bat) can be considered as keystone species
 - Member contributed that Kotahi is a keystone species
 - o Freshwater mussels also keystone species tawa tapu (?) also have a whole colony, with facilitator agree and said have seen at Wharekopae
- Solution is people recognising that they're causing the problems
- Water clarify, water life need to define rejuvenation
 - Example of clean river in Canada no life in it
 - o So need to make clear if we want clean river for drinking water or clean in terms of thriving ecosystems in the river

SESSION 2 – values for draft environmental outcomes yet to be developed

Questions for consideration

- 1. For the Waipaoa– specific values for this FMU what should environmental outcomes be?
- 2. Consider if this FMU includes the aquifers what are the catchment specifc environmental outcomes for them?
- 3. Are there any missing environmental outcomes?

Tūranaa Flats FMU

Waipaoa catchment specific values
Habitat restoration
Waka ama / rowing
Ecosystem values – shallow aquifers
Irrigation – aquifers
Wetlands – aquifers and Turanga Flats
Original stories / Korero o mua
Horticulture – deep aquifers, Turanga flats
Taniwha / waahi tapu
Aquifer recharge
Aquirer recharge

Use of Aquifers water

- 1. Providing for resilience of food production
- 2. Quality doesn't deteriorate

Aquifer recharge

- Store river water
- Use it to improve water quality it's not great now (naturally)
- Pressurise to push saline out
- Sea level increase going to lose aquifers

Wetlands/Treatment systems

- Is there an ability to get consent holders to 'give back' to Papatuanuku if they don't have the land area themselves?
 - o i.e. 'Tim' doesn't have room for a wetland on his 5 ha but could contribute to a community
 - o One would need transparency around where funds end up

Te Arai Te Uru FMU

Waipaoa catchment specific values	
Habitat restoration	
Wetlands	
Original stories / Korero o mua	
Taniwha / waahi tapu	
Horticulture	
Flood management / sediment control	

Biodiversity + habitat restoration/ecosystems...

- Ki uta ki tai
- On Patemaru corridor of totara, bats, kahikatea
- Aspiration to build that corridor
- Provides/enhanced kapita kai
- Freshwater through Te Wherowhero improves kai

Korero a mua

- Respectfully understand upper and lower catchment across overlapping iwinterests
- But we share the same values
- Common benefits
- State of awa enable stories to be told
- Ability to maintain kaitieki role, manaakitanga
- Whatatuna house of the eel
 - Names reflect values of places

Taniwha/wahi tapu

- Have been identified
- Recognition that wahi tapu exist
- Areas of cultural significance
- Maybe areas of culturally significance may be more appropriate as value
- "At every bend of river is a chief" Whakatauki

Flood protection/resilience

- Improving landuse practices improves flood protection
- Creates more sustainable flood management
 - Riparian planting
 - Wetlands
 - Land use right plant for right location

A return to cobbled bed reflects an improved state

Waiora/hauora

- Building Te Arai flood capacity group to check and monitor river
- People work together to ensure the ongoing improvement to Te Arai te Uru
- Te Wherowhero wetlands biodiversity/enhancement
- **Joss** <u>Access</u> -> cycle trail -> community connection -> landowner-GDC relationship + iwi connection
 - Could create tupapa korero -> storytelling opportunity
 - Digitised korero
 - Employment, community health
- Landowners
 - o <u>Productive land</u>
 - Being inclusive in catchment korero
 - Catchment group focusing on sediment
 - Overlapping relationships
- We enable land to provide for seasonal + permanent crops
 - Lower catchment is a food basket
 - o The value of soil is protected
 - Best practices
 - Mauri of whenua protects mauri of wai
 - Food practices are regenerative

Gisborne Urban FMU

Waipaoa catchment specific values
Habitat restoration
Waka ama / rowing
Recreation
Wetlands
Original stories / Korero o mua
Taniwha / waahi tapu
Ecosystem values – shallow aquifers
Irrigation – aquifers

- Improved water quality
- Legacy landfills rehabilitation restoration projects / removal ie Waikanae Creek
- Re-establishment of wetlands in Upper Waikanae creek
- Maintaining Te Hapara Sands Aquifer groundwater levels to maintain springs / wetlands ie Waikanae and Taruheru
- Avoid saltwater intrusion
- Sedimentation management to improve deposited sediment in Waimata / Taruheru / Turanganui Rivers
- Stormwater quality Integrated catchment plan / roading impacts
- Mahinga kai / kanae / shellfish harvesting / health
- Paokahu Landfill management
- Sea level rise / climate change
- What is the true cost carbon inputs of roading use
- Wastewater overflows drainwise project
- Sparting
- Eastland Port activities dredging impacts

Verbatim feedback:

- Runoff, volumes of waters from storm
 - These waterway is tidal, horrible after rain as it washed out to sea
- For Waikanae, poor quality so need to improve
 - Mudflats converted into rubbish dumps areas around rail tracks,
 Awapuni, airport
 - Waikanae has heaps heavy metal and other contaminants leaching
 - Huge impact on mahinga kai
- Te Hapara Sands aquifer has springs coming up at the Taruheru
 - Same in Waikanae
 - Suggest maintaining minimum groundwater level in mind of these connections
- Recent discovery of freshwater aquifer off the East Coast concerns about stability
- Stormwater quality link to waterways
- Run-offs from roading e.g. break pad dust

Waipaoa Hill Country FMU

Waipaoa catchment specific values

Habitat restoration

Original stories / Korero o mua

Flood management / sediment control

- Lake Repongare Mahinga kai
- Habitat restoration
- Mahinaa kai is critical
 - Eels are not the same as what get in the river
 - Better for drying as a result of their food + habitat
- Unique qualities of that mahinga kai
- Are issues with access/fish passage to the lake
 - Pouamu Stream mauri access for elvers
- Siltation of lake is an issue needs riparian buffers
- Pouaru Stream is heavily impacted
- Puna springs
- Water supply (Drinking + irrigation)
 - o In the hill country is main opportunity for storage of water
 - Similar to Mangapoike Dams
- Patutahi -> Moanui

ADDITIONAL FEEDBACK

<u>Email</u>

Table 4: Additional Management Tools

- Stocking rates/density at a given time (i.e. does it have to be all or nothing, could there be a certain stocking rate that is acceptable that allows for weed control in fenced areas)
- Sediment traps
- Erosion control planting
- Pest control of deer, goats, pigs (browsing and rooting animals) will support natural generation and maintenance of understory/canopy to help with shading = cooler water, better health.

Setbacks are only necessary on the downhill sides/the sides the water flow.

Having specific "Tairawhiti" rules make it more difficult for landowners that cross boundaries. These would only be necessary if national level rules are not tight enough. In some instances, it seems like the national rules are going to be too extreme for what is achievable across our landscapes.

From what was provided in the pre-reading, it looked as if the Rere Project's fencing has not had any positive effect on water quality. We shouldn't implement rules that enforce "mitigations" in the region without the science to back that those mitigations work.

If land were to be forced to be retired, there should be rules about not having to pay rates on that land.