

Report of Te Awarua-o-Porirua Whaitua Committee Workshop

26 October 2017, 5-9pm, Tawa Community Centre

Summary

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Overview

Workshop attendees **Te Awarua-o-Porirua Whaitua Committee:**
Barbara, Dale, Diane, David, Jennie, Larissa, John G, John M, Richard, Sharli-Jo, Stu (Chair), Warrick

Apologies: Hikitia

Project Team:
Alastair (Project Manager), Brent, Grace, Hayley, Jon, Kara, Keith, Shelley, Suze

Facilitator: Isabella

Guests:
Ned Norton (Land Water People)
Don Jellyman (NIWA)

Workshop purpose The purposes of this workshop were to:

1. To hear and understand how flow-related policies work together, and in the context of the wider policy package
2. To hear and understand the different stressors on tuna and implications for ecological health and mahinga kai, including a more holistic perspective for managing human effects on flow
3. To make consensus decisions for whaitua-wide defaults for:
 - a. Minimum flows, allocation amount and permitted activity takes

4. To feel informed and comfortable with the processes we'll use for the WIP construction

The first two purposes were achieved, with the exception of stressors on mahinga kai due to Caleb Royal being unavailable. Of the remaining purposes, Committee only made a decision on permitted activity takes.

Committee Decisions and actions to do

Committee Decisions

1. Committee decided to dispense with “permitted activity” water takes: all surface water takes beyond reasonable domestic and stock-watering purposes will need a consent.
 - a. Permitted activity takes create a major source of uncertainty and potentially affect stream flow levels in a way that undermines the Committee desire to manage human effects on water bodies.
 - b. Requiring consent will remove the uncertainty and create a good incentive for commercial or large-volume water users to use non-stream sources, while not imposing an unreasonable burden.

Actions

1. Project Team will add an item on the next TAOPWC agenda for the decision about the whaitua-wide minimum flow and allocation limit.
2. Project Team will communicate with Committee by email about the remaining two agenda items (engagement, and WIP structure and processes).
3. Committee will reflect on this evening’s session and gather insights, comments or principles they think should be taken forward.

Workshop Notes

Session 1 – Welcome and getting started

Stu Farrant, Chair, and Sharli-Jo Solomon

Sharli-Jo gave the karakia, and Stu welcomed everyone.

Stu addressed the Committee with the Chair’s Direction

The Chair’s Direction will open each Committee meeting or workshop, with a direction-setting kōrero to help Committee focus and collaborate for the session. It will be sent out with the Agenda and is reproduced at Appendix 1.

In tonight’s Direction, Stu urged the Committee to gather up the information and discussions on water allocation from previous meetings and make decisions.

Stu then ran through the Agenda:

1. Timeline - Alastair
2. Water allocation –
 - a. Brent , Don, Caleb (unfortunately had to cancel), Hayley
3. Committee decision on water allocation amount, minimum flows and permitted activity takes
4. WIP structure and process
5. Engagement approach

6. Any Other Business

Session 2 – Timeline

(Alastair Smail, GWRC)



Alastair spoke to the updated Te Awarua-o-Porirua Whaitua [timeline](#), which has been made into a diagram. He noted that the December 14 Committee meeting is likely to be a field trip of some kind: waka ama or a stream walk up Bothamley Park are two current options.

Session 3 – Water Allocation

(Multiple presenters)

Isabella introduced the session:

- Tonight's session builds on 14.9. Some level of agreement was starting to form but Committee had lots of questions. In response to the questions asked at that session, PT has arranged four experts to speak tonight:
 - Brent leading off, with further information requested on the alternative approaches to minimum flows and allocation amounts
 - Don Jellyman, with further information requested on the effects of low flow and other stressors on tuna
 - Caleb would have been next, to provide requested information on tuna and mahinga kai, but had to cancel and hopefully can come next time
 - Hayley will give the further information on permitted activity water takes
- We'll pull all this together and hopefully come to Committee consensus on three decisions to apply to all streams in the whaitua:
 - What minimum flow will be

- What allocation approach will be
 - Whether to have permitted activity water takes.
- These are genuine decisions but we will be able to revisit them if necessary. We can do this once we have more pieces of the WIP puzzle to hand. This will mean we can consider them all as a package and check the line of sight between your objectives and these tools. We can also make any stream-specific refinements for which the need arises, as further information comes in from engagement, modelling and other sources.
 - But at the end of tonight, building on what will then be three sessions of richer information about water allocation plus Committee's special status and knowledge, we are looking forward to Committee exercising its mandate to make decisions.

Given the long gap between the last time water allocation was discussed (14 September), and the low turnout of Committee, there was an option for Committee members present at 14.9 to brief their colleagues, but people preferred to be told again about the core concepts.

3.1: Water allocation refresher, and further information on minimum flow and allocation limit options

(Brent King, GWRC)

See [paper](#) "Water Allocation – further information on alternative options for minimum flow and allocation limit" and [presentation](#)

Brent reacquainted Committee with the core concepts behind managing people's effects on flow:

- Natural variability in stream flows and ecological stresses,
- descriptive statistics of flows, particularly mean annual low flows,
- the two main elements of water allocation, minimum flow and allocation limit,
- and the effects of setting these water allocation elements at different levels.

An example hydrograph and key concepts are on page 3 of the paper and slides 5.

The effects on water users come from:

- how much water has been made available for abstraction (taking out) and use
- once one has an allocation, how much of the year one can expect to take it without restrictions.

Note that the hydrograph assumes the worst case scenario to illustrate allocation limit concepts (all water allocated has been used, and has been taken at the top of the stream so the whole stream experiences its absence).

While water could theoretically be taken at any time of year it is during dry periods that people will want to use stream water the most (e.g. for watering) so human effects will put the greatest pressure on streams on top of natural stress at these times.

The natural variability of streams is a key concept.

Brent then walked through the impacts on different values for the alternatives compared to the original 90+30 minimum flow + allocation amount that the Project Team had recommended at 24.8.17 and 14.9.17 workshops.

These alternatives had been assessed by the technical team for the Pauatahanui Stream's flow and the implications presented for three values: economic use of water, and mahinga kai and ecological health.

The 90% of MALF minimum flow and 30% of MALF allocation amount were originally found to provide *good* protection for ecological health and mahinga kai, and *moderate* reliability of supply for extractive users of water, which was the basis for the Project Team's original recommendation.

The technical team assessed, on the Committee's request, some other alternatives to the 90+30 and found the following.

- There is little marginal difference between these options
- All these options in their different combinations (100 or 90% of MALF minimum flow, and 30, 25 and 20% of MALF allocation amount) provide well for all values.
- Using a higher minimum flow and/or lower allocation limit is slightly more precautionary and would provide slightly higher levels of habitat protection. This comes with the trade-off of less water available for use and slightly more time on total restrictions.

There was lots of discussion and questions around Brent's presentation. Themes specific to this are below, and themes that recurred during the subsequent sessions are noted on p8.

Predictability of stream flows

- There were questions about how well previous stream behaviour could predict future stream behaviour, the reliability of GWRC monitoring, and the influence of climate change on natural variability and on human behaviour (including whether this had been modelled).
- This fed into different opinions about how conservative Committee should be in setting minimum flows and allocation amounts (see combined notes).
- The stream-flow data available for Te Awarua-o-Porirua Whaitua streams are from long-term monitoring sites and are as reliable as any, nationwide. The habitat loss information is from studies across NZ and national modelling, and are considered to be relevant and reliable for the types of streams found in Te Awarua-o-Porirua Whaitua.
- It is responsible to use these data to make decisions as no-one has any that are any better
- Climate change is likely to decrease MALF and may increase the duration of periods of low flow, potentially increasing the intensity and duration of ecological stress and demand for water. Setting absolute numbers (e.g., in litres per second) for minimum flows and allocation limits rather than continuing to express these limits as percentages of MALF helps provide clarity/certainty in the face of such change, though significant changes in MALF are unlikely to be observed within the lifetime of this plan.
- Future plan reviews of minimum flows and allocation limits will need to consider how climate change may have changed MALF, available habitat and demand for water in the future.

Implementation: percentages into numbers, NRP vs consents

- Percentages of MALF decided by Committee will be turned into a specific number for each stream (ie, a flow rate in litres per second) and included in the NRP.
- This is a sound approach because it provides consistency for the life of the plan. Leaving as a percentage might introduce subtle changes in the limits over time as MALF is updated annually.
- Committee members asked what it means given consents are allocated for 30 years and the NRP (including the WIP's minimum flow and allocation limits) and is reviewed in 10 years. This is a risk but is unavoidable; our task must include embedding commitment to the limits into institutions and organisations, and helping ratepayers understand. This also reinforces the soundness of establishing the limits as numbers now rather than leaving them as percentages of MALF.

Loss or gain, how much, for which values?

- There were lots of questions about understanding the table: How much habitat will be lost or gained, and how much takeable water and certainty of allocation would be lost or gained.

- The differences are in the order of 10% more or less stream habitat, and one or two additional or fewer weeks per year of likely restrictions (most probably during summer).

3.2: Tuna zoology: effect of stream flow and other influences

(Don Jellyman, NIWA)

See [paper](#) *“Notes from meeting with Ned Norton and Don Jellyman (27/9/17)”* on [Whaitua webpage](#) plus [presentation](#).

Don spoke to questions that Committee had asked following the previous TAOPWC workshops, including the effects of density stress (overcrowding) on tuna, and what might cause a disproportionate amount of males in the population.

He also covered a wide range of other characteristics of tuna including their general zoology (life cycle, breeding habits, species etc) and the different things that affect their health and vitality at different life stages.

Key points from the presentation included:

- Tuna need different kinds of habitat at different life stages, so catchments need to provide a variety
- Tuna are quite resilient compared to other fish.
 - In the Horokiri Stream, 50 years of habitat degradation caused the demise of the trout fishery (comparable sensitivity to most local native fish) but did not affect eel populations over this period
- Flow is important for tuna but habitat type and variability is the main limiting factor in many whaitua streams, demonstrated by the “bottleneck phenomenon” (slide ****)
 - For example: the presence of instream cover (holes, debris clusters), variety of appropriate habitat types for different life stages (shallower / deeper, faster / slower etc), shading, lack of inaccessible structures such as perched culverts
- Tuna are ideal bioaccumulators of persistent toxins such as DDT as they are long-lived scavengers. Toxins are mobilised into the ecosystem again when tuna spawn. Small amounts of nutrient pollution that stimulate (but don’t unbalance) aquatic ecosystems are good for tuna
- Tuna breed only once in their lifetime, so every one taken is one less breeding opportunity
- Minimum flows that stress tuna are in the order of 50% of MALF, which the modelling predicts would cause significant habitat reduction (30-50% less)
- Density stress and the resulting high proportion of males in the population could occur from significant habitat reduction
- Minimum flows between 90 and 110% of MALF will avoid placing additional stress on tuna beyond what occurs naturally in the catchment during dry periods.
- Water takes should not keep streams at minimum flow for unreasonably longer than occurs naturally

The Committee did not hear in depth about mahinga kai due to Caleb’s absence and Don not being keen to talk about this as the biological / zoological aspects of tuna are his specialty.

There was wide-ranging Q&A following Don’s presentation, using the time that had been allocated to Caleb’s presentation. Many themes were recurring during other sessions, and combined notes are below.

3.3: Permitted activity water takes: further information

(Hayley Vujcich, GWRC)

See [paper](#) “Permitted activity water takes in Te Awarua-o-Porirua Whitua: further information and recommendation for 26.10.17 workshop” and [presentation](#).

After dinner, Hayley talked to the additional information that Project Team had gathered.

At the 14.9 TAOPWC, Committee had felt a general consensus forming around continuing to allow reasonable amounts be taken for stock watering and domestic use (s14(3)(b) RMA takes) and requested further information on the option of not having further permitted activity takes beyond those reasonable RMA takes.

The paper summarises the reasons for this approach:

- The low current level of water use in the whitua compared to most other parts of the region is an opportunity to take a more protective approach of instream values (e.g. native fish)
- There is high uncertainty around the current level of permitted activity takes. In future, particularly under climate change, such takes could comprise a large portion of allocation volumes for some streams, potentially putting instream values at risk
- Estimates suggest only a small amount is taken for stock watering and domestic use (s14(3)(b) takes) in most streams, meaning these takes do not put instream values at much risk
- Users of water for activities such as watering gardens or filling pools should be encouraged to have systems that do not rely on taking water from streams (e.g. rainwater tanks)

With this approach, the options for taking water from Te Awarua-o-Porirua Whitua streams would be section 14(3)(b) of the RMA use (reasonable domestic use and stock drinking) or getting a resource consent).

At 14.9 Committee wished to know about the administrative and cost burden this would place on people, and Hayley spoke to this additional information (see paper).

Bores vs tanks vs streams

- There were questions about the significance of different water sources. Hydrologically, as Porirua has little groundwater compared with other catchments and no contained aquifers, bores near streams (e.g. in the Pauatahanui Stream valley) are managed together with stream takes.
- It was reiterated from the 14.9 meeting that giving people an incentive to use roof-collected rain-water (tanks) for non-domestic uses is a good thing as this has no effect on stream flow

Significance of takes

- There was discussion around the magnitude of water takes and the need to be precautionary and add “more margins”. Committee asked about the difference between “normal” takes versus current takes (including Transmission Gully) versus future takes, versus future takes under different climatic conditions (e.g. viticulture becoming a thing in Porirua).
- Excluding the currently consented allocations to Transmission Gully, Pauatahanui stream is allocated close to ~20% of MALF and other streams in the Whitua have low levels of allocated water (through consented or for stock watering and domestic use (s14(3)(b) takes).
- One of the key attractions of removing permitted takes (from 15.9.17 TAOPWC meeting) was removing the uncertainty around the amount of permitted takes used and having some control over the potentially larger takes from the streams via requiring a consent process.

Entitlements and rights:

- It was noted that people currently have a (perceived and actual) entitlement to take water, minimally monitored, for uses beyond reasonable domestic and stock water.
- Talking this through with communities will require justifying any reduction in entitlements (also necessary for the section 32 analysis). One member noted “fish don’t vote, people do”, and another that “there will be heaps of pushback if we go there [to 100:20 or 100:25]”.
- It was also noted that the entitlements can be a construct of an historical management regime (or lack thereof). One member felt that “in the city you don’t get to expect quiet, in the country you don’t get to expect water”
- A third theme was explaining what people are still entitled to under “reasonable domestic use and stock watering” and where the “line” is beyond which consent would be needed. While this gets defined in every catchment, in practice (like many areas) is likely to fall to GWRC officers’ discretion and the exercise of reasonable judgment.
- Committee members noted that communities’ feedback could come before or after the WIP is put out for formal submissions as part of the NRP change. There was emphasis placed on the importance of getting communities’ buy-in to the WIP contents before the Schedule 1 process, as this is where members will first have to face up to their communities.

Decision-making: how much detail and discussion?

- Hayley observed that this discussion was raising issues of Committee’s decision-making processes: how deep into the technical nuts and bolts of an issue should Committee go under different circumstances?
- There were observations that in this paper Project Team had presented a clear recommendation with rationales, plus additional information based on Committee’s direction-setting at the 14.9.17 workshop. This is the process that Committee has previously told Project Team is the preferred way to receive information and make decisions, rather than making a decision from first principles with all the richness of detail that that entails.

Decision:

Committee agreed to proceed with their previous direction of having no permitted activity water takes in Te Awarua-o-Porirua Whaitua.

Combined discussion notes

These are notes of the themes that featured in the discussion after each of the presentations.

Marginal changes: perceived significance

- There was a lot of discussion about the significance of the marginal differences between the 90+30 and the other allocation options. The same difference in (e.g.) ecological protection between options was seen by some members as very significant, including because it is cumulative on decades, whereas for others this was not very significant. The same applied to the differences in water availability for use, and in reliability: some members saw these as very significant, whereas others did not.
- The Project Team and Ned reiterated that all the options were “down the conservative end of the spectrum”, meaning they all provide well for ecological health, mahinga kai, and extractive economic use and the differences between them were minimal.
- There were underlying elements about symbolically or materially ceding, giving something up, or “winning” or acquiring something. Related to this were

“constituencies” or beneficiaries of water, whose presence was felt in the room at different times.

- Underpinning all this was the concept of providing “reasonably” for all values, which is the Committee’s task. How this applies in water allocation changes, and in communicating collectively about them, was generally obscured in the conversation.

Methodological inquiries: how much understanding for decision-making?

- There was a theme in the discussion of questioning how different types of information had been gathered, with the implication that this would make it more or less trustworthy for members. Questions on this included: how reliable are our numbers given climate change; what proportion of the information is from modelled statistics or observations, and whether those are by devices or by people in the field.
- This raises questions pertinent to Committee’s decision-making.
- When presented with lots of further information and recommendations, what level of detail should Committee demand? Is this different for a topic like water allocation?
- Especially in a subject-area of acknowledged complexity (like water allocation), what level of understanding is necessary when presented with recommendations and additional information?
- What grasp of methodologies and uncertainty associated with these is necessary for Committee to feel comfortable making a decision?

Decision: defer decision

- 90% of MALF minimum flow and 30% of MALF allocation amount was proposed by the Project Team and supported by a majority of Committee members at the 26.10.2017 workshop.
- However, consensus is 100% of Committee members being able to live with a decision, and consensus was not achieved and a decision was made to defer the decision until the next workshop.
- Committee members agreed to continue discussing the proposed water allocation options amongst themselves in the weeks until the next Committee workshop. At that workshop, members would report back with their preferred option and their reasoning for that decision.
- On the basis of that, if there is not unanimous support for one option, the Committee would resume their attempt to gain consensus

Insights for TAOPWC decision-making

- Following this resolution, the discussion was brought to a close at 8.58pm. So Committee were invited to reflect on what principles or insights should be taken from tonight’s experience for future Committee activity.
- If people wished they could share these with the Chair, Alastair, any Project Team member or Isabella, or post them anonymously to GWRC attn Alastair.
- There will be a discussion about decision-making following on from tonight.

Action: Project Team will add a five-minute item on the next TAOPWC agenda for the decision about the whaitua-wide minimum flow and allocation limit.

Action: Project Team will communicate with Committee by email about the remaining two agenda items (engagement, and WIP structure and processes) and send the link to the video that was going to be played in Any Other Business .

Session 4 – Any other Business

- Sharli-Jo invited Committee to a Porirua Harbour cleanup happening on the weekend.
- Kara informed Committee about a Wellington Water Limited reference group being established to consider wastewater treatment plant and network issues, and that there was an opportunity for a Whaitua representative to be part of this group (Sharli-Jo is also a member, representing Ngati Toa). The Chair will receive a letter outlining the details and formally inviting a Committee representative, which Stu will then circulate.
- The next meeting's topics will be:
 - Decision on water allocation
 - Decision-making discussion
 - Porirua City Council on the District Plan and other work
 - Engagement

Jennie gave the karakia, and the meeting closed at 9.04pm.

The next workshop of Te Awarua-o-Porirua Whaitua Committee is 23rd November, 5 – 9pm.

Appendix 1 – Chair’s Direction 26.10.17

Over the last few meetings we have been inching towards decision making on Water allocation: tonight we can hopefully close this out.

PT have done lots of work and several people will do stuff tonight with us:

- To respond to our requests from last time for more information around the options for those tools for managing people’s effect on stream flow:
minimum flows, allocation amounts, and permitted activity takes*
- To respond to the desires people expressed last time, for Committee to get an holistic perspective on the range of things that affect values like mahinga kai, or healthy happy freshwater fish,
as well as a zoomed-in focus on what managing people’s water takes can do to provide for those values.*

Once we’ve got sufficiently informed we will have a discussion with an aim to make consensus decisions on the whitua-wide settings for:

- a. Minimum flows*
- b. Allocation amount*
- c. Permitted Activity takes*

As part of that we’ll have a process to record and take forward any non-flow-related things we agree want to do to provide for values like healthy fish and mahinga kai, and any principles for our next steps of work.

In this discussion towards consensus we might find that some people support different options than others.

We owe it to each other and to the collective to be upfront about why we prefer one option over another, so we can understand each other’s perspectives and find common ground.

We might also be holding some discomfort about the content, or the process, or something else that’s harder to define.

If we have issues or discomfort with something, we owe it to each other to call that out now, so we can know it and start dealing with it.

We have a few other agenda items tonight but they don’t require us to decide anything, just to pay attention, note and give a general nod.

Water allocation is a big decision; that’s good. We told PT last meeting that we want to start making decisions – so it’s now.

We can revisit what we decide tonight, later on once we have other pieces of the WIP puzzle in hand, but we need to make a decision tonight because we’ll have had three sessions of information and very good discussions. It’s our responsibility now to use our judgment as those people best placed of anyone to make a judgment call.

Stu Farrant, TAOPWC Chair