



Collaborative Stakeholder Group (“CSG”) Workshop 16b Notes

21 September 2015, Don Rowlands Centre, Lake Karapiro, 9.00am – 5.45pm

Attendees:

CSG: George Moss (Dairy), Gwyneth Verkerk (Community), James Bailey (Sheep and Beef), Phil Journeaux (Rural Professionals), Ruth Bartlett (Industry), Stephen Colson (Energy), Jason Sebastian (Community), Sally Millar (Delegate for Rural Advocacy), Alamoti Te Pou (Māori Interests), Brian Hanna (Community), Rick Pridmore (Dairy), Elizabeth Aveyard (Delegate – Industry), Alan Fleming (Env/NGO), Patricia Fordyce (Forestry), Chris Keenan (Horticulture), Weo Maag (Māori Interests), Garry Maskill (Water supply takes), Gayle Leaf (Community), Don Scarlet (Delegate – Tourism/Recreation), Graeme Gleeson (Delegate - Sheep and Beef), Michelle Archer (Env/NGO’s), James Houghton (Rural Advocacy),

Other: Bill Wasley (Independent Chair), Helen Ritchie (Facilitator), Stu Kneebone (Deputy Co-chair), Jo Bromley (WRC), Billy Brough (River Iwi Co-ordinator), Janine Hayward (WRC), Jackie Fitchman (WRC), Will Collin (WRC), Janet Amey (WRC), Jonathan Cowie (WRC), Michelle Hodges (WRA), Kataraina Hodge (HRWO Co-chair), Poto Davies (Maniapoto), Philip Millichamp (CHH), Warren Parker (Scion), Brian Johnson (Margules Groome)

TLG: Dr Bryce Cooper (Chair), Antoine Coffin, Liz Wedderburn, Mike Scarsbrook, Graeme Doole

Other staff (part): Vaughn Payne, Justine Young, Vicki Carruthers, Sarah Mackay, Emma Reed, Tracey May, Ben Ormsby

Apologies:

CSG: Dave Campbell (Delegate for ENV/NGO), Alastair Calder (Tourism and Recreation), Sally Davis (Local Government), Charlotte Rutherford (Delegate – Dairy), Garth Wilcox (Horticulture - Delegate), Liz Stolwyk (Community), Matt Makgill (Community), Gina Rangi (Maori Interests), Evelyn Forrest (Community),

Other: Alan Livingston (HRWO Co-Chair)

Item	Time	Description	Action
1.	9.00am	<u>Opening waiata and CSG – only time</u>	

2.	9.30am	<p><u>Chairs opening</u></p> <p>Chair Bill Wasley welcomed the group and gave the apologies for the workshop</p> <p>CSG only - The chair advised that there would be a discussion in respect of project timelines in the afternoon. At that time HRWO co chair Kataraina Hodge will speak to the correspondence sent to CSG on Friday 18 September 2015. CSG members indicated that there should be a CSG only session to discuss matters related to timelines.</p>	
3.	9.35am	<p><u>Intro to CSG16b process</u></p>	
4.	9.40am	<p><u>Integrated Assessment – Dr Liz Wedderburn and Antoine Coffin (DM#3495598/ 3510525/ 3562933)</u></p> <p>Presentation on round one of the IA findings.</p> <p>Key points from the presentation included:</p> <ul style="list-style-type: none"> • Liz thanked the CSG members who help conduct the first round of the integrated assessment • The integrated assessment will assist the CSG to talk to the community about the predicted impacts of the scenarios • At the subgroup meeting that occurred on 15 Sep, the subgroup: <ul style="list-style-type: none"> - Validated the baseline information - Validated the integrated assessment for scenario 1 - Undertook an integrated assessment for scenarios 2-4 - Defined the ‘vibrant resilient communities’ indicator • The tasks for the CSG today were to: <ul style="list-style-type: none"> - identify the key points which stand out from the integrated assessment - identify which of these points they would like to ensure are covered in round 2 of the integrated assessment - validate the vibrant resilient communities indicator and decide on a way forward for this indicator • The changes to the ‘wheel’ method of presenting the integrated assessment and ‘how to read’ the wheel were discussed • The wheels (results) of the integrated assessment for scenarios 1-4 were shown to the group <p>Following the presentation the CSG had robust discussions on:</p> <ul style="list-style-type: none"> • the results of the first round of the integrated assessment 	<p>Clarification is needed as to whether scenario 1, 2 or neither meet the V&S. In particular, our wording to describe these scenarios needs to be accurate – Jacqui Henry</p>

		<ul style="list-style-type: none"> • the way the results were presented • the baseline data and how this could be further improved • the potential policy implications of the integrated assessment and scenario modelling <p>Some discussion also occurred regarding whether scenario 1 meets the requirements of the Vision and Strategy, whether scenario 2 also meets the requirements of the Vision and Strategy or whether neither meets the requirements of the Vision and Strategy. It was noted that this will need to be clarified.</p>	
	10.35am	Morning tea	
5.	11.00am	<p><u>Integrated Assessment – Dr Liz Wedderburn and Dr Antoine Coffin (DM# 3495598/ 3510525/ 3562933)</u></p> <p>Vaughn Payne was introduced to the CSG.</p> <p>The CSG participated in small group sessions to address questions:</p> <ul style="list-style-type: none"> • Validate baseline narrative for vibrant resilient communities. • What changes would you make to the wheel? <p><u>Integrated assessment - small groups feedback</u></p> <p>Vibrant and resilient communities:</p> <ul style="list-style-type: none"> • Sits under TA's – their responsibility. Go down to finer spatial level than FMU. TA's will need time to implement strategies. Don't underestimate resilience. Rural depopulation trend happening anyway – if this is to accelerate it, it will be up to TA's to mitigate – affected by timeframes. Understand what TA's already do and measure. • Support for this indicator, demographic data useful to reflect it. Employment diversity – does it duplicate MEC or is it different? • Recreation participation - does it duplicate recreation? • Add work on self promoter score, as a measure of pride. Story around 'adapting' - social, cultural and commercial. Link to flexibility of land use. • Resilience/ vibrancy would look very different in different parts of the Waikato. Develop sub regional descriptions. (Economic development strategies, 10 year plans, Community Outcomes) - Info sources from districts. • School age population - better indicator is number of schools. <p><u>Wheel:</u></p>	<p>TLG will make a start on feedback received and then the data will be validated back with CSG on 1/ 2 October workshop. The Integrated Assessment meeting on 23 Sept will not involve the CSG sub-group; it will be done by the expert panel.</p>

		<ul style="list-style-type: none"> • Temp, flow, clarity. Suggest we remove temp and flow as not in scope, clarity already an attribute. • Need better index and key for public and scenario descriptors • Add vibrancy and keep two employment indicators. • Riparian margin access – same as riparian • This info (cultural indicators) came through from kaumatua, either put it in a way that's 'fits the glove' or has to fit somewhere, or we have to go back to kaumatua. • Clarity – our 'c' band is 1m for attributes • Confusing if our indicator is different • IA should have indicators that aren't attributes • Could we package some of these together as an indicator for swimming accessibility and acceptability / Hauora • Korero to go back to kaumatua about how it's been used. • Pests – peace of mind that there is no unintended effect on this. • Question is whether this wheel reflects CSG discussion or wider input/ conversations? <p><u>Summary</u></p> <ul style="list-style-type: none"> • Keep employment orange and purple and add in resilience and vibrancy as a new indicator. <p><u>Subgroup meeting:</u></p> <p>There is a meeting scheduled for the CSG Subgroup on 23 September (Wednesday). CSG members were asked who would like to attend. Agreed to leave this second round to the expert panel. Liz W advised that the expert panel would need more time to incorporate feedback (longer than two days).</p> <p>Action: TLG will make a start on feedback received and then the data will be validated back with CSG on 1/ 2 October. The Integrated Assessment meeting on 23 Sept will not involve the CSG sub-group; it will be done by the expert panel.</p>	
6.	11:45am	<p><u>Mitigations – Dr Bryce Cooper and Dr Graeme Doole (DM#3565204)</u></p> <p>The TLG's focus has been on the second round of scenario modelling so that this can be fed into the integrated assessment. This is a critical task for the TLG and needs to be completed in time to get this information back to the CSG for their meeting on 1/2 October. The</p>	

		<p>work on the mitigations report has come secondary to this core task of the TLG.</p> <p>Creating the mitigations report involves a rigorous sensitivity analysis on the mitigations. This analysis checks how sensitive the assumptions are and how this affects the model. This will highlight the implications of the assumptions. This extensive piece of work will involve various expert input.</p> <p>The mitigations report will be ready for the next CSG meeting (1/ 2 October 2015). It will also be important to bring in the experts so that the CSG can get as thorough understanding as they need to. A key aspect of all of this work will be to highlight the really important mitigations.</p> <p>The scenario modelling has presented the profit for each sector and the cost across a number of mitigations. Some mitigations were shown as cost curves for different sectors.</p> <p>Mitigations were targeted at the different representative farm types in the model. These representative farm types were developed with industry.</p> <p>Graeme went through the list of mitigations (DM# 3565204) and described them in more detail for the CSG.</p> <p>Discussion points:</p> <p><u>Edge of field mitigations and fencing:</u></p> <p>Q – Do the detention bund and sediment pond mitigations apply on horticulture land? A – Yes they are mitigation in the models. Edge of field mitigations apply to not only pastoral land uses but to other land uses as well, like horticulture and urban.</p> <p>Q – For edge of field mitigations, are the same parameters used for fencing for both drystock and dairy? A – The type of fencing is modelled differently for drystock and dairy. Different stream types are also included; for Dairy Accord streams, non-Accord streams and drystock streams.</p> <p>Q – Are all the fencing for sectors different widths? Are they assumed to be planted? A – All sectors setbacks have been assumed to be 5m. They are not assumed to be planted</p> <p>Q – Is the loss of land value due to setbacks calculated as part of the model? A – Loss of land value is not calculated in the modelling but loss of profit from the land use is included.</p>	
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7.	12.30pm	<p><u>Policy session – Justine Young and Emma Reed (DM#3507568)</u></p> <p>Progress update provided from a meeting held 9 September.</p> <ul style="list-style-type: none"> • Purpose was to look at benefits and constraints of using N and P at a property level. • A CSG sub group was set up to work on this. • Participants were: Charlotte R, Phil J, James H, James B, Rick P, Mike S. Jon Palmer, Mark B, Emma R and Justine Y from WRC. • Next meeting scheduled for 6 October 2015. • The meeting is open to any other CSG members who want to attend. • The aim is to have this information ready for the 13/14 October workshop. • The strengths and weaknesses of Overseer were discussed at meeting. • All things being equal, Overseer will be a key component of monitoring N and P on farms. • There are always Overseer updates happening. <p><u>Modelling with Overseer:</u></p> <ul style="list-style-type: none"> • Report needs to be more explicit on issues with version control • Note that Overseer not being used in Horizons for 	

		<p>horticulture - using proxies instead, but still have to keep same records (inputs/outputs etc)</p> <ul style="list-style-type: none"> • 2 pieces of work underway <ul style="list-style-type: none"> ○ Use in policy/regulation ○ LAWF work on accounting • Note that Overseer informs catchment modelling/ abatement curves • Question why are we still suggesting using Overseer for P? • Property plan 'limit' - if no number, is it just a property plan? (Can we transit over time to a more numerical basis?) • For horticulture using 40 – 60 blocks and many change each year – a lot of modelling would be required. • More interested in actions for that sector <p><u>Resolutions:</u></p> <ol style="list-style-type: none"> 1. That the report [Options for using Overseer model to manage nitrogen and phosphorus at a property-level] (Doc #3507568 dated 17 September 2015) be received, and 2. That the CSG confirm that the benefits and constraints of using the OVERSEER® (Overseer) nutrient model for managing nitrogen and phosphorus at a property-level have been satisfactorily identified by the CSG subgroup that met on 9 September 2015 (representatives for dairy, drystock, rural professionals, rural advocacy, with WRC staff, Helen Ritchie and Technical Leaders Group). 3. That the CSG nutrient limit and Overseer subgroup meets again (open to other interested CSG members, with a date to be confirmed) after 1-2 October when the Round 2 scenario modelling results are known, to: <ol style="list-style-type: none"> a. further consider viable options for managing nitrogen and phosphorus at a property level, and b. report back to the CSG at their 13-14 October meeting. <p>George Moss/Phil Journeaux Carried</p>	
	1.00pm	Lunch	
8.	1.45pm	<p><u>Community Engagement – Janet Amey and Will Collin (DM#3511300)</u></p> <p><u>Recap:</u></p> <ul style="list-style-type: none"> • Five sectors have set their sector out and 	

		<p>about days</p> <ul style="list-style-type: none"> • Community workshop dates finalised • HRWO workshop on Friday 18 September. • Project booklet, invites, presentations, info sheets, Your Waikato (end of Sept) • Timeframes back from IEP1 (what timeframes do you think are achievable...) • Open stakeholder workshop – overview of the day provided <p>What are the key parts for policy options to focus on? Small group work to look at what do you want feedback on (from the IA and Modelling results)? What will we share?</p> <p><u>How to reword the scenario descriptions of Talking Points.</u></p> <p>Minor changes were made to the Talking Points document:</p> <ul style="list-style-type: none"> • Swimmable and fishable in brackets after each V and S. Add in improvement everywhere • Add after V and S at bottom swimmable and fishable. <p><u>Where to from here?</u></p> <ul style="list-style-type: none"> • 1 / 2 Oct - round 2 results and we discuss possible limits. • Next workshop – think about what we want to ask the community during the engagement period about limits, targets • 13/ 14 Oct – policy options that we want to test. 	
9.	2.30pm	<p><u>Approvals and updates session</u></p> <p>a) <u>Confirm CSG16a workshop notes (DM#3503347)</u></p> <p>The CSG16a workshop notes were approved:</p> <p>Don Scarlet/Stephen Colson Carried</p> <p>b) <u>TLG update on round two scenarios selected for regional economic modelling and IA – Bryce Cooper (DM#3539405)</u></p> <p>Update from Bryce Cooper:</p> <ul style="list-style-type: none"> • The TLG worked through the farm-scale economic results of all the Round 2 scenarios and the regional economic modelling and IA will be run on the scenarios that aim for 10%, 25%, 50% and 75% of Round 1 Scenario 1, as well as the scenarios for 10% and 25% that are constrained to current land use, and using mitigations only (no land use change). 	<p>A fact sheet or short story on the N+P+Chla dynamics to be produced for CSG – Vicki C</p> <p>Provide reference to the DairyNZ work that was published at a conference [last year?] on mitigations - Vicki C</p> <p>Put a description of the scenarios</p>

		<ul style="list-style-type: none"> • The TLG also considered the scenarios targeting one contaminant more strongly than other but found there was not much difference, as the mitigations aimed at controlling other mitigations have the effect of controlling N anyway. • Therefore haven't picked those scenarios further down the list i.e. scenario 11 onwards to run through the economic model. • When we receive the results we will see that S2, 5, 6, 7 answer the question – 'will we get a diminishing return curve?' asked at last CSG. Shows where most of the benefit is coming from. <p>That the report be received Phil Journeaux/James Houghton Carried</p> <p>c) <u>Nutrient reports final package and synthesis report (DM#3539475)</u></p> <p>It was noted that all of the reports will be on the CSG portal shortly. There is one report that the TLG has not approved yet so this will be uploaded when finished in a few days (the Verburg report). There are six reports in total – five are already on portal.</p> <p><u>Conclusions:</u></p> <ul style="list-style-type: none"> • The weight of evidence from these analyses of spatial, temporal and seasonal patterns of chlorophyll a and nutrients, together with bioassay experiment results, indicates that: • Phosphorus is more important than nitrogen in controlling the annual median phytoplankton biomass in the Waikato at present. • However, nitrogen is likely to exert limitation of phytoplankton biomass at times and in places during summer and autumn when N levels are reduced by catchment retention processes (including in-river uptake by plants). • This suggests that efforts to control phytoplankton biomass should focus most on controlling phosphorus. Nevertheless, the evidence suggests secondary focus on nitrogen control to: (i) help control summer/autumn chlorophyll a levels; (ii) as a precautionary approach against increased annual median phytoplankton abundance if the reductions in phosphorus seen in the last decade were reversed (e.g., by extreme climate events that increase erosion processes and deposit more sediment-laden P into the river system); and (iii) as a precautionary approach against nuisance 	<p>(with notes) at the front of future agenda packs - Janine H</p> <p>TLG to bring back a table with attribute bands, load numbers and percentage reductions required for each attribute at sub catchment/ FMU/total catchment level, for each scenario. It is recognised that this will be a large table – Vicki C</p>
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		<p>plant effects in downstream estuary/coastal environments.</p> <p><u>Discussion points:</u></p> <ul style="list-style-type: none"> • Given the limitations of the nutrient reduction bioassay, should it be done in more depth/ again? • The bioassays done with Verburg’s work confirmed, as a body of evidence, the picture of what’s going on... though from a scientific point of view, we could do further work – more bioassays would help to develop a more dynamic model of flows and processes in each hydro lake etc. • This work confirms taking a dual nutrient management approach (to N + P) which is where CSG have landed anyway (addressing all contaminants). Need a fact sheet, short story on influences as we move down the system and what we know about them. <p>d) <u>Answers to questions on nutrients and macrophytes</u></p> <p><u>Macrophytes:</u></p> <ul style="list-style-type: none"> • Some hypotheses put forward for further analysis. • Macrophytes are a sink for nutrients - but nutrient dynamics regarding macrophytes less understood now than for phytoplankton. Still lots of unknowns about macrophytes. • If N and P and sediment encourage macrophytes growth and the die-off in Autumn, what is the effect on nutrients in water? (Release in a pulse) Know less about this. Macrophytes also influenced by water depth – tend to be littoral. 1400 ha of macrophytes in lakes • Macrophytes also controlled 100ha for rowing/ recreation purposes in Jan/ Feb and for intake structures. • Why are there no data points for the Waipa? Because Chlor A is an attribute for lakes and lake-fed rivers. <p><u>The CSG received the document ‘Nutrient reports final package and synthesis’ report (DM#3539475) and that once the final nutrient report is approved by the TLG, all six nutrient reports will be released, along with the synthesis statement.</u></p> <p>George Moss/Chris Keenan Carried</p>	
10.	3.20pm	<p><u>Update from Project Sponsor/Co-chairs – Kataraina Hodge (HRWO Co-chair) and Stu Kneebone (HRWO Deputy Co-chair) (DM#3565115)</u></p>	<p>Bill Wasley to respond to River Iwi Governors</p>

	<p>Apologies from Alan Livingston and Maria Nepia.</p> <p>Stu talked about the recent HRWO committee meeting. He thanked the CSG members who attended the workshop and Bryce for their contributions.</p> <p>The committee made key endorsements on two pieces of work the CSG had done, their preferred option for Lakes and the Values and Uses</p> <p>Kataraina then spoke to a letter that had been sent to the CSG from River Iwi Governors (DM#3565115).</p> <p>Key messages from the letter:</p> <ul style="list-style-type: none"> • River Iwi are concerned about the April 2016 timeframe and the limited time • The question they ask the CSG is do you think you have enough time to make good decisions? • If you need more time, signal it now so that they can make it happen • They would like a formal response to the letter <p>The letter outlines the view of River Iwi and they stressed that they can't speak for the Council.</p> <p>Some CSG members noted concerns about the timeframes and communicating the results of what they are learning.</p> <p>Q – Is part of the concern from River Iwi around engagement with tāngata whenua and the thoughts around the time that might take? A – When it comes to consultation they are in the same boat as the CSG, except they get their info from CSG and that informs what they take to their people.</p> <p>Q – It has previously been noticed that having the end point being too close to the election next year is a risk. Would you agree that that might be a risk of extending the timeline? A – River Iwi have changed membership during the process but this has not stopped the process. It is a question for the council.</p> <p>The CSG thought it was a considered letter and thanked the authors. They share the concern around the time needed for good process.</p> <p>Action: Bill Wasley to respond to the letter.</p> <p>The CSG will have CSG-only time to discuss their response. Bill asked Stu to give a council perspective on the issue.</p>	<p>correspondence dated 17 September 2015.</p>
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		<p>Stu noted that:</p> <ul style="list-style-type: none"> • there were a number of considerations for why April was the deadline. • he can't speak for all of council but that the expectation would be that a quality output would override any timeframes. • he is conscious that people are giving up their time for this process and that it is important to have a healthy tension in terms of deadlines. • there was also the possibility that if timelines were delayed until after the election that there could be new councillors (all of whom would have to be brought up to speed) and that the notification date might have to be pushed out even further to 2017. <p><u>CSG only time which related to a discussion on project timelines</u></p>	
	3.30pm	Afternoon Tea	
11.	3.50pm	<p><u>Lakes – Mike Scarsbrook (DM#3539452)</u></p> <p>Moved to CSG17 workshop</p>	
12.	4.30pm	<p><u>CHH/Scion/ Margules Groome research presentation – Philip Millichamp, Ian White, Brian Johnson and Warren Parker (DM#3539304)</u></p> <p>Philip Millichamp – National Environmental Manager (CHH), Ian White - Kinleith Mill Manager (CHH), Brian Johnson (Margules Groome), Warren Parker (Scion) were introduced to the group.</p> <p>Key points:</p> <ul style="list-style-type: none"> • Kinleith has recently been sold – now owned by two Japanese holdings. Principal is Oji Holdings who are interested in growing the business. • Kinleith located strategically due to water, port, timber etc • Large employer in the region • Contribute to the local economy • Two studies have been carried out to look at answering two questions: <ol style="list-style-type: none"> 1. What are the risks to Kinleith with land use change? 2. How much do different land uses contribute to the region considering the full value chain? <p>The chair advised that further discussion on Scion's research results (work co funded by CHH and WRC) would occur at a subsequent CSG workshop with input from TLG.</p>	
13.	5:45pm	Karakia and depart	