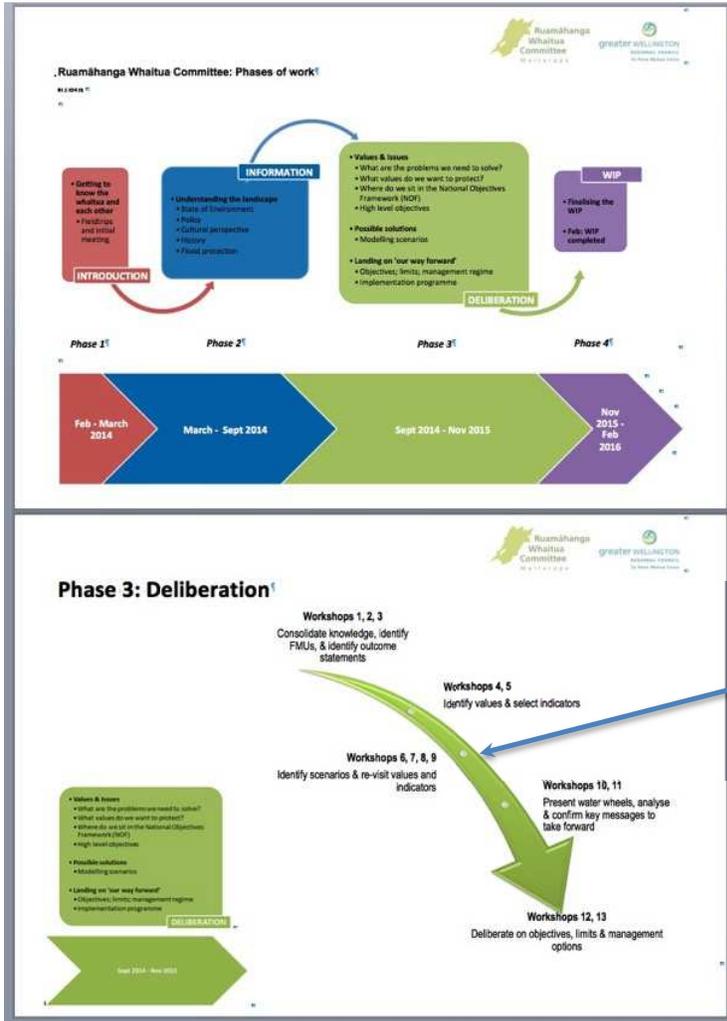


Meeting Notes: Ruamāhanga Whaitua Committee

Deliberations Phase 3 - Workshop 30

October 10 2016 1:00pm – 6:00pm

Carterton Events Centre



Workshop 30

Summary

This report summarises notes from a workshop of the Ruamāhanga
Whaitua Committee held October 10 2016 at Carterton Events Centre.

Contents

These notes contain the following:

A Workshop Attendees

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/ silver bundle discussion

H Wetland management option idea for policy discussion stage (or
added in as additional management option if modellable - (pulled out as
slightly different to (4) Constructed Wetland Management Option)

I Determination of attributes for the biophysical components of the
collaborative modelling architecture

J Appendix – Photos of Flipcharts

A Workshop Attendees

Workshop
Attendees

RW Committee: Esther Dijkstra, Peter Gawith, Vanessa Tipoki, David
Holmes, Phillip Palmer, Mike Ashby, Russell Kawana, Mike Birch,
Andy Duncan, Aidan Bichan,

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

Modellers: John Bright

Independent Facilitator: Michelle Rush

Apologies: Chris Laidlaw, Rebecca Fox, Ra Smith, Colin Olds

B Workshop Purpose

- Workshop Purpose
1. To confirm the bundle of ‘management options’ for:
 - a. the aspirational future
 - b. the ‘business as usual’ scenario

 2. To develop a management option bundle for each of:
 - a. a ‘silver’ future
 - b. a ‘bronze’ future

 3. To describe each of these management option bundles, and all the assumptions associated with them, in a clear, unambiguous manner so that everyone – RWC, Modellers and Project Team know what is intended, and what is required.

 4. To review and confirm recommendations for attributes to be measured through the biophysical components of the collaborative modelling architecture.

The purposes were achieved.

The agenda is below.

Agenda

TIME	Task	Who
(12:00 - 1:00PM)	Committee only session	
(1:00 - 1:30PM)	Lunch	
(1:30 - 1:40PM)	Welcome and Karakia. Purposes and the Task	(Peter Gawith) (Ra Smith), (Michelle Rush)
(1:40 - 2:00PM)	Confirmation of management options for ‘business as usual’ scenario	Al, All
(2:00 - 2:45PM)	Confirmation of gold management option bundles for aspirational future	Al, All
(2:45 - 3:30PM)	Bronze and silver future management option bundles	All
(3:30 - 4:00PM)	Afternoon tea	
(4:00 - 5:15PM)	Bronze and silver future management option bundles continued	All
(5:15 - 6:00PM)	Recommended attributes	John, All
(6:00PM)	Close	

C Other Actions

Water
Efficiency
Modelling

Question: Andy asked if, and if yes, when, in the process would modelling of water efficiency approaches be done.

Answer: Yes, it will be done. Likely as part of the policy options discussion.

D Confirming the Business as Usual Management Option Bundle / Scenario

Overview

RWC members heard an overview of the Business as Usual scenario, and worked through a series of questions to confirm the final shape of the scenario for provision to the modelling team.



RWC Assumptions of
Scenario 1 - Business

Decision: The business as usual management option bundle was confirmed pending clarification of three final points as below.

Discussion of BAU scenario

The following questions were asked during the discussion of the Business as Usual scenario:

Question: How are the cultural values from the Proposed Natural Resources Plan included in the BAU scenario?

Answer: Will follow up on this to provide more information but some are related to stock exclusion which is included.

Question: What is the timeframe for the roll out of hill country plans?

Answer: Probably 150 years. The speed of any gains would depend on where sediment management was implemented. GRWC will provide information on how much of the total programme will be achieved by 2080 (which is the end of the modelling timeframe).

Question: Are we modelling any correlation between the number of septic tanks, water allocation and the size of small blocks?

Answer: Changes in water allocation are included in population growth and septic tanks have a small overall impact and are difficult to model at the catchment scale. They do have a big local impact.

Question: Are the population trends used realistic? They sound very low compared to say population growth for Carterton.

Answer: These figures have come from Statistics NZ. Population growth will also have very little relevance to the model. It will affect things like land use but in a minimal way. Agreed to double check the suitability of these figures.

E Confirming the Gold Plated Management Option Bundle

Overview

The compiled ‘gold plated’ management option bundle developed from the past two RWC workshops was presented, including recommendations for some options to come out for consideration later in the process.



REFINED RWC
Management options

Following some clarification questions from the committee, specific questions were posed to the committee from the gold scenario table and discussed. These are described below.

Decision: The gold plated management option bundle was confirmed.

Initial clarification questions and comments

Comment: Agreement that from sampling individual committee members have done, heavy metals in stormwater and wastewater aren't a major problem in the Wairarapa. Therefore it's not a big problem that there isn't enough data to model this. The committee will need to address stormwater and wastewater in their final recommendations.

Question: There is a need to meet cultural values. How do we reach this? For example, if we put higher minimum flows in place how do you provide water for other users?

Answer: The model doesn't tell you this, it just runs out that it's happened and tells you what the change to the environment would be. For management options there are ways to implement these in a policy sense and that is the next step for the committee. This will also be the place to look at costs as some policies will be more expensive than others.

Questions from gold scenario table: How should we define a stream?

Initial ideas were to use the Fonterra definition of 1m wide and 30cm deep and continuously flowing, however it was acknowledged that this is a definition used as a means to determine when to fence.

It was acknowledged that whatever the definition was, it needed to reflect the risk to water quality in order to be useful in the ‘gold’ management option bundle.

Another suggestion was to use the Fonterra definition for the flats, but not for hill country; a sense the Fonterra definition too wide.

Decision: RWC members confirmed that a ‘stream’ was where water has formed a channel (as in, denudation is evident) and / or it is 1metre or more wide OR 30cm or more deep OR continuously running.

How should we define riparian planting?

After discussion, including evidence as to the efficacy of the width of riparian strips, the RWC agreed to use 10 metres as a width for modelling the planting of riparian strips.

Decision: A riparian strip is 10metres wide.

How should we define the term ‘stock?’

In respect of the rule to exclude stock from water ways in the Proposed Natural Resource Plan covered through the BAU scenario, the RWC agreed to continue to exclude sheep from the definition of stock.

There was discussion about excluding sheep from significant areas – this could be a policy option. It was noted if we are modelling a 10m riparian strip then sheep will be excluded anyway.

Decision: Use a definition of stock that excludes sheep.

Minimum flows and allocation

Should only the water bodies defined in Caleb Royal’s report ‘Cultural Values for Wairarapa Waterways’ be modelled for the cultural values minimum flows (mostly rivers in the Upper Ruamahanga)? What allocation should be considered?

Decision: Apply the theme from Caleb’s report to all rivers. Assume existing allocation.

Where should constructed wetlands be put (so as to be able to be modelled)?

In respect of a wetland definition to form part of the management option of constructing wetlands, the committee reached a consensus on either or both of areas where wetlands used to be; or convergent flow paths on gley soils.

Decision: Define 'wetland' as either or both of areas where wetlands used to be; or convergent flow paths on gley soils.

Flush or dredge sediment from the lakes?

In respect of the management option to remove sediment from the lake, the committee agreed to go with flushing.

Decision: Mechanism to be flushing.

It was also agreed that further work was needed on the assumptions to be made to accompany the modelling of this management option. To that end, the following other matters need discussion and decision:

Agreed: Ra to talk with John about a modellable regime for the management option of flushing which take into account the dimensions of maintaining water levels (Lake Onoke), maintaining fish passage and flood management elements.

Lake opening regime

In respect of the management option for opening and closing the lake mouth and barrage gates, there was a view that closing the Lake mouth during dry periods would be good.

Agreed: To discuss this matter, too, later this week with Ra. Have a feedback loop, e.g. to the committee via email.

F Bronze and Silver Management Option Bundles

Overview

Working in groups, RWC and PT members selected management options for a 'silver' and 'bronze' management option bundle respectively. These bundles sit in the sphere of 'improvement' somewhere between Business as Usual and the 'gold plated' bundle.

Participants were asked to:

- 1) describe the management option (if it differed in nature or assumptions to the way it was described in the gold plated or BAU bundles);
- 2) specify where; and
- 3) specify when.

The ideas from the three groups were put up, and then a discussion was held to reach consensus on a final set.

The tables below set out the results reached through the consensus building discussion.

Bronze Management Option

Bold = a change / assumption that is different to how this management option has been described for the gold plated bundle.

No.	What (Description of Management Option)	Where	When
1	Retirement of very steep slopes and afforestation/reversion to bush	Retire class 8 by 2025 & retire class 7e by 2080	By 2080
2	Space planting on steep slopes	Class 7 and above	By 2080
3	Riparian planting ¹	5m planting of F1 schedule sites	By 2040
4	Stock exclusion from water ways ¹	Same where and when as for gold.	
5	Wastewater treatment plant are discharging only to land 60% to land and surface water discharge criteria as per B.A.U		By 2025
6	Total allocation and minimum flows to meet cultural values Total allocation and minimum flows to a level to be recommended by Mike Thompson, using the earlier RWC discussion on allocation regimes that wished to see modelled as a guide.		
7	Construct wetlands throughout catchment	10% of total area previously in wetlands back in wetland	By 2040

¹ Also has benefits for reducing pathogens and nutrient inputs, and benefits to stream habitat

No.	What (Description of Management Option)	Where	When
8	All mitigation practices from Tiers 1, 2 and 3 good management practice Tier 2&3 by 2040		By 2040
9	Remove sediment from beds of lakes		By 2080
10	Change lake opening regime (both barrage gates and Lake Onoke mouth opening)		By 2040

Silver Management Option

Bold = a change / assumption that is different to how this management option has been described for the gold plated bundle.

No.	What (Description of Management Option)	Where	When
1	Retirement of very steep slopes and afforestation/reversion to bush		By 2040
2	Space planting on steep slopes	Space planting and grazing for class 7 and 6e	By 2040
3	Riparian planting ²	5m width, all streams	By 2080
4	Stock exclusion from water ways ¹	Same where and when as for gold.	
5	Wastewater treatment plant are discharging only to land All to land		By 2040
6	Total allocation and minimum flows to meet cultural values Total allocation and minimum flows to a level to be recommended by Mike T, using the earlier RWC discussion on allocation regimes that wished to see modelled as a guide.		
7	Construct wetlands throughout catchment	To be determined in discussion with Ra and others – Total of 15% of what used to be there.	By 2040
8	All mitigation practices from Tiers 1, 2 and 3 good management practice Tier 2&3 by 2040		
9	Remove sediment from beds of lakes		By 2040
10	Change lake opening regime (both barrage gates and Lake Onoke mouth opening)		By 2025

² Also has benefits for reducing pathogens and nutrient inputs, and benefits to stream habitat

G Gold Management Option – additional adjustments following bronze / silver bundle discussion

Bold = a change / assumption that is different to how this management option has been described for the gold plated bundle.

No.	What (Description of Management Option)	Where
1	Retirement of very steep slopes (e.g. Class 7e, 8) through afforestation/reversion to bush. Exclude from this, argillite / limestone.	
2	Space planting on steep slopes	Space planting and grazing for class 7 and 6e
3	Riparian planting ³	
4	Stock exclusion from water ways, including exclusion of sheep from wetlands. ¹	
5	Wastewater treatment plant are discharging only to land All to land	
6	Total allocation and minimum flows to meet cultural values	
7	Construct wetlands throughout catchment	20% of former areas of wetland restored
8	All mitigation practices from Tiers 1, 2 and 3 good management practice	
9	Remove sediment from beds of lakes	
10	Change lake opening regime (both barrage gates and Lake Onoke mouth opening)	

H Wetland management option idea for policy discussion stage (or added in as additional management option if modellable - (pulled out as slightly different to (4) Constructed Wetland Management Option):

Overview

SILVER

- Potential wetland sites on farm plans by 2025; by 2040 % established catchment wide
- OR
- Wetlands treating hill country land by 2040; for treating sediment

BRONZE

- Potential wetland sites on farm plans by 2025; by 2040 % of higher value wetlands established.
-

³ Also has benefits for reducing pathogens and nutrient inputs, and benefits to stream habitat

I Determination of attributes for the biophysical components of the collaborative modelling architecture

Overview

John Bright gave an overview of the table with the proposed attributes to be used for the bio-physical componentry of the Collaborative Modelling Framework.



Recommendations of attributes to be mode

Decision: RWC confirmed the use of this attribute set for the purposes of modelling.

Discussion that some of those attributes which can't be modelled, the committee may want to recommend in the WIP that they are monitored in the future.

All of the 'yes' attributes will be modelled for each scenario. When the results are received the committee will decide which ones they want to include on the wheel of water.

Full analyses of the economic and social attributes are not yet completed. The modellers will come back to the committee with this information when completed.

Maori Use Attributes

Agreed: That further detailing of the Maori Use Attributes will be undertaken at a meeting between John Bright, Iwi representatives and any other committee who are interested.

Vanessa, Peter, David, Russell, Ra, all indicated interest in this. Likely timing is prior to the next committee workshop at the end of October.

J Appendix – Flipchart Photos



<p>6 Total allocation and minimum flows meet cultural values</p> <p>6. Immediately</p> <p>6 All rivers and streams identified in catchment flows report 2011</p>	<p>7 Construct Wetlands through-out catchment</p> <p>7. All plants in by 2040</p> <p>7. Catchment-scale</p>	<p>8. All mitigation practices from Tiers 1, 2, 3 good management practice</p> <p>8. Tier 1, 2 mitigation by 2025. • Tier 3 by 2040</p> <p>8. All dairy, dairy support, sheep and beef farms</p>	<p>9. Remove Sediment from beds of lakes</p> <p>9. Completed by 2025</p> <p>9. Lake Nowarapa Lake Onoke</p>	<p>10. Change lake opening regime - both barrage gates and Lake Onoke mouth opening</p> <p>10. Start regime immediately.</p> <p>10. Lake Nowarapa Lake Onoke</p>
<p>6 Silver</p> <p>BAL with allocation bands with transition period</p>	<p>7 Silver</p> <p>Potential wetland sites on farm plans by 2025 & established catchment wide.</p>	<p>✓</p> <p>Some at bronze</p>	<p>9. Remove sediment as per gold except by 2040 (needs to be preceded by sediment mitigation in catchment)</p> <p>9. 5. Completed by 2040</p>	<p>B.</p> <p>10. By 2025</p>
<p>5 Silver</p> <p>70% MALS → 70% MACTS</p> <p>BAL with Allocation bands</p>	<p>15</p>	<p>Same as bronze</p>	<p>By 2040</p>	<p>By 2025</p>
<p>Mike's work</p>	<p>Wetlands treating hill country land By 2040 for treating sediment</p>	<p>✓</p>	<p>9. B. Completed by 2080</p>	<p>10. 5. By 2040 B. Resource consent</p>
<p>6 Bronze</p> <p>"BAL-Plus" Allocation bands, extended, grades allocation bands plus transition period.</p>	<p>7 Bronze</p> <p>potential wetland sites on farm plans by 2025 & established by 2040 & catchment wide.</p>	<p>MI farms doing Tier 2 + 3 by 2040 ✓</p>	<p>By 2080</p>	<p>By 2040</p>
<p>5 Bronze</p> <p>BAL with allocation bands</p>	<p>10</p>	<p>Tier 2 & 3 by 2040</p>	<p>7 ✓</p>	<p>6 *</p>
<p>Mike's work</p>	<p>6 *</p>	<p>7 ✓</p>	<p>7 ✓</p>	<p>6 *</p>

BAV Scenario Discussion

Q: Will cultural values affect negotiations?
Ans: Some related to stock exclusion

Q: Timeframe for roll out of hill country plans - probably 150 years
figure to come on how much of this by 80 years (land models)

Q: Check population growth figures to be used - Corteton / Marleton have done work on these.

Confirm BAV.

Definition of stream:

Fontenay def → 1m wide ^{and} 30cm deep and
- a guide for continuously running
fencing → low flow temp fence

Fontenay ^{all} ~~to~~ ^{to} narrow wide
needs to reduce risk to water quality

Q: OK on flat but diff in hill country where a stream has formed a channel? i.e. channel parameter - lines on map - these streams are fenced

Answer → formed a channel.

Answer → 1m or 30cm or cont running

→ 10m on flat
~~not keep water in~~

Stock
Ans: Sheep

Cultural
as

Yes

Wetland

Red Bank
Ans: Flu

Lat
Ans: cl

Andy → r

options?
ch

hill
50 years
much
do modelling
before
CS to
in here

Stock exclusion from waterways

Ans sheep out

Cultural flows - most covered what assumptions for the rest?

Yes with existing on locations

Wetland - where wetlands used to be // convergent flow path on gley soils

Seed from lake
Ans Flushing
~~to maintain water levels & fish passage~~
Borrow: - ash for faster flood control aspect

Lake opening regime
Ans close more often in dry periods
In this work? Flood bank loop to see via email

deep and
unring
a

re. decided
then

cont
unring

Andy -> models for water efficiency



Vanessa, Peter, David
Russell, Ra
→ main use attributes
→ reser RWC??
