

Pongakawa/Waitahanui Freshwater Futures Community Group Workshop held in Pongakawa Hall, Pongakawa, on Tuesday 10 May 2016 commencing at 9.00am

Community group members present:

Wilma Foster (Chair), Andre Hickson, Bernie Hermann, Bev Nairn, Colin McCarthy, Darryl Jensen, Dennis Walker, Grant Rowe, Jane Nees, John Garwood, John Cameron, Julian Fitter, Kevin Marsh, Mike Maassen, Paul Van der Berg, Roku Mihini and Wilma Foster.

Visitor: Eric Cawte (for Andy Bell), Rani Dhaliwal – PhD student.

BOPRC staff Present:

Pim de Monchy (Relationship Manager), Stephanie Macdonald (Facilitator), Kerry Gosling (Support Facilitator), Nicola Green (Senior Planner – Water Policy), Clarke Koopu (Māori Policy Advisor) and Rochelle Carter (Environmental Scientist), Lisa Baty (scribe).

Apologies:

Andy Bell, Geoff Rice, John Meikle, Melv Anderson and Te Awhi Manahi

Related documents previously circulated:

1. Briefing note: Workshop 3: Value Sets and Freshwater Management Units
 2. Pongakawa/Waitahanui Community Group Workshop 3 power point presentation
 3. Feedback sheet – Pongakawa/Waitahanui Community Group
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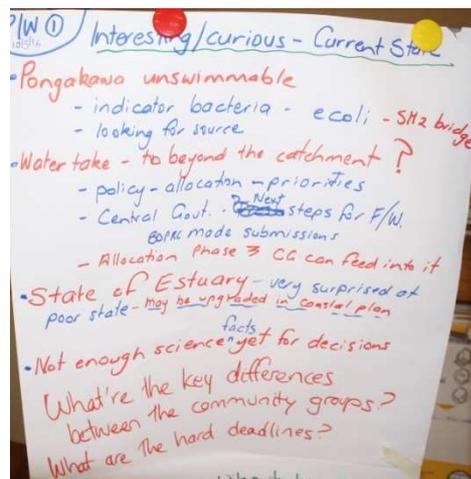
1 Welcome and Updates

Wilma welcomed the group and asked Clarke to open the meeting with a karakia. Apologies were noted.

Wilma invited the group to share any comments or burning questions following the previous Current State workshop

Key comments/questions:

- When staff reference 'we' is that Council or our Group? A: Council's work programme, which the community group is inputting in to.
- Pongakawa is un-swimmable – how do you justify this claim? A: Monitoring shows Pongakawa water quality is below the minimum acceptable state specified in the NPSFM for swimming, i.e., E. coli >540/100ml.
- Population growth and the fragmentation of land, how will this be sustainable?
- Why can't we state in this group – keep freshwater in the catchments? How far does Council go with water in this catchment going elsewhere? A: Options and solutions will be discussed during Phase 3. This is about allocation priorities. Governments' allocation policy package may provide some direction but is not due for delivery until 2018.



- Very surprised at the state of the estuary – indigenous biodiversity status may be upgraded in the Coastal Plan
- There is not enough science to base our decisions on. *A: We will work through this in phase 3. There is also a risk of not acting. We have to be working with a level of uncertainty.*
- Are there big differences between the three community groups? Is water quality also an issue for the other two groups? *Noted that minutes are now shared – some commonalities.*
- What are the hard deadlines for these decisions to be made? Should we be working backwards? *See above re Phase 3.*

Stephanie outlined the agenda and desired outcomes:

1. Build understanding of work programme and progress
2. Advise on regional values
3. Map values in the WMA
4. Initial input on attributes
5. Feedback on FMU setting

Nicki explained:

- the work programme (see presentation slide 6 and 13), where we are up to, and community group's involvement.
- current project work underway (presentation slide 13), including the values framework, FMU identification, current state gap filling and initial work towards attribute identification, issue definition, modelling, overarching policy direction, and methods for setting environmental flows and levels.
- National update – Next Steps for Freshwater consultation closed, allocation policy package yet to come.

We are in Phase 2 (values and FMU identification). Phase 3 (start date to be confirmed by Council – late this year) is a major phase of work to establish objectives, limits and methods and involves developing future scenarios, modelling and management options. This is a major phase of work. Anticipate 4 community group workshops on this (TBC).

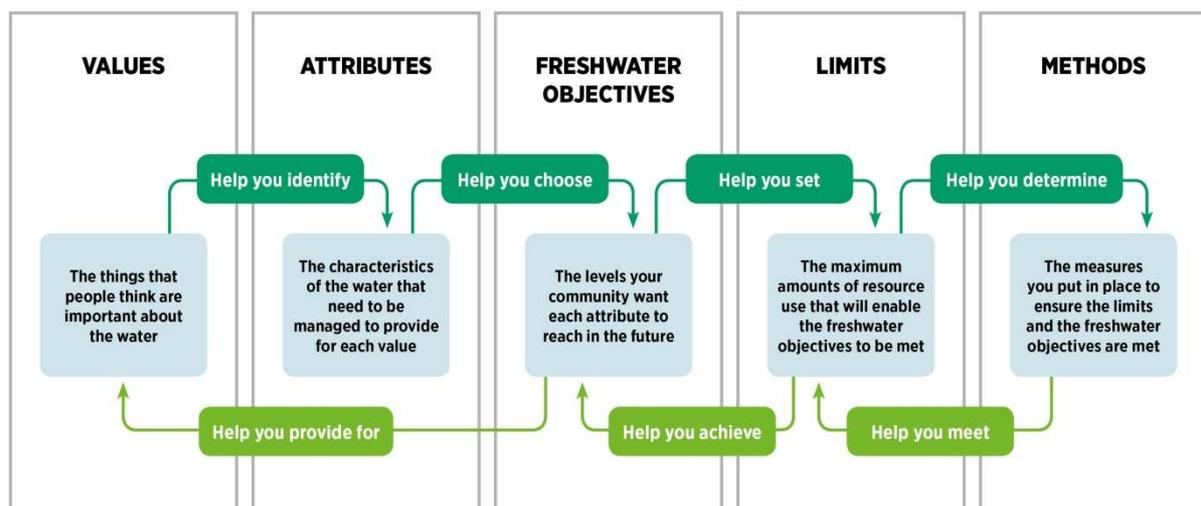


Figure 1: Implementing the NPSFM (presentation slide 13)

Actions:

- Council to send group members the link to the Radio New Zealand interview with Minister Nick Smith on freshwater.

- Council has collated Community Group questions. There are many and we are preparing answers. This will be made into a booklet and distributed once finalised.
- Wilma suggested an informal gathering at someone’s house to gain a better understanding of the process (see last two bullet points under 6. *Closing* in meeting notes).

2 Value Setting

Nicki referred to the briefing note. The draft regional freshwater value set is attached to this and was explained by Nicki. It will remain in draft, with some flexibility to review and amend at later stages in the work programme process.

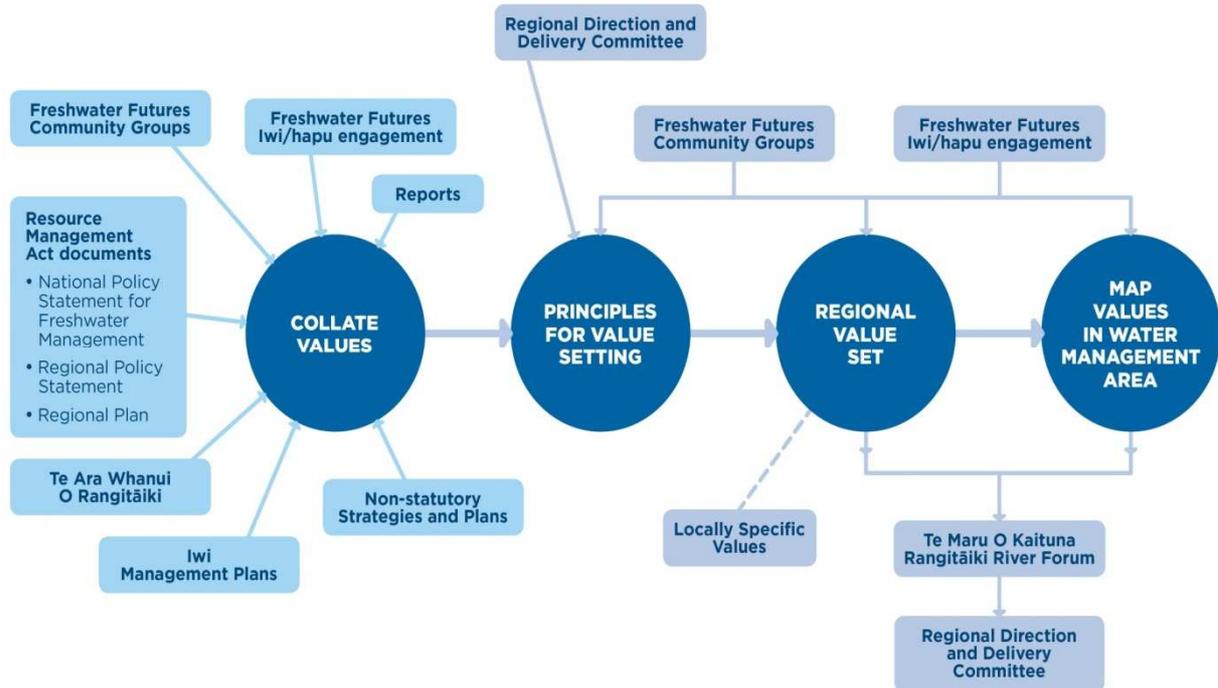


Figure 2: Regional freshwater value set development (Slide 15)

A comprehensive draft value set is needed in order to progress the next steps in the NPSFM implementation process. The draft regional freshwater value set was created from collation of values from multiple sources, applying principles agreed by Council, seeking community group feedback. Staff will seek Council approval of the value set to progress with, but it will remain in draft for some time. There will be some flexibility to amend at later stages in the work programme process.

Principles (presentation slide 14)

Need to:

- be nationally consistent
- provide for some regional consistency
- be flexible enough to accommodate local differences
- demonstrate how values drawn from statutory documents are represented
- check values from statutory documents with the authors
- generally, aggregate common regional values.

The next step is to identify measures for the

Applying values in Pongakawa/Waitahanui WMA																									
Values	Ecology/whānau health	Species and habitat	Human health/ recreation - primary context	Human health/ recreation - secondary context	Natural form and character	Wānanga/whānau	Mānanga/whānau - Kaitiaki to harvest and eat	Mānanga/whānau - Kaitiaki to eat	Fishing	Water supply	Transport and navigation/whānau	Irrigation and food production	General drinking water	Commercial and industrial/whānau, use, drinking and recreation/whānau	Power generation	Food production and control	Urban stormwater drainage and attenuation	Iwi/hapu	Historical/Cultural significance	Cultural heritage connections	Kaitiaki/whānau	Cultural resources	Influence on other freshwater bodies	Influence on coastal waters and environment	Influence on groundwater
WMA/FMU	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PIW/ WMA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
FMU1	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
FMU2	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
FMU3	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
...	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Figure 3: Applying the regional value set in Pongakawa/Waitahanui WMA (presentation Slide 17)

values (called attributes).

Nicki explained how the regional value set would apply in Kaituna-Pongakawa WMA. The intention is that in each WMA and FMU council will note the presence/absence of the value. Where there is something special or particular about the value that needs explaining, council can include in schedules with descriptions, by doing so it will not lose important detail by using a regional framework. Values, current state/trends and measures will then be used to start working on scenarios and preferred objectives.

Questions/ Comments made:

- How do you integrate Co-Governance values? *A: Cogovernance feedback will be sought before taking the value set to Council to approve. Ideally, we will be able to accommodate all feedback or work through it. Where there are unresolved tensions we may have to report them to decision makers.*
- How do you balance national and regional consistency? *A: See value set – we checked national values are generally relevant in the region, and also what may be needed and generally applicable regionally.*
- Kaituna/Maketū and Pongakawa/Waitahanui fall under one Water Management Area- will you bring the two groups together? *A: Notes are now shared. Suggesting a get together of at least chairs, possibly groups shortly.*
- Kahawai present in lower reaches
- How does sea level rise and salinisation of groundwater fit into this process? *A: Has to be factored in to future scenarios and effects in Phase 3.*
- Why are some national values compulsory i.e. swimming but not drinking water. *A: Not all water bodies everywhere are swimmable or needed for drinking water supply. Central government has deemed that ecosystem health and human health should be relevant everywhere.*
- Do we think they have different outcomes?
- Groundwater levels are higher, what are the impacts and how would we monitor? *A: We do have some groundwater monitoring sites (see current state presentations).*

3 Values Mapping

Nicki explained: Some current or potential future values and uses exist throughout freshwater bodies. Some only apply to specific area/parts of water bodies. Some values can be mapped by Council as we know where they are (e.g., commercial/industrial discharges, irrigation etc). The group were asked to map seven values based on their local knowledge (see Figure 4).

Values may inform how we define FMUs and will inform how we set objectives for FMUs.

Nicki noted this is a first mapping of values, not the only input. No prioritisation or weighting is occurring yet.

Stephanie introduced the values mapping exercise. The group then worked their way

around the seven maps in the room marking and discussing values that they are aware of.

Comments and questions:

- We need to think about new sustainable industries i.e. “flax, mānuka”
- Increased population – are we mapping values here and now or beyond? *A: We will look into future population and land use during phase 3.*
- Endangered species birds are more than just whio (blue duck)

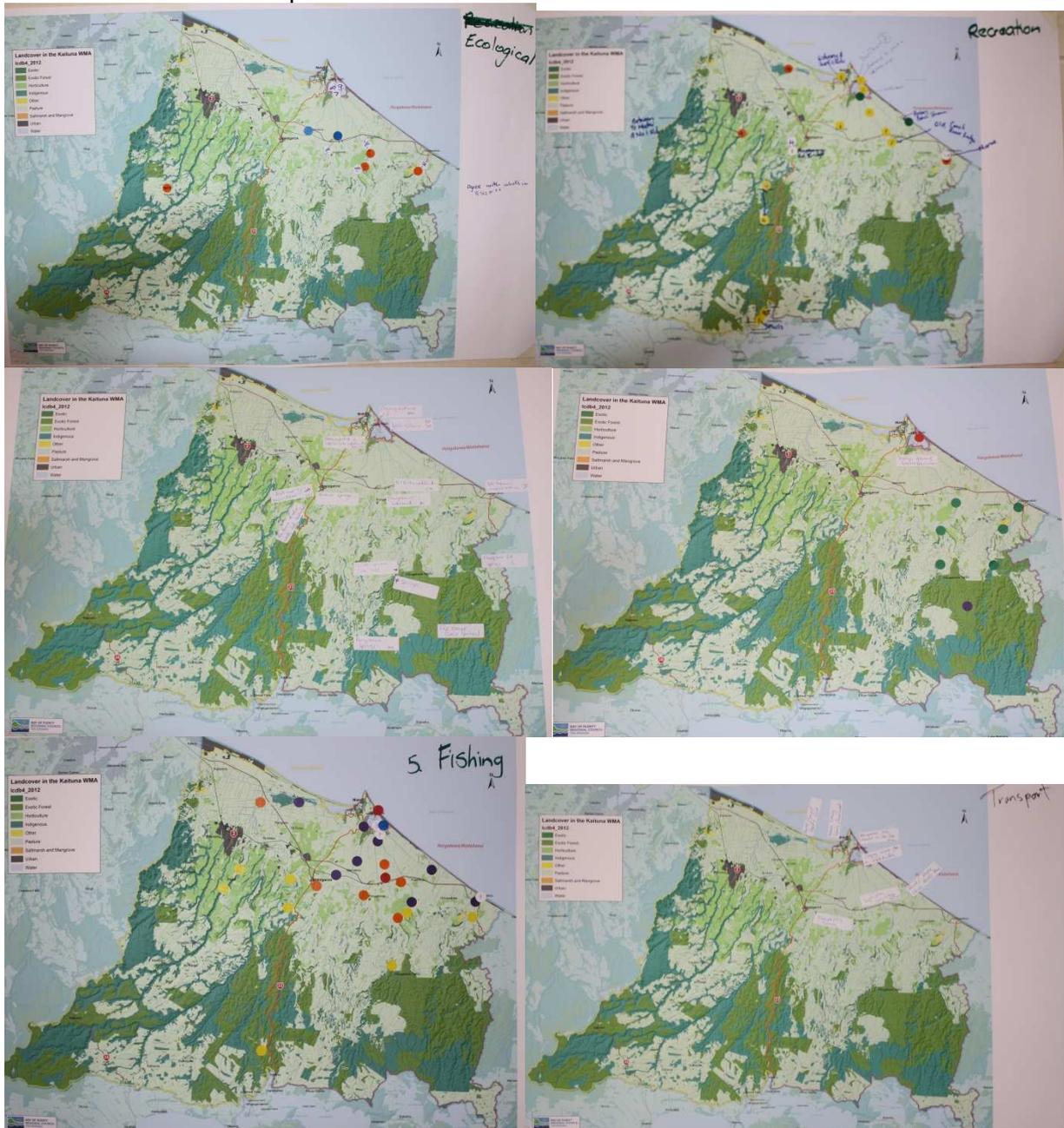


Figure 4: Values considered in community group values mapping exercise (slide 22 of presentation)

- What about species we don't want? – what is Councils intention to rid of the pests?
- Are we considering “other” species than birds and fish such as insects that need an environment – wider ecology? A: Yes – *this comes under the ecosystem health value rather than significant species*
- Values and views for the future ‘range’, how do we get values for the younger generation?
- Concern there was a risk in being too prescriptive
- Participants found it difficult to map the transport value

Actions

- Council considering communications with wider public, including youth. Suggestion chair shares values maps with local schools and marae to add to.





Ecological

- Birds dependant on freshwater fish etc – not mapped
- Agree with RWLP species + more
- Game birds and fish
 - Ducks – wetlands
 - Should these (game birds) be grouped with 'fish and game', not species and habitat
- Species are listed as 'fishing' sp rather than endangered etc

Recreation

- Eco-tourism

Mahinga Kai

- Whole Rotoehu forest good for hunting – deer/pigs
- Watercress most of way up both Pongakawa and Waitahanui rivers
- Koura – in places

Fishing

- Drainage – flow – what about taking drainage into account

Transport and Tauranga Waka

- Estuary entrance from the sea – important for navigation
- Dinghy access for whitebaiters from Cutwater Road
- Kayak access to the Waitahanui at the junction with Hereford Road
- Query – what beach launching access is used at the mouth of the Waitahanui?
- Used to launch jet boats off Kaikokopu and Wharere

4 Measuring Values

Nicki explained that we are required to identify attributes for values – ways of measuring whether values are or are not provided for, particularly in relation to water quality and quantity. We are at the beginning of identifying scientific attributes, supported by our science knowledge. Group members were asked to note down potential ways of measuring whether each value is provided (where they know of any) based on their knowledge.

This workshop provides an early look at attributes and this will require more in depth consideration later.

Comments and questions:

- There will likely be commonalities in measures for some values i.e mauri/ water quality/ ecology
- Principles of fairness and equity important to consider
- Management options (i.e planting) were discussed and the group was asked to focus on the values/problems at this stage. Management options will be looked at in depth in Phase 3

5 Freshwater Management Units FMUs

FMU: a water body, multiple water bodies or any part of a water body determined by Council as the appropriate scale for setting objectives and limits and for freshwater accounting and management purposes”.

Principles for identifying FMUs agreed by Council (presentation slides 30 and 31):

- Include the water body and its catchment
- Reflect significant spatial differences that affect how we should manage freshwater
 - biophysical (e.g.,. geology, slope) affects “natural water quality and quantity, and “capacity” for use
 - values/uses and objectives
 - land use (in some cases)
 - “permanent” modifications also being considered

- Regional consistency, with some local flexibility
 - justified, transparent method
- Manageable spatial scale and number of FMU's
 - aggregate where possible
 - specificity vs planning/implementation complexity
- Clarity and certainty of boundaries
- Different FMU frameworks for surface water, groundwater, wetlands and lakes
- Flexibility during plan development

Biophysical Layer

Nicki outlined that a biophysical layer has been developed which classifies water bodies according to geology and slope because these factors are key determinants of natural water quality, water body characteristics, and response to some contaminants.

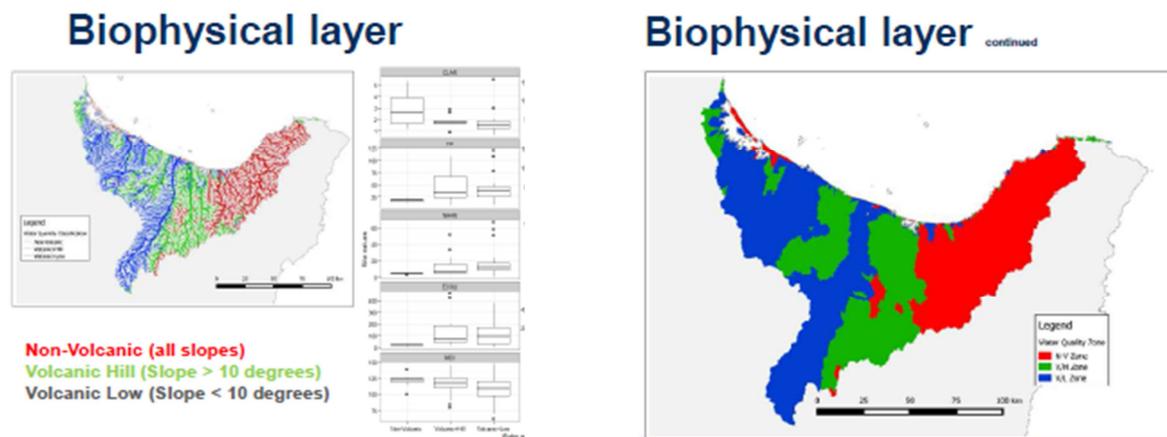


Figure 5: River classifications (left), river classifications and their catchment (3rd order streams) (slides 32 and 33)

Other Layers

Nicki explained other layers that may be important when identifying FMUs (see figure).

Pim presented a recent exercise carried out by the multidisciplinary staff project team working through these layers and questions. Staff's working draft FMUs for objective setting were discussed along with the thinking behind them. Pim also explained some of the difficulties staff found in doing this exercise.

Members then split into groups of 3 and spent time working through the layers and suggesting changes and other considerations on laminated maps provided.



Figure 6: Factors (other than biophysical) to consider when setting FMUs (slide 34).

These groups provided feedback and thoughts to the wider group.



Figure 7: Uncomfortable with lines, but see Maketu and Waihi estuary as one FMU as it's low peat land. The top edge of the peat/saline level is another FMU. The rest of the area is a third FMU.



Figure 8: Conscious that upper FMU objectives affect lower FMU's so some objectives may be the same. Would separate saline and peat; kiwifruit belt; forestry/cattle (maybe), 200m contour. Also aware that global warming may change crops grown. Waitahanui separate.



Figure 9: Urban Paengaroa/ Pukehina FMU- are there sewage/ septic tank issues? Waitahanui FMU and Pongakawa FMU. Are there coastal equity issues?

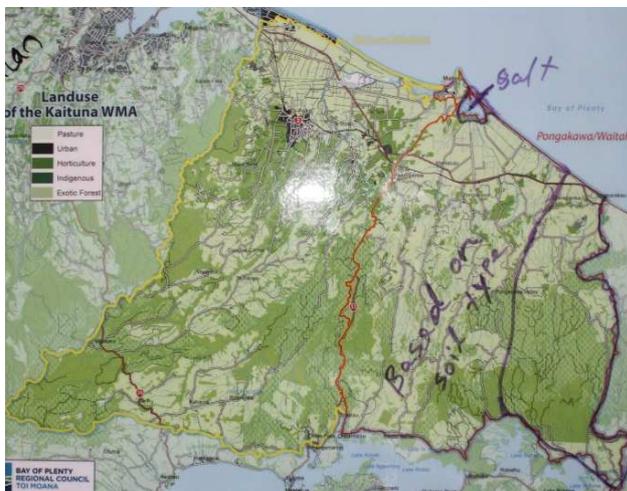


Figure 8: Waitahanui FMU might have more stringent WQ rules on stream than estuary. Salt area one FMU, the rest divided into FMU's by soil types rather than geographic lines.

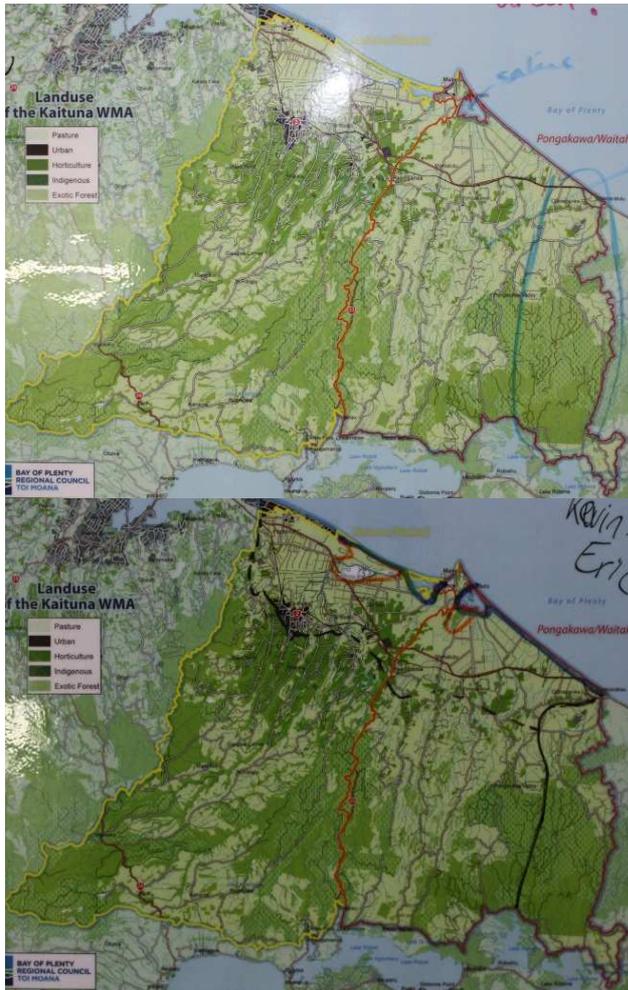


Figure 9: Waitahanui straight out to sea, but no lines after that. Remaining FMU's based on soil. Urban will need to be considered including future development requirements

Figure 10: FMU's by catchment with different FMU's for wetlands and estuarine environments. A dotted line to separate the peat/topography.

NO MAP PROVIDED. Waitahanui as one FMU. Saltwater areas separated out. Separate rest based on drainage. Concern there is not enough science and measurement will be difficult.

General comments made:

- Are wetlands and lakes part of surface water? A: Yes
- Why are lines drawn for boundary, why is it not identified by soil type? A: *The lines are around the catchments of water bodies/parts of water bodies that are each likely to have different water quality and quantity objectives for water bodies. **The focus is on where we are likely to have different objectives for the water body.** Methods of managing effects (such as managing land uses) have not been worked through and could be on a different scale. Soil type is one consideration.*
- Concern about giving feedback on lines to be drawn without knowing full implications. A: *The FMUs will be taken to Council to approve, but will remain flexible as we work toward a plan change.*
- Detailed soil mapping overlay needed.
- Need to look at use of deeper groundwater aquifers.
- A comment was made by a member that we need to start making progress and to stop repeating/covering off the same information.

Summary

- Concern about giving feedback on lines to be drawn without knowing full implications – equity issues.
- General agreement on the following areas being treated differently for objectives and management:
 1. Waitahanui
 2. Lowland peat
 3. Saline area

- Urban ? Coastal urban areas discussed (further information/research is required)
- Must consider soil type when managing land use effects on water bodies.

Action

The feedback form will be emailed out to the group to complete.

6 Closing

- The next community group workshop will not be held for a number of months until the Council approves the 3rd phase of the programme to start. Toni has suggested that a more social gathering could be held with all three community groups to share progress and build relationships.
- There was consensus that the chairs of each community group meet for collaboration, other interested group members would be welcome to attend as well. The agenda could include common points, disparities, what's coming, and what have we achieved already.
- Wilma also suggested a "group members only" informal meeting. This had mixed responses.
- Nicki suggested that any advice/outcomes that may come from such an informal meeting should be reported in to the next community group workshop for transparency.

Action

Toni to progress the "Chairs" meeting

Wilma to coordinate any informal group member gathering

Meeting ended: 2.16pm

Next meeting: TBC

Feedback notes received from Pongakawa-Waitahanui Community Group Members

Regional Values Framework Feedback			Grouping Agree/Disagree	Comments
Ecological Values	Te Hauora o te Wai / The Health and Mauri of Water	<ul style="list-style-type: none"> - Ecosystem health - Species and habitat 	Agree	<ul style="list-style-type: none"> - If species and the habitat return or increase, is one way to measure success. - Will be the result/cause of success in all the other categories Does this include missing/threatened species as well as unwanted species e.g., catfish
Social Values	Te Hauora o te Tangata / The Health and Mauri of the People	<ul style="list-style-type: none"> - Human health for recreation - Frequent immersion / Primary contact 	Agree	<i>Our waterways should be clean to allow for full time swimming. (priority)</i>
	Te Hauora o te Taiao / The Health and Mauri of the Environment	<ul style="list-style-type: none"> - Natural form and character - Amenity values 	Agree	Difficult to manage and assess (fish and game) Are wetlands natures filter or has humane intrusion changed that position. We may need more science.
	Mahinga kai / Food gathering, Places of food	<ul style="list-style-type: none"> - Mahinga kai / Kai are safe to harvest and eat - Mahinga kai / the mauri of the place is intact - Fishing 	Agree. Throughout this process we may need to break down our committees	Flounder, Kahawai Trout vs. Koura, introduced vs. native Duck pond vs gathering spot Amenity Should be available and part of the Maori/Kiwi lifestyle. If we lose this Taonga, everything we are and represent will change.
	Wai Māori / Municipal and domestic water supply	<ul style="list-style-type: none"> - Water supply 	Agree	Crucial to our survival. We must maintain to the highest degree. Quality not cost should be the priority
Social Values	He ara haere / Navigation	<ul style="list-style-type: none"> - Transport and Tauranga waka 	Agree	Access to and capacity to float water craft Needs more monitoring. Too much speed especially in our river ways. Time to get tough.
	Economic use and values	Mahi mara / Cultivation	<ul style="list-style-type: none"> - Irrigation and food production - Animal drinking water 	Agree

Regional Values Framework Feedback			Grouping Agree/Disagree	Comments
	Au putea /Economic or commercial development	<ul style="list-style-type: none"> - Commercial and industrial use - Commercial and industrial take/use/damming and diversion - Assimilative capacity – discharges - Hydro-electric power generation 	Agree. Requires a specialist committee.	<p>Is this [commercial and industrial use] included in municipal [water supply] where provided by a local authority?</p> <p>We need to toughen up. Consider the bigger picture. Monitor potential water banking by organisations for future use.</p> <p>Hydro generation on our river ways is not negotiable. It creates too much damage. Geo is cleaner and easier to work with.</p>
	Floodwater and urban storm water conveyance	<ul style="list-style-type: none"> - Flood protection and control - Urban storm water drainage and assimilation 	Agree	<p>Volume and contaminants</p> <p>We should be there to monitor adequate application and protection but I think is the role of operations / experts.</p>
Cultural values	Wai Tapu / Sacred Waters	<ul style="list-style-type: none"> - Wai Tapu – places where rituals and ceremonies are performed 	Agree Create a CAS Group for both groups Can some of the cultural values be combined?	<p>Involve a mix of cultures to create and assist understanding.</p> <p>Identify.</p>
	TBA / Sites of cultural significance	<ul style="list-style-type: none"> - Sites of cultural significance 	Agree Can some of the cultural values be combined?	As above.
	Kaitiakitanga / Historical relationships	<ul style="list-style-type: none"> - Cultural heritage and connection - Kaitiakitanga 	Agree CAS Can some of the cultural values be combined?	<p>As above.</p> <p>Some wananga may be of assistance.</p>
	Rawa tuturu / Customary resources	<ul style="list-style-type: none"> - Rawa Tuturu Kei t era te mauri (the mauri of the place is intact) 	Agree CAS Can some of the cultural values be combined?	<p>Medicinal algae</p> <p>All of the CAS may require special Taonga assistance, from Iwi.</p>
Integrated Management	Influence on other freshwater bodies	<ul style="list-style-type: none"> - Base flow - Water quality 	Agree	<p>Science for accuracy and quality monitoring.</p> <p>Does this include aquifers?</p>

Regional Values Framework Feedback			Grouping Agree/Disagree	Comments
	Moana / Influence on sensitive coastal waters and receiving environments	-	Agree	As above Expertise
	Influences on geothermal heat	-	Agree	As above. Refer to Diane Bradshaw.

Attributes Feedback		<ul style="list-style-type: none"> How would you know these values are provided for? What would it look and feel like? 	<ul style="list-style-type: none"> How would you measure this?
Ecological Values	Te Hauora o te Wai / The Health and Mauri of Water	<p>E.coli, clarity, wildlife, level, smell Mother Nature And</p> <p>Good biodiversity, minimized engineered interventions Water quality/quantity – wildlife Environmental sampling</p> <p>Flora and fauna stocktake Mauri – ask iwi Water quality, clarity, smell, nitrates, phosphorous – healthy safe waters Clarity, E.coli. Smell, testing, inspection Enough can be used Clarity – movement/flows – what’s living – quantity/quality – vegetation- nutrients</p>	<p>Science based Science and collaboration with e.g. Te Keepa Morgan and others. Routine lab & site testing, water course design Visual observation. Scientific measuring. Aesthetically attractive. Yes, Macro-invertebrate measure Water testing – flora/fauna ecology/survey. How can you measure mauri E.coli, life of fish</p>

Attributes Feedback		<ul style="list-style-type: none"> How would you know these values are provided for? What would it look and feel like? 	<ul style="list-style-type: none"> How would you measure this?
Social Values	Te Hauora o te Tangata / The Health and Mauri of the People	Health – tasting is easy Invisible by eye Recreation our peoples health Lack of illness and anxiety about the invisible water hazards Healthy and happy people. Not so many people visiting doctor Usage of the river Community wellbeing People are not getting sick	Hospitalisations, illness Clarity As above Public poll, medical records Talk to them! Health statistics Statistics Monitoring Iwi feedback Public health statistics. Public satisfaction/perception surveys/ iwi feedback Test, medical reporting
	Te Hauora o te Taiao / The Health and Mauri of the Environment	Recreation over time will let us know. Feel good/safe/proud of the waterways. Can't distinguish this from ecological values. Wide variety of species, absence of pest species Reports, observations Healthy/prolific protected natural resources	Science based As above It will feel and look clean. Monitor bird plant and fish life etc. Talk to those who remember back. Opinion seeking ? Regular surveys and observations Audits of species Nutrient/volume monitoring State of the environment monitoring Biodiversity/no loss
	Mahinga kai / Food gathering, Places of food	Recreation Lack of illness Plenty of food Abundant food Public reporting No net loss of food gathering capacity Food is there and edible	Nitrates For me this is getting too far ahead of ourselves. Medical records Surveys of fisher folk and food gatherers Health stats: PSP levels. Population studies of shellfish Feedback from food gatherers. Test shellfish. Count seafood numbers

Attributes Feedback		<ul style="list-style-type: none"> • How would you know these values are provided for? • What would it look and feel like? 	<ul style="list-style-type: none"> • How would you measure this?
	Wai Māori / Municipal and domestic water supply	Recreation Public health measures Clean drinkable water Resource consents sufficient for municipal needs Drinking water standards met – reports available Reasonable needs are being met for the future Drinkable	I feel like someone is trying to create a box prior to establishing the fix. Testing Includes capacity for firefighting? To be safe – national public health issue Safe drinking water standards met Sufficient water available Scientific testing
	He ara haere / Navigation	Recreation Evidence based Plenty of access points to waterways Good access and use of the river Enough water depth	I'll save the rest for around the table. Surveys of usage Lack of access is a thing of the past Measure siltation
Economic use and values	Mahi mara / Cultivation	Evidence based Good quality and availability	E. coli is the only consumer demanded measure of water used Natural capital – land use is matched with capability of the land Test
	Au putea or /Economic commercial development	Evidence base Absence of E.coli Sufficient resources available for growth Sustainable economy in the area Everyone involved and answered	Economic productivity of the catchment Best use of the land Financial vs. economical quality
	Floodwater and urban stormwater conveyance	Evidence based. Lack of undesirable flood impact Urban should buffer stormwater in release times, as rural [does?] Low frequency of flooding events Flooding is minimise Resilience in the catchment Urban growth not impacting on downstream users	Mitigate the effect Modelling/recording of storm events Land inundation Monitor impact downstream Do calculations on peak flow of doing the activity
Cultural values	Wai Tapu / Sacred Waters	Not qualified to comment Need to ask iwi Areas identified	Matauranga Māori framework

Attributes Feedback		<ul style="list-style-type: none"> • How would you know these values are provided for? • What would it look and feel like? 	<ul style="list-style-type: none"> • How would you measure this?
	TBA / Sites of cultural significance	Need to ask iwi	Matauranga Māori framework Protected and discussed
	Kaitiakitanga / Historical relationships	Need to ask iwi	Matauranga Māori framework
	Rawa tuturu / Customary resources	Need to ask iwi	Matauranga Māori framework How detailed and who manages to what level
Integrated Management	Influence on other freshwater bodies	Evidence based Quality of water is maintained and not degraded	Tracking contaminants to source Scientific measurement of water quality, e.g., Pongakawa Drain to Waihī estuary e.g., groundwater quality
	Moana / Influence on sensitive coastal waters and receiving environments	Evidence based Works both ways – saline intrusion on freshwater resources, degraded freshwater into estuaries Life and quality maintained	Tracking contaminants to source Scientific measurement of water quality, e.g., Pongakawa Drain to Waihī estuary Test and count species and quality
	Influences on geothermal heat	Evidence based Sustainability of the geothermal resource	Temperature monitoring of groundwater No over allocation

Are we becoming too prescriptive in value setting? Measurability – some easier than others. Agreement from all?