

TANK Collaborative Stakeholder Group

Meeting Thirty-Nine Record



When: 9:30am, Thursday 19th April 2018

Location: Te Taiwhenua o Heretaunga, 821 Orchard Road, Camberley, Hastings 4172

- Note: this meeting record is not minutes per se. It is not intended to capture everything that was said; rather it is a summary of the proceedings with key comments noted. *Text in italics indicates a response from HBRC to questions posed during the meeting.*
- *Where additional information has become available subsequent to the meeting (such as answers to questions unable to be answered in the meeting), this is included in red italics*

Key to text boxes

	Actions required
	Recommendations
	Decisions, agreement/disagreement

Meeting Objectives

1. Water Quality Objectives – Attribute States
2. Agree management framework and policy direction for sediment and contaminant management
 - Farmer Reference Group Proposal
 - Nutrient Management

1. Welcome and karakia

Robyn welcomed everyone and Marei blessed the meeting with a karakia.

2. Apologies, Housekeeping and other matters

Robyn noted the apologies, in addition to the members noted above Apiata Tapine's (HBRC RPC) apology was accepted.

Robyn introduced new representative and observers – Cameron Burton (NCC), Dr Anthony Cole (iPansophy), Charlotte Drury (Hort NZ), Corina Jordan (Beef + Lamb).

Robyn went through the housekeeping, ground rules for observers and other matters.

3. Notices

A member informed the group that the Raupare Enhancement Society held a meeting Thursday 12 April, which many TANK members are part of. He noted that the first planting day is arranged for the 7th July 2018 where proper enhancement planting programme will begin. Fish & Game, DOC and Iwi will all be represented there.

Ceri informed the Group that a presentation was given to the TLA Councillor's (HBRC, NCC & HDC) on Friday 13th April, whereby Mary-Anne introduced TANK to the Councillors to TANK. Ceri thanked two members for their efforts in the meeting where they spoke wonderfully and told the councillors all about the good work the TANK Group are doing through this collaborative process.

4. Introduction – Objectives for the day (Mary-Anne Baker)

Mary-Anne told the group that there were only two objectives for the day, one being a motion to the work that Sandy's been doing to give some effect to decisions around attribute states from TANK meeting 33 and requested an agreement from the group regarding the numbers in the table; and also an agreement to the management framework for sediments and contaminant management, this is largely based on the work that Peter Kay has been developing with the Farmer Reference Group.



Mary-Anne explained that the aim is to achieve the water quality objectives and provide for the values, by trying to understand how we do that by using attributes we can measure and put states around. Sandy's attributes table will provide clarity and direction around the water quality states that we are looking for. The Farmer Reference Group (through the Economic Assessment Working Group) were given the challenge of working out how the sediment reduction challenge was going to be met. How were going to reduce sediment loss by 30%. The discussion was taken right back to good stewardship and looking more widely to what that means, not just in relation to sediment but also to eco-system health, and the development of the 'Strawman' Management proposal.

Another stream of information came out of Sandy and Anna's work around nutrient concentrations particularly and the state of the estuaries. That work went to the Economic Assessment Working Group to look at how the nutrient challenges would be managed with a bit of a direction around reduction and nutrient loss by somewhere between 10-15%. The group talked at some length around setting nutrient loads and establishing allocation limits around nutrients and that evolved into the discussion paper that was circulated prior to this meeting. It also built on the work that the Farmer Reference Group have done in terms of building a management framework to deal with the issues arising from contaminant loss.

5. Water Quality Objectives for Attributes States - Sandy Haidekker (Table & Slides)

Sandy explained that the table (pre-circulated) puts numbers in to an attribute to ensure the values assigned for that zone is protected and maintained or where we are seeking an improvement. In TANK meeting 33, the Group agreed to either maintain or improve and we have already put some numbers out there where we wanted to improve. We will look at the decisions behind the agreement in TANK 33, providing a rationale for the numbers being presented. Where agreement was to 'maintain', we left it as a maintain. We have to pick a threshold/band that ensures that the values are protected. Sandy noted that the zones do not have anything to do with the hydrological zones, they are ecological zones grouped according to their similarity, what they are made of and how they react to different parameters.

There are four zones

- Zone 1 – Upper catchments
- Zone 2 – Mid to low main stem
- Zone 3 – Hill country tributaries
- Zone 4 - Lowland tributaries

There is a pool of guidelines and we are trying to pick the number which is related to the values in the most direct way. Some Guidelines have broad categories, it is sometimes challenging to find the right attribute value, significance or relationship (e.g. ANZECC, RRMP). Sandy explained there are many limitations and variables associated within the range of guidelines.

Water quality objectives (guidelines)

Decision criteria for guidelines

1. National Objectives Framework
2. Direct attribute – value relationship
 - With bands for state: excellent/good/fair/poor
 - Single guideline
3. A statistical guideline
 - Defines 'normal' in a range (percentile) → being outside means potentially a problem
 - e.g. ANZECC, RRMP
4. The critical value is the most sensitive value for the water quality attribute and for which guidelines have been developed.

e.g. attributes: clarity, turbidity, suspended sediment to values: trout fishery, recreation

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Sandy explained that she has looked at a number of scientific papers for NOF as there is currently no guideline. Sandy noted that there needs to be something other than SOE statistics when understanding the zone and band. More guidelines are coming out that are better because they are the ones which connect the cause and effect on the values. Sandy noted that there are a couple of gap sites where there has not been data for 3 years.

Questions & Answers

Can you expand on the Australia & New Zealand guidelines, what the difference is?

Sandy – That's a decision criteria (slide below). Suggested that these are preferential because of a direct relationship, sometimes have more than one attribute per value. It is about taking the more sensitive guidelines which covers our values instead of having five.

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How will you achieve 'not diminishing' the state

Sandy – For those which are in a better state than what 'is good' in the guideline we won't allow it to drop below the existing state.

Mary-Anne – That will be covered in the presentation, in the Management Framework

Robyn – The short answer is that we are putting stricter guidelines and management in place

You reference the TANK/WCO, what is the significance

Sandy – None at all, that is an older superseded version

Ceri – That was an error in the first email that was sent out. You won't see that reference on the updated version (table). The update is in your pack before you.

Queried which are improved versus maintained in the table?

Sandy – The red numbers are where there needs to be improvement. The shaded boxes are here the guidelines are not being met. The white boxes are where the state needs to be maintained.

Attribute	Value/guideline	maintain	improve							
turbidity (NTU)	Trout fishery ANZECC	maintain	improve ≤5.6 NTU							
clarity (m)	Trout fishery recreation	≥ 5	≥ 5	≥ 1.6	≥ 1.6	≥ 1.6	≥ 1.6	≥ 1.6	≥ 1.6	≥ 1.6
sediment	Waikang/Ahuriri estuaries	maintain	maintain	improve						
(% PeriwCC)	Ecosystem health									n/a
(% PeriwCC)	Recreation	SSU	n/a	n/a						
Volume (% CAV)	Ecosystem health	n/a	n/a	n/a	n/a	≤ 50	n/a	≤ 50	≤ 50	≤ 50

White: all SOE sites meet GL = maintain
 Grey: One or more SOE sites don't meet GL

Queried sediment clarity, the ‘improves’ are only in the last 3 boxes and your red figures go right across

Sandy – That has to do with the update of the numbers and the value that we are managing for. While we are going through this I shaded improved and maintained. The TANK 33 decision was that we maintain current. There is an issues with turbidity and clarity. We were sitting ‘ok’ with the clarity. The problem is that there are attributes for trout fishing and recreation – don’t think we need both. Turbidity is only an ANZECC guideline it’s a statistical guideline and not cause and effect related. Would be happier using clarity as this has a direct relationship with fish.

Why is Tutaekuri not in zone 4

Sandy – It doesn’t have a macrophyte dominated tributary or soft sediment, they are all hill country tributaries

You keep referring to trout, that’s not an endemic species we have long fin tuna and patiki, what about their attributes. We don’t have figures for that.

Sandy –We don’t know enough for their need in terms of clarity, and there are no figures for long fin tuna and patiki. Trout are drift feeders, they need the visual perception to get their food which makes them a good indicator. The tuna will be safe because they have other ways to find their food and are not quite as limited by clarity. We keep the tuna and the native species safe with that number for the trout.

A group member confirmed that trout are more sensitive than native species, so are a good indicator.

With turbidity, are they looking at this as a part of the framework (NPS)

Sandy – No, it’s not for rivers. There is no attribute in the NOF. There is a huge discussion document as to which one is the best one, it’s not decided because some people say that the advantage with clarity is that it does have a direct relationship to fish or recreation whereas turbidity is an artificial number and there is no solution for that yet

From the turbidity, does this give an estimate as to what’s dropping out of the water?

Sandy – That’s more the load aspect it is not of any value if you don’t have the whole event based measurements. You would have to go out and measure the algae for a meaningful number. It will be hard to put into the plan.

Could you look at sediment deposit?

Sandy – Would have liked to do that and there are some guidelines coming out. The problem is that the deposit sediment is totally decoupled from the load coming off the land.

On sediment clarity, zone 3 figures, seems as though they maintain target is a bit low especially for the Ngaruroro 1.6 doesn’t look like a reasonable value to maintain

Sandy – We have quite a range here with less stringent guidelines as our value here is recreation, but don’t deteriorate below that. Have to achieve 1.6 the current level is better than will be maintained.

Think we do have a guideline for deposited sediment and feel this should be included. I accept what you are saying about turbidity

Sandy – We could include it as an information item though it will be dynamic, but we do measure it.

Is the estuary not included?

Sandy – No guidelines for estuaries yet but will put something in place until we do. For the sediment, we do not have numbers, there are no guidelines. We can say in the plan that we will work on reducing sediment and let science catch up with it.

A member was heartened to hear the discussion and support the sediment guidelines. Is your discussion document, is that an international exchange of ideas around turbidity and clarity or just New Zealand based

Sandy – New Zealand based, there is great science coming out of the discussion document.

Action: Sandy to put the discussion document on the TANK website for people to read

Why aren't DO and Temperature on the table?

Sandy– Toxity, nitrate, ammonia and E.coli are also not in there. We need a good data set of summers. We have spot measurements that do not tell us enough about whether we are protecting the value or not. I will put guidelines in there, but the table for discussion today focuses on nutrients and sediment.

When the other comes, does this mean other values will be considered

Sandy – Yes

This dialogue started from Sandy in terms of whether we include the two attributes. See a step change, taking on a new level of responsibility for management and the accountability for the quality of the waterways. We shouldn't try to do everything in one step, might be a step too big. Being pragmatic, it would be a step forward if we were to agree on one of those attributes. Clarity is a fair indicator of turbidity

The group took a vote on who was in favour of going with Clarity.

All were in favour with one exception (A group member)

Objects wishes to remain with both attributes

Sandy–We are measuring both in the SOE and do have numbers for turbidity. I wanted to keep it simple for the plan. We are not dropping the measuring for turbidity.

Noted that he didn't vote, but hearing that there is a lot of historical monitoring, think we remain with all 3

Mary-Anne – This information is really important at the grassroots level. As Sandy said we have state of the environment monitoring but not across all the catchments and sub catchments. It's particularly important in the implementation phase when we start working at a small catchment scale to look at the water quality objectives being met. I'm advocating keep it simple and if clarity does the job in terms of helping farmers and landowners understand water quality objectives then we should keep it simple for them but continue with the state of the environment monitoring which is at a higher level that has more to look at than the farmers do. The farmers need something that is useful and relevant

Robyn – What is going to be lost if you were to focus on just clarity and not the other measures?

Technically I don't know

Sandy– This is more stringent, more on the safe side

Robyn suggested that two group members have a conversation with Sandy

These figures are going to be used for the consenting process will it make it more difficult or easy

Sandy – More figures will make it more complex

Can we have a practical sub-set. Set of management tools at grassroots level

Mary-Anne– Not sure how it would work? The important thing to remember is that in the Strawman the sub catchments are going to be tasked with meeting the objectives. If these are more complex it will make it more difficult for people on the ground.

Robyn– We are trying to keep it simple for people on the ground, it will be measured.

Mary-Anne– Noted that the stakeholders that you (Vaughan and John) are talking directly to haven't had the benefit of this wider discussion we need to include in discussion offline and see if we can't resolve the impasse.

Robyn– Good idea to have the discussion offline and if we can't agree, will agree to keep all measures

Sandy highlighted that at Whanwhana this is sometimes just below the guideline of excellence that we have for the upper catchments i.e. 118 NCI, where 120 is the guideline. The catchment that is upstream from the Taruarau measurement is below that. This needed to be flagged as it will be over and under through the years. We cannot go to Kuripapango as we do not have the algal information for that but at Whanawhana we have the influence of the Taruarau. The question for the Group is whether to include Kuripapango although we don't have algal data for that one

It would be nice for NIWA to share its data

Sandy – NIWA do share their data. We get MCI and Water Quality data but not algal scrapes. We expect excellence in Zone 1. The SOE site is below Taruarau which is under land use.

Action: Ask NIWA to include algal scrapes in their programme

Sandy noted that Taruarau is not an SOE site either. Whanawhana is an excellent site but it has the odd bloom, still in an excellent condition but sometimes you can see the influence from the Taruarau but it is only slight.

The Kuripapango is natural woodland so measuring algae would only be a natural environmental bloom so comfortable in just using the NIWA data

Noted that a lot of that land isn't under DOC protection

Agreement: It was agreed to keep the Kuripapango

Recommendation: The question whether to include the Whanawhana into that zone was not resolved. Mary-Anne suggested that this needed more recommendation as it may be a bit too complex to do it in plenary

In meeting 33 we talked about phormidium and the context of algae cover and that as a measure of the recreation value, I don't think we have it in here. Could we add it, I understand that it's very low levels of phormidium in Ngaruroro and Tutaekuri but we would like to keep it that way

Sandy – We have it in the Strawman, phormidium is covered outside of this table

Mary-Anne – It's in the Draft Plan, if we put phormidium in this table and give it to the farmers saying that these are the objectives you have to meet there will be a problem meeting the phormidium objectives because we don't know all the management responses to keeping phormidium low. We are dealing with it at a policy investigation national response level rather than at a catchment scale

Concerned about the Whanawhana, it's not just the Taruarau that's influencing the measurements you have other tributaries (Omahaki Stream) on that site that influences as well. Ideally if we can get the measurement done at Kuripapango it would be a more ideal site. When you get to Whanawhana you get to the middle regions of the river. A group member agreed with another member

Sandy noted that the Algal biomass for NOF agreed on previously. The algal cover is a good indicator for recreation and eco system health as well. These are two different guidelines. The sites in the Tutaekuri have small gravel and will not support algal growth, elsewhere where we have bigger gravel it can. Recreation has a 30% guideline. The eco system health has more guidelines and have different needs. Sandy questions the Group – do they agree, recapping the background where the numbers come from?

Why are there no figures for lower Ngaruroro (algal guidelines) – Zone 4

Sandy – The lower ones are macrophyte dominators and the rest of the hill country tributaries have gravel and therefore have algal cover

The Ngaruroro River at Garrick Road sits in which category? Wanted to be sure there were standards for that part of the river

Sandy – Garrick Road is not an SOE site that is measured, it would be in zone 2. Ngaruroro at Garrick Road would be the Fernhill site (mainstem)

Wouldn't zone 3 guideline be lower guidelines? Could there be more stringent guidelines for zone 3 (Tutaekuri) 30 for recreation and 40 for eco system health?

Sandy – This would be the same guideline but looking at a good state (zone 3 and 2) zone 1 is the excellent state. We maintain current state so that it's not deteriorating. We have to fall back onto the algal growth risk from the nutrients, this is a problem with ecological indicators e.g. Tutaekuri needs other indicators as the gravel cannot support the algal growth. These new guidelines are better, this shows that there needs to be improvement in the Tutaekuri. Have more confidence in the link between the (new) guideline and algal growth.

Does this apply to lowland streams as well?

Sandy – No there is no guideline for dissolved nutrients for macrophyte growth. All lowland streams need to improve.

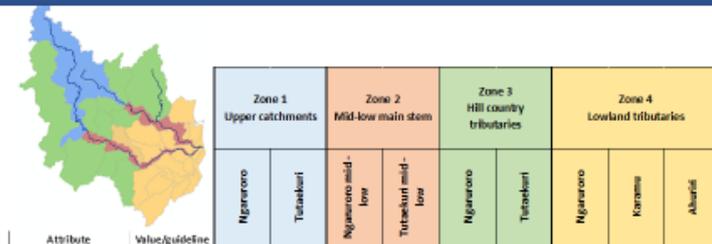
< 0.444 ANZECC guideline just tells you algal growth is higher than normal – a trigger for action

<0.3 is the concentration

Need to try to get below <0.444 to protect the estuary

The question is how do we manage this, how do we get there
 Sandy– This will be through the Management Framework

Summary on desired states



- Maraekakaho at Kereru road: should be algae on gravel bed
 → switches between algae and macrophytes or both

Macrophyte volume (% CA)	Ecosystem health	n/a	n/a	n/a	n/a	15 500	n/a	≤ 50	≤ 50	≤ 50
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Sandy explained in this slide the area circled is for Maraekakahou – the ecosystem health 50% cover as a volume is too much, that’s where eco system health starts to suffer so we aim for less than 50% in those lowland streams of macrophyte cover. We are doing this and another management regime because we can do much about it. With nutrients, this is where shading comes in.

Cow press (impalatable to humans) is this a macrophyte.

Sandy – Note that the weed boat is a short term measure but the long term management would be riparian planting, this is the goal.

Peter questioned the location of the testing site for Maraekakahou (at Tait Bridge), should be at Carrick Lane Bridge

Action: Sandy to check the location of the testing site in Maraekakahou

There was discussion around the slide presenting the MCI. Sandy stated that she thought that this should still be the guideline for the lower Ngaruroro and the lower Tutaekuri, we are just below the 100 (95/99 Ngaruroro and 86/92 Tutaekuri).

With the 12 year plan (2 in court 10 year lifespan), consider 80 is too low in the last 3 boxes, this should be 90 for the Ngaruroro/Karamu on the lowland tributaries. Advocating for that to be increased by 80-90

Sandy– We are already better than 80 for Ngaruroro which will be a ‘maintain’. It’s only about macrophyte dominated streams so 80 is within the existing guidelines. The question is do we pick another number

There was further discussion about the figure for the Ngaruroro and further support for a members suggestion.

Don’t have an issue with being inspirational but my first question is

1. Why this number and no others?
2. What’s the benchmark and is there a rationale for not suggesting more?

Sandy – we are far from 80 in the Karamu/Ahuriri, we can allow for a huge timeframe and say we want to be aspirational but we are taking the first step saying we want to reach 80

Support target of 90 especially for Zone 4. Taruarau looks really good, and could be 120, this averages approach could disadvantage others from doing better. For Zone 2 you have the states that are under the guideline and in the Taruarau the state is way better than the guideline

Sandy – If it’s in a better state that state will be required to be maintained. It’s the same problem with the other variables. They are very different sites and tributaries, some are definitely better and will be a step better than others but that does not mean that they get neglected or that they deteriorate.

In the council documents, how is that reported and communicated to people as a long term aim? Could Taruarau be referenced specifically?

Mary-Anne – *There is a specific objective and policy that says that so there are objectives that sit alongside the table to show how we interpret the table itself. There is no specific reference to Taruarau at present but we could.*

Is there somewhere we can go to now with the Draft Plan change that we’ve seen that explains the detail, how these numbers are required, and do we already have that? You explained that there is a volatility in these numbers, can you explain how that will relate to triggers. How do we deal with inter-annual variability?

Sandy– *There is a footnote that explained the problem with the maintaining better states and it probably has to be separate, clear paragraph table saying these are the sites we want to maintain, I agree with that and it will be done. How we deal with inter-annual variability, we always look at a minimum of 3 years data and it gets updated.*

Going back to the lowland, how easy is it going to be going up to 80, how challenging is 90 and is it achievable?

Sandy – *The crucial point is the time scale so yes we can get better but how long it takes us, I cannot answer. Depends on how long it take for plants to grow, macrophytes to reduce and for temperature to change. I don’t think 90 is realistic in 10 – 12 years but good to have aspiration. I am positive that we are going to make the change*

What about the effect of HDC Stormwater

Sandy – *This does have an effect further downstream, the macrophyte streams are all the way through the catchment, we have the upper part that has an influence on the temperature downstream then we have the stormwater as and impact. Different factors are integrated and have an effect.*

The solution is to stop doing the things that are the problem and the environment will respond

Does this trigger an action plan under the NPS? Especially around zone 4.

Mary-Anne – *The Plan will identify where there is a need to improve any of these attribute states then priority will be given to these catchments. The Karamu catchments are going to be quite high on the priority state, if that’s not the outcome we are looking for we will look at setting up a different approach. The work that Peter and his team have done has given us a management framework that can be applied across all the TANK catchments and prioritise what needs to be done in relation with meeting objectives*

The Group took a five minute break to discuss. It was then agreed following Sandy’s presentation that the discussion around ‘turbidity’ and additional deposited sediment would be taken offline.

Question to the Group: Do we agree with Sandy’s figures? If not, why not?

There were 24 voting members

9 voters were happy with the table as it was presented.

Discussion ensued, the comments which were noted on the whiteboard are replicated below, as well as the votes in favour of the comments received.

Member	Suggestion	Votes in support (in addition to speaker)
Member 1	Zone 3 increase sediment clarity to 3.7 (kaitiakitanga).	8
	Periphyton cover sone 3 -20	9
	MCI coverage zone 4 change to 90	16
	Improved DIN in Zone 3 – 0.15 (decreasing DIN)	7
	DRP Zone 3 & Tutaekuri Zone 2 0.01 or less	6
Member 2	Lower numer for E.Coli in upper reaches – 260 to maintain (it was agreed that Sandy would fine tune this section)	13

Further comments:

A group member reminded the Group that these figures will impact people. The urban people will be pointing a finger at the people on the farms/orchards saying they are the ones creating it. The people who work the land have to make sacrifices and in some cases can’t be made, it’s just not possible. We can’t be flippant about this, we are making some really good strides and it’s the Karamu and the Ahuriri where we have real problems. That’s what we need to work on and we are going to get some really great gains.

A member stated that for the last 40 years she has been living in that undesired state of an awa adversely affected. She noted that they have an orchard and therefore a responsibility – but there is trash that’s delivered to us (in the river), it’s

unacceptable. Let's take a step up if we have to, jump (meaning the numbers targeted in the Table). We cannot continue in this state of mind and being.

Tom acknowledged the member's point and reminded the Group that this Plan Change has an awesome responsibility with its first task to stop things getting worse and then to find ways to improve and meet the objectives that everyone shares. One of the challenges of setting super aspirational targets within a ten year timeframe is that you potentially open the Plan Change up and it becomes unbalanced. If it is unachievable in a short timeframe and we put that up to the public arena, all we are doing is incentivising people who are most adversely affected by that speed to challenge it. We will end up spending years in the courts and won't have affected the change, we will be going in the same direction. There is an absolute leap of faith that this is a change, these problems were developed as you recognise over many years and they won't be fixed in ten years but it's about the change in direction. If we push the timeframes too hard we will end up going nowhere

Mary-Anne – What we are doing is saying that things need to be better and here are some numbers that help you understand what better is, 80 is better and 90 is even better and what we want to do is provide a small shift so people are taking responsibility for what is happening in their sub catchments. Each sub catchment will have different challenges and they will be given the tools to understand what the problem is and what some of the mitigations are. They will also be given the opportunity to find innovative and flexible ways of reaching those targets. We are looking to change the trends and are looking for positive trends in relation to the objectives we are setting. We haven't heard anything about how quickly this has to happen and some of the economic analysis will help us understand the mitigation measures we do know about. It will cost money and we need to provide time for landowners to do those mitigations.

We are looking for trend changers and if we don't get those trend changers in our state of the environment monitoring, our Management Framework is failing and we will need to revisit the Management Framework. The incentive is really powerful for landowners to start looking at how they interact with their waterbodies and it will be a fail if we don't get those trends happening and a huge discussion as we review the plans effectiveness as to whether or not we continue with the Management Framework or go to an alternative one

This is the ten year management step, the framework we are going to adopt will manage the issues in front of us. We are not saying that we are going to meet MCI of 90 in the years, instead say 90 is our goal and we are going to work towards that. The problem with some of the attributes is that we don't know the range of mitigation measures necessary.

There was further discussion around the appropriateness of the numbers within the table and the need to be aspirational, there was some concern that the finger was being pointed at the landowners and the changes were being borne by the primary sector and largely ignored in the urban/municipal environment.

James noted that every comment made was valid, with no right or wrong answer. Fundamentally the question is that in the lower parts of the catchment the number and complexity of stresses on the environment is infinitely greater than it is in the rural environment. To a large extent it is the urban environment that is driving the poor MCI count. Every decision you are making, whether you set it at 90 or 100 (both valid numbers and probably technically achievable over time) is whether you want to see the urban environment with all of that costing complexity and it will be more expensive to clean up this environment because of the many stresses, contribute essentially, equally to this effort as the rural environment. That really is the question before you.

A member wanted to go on record – stating that we operate by consensus in this group and now it is about half (votes) even if we decide as a group to go forward, we are getting into bad process but it doesn't mean that I don't want to be aspirational but we are getting our processes really wrong. I would like to carry this forward and recognise this as a very important debate and balancing in the plan. It's about balancing a whole bunch of levers. That's the final consensus job we have to line these things up so that we have a plan that works from year one rather than twenty years in environment court.

Ceri– (addressing the process issue) we have some amendments that we know we need to make around the offline discussion about turbidity etc. Would it be once we've done that, come become back Sandy's table as originally suggested with some minor tweaks around that point then the alternative table which takes into account all of these new suggestions and highlighting what this means for our priority areas then take a vote on whether we accept table 1 or 2. We will be following a process whereby you all have an opportunity to make a decision on what fits best once we've heard Peter's Management Framework suggestions and bring the two options to the next TANK.

Following substantial discussion there was no clear agreement as to what should be done to amend Sandy's table. A number of suggestions were presented as to what decisions could be made and recorded on the whiteboard. These are as follows:

1. A member suggested we accept Sandy's table as it is and allow HBRC to amend off the back of today's conversation
2. A group member suggested change the MCI from 80 to 90, the remainder of the table to stay as it is.

3. Peter Kay – suggested delay until after his presentation on the management framework
4. Sandy – suggested having two tables in the plan
 - a. No.1 table as presented – representing the targets for now (including MCI and E.Coli)
 - b. No.2 table with the targets suggested for the future
5. Ceri – suggested an either or option. Delay making a decision on Sandy’s table until a second table with the suggestions have been considered and the implications of these amendments on the priority areas are assessed. Bring this back to TANK for a decision comparing it to Sandy’s table.

The Group broke for lunch, and was asked to consider the options presented (above). Jenny blessed the food.

6. Farmer Reference Group, Management Framework Proposal/Sediment and Nutrient Plan (Group member)

The member introduced himself and Corina Jordan (Beef + Lamb). He explained the Farmer Reference Group started about 18 months ago, holding a few rural meetings, largely covering the beef and sheep catchment. From these meetings a reference group was formed with 6 people from each area, giving a good representation. It was felt that a collaborative approach with landowners was needed much in the same way as on TANK. The Farmer Reference group was given the task of coming up with the proposal being presented today and in the course of our journey we’ve been fortunate to share the guidance and knowledge of a large number of people, including Mark Harris who couldn’t attend today.

The ‘Strawman’ was taken as read.

The first two meetings the values were discussed identifying what is important to the rural area and the wider community, it was found that they are not much different from the values that we already discussed here on TANK. We also listed the problems that stood in the way of achieving these values.

Peter noted at the third meeting a TANK member was invited and this was the turning point. His enthusiasm was infectious. Peter thanked him for his input and getting the Farmers heads around it. The group realised that there are some things that are not ok and needed to be fixed.

One of the first requests was don’t make one rule fits all, it won’t work because of the variety of land, land use and also distances. We came up with a catchment management approach for a number of reasons.

- Swifter and more concentrated action to a problem in the event of a hotspot occurring.
- Better use of Council resources, catchment groups will be taking responsibility for meeting objectives and therefore allow swifter action regarding compliance and an easier path for the Regional Council auditing and achieving compliance goals.
- Creates a chain of accountability ultimately to the Regional Council i.e. the catchment will have a catchment plan which will be audited probably annually and this plan is a platform to comply.
- Support with individuals and help with information transfer it will also enable collective action, across property boundaries to solve problems
- Potentially drive lots more innovation.

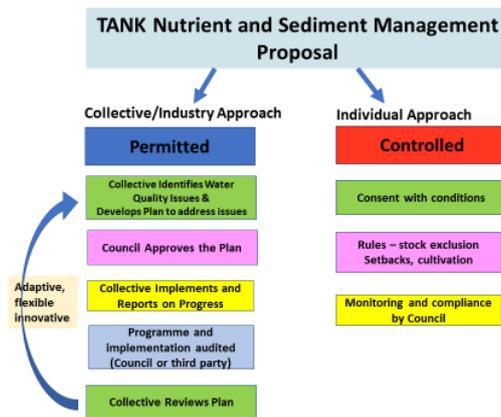
There are areas with water quality problems. By taking a catchment approach we hope to achieve a top down as well as a bottom up approach whereby the council workload is concentrated on core issues and resources are not spread over the entire area, and also where landowners have a willingness and enthusiasm to do the right things to comply.

All catchment groups will complete a Farm Environment Plan, the region will be divided into various sub catchments and a management committee for each catchment will be formed within it. Already there are a number of industrial management groups out there who are setting their own standards for their businesses e.g. the Dairy Industry.

The first task of the catchment group will be to undertake forensic analysis to prioritise which contaminants or issues are important in order to reach the prescribed water quality standards. Once these priorities are established the committee turns to the issue and what changes are required to meet these water quality goals. The decisions about where to start are contained in the list of priority catchments. The common issues is sediment and the ability of phosphorous to adhere to it.

Another request from the group was, whatever we do we must try and keep it simple, as such suggestion is for a two-way approach.

1. Catchment based membership groups/collectives
2. Individual Approach - a stricter set of rules will enable the council to ensure compliance.



The message is very clear, there is no way around avoiding compliance with rules meeting fresh water objectives and if you want to go at it alone, the council will keep a very close eye on your land use activity. This is part of the incentive to be part of a catchment group. In effect, why should 90% of the pastoral farmers who want to be good stewards of the land be penalised by an individual who performs badly.

The catchment management plan is a living document in order to deliver the communities objectives:

- It is adaptive, responsive and innovative.
- It will align with the three yearly LTP reviews.
- It will focus on priority areas (priority catchment list still to be refined)
- Recommending a date of 2023 to have stock exclusion rules enacted

Currently there are three catchment groups underway and we are fielding enquiry from groups for more to be formed. There is a genuine feeling out there to improve our environment and the enthusiasm to change perception that some of the landowners feel is unjustly deserved.

Question & Answers

A member congratulated the member for his hard work, it's really nice to see other groups being proactive. I like the concept and would like to suggest local iwi and possibly Fish & Game have an advisory role so that we can work with those groups when moving forward and have something in the plan saying that there are stakeholders that would like to work with that group

That will definitely happen. The brief from TANK was to deliver the strawman there is still a lot more work to do, but didn't want to pre-empt this. There will be more collaboration with the wider community. We haven't gone so far as to work out all the catchments yet, that is the next step and we will be bringing in more people in on that.

The broader governance structure that this Plan Change is going to operate under was questioned, if we do the best we can, what is the right governance structure on top of that, and how we organise ourselves under this Plan Change? We are going to have a multitude of sub catchment and industry collective groups. Suggest a 3 tiered structure of governance, HBRC/RPC at the top and at the bottom is the sub catchment working groups (boots on the ground getting things done). In the middle are other interested parties e.g. iwi, NGO's, communities. Allows for ongoing ownership and roles for people who want to be more involved in Plan Change implementation.

A member was troubled with the fact that there a different set of standards for someone who wants to go at it alone. It seems as though it's a tool to beat people into being part of a collective group of people that they won't necessarily want to be with. Won't a Farm Management Plan be a mechanism to achieve similar outcomes?

We are trying to encourage catchment groups because we feel that there is more to be gained out of a catchment group, we are not stopping the individual approach but this needs to be monitored a bit more closely because it'll be a one on one with the person and Regional Council trying to achieve the end results.

Carina – The individual approach is about activity specific regulation. The best environmental outcomes happen when you get people together if are working in a collective it opens up the opportunity for what we call edge of field mitigation. You can think about the whole catchment and identify what the risks are at a catchment level and address them rather than at farm property scale. If you have people working collectively they can more efficiently target those areas? The rules are there to capture activities which are maybe a little more risky when they are undertaken on that farm and when they are not undertaken in the catchment so there is not opportunity to offset or mitigate environmental impacts when the Regional Council needs to have a firmer view of that activity undertaken by that individual

James— One benefit of a collective is that there is more efficiency transaction wise for Council, there is a degree of self-management/auditing with checks and balances. It lowers the burden for us in terms of each and every property in the catchment being dealt with specifically. There are benefits to the wider society both in terms of cost and effectiveness of outcomes. I think there is a strong case to create a preferential path for a collective effort, if people want to exercise that right of going at it alone they are imposing greater transactional costs on society.

Cllr Belford— The member is asking, is there a different qualitative standard being asked of the individuals? Is everybody being asked to meet the same standards? Are the individual practitioners put under a sharper microscope or a more intensive monitor? Is there an equity question?

James – For an individual property there will be standards required to be met. The benefit of a collective effort is that you can share resources e.g. investing in a wetland that filters run off from a number of properties. In the implementation of this there will inevitably be benefits from collectivization. Is there an equity question? As an individual there will some rigidities with regards to your business but if you are joining a collective that provides both the community, the Council and the landowner group with the opportunity to think more creatively and flexibly about what the solutions are

A member noted that the wine sector has reviewed this proposal and were initially concerned that the same concept could apply to collectives. Discussions with Mary-Anne has highlighted that there is no current proposal to link farm plans to irrigation. The only link to farm plans or farm planning right documents through a collective is via the land use activity.

A member made an observation, there is still a lot of modelling and not enough measuring. Sediment, phosphorous, nitrogen are all capital that the farmers are working with and they don't wittingly have a desire to discharge into the environment, but they do. It is costing them. This needs to be measured. Monitoring trends is more important than the levels.

Carina agreed, noting this was a complicated conversation due to lag phases. It is intended to be built into the framework even though it has not been well expressed at the moment.

Peter confirmed that there are not a lot of figures at present (this was also echoed by the FRG), once the information is available it will be used. Until then have to rely on models.

It was suggested that HBRC need to provide templates so that we can multiply out the figures to a standard that is acceptable. Need the numbers to know what we are going to achieve.

A member supports the concept because the ability of the HBRC to get across 3500 landowners is problematic so you need something of the collective industry approach. Concerned with is the self-audit side. Would like to see everybody sign off on their copy and it becomes their farm management plan. If you find that the water quality is not improving then you need to ask what the next step is and find who is not playing the game and that is where analysis of the self-audit documentation takes place. Suggested something similar to the kiwifruit 'tick box' exercise for self-auditing.

Carina agreed there should be minimum self-auditing. Individual activities will be reflected in individual farm environment plans but the collective activities will be written into the catchment plan and ticked off as they're done and that will be audited by the Regional Council.

In some schemes self-audit is a desktop audit. In self-management programmes, the audit part is external audit e.g. accredited, independent audit employed by the collective. The efficiency is HBRC 50 collective rather not 1500 individual schemes.

Robyn queried whether the Group needed to agree the content and process for record keeping?

Mary-Anne confirmed that this was not required through the plenary, but would be part of the plan change which we need to work around in more detail.

Councillor Belford noted that the strawman does not say that there will be individual reports feeding into the collective catchment plan. Not objecting to the collective. Individual property owners are the responsible parties at the end of the day but where is their signature on the contract, what are they signing up for?

Peter confirmed that in their work (and shown by a slide which was difficult to see on the screen) that this accountability was addressed. If you don't comply you've got one direction to go and if you do, you go into another direction. Then you have a responsibility of the individual within the catchment group itself.

Carina - A lot of rules become input standards and we are finding that it is not resulting in environmental outcomes, it is a tick box exercise which stifles innovation and flexibility. It wasn't intended that every single farm environment plan be auditable but that those key outcomes in relation to the individual actions be reflected in a catchment plan and that's what

was auditable. It was about creating a catchment plan which was the auditable document which captured the actions that work collectively to achieve the outcomes not just an input based approach.

Question to the Group: Do you support what the Farmer Reference Group are suggesting as the management plan for reducing sediment & nutrient?

There were 22 voting members

- Agree 14
- Disagree 0
- Conditional support 8

Discussion ensued, the following comments were noted on the whiteboard

Member	Suggestion (support with conditions)
Member 1	All landowners should be required to sign-off and the self-auditing provisions should be addressed.
Member 2	Suggest there be third party involvement, consultation, advice
	Term "landowner" needs to be who is ultimately responsible
Member 3	Section 2 needs to be more specific e.g. collecting data and timelines
	Provision with out penalty for large properties (individual) that can do the same as a collective
Member 4	Rule 7 – Question how the 5m works when planting permanent crops?
Member 5	Issue with the different standards for individuals
	This has been developed by sheep and beef farmers others not has a chance to provide input
Member 6	Schedule Y Environmental Outcomes – include native biodiversity
	Question marks in Policy need filling in and there is a LWWG gap
Member 7	Policy 8 – strengthen "suitably qualified person"
	Multi-Plan catchments – how would this be considered/addressed?
Member 8	Tangata whenua as Treaty Partners
Member 9	Schedule Y – terminology and clarity required (Farm Plans, Individual, Catchment and Independent)

There was further discussion following the whiteboard session. There was comment as to whether forestry would fit into this model, and the 20 kg nitrogen trigger. It was noted that it was hoped that they could but there are also new National Environmental Standards specific to forestry. Keith confirmed that this was a big issue for the commercial forest sector, and they are working extremely well with the Council in terms of designing templates, agreeing on the various protocols in terms of what level of consenting is acceptable to the parties

It was noted that for pastoral farmers they don't know what is in the NES-PF and have asked Council for a summary of what it is so that can make a decision on what will be required within their collective.

There was support for the collective approach within the Group and comments around the benefits – such as allowing farmers to talk to one another, spreads knowledge & information, it has an educational aspect etc. It allows for risks to be identified and allows for solutions to be found through innovation.

Peter was applauded by the Group for all his hard work and effort in developing the Management Framework.

7. Reducing Nutrient Losses to Water – Water Quality Attribute States (Mary-Anne Baker)

Mary-Anne touched on the discussion paper which had been pre-circulated and taken as read, noting that this document ties in to both Peter and Sandy's earlier work and presentations.

Question to the Group: Do you agree with the conclusions that are presented in the document are the right approach?

Discussion ensued, the following comments were noted on the whiteboard.

Member	Suggestion (support with conditions)
General note	There are industrial users who fall outside the municipal consentes who need to be captured
Member 1	Options queried – confirmed that they have been considered and discounted (appendix 1)
	Address nutrient losses association with land use activities, especially where there are negative trends
Member 2	Confirm and identify areas of nitrogen hotspots
Member 3	Need to measure now – determine trends
Member 4	Groundwater – framework to take into impact of nutrients on groundwater and load to come
	Bullet 18 – what's the role of ANZECC guidelines for estuaries, include guidelines or interim guidelines for estuaries
	Other contaminant e.g. zinc
Member 5	TLA's and Industry missing – particularly in Karamu and Estuary – where do these fit?
Member 6	Are we addressing cumulative effects of old/redundant farm dumps – where do these fit?
	Septic tanks – where do these fit?

Questions/comments:

A member queried why the sediment ends up in the estuary and not in the marine environment

Sandy confirmed that some of it does eventually end up in the marine environment, but this is highly dynamic and changing with every flood. If there is a lot of load coming down the river there will be implications

It was questioned whether a permanent mouth would be able to address the sediment issue in the river

Sandy was unable to answer this.

The Group revisited Sandy's table and the figures.

Agreement/decision:

- It was agreed to include turbidity and deposited sediment would be included within the table.
- It was agreed that MCI Coverage for zone 4 would be amended from 80 to 90
- It was agreed that there would be a lower number for E.coli in the upper reaches
- It was agreed that there would be two tables – the original as presented today with the above changes and a second more aspirational table for the future.

A concern was raised with the process of voting, previously one vote against and it was discussed now it's flipped and one vote against overruled.

8. Update on Treaty Partners (Group Member)

A TANK group member firstly acknowledged the other members of the Tangata Whenua and Mana Whenua Working Group (now the Treaty Partner Working Group - TPWG) involvement in the TANK process. He explained that he was invited to provide an update on what's been happening and how things have been going particularly as we have been meeting more constantly in those different forums, such as working groups and one on one meetings with Mary-Anne.

He noted the TPWG focus particularly trying to draw out the commissioned work that was done for the Ngaruroro and the values and attributes highlighted the importance of Te Mana o te Wai which basically grounded the Group to collectively work together. The Ngaruroro Values report was completed mid last year.

He gave recognition to Joella who has been brought into the Regional Council to stitch together the conversation between Mana Whenua, Tangata Whenua and the Council over these bits of work with regards to values attributes. He also noted that a Treaty Partner member has produced the Tutaekuri Values report. Not having Mana Ahuriri around the table has made the situation cumbersome in terms of the stage of the TANK process.

He acknowledged the role of Dr. Anthony Cole arriving into this space and for Jenny to push the issue about the social impact assessment work that Dr.Cole has been undertaking and has been getting around the block with the support of another member to have a number of conversations that can help assist him and derive from each of the particular sectors impact comparisons with regards to Economic and the other work being undertaken to give it a more balance view.

The Treaty Partners were also invited to meet with the Maori members of the RPC earlier on this year, the RPC had a concern that those within the collaborative process were not happy and what our concerns and issues were and we took the opportunity to meet with them (on the 20th March). A desired outcome for me would be Partnership, Reciprocity, Active participation, Mutual benefit (PRAM Model, refer to slide). We've been around this table for a while and rather than having as I felt (and this is to the Regional Planning Committee) the commandant riding in the tank. These sorts of things are not easy in a community and particularly as we go through the complexity of today's two decisions and there is certainly a willingness that is starting to exhibit itself.



He noted that since the introduction of the RMA, mana whenua have been the antagonistic submitter. There is a desire to get out of that process and demonstrate clear leadership with each other that we are all in this together. He explained that the key issues of the Hapu were especially around the stock in the river and no one is listening (calls to pollution hotline) and when the gastro outbreak occurred there was so much angst that came out of that and it created a huge spend on the part of Council notwithstanding of course the medical issues that occurred.

What mana whenua were concerned about was the quality of the aquifer. Concerned that TANK may in its rules override that process (Plan Change 5) and the Environment Court outcome so just keeping an eye on this sand making sure that what did go through to achieve the outcome that there is no degradation and no contamination to the groundwater aquifer.

The member recognised that mana whenua are across the spectrum – as a Stakeholder, a Treaty Partner, commercially i.e. in horticulture etc. We have to be cautious about how we approach this balanced outcome process that we are all trying to achieve. Remember it takes 6 months to build a Rolls Royce and thirteen hours to build a Toyota so we may just need to put some time up our sleeves.

We need to ensure that we have a correlation between the values that came out of this report into the plans sub-values (whether that be ecological, swimmable, recreational etc.). Tāngata whenua don't want to see numbers when it comes to finding their values in the plan. We are also representing the front end with just six or seven people that are part of the Treaty Partner Working Group and having to be in the middle particularly with our people. This is a huge undertaking and I want to acknowledge the support of Regional Council.

Now we want to make sure that there are some linkages that give rise to issues that are clearly articulated through the objectives and hopefully with our consensus around the table which means we need to have more dialogue with each other, Tangata Whenua and the various sector people around this table.

We want to leave a legacy for our family and hopefully what we don't leave with them are the issues that we are discussing and debating. Water is a taonga, change needs to occur, maybe requiring more realistic timeframes and if we set those aspirations and are clear about them we are on the right track. We should not be afraid to set the bar high to create the best possible community business and environmental outcomes.

The TANK Plan Change must include Tangata Whenua rights and interests. We are makers not takers and I would like to think that we are all on the winning team from this point and it is about Partnership, Reciprocity, Active Participation and Mutual Respect.

9. Other business

Ceri noted that Dr. Cole will be presenting to RPC on 2nd May at 1pm at Regional Council around his work and the processes he is going to be following to deliver the Social and Cultural Impact Assessment for TANK and all are invited to come along or watch live through live stream or YouTube. The links would be sent after the TANK meeting to remind everyone.

Tom reminded everyone of his speech at Meeting 36 and his promises to the Group which he felt had been upheld. There have been decisions required under uncertainty; we are producing a plan that you may not all love but hopefully support (that's the discussion around gifts and gains and the fact as Regional Council we have to produce a Plan Change that we can defend) and by the end of this process you were probably going to hate him!

There has been an enormous amount of content and policy covered from January-April, with an enormous amount of detail. We responded to your feedback wanting your papers in advance and not on the day and not having to sign off on ten sets of minutes. Tom acknowledged the staff the work they've done in particular Mary-Anne.

Tom acknowledged a group member's earlier comment about the amount of pressure everyone is under, and that's effectively been double or treble the pressure put on the Treaty Partner Group because we are asking them to provide a greater degree of input and feedback especially as this document comes together. A member referred to it and we want to endorse the fact that it's true.

Tom reminded the Group that there was one more meeting scheduled for May. On a technical basis there is sufficient information to write a plan, however he did not feel that this was going to be fair of this group. He proposed to the Group extending this out a couple of months. A meeting in June to go through the Plan, then give everyone another month to reflect, take it away and come to a final consensus around the Plan in July.

Tom was clear that the Group are in charge of this process he understands there is also pressure put on this group through the special tribunal process and the WCO, but he was comfortable to report back to the Special Tribunal on the great progress of the Group and let them decide if they want to provide more time. The Council want to do what we can to support that process. He explained that he did not want the TANK process to be jeopardised by an artificial deadline

He concluded that we are currently working on with the RPC and the Treaty Partners with regards to the handover is August. RPC can't be expected to digest this in one meeting so we are proposing a series of workshops to support and take them through the decisions that the Group have reached.

A member supported the proposal to extend in relation to the Drinking Water report back. He noted Joint working group would be meeting next Friday to agree on the work that the contractor is doing and it still has to go to the Governance Group so May is unrealistic.

It was questioned whether we would be covering off higher trigger levels

Mary-Anne noted that we would not be looking at a B Grade permit (further slice). Looking at high and low flow. B grade adds further impact on instream values. It will flat line and extend the time that it's at those low flows.

A member noted that many around the table don't have delegated authority to make decisions

Actions: A couple of additional items were noted as being absent from the forthcoming agenda and needed to be addressed before the close of the TANK process:

- Update on stormwater and wetlands.
- Sensitivity analysis and groundwater model assumptions, losses relying on this – results required.
- Ahuriri and Karamu values reports.

Decision: There was consensus from the Group that extending the timeframe from May to July was appropriate to conclude the process.

Action: Ceri to confirm the meeting dates for June and July and send meeting invites to the Group.

10. Minutes

Ceri noted that the minutes from Meeting 37 were not agreed at the last meeting, but there had been some comments to the draft. These have been incorporated and therefore the iteration pre-circulated to this meeting should be read as final. Nathan noted a further amendment that he was late to that meeting. This would be amended and uploaded to the portal and website.

Meeting 38 record – A member noted that this was not her recollection of the vote. She felt that she had stuck to her position and that the 4,000l/s scenario was going to be modelled. The Group discussed this and John explained that they had agreed that NimmoBell would not be undertaking the modelling for that scenario at this stage but that there was the option of reviewing this if necessary. He explained that there was an agreement to accept this position for now.

She felt that her comments had not been accurately reflected in the meeting record.

Ceri stayed after the meeting with the member, Dr Cole and Robyn. Her comments were discussed and have subsequently been included in the meeting record. The decision from meeting 38 has not been altered.

11. Summary of Action Points

ID	Action item
39.1	Sandy to put the discussion document on the TANK website for people to read
39.2	Ask NIWA to include algal scapes in their programme
39.3	Sandy to check the location of the testing site in Maraekakahou
39.4	A couple of additional items were noted as being absent from the forthcoming agenda and needed to be addressed before the close of the TANK process <ul style="list-style-type: none">• Update on stormwater and wetlands.• Sensitivity analysis and groundwater model assumptions, losses relying on this – results required.• Ahuriri and Karamu values reports.
39.5	Ceri to confirm the meeting dates for June and July and send meeting invites to the Group.

The meeting closed at 4.30pm