Report of Te Awarua-o-Porirua Whaitua Committee Workshop

10 May 2018, 5.00pm – 9.00pm
Takapūwāhia Marae, Porirua
Workshop (Closed to the public)

Summary

This report summarises notes from a workshop of the Te Awarua-o-Porirua Whaitua Committee held on Thursday 10 May 2018 at the Takapūwāhia Marae.

Contents

These notes contain the following:

Overview

Workshop Attendees

Te Awarua-o-Porirua Whaitua Committee:

Present: Diane Strugnell, David Lee (arrived 6.45pm), Barbara Donaldson, John Gibbs, Sharli-Jo Solomon, John McKoy, Stu Farrant (Chair until 7.15pm), Dale Williams, Richard Cook (arrived 5.20pm), Hikitia Ropata (Chair from 7.15pm)

Apologies: Jennie Smeaton, Larissa Toelupe, Warrick Lyon

Greater Wellington Project Team: Alastair Smaill (Project Manager), Suze Keith, Jon Gabites, Sheryl Miller, Paula Hammond, Mike Grace, Keith Calder (PCC), Turi Hippolite (Ngāti Toa), Kent Barrett

Independent Facilitator: Kristy McGregor (Mitchell Daysh)

Guests:
- Taku Parai, Ngāti Toa

- Peter Gilberd, Wellington City Councillor
- Andrew Gray, Landscape Architect, Porirua City Council
- Mark Heath, Scientist, Greater Wellington Regional Council
- Torrey McDonnell, Planner, Porirua City Council

Notes prepared by Suze Keith and Kristy McGregor.

Workshop Purpose

The purposes of this workshop were to:

- Complete the development of Freshwater Objectives:
    1. Develop objectives for MCI, Periphyton and Fish
- Community Engagement:
    2. Update the Committee on community engagement activities, including meetings undertaken with Porirua City Council, Wellington City Council and Wellington Water, including extracting key messages and further actions
    3. Consider future engagement activities including who else we need to be talking to

Purpose 1 was achieved. Purpose 2 was discussed, although noting time restrictions prohibited the extraction of follow up actions required. There was insufficient time in the evening to complete Purpose 3 so this has been noted as a priority for the commencement of the next Committee Workshop.

Agenda

The agenda is detailed in the table below.

TIME	TASK	PURPOSE	WHO
Part 1: Introduction			
5.00pm	**Karakia**		Sharli-Jo/Hikitia
	Welcome • Apologies & introductions **Chair's Direction** • Purpose of meeting & agenda outline	Establish purpose of meeting	Stu
	Housekeeping		Kristy
	Role of Tonight's Workshop • Focus of this evening's workshop	Clarify what we are doing tonight, and where this fits in the decision-making	Kristy

		process	
5.15pm	**Check in on freshwater objective setting** • Progress made at last Committee Meeting • Check in on objectives summary table & gaps filled in by the Project Team • Commentary from Ngāti Toa • Opportunities for further review	Signpost for the Committee where we are at; brief check in on comfort with draft objectives	Kristy Hayley /Sheryl /Al/Hikitia/Sharli-Jo
Part 2: Learning from Ngāti Toa			
5.30pm	**Sharing of knowledge by Ngāti Toa** • Taku Parai from Ngāti Toa to share his knowledge about streams within the catchment	To learn from Ngāti Toa	Taku
Part 3: Community Engagement			
6.00pm	**Update on Engagement Meetings** • Porirua City Council – officers and Councillors • Wellington City Council • Wellington Water • Water Sensitive Cities– Councillor session	Inform Committee; tease out key messages and any required follow up actions	Suze, Al & Committee Members
	Discussion on Community Engagement • Who else we need to be talking to? • Value in a wider discussion? If so, how?	To gauge the Committee's interest in furthering community input; value of engagement	Kristy
6.30pm	**Dinner**		
Part 4: Freshwater Objectives			
7.00pm	**Presentation: Scenario Modelling Data for Ecological Attributes** • Process of developing the assessments • Results of assessments undertaken - high region-wide overview; main drivers of change; patterns of note • Case study: Complete objective	Inform Committee of high level overview of ecological attributes data; process undertaken; work through one stream as	Ned & Mark

	setting for the Kenepuru Stream	a group	
7.45pm	**Introduction to Group Activity: Developing Objectives for Ecological Attributes** • Walk through group activity instructions	Introduce group activity	Kristy
	Group Activity: Developing Objectives for Ecological Attributes • Break into three allocated groups • Use WMUs allocated to each group • Complete activity sheets	Work in small groups to set ecological attributes objectives	Group Facilitators
8.30pm	**Reporting & Group Discussion** • Reporting back from each group • Discussion on each objective • Confirmation of objectives	Achieve consensus on objectives discussed in smaller groups	Kristy
Part 5: Conclusion			
8:50pm	**Other Business** • Update on field trip/stream walkover • Staffing updates		Sharli-Jo, Suze & Al
8.55pm	**Thank yous**		Sharli-Jo
	Karakia		Sharli-Jo/Hikitia

Committee Decisions The Committee made decisions on the objectives for freshwater quality for the ecological attributes, for 10 of the 23 Water Management Units in the whaitua, for which information was provided. These will serve as a proxy for the other WMUs in the WMU groupings.

Workshop Actions The following actions were agreed to:

1. Suze and Kristy to place Community Engagement Discussion as first agenda item for 31st May workshop.
2. Suze to follow up with Taku and Ngāti Toa for a copy of the 1929 ecological survey – by 31st May.
3. Keith to prepare a collage of 1940's aerial photographs, which before development show the clearest images of the stream pathways – for

meeting on 31st May.

4. Keith to locate Bruce Murray's book with maps of streams – for 31st May.
5. Suze to send an email to the Committee with update on the Stream Walkover and requesting any information/feedback that is needed to make further arrangements – before 18th May.
6. Suze to summarise all of the feedback from engagements in one document – by 25th May.

Workshop Notes

Part 1: Introduction

Welcome

Stu welcomed everyone to the meeting.

Role of the Workshop

Kristy explained the role of the workshop as being the second workshop to set freshwater objectives, this time for the three ecological attributes, periphyton, macroinvertebrates (MCI) and fish. She explained the other aim for the workshop was to get a sense of the recent engagement activities, and to think about other community engagement that might be needed moving forward.

Check in on Freshwater Objective Setting

The Committee was taken briefly to the draft freshwater objectives. Kristy noted that these were only drafts and that the Committee would be given further time and information to review these objectives, however at present the focus was on ensuring, in light of them being modelled only on environmental data, the Committee was generally content.

Sheryl spoke to the few objectives that had been completed by the Project Team. The Committee was asked if there were any questions on these areas. Questions were asked about the Hukarito and Mahinawa Streams which had a double band of B/C. Sheryl noted that they were pretty close; it was more aspirational jumping up to B. Sharli-Jo and Hikitia noted that for the streams near the Marae, they would like these brought up to an A band. Questions were also asked about ensuring that the other parts of streams (such as the upper reaches) don't get worse when the data and focus may be on the lower reaches which are likely to have more degraded water quality.

Changes were recorded on the Tally Table, which can be found here.

The Committee noted that the economic results will help to understand the degree of effort in dollars. Al noted that this was a first cut. Streams have been grouped together and as there are similarities, these may be further grouped together. After doing the coastal objectives, for the

harbour, may look to change some of these draft freshwater objectives. We will need to ask the question, what do we want in the coastal water? Can we do it or do we need to change the freshwater objectives?

It was noted that we need to be moderately consistent in the way we approach objectives. For example, similar levels of aspiration plus pragmatism. This may be an issue in the way the streams are grouped together. Al agreed that there would need to be a check to ensure the objectives are logical across sub catchments, and also reconsidered with social and economic inputs.
The role of sediment was questioned, given its importance with the harbour strategy and the NPS. Al noted the main driver for sediment limits will be the harbour, so need to work up from there.

The Committee acknowledged they were generally content with the direction of the draft freshwater objectives. Kristy noted that the draft freshwater objectives would be further revisited at future meetings.

Part 2 – Learning from Ngāti Toa

Sharing of Knowledge

Taku Parai, Rangatira of Ngāti Toa, spoke to the streams within the Takapūwāhia area and the names of the streams. Once, streams were all named based on what happened near waterways, such as where eeling occurred, and how streams and rivers acted to sustain life and as hapu boundaries. Taku noted the importance of groups such as the Whaitua to help flip around this change, come together to work together, and to find out these places of significance.
Taku noted an ecological survey he has of the harbour, which was completed in 1929. It was the first survey completed by two chaps, along with a Māori guide, walking from Makara. It names all of the streams in the area, starting on the Makara coast.

Action: Suze to follow up with Taku and Ngāti Toa for a copy of the 1929 ecological survey.

Discussed the accessibility of documentation of names, as used for the Treaty Claim. Taku noted that there was written, oral and professional research available. Robert McLean did a lot of early research. Taku said the information was available but would need to be referenced back to Ngāti Toa. It would be helpful to understand what is already known.

Al noted that when the Proposed Natural Resources Plan (PNRP) was developed there was an opportunity for Ngāti Toa to reference a number of sites of significance. Mike Grace noted at the time kaitiaki got together to develop a criteria of mana whenua sites around the region. He spoke to the relationship through Aratahi, who built trust over the year for kaitiaki to identify water bodies where they were concerned about the effects of development, and places of significance to mana whenua. Each iwi developed a schedule, including Jennie Smeaton and Raina Solomon from Ngāti Toa. Ngāti Toa decided to only include sites on public land, but certainly there is a process to tell private landowners that they have sites of significance on their land and inform them of their responsibilities. Sites that are in the GW jurisdiction can be included, including any in waterbodies, and the CMA. Under the PNRP a number of activities are restricted where sites of significance have been identified. For example Category 1 waterbodies - stock must be excluded and consent for works is required, rather than occurring as permitted activities. Mana whenua must be involved in the management of these places. Most are quite contained. Water quality across the whole catchment would often need to be managed in order to look after mana whenua sites.

Ngāti Toa Feedback on Draft Freshwater Objectives established on April 19, 2018.

Hikitia provided a report back to the Committee on behalf of Jennie, Sharli-Jo and herself. Generally, there was agreement regarding the objectives, with some commentary. Consider that Rangituhi needs the highest level of protection. It is one of the largest areas of remnant bush, is a site for harvesting rongoa, and freshwater is in a pristine state, supporting the presence waikoura.

Concerned with the construction of the adventure park, and the risk of impacts. Ngāti Toa would reflect this in the CIA. Second to *E.coli*, copper is most concerning. Support the concept of the stream walkover field trip, with a good map.

Keith offered to prepare a collage of 1940's aerial photographs, which before development show the clearest images of the stream pathways.

Action: Keith to prepare and bring along to the next meeting. Bruce Murray, of Tawa, also prepared a book with maps. Keith to follow up.

Part 3: Community Engagement

This section was briefly discussed at the conclusion of the evening, following the group work in Part 4 and prior to Part 5: Conclusion.

Update on Engagement Meetings

Al spoke to the recent engagement meetings, which had been held with Wellington City Council, Porirua City Council and Wellington Water. The officer meeting with Wellington City Council was perhaps quite confronting, as it provided a new perspective for officers on the role of the Whaitua and what the implications would be for the City Council. Al noted that in general the engagements are quite confronting as people and organisations better understand the role of the decision making of the Whaitua in their own activities, however noted that the fact dialogue was occurring was positive.

The Water Sensitive Cities seminar was a whole day workshop with Council staff from around the country. A one-hour workshop was then held with Greater Wellington Councillors, which received a good reception. Barbara spoke to the session, in which New Zealand was told it is 30 years behind. Al noted that the answers are there and there are good designs that exist, and are available, if they wish to be employed. Barbara noted that to do good practice here would only cost $2,000 to 5,000 more per lot, if designed with water sensitive thinking upfront, rather than retrofitting. Water sensitive design not just about devices but a design philosophy.

Action: Suze to summarise all the feedback from engagements in one document to aid future planning and be able to extract key messages.

Discussion on Community Engagement

There was insufficient time to allow for the discussion on community engagement, so Hikitia, as Chair, advised that this would be discussed at the next Committee Workshop.

Part 4: Freshwater Objectives

Presentation: Scenario Modelling Data for Ecological Attributes

Prior to the workshop, a summary of the scenario modelling data was circulated to Committee members, along with a memo highlighting the key messages regarding the ecological attributes results. The modelling data can be found here, and the memo, here.

Ned Norton and Mark Health presented on the scenario modelling undertaken for the ecological attributes. Their presentation slides can be found here.

Ned explained the three indicators- periphyton, macroinvertebrate community index (MCI) and native fish. Periphyton refers to the algae and slime attached to surfaces in the waterbody. It is like the grass of the stream; some is essential however we don't want too much. MCI is the index of invertebrate community health. A low MCI implies a degraded stream. Fish refers to the extent of diversity and abundance of fish. Mahinga kai and cultural attributes are relevant beyond ecological attributes.

Ned noted that for the ecological attributes there is not a single model that produces a clear number, but rather a range of factors are considered when making an overall prediction of the band. It considers factors such as flow; nutrients and sediment; toxicants; instream habitat; riparian habitat; and free fish passage.

Ned noted that while there are 31 WMUs, the Project Team had deliberately chosen one example within each of the 10 WMU groups. The intention is that this is a representative sample because it doesn't just speak to a specific site but to the general reach and broader health of the whole catchment.

Periphyton

Ned noted that the periphyton results for the 10 WMUs are largely C band, with a few exceptions. For only 3 WMUs monitoring data exists.

For periphyton, both improved and water sensitive scenarios deliver significant improvement. For periphyton most of the benefit will happen under the improved scenario; there is no significant further gains from water sensitive scenarios. Ned explained that the use of the arrow was to reflect where there were improvements within a band, but these were not enough to get through the band into the next band. Improvements for periphyton are being mainly derived from stream shading, a reduction in sediment and nutrients from riparian planting and stabilised grazing land, under the improved scenario. The water sensitive scenario assumes a wider margin for riparian planting (5m – 10m) however does not add much extra for the extra effort and cost. The water sensitive scenario assumes all moderate and steep land would be retired, not just pole planted. Ned noted that the side tributaries of the reaches might be in an improved or better state.

Questions raised by the Committee:

Impact of flow on data

Monitoring points

- *Is periphyton affected by flow?*
  While periphyton is very much affected by large flushing flows, Mark noted that the scenario modelling data has assumed minimum flows.
- *If monitoring points are near the bottom? Is this sensible, where with an attribute like periphyton you're not going to capture what may be a worse state further upstream? Is the objective therefore to get the worst part of the stream up to standard? If we don't try and make the worst part of the stream better, then how do we do it?*
  Ned noted that that was correct. If the score is poor at the bottom, it doesn't mean that it isn't better upstream. Lower channels are often more difficult to shade due to their wider reaches. Noted that taker planters are better than grasses. Sharli Jo suggested could look to planting larger trees, such as kahikatea. Al noted that if you get the lower site up to standard then you can; in general, assume the condition will be better upstream.
- *Raises general questions about monitoring; are the points generally representative of the stream as a whole? Sample of one would not be appropriate during a fish stock sample. Need more sites and a consistent way of accounting for it.*
  Al agreed, noting that it raises an example in the Ruamāhanga, in which the monitoring site is shaded and so results are very good, when elsewhere in the stream is terrible. Ecological attributes and stream health depends on all practices being undertaken. Al noted however that there was a difference between State of the Environment reporting and plan effectiveness. For ecological attributes, Council's SOE monitoring will need to change. When talking about effectiveness of a policy, there will need to be a broader view taken.
- *What is the threshold for periphyton?*
  As it's included in the National Objectives Framework, the national bottom line is between a D and C band, so must get to C.

Nutrients and periphyton

- *What about the factors influencing MCI; don't these harm periphyton too?*
  Ned noted that an increased nitrate leads to a greater biomass starting point, but reduction is not having a large effect.
- *Aren't wastewater overflows full of nutrients?*
  They are, however they are sporadic and temporary, so flush through. In terms of periphyton in the stream, it's the long term baseload that tends to have greater effect. For example, downstream of wastewater treatment plants where there are continuous discharges.
- *What about the role of septic tank flows?*
  Ned acknowledged they are not good for periphyton, however are not a key driver. Definitely a driver for MCI (more sensitive).
- *What if we think organic pollution should be included?*
  Organic pollution is a key contributor to algal growth. What we see as leading to reductions for MCI doesn't achieve the same improvements for periphyton. Ned noted that the fact your ecology and species are still there but periodically downed in wastewater overflow has an impact on mahinga kai; and this may be more of a consideration in that

context.

- *Is periphyton most dependent on sunlight?*
  Yes. Shade has a direct effect on reducing periphyton growth, and also reduces water temperature both during the day and night.

Macro Invertebrate Index (MCI)

General pattern is the current state is a C band in most areas, with a few exceptions. BAU sees this continuing. Under the improved scenario there is an improvement, and a little bit more for water sensitive, for Lower Duck Creek and Kenepuru. This is associated with more extensive flow run off mitigations, and the use of water sensitive design for new urban development which leads to better results in the catchment.

The MCI is not in the National Objectives Framework however a series of thresholds for MCI have been proposed and discussed nationally. It is incorporated within the Proposed Greater Wellington Natural Resources Plan (PNRP). Nationally, looking at C/D band as minimum; would either be a pass or fail as to whether can be achieved or not.

This assessment of MCI informed by regional modelling. Regarding the bands, Ned explained that in essence, D was poor, C - fair, B - good and A - very good. Sitting in a band less than A doesn't mean there would not be tributaries of the stream that would be an A state.

Typically, improvements in MCI have been achieved by riparian planting, stabilising of grazed land, reduced toxicity, reduced storm water run-off and reduced waste water overflows.

All of the discussion centred upon the way in which improvements for MCI were reached and how this intersected with periphyton. The questions asked by the Committee are included in the above section on periphyton.

Fish

Overall, patterns for fish show that the WMUs are generally sitting in the B and C bands. There is not much change under BAU, with substantial improvements under the improved scenario, and even better under the water sensitive.

There is good species diversity in the catchment. While they are there, they are likely to be under stress, in terms of numbers and populations. That's why the B/C grade is showing up. Improved shows benefit across the scenarios. Improvements include bettering the physical habitat further plus reduce obstructions for fish passage; protect and restore spawning habitat.

Ned noted that there is no classification system, so feedback on how it had been done was welcome. Limited fish data – with records unavailable for half of the sites - so have used the best knowledge around but welcome more information. Observations are presently not included in modelling. As an example, it would be useful to know whether streams are intermittent or permanently flowing.

Questions raised by the Committee:

Fish populations

- *Is it both the diversity and size of the population?*
  Mark noted that along with size, it was diversity that was also under stress. For example, some species such as lamprey may be starting to be lost in streams and the catchment. Loss of habitat is limiting type and abundance. The advantage of Porirua is that it is close to the coast and there is the ability for it to be repopulated from species migrating from elsewhere.
- *What do fish do at night? Is there more fish out when there is a full moon?*
  Most fish are more active at night time. Full moon may bring bugs which equates to more fish. Sharli-Jo noted the influence of the full moon on the quantity of fish.

Setting freshwater objectives for ecological attributes in the Kenepuru Stream

The Kenepuru Stream was workshopped as a group, following the presentation. There were a number of questions raised regarding what has been included in the improvements under the scenario modelling.

Questions raised by Committee members

What is included as effort in scenario modelling

- *What are the things that are included in that scenario? There may be things included in the scenario that may be helpful for the stream.*
  This analysis speaks to the amount of effort that is needed, but in terms of what actually happens on the ground, there will be different actions in different places which we won't have modelled. We can take a closer look at these areas, for example the use of fish passages.
- *If the Porirua Stream is being improved but not Kenepuru, isn't that counter intuitive?*
  The monitoring point is at the bottom, at the mouth, and the assessment is conservative. Where straightened, marginalised deposited sediment and a lot of contaminants. Although there is improvement it is not enough to get it out of the band. Whereas, with Porirua, it is in the B band.
- *There is little to be gained between the improved and water sensitive scenario so understanding the effort is important, if it is going to cost more and there is going to be no real benefit.*

The Committee indicated, based on the information in front of them, the objectives for the Kenepuru Stream they would like to set as:

Periphyton: C – little choice
MCI: C/B – slightly more that can be done
Fish: B

Group Activity: Developing Objectives for Ecological Attributes

Kristy briefly introduced the group activity. She explained the purpose of the group as being to set objectives for the ecological attributes for each of the nine remaining WMUs for which there was data and noted that each group had been allocated 3 WMUs to work through.

Committee members then broke into groups where they worked through the activity sheets.

Reporting & Group Discussion

The group then moved back together and were asked to describe any key areas of contention in that arose in the group discussion.

Richard reported on Hongoeka to Pukerua and Taupo Streams, noting that the group sought both be maintained. For the Mahinawa Stream, they would like to see this shifted from a C to an A band for native fish.

Al reported on the group which had considered the Takapu, Stebbings and Porirua Streams. For the Porirua Stream, it was noted the group doesn't agree with the result of the scenario modeling and consider it is likely to be less – towards the top or lower part of B. There is potential for a significant amount of catchment improvement, for habitat, even if the band stays the same. For Stebbings, it was noted barriers will need to be removed for fish passage.

John Gibbs reported on the Horokiri and Motukaraka and Pauatahanui streams, noting that they are very similar, both healthy streams and across a mix of A and B for all three attributes. The group was concerned about the effects of Transmission Gully on Lower Duck Creek.

There was a general contentment with the objectives set by Committee members. The results of the Group Activity are attached in Appendix D.

Kristy noted that due to the harbour current state and scenario analyses being available, the next Committee meeting would focus on setting objectives for coastal waters. Given the pace with which the Committee has been able to work through objectives, this may be able to be determined at the next meeting alone. This would leave future meetings for reviewing information holistically, in conjunction with social and economic information.

Part 5 – Conclusion

Update on Field Trip/Stream Walkover

It was noted this would be best progressed via email between meetings.

Action: Suze to send an email to the Committee with update on the Stream Walkover and requesting any information/feedback that is needed to make further arrangements.

Staffing Update

Al acknowledged the work of Grace, noting that this was her last meeting before she leaves to complete a PhD, and extended the invite to join her farewell function the following week.

Al noted his replacement had been appointed. His name is Tim Sharp and he as a background with the Ministry for the Environment and Hawkes Bay Regional Council, where he worked on similar collaborative processes. Tim will commence in the role on 1st July 2018. Al noted he will still be feeding in from his new role as Principal Advisor Urban Water Strategy, GWRC.

Thankyous and Karakia

Sharli Jo completed the karakia.

The meeting closed at 9.00pm.