



Collaborative Stakeholder Group (“CSG”) Workshop 6 Notes

(Day one) 15 September 2014, Turangawaewae Marae, River Road,
Ngaruawahia 9.30am – 6.30pm

Attendees:

CSG: George Moss (Dairy), Gwyneth Verkerk (Community), Hone Turner (Community), Evelyn Forrest – part (Community), James Bailey (Sheep and Beef), Matt Makgill (Community), Patricia Fordyce (Forestry), Phil Journeaux (Rural Professionals), Rick Pridmore – part (Dairy), Ruth Bartlett (Industry), Stephen Colson (Energy), James Houghton (Rural Advocacy), Tim Harty (Local Government Delegate), Brian Hanna - part (Community), Weo Maag (Māori Interests), Jason Sebastian (Community), Alastair Calder (Tourism and Recreation), Gina Rangi (Māori Interests), Charlotte Rutherford (Dairy Delegate), Liz Stolwyk – part (Community), Michelle Archer (Env/NGO), Alamoti Te Pou (Māori Interests)

TLG: Dr Bryce Cooper, Antoine Coffin

Other: Bill Wasley (Independent Chair), Helen Ritchie (Facilitator), Jo Bromley (WRC), Wendy Boyce (WRC), Janine Hayward (WRC), Justine Young (WRC), Emma Reed (WRC), Ruth Lourey (WRC), Jackie Fitchman (WRC), Will Collin (WRC), Tim Manukau (Waikato Tainui)

HRWO: Tipa Mahuta, Marae Tukare

Other staff (part): James Whetu (WRC), Vicki Carruthers (WRC)

Apologies:

CSG: Alan Fleming (Env/NGO), Chris Keenan (Horticulture), Garry Maskill (Water supply takes), Sally Davis (Local Government, Delegate Tim Harty to attend), Gayle Leaf (Community), Angus Judge (Energy Delegate)

Item	Description	Action
1.	Powhiri History of the marae from Whaea Te Ataarangi. Morning tea and walk to river by Doug Turner. Workshop commenced at 11.30am with a Karakia by Hone Turner.	
2.	Chair’s Opening Statement:	

	<p>Bill Wasley extended his appreciation to Tūrangawaewae Marae for their warm welcome and for sharing some of the history of the marae.</p> <p>Apologies: Sally Davis (Local Government), Chris Keenan (Horticulture), Al Fleming (ENV/NGO), Angus Judge (Delegate for Energy), Garry Maskill (Water supply takes). Apologies also from Alan Livingston.</p> <p>Delegates in attendance: Charlotte Rutherford (Dairy), Garth Wilcox (Horticulture) and Tim Harty (Local Government).</p>	
	<p><u>Waikato Tainui perspectives – Tim Manukau (Doc #3168019)</u></p> <p>Tim Manukau is the Environmental Manager for Waikato-Tainui and a member of Te Rōpū Hautū. His presentation covered who Waikato-Tainui are, their views on the environment, and their environmental plan.</p> <ul style="list-style-type: none"> • Waikato-Tainui is made up of 68 marae. • This includes 64,000 tribal beneficiaries. • A key aim for Waikato-Tainui is working together to enable their people to grow and have a healthy prosperous environment. • Tribal assets now total over \$1.1b. • Tribal businesses generate money for the region and community. However, the tribe used to be more prosperous before the land confiscation, when they traded goods within New Zealand and beyond. • The tribe supplied Auckland with goods and supplies and protected Auckland from invasion from Ngā Puhi attack. • The Government at the time passed the New Zealand Settlements Act which allowed for the confiscation of land. • In 1995 there was the first deed of settlement. • The formal apology from the Crown was the key item for Waikato-Tainui, although the settlement included land and financial compensation. • The Waikato River settlement was an outstanding claim. They negotiated a number of co-management and co-governance situations for the river. • A key development was the Vision and Strategy. The overarching purpose of the Vision and Strategy is the – “protection and restoration of the health and wellbeing of the Waikato River for future generations”. Negotiations took place to ensure protection and restoration was emphasised rather than merely maintenance. • Lands and natural resources are part of the natural identity of the tribe. 	

	<p><u>Waikato-Tainui Environmental Plan – Tai Tumu, Tai Pari, Tai Ao</u></p> <p>The Waikato-Tainui Environmental Plan was officially launched at the 2013 Koroneihana. The key objective of the plan is achieving a state for water quality throughout the rohe of Waikato-Tainui that is fishable, swimmable and drinkable. This includes the tributaries. This objective was agreed to by people from all areas in the rohe and was the common theme in the consultation. It is something to aim towards. It will take a long time.</p> <p>Waikato-Tainui supports the Healthy Rivers plan change. A healthy river will provide for a healthy future. Waikato-Tainui wants to restore the river for all future generations.</p> <p>An objective from a Waikato-Tainui perspective is to have swimmable water all year round. Tūrangawaewae is one of the most well-used spots for swimming on the Waikato River.</p> <p>The eel population is not what it used to be in the past. Some initiatives are in place to help restore the eel population. A lot of eels are in poor condition, especially in the lower parts of the Waikato River.</p>	
	<p><u>Mātauranga Maori Approach – Antoine Coffin (Doc#3168018)</u></p> <p>Mātauranga Māori incorporates the past, present and future. It can be held by individuals, a collective (family, hapu) and shared. It is knowledge held by kaumatua, whanau, hapu and iwi (tribal).</p> <p>Mātauranga Māori is a term that describes the body of knowledge originating from Māori ancestors, including the Māori world view and perspectives, and Māori creativity and cultural practices.</p> <p>Mātauranga Māori also embraces Māori values, cultural expressions, perspectives, and observations, being traditional, historical and contemporary.</p> <p>The water can be seen as for sustenance, cleaning, cooking, preparing, and gardens (he wai). It is also a source of life, (food, resources), transport, identity, place and knowledge.</p> <p>In contemporary times, there has been a flurry of work to bring principles into resource management. People have come up with current models and framework e.g. tapu and noa framework, mauri model, cultural health index.</p> <p>Models get used at different levels at different times. Models are frameworks for ordering thoughts – each tribe will use differently. All water is not equal i.e. all water has different characteristics. Framework can be applied in</p>	

	<p>different places but the key is how is it measured.</p> <p>A range of frameworks were outlined, including:</p> <ul style="list-style-type: none"> • <u>Mauri model</u> – ‘mauriometer’– framework for looking at policy and describing characteristics for describing mauri. • <u>Cultural Health Index</u> (CHI) – mostly used in South Island – monitoring tool. Used by Ngai Tahu. • <u>Whakapapa</u> – iwi can interpret using a whakapapa model. Lots of knowledge held in 1860s by community; not always so these days. <p>Work currently being undertaken in this region:</p> <ul style="list-style-type: none"> • Cultural Health Index currently being used by Maniapoto • Te Mauri model • WRISS (Waikato River Independent Scoping Study) • Knowledge networks for Waikato River restoration (WRA) • Raukawa Environmental Management Plan <p>The group need to take the Waikato Objectives Framework and populate it. Consider using knowledge networks, exploring Māori values and attributes and then look at collaborating with other programmes.</p> <p>Discussion on the challenge to bring through ideas and concepts we have in the national framework. There has been some good work done, but we need to make sure it is relevant and appropriate.</p> <p>There is a wealth of information to draw on from examples of frameworks used in different parts of the country.</p>	
1.30pm	Lunch	
	<p><u>Policy Selection Criteria – part 1</u></p> <p>The policy selection criteria will provide the CSG with a basis to make policy choices.</p> <p>The group will take draft criteria to the Large Stakeholder Forum. This will also go to Te Rōpū Hautū and the Healthy Rivers Wai Ora Committee.</p> <p>The focus question for this session was “What criteria should the CSG apply when selecting from different policy options for a plan change for the Waikato and Waipa catchments?”</p> <p>The group identified 33 ideas and then clustered them into 8 groups. The group then gave titles to these groups that captured the criteria within the group. The CSG were asked to reflect on these overnight and come back in the morning to confirm them (see below).</p>	

3.45pm	Afternoon tea	
Agreement and Approval Session		
<u>Approvals Session</u>		
<p><u>Confirm meeting notes from CSG5 (Doc #3136044)</u></p>		
<p>Workshop documents in a committee format are preferred by CSG. Some minor amendments to agenda to be made. Comments to CSG5 workshop notes included:</p>		
<ul style="list-style-type: none"> • Add in page 15 – ‘can swim in it’ (<i>E. coli</i> levels) • Page 24 – clarification on ‘narrows’ – this is a standard sampling site. 		
<p>The workshop notes from CSG5 were approved by the group.</p>		
<p>Evelyn Forrest/Alastair Calder</p>		
<p>Carried</p>		
<p><u>Consent Conditions Report (Doc # 3140943)</u></p>		
<p>Mark Brocklesby (WRC) was present to answer any questions. This topic was originally raised at CSG3 in Tokoroa.</p>		
<p>Discussion around RMA S128a and b and whether Council will apply this or not.</p>		
<ul style="list-style-type: none"> • Plan process doesn’t change iwi process or co-management arrangements. • When processing resource consents, comments are taken into account. • Sect 128 – need to give a certain length of time. • The term of a consent is at discretion of the council. • If council felt strongly that consents that involve activities that would be affected by plan change process, this could be signalled by the plan i.e. as signalled in V6. The interim period is 18 months (November 15 – proposed) short period. That is why there is section 128 b. • Clear intention that existing consents will be brought in line. Can only apply to new consents that involve discharge from 4 contaminants. • Subject to a review for ones that were given in next 18 months. • In next 18 months – approximately between 70 - 100 resource consent applications will be received. Range from agriculture discharges, industrial discharges, forestry activities. • Indication to applicants that here on in, things may change in future, may need to review conditions of consent, can add advice note on consent, i.e.: under 1281b, the council has the power to review 		

	<p>when regional plan becomes operative.</p> <ul style="list-style-type: none"> • Number of applications dropped, WRC and dairy industry encouraging shift to land discharge of effluent. • Some members of the CSG noted that giving farmers direction is better. • The CSG suggest use of section 128 a. <p>For further discussion tomorrow. Receive report only.</p> <p>Trish Fordyce/Stephen Colson Carried</p> <p><u>Freshwater Management Unit (FMU) approach report</u></p> <p>Summarising where CSG got to last time, suggesting a holding pattern in terms of recommendation for option 3. Further info at later date and may choose another option.</p> <p>Discussion and questions raised on the following:</p> <ul style="list-style-type: none"> • A number of factors in report that focussed on administrative management on where you set boundaries for FMU's. Should be greater weight on issues that arise from catchments, i.e. physical features/geology/soil type that would require a different approach. • What are the reasons for setting up FMUs? Could lead to differences for water quality, attributes, levels etc. • Critical to FMU's – where and how things measured and monitored. Not clear as to how that fits. 80 monitoring points – how will that be aggregated up? • How easy/hard will it be to deal with changes at a later date? How flexible to look at sub units within 4 FMU's? • What other implications does it have? <p>Report received only.</p> <p>Action: Require further elaboration around issues from TLG tomorrow at 2.15pm wrap up session.</p> <p><u>Values report</u></p> <p>Discussion on the following:</p> <ol style="list-style-type: none"> 1. Discussion over best way to present this to the LSF. 2. Some items need further work before going forward for 23 October discussion (first three columns ok) 3. May require a greater level of detail when writing plan change. 4. Look at doc identifying national values – had a fuller list. Doc# 3100236. 5. Further discussion on what will be presented to the LSF, pitch and detail level. 	
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	<p>Action:</p> <ol style="list-style-type: none"> 1. List of values detail is added to values document, circulated to CSG to review prior to LSF. 2. Send paper out again to CSG members 3. Bring back draft tomorrow to wrap up session to consider draft. <p><u>Evaluation follow up session - Kate McKegg and Debbie Goodwin</u></p> <p>The CSG heard from the evaluators about suggested actions arising from the first round evaluation survey.</p>	
Facilitation Session		
	<p><u>Policy Selection Criteria – part 2</u></p> <p>CSG only discussion related to Policy Selection Criteria. CSG members were asked to consider what they would NOT want to see in a policy. Ideas were shared in an informal discussion.</p>	
	<p><u>Feedback from sector/community networks</u></p> <p>The group noted who they had communicated with/what meetings they had attended in the past few months and any issues arising from these.</p> <p><u>Key points:</u></p> <ul style="list-style-type: none"> • Tangata Whenua Engagement - Koroneihana • Waikato River Community Care Group Meeting regarding Cambridge wastewater treatment plant. 	
6.30pm	Workshop closed by Hone Turner. Dinner	



Collaborative Stakeholder Group (“CSG”) Workshop 6 Notes

(Day two) 16 September 2014, Turangawaewae Marae, River Road,
Ngaruawahia 8.30am – 4.30pm

Attendees:

CSG: Alastair Calder (Tourism and Recreation), Alan Fleming (Env/NGO), Garry Maskill (Water supply takes), George Moss (Dairy), Gwyneth Verkerk (Community), James Bailey (Sheep and Beef), Jason Sebastian (Community), Matt Makgill (Community), Phil Journeaux (Rural Professionals), Ruth Bartlett (Industry), Stephen Colson (Energy), James Houghton (Rural Advocacy), Michelle Archer (Env/NGO), Tim Harty (Delegate Local Government) Weo Maag (Maori Interests), Alamoti Te Pou (Maori Interests), Evelyn Forrest (Community), Chris Keenan (Horticulture), Charlotte Rutherford (Dairy Delegate), Brian Hanna (Community), Angus Judge (Energy Delegate), Andrew Jolly (Sheep and Beef Delegate), Garth Wilcox (Horticulture Delegate) Rick Pridmore – part (Dairy)

Other: Bill Wasley (Independent Chair), Helen Ritchie (Facilitator), Jo Bromley (WRC), Wendy Boyce (WRC), Janine Hayward (WRC), Will Collin (WRC), Jackie Fitchman (WRC)

TLG: Dr Bryce Cooper, Graeme Doole, Dr Tony Petch

Other (part): Emma Reed (WRC), Ruth Lourey (WRC), Justine Young (WRC), Vicki Carruthers (WRC), David Hamilton (Waikato University)

Apologies:

CSG: Hone Turner (Community), Patricia Fordyce (Forestry), Liz Stolwyk (Community), Sally Davis (Local Government), Gina Rangi (Maori Interests), Gayle Leaf (Community)

Item	Description	Action
8.45am	Karakia. Waiata (He Honore)	
8.50am	Apologies: Liz Stolwyk, Hone Turner, Gina Rangi, Trish Fordyce Delegates in attendance: Garth Wilcox, Andrew Jolly, Charlotte Rutherford, Angus Judge, Tim Harty.	
9am	<u>Reflect on yesterday’s session</u> The CSG acknowledged the value of the Powhiri, tour and river walk of Tūrangawaewae marae yesterday. The CSG reflected on the policy selection criteria session. The	Future session on allocation methods, including

	<p>following changes were suggested:</p> <ul style="list-style-type: none"> • Social, cultural sections – there could be a separate environmental section. V & S in its holistic-ness may not show it explicitly enough. • Add into: Give positive social benefits and community: Uniqueness and inability to be replicated/duplicated in other parts of the country. • Suggested the CSG will need to consider allocation options and devise a set of principles for nutrient allocation. Add in: achieves the principles of nutrient allocation that are determined by the CSG • These items to be added in and a final set of criteria to be confirmed after lunch. <p>Further discussion will occur on the following items at a later date:</p> <ul style="list-style-type: none"> • Other tools (not just grandparenting). Consider other allocation options. There is interest from the CSG to learn more about grandparenting. What does community understand of grandparenting? It was noted that grandparenting allows people to continue doing what they are doing; not allowing this would create major disruption, so the question is more about to what degree/ what else you put in place to avoid other inequities. • Alternatives to transferring? More discussion on trading. <p>Wealth of experience around the room was noted – importance of the debate within the CSG.</p>	<p>discussion on trading, to be planned into the best project phrase. Justine Young</p> <p>Email road map to find document that describes different policies and how they relate to the project – Legislative context document (CSG1 takeaway pack item 2) on CSG portal. Janine Hayward</p>
9.45am	<p><u>Economic Joint Venture update – Graeme Doole (Doc #)</u></p> <p>A summary of progress on the Economic Joint Venture project which started last year was provided. The project commissioned a series of studies to evaluate the potential impact of water quality limits. The study looked at social, economic, environmental and cultural costs through a lens of both market and non-market values.</p> <p>The study has a strong focus on the costs and benefits of improving water quality. The primary aim of the study is to provide a model to allow potential economic implications of targets to be estimated. It should be noted that the model has only been used for test scenarios so far.</p> <p>Stage 1 of the study looked at the Upper Waikato catchment. Stage 2 of the study has an entire Waikato River catchment approach. The focus has only been on N and P so far. Scenarios have been generated to test the model and the relationship between profit and N and P.</p> <p>There are about 1.1 million hectares in the Waikato and Waipa river catchments. Of this around 33% is dairy, 27% sheep and beef, 1% horticulture, 14% forestry, 25% other (which includes urban areas).</p>	

	<p>The study took many representative land use types to develop the model including: dairy platforms, dairy support blocks, sheep and beef types, horticulture farms, forestry blocks, and point sources.</p> <p>The model can be used by the CSG to test the limits and targets they come up with.</p> <p>The goal within the model framework is to achieve least cost on farm and identify what are the implications of this e.g. what needs to change in terms of land management, intensity, mitigation and land use change.</p> <p>The approach the model uses is broadly used (in both policy and publication). It deals with multiple contaminants, provides key outputs etc</p> <p>Some illustrative scenarios: 10%, 20% and 30% reductions in total N loads.</p> <p>Discussion on where is it most cost effective to have gains throughout the catchment. What can we attain, in terms of total N reduction, with no land-use change?</p> <p>The story changes if you factor in land-use change.</p> <p>In general you find in catchments with a lot of sheep and beef there is a lack of significant mitigation options.</p> <p>Notes:</p> <ul style="list-style-type: none"> • It is important to remember it is just a model and that there are assumptions and omissions which would impact the results. • There are also other limitations to the model such as no inclusion of <i>E. coli</i> and sediment yet. No inclusion of hydrology in Phase 2 model yet (that is the next step). Targets thus focus on loads and not on concentrations. • It is also important to recognise multiplier effects, beyond on-farm costs, which are not factored into the model. <p>Discussion on the ability to support limit management down to the farm level. Is there capacity to do this? It is valuable but it's more important to have qualitative insights from model then the data itself. Too much uncertainty to put weight on quantitative data.</p> <p>Profitability is defined in the context of this model as operating profit.</p> <p>In Upper Waikato report, 3 attenuation levels used. One of the critical findings of the report was how important attenuation is in influencing results.</p> <p>The model can identify the “best bang for buck” farms. This is a</p>	
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	<p>key aspect of the model. Each representative farm is looked at in terms of least cost methods of achieving reduction.</p> <p>The model can be brought down to a viability index for farmers. The model can approximate the number of farms which would no longer be viable under certain targets.</p> <p>Discussion on allocation scenarios around N and how capable would the model be to tell what the effects of an allocation method would be. If you have allocation you should have trading, trading can help overcome distortions. This model can account for allocation methods but need to allow for friction. Can also input the effects of trading but need to be careful with what you are modelling.</p>	
10.30am	Morning tea	
11am	<p><u>Focus on lower river and lakes 1 – Tony Petch and David Hamilton (Doc #3168020, 3168017)</u></p> <p>Presentation from David Hamilton from the Environmental Research Institute at the University of Waikato. Presentation is on meeting the bottom lines for the NOF in shallow lakes in the region.</p> <p>A lot of lakes do not meet the bottom line for chlorophyll a and total N and total P.</p> <p>There are other useful indicators such as the Lake SPI index. It is an indicator for submerged plant health. Reduced water clarity reduces the ability of submerged plants to colonise. This occurs more in shallow lakes.</p> <p>There are large variations in nutrient levels which may be associated with algal blooms including toxic cyanobacteria.</p> <p>Generally in New Zealand we have relatively low total N levels in our lakes and slightly elevated total P levels. However the Waikato lowland lakes stand out internationally as having particularly high total N and total P levels.</p> <p>Storm events can deliver elevated levels of total P and total N.</p> <p>If you are to rectify these lake systems then you may need to re-engineer the systems. Lakes now have a huge legacy of both sediment and total P.</p> <p>There are a large number of peat lakes that have small amounts of native vegetation remaining in their catchments.</p> <p>To reverse the trend and improve the current state there is a need to increase percentage of native vegetation, percentage of catchment in wetland, remove koi carp and invasive macrophytes, and explore re-engineering and sediment treatment in some cases.</p> <p><u>Case study from Tony Petch on Lake Waikare</u></p>	<p>Shallow Lakes Accord – Tony Petch to get info to Charlotte Rutherford on how it is going at achieving its objectives. Vicki Carruthers</p>

	<p>Lake Waikare is a large shallow lowland lake. It has many stressors. It is also an important part of the Lower Waikato flood protection scheme. It is an area of significance for Waikato-Tainui and it also has downstream impacts of sediment through the Whangamarino wetland.</p> <p>It fails to meet NPS-FM bottom lines. The lake has numerous water quality issues. N and P promote algal growth; sediment reduces clarity and impacts ecology. Wind and pest fish disturb the sediment on the bottom of the lake.</p> <p>The lake is important in the flood protection scheme. Lake Waikare has been lowered by a metre to increase its ability to store water. There are specially designed structures to protect against a 100 year type flood that utilises Lake Waikare. Large areas of land are protected by this flood scheme.</p> <p>Other stressors include erosion from steep hills and koi carp. The regional council have installed a koi carp trap in the Lower Waikato. It drags out koi carp, and then turns the carp into compost. There may be opportunities to increase these traps in other lakes.</p> <p>The Matahuru catchment, which flows into Lake Waikare, has some soil conservation but still active erosion suggests more soil conservation is needed.</p> <p>Trees moderate our floods. Under forest compared to pasture the differences in discharges that occur from a flood event are significant.</p> <p>Many groups have interest in the land surrounding the lake, such as DOC, WRC, WDC, Waikato-Tainui, Fish and Game and private owners.</p> <p>Impediments to lake restoration:</p> <ul style="list-style-type: none"> - Scale of issues - Remediation costs - Diverse expectations – land owners, public, iwi - Significant infrastructure, such as management of land drainage and management of the flood protection scheme <p>Challenges for the future:</p> <ul style="list-style-type: none"> - Improving lake water quality - Protecting biodiversity - Enhancing cultural values - Maintaining land drainage - Maintaining viable flood protection scheme - Managing future demands for water <p>Solutions:</p> <ul style="list-style-type: none"> - Management of upper catchment - Habitat enhancement of margins, ephemeral 	
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	<p>wetlands</p> <ul style="list-style-type: none"> - Management of lake depth – WQ/sediment re-suspension, irrigation - Pest fish and pest plant management <p>Most important is that all parties need to act effectively toward a common goal.</p> <p>It is not possible to remove all the koi carp, but can reduce them to a level that you can get some native species back into the lake.</p> <p>To reverse the trend, need to increase the level of native vegetation. The scale of the problem is large and we need a % of the land in native vegetation but this takes time and money. Start with a little step and move forward.</p> <p>CSG noted similarities to other situations. Lake Horowhenua, improvements have been seen due to far more coordinated sediment control. Need to deal with issue in bite sized chunks. WRISS report highlighted that the cost is large, over \$1b.</p>	
11.45am	<p><u>Focus on lower river and lakes 2</u></p> <p>Group exercise looking at the lower river and lakes – what are the key characteristics of the area? (Located in facilitation session notes DM #3175903)</p>	
12.15pm	<p><u>Issues affecting fisheries in the Waikato and Waipa Catchments – Nicholas Manukau and Mike Holmes (Doc #3168014, 3168015)</u></p> <p>Joint presentation from Nicholas Manukau from Waikato-Tainui and Mike Holmes from Eel Enhancement Company regarding the issues affecting the industry and the importance of the river to community and industry.</p> <ul style="list-style-type: none"> • Tribal boundaries stretch from Auckland to South Waikato. • The main aims are to work with people and to satisfy the purpose of the Waikato-Tainui River Settlement. • There used to be an abundance of eel in the river. • The Waikato River provided 97% of protein to ancestors. • Many songs, stories and carvings refer to tuna. • Waikato-Tainui are guardians of the Kiingitanga (King movement). • The Waikato River catchment was a resource and the ancestral lands provided for the country. • Huntly area (Rahui Pokeka) well known for tuna with Lakes Hakanoa and Waahi - names from stories connected with the tuna. • Waikato-Tainui are looking ahead to teach future generations, getting them involved and carrying out monitoring programmes. <p>Waikato river is the largest whitebait fishery in NZ. There has</p>	

	<p>been a decline in the catch of whitebait due to:</p> <ul style="list-style-type: none"> • Destruction of estuary vegetation (riparian vegetation is critical for spawning) <u>and</u> poor water quality • Harvesting • Insufficient suitable food and habitat during the adult stage <p>Water quality:</p> <ul style="list-style-type: none"> • The effects of water quality on fish health are chronic and cumulative • High levels of contaminants cause fish death or avoidance of an area • Low contaminant concentration may have sub-lethal effects i.e. loss of reproductive capacity, decline in growth rates • High suspended sediment levels cause lower abundance of native fish i.e. avoidance • Loss of koura and fresh water mussels (Kaaeo) <p>Dams, weirs, flood pumps and culverts also impede fish passage through access to feeding habitat and spawning, reduce the distribution of native fish and provide advantage to introduced fish that do not need to migrate to spawn.</p> <p>Changes in the flow regime such as modifying flows (i.e. hydro dams) all play a part in impacting on fish health. Natural and autumn floods also have a role to play in life cycle, providing food and tuna migrations.</p> <p>Biggest threat to the native freshwater fishery is the significant modification <u>or</u> total destruction of wetlands (92% of Waikato wetlands lost).</p> <p>Tuna have been commercially exploited since the 1960's. Abundance of commercial-sized eels has declined.</p> <p>The impact of poor water quality and loss of habitat means that there is not enough habitat and food. Tuna are competing for limited space and food – the effect is they are 'penned in.'</p> <p>Waikato River fishery regulations were established to manage customary fishing <i>and</i> propose bylaws to restrict or prohibit fishing within the Waikato-Tainui Fisheries Area</p> <ul style="list-style-type: none"> • Applies to fisheries resources under the Fisheries Act 1996 • Bylaws must be necessary for: <ul style="list-style-type: none"> ○ ~ Sustainable Utilisation or ○ ~ Cultural Reasons • Consistent with Waikato-Tainui Environmental Plan - Tai Tumu, Tai Pari, Tai Ao <p>Discussion on working with other parties and how collaboration has meant empowerment – achieving the purpose of the Waikato River settlement. Everyone has to get involved and</p>	
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look to the long term gain from careful management now.

Mike Holmes - Eel Enhancement Company

The Eel Enhancement Company:

- Represents Quota Holders (50% of these are Māori/iwi)
- Engages with all fishery interests
- Funded from Quota

50% Māori quota holders. It is a small industry nowadays. 90% of the wetlands have gone. A lot less water, quality of water and eels. Land management focus has been on getting rid of water.

EELCo – advocacy for:

- Habitat quality and quantity
- QMS (Quota Management System) fishery management
- Research; and
- Enhancement

Eel habitat, past and present:

NZ waterways have been and are continuing to be:

- Channelized
- Drained
- Pumped
- Walled off
- Flood protected/reduced (90% wetlands gone in Waikato basin)
- Swamps and ox-bows drained and in-filled
- Dehydrated (extraction and irrigation)
- Turbined
- Willow denuded; and
- Polluted by excess nutrients, fine sediments, toxic algae and pest fish.

Discussion points:

- Lower Waikato lakes not fished (only Waahi and Whangape) but they are so degraded they are no longer commercially viable. Lake Waikare was looked at, but nothing can be achieved by managing fish alone.
- Silt is one of biggest problems in fisheries.
- Long finned eels need to have cover. Removing willows removes environment.
- Questions from CSG included what if trees removed for native riparian planting? Can willows be sprayed and died down and native trees planted in between or controlled willow removing? On the Waipa River which is a flood zone, what native will replace a willow? (noted natives won't work in this area).
- Lake Waikare is a typical example of where we have got to. There is no bird life or fish life. Changes need to be made fast so this doesn't happen to the Waikato and Waipa rivers.

	<ul style="list-style-type: none"> • Eels are managed by introducing young eels (elvers) into hydro lakes. There is no way out of a hydro lake for the adult eels. • As a right you can spray aquatic plants. Hamilton Lake is a good example of how not to manage a lake. Plants are sprayed off then plants won't grow and this reduces the health of lake. • Hydro dams limit number of elvers you put in there. Identify streams, farm ponds that don't have any eels and put in there. • Commercial fishing in hydro lakes spreads the load. • Marae can now harvest eels in hydro dams. • Important to get buy in from all iwi – work together. • Education and importance of issues that are impacting tuna. Still want to encourage families to do the things they value. 	
1pm	Lunch	
1.45pm	<p><u>TLG process update – Bryce Cooper (DM# 3167990)</u></p> <p>Update on where the TLG is up to at this stage of the project.</p> <p>The TLG has a log sheet regarding what questions have been asked, who is answering them and where up to. At each TLG meeting they sit down and review it.</p> <p>Members of the CSG would like to use TLG presentations to convey technical questions back to farmers. Presentations are on the CSG portal and members can use them with their groups. The presentations are not placed on the public website.</p> <p>Reiteration that this is a new process going forward. There are always learnings along the way.</p> <p>Consider learnings from regions at LAWF forum held 15 September 2014.</p> <p><u>Attributes:</u></p> <p><u>To date:</u></p> <ul style="list-style-type: none"> • Desired Values developed by CSG • National Objectives Framework with attribute tables just produced • TLG presented Freshwater Management Unit options at CSG5 <p><u>Next steps:</u></p> <ul style="list-style-type: none"> • Technical experts develop a Draft Waikato Objectives Framework (a 'WOF') • TLG presents that at CSG7 • Subsequent work on gap-filling on an 'as needs' basis • TLG uses 'WOF' attribute levels in scenario analysis 	<p>Load pdf version of TLG presentations onto portal for CSG use.</p> <p>TLG to pre circulate material on mitigation options for their model (if possible) for CSG members to bring feedback on to CSG7 from their constituencies. However, if CSG members have mitigation option suggestions already they should send them in now to join the TLG discussions. If CSG members get mitigation</p>

	<p><u>Scenario analysis:</u></p> <p><u>To date TLG has:</u></p> <ul style="list-style-type: none"> • Reviewed relevance of previous studies • Built understanding of studies already underway, their availability, what they might deliver for Healthy Rivers, and when • Prepared work briefs for initial technical experts' workshops <p><u>Next steps:</u></p> <ul style="list-style-type: none"> • September – experts report to TLG identifying gaps, work-streams to fill them, costs, and timing. • October - TLG reviews reports, sets priorities on work-streams, develops work briefs, and recommends commissioning to Te Rōpū Hautū • TLG updates at CSG7 <p><u>Workstreams currently underway:</u></p> <ul style="list-style-type: none"> • Groundwater, hydrology, age, quality and N attenuation • Extension of the economic impact scenario modelling • Social and cultural impacts of scenarios <p><u>Work brief currently being worked on:</u></p> <ul style="list-style-type: none"> • Mātauranga Māori knowledge networks and the four contaminants. <p>One other item mentioned this morning was an impact assessment on regional economics and flow-on effects research.</p> <p>Within economic modelling scenario the model needs to have all of the four contaminants.</p> <p>For sources for mitigations to model there are some that are already in the model. The CSG will see the list of mitigations at subsequent workshops. CSG members can send other ideas/ codes of practice to TLG Chair.</p> <p><u>Beyond CSG7:</u></p> <p>Scenario modelling that describes effects of (different) attribute limits on:</p> <ul style="list-style-type: none"> • Values met • Mitigations required • Costs (\$, where, who) • Impacts (social and cultural) <p>Anticipate findings in the new year, then iteration (revisiting).</p> <p>Discussion on the process for designing mitigations. Need to come up with the right list of mitigations to apply. Can do one thing that has already accounted for others. Some may not add</p>	<p>option suggestions from their constituencies after CSG7 still send them in, whilst noting that the TLG wants to set up studies as soon as possible after CSG7. Vicki Carruthers</p>
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	<p>any value. How you get to a specific level, what is the cost to get there? No one thing will work on all farms. Farms could be clustered by soil types, rainfall etc. Within cluster can be different responses i.e. stand off pads.</p> <p>The TLG can run a whole range of scenarios so CSG can see effects. The iteration process is important. Sensitivity analysis will also be completed.</p> <p>A scenario gap analysis will look at FMU's and what values have and haven't been achieved.</p> <p>There is a lot more spatial resolution in the modelling than the four FMU's so we can adjust FMU boundaries later if necessary.</p> <p>TLG has presented nutrient, <i>E. coli</i> levels around catchment, national bottom line. First thing that we need to do is develop a WOF (Waikato Objectives Framework) and look at where it sits compared to current levels to show the gap. It will be part of the process to look at what are the things we can do to narrow the gap.</p> <p>Discussion around the aggregation and ability to change FMU's at a later date and the need to talk further about rationale for boundaries. Mix of administrative, geography, logic and physical landscape factors too. Option 3 gives a reasonable compromise. Not a big issue to change the modelling to show other FMU boundaries at a later date.</p>	
21.	<p><u>Wrap up session</u></p> <p><u>Values report</u> : The amended report was tabled (DM# 3164183). Changes have been made based on yesterday's discussion and include emails received and CSG5 feedback. This is a working list that CSG need to decide if ready to:</p> <ul style="list-style-type: none"> • go to Large Stakeholder Forum • go to TLG ;and • Presentation to be put on portal to test with networks. <p>The values from the report have been included in this document.</p> <p>Discussion points and suggested edits to values list:</p> <ul style="list-style-type: none"> • This can look like a table - 2 versions: (1 with succinct title and 1 with another column with bullet point form explaining more detail) • 'Social and economic wellbeing and importance' of primary industry as well as electricity generation. Re word other sections – make clear like electricity. • Commercial and industrial use (not about takes) – discharges. Fresh water is used for industrial processes, then provide for wastewater disposal – add in 'municipal process.' • Electricity generation – merge the box. Unique flora associated with electricity generation also. 	<p>Sectors to review and provide feedback on working list of values document. All</p> <p>That the CSG Independent Chair take advice to the Healthy Rivers Wai Ora committee regarding actions from review clause / consent issue item. Bill Wasley</p>

- Shouldn't separate animal drinking water – subset of primary industries. In NOF it is that way because NOF deals with water quantity and quality.
- Comment regarding international vs national in E5. Food security is important no matter where we come from.
- For Māori translation of the value about identity/ relationship, prefer more direct translation – hononga – connection (second version)

The Large Stakeholder Forum will be held on 23 October.

Action: Send out values document to CSG to get feedback and have it in two docs (one detailed, one high level).

Sectors to work together using the following timeframe:

17 Sept – Staff to send out document to CSG

24 Sept – information needed by CSG

26 Sept - Staff send out to CSG for review

3 Oct – CSG to come back with any comments

23 Oct – Large Stakeholder Forum (both long and short version available at LSF)

Actions from review clause / consent issue conversation:

Interim arrangement prior to plan change notification:

That the CSG Independent Chair take the following advice to the Healthy Rivers Wai Ora committee:

Statutory

- CSG would like it noted by the Healthy Rivers Wai Ora committee:
 - That it does not wish to see the future plan change undermined in the interim prior to its public notification; and
 - That the CSG recommends that it would like to see a section 128 1(a) condition applied to any consents relating to the 4 contaminants; and
 - That it be noted that there is a clear intention that existing consents will be brought in line with policies contained in the plan change.

Receive Conditions on consents report and progress two bullet points. (15 agreed)

**Stephen Colson/Ruth Bartlett
Carried**

FMU report

Preference from group for option 3 at this point. The CSG may revisit and choose a different option at later date.

Additional points raised for discussion:

The CSG decided to put FMU's on hold at this stage and

revisit after further consideration and discussion. There are still a number of differing views and more information is required at this stage.

Policy selection criteria

These had been summarised overnight into a series of questions

- The CSG reviewed the summarised criteria
- The CSG confirmed the re-written version of the policy selection criteria as a basis for further consultation e.g. at the Large Stakeholder Forum
- The Communications team will now work on formatting.

The confirmed version is as follows:

1. **Provides for Māori cultural aspirations.** Does the policy:
 - Provide for Māori to retain and use their taonga?
 - Provide cultural benefit?
2. **Realistic to implement, monitor and enforce.** Is the policy:
 - Able to be measured and monitored?
 - Implementable and technically feasible?
 - Administratively efficient?
3. **Gives positive social and community benefits.** Does the policy:
 - Minimise social disruption and provide social benefit?
 - Enhance people's use of the river?
 - Take account of its unique (non substitutable) features and benefits?
 - Result in outcomes people can identify with, own and feel proud of?
4. **Is accepted as fair and equitable.** Does the policy:
 - Avoid inequitable allocation of rights e.g. 'windfall gains' for some, loss of flexibility of use of land returned under Treaty settlement.
 - Follow the legal principle of not compensating for loss of future opportunities?
 - Recognise efforts already made?
5. **Minimises economic impact.** Does the policy:
 - Minimise economic cost?
 - Provide investment certainty?
 - Provide realistic timeframes for change?
6. **Allow flexibility into the future.** Does the policy:
 - Foster innovation?

- Incentivise and support action on the land?
- Allow for change as new information and opportunities arise?
- Provide flexibility for future review?

7. **Achieves the outcomes of the Vision and Strategy and the RMA.** Does the policy:

- Contribute effectively to the protection and restoration of the Waikato and Waipa Rivers? Comply with the RMA (including the purpose of the Act)? Set out clear and balanced objectives?
- Take account of existing policy frameworks?
- Achieve the range of values identified?
- Achieve sound principles for allocation?

8. **Supported by clear evidence.** Does the policy:

- Take an evidence based approach?
- Transparently show the costs for meeting the outcomes?
- Prioritise efforts to achieve catchment solutions?
- Set transparent limits and definitions?

9. **Achieves the restoration and protection of native habitats and biodiversity.** Does the policy:

- Support resilient freshwater ecosystems and healthy populations of indigenous plants and animals?

Bus Trip

Overview on the 23 September CSG bus trip which will cover the energy, industry and forestry sectors and travel to Ohakuri Power Station, Wairakei Power Station and Kinleith Mill.

Large Stakeholder Forum

- The draft agenda was distributed to the group which will cover:

1. Registration
2. Opening
3. Project Update
4. Technical Update
5. Identifying questions
6. Input on Draft Policy Selection Criteria
7. Values relating to FMU's
8. TLG panel answering questions
9. Closing

- The role of CSG members was outlined for the day
- Handling technical questions
- Consider clothing that identifies CSG and who they are
- CSG will be seated amongst the crowd, no place names

	<ul style="list-style-type: none"> It will not be all presentations from the front – there will be some table work to involve group and get their feedback. CSG to host. <p><u>CSG6 Catch up session – 2 October</u> Mark date in diaries to catch up on any missed sessions.</p> <p><u>Next workshop - CSG7</u> – will be held in Reporoa (hosted by Community member Evelyn Forrest)</p>	
4pm	<p>Chairs closing comments. Thank hosts. Meeting closed by Hone Turner.</p>	

Approved