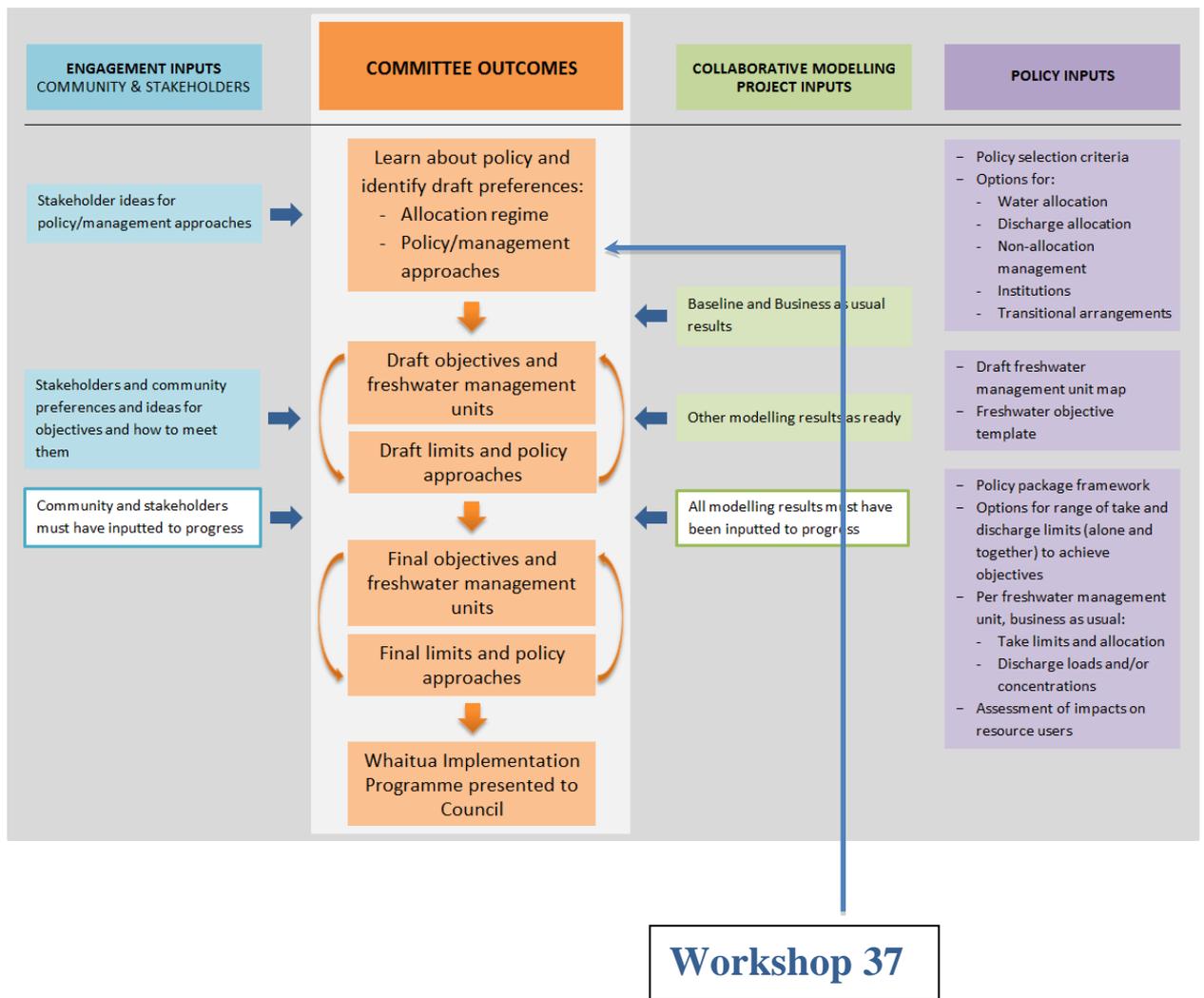


Meeting Notes: Ruamāhanga Whaitua Committee
Deliberations Phase 3 – Field Trip and Workshop 37
Monday 27 February 2017
12:00PM –6:00PM
South Wairarapa Working Men’s Club, Greytown



Summary This report summarises notes from a fieldtrip and workshop of the Ruamāhanga Whaitua Committee held 27 February 2017 at the Parkvale and Papawai Streams and then at the South Wairarapa Working Men’s Club in Greytown.

Contents These notes contain the following:

- A** Workshop Attendees
- B** Workshop Purpose and Agenda
- C** Fieldtrip
- D** Workshop Session – Small Stream Impacts

Appendix 1: Photos of Flipcharts

A Workshop Attendees

Workshop Attendees *RW Committee:* Peter Gawith, Vanessa Tipoki, Philip Palmer, Mike Ashby, David Holmes, Mike Birch, Colin Olds, Rebecca Fox, Esther Dijkstra, Aidan Bichan, Ra Smith and Andy Duncan (Workshop only).

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

Modellers: John Bright.

Independent Facilitator: Michelle Rush.

Guests: Johni Rutene, Ruamāhanga o Wairarapa Kaitiaki
Rueben Tipoki, Ruamāhanga o Wairarapa Kaitiaki
Joe Hay, Cawthron Institute
Paul Franklin, NIWA
Richard Storey, NIWA

Apologies: Russell Kawana, Chris Laidlaw.

B Workshop Purpose and Agenda

Purpose

- To understand how small streams are impacted by low flows
- To understand what science is relevant (the tools and evidence available) to setting limits
- To understand the options for take limits - particularly:
 - allocation limits but also minimum flows

The workshop purposes were achieved in part.

Agenda

TIME	TASK	WHO
12:00 – 12:25	Karakia Welcome and introductions, purpose, health and safety briefing	Ra Michelle Kat
12:30- 12:45PM	Travel to site 1 – Parkvale Stream	
12:45- 1:30PM	Discussions at the Parkvale Stream	
1:30-2PM	Travel to site 2 with potential toilet stop in Greytown	
2-2:50PM	Discussions at the Papawai Stream	
2:50-3PM	Travel back to the Working Men’s Club.	
3:00	Afternoon Tea	
3:30	Presentations <ul style="list-style-type: none"> - Joe Hay (Cawthron) - Paul Franklin (NIWA) - Richard Storey (NIWA) 	
4:20	Workshop Session – Impacts on Small Streams and Choices for Setting Allocation Limit	All
6:00	Closing Comments and Karakia	Peter, Ra

C Fieldtrip

Fieldtrip

Two sites were visited:
Site 1 – Parkvale Stream
Site 2 – Papawai Stream

General discussions were had at both sites about small stream allocation with input from expert guests.

D Workshop Session

Technical Presentations

Mike Thompson, Joe Hay, Paul Franklin, and Richard Storey gave a presentation on the characteristics of small streams, supplementing what had been covered in the fieldtrip.

[Presentation on small stream allocation - 27.02.2017](#)

Some discussion followed:

- Has climate change been factored into allocation decisions in other parts of the country? There is little precedent for it. Climate change will affect the natural variation and stress the system on a more regular basis.
 - The importance of considering permitted activity takes, especially in catchments that are over allocated.
 - How limits are applied and the scale at which they are set will affect outcomes. Values, objectives, limits and freshwater management units all need to be considered together.
 - Small streams are being considered separately as the modelling is unlikely to provide much assistance in decision making. There is no ‘technical answer’. The Committee needs to consider whether a change in allocation would be beneficial and if it is the best tool to achieve the outcomes they want.
-

Workshop Session Small Stream Impacts

Working in three breakout groups, the Committee, project team and guests discussed the following question:

What are the significant impacts on small streams?

In what order of significance?

And to what extent is over-abstraction part of the ‘problem’?

The table below sets out the record of each group’s discussion.

Group 1 Impacts on Small Streams organised to depict their relative extent

What the impact causes (the effects)	The impact (land/water uses)	What the effects of the impact affect
High Nutrients	Change in land use – no trees / more trees	↑↓ Fish species
Sediment	Riparian planting	Mahinga Kai
High temperatures	Differing ground/surface water takes	Spawning Areas
E.Coli ↑↓	Plant growth / Pest plants	
Channel Management and clearing	Native species	
	Flow variation	
	Shallow ground depth	

Group 2 Impacts on Small Streams organised to depict their relative extent

Extent of impact	Impact		
High	Unmonitored abstraction ⇒ lower flows - over allocation	Stock ⇒ leaching high nitrogen and phosphorous	Fertiliser use ⇒ leaching nitrogen and phosphorous
		Waingawa freezing works historic point sources ⇒ contaminant leaching nitrogen and phosphorous, heavy metals	
Medium	No riparian planting ⇒ temperature rise	Stormwater run-off ⇒ (toxic) contaminants	Consented abstractions
	Stock in water ways ⇒ E.Coli, nitrogen		Current point sources waste water treatment plants
Low	Stock, erosion Sediment in water or on the bottom	Climate change	Stream Modifications

Group 3 Impacts on Small Streams organised to depict their relative extent

High	No limiting of upstream farms	Urine patches	Fertiliser Use	Intensity of land use Irrigation	Legacy effects
Medium	Increased phosphorus -	Sediment bank erosion -	Manipulated waterway – water input	Channelisation	Water allocation
Low	Water temperature	E.coli run-off (wastewater)	Aquatic weeds Riparian vegetation		
	Ground water effects on surface water	Wetted perimeter			

Workshop Session – Management Levers Plenary Discussion

Following the report back, and a commentary on that from guests, a further question was discussed as a plenary:

To what extent could managing the flow regime make a difference to these impacts? E.g. if you halved the allocation?

The notes from the discussion are as follows:

- Might decrease leaching..... Or if a reduction in water allocation led to a change in land use that would affect the amount of nutrients entering the river.
- It's important to solve a problem where it's happening. E.g. in the sub-catchment, rather than at the bottom of the whole catchment.
- Not much – is dilution really the solution? We should be looking to keep nutrients where they need to be... in the soil! Dilution could be a useful temporary solution whilst longer term solutions are brought in.
- Improvements through riparian planting will take a long time to be felt.
- Groundwater injection is bringing in the nitrogen thus riparian planting won't make a difference to N levels.
- Encourage good management practice to reduce nutrients in the first place – requires building a 'high trust' approach that allows for innovation. We've seen low trust on the fieldtrip today and where that has occurred there is no riparian planting.
- In some streams, halving the abstraction might only have a small impact on reliability in an extreme year but could lead

to more reliability in more ‘middle years’.

Issues to Think About

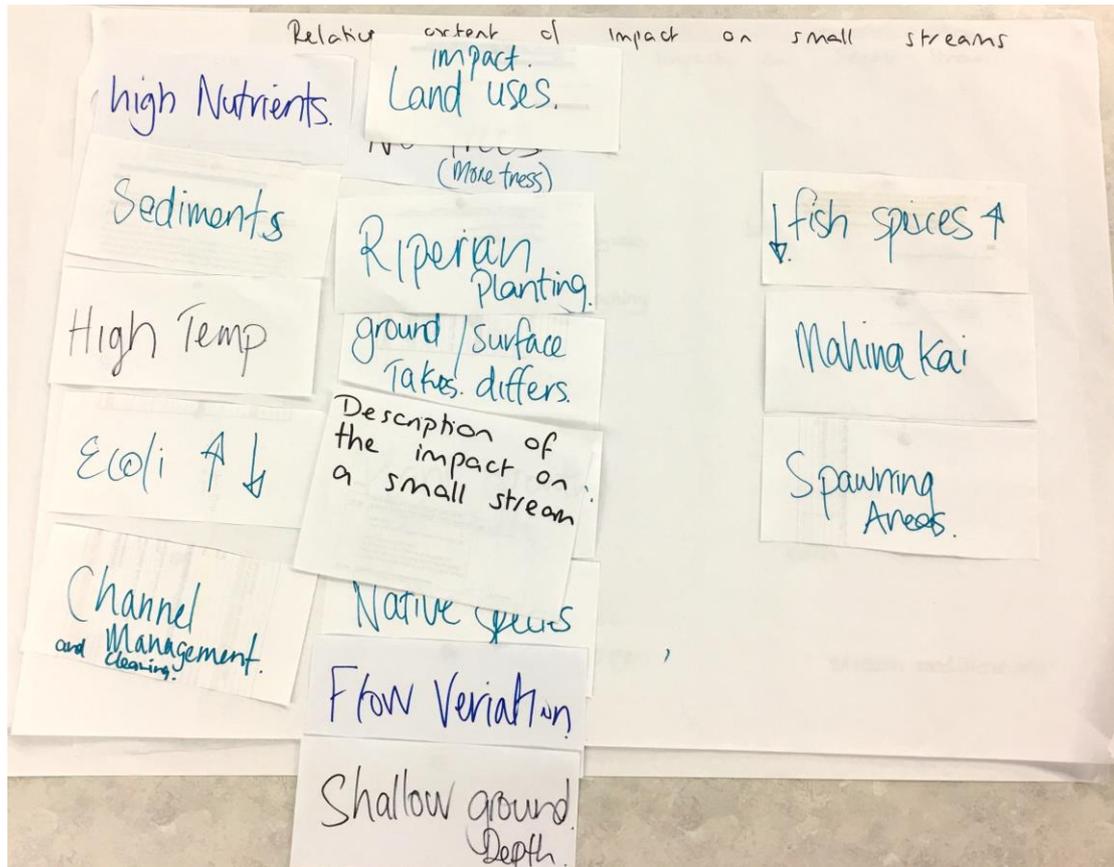
- What range of management levers would give the best gains?
- Unconsented takes
- Are there opportunities to improve efficiencies in areas where there are complex consents in place?
- Ideas for management, e.g. in Hawke’s Bay they have a single limit which is shared between all water users. This works well when there are lots of different user types.
- Your management objectives are critical – they define what ‘over-allocation’ is. If you are managing for abundance you need to be much stricter than if just managing for biodiversity. Achieving abundance will take a combination of approaches. Also, is it ‘in-situ’ matters or what is being ‘exported’ that you are managing for?
- Identify the values you are managing for and where – what you do need to have a holistic feel.
- Kaitiaki perspectives
 - Wish to be part of decision making around how our water is used
 - New consents – there should be an obligation to be responsible about using water included with existing consents.

The Ruamāhanga Whaitua Committee has a unique opportunity as they are considering both quantity and quality together.

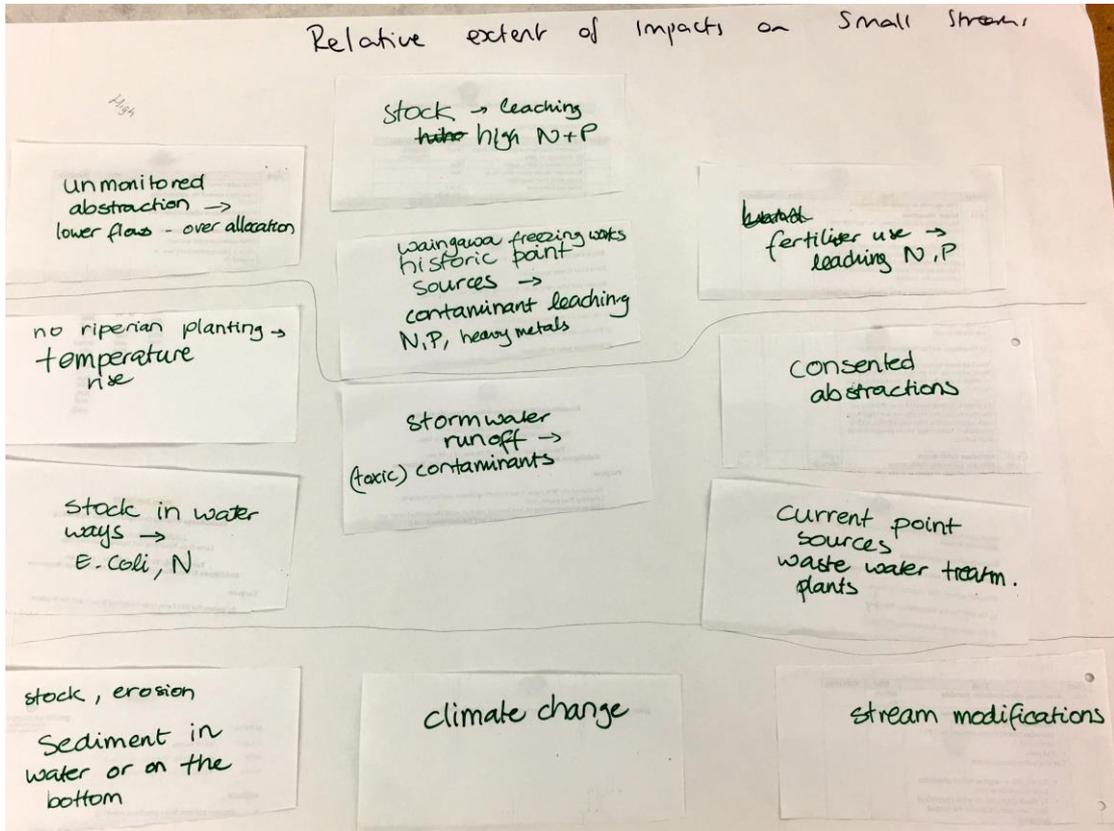
The key question following this, is then:

What combination of management levers could give us best gains in small streams (where changing allocation makes less difference)?

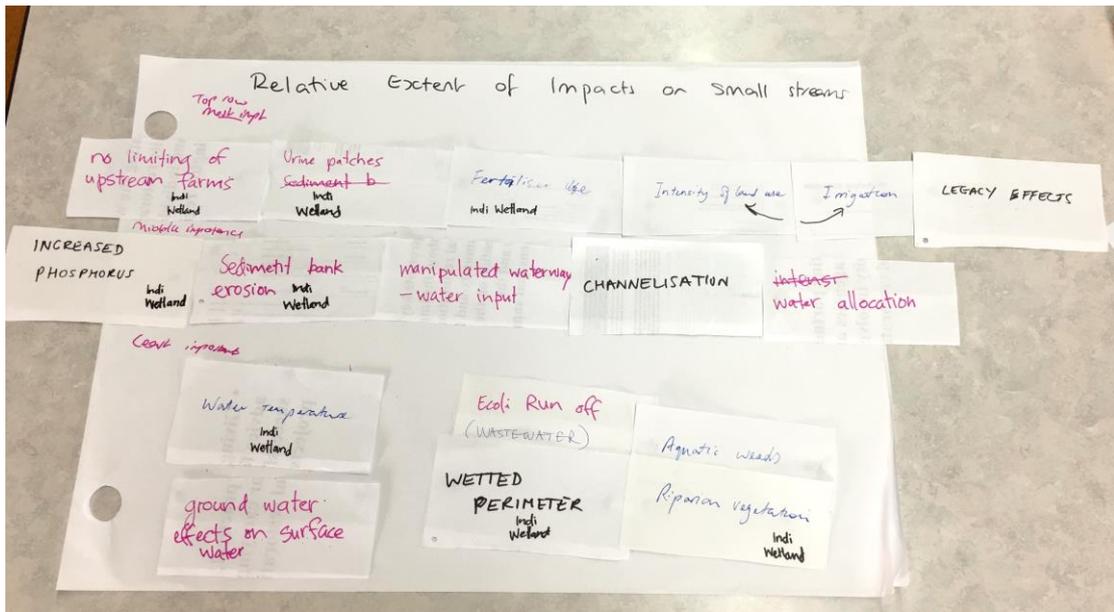
Appendix 1: Photos of flip charts



Group 1 Breakout Session



Group 2 Breakout Session



Group 3 Break out Session

What combination of management levers could give us best gains in small stream? (where changing allocation makes less diff)

Questions

- * To what extent could managing the flow regime make a difference to these impacts?
- * E.g. if you halved the allocation?

might?

↓ leaching... or if it ↓ intensity thus ↓ fertilise

not much - it's dilution really the solution, keep nutrients where they need to be... in the soil!

could improve some factors, e.g. extent of plant growth

could be a useful temporary solution whilst longer term solutions are brought on

groundwater injection is bringing the N ⇒ riparian planting would make a difference

encourage a g.m.p. to reduce nutrients in first place - requires building a 'high trust' approach that allows for innovation

Issues

- Unconverted takes
- uses sharing arrangements e.g. Parkvale

and what you are making where

↓ your most objectives are critical - they define what is 'overallocation' - if managing for abundance need to be much stricter than if just managing for biodiversity.

Take holistic feel

- Be part of decision making around how our water is used
- new consent - obligation to be responsible about using water incl. consent

but achieving it will take a combo approach - is it 'in-situ' or what is being reported you are managing for.

Plenary Discussion

ENDS