

Te Awarua-o-Porirua Whaitua Committee Workshop 2.3.2017

5-9pm at Pātaka Art + Museum

Summary

Contents

Summary	1
Meeting agenda	2
Actions and general business to do	2
Meeting notes	3
Session 1 - Karakia, Welcome, Getting ready	3
Session 2 - Te Awarua-o-Porirua Whaitua Committee Meeting Processes (Alastair Small, GWRC).....	3
Session 3 - Community engagement.....	3
Session 3 – Scenario content & framework.....	7
Session 4 – Any Other Business.....	10
APPENDIX 1 Skeleton diagram: Te Awarua-O-Porirua Whaitua Committee Work Stages	11
Appendix 2:.....	12
TAoPWC 2.3.17: Scenarios mapped into framework: groups’ comfort and discomfort notes.....	12

Workshop **Te Awarua-o-Porirua Whaitua Committee:**

Attendees Stu (Chair), Barbara, Diane, David, Larissa, John G, Sharli-Jo, Warrick, Richard
Apologies: Naomi, John M, Jennie, Dale

Project Team:

Alastair, Brent, Grace, Hayley, Isabella, Murray, Kara, Keith, Sheryl, Suze, Jon,
Turi

Ned Norton (CMP, Land Water People)

Workshop purposes The purposes of this workshop were:

1. To discuss options for improving Committee meetings’ efficiency and agree some instructions
2. To hear and understand how Committee’s scenarios content from 2016 fits into the revised scenario framework
3. To make a committee decision on moving forward from the scenario content mapping
4. To hear about the proposed whaitua communication actions, and

- make a decision about implementing this
5. To hear about a strategic proposal for targeted community engagement and agree how to move forward

The purposes were achieved.

Meeting agenda

The meeting agenda was:

1. **Karakia, Welcome, Getting ready, Agenda** - Stu Farrant, Kara Dentice, Isabella Cawthorn
2. **Te Awarua-o-Porirua Whaitua Committee meeting processes** – Alastair Smail
3. **Community engagement** – Jon Gabites, Committee
4. **Scenario content & the framework** – Hayley Vujcich, Committee
5. **Any other business, New Year processes and karakia** - Stu Farrant, Larissa Toelupe

Meeting Close 9.00pm

Actions and general business to do

- | | |
|--------------------------|---|
| Meeting processes | <ul style="list-style-type: none"> • PT : include session (led by AI) on process for consensus decision-making in the Mar 23 committee meeting agenda • Ongoing - Committee: Any members missing key meetings or requiring extra time or information to seek additional support from the PT or committee • PT (Suze): add to agendas: <ul style="list-style-type: none"> ○ as requested by committee: in-committee sessions ○ regular item: updates on TA engagement by PT and / or committee |
| Communications | <ul style="list-style-type: none"> • PT (Jon, Jim): to deliver communications activity as discussed • Jon to check video, newsletter to make sure they're fit-for-purpose & improve where necessary and use as discussed • Ongoing: Committee to feed any suggestions to Jon regarding distribution networks for stories, and content for stories / press releases • Ongoing: Committee to disseminate stories through their networks |
| Engagement | <ul style="list-style-type: none"> • For future meeting: Jon to proceed with engagement plan development and bring proposals to Committee |
| Scenario content | <ul style="list-style-type: none"> • For next meeting: PT to process feedback on mapped-in 2016 scenario material and bring responses for consideration • PT to work up next stage of scenario content to Committee for consideration • 1 week prior to next Committee meeting, PT to supply Committee with: <ul style="list-style-type: none"> – Modellers' recommendations on modelling reporting locations ; – BAU scenario information – proposed WMUs |

By next meeting:

Committee to do pre-reading the above and prepare for brief discussions at 23.3.17 Committee meeting, except for modelling reporting locations (Committee to send feedback by email unless major issues)

Meeting notes

Session 1 - Karakia, Welcome, Getting ready

(Stu Farrant, Kara Dentice, Isabella Cawthorn)

Kara opened the evening with the karakia, and Stu welcomed the Committee & Project Team to the workshop.

Stu acknowledged Naomi's contribution and congratulated her on her new role advising the Minister of Māori Affairs. The Committee thanked Naomi in her absence.

Sharli-Jo reported on the Takapuwahia Village Planning Committee's harbour clean up held February 28 on a beautiful summer evening with a super-low tide.

- Yucky stuff hauled from the harbour included 65 tyres, 37 cones, 4 chairs, 2 trolleys, 36 miscellaneous items and 30 bags of rubbish.
 - In total this came to over a tonne of rubbish, disposal of which cost over \$500. There was brief discussion about where the burden of this cost should lie, noting that at present it falls into the stretched PCC budget for litter collection.
 - Photos (by Sheryl) were shown, and Sharli acknowledged volunteers including the Porirua Mayor Mike Tana and other Porirua councillors, local religious groups, plus Hayley & Sheryl from the Project Team.
-

Session 2 - Te Awarua-o-Porirua Whaitua Committee Meeting Processes

(Alastair Smaill, GWRC)

IN COMMITTEE SESSION

Session 3 - Community engagement

(Jon Gabites, GWRC)

See Jon's presentation in Whaitua Committee [Shared Workspace](#)

Session purposes:

1. To hear about the proposed whaitua communication actions, and make a decision about implementing this
2. To hear about a strategic proposal for targeted community engagement and agree how to move forward

Jon presented a two-part session, focussed on the two decisions for Committee. The first part was on communications activity, and required only a “tick” from Committee.

Communications activity plan

Refer to slides 2& 3 in presentation.

The purposes of communications activity are to:

- Raise general awareness of the whaitua
- Give people an opportunity to connect with the Committee and the work
- Make clearer the link between the community’s values and the whaitua work

The communications activity will bridge the gap or “radio silence” that the public would otherwise experience until the period when Committee is ready to engage on scenarios (~June). This work is consistent with the direction Committee signed off in the communications plan (as presented by Tracy Lewis in 2016).

Jon will work with Jim Flack (Snr Comms Advisor, Comms and Marketing) to identify things happening in the whaitua that relate to the TAOPW values and attributes.

They will take a whaitua angle on these, and distribute the resulting comms via mainstream media (press releases), facebook etc.

They will make sure that every value is illustrated in a comms story.

Jon will also look to use the [‘From mountains to sea - ki uta ki tai’](#) video, possibly with increased references to Porirua.

It was noted that the From mountains to sea - ki uta ki tai video is already successfully used in schools, so may not need changing, and that the newsletter may need improving to really garner attention.

The committee were generally concerned that they had signed off on this type of work previously and that they felt there was no reason for it not to get underway.

Opportunities for stories to illustrate values

There was considerable discussion of activities that can be used to illustrate the whaitua values in the real world, with lots of examples coming from Committee and from Project Team members.

These included: the work of Porirua Harbour Trust, Enviroschools, Living Waters programme, Healthy Harbours, Ngāti Toa’s Mana College work with the Department of Conservation.

The point was made that most of this activity happens independently of the whaitua process and it would not do for whaitua communications to give the impression that the whaitua process is responsible for this work.

It was clarified that this was not the goal, rather to “piggyback” on existing work by pointing out the connections between great activity (and topical current events) and the whaitua values and process. This will also benefit laudable non-whaitua work / activities by extending their communications’ reach.

It was understood and agreed that the whaitua work is very much aligned with all these activities and in order to increase the awareness of the Committee’s work, opportunities to leverage from them need to be identified and actioned.

Committee role in communications

The PT will be looking to draw on the Committee’s networks to help raise awareness, assist in the distribution of press releases, facebook posts and linking their work to

the whitua work.

Decisions and actions **ACTION: Committee to feed any network or story suggestions to Jon**
ACTION: Jon to look at video, newsletter to make sure they're fit-for-purpose
DECISION: Jon should proceed with delivering communications activity

The second part of the session was on the proposed approach for community engagement. Jon presented a recommended purpose, scope, and high-level content for the focussed community engagement, and sought Committee's approval of the direction proposed so he can develop this further.

Purposes & minimums of engagement

Purposes (refer to slides 4-5):

- providing insight into community's preferences, to enable the committee to be informed beyond their own preferences
- Reducing the risk of stakeholders feeling excluded from the process.

Non-negotiable minima (slide 6):

- Engaging with partners (TAs, Ngāti Toa) – must involve them in developing key elements of the work
- Engaging with community – to get information on preferences
- Engaging with stakeholders – to manage potential risk from them

Timing

Refer to slide 7

The diagram shows approximate periods when different kinds of communications and engagement might happen.

- Communications activity runs alongside the first three boxes – the “preloading” period
- Results from BAU modelling would come back between draft policy preferences and identifying draft objectives and WMUs
- Community engagement (e.g. focus groups) contributing to refining preferences would occur during the latter four boxes / two brisk iterative cycles of the “decision-making” period.

Following presentation of the overall plan, Jon sought Committee approval to go away and develop the details of the focused engagement (the what, who, how, when etc).

There followed a general discussion about engagement, of which key points are:

Partner engagement: priority

There was considerable discussion about the high importance of bringing councils - including GW itself - into the process, as they will be the ones to implement the ultimate WIP so their buy-in is vital.

This was generally viewed as a higher priority than bringing in the wider communities of the whitua.

One member commented that the wider communities had been given the opportunity to be involved during the values identification process.

The councillor members of Committee emphasised the importance of raising and keeping up awareness of the whitua process within the councils – both amongst officers and councillors.

All Committee members recognised the challenges and efforts of the councillor members, and also noted that the Project Team includes officer representatives of all the councils. There was general agreement that the right level of awareness couldn't be achieved solely by the councils' representatives on the committee or project team.

Current engagement with TA partners by GWRC

Alastair Smaill (GWRC) noted that the relationships with Wellington City Council, Porirua City Council and Wellington Water are key to the success of the whitua. He outlined the PT's ongoing work with these three organisations at a variety of levels (from workers to senior leaders):

- considerable engagement is going on with WCC, PCC and WW at officer / worker level, through the process of information gathering for the modelling
- meetings with more senior officers and also with councillors

He explained that he did not see this engagement with partners to be the responsibility of the committee, but that opportunities might arise where it would be good for members of the committee to be present.

These opportunities will be taken and Committee members invited to participate. There was general willingness amongst members to take part, supported by the PT.

Keith Calder (PCC) noted that the whitua Committee last met with PCC in the middle of 2016 – while this was much appreciated, PCC is now a predominantly new council (7 new councillors) so it is good timing to talk to them again.

Alastair gave examples of engagement with partners:

- The PT is talking with PCC staff, such as the new Manager of Environment and City Planning, about urban development. These conversations are seeking some alignment which will enable whitua work to mesh with PCC's potential District Plan changes.
- The whitua (a presentation by Alastair, primarily focused on the Wellington Hutt Valley Wahitua) was able to get on the agenda at the inaugural 2017 meeting of the WCC City Strategy Committee, which is a considerable coup for the project. This is testimony to the effectiveness of the internal engagement by WCC's PT representative Nicci.
- Another good vehicle for some of these conversations with partners – in this case aligning asset management with resource management – is WW's Three Waters Strategy for the region, which includes all TAs and GWRC.

Alastair also reported on a number of ongoing conversations being had with Ngāti Toa, including about how to support iwi representatives to participate in the large number of processes that need their input.

There are also regular meetings, such as monthly Rūnanga meetings, in which the PT and committee could participate with the appropriate notice and organisation.

Overall, there was a desire amongst Committee to stay better abreast of the engagement with partners, and take more opportunities to help build relationships and raise awareness.

ACTION: Suze to put a recurring update on the Committee meeting agenda: PT and/or Committee attendance at TA and Ngāti Toa meetings

DECISION: Agreed Jon proceed to work up detail of the engagement plan

Dinner break

Session 3 – Scenario content & framework

(Hayley Vujcich, GWRC)

See Hayley's [presentation](#) and [handouts](#) in *Whaitua Committee Shared Workspace*

Session purposes:

1. To hear and understand how Committee's scenarios content from 2016 fits into the revised scenario framework
2. To make a Committee decision on moving forward from the scenario content mapping / translation

Hayley first gave a brief recap on the purpose of scenario modelling (exploratory, to provide the maximum breadth of information for Committee decision-making). She then talked through the revisions to the scenario framework, made in response to Committee questions and requests at the 9.2.17 Committee meeting. (Refer to handout "[Revised scenario framework](#)"). Any further suggestions on wording (e.g. the names of the axes) should be emailed to her.

The three questions that need answers to develop scenario content will be tackled in steps (refer to slide 6 in presentation). This meeting's focus was on how 2016 content maps into the new framework. This will be further worked on following this meeting, and the other two key questions will be addressed at the 23.3.17 meeting.

Hayley then presented how the working groups' 2016 scenario material had been mapped into the new framework of "improved" and "water sensitive" practice levels, by a variety of project team workers. (Refer to handout "[Translating working group material into improved and water sensitive practice – 02.03.2017 workshop](#)".) This was a relatively brisk overview with detailed discussion and questions held over for the subsequent small group workshopping. Key points from the presentation are below.

Rural issues WG material	<p>Refer to handout “Translating Rural Issues Working Group scenario material into proposed scenario framework – for 02.03.2017 workshop” pp1-2</p> <p>This material translated relatively directly into the new framework.</p> <p>Forestry is a notable outstanding element which needs to be discussed.</p> <p>The management option of retiring class 8 land (only) has been removed as there is only a tiny amount of this in the catchment.</p>
Storm water & wastewater WG material	<p>Refer to pp3-5 in the handout.</p> <p>Several management options can be in either (or both) improved or water-sensitive depending on the level / intensity of effort that Committee decide.</p> <p>An example of this is for the management options around wastewater overflows. For these, the Project Team would like to come back to you with options for how to put this together.</p>
Other / ex-scenario options	<p>Several management options are coded “Other”.</p> <p>These will be reported on outside the “integrated scenarios” due to factors such as their novelty (there is no data yet) or that they are particularly difficult to incorporate into the integrated scenarios.</p> <p>Committee will receive useful information on Other management options (e.g. cost, likely benefit) at the same time as the integrated scenario results, but from other analysis such as feasibility assessments.</p> <p>Similarly, “WWTP” are very important (particularly re cultural and social values) but will be handled outside the big framework because the information we have is unlikely to be useful for modelling the impacts of the discharge, how it mixes etc.</p> <p>Committee will receive information on WWTP options from analysis done outside the integrated scenario modelling (in this case by Wellington Water’s own modelling work).</p> <p>For all the of “outside scenarios” information, Committee will receive information on the associated confidence and uncertainty.</p>
Urban Development WG material	<p>The narratives relate to the practice levels, and also draw on the yet-to-be-decided spatial variables (how great the extent of development is).</p> <p>Lots of technical input is needed to further tease out what the different practices actually mean.</p>
Next steps & who does what	<p>For the first key scenarios question (What are the practices), following today’s workshoping, the PT will revise the content and bring it back to you. In parallel, they are requesting advice from technical experts on finer detail, including getting Committee / modellers together.</p> <p>For the second and third questions (“For the new urban, where is it? What kind of density?” And “For all land use change and practice, when does it occur?”) the PT will bring some recommendations for how these could come together.</p>

The Committee broke into small groups facilitated by Alastair, Murray and Ned for half an hour of workshoping. The task was to:

1. Discuss the content and the mapping of 2016 material into current, improved, water sensitive ‘practice’ categories, and
2. Identify areas where people felt comfort and discomfort (both from not understanding, and from understanding and not being happy with material).

This work is reproduced at Appendix 2.

Once this was completed, the Committee re-grouped for discussion. The key questions were: How comfortable is Committee with the mapping of scenario content into the new framework? Are people happy to clear the Project Team to take tonight's content and move forward with the next step of scenario development? Some key themes from the discussion follow.

Types of comfort and discomfort Some of the small groups' questions give rise to specific answers (e.g. what are current stocking rates, so we can compare other practice levels). Others speak to the generally shared feeling that people will be more comfortable once they can see more detail on practices. People acknowledged that this is coming, but looked forward to seeing it. Two key examples of this were management options in the urban development space, and in the wastewater space. Forestry was again raised as an area eliciting particular discomfort and needing more detail. Overall there was general comfort with the improvements to the new framework, and with how 2016 material had been mapped into it, subject to the Project Team addressing the areas of discomfort highlighted.

Committee material to modellers: what is needed There was discussion about the next steps to the overall objective of having scenarios sufficiently complete by the end of March to hand to the modellers. The threshold is for Committee to have a sufficiently high level of comfort that the scenarios:

- will capture information on the effects of different activities on the values, and
- cover a broad enough range that the results will provide good information into the Committee's decisions in selecting different management options

Ned Norton observed that some of this information will come to light once the modelling has begun, and that there is an iterative process that can happen.

There will also be a degree of being comfortable with the exploratory nature of the scenario modelling, remembering that including a particular management option in modelling in does not constitute tacit approval of it or a decision to include it in policy.

There was a question about whether the modellers are able to work with the Committee's material. Brent responded that the CMP had been comfortable with the first versions of the material and so would also be able to work with the integrated framework – in an iterative process with Committee. He also noted that Committee members were invited to the meeting with some modellers to discuss the Urban Development material on 08.03.2017; Stu commented that he was intending to attend.

Decision Overall, all three groups were comfortable with the Project Team taking the evening's scenario material and moving forward.

ACTION: PT to present the next phases of scenario material to Committee for discussion on Mar 23.

The session's purpose was achieved.

Session 4 – Any Other Business

(Stu Farrant, chair)

Stu reminded the committee that

1. They should continue to feed ideas for meeting agendas, running of meetings, material, field trips etc. to the PT or himself or in the small black box;
2. The PT will be sending the committee material to look over before next meeting:
 - modelling reporting points response from modellers (for committee feedback by email)
 - BAU scenario (any quick clarifications at 23.03.2017 meeting)
 - WMUs (for brief discussion at 23.03.2017 meeting)
3. The next meeting topics are:
 - Scenario content – deciding questions 2 & 3 from Hayley's presentation
 - Discussion on consensus in Committee
 - BAU – very short session
 - Water management units – short session

Committee are welcome to suggest additional topics, and PT will consider them noting the universal desire for less full agendas

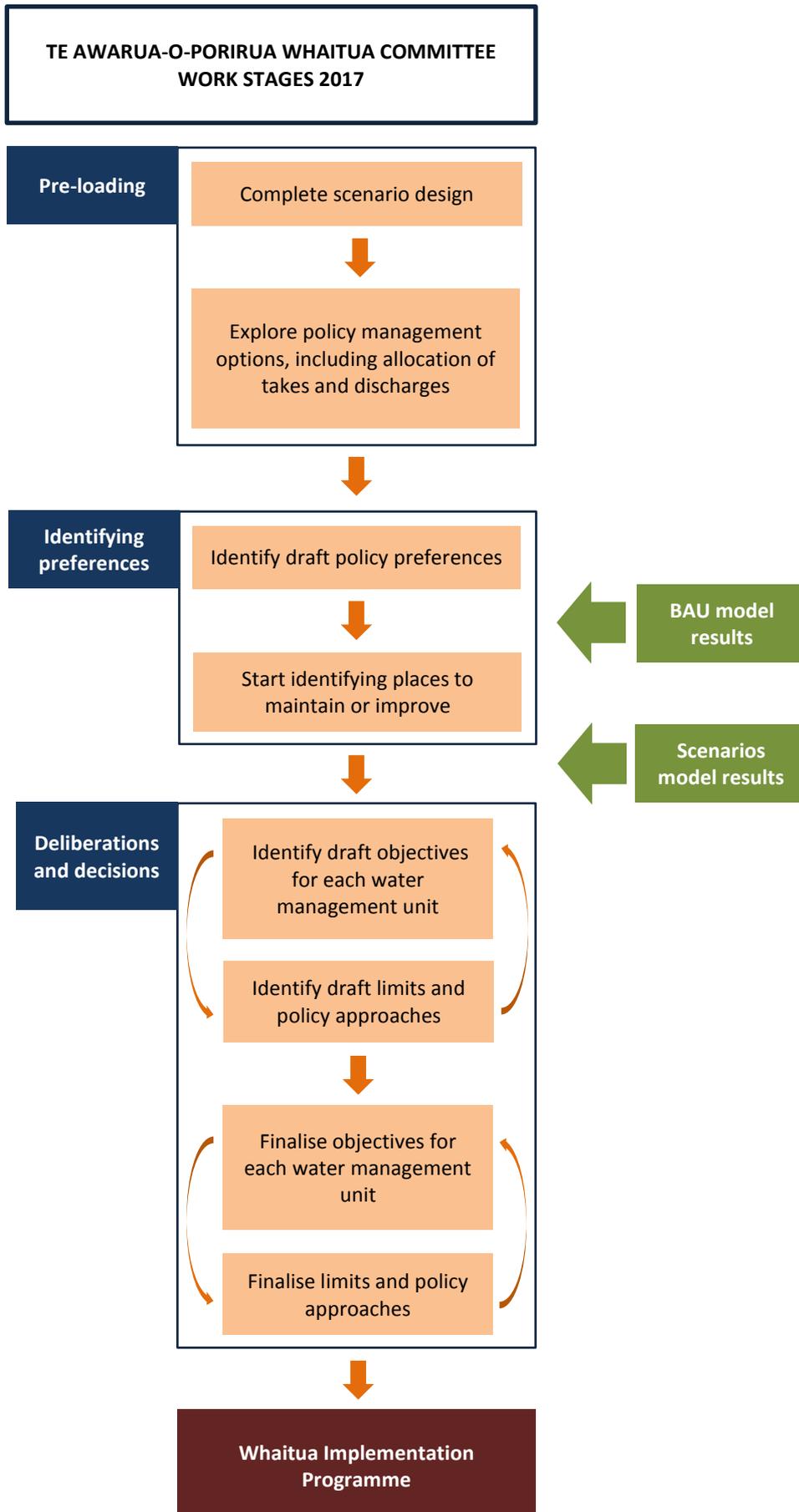
The committee approved Glen Lauder and Phillip Barker from the Land and Water National Science Challenge to observe the March 23 meeting, if they bring chocolate.

Field trips update – Suze had not heard back from Transmission Gully and Hayley had discussed a waste water trip with Wellington Water, however they had proposed 4-hours, which was deemed too long by the committee. Hayley will revert to Wellington Water and bring an alternative idea to the next meeting.

The meeting closed at 9pm.

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

APPENDIX 1 Skeleton diagram: Te Awarua-O-Porirua Whaitua Committee Work Stages



Appendix 2:

TAoPWC 2.3.17: Scenarios mapped into framework: groups' comfort and discomfort notes

* = comfort note

^ = discomfort note (generally)

Group 1:

- Generally happy with mapping into framework
- * Improved (I) & Water Sensitive Design (WS) easier to understand than gold, silver, bronze
- ^ Need to confirm stocking rates
- ^ distinguish what is "good" or WS forestry practice

Urban Development (UD) management options:

- ^ need to list practices.
- ^ "Bucket" of other options to be explored (but aren't modelled)
- ^ Acknowledge this (I) is still high imperviousness

Storm water/Wastewater (SWWW) management options:

1st 3

- * Retrofitting proprietary devices: Improved is low hanging fruit
- * wetlands in WS category good
- road sweeping, zinc roofs mitigations: WS is doing more vs I is doing less overflows and riparian restoration:
- ^ Need to quantify number of overflows for both ws and i
- ^ riparian - need to quantify – probably metres or %
- ^ riparian - Need to identify where (both I and WS)

Current business as usual	Improved	Land and water use practice	Water sensitive
<p>Remotement of classes 8, 7a, (NZR1) (both sides)</p> <p>Space planting on all class 6a (NZR1) light</p>	<p>Remotement of classes 8, 7a, (NZR1) (both sides)</p> <p>Space planting on all class 6a (NZR1) light</p>	<p>Remotement of classes 8, 7a, 6a (NZR1) land into class 6a (NZR1) light</p> <p>Space planting on all class 6a (NZR1) light</p>	<p>Remotement of classes 8, 7a, 6a (NZR1) land into class 6a (NZR1) light</p> <p>Space planting on all class 6a (NZR1) light</p>
<p>Riparian planting on all streams (permanently flowing water 0.5m wide or 30cm deep, 5m width (both sides))</p> <p>Stock exclusion from all streams (permanently flowing water 0.5m wide or 30cm deep)</p> <p>Stocking rates at 12 su/ha</p>	<p>Riparian planting on all streams (permanently flowing water 0.5m wide or 30cm deep, 5m width (both sides))</p> <p>Stock exclusion from all streams (permanently flowing water 0.5m wide or 30cm deep)</p> <p>Stocking rates at 12 su/ha</p>	<p>Riparian planting on all streams (permanently flowing water 0.5m wide or 30cm deep, 5m width (both sides))</p> <p>Stock exclusion from all streams (permanently flowing water 0.5m wide or 30cm deep)</p> <p>Stocking rates at 12 su/ha</p>	<p>Riparian planting on all streams (permanently flowing water 0.5m wide or 30cm deep, 5m width (both sides))</p> <p>Stock exclusion from all streams (permanently flowing water 0.5m wide or 30cm deep)</p> <p>Stocking rates at 12 su/ha</p>
<p>Proportion of forest harvested in a year does not exceed 1% of the total catchment</p> <p>Stormwater management practice is enhanced to include riparian planting, stock exclusion, and other measures to improve water quality and reduce erosion</p>	<p>Proportion of forest harvested in a year does not exceed 1% of the total catchment</p> <p>Stormwater management practice is enhanced to include riparian planting, stock exclusion, and other measures to improve water quality and reduce erosion</p>	<p>Proportion of forest harvested in a year does not exceed 1% of the total catchment</p> <p>Stormwater management practice is enhanced to include riparian planting, stock exclusion, and other measures to improve water quality and reduce erosion</p>	<p>Proportion of forest harvested in a year does not exceed 1% of the total catchment</p> <p>Stormwater management practice is enhanced to include riparian planting, stock exclusion, and other measures to improve water quality and reduce erosion</p>
<p>Individual devices in one off cases, such as:</p> <ul style="list-style-type: none"> • On private land high risk areas? • Treatment of high trafficked roads 	<p>Individual devices in one off cases, such as:</p> <ul style="list-style-type: none"> • On private land high risk areas? • Treatment of high trafficked roads 	<p>Individual devices in one off cases, such as:</p> <ul style="list-style-type: none"> • On private land high risk areas? • Treatment of high trafficked roads 	<p>Individual devices in one off cases, such as:</p> <ul style="list-style-type: none"> • On private land high risk areas? • Treatment of high trafficked roads
<p>Migrate high zinc generating roofs by replacement or painting</p> <p>Road sweeping to remove fines</p> <p>Reduce impervious surface catchment cover</p>	<p>Migrate high zinc generating roofs by replacement or painting</p> <p>Road sweeping to remove fines</p> <p>Reduce impervious surface catchment cover</p>	<p>Migrate high zinc generating roofs by replacement or painting</p> <p>Road sweeping to remove fines</p> <p>Reduce impervious surface catchment cover</p>	<p>Migrate high zinc generating roofs by replacement or painting</p> <p>Road sweeping to remove fines</p> <p>Reduce impervious surface catchment cover</p>
<p>Reduce wastewater network overflows, including on replacing pipes, reducing (I) and increasing storage</p> <p>Riparian restoration of some waterways</p>	<p>Reduce wastewater network overflows, including on replacing pipes, reducing (I) and increasing storage</p> <p>Riparian restoration of some waterways</p>	<p>Reduce wastewater network overflows, including on replacing pipes, reducing (I) and increasing storage</p> <p>Riparian restoration of some waterways</p>	<p>Reduce wastewater network overflows, including on replacing pipes, reducing (I) and increasing storage</p> <p>Riparian restoration of some waterways</p>

Group 2:

- * Happy with first 4 management option rows on chart.

Questions/seeking more info:

- Definitions / maps around land classification
- Is there any significant difference vis-à-vis 5m width and 10m width riparian planting?
- What about targeted planting on overland flow paths?
- ^ Stocking rates for Improved– where should this be set? Is this too high?
- Can we get stocking rates throughout NZ on similar land classes in whatua?
- ^What are X% and Y% for forestry? Committee to agree re % and whether we want a forestry scenario
- Wording edits (& spelling corrections) to UD descriptions – see picture if required

Bringing together all Working Group management options into 'improved' and 'water sensitive'

Current (Business as usual)	Land and water use practice	
	Improved	Water sensitive
GWRC subsidies for space planting (av X/yr)	Retirement of classes 8, 7e (NZLRI) land	Retirement of classes 8, 7e, 6e (NZLRI) land into woody vegetation
Riparian planting with current GWRC funding (\$20k/yr), equivalent to ~1.6km/yr	Space planting on all Class 6e (NZLRI) land	Riparian planting on all streams (permanently flowing water 0.5m wide or 30cm deep) 10m (both sides)
Stock exclusion in accordance with Proposed Regional plan rules, but this does not require any exclusion within the whatua boundaries (with very small exceptions)	Riparian planting on all streams (permanently flowing water 0.5m wide or 30cm deep), 5m (both sides)	Stock exclusion from all streams (permanently flowing water 0.5m wide or 30cm deep)
No limit on stocking rates <i>Could stocking rates?</i>	Stocking rates at 12 su/ha <i>Where should this be set? Is this too high?</i>	Stocking rates at 3.5 su/ha
No restrictions on forestry areas under harvest	Proportion of forest harvested in one year does not exceed Y% of the total catchment	Proportion of forest harvested in one year does not exceed X% of the total catchment
Little or no application of design or devices for stormwater management in new subdivision and development.	Stormwater management practice is enhanced to reach a 'best practice' standard (BMP). This is likely to reflect national best practice, with some degree of analysis to identify mitigation practices likely to be feasible and valuable in the whatua. This approach tends to be focussed on the use of stormwater management devices and follows an approach of current land development practice aiming for large flat sections, large houses and large roads.	'Urban best practice' approach. This will mean the full application of water sensitive urban design (WSUD) principals in subdivision design and construction, including seeking permeability greater than BAU and BMP, smaller building and road footprints, and enhancement of water ways through green space management, and stormwater infrastructure choices.

- Suggestions: clarify by adding “greenfields”, “brownfields”, “improving what we have” to management options
- ^Proprietary devices –where cost effective, add WS ones to I scenarios. Targeted
- *Generally happy with other SWWW options.

No limit on stocking rates <i>Could stocking rates?</i>	Rural Issues Working Group	Stocking rates at 12 su/ha <i>Where should this be set? Is this too high?</i>	Stocking rates at 3.5 su/ha	<i>Can we get targeted stocking rates around whatua on similar land classes in whatua?</i>
No restrictions on forestry areas under harvest	Rural Issues Working Group	Proportion of forest harvested in one year does not exceed Y% of the total catchment	Proportion of forest harvested in one year does not exceed X% of the total catchment	<i>What are X & Y?</i>
Little or no application of design or devices for stormwater management in new subdivision and development.	Urban Development Working Group	Stormwater management practice is enhanced to reach a 'best practice' standard (BMP). This is likely to reflect national best practice, with some degree of analysis to identify mitigation practices likely to be feasible and valuable in the whatua. This approach tends to be focussed on the use of stormwater management devices and follows an approach of current land development practice aiming for large flat sections, large houses and large roads.	'Urban best practice' approach. This will mean the full application of water sensitive urban design (WSUD) principals in subdivision design and construction, including seeking permeability greater than BAU and BMP, smaller building and road footprints, and enhancement of water ways through green space management, and stormwater infrastructure choices.	<i>It sounds like we need to see what we can do with a 'best practice' approach.</i>
Some use of individual devices in one off cases, but no systemic use	Stormwater and Wastewater Working Group	<ul style="list-style-type: none"> • Retrofitting of proprietary devices (e.g. filters) on public land (distributed) • On private land (high risk sites?) • Treatment of high trafficked roads 	<ul style="list-style-type: none"> • Fitting of rain gardens • Fitting of stormwater treatment wetlands • On public land (catchment-scale) • Treatment of high trafficked roads (catchment-scale) 	<i>Urban Field</i>
NA	Stormwater and Wastewater Working Group	Mitigate high zinc generating roofs by replacement or painting	Mitigate high zinc generating roofs by replacement or painting	
NA	Stormwater and Wastewater Working Group	Road sweeping to remove fines	Road sweeping to remove fines	
NA	Stormwater and Wastewater Working Group	Reduce impervious surface catchment cover	Reduce impervious surface catchment cover	
Investment in infiltration and in-flow (I/I) reduction under existing	Stormwater and Wastewater Working Group	Reduce wastewater network overflows, including	Reduce wastewater network overflows	

Group 3:

- Generally happy with mapping into framework
 - Observation – first 3 mgmt options are linked
 - ^Forestry – don't agree with %, instead improve practice. Need to find best mechanism to achieve.
 - * Agree want to reduce sedimentation from harvest
- UD material:
- ^focus on outcome rather than methods – e.g. imperviousness = method not outcome
 - *Good in principle. Need modellers to list measures at scale ahead of main modelling
 - ^Proprietary devices row (covers all 3 boxes in right column too): WS examples could fit under improved at small scale
 - ^Zinc, road sweeping: Scale, frequency: good → medium (improved?); Better → high (WS?)
- Imperviousness:
- Agree on desirable outcome but discomfort with wording of method (reduce impervious cover)

Group management options into 'improved' and 'water sensitive' practice

	Land and water use practice	
	Improved	Water sensitive
Group (av X/yr)	Retirement of classes 8, 7e (NZLRI) land Space planting on all Class 6e (NZLRI) land	Retirement of classes 8, 7e, 6e (NZLRI) land into woody vegetation
MRC funding (yr)	Riparian planting on all streams (permanently flowing water 0.5m wide or 30cm deep), 5m width (both sides) Stock exclusion from all streams (permanently flowing water 0.5m wide or 30 cm deep)	Riparian planting on all streams (permanently flowing water 0.5m wide or 30cm deep) 10m width (both sides) Stock exclusion from all streams (permanently flowing water 0.5m wide or 30 cm deep)
Proposed boundaries not require boundaries	Stocking rates at 12 su/ha	Stocking rates at 3.5 su/ha
under harvest	Proportion of forest harvested in one year exceed 5% of the total catchment	Invested in one year does total catchment
or devices for subdivision	Stormwater management practice is enhanced to reach a 'best practice' standard (BMP). This is likely to reflect national best practice, with some degree of analysis to identify mitigation practices likely to be feasible and valuable in the context. This BMP approach tends to be focussed on the stormwater management of private land, with the aim of large flat sections of land being managed as large roads.	Stormwater management practice is enhanced to reach a 'best practice' standard (BMP). This will mean the full application of water sensitive urban design (WSUD) principals in subdivision design and construction, including seeking lower imperviousness than BAU and BMP practice, smaller building and road footprints, creation of green space, and improvement of water ways through green space management, and water infrastructure choices.
in one off cases,	Urban Development Working Group Retrofitting of proprietary devices (e.g. filter socks) on public land (distributed) On private land (high risk sites?) Treatment of high trafficked roads	Urban Development Working Group Retrofitting of rain gardens Retrofitting of stormwater treatment wetlands on public land (catchment-scale) Treatment of high trafficked roads (catchment-scale)
Stormwater and Wastewater Working Group	Mitigate high zinc generating roofs by replacement or painting Road sweeping to remove fines Reduce impervious surface catchment Reduce wastewater network overflow by replacing pipes, reducing I/I and storage	Rain water harvest and reuse Install rain tanks in dwellings Install rain tanks and reuse in commercial properties Mitigate high zinc generating roofs by replacement or painting Road sweeping to remove fines Reduce impervious surface catchment cover Reduce wastewater network overflow by replacing pipes, reducing I/I and storage
and inflow I/I) set Management	Riparian restoration of some waterways	Riparian restoration of some waterways

Handwritten notes on the table:

- Top left: FRAMEWORK
- Top right: This is a good example of a water sensitive practice
- Left side: Don't agree with the % of the total catchment. Agree on desirable outcome but discomfort with wording of method (reduce impervious cover)
- Center: This BMP approach tends to be focussed on the stormwater management of private land, with the aim of large flat sections of land being managed as large roads. GOOD IN PRINCIPLE. NEED MODELLERS TO LIST MEASURES AT SCALE AHEAD OF MAIN MODELLING.
- Right side: Agree on desirable outcome but discomfort with wording of method (reduce impervious cover)