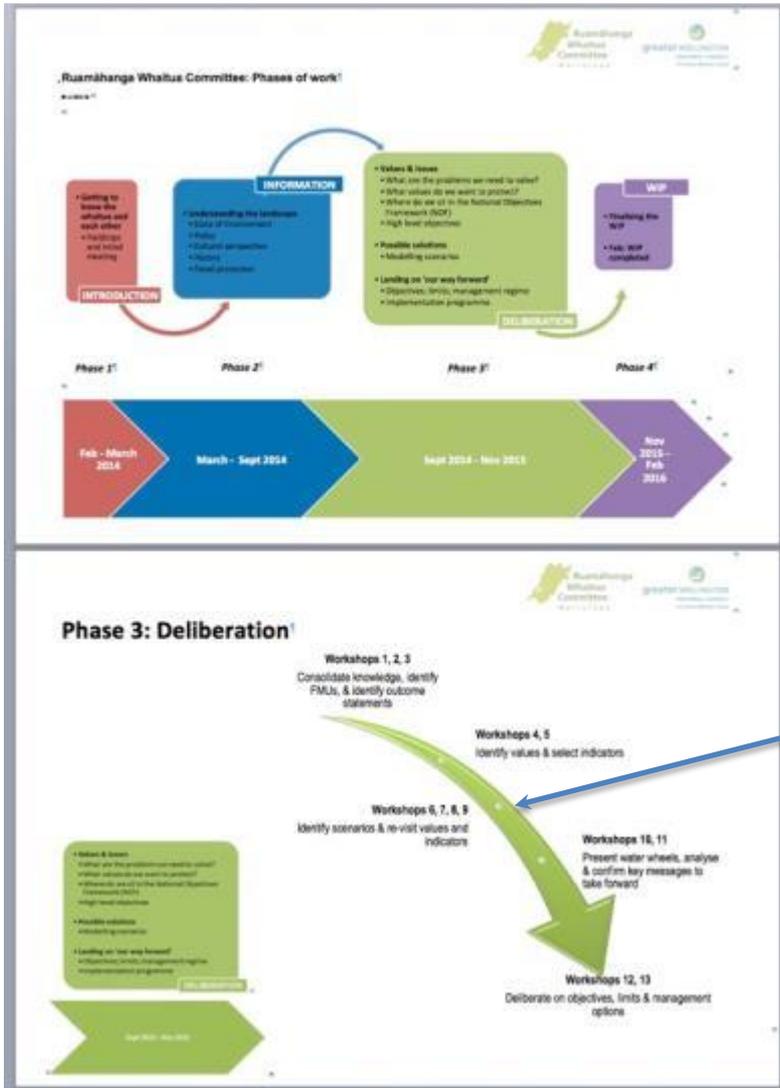


# Meeting Notes: Ruamāhanga Whaitua Committee

## Deliberations Phase 3 - Workshop 31

October 25 2016 4:00pm – 8:00pm at

South Wairarapa Working Men's Club, Greytown



Workshop 31

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Summary                    This report summarises notes from a workshop of the Ruamāhanga  
Whaitua Committee held October 25 2016 at the South Wairarapa  
Working Men’s Club in Greytown.

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Contents                    These notes contain the following:

- A** Workshop Attendees
- B** Workshop Purpose and Agenda
- C** Report Backs – Hydrological Scenarios
- D** Water allocation option testing
- E** Report backs & confirmation –Management option bundles
- F** Next steps

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## **A Workshop Attendees**

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Workshop Attendees                    *RW Committee:* Esther Dijkstra, Peter Gawith, Aidan Bichan, Vanessa  
Tipoki, Phillip Palmer, Mike Ashby, Andy Duncan, Russell Kawana,  
Chris Laidlaw, Rebecca Fox, Ra Smith, Colin Olds.

*Greater Wellington & Project Team:* Hayley Vujcich, Alastair Smaill,  
Kat Banyard, Mike Thompson, Horipo Rimene, Grace Leung, Mike  
Grace, Natasha Tomic, Murray McLea.

*Modellers:* Mat Allen (University of Waikato), John Bright (Aqualinc  
Research).

*Independent Facilitator:* Michelle Rush.

*Apologies:* David Holmes, Mike Birch.

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## B Workshop Purpose and Agenda

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Workshop Purpose

1. To confirm the bundle of ‘management options’ for each of:
  - a. the aspirational future (gold plated bundle)
  - b. the silver and
  - c. the bronze plated management option bundles
  - d. the ‘business as usual’ scenario.
  
2. To confirm approach for water allocation sub-scenarios and parameters for the main management option bundles
  
3. To understand progress on the development of the scenarios for:
  - a. A ‘small dam’ water storage scenario (e.g. on-farm)
  - b. Artificial recharge
  - c. Re-plumbing of Lake Wairarapa Moana
  
4. To understand the next steps, both to:
  - a. fully complete the scenarios (attributes and policy discussions) and
  - b. the scope and topic areas for the policy discussions needed for development of the WIP.

The purposes were achieved.

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Workshop Agenda

The agenda is below.

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When	Task	Who
4:00	<b>Welcome (and Karakia</b>	Peter, Ra
4:05	Purposes and the Task	Michelle
4:10	<b>Report backs</b>	
	Approach for re-plumbing the lake scenario	Alastair / Mat / Ra
	Artificial aquifer recharge scenario	Alastair / Andy
	Water allocation scenarios	Mike T
	Small Dam Scenario	Alastair
5:00	<b>Discussion and confirmation of each bundle</b> <ul style="list-style-type: none"> <li>• Gold</li> <li>• Silver</li> <li>• Bronze</li> <li>• BAU</li> </ul>	Michelle / All
6:00	<b>Dinner</b>	
6:30	Discussion and confirmation of each bundle continued	
7:30	Next steps to complete scenarios	Alastair / All
7:45	Next steps to complete attribute selection	Alastair / John
8:00	<b>Close</b>	

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## C Report Backs – Hydrological Scenarios

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### Large Dam

The committee heard about the large dam scenario at their 19 September workshop. This will be run in conjunction with the BAU management option bundle. Technical work is continuing on this.

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### Re-plumbing the Lake

Ra Smith, Horipo Rimene, Russell Kawana, Mat Allen, John Bright and Al Smaill met on 25 October to discuss the re-plumbing of the lake scenario. The notes from this meeting will be written up and provided to the Committee for discussion.

This scenario sees the Ruamāhanga River diverted back into Lake Wairarapa.

This scenario would be run in conjunction with the BAU management option bundle; and each of the bronze, silver and gold management option bundles. The inputs are straightforward as the flow and concentrations of contaminants are adjusted.

Questions still to resolve in confirming the scenario as to whether some flow would continue to go past the lake, e.g. high flow, so as to mitigate flooding risks; flows high in contaminants, especially sediment – modelling of these differences may be important.

Running this scenario through the modelling architecture will help determine if ‘re-plumbing’ is a feasible option: however determining the re-plumbing regime itself, and how it would be designed and operated is NOT part of the task.

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Artificial aquifer  
recharge scenario

Mark Gyopari (Earth in Mind), Al Smaill, Peter Gawith, Andy Duncan, Doug Mzila, Lindsay Annear and Natasha Tomic met on 10 October to discuss a potential aquifer recharge scenario.

This scenario sees water diverted to recharge unconfined aquifers (these are usually the shallower aquifers).

Mark Gyopari will present a potential scenario design at an upcoming committee workshop. This will be run within the BAU management option scenario.

NB: Recharge of confined aquifers is both difficult and probably not desirable.

At this point the scenario will look at this occurring in one part of the catchment, the central plains area, and likely include use of the water races as one of the means of recharge. It is also presumed there would be some means of ensuring contaminants were removed before recharge.

Q: Is pumping injection an option?

A: Yes but it's much harder. The method of injection doesn't matter at this stage as this is mainly about feasibility.

Q: Some bores in the Wairarapa sometimes show unexpected contaminant results. Will the modelling help understand this and the movement of water more?

A: The model uses current data and is mostly calibrated. The model we have is very robust, but as new information becomes available in the future the models will be updated. Over time we will know more about the movement of water.

Questions still to resolve are identifying how much water can be got back into the ground; and from where would this water come.

Similar to the 're-plumb the lake' scenario, running this through the modelling architecture will help determine if artificial recharge is a feasible option, but again, how this is then engineered and run is not part of the task.

'Small dam' water storage scenario

This scenario will provide an alternative to the 'large dam' scenario and may or may not be modelled. Water Wairarapa did some initial work on potential small dam sites. Al Smaill to report back on whether this information is relevant and whether it can be used for modelling.

The Project Team is still to finish assessing the work on this basis, including understanding the scale at which it was undertaken, and a recommendation will be made back to the committee once this is done.

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## D Water allocation option testing

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Allocation Scenario Discussion

Mike Thompson (GWRC) talked through the document 'Recommendations on approach to water allocation testing'.



Recommendations  
from Mike T on appro:

A range of analytical tools will allow the committee to look at different allocation options. They won't be run through the full modelling architecture. Not having too much change in the allocation amounts within the scenarios will help show up the effects of the minimum flow adjustments.

## Discussion

Some discussion was had about the robustness of the minimum flow figures used in Caleb Royal's report – Cultural Values for Wairarapa Waterways report (2011) which were proposed to be tested in the gold scenario (including consequent extrapolation to other rivers in the whaitua). Was there the potential for counter intuitive outcomes in some sub-catchments?

Following discussion it was agreed to continue using these figures for the gold scenario. The suggested higher minimum flows, while fairly extreme in some cases, will provide some valuable learning about how reliability will change and associated potential land use constraints.

### 2.2 Multiple band/block allocation

Committee agreed to approach and it was acknowledged this is a place where they will be able to see the initial results and then get further analysis done.

### 2.3 Assessing reasonable levels of allocation from small streams

The modelling architecture will not deal well with the ecological impacts of the scenarios on small streams. Mike Thompson proposed to the committee that they might wish to involve a small panel of experts (two or three) to help assess information of the impacts on small streams. This was agreed to. The committee can choose to make recommendations in the WIP to collect more information on small streams.

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## Agreements

Confirmed the four allocation regimes for each of BAU, gold (based on cultural flows with Mike's suggested extrapolations); silver and bronze as per report suggestions.

Also happy at this stage to proceed with initial sub-scenarios for allocation as proposed in the paper and to have a panel of experts assess information on the impacts on small streams.

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## **E Report backs & confirmation – Management option bundles**

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Management options bundles

The latest version of the management option bundles based on committee work completed in previous workshops was worked through.



DRAFT RWC gold silver and bronze scei

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Removing sediment from the lake

The group who met to discuss re-plumbing the lake on 25 October (pg. 4) also discussed the option of removing sediment from the lake and reported back to the committee.

Further discussions of this management option determined it would entail a deepening of the lake from three metres to four metres on average (taking out a metre of sediment or increasing the lake height by 1m). Removal of sediment could be by flushing or dredging.

Some aspects needed to be confirmed, e.g. the connection with the re-plumbing of the lake – would this help flushing, would the lake be bypassed at higher flows for instance, as part of continuing to manage sediment.

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Lake Onoke opening and closure management option

The group who met to discuss re-plumbing the lake on 25 October (pg. 4) also discussed the opening and closure of Lake Onoke and reported back to the committee.

This management option presumed a period of the year in which the Onoke mouth would be closed, e.g. three months over the summer.

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Stock exclusion rule

A correction was sought to the wording of the management option for stock exclusion to reflect the discussion at the last workshop concerning sheep grazing in wetlands:

It was agreed to include sheep in the 'stock exclusion' definition for the Bronze, Silver and Gold management option bundles in relation to Schedule F3: Identified Significant Natural Wetlands. This is a 'step up' from the Business as Usual bundle, which includes the provisions of the PNRP in section 5.4.3.

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Construct Wetlands Management Option

The ‘where’ was discussed and clarified, and it was agreed that the assumption here was 20% more wetland cover than what currently (as of now) exists. It was also agreed this might be more usefully expressed as an increase in area (hectares), e.g. 7 times the existing area. In terms of determining where, the use of maps showing where wetlands used to be 30-40 years ago was seen as a useful starting point; a suggestion was also made to use the overlay of land use maps so as to determine the optimal placement of new wetlands, e.g. as part and parcel of dairy farm effluent treatment for instance.

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Wastewater to Land Management Option

It was clarified that application of effluent to land assumed that the effluent was treated prior, to the standard it currently is, (as in, before it is currently discharged into water bodies).

RWC confirmed to 100% volume to land by 2040 for the ‘bronze’ bundle, making this the same as the target for the ‘silver’ bundle.

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Retirement of very steep slopes and afforestation management option

The project team proposed addition of a second ‘when’ step, i.e. woody vegetation cover achieved by 2080 was agreed to by RWC.

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On-farm mitigation practices

The project team proposed changes in timing (Tier 1 mitigations immediately (as BAU) for Gold scenario; Tier 3 mitigations by 2080 for both silver and bronze) to align with the riparian planting management option. Was agreed to by RWC.

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Riparian Planting Management Option

The definition of ‘stream’ was again discussed, and it was acknowledged that determining the appropriate definition was difficult, e.g. ‘continuously running’ or ‘channelised’ – where did and didn’t the parameters apply. It was agreed that the Project Team would come back with a map showing the waterways determined to be ‘streams’ for the purposes of modelling – they will use various stream classifications as a basis for this – and present this back to the committee.

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Confirmation of Management Bundles

Incorporating the revisions detailed here, the management option bundles for:  
Business as Usual  
Bronze, Silver and Gold were confirmed.

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## F Next Steps

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Next Steps for Policy and Scenario Development

Work will come back to the committee on re-plumbing the lake, aquifer recharge and small dams.

Work will be completed by the project team to turn the scenarios into modelling inputs. Clarifications may need to be made with the committee.

There are eleven core ‘management options’ which go across the scenarios – each of which has a policy dimension for which there are a range of options to assess and make decisions upon.

Core management options:

- Re-plumbing Lake Wairarapa – putting the Ruamahanga River back into the lake.
- On farm mitigations (good management practice) – management of nutrients, sediment and pathogens, water use efficiency.
- Stock exclusion.
- Habitat restoration:
  - Riparian margins
  - Wetlands
  - Channel improvements
  - Lake macrophytes
- Wastewater treatment discharges to land.
- Enhance groundwater recharge and slow water down in the catchment.
- Hill country erosion – planting and retirement.
- Fish passage.
- Restrictions on water allocation and minimum flows.
- Restrictions on contaminant discharges.
- Restrictions on max and min water levels in lakes (Water Conversation Order)

The policy dimensions are regulatory (rules) and non-regulatory (investment and/or education). Within this are options like partnerships, collaborations and citizen science.

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Committee needs for effective policy discussions

Committee members discussed and identified needs for the policy options discussion:

Understand what is happening nationally in this area, e.g. any policy statements, national standards (across all government, not just environment);

Understand fully the proposed PNRP and assess what's currently happening – keep / build on what's good:

- e.g. hear from Dave Cameron (GWRC Land Management) on how things are going with the hill country work
- hear other ideas for implementation from other council staff too
- hear from those doing things well in the farming community – farmer champions, what motivates people to do this
- understanding compliance burden / reality of dairy farming
- hearing about GMP from other regions – both community and council
- include how not to do it
- FEP's – compulsory or not?

Collaboration examples – what works, what doesn't? Information could be collected in collaboration with the community E.g. citizen science. The RWC can make recommendations in their WIP for ongoing decision making e.g. implementation at a sub-catchment scale for riparian planting.

Hear examples of groups operating at sub-catchment level, e.g. Landcare Trust.

How to maintain momentum?

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Community Engagement

A planning session needed at the November meeting. A suggestion this needs to include some discussions of what is the community willing to do / work with? What are the amalgamation risks?

Also need to include links with viticulture / horticulture there.

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Closure

The meeting closed with a karakia at 8:00PM.

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