

Pongakawa/Waitahanui Freshwater Futures Community Group Workshop held in Pongakawa Hall, Pongakawa, on Tuesday 15 March 2016 commencing at 9.00am

Chairman: Pim de Monchy

Facilitator: Stephanie Macdonald / Kerry Gosling

Scribe: Lisa Baty

Present: Andre Hickson, Bernie Hermann, Bev Nairn, Colin McCarthy, Darryl Jensen, Dennis Walker, Geoff Rice, Grant Rowe, Councillor Jane Nees, John Garwood, John Cameron, John Meikle, Kevin Marsh, Melv Anderson, Mike Maassen, Paul Van der Berg, Te Awhi Manahi. Rani Dhaliwal – Phd student.

BOPRC Staff: Alex Miller, Alastair Suren, Beverly Hughes, Clarke Koopu, Janine Barber, Jill Owen, Michelle Lee, Kerry Gosling, Pim De Monchy, Paul Scholes, Raoul Fernandes, Rochelle Carter, Stephanie Macdonald and Shay Dean.

Apologies: Julian Fitter, Paul Van der Berg, Wilma Foster.

1 Welcome/introductions

Pim de Monchy welcomed the group and invited Geoff Rice to open the meeting with a karakia.

Apologies were noted. It was agreed an introduction of each Scientist would be best at the start of each presentation. Approvals were sought from members to have Rani Dhaliwal observe today's meeting; approval was given with no unwillingness. Rani provided background of her education and reasons for attending today's meeting.

1.1 Gaps in membership

- Ngāti Pikiao and Ngāti Mākinō – have chosen not to engage in the process
- Rotorua Lakes Council have been approached – Andy Bell and / or Ella Jonker are considering joining. TBC for workshop 3
- Te Arawa Lakes Trust – Roku Mihinui – invitation to be made to join the group
- Quarry industry (Winstone) – no longer a gap as the quarry is not operating at present.

Pim went through the housekeeping rules and provided background to the purpose of today's meeting and detailing the group's contribution at this forum.

All groups have confirmed workshop notes can be provided to ensure transparency and records of questions asked for information sharing purposes.

Michelle Lee informed of the values framework and council process around the Freshwater Management Unit methodology and the Resource Legislation Amendment Bill. A reminder was given for attendance at the MFE meeting being held this evening at Trinity Wharf, Tauranga.

2 Science Current State (Rob Donald)

Rob (Science Manager) stated the science approach is to provide you with as much information as possible, for you to gain an understanding of our current state, asking members to interact and ask questions as we go along on this process. Rob talked to the prioritised gaps outlined by Council via his presentation.

The National Objectives Framework (NOF) identifies the compulsory limits for freshwater to protect 'human health for recreation' and 'ecosystem health'.

Comments made:

- Is there any information that this group should have that is not already provided?
- How much do we need to take in?
- Assessing the effect – catchment approach.

3 Aquatic Ecology (Alastair Suren)

Alastair provided details of the ecosystem health value set under the National Policy Statement for Freshwater. There are 64 monitoring sites with 17 under the Council having been monitored for 10-15 years.

It was noted that native bush has the highest health, with urban streams having poor habitat and water quality due to the slow flow and high temperatures. There are a number of considerations against habitat change – stock grazing, vegetation, temperatures and overfishing as an example. As a council we need to maintain the current levels if not improve.

Comments made:

- How many in our specific area?
- Is urban area classed as land use? What effect does this have on the estuary?
- What is the quality of water?
- Potential water available? Have tests been done on 'pre and post' crop production?
- What is Rip Rap?
- Has thought been given to; storage of water / harvesting?
- Is speed of water velocity taken into Councils measurements?

ACTION: Council is inconsistent in the management of drains

4 River – Water Quality (Rochelle Carter)

Rochelle described Council has three key areas for water quality; Physical, Chemical and Biological, with routine long term monitoring in place. Summer sampling of bacteria occurs on a weekly/biweekly rotation to ensure the swimming quality is of standard

From a diagram shown, all sites recorded in the Pongakawa/Waitahanui area, all are graded A or B for both nitrate and ammonia which is above the national bottom line. Rochelle also noted that the gaps identified for tributaries and drains are being filled. Five sites have been newly identified with monitoring only starting late last year; we only hold three examples thus far.

Comments made:

- Are measures for total phosphorus captured?
- What is the average on all sites?
- Nitrate increase is this – good to bad – bad to real bad?
- Can nitrate affect health?
- Monthly monitoring – does this include after a weather 'event?'

- How rigorous is sampling? Are Council confident in the data that was captured 20 years ago?
- How long does leeching take to present effects?
- What are the comparisons to our areas nitrates?

ACTION: Standards between wading and swimming to be sent to the group.

5 Estuarine – Ecology and Water Quality (Paul Scholes)

Paul explained that the National Policy Statement (NPS) for Freshwater focus is on freshwater and does not apply to coastal waters, but must take into account the receiving environment. For freshwater catchments feeding into estuaries, such as the Waihi Estuary, this is important because estuaries are typically more sensitive to contaminant loads than rivers, especially soft-bottomed pumice rivers such as those in this catchment.

Paul confirmed sea grass is a good indicator of estuarine health, with a change in quantities which used to be dominant in 1940's. There are measured sites showing dominant red seaweed, the extent has increased in recent times by 30 percent.

When algae and sediment are present in the harbour there is not much growth, metal contents in sediments cause to influence the animals. When monitoring, we use as an indicator Chlorophyll A (which measures the concentration of a type of plant material and is positively correlated with algal abundance).

Comments made:

- Pre 1940 were there no open streams direct into Pongakawa
- Could species grow in the red seaweed? Is this trend similar to other estuaries?
- What was the tipping point in trend for Pongakawa?
- Is there a link to adverse weather effects?
- With heavy metal testing, as there is no data shown today, are there any problems with cockle?
- Is there a certain time for testing?
- Has Little Waihi been sampled for long enough to show cockle salt tolerance?
- With the indicator samples taken from estuaries/rivers, can you tell what comes from the water tank?
- Is there a possibility of determining animal / human secrete?
- What is the cause of decline in nutrients?
- There is definitely a trend. Waihi might be worse than we think.
- Nitrate is going up, bacteria is down and algae is up – what is the trend line?
- Previously the water entering the estuary was subject to filtering through wetlands, especially because the water velocities were much lower. If you take out the acres of filtering, the water simply goes out to sea.
- Where is Council funding going to be spent/prioritised? Preference is on achieving more data.

6 Freshwater Wetland Ecology – (Shay Dean)

Shay provided detail on what determines a wetland and the state of freshwater wetlands from an ecological view.

The importance of wetlands makes up 22 percent of native land bird and 30 percent of native freshwater fish. Including the filtering of sediments, nutrients and contaminate, wetlands also control floods and reduce erosion by slowing and capturing of water. Shay outlined the threats and impacts and an overall decrease in wetland function. Wetland attributes are still being developed for inclusion within the NOF.

Before and after pictures were spoken to identifying the loss of wetland in this region, we are currently down to 1.5 percent remaining. The Council have implemented a wetland condition monitoring programme to monitor and further research the baseline data required. The BOPRC are one of a few councils who have initiated this programme.

Comments made:

- The date of the original picture used? 1840 (showing how many hectares of lost wetlands)
- What is the difference between Fen and Swap?
- Is it within our scope to introduce invertebrate/fish?
- Do we have a modelling of sea level rise and climate change to map wetlands future?

A member noted the importance of a wetland, we can never revert back to previous states, we do however have the opportunity to create small wetlands on current land.

7 Groundwater – Hydrology (Janine Barber and Raoul Fernandes)

Janine provided background to the natural water cycle and how this is replenished by rainfall. There are many different aquifers; being sand, gravel and fractured rock, the water in aquifers is then brought to the surface naturally via springs which can supply a continuous flow of water to a river, lake, wetland or stream – this is known as ‘baseflow’. The volume of groundwater stored is monitored via recharge stations.

Raoul talked about Lysometers, their installation and monitoring, and how much water infiltrates to recharge the aquifer(s).

Janine explained that an unconfined aquifer is a support for the water level = bore, and a confined system is separated from surface water = artesian bore.

Further monitoring and data analysis will be implemented to understand rainfall and surface water balance in more detail, all bore locations have water quality monitoring currently. Discharges can come from springs/swamps/fens, out of 185 sites, 100 are visited.

The flow can travel where it wants to; there are elements of climate and human impact to consider. .

Comments made:

- Do you class gravel and pumice as the same?
- At what depth do you transition from unconfined to confined aquifers?
- What vertical measures do we have separating out aquifers?
- Timing of ‘flow’ how long does it take to come through?
- What is the drilling programme timeframe?
- How far back is the water coming from? I.e. lakes.
- Has consideration been given to submission of storing water? Damming?

8 Consents and Compliance (Alex Miller and Jill Owen)

Jill spoke to the Current State National/Regional Policy Statements for ground and surface water allocation, with the limits set under the RMA. The current limits are under review which provides a great opportunity for ideas to be put forward.

Policy for eco flows and water levels are on a first in first served basis for allocation, with consideration given to environment changes and cultural values.

Alex added that an open day will be held to have registration for water takes; this will hopefully identify unconsented surface water takes in this area. Alex also noted there are challenges in

many areas of consents; verification and accurate records of meters in horticulture, management of dairy effluent ponds and forestry covering such a vast area of land.

Comments made:

- Unconsented takes and allocations – does Council have an understanding who is taking the water?
- Need to determine water ‘takers’ to fund the process – Does Council have enforcement process for those that are unconsented?
- Illegal takes/consents is not just the Councils concern, there is obligation of the users/community to speak up if something is seen.
- There needs to be consistency on compliance – example; Compliance fine on Kiwifruit association should ‘they’ dump into water, where Urban are not held liable.

It was noted the members felt Council should have a database capturing all bores on properties. Te Awhi offered that if there are any cultural effects for the Pongakawa River to see her in the first instance.

9 State of the Environment (Rob Donald)

Rob gave a high level summary noting the loss of sea grass beds in estuaries and the long term ecological monitoring reductions and sediment health in the mid to upper reaches of the estuary. The key message was, this is not a new occurrence, the Regional Council have seen degradation in some of the estuaries over some time and we have actions in place to address.

Rob asked if there were any further gaps the members would like addressed.

Comments made:

- What is the baseline of take and the impact on our community? We are already over allocated, do the applicants need to provide more information?
- Are rivers being monitored on flow?
- Science of value?
- Effort into nutrient budgets of tolerance?
- What are our roles to establish values then allocate resources we have to re-evaluate and understand better use?
- State of current kiwi/avo/dairy future intense land use? Surface water is obvious; groundwater needs increased funding to better understand the science.
- There is no Queens’s chain – Why?
- Maps – <https://www.walkingaccess.govt.nz/walkways-and-access/walking-access-mapping/>
- Council wants to hear the member’s views. The impact of work – MPS freshwater technical terms and standard change - NPS, RMA, NES.

Michelle reminded members of the MFE meeting being held tonight at Trinity Wharf, which will discuss **Next Steps for Freshwater Reform**.

10 Socio Economic (Michelle Lee)

Michelle talked to the current social and economic relationships, noting the importance of freshwater resources at the local catchment and regional scale.

The population increase across the Bay of Plenty with Agriculture and Forestry is a key dependency on local freshwater resources.

Michelle commented that Council will come back with further information once this has been progressed.

11 Māori Interests and Values (Beverly Hughes and Clarke Koopu)

Clarke talked to the Iwi associated with Pongakawa/Waitahanui water management area (WMA).

Beverly introduced herself and spoke to Maori interests, detailing the multiple ownerships of freehold land, tenants in common and the Maori Land Act 1993.

Bev noted the values as Tangata o te Whenua – with emphasis on the importance of relationships and belief.

Comments made:

- Are there any outstanding treaty settlements in this area?
- Te Maru o Kaituna was given as an example – inclusion of all iwi involved, some iwi want a completed claim.
- Cultural effects assessments on land, taking water from Kaituna.

12 Summary of the day

Stephanie spoke about the variety of presentations given over the day and re-capped what has been agreed to:

- Sharing of each community groups – meeting notes
- Rani Dhaliwal is attending today's meeting for research purposes
- Te Arawa Lakes membership – invite Roku Mihinui
- Geo model to be made available "earth beneath our feet".

Round the room comments:

- Pongakawa is not in a good state;
- There is an opportunity in this environment;
- Piece meal approach – collaborative; Beyond current capacity, setting levels;
- Value of the science presentations, wanting more funding in this area, don't make the same mistakes;
- Loss of wetlands, rivers altered and over allocation;
- Hydraulic / Science to base decisions on;
- Geotech and science need more resources;
- Condition of rivers; more clear processes, eliminate detail.

Summary of the day:

- Invertebrates – trends are stable;
- Surface water – generally ok for swimming conditions with rising nitrogen;
- Estuary – this is a flagged area with nitrate and algae in shellfish gathering;
- Groundwater – the rate of extraction, resource is ok;
- Wetlands – 1.5% left, opportunity for us and landowners to increase sustainability;
- Consents – water takes are at allocated capacity;
- Compliance – Catchment is similar in compliance, effected risk, peak land and disposal;
- Māori Interest – Legal framework needs to take into account the relationships.

Our information is on-going, we have prioritised the gaps and continuously look at how funding is directed. If any members have comments please make this known to your relationship manager.

We look forward to the next meeting.

Meeting ended: 2.23pm

Next meeting: 10 May 2016