

## MINUTES

SUBJECT	<b>Ruamāhanga Whaitua Committee workshop with stakeholders on contents of WIP (2)</b>
WHEN	Thursday 24 May 2018, 1-4PM
WHERE	Carterton Events Centre, Carterton
ATTENDEES – COMMITTEE	Peter Gawith, Phil Palmer, Ra Smith, Mike Birch, Esther Dijkstra, Aidan Bichan
INDEPENDENT FACILITATOR	Terry Parminter
ATTENDEES – GWRC PROJECT TEAM	Kat Banyard, Alastair Smaill, Mike Grace, Paula Hammond, Caro Watson
ATTENDEES – STAKEHOLDERS	Diana Mathers (FAR), Leo Vollebregt (Water Users), Jamie Falloon (Federated Farmers), Paul Shortas (Fish and Game), Duncan Moore (Sustainable Wairarapa), Chris Peterson (Forest and Bird), Don Bell (Sustainable Wairarapa and other local groups), Andrew Stewart (Sustainable Wairarapa), Vern Brassell (Water Users), Liz McGruddy (Federated Farmers), William Beetham (Federated Farmers), Richard Allen (Fonterra), John Stevenson (Water Users), David Hopman (MDC), Phil Evans (MDC), Adam Duker (DairyNZ), Lauren Cameron (Beef and Lamb), Lindsay Fung (Deer NZ), Linton McGill, Hannah Bruce (Baker Ag), Ian Gunn (Sustainable Wairarapa), Michelle Sands (HortNZ), Karen Williams (Arable farmer), Natasha Petrove (DOC), Greg Sneath (Fertiliser Association), Tony Pritchard (CDC)
ATTENDEES – TECHNICAL EXPERTS	Mike Thompson (GWRC), Mark Heath (GWRC), James Blyth (Jacobs)
APOLOGIES	Mike Ashby, Andy Duncan, Chris Laidlaw, Colin Olds, Vanessa Tipoki, Rebecca Fox, Russell Kawana, Tom Kay (Forest and Bird)

## 1. Opening talks and questions

### ALASTAIR SMAILL – WHAITUA PROGRAMME MANAGER, GWRC

Alastair Smaill talked about the process from here to completion of the WIP, outlined the chapters that will make up the WIP and talked about some of the different kinds of recommendations the Committee might make and to who.

Some of the questions asked and responded to were:

- Has a draft S32 been written to accompany the draft WIP? No – that is a Council responsibility and will be written when the plan change is drafted.

- Has a decision been made on whether to put out a draft plan change or go straight to a proposed plan change? Not yet.
- What is the timing around a plan change being put out? Likely to be in 2019.
- Will the plan change occur after the commissioners have put out their decisions? Yes.

ACTION: Process beyond the WIP to be written down and circulated to stakeholders.

Alastair then went on briefly explain the numerous tables provided. The focus of the modelling has been looking at percentage load reductions. In the future the modelling will be updated so the numbers are likely to change. The initial limits set are likely to be based on existing loads.

Tables provided (note these are valid as at 24 May 2018):

- [Summary of draft Ruamāhanga whaitua freshwater objectives for river and lake FMUs](#)
- [Sediment limits and targets](#)
- [Diffuse source nutrient limits and targets \(un-attenuated\)](#)
- [Point source discharges - current and target allocations](#)
- [Instream nutrient concentrations and exceedance criteria for achieving periphyton objectives](#)
- [Water quantity limits for the major quantity freshwater management units](#)

#### **JAMES BLYTH – MODELLER, JACOBS**

James Blyth explained the involvement of Jacobs in the modelling process. He then talked through the '[NO3-N Objective Setting](#)' table as an example of the methodology used to determine the freshwater objectives from the Committee's work and the limits. There were questions about what was in the scenarios modelled and the differences between gold and silver. There were also questions about the data used for modelling – the last 22 years of data was used for modelling, and current state was based on the last 3-5 years of monitored data. Concerns were raised about communicating this information usefully to the community, and about showing the relativity between catchments.

ACTION: Send around a link to the document listing the scenarios.

Clarification was provided that the scenarios were used to consider the amount of effort needed to achieve certain water quality improvements. Just because a mitigation was modelled doesn't mean that is what will be implemented on the ground. Within freshwater management units, it will be up to those in the catchment to work out the mitigations best suited to achieve the improvements in water quality in that place.

#### **MIKE THOMPSON – HYDROLOGIST, GWRC**

Mike Thompson explained that the modelling of minimum flows was done offline from the water quality modelling. This means that the higher minimum flows suggested by the Committee for several rivers haven't been factored into the water quality modelling.

Mike briefly explained the table 'Water quantity limits for the major quantity freshwater management units in the Ruamāhanga whaitua' (See link to table above).

## MARK HEATH – WATER QUALITY SCIENTIST, GWRC

Mark Heath briefly explained his involvement in the technical work to date and the materials we've provided related to ecosystem health. In particular he described the nutrient concentrations that will assist in achieving periphyton objectives (See link to table above).

## 2. Questions from participants

Those at the meeting were asked to contribute questions they had, which were then grouped by topic – implementation, water quality, water quantity and ecology. The questions are grouped below. Some questions were relevant to a couple of topics.

### Water quantity

- Update on Category A groundwater review (Mike).
- How will Category A groundwater review influence the WIP?

### Water quality

- Water temperature/clarity – why no freshwater objectives around this?
- Does WIP implement swimming changes to NPS-FM?
- Is BAU being utilised as a baseline?
- Does nutrient modelling deliver band changes to get above NOF requirements for the Lakes MCI scores?

### Implementation

- Once WIP has gone to Council what influence will there be by people?
- Timeline/flowchart for process of WIP?
- What changes were made as a result of economic analysis?
- What landowner behavior is the WIP trying to influence?
- What is the process for industry to supply info to the modelling?
- In what way has GWRC worked to verify sources, what tools have been used?
- What does the WIP mean for me? (Does the community understand the consequences especially the land owner's community)?
- Will we be able to have a consultation with Landcare experts around the economic modelling?

### Ecology

- Does WIP implement swimming changes to NPS-FM?

Following this people split into the four topic tables to discuss answers to these questions and any others. The notes below outline the discussions at each topic table. People had the opportunity to move around topic tables.

### 3. Water allocation topic table

- Category A groundwater and the process:
  - Implications in quantities for surface water?
  - What happens for other options for water if cease take whaitua is part of the solution?
- Category A delineation investigation by GWRC - it is a desk top review using existing information, mainly pump test and bore log (as opposed to any further site investigations). Focusing on local scale depletion as well as cumulative catchment scale impacts. Early findings suggest worth pursuing the review further. Won't be any conclusive findings ready before WIP finalised but will inform plan change and there will be consultation with Cat A users on outcomes of review before the plan change is prepared.
- Torrent Fish 70% v 90% habitat protection?
  - Water temp, shading.
  - What does the difference look like?
  - Does quantity play a part?
- Managed aquifer recharge and other options - is there any analysis of how much water these options can provide?
- Community water takes?
- Water quantity timeframes 10-20yrs but water quality timeframes 2040/2080?
- Rootstock protection at minimum flows?
- Water races at minimum flow just for stock – is this at the end of the water race?

### 4. Implementation topic table

- Do you have to maintain or improve at farm scale?
- What is the incentive to meet loads? As non-allocated responsibility?
- Where is the 'big stick' and what does it look like?
- As a LUC dries nitrogen goes up but *E.coli* goes down. Will it be permitted?
- Are Cat A restoration timeframes related to point source restoration timeframes?
- What is 'the stick' for non-performers? A1 additional information required. A2 Get a consent.
- Why has hōwarau fallen over? Catchment communities.
- Will GWRC put down an implementation plan/timeframe?
- Can we have R dedicated Schedule I changes?
- Was carbon sequestration considered in the WIP development?
- How can potential economic benefits of mitigations relating to carbon/poplar/willow planting?
- Can we breakdown economic analysis by FMU?
- Can catchments see how effective mitigations are achieving limits?
- Were mitigations applied universally?
- What is the plan to support FMUs and Committees meeting limits?
- What information will be required to establish progress?
- Will there be a standard process across FMU types?

- How do you organise to develop an FMU Plan, establish priorities etc.... i.e. providing data to measure load...
- How do I know what my situation is and what it is I need to do? (As an arable farmer).
- What happens if tier 1 mitigations are not able to meet load limits?
- Arable sector has mitigations that have not been modelled.
- Does our sector have to bring forward our own mitigations? Who will monitor?
- How will we know that we are being effective? Proof of effort?
- Have forest harvesting impacts been modelled for sediment levels?
- If monitored load shows change from modelled for sediment levels?
- If monitored load shows change from modelled will % reduction stay the same?
- Have the links between mitigations been modelled to achieve limits i.e. Periphyton.

## 5. Water quality topic table

- Sediment in lakes, discussed reduction looking for and impact on phosphorus.
- We should manage sediment from DOC land. Reduce pests. Tararua Ranges hold more water and sediment. This is very small comparative to loads from big landslide events.
- Reduction in native sediment loads seen in the modelling is due to pole planting and retirement, due to changes in land use maps used.
- Planting to reduce net bank erosion will reduce sediment.
- Did we partition sediment loads within different flows? Only 3 sites for suspended sediment. No objectives for SSC due to lack of data. Part of decision to use SEDNET.
- District Councils have resource consent sediment data. Has this data been used? WWTP discharge data has been.
- Need better on ground sediment information. E.g. Turbidity monitoring in key eastern hill catchments. Collect information before making decisions. Use modelling or plug gaps first.
- What is the uncertainty on stream bank erosion work?
  - Used John Dymond – applied an 80% reduction. A range has been used in different parts of the country. Riparian and stock exclusion.
  - Wardells and the Cliffs water quality has changed in the last 5 years. Much improved. Wardells should be an A band. Check District Council information - update current state *E.coli* to 2017 NOF swimming standards.
- James' report has last 5 years of *E.coli* data – not reflected in current state. Last 5 years sometimes better than the freshwater objective the Committee is trying to achieve.
- Could we end up with a model that can be used by MDC/others?
  - Point source – only WWTPs incorporated.
  - Could the model be used to show the effects of stormwater? Urban has been a smaller part of the modelling process.
  - Metals could potentially be incorporated for urban loads.
  - MDC don't have base data on stormwater – doing snapshots.
- Inputs into water quality modelling from other models - concerns about hydrology model inputs accounted for issues in flow modelling in water quality modelling. See James' report for explanation.

- Why is the attenuation in the Mangaterere 30% different to others?
- Should concentrate effort on loads from land attenuation (pathways)? 6% nitrogen reduction applies to land loads.
- What is the impact of concentration reductions in river on fish etc.? BBN (unknown defaults) and lakes modelling.
- BBN – did it inform recommendations? Where are the technical reports? Which technical reports informed RWC recommendations?
- What will be the impacts of non-nutrient mitigations on periphyton?
- Monitoring - considering whether we can collect data less often but in more places?
- Cultural health monitoring – there will be recommendations in the WIP.
- Jacobs can provide help about where to shade. GIS approach, look at hot spots. Priority catchments.

## 6. Ecology topic table

- Modelled nutrient load – average – annual – not broken down by season e.g. Higher WMU in models, would this enable objectives to be met?
- Future technology – will this enable better interpretation of results and different modelling tools? Better nitrate sensors, expanding modelling sites/network. More accurate results over time.
- Sediment fingerprinting – perceived best practice but does this achieve results? Is GWRC looking at this? Fecal source tracking lots of advancement here. *E.coli* training in urban areas. Could be good for targeted mitigation in top 5 FMU with sediment issues.
- River character – bulldozing and gravel movement. Few deep holes. Flood protection outcomes vs habitat protection. Freshwater ecologist in flood protection team. Waiohine bad MCI but good water quality? No shading and influence of tributaries. 2 different measured sites, not capturing ecology at its best. DNA fish testing?
- River management and land management BAU – need new ways of doing things. Are there other ways? E.g. New technologies? Wetland construction for example. The WIP is promoting innovation vs being afraid of regulation/protection. Need staff resources to collect ideas from modelling, community and iwi – open developing strategies.
- Innovation needs \$ e.g. for trials – levies, industry investment and councils making getting funding easier for groups. Council needs to make it easier for innovation with good outcomes.
- Concerns about equity of availability of draft WIP and extra stakeholder workshops not accessible to general public/questions.

## 7. Closing comments and discussion

A short discussion was held on the answers to the questions provided in the small groups.

- GWRC needs to change to ensure effective implementation.
- Update on Category A groundwater had been provided in small group.
- The questions about temperature and clarity are still to be answered.

- Question about habitat levels (for torrentfish) wasn't fully addressed at the table (but 2 pager now up on website)
- Modelling – there will be continuous improvement. When new information is put into models can it be made available online? Yes although there will be very little further modelling work between now and the WIP being finalised.
- People understanding the consequences of the WIP for them is very important.
- The nutrient modelling in Lake Wairarapa didn't show the necessary improvements to move total phosphorus to a C band. We will need to look at other in lake options e.g. increasing the depth.

#### General discussion:

- Some groups wanted to meet again. Wanted time to look through the draft WIP first.
- In the future there will be a decrease in the amount of water in the river and an increased need for water. We need to focus on solutions that make the link between water quality and water quantity.
- To what extent is the WIP going to have ideas and preferences around water allocation? Having Category A groundwater users cease take leaves a gap. Worry that recommendations to fill that gap e.g. around storage won't be specific enough. The whaitua should offer alternatives and it should be resourced.
  - Work completed in this space so far – Council has undertaken a lot of work on storage. A Committee scenario tested was on aquifer recharge – that suggested further feasibility work was worthwhile. We have to try it. In other areas other feasibility work has been done, and again it will have to be tried. There is funding in GWRC's LTP to look more at this work.
- There is a need to keep working towards the best outcome. Do we need more time to understand what this means for the community?
- Want to encourage the discussion now, rather than through the schedule 1 process.
- Rather than more time now, one option is to release a draft plan change.
- The draft WIP will be provided electronically and through hard copies. Leave some at the Masterton office.
- Is there the potential for another stakeholder meeting? Perhaps 2 weeks after the draft WIP has come out to give people time to digest it.
- Who was missing from the room today? Industry such as JNL. Chamber of commerce – they were invited. DOC – how involved has the local office been? Were invited to this meeting and have been at others. Iwi involvement.
- Sharing of information online – will the notes from stakeholders and questions been made available online? Yes. Will information from meetings with the kaitiaki be made available? Will check with them.
- Thanks to all the experts and the Committee for their work today.