

Rangitāiki Freshwater Futures Community Group

Workshop Notes:

Workshop 5B (extra ordinary) Water quantity discussion / Draft in-river state (continue from 28 June Workshop 5)

Galatea Hall, 50A Mangamate Road, Galatea

Tuesday 1 August 2017 commencing at 10.00am

Members present: Larry Wetting (Co-Chair), Alamoti Te Pou (Co-Chair), Beverley Hughes, Cr Bill Clark, Cathy Brown, Colin Maunder, Earl Rewi, George Johnston, Kirsty Joynt, Linda Conning, Matt Osborne, Nick Doney, Tom Lynch, Mark Ross (for a part of the workshop)

Apologies: Alan Law, Atamira Nuku, Bill Kerrison, Christina Bunny, Craig Rowe, Daryl Christie, Gareth Boyt, James Doherty, John Gibson, Kerry Snowdon, Matt Gow, Ngaperā Rangiaho, Robert Pouwhare, Steve Brightwell, Wetini Paul

BOPRC Staff present: Simon Stokes (Relationship Manager), Kerry Gosling (Facilitator), Stephanie MacDonald (Support Facilitator), Andrew Millar (Senior Planner – Water Quantity), Michelle Lee (Planner – Water Policy), Raoul Fernandes (Science Team Leader – Water Quantity), Sandy Hohepa (Māori Policy Advisor), Toni Briggs (Project Manager), Lisa Baty (Planning Coordination Officer – Water Programme)

Related documents previously circulated:

1. Workshop Paper – Freshwater Futures Workshop 5 Overview
2. Workshop Paper – Desired In-River State - Have we got them right?
3. Workshop Paper – Issues in Rangitāiki Water Management Area
4. Workshop Paper – Use Values
5. Workshop Paper – Causal loop workshops
6. Presentation slides – Freshwater Futures Workshop 5 – second part

1 Welcome / Updates / Focus of the day

The meeting was opened with a karakia.

1.1 Agenda, purpose and updates

Agenda:

- Water quantity explanation
- Towards objective: Desired in-river state
- Alternative naming draft FMU “Rangitāiki Natural State”.

Outcome sought today:

- Confirm draft desired in-river statements towards setting freshwater objectives.

Work programme:

- Indicative calendar for future workshop 6 to workshop 9.

2 Progress to date

Project manager presented a brief timeline for future workshops before June 2018.

The next workshop will be held in mid-September. Further workshops are planned to cover scenarios, modelling and what this means for management options.

Questions / Comments

- Will there be time to discuss equity around this? *Answer: Equity will be part of management options, which will also be discussed in the socio-economic effect, balancing costs and benefits.*

Some suggestions from individual members:

- Consider further discussion on economic and social values
- There could be a sub-group focuses on allocation
- Consider widening group membership to include members from the Regional Water Advisor Panel
- Consider providing information on the historical outlets of the Rangitāiki River
- Consider the flood risk values for community safety reasons.
- Some members expressed interest in being involving in 'implementation'
- Good management practice needs to be based on the scenario discussion
- Industries and the Council may define "Good Management Practice" differently
- Consider reviewing other plan changes and the Rangitāiki River document for potential objectives to adapt. [The Rangitāiki River Forum meeting agendas and minutes are available online: <http://www.boprc.govt.nz/about-council/meetings-and-agendas/committee-structure/rangitaiki-river-forum/>]

3 Water quantity

The presentation covered the water cycle, groundwater, saline wedge, connections between waterbodies, groundwater recharge and management, allocation, groundwater modelling, surface water flow, surface water allocation and surface water allocation modelling.

Questions / Comments

- Saline wedge description (seawater) raises the need to ensure overall management of fresh water prevents the potential for saline intrusion at the coast.
- Can recharge happen quite quickly? *Answer: Yes, dependant on land cover / impermeable surfaces and the soil / aquifer properties.*
- How long does it take for the water to discharge? Is this is a slow process? *Answer: The groundwater gradient, aquifer properties and distance travelled all have effect on the time taken for water to discharge.*
- How can we mitigate stormwater effects and manage urban environments? *Answer: Surface water runoff can be managed with storage tanks and engineered ponds to attenuate rainfall.*
- Does Council have a policy for "sharing of" allocation? *Answer: This is covered in PC9. There are polices that relate to efficient use of water including water user groups, rostering and transfer of resource consents.*
- Are there any provisions to make water available for future use? *Answer: As per the Resource Management Act case law, consent applications to take water are required to be considered on a first-in-first- served basis.*
- How does PC9 interact with PC12? *Answer: PC9 covers the entire region. It includes metering requirements and sets interim limits. PC12 is specific to geographic Water Management Areas (WMAs). Water quality and new quantity limits can be tailored to suit / reflect the values in a particular WMA.*

4 Desired in-river state discussion

Draft desired in-river state statements were collated from community group member feedback worksheets and notes taken at Workshop 4. Feedback is now being sought from the group.

Staff explained the National Objective Framework requirements related to values, attributes and freshwater objectives. Identifying 'desired in-river states' will help with the process in developing freshwater objectives, but those are NOT the group recommended 'freshwater objectives'. The group is yet to consider the scenarios and modelling process (workshop 6 to 8) to determine the group's recommendations.

Continue from the 28 June workshop, where the group was half way through this exercise. Starting from the Lower Rangitāiki draft FMU, the 'Gradients of Agreement' tool was used to help the group considering the in-river state statements. Members were asked to consider all of the statements for each Freshwater Management Unit and to state where they sat on the 'Gradients of Agreement' scale outlined below:

- 1= whole hearted support
- 2= agreement with minor point of contention
- 3= support with reservations
- 4= abstain
- 5= more discussion needed
- 6= don't like but will support
- 7= serious disagreement
- 8= veto

	No. of members who selected this score	
	Lower Rangitāiki draft FMU	
Score	Initial wording	Final wording
1= whole hearted support	-	-
2= agreement with minor point of contention	1	9
3= support with reservations	3	3
4= abstain	-	1
5= more discussion needed	8	-
6= don't like but will support	-	-
7= serious disagreement	1	-
8= veto	-	-

Points of contention:

- economics need to be discussed
- the scoring for 'abstaining' is not appropriate
- RL2 wording needed to be more concise.

General comments:

- some members expressed interest in being involving in 'implementation'
- good management practice need to be based on the scenario discussion
- industries and the Council may all define "Good Management Practice" differently
- there could be a sub-group focuses on allocation.

4.1 Desired In-River States - Continued from workshop 5 (28 June 2017)

Community group members provided feedback on the draft desired in-river state statements collated from Workshop 4. This is to ensure the group view was interpreted and noted correctly.

4.1.1 Lower Rangitāiki

Original Wording	Streamlined Wording	As agreed on the day
<p>RL1.</p> <p>The river depth (including in summer) and water quality will continue to be good for swimming.</p> <p>Key attributes: water flow, water level, <i>E.coli</i> (currently in band B at Te Teko, band A at Edgecumbe and Thornton), cyanobacteria – planktonic (currently no history of blooms recorded)</p>	<p>RL1.</p> <p>Water quality and quantity will be maintained and/or improved to be suitable for swimming.</p>	<p>RL1.</p> <p>Water quality, quantity and levels will be suitable for swimming.</p> <p><i>*except in extreme weather events</i></p>
Original Wording	Streamlined Wording	As agreed on the day
<p>RL2.</p> <p>The water will support ecosystem health.</p> <p>The water flow, quality and hydrology will provide for improving ecosystem health, indigenous species, spawning areas, mahinga kai and species of importance for fishing.</p> <p>Notes: Members identified species include watercress, longfin tuna, shortfin tuna, whitebait (including inanga, koaro, banded kōkopu and/or giant kōkopu), kahawai, mullet, lamprey, parore, kakahi, kotuku, bittern, mallard and grey ducks and trout.</p> <p>Key attribute: water flow, nitrate (toxicity, currently in band A, ammonia (toxicity, currently in band A, phytoplankton, periphyton/algae, dissolved oxygen, temperature, pH, total suspended solids*, benthic cyanobacteria, macrophytes, invertebrates, phosphorous*, metal[?], pesticides[?], fish[?], habitat[?].</p>	<p>RL2.</p> <p>Water quality and quantity continue to provide for significant indigenous species, and mahinga kai and species that are important for fishing which are safe to eat.</p>	<p>RL2.</p> <p>Water quality and quantity provides for ecosystem health for significant indigenous species, and mahinga kai and species that are important for fishing which are safe to eat.</p> <p>Note: include spawning</p>

Original Wording	Streamlined Wording	As agreed on the day
<p>RL3.</p> <p>Wetlands will be suitable for water fowl habitat, such as for the presence of kotuku and bittern.</p> <p>Key attributes: water level, habitats?</p>	<p>RL3.</p> <p>Wetlands will be suitable for water fowl habitat, such as for the presence of kotuku and bittern.</p>	<p>RL3.</p> <p>Wetlands will be restored and enhanced to improve their intrinsic value and functions.</p> <p><i>Note as a habitat for indigenous species, game birds and appropriate recreational activities.</i></p> <p><i>*kotuku and bittern are not water fowl.</i></p>
Original Wording	Streamlined Wording	As agreed on the day
<p>RL4.</p> <p>Natural form and character will be improved.</p> <p>Notes: Members noted the Lower Rangitāiki River has been heavily modified including structural changes and pest plant and animal impacts</p> <p>Key attributes: water flow, algae, wetland vegetation, erosion/total suspended solids*, modification?, wetland vegetation? [note more information to be added with tangata whenua knowledge input]</p>	<p>RL4.</p> <p>Natural form and character will be improved.</p>	<p>RL4.</p> <p>The enhancement of the form, natural character and mauri of rivers and streams will be a priority.</p>
Original Wording	Streamlined Wording	As agreed on the day
<p>RL5.</p> <p>Water will provide for wai tapu, sites of cultural significance and customary cultural ceremonial activities.</p> <p>Key attributes: Information to be added with tangata whenua knowledge input.</p>	<p>RL5.</p> <p>Water quality and quantity will provide for wai tapu, sites of cultural significance and customary cultural ceremonial activities.</p>	<p>RL5.</p> <p>Water quality and quantity will provide for wai tapu, sites of cultural significance and customary activities.</p> <p><i>Note Customary includes cultural, ceremonial, spiritual and food gathering.</i></p>
Original Wording	Streamlined Wording	As agreed on the day
<p>RL6.</p> <p>Water will continue to provide for transport / tauranga waka.</p> <p>Key attributes: water flow.</p>	<p>RL6.</p> <p>Water quality and quantity will continue to provide for transport/ tauranga waka.</p>	<p>RL6.</p> <p>Water quality and quantity will provide for safe passage and accessibility for water craft/waka.</p> <p><i>Note tauranga waka and for recreational and commercial uses. Safety for communities.</i></p>

4.1.2 Middle – Upper Rangitāiki

Original Wording	Streamlined Wording	As agreed on the day
<p>RM1.</p> <p>The water will continue to be good for swimming.</p> <p>Notes: The swimming experience could be improved by reducing sediment, filamentous algae, aquatic weed and human waste.</p> <p>Key attributes: water level, <i>E.coli</i> (currently in band A at Murupara, band B at SH5, below acceptable for swimming at Matahina Dam and Aniwhenua Canal), total suspended solids*, cyanobacteria - planktonic.</p>	<p>RM1.</p> <p>Water quality and quantity will be maintained and/or improved to be suitable for swimming.</p>	<p>RM1.</p> <p>Water quality will be improved to be suitable for swimming.</p> <p>Note Murupara and Lake Aniwhenua</p>
Original Wording	Streamlined Wording	As agreed on the day
<p>RM2.</p> <p>The water will support the natural form and character.</p> <p>Key attributes: water flow, habitat[?], temperature, total suspended solids*, deposited sediment[?], algae.</p>	<p>RM2.</p> <p>Natural form and character will be maintained and/or improved.</p>	<p>RM2.</p> <p>The improvement of the form, natural character and amenity value, mauri of rivers and streams will be a priority.</p> <p>Note instream / current structures</p>
Original Wording	Streamlined Wording	As agreed on the day
<p>RM3.</p> <p>The water will support ecosystem health, significant indigenous species, mahinga kai and species that are important for fishing.</p> <p>The water quality and flow will provide for habitats of mahinga kai, native and/or fishing species, including reducing silt going into the river and affecting habitats.</p> <p>Notes: Members noted opportunities should be taken to restore wetlands, remove weeds (blackberry, gorse and</p>	<p>RM3.</p> <p>Water quality and quantity continue to provide for significant indigenous species, and mahinga kai are safe to eat.</p>	<p>RM3.</p> <p>Water quality and quantity provides for ecosystem health for significant indigenous species, and mahinga kai and species that are important for fishing which are safe to eat.</p>

<p>aquatic weed), plant riparian margins and include buffers between streams and forestry blocks. Species noted by members include longfin tuna inanga, koaro, banded kōkopu and/or giant kōkopu, koura, kakahi, watercress, whio and trout. More information is needed on koura, kakahi, kotuku, mallard and grey duck. Sediment reduction is a key concern.</p> <p>Key attributes: nitrate (toxicity, currently in band B at Otamatea, band A at Murupara and Matahina), ammonia (toxicity, currently in band A at Murupara and Matahina), total nitrogen, total phosphorus, trophic level index, phytoplankton, periphyton/algae, dissolved oxygen, temperature, pH, total suspended solids*, silt[?], benthic cyanobacteria, macrophytes, lake submerge plant index invertebrates, phosphorous*, metal[?], pesticides[?], fish[?], habitat[?] [more information is needed on koura, kakahi, kotuku, mallard and grey duck].</p>		
Original Wording	Streamlined Wording	As agreed on the day
<p>RM4.</p> <p>The water flow and quality will continue to provide for wai tapu, springs, sites of cultural significance and customary cultural ceremonial activities.</p> <p>Possible measures: appropriate cultural impact assessment (which Rangitāiki, group members suggested assessing the impacts on tuna/eel and physical connection, from modified landscape and waterways, artificial mixing of water and presence of human waste) [note more information to be added with tangata whenua knowledge input].</p>	<p>RM4 .</p> <p>Water quality and quantity continues to provide for wai tapu, springs, sites of cultural significance and customary cultural ceremonial activities.</p>	<p>RM4.</p> <p>Water quality and quantity will provide for wai tapu, sites of cultural significance and customary activities.</p>
Original Wording	Streamlined Wording	As agreed on the day
<p>RM5.</p> <p>The water flow and quality will continue to provide for transport/tauranga waka, and recreational uses</p>	<p>RM5 .</p> <p>The water quality and quantity continues to provide for transport/tauranga waka, and</p>	<p>RM5.</p> <p>Water quality and quantity will provide for safe passage and accessibility for water</p>

<p>including rafting.</p> <p>Key attributes: water flow, <i>E.coli</i> (currently in band A, in relation to the annual median, at Murupara and at Matahina Dam and Aniwhenua Canal), tree log obstructions?</p>	<p>recreational uses.</p>	<p>craft/waka.</p>
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4.1.3 Rangitāiki Natural State

Original Wording	Streamlined Wording	As agreed on the day
<p>RN1.</p> <p>The water will continue to be swimmable without getting sick.</p> <p>Key attributes: <i>E. coli</i> (currently in band B), pathogens (Giardia cysts)?</p>	<p>RN1.</p> <p>Water quality and quantity continues to be suitable for swimming.</p>	<p>RN1.</p> <p>Water quality continues to be suitable for swimming.</p> <p>Current water quality is maintained and improved in every surface waterway.</p> <ul style="list-style-type: none"> • <i>In terms of pathogen and bacteria</i> • <i>Drinking water.</i> • <i>E. coli</i>
Original Wording	Streamlined Wording	As agreed on the day
<p>RN2.</p> <p>The water will continue to support the natural form and character as it is now, while seeking opportunities to control and reduce pest plants and animals.</p> <p>Key attributes: water flow, habitat?, temperature, total suspended solids*, deposited sediment?, algae, metal?</p>	<p>RN2.</p> <p>The natural form and character of the river will be maintained.</p>	<p>RN2.</p> <p>The maintenance of the form, character and mauri of rivers and streams will be a priority.</p>
Original Wording	Streamlined Wording	As agreed on the day
<p>RN3.</p> <p>The water will support the ecosystems' health, fishing and eeling in tributaries, and the tributaries' health is not affected by algae.</p> <p>Key attributes: nitrate (toxicity, currently in band A), ammonia (toxicity, currently in band A), dissolved oxygen,</p>	<p>RN3.</p> <p>Water quality and quantity continue to provide for significant indigenous species, and mahinga kai and species that are important for fishing which are safe to eat.</p>	<p>RN3.</p> <p>Water quality and quantity will provide for native species, species that are important for fishing and mahinga kai, and their habitats/ecosystems.</p>

<p>periphyton, temperature, pH, total suspended solids*, algae, benthic cyanobacteria, macrophytes, invertebrates, phosphorous*, metal?, pesticides?, fish?</p> <p>The water will continue to provide for fish and bird habitats. The level of sediment in the water will be managed for providing healthy habitats for mahinga kai species.</p> <p>Notes: Members noted species include whio, koura, whitebait (koaro, kōkōpu and galaxiids), trout and longfin tuna. Sediment and algae in the water were noted as particular concerns.</p> <p>Key attributes: water flow, dissolved oxygen, temperature, invertebrates, total suspended solids*, deposited sediment?, metal?, pesticides?, fish?, habitat?</p> <p>The water will continue to provide for mahinga kai that is safe to eat as it is now.</p> <p>Key attributes: <i>E. coli</i>, benthic cyanobacteria, macrophytes, invertebrates, metal?, pesticides?, pathogens (<i>Giardia</i> cysts)?, faecal coliforms?, fish?, habitat?</p>		
Original Wording	Streamlined Wording	As agreed on the day
<p>RN4.</p> <p>The water will continue to be suitable for wai tapu and cultural spiritual needs.</p> <p>Key attributes: water flow [preliminary information subject to tangata whenua knowledge input].</p>	<p>RN4.</p> <p>Water quality and quantity will continue to be suitable for wai tapu, sites of cultural significance, and customary cultural and ceremonial activities.</p>	<p>RN4.</p> <p>Water quality and quantity provides for wai tapu, sites of cultural significance, and customary activities</p>

Key questions / comments

- Some members suggested the group should discuss the use values related to economic prosperity. It is considered important to work on use values, social values and economic values. Give them equal consideration when comes to a management options conversation.
- One member suggested restoring the river to its pre-1914 condition when it was connected to the Tarawera River and Whakatāne River through the Orini and Omeheu canals.

5 Resource management issues

Members considered the summary of resource management issues. The following resource management issues were highlighted:

- Amend to “*increasing water demand in lower catchment surface and groundwater availability*”. Remove ‘risk of effects’ and ‘dependent on HEP dam operation’
- Swimming sites should be considered a part of connected river, instead of swimming ‘spots’
- The ten year resource consent tenure is too short for some capital investment.
- Absence of metering in the past (ie not knowing how water is being used)
- Climate change and extreme events
- Flood protection
- Future forestry, such as the requirement of doubling output could be an issue.

Member also identified other issues that may have resource management implications as follows:

- Māori land ownership and water rights can change the conversation in the community
- Dealing with national values in local terms
- The catchment has a small population/rate base
- Changing industries that technology may allow future-proof growth
- Managing dam structure and releasing of flood water.

For further ideas on management options, members were encouraged to capture their ideas on the large ‘Management Options’ and ‘Principles’ posters displayed in the foyer.

6 Re-naming the draft ‘Rangitāiki Natural State’ FMU

Community group members advised staff to engage with Ngai Tūhoe, Ngāti Whare and Ngāti Manawa in re-naming the draft ‘Rangitāiki Natural State’ FMU.

7 What’s next

- Calendar indicating the upcoming workshops.
- Next workshop will include these discussions on the other values.

Workshop ended at 2.48pm with a karakia.