

FLAG MEETING NOTES: 20 April 2015

Purpose:	Waimea Plains Freshwater and Land Advisory Group (FLAG) – Meeting 8
Date:	20 April 2015
Time:	9.30am-3.30pm
Venue:	TDC Council Chambers
Present:	<p>FLAG members: Philip Woollaston (Chair) Nick Patterson Matt Hippolite (iwi representative on FLAG) (Deputy Chair) Gavin O'Donnell Heather Arnold Martin Rutledge Mirka Langford Zane Mirfin Lawson Davey</p> <p>Staff: Mary-Anne Baker (Senior Environmental Policy Planner) Lisa McGlinchey (Environmental Policy Planner) Joseph Thomas (Resource Scientist – Water) Glenn Stevens (Resource Scientist - Water & Land) Trevor James (Resource Scientist – Environmental Quality)</p> <p>Guest presenters: Andrew Fenemor (Landcare Research)</p>
Apologies:	Pierre Garguilo, Dean Rainham
Notes taken by:	Lisa McGlinchey (supplemented by other staff)
Definitions and Abbreviations	FLAG=Freshwater and Land Advisory Group WWMC= Waimea Water Management Catchment TTIFAK = Te Tau Ihu Freshwater Advisory Komiti (interim name for group until finalised) NPSFM= National Policy Statement for Freshwater Management 2014 NOF= National Objectives Framework TRMP = Tasman Resource Management Plan SOE = State of the Environment Unconfined aquifer = are those where permeable strata are open to the ground surface. Surface water (rainfall and/or river flow) is able to seep from the ground surface directly to the aquifer. Confined aquifer = are those where permeable groundwater bearing strata are separated from the land's surface by an impermeable layer (such as silt or clay) that prevents surface water from directly seeping into the aquifer. Groundwater migrates to confined aquifers from an unconfined recharge area located elsewhere. AGUA= Appleby Gravel Unconfined Aquifer UCA=Upper Confined Aquifer LCA= Lower Confined Aquifer
<i>Note: records of discussion points have been grouped into similar topics and are not necessarily in the order discussed at the meeting.</i>	
FLAG MEMBERS PLEASE NOTE: If you have any questions or need anything between meetings, then please contact Mary-Anne Baker by email: marya@tasman.govt.nz or by phone ddi 03 543 8486.	

Session 1 – Issues arising from previous meeting

Election of new chair

- NP called for nominations for chair.

- Philip Woollaston was nominated and elected as the new chair.
- The group thanked Nick for his work to date as chair of the FLAG.
- Matt Hippolite acknowledged that he was happy to continue as deputy chair – although noted that this may change due to recent iwi commitments.

Interest Register

Are we still going to implement an interest register?

Yes.

Discussion determined that this best done by email.

Action: staff to send out email form for members to register interests.

What is the definition of ‘interest’?

It should be limited to interests individuals perceive as potentially affecting FLAG decisions – anything associated with water management.

FLAG Replacement for Andrew Kininmonth

- Nick has talked to Dennis Cassidy about being a replacement for Andrew Kininmonth who resigned from the FLAG group.
- Dennis was keen, but could not make the meeting on the 20th April.
- NP asked the FLAG if they were agreed that Dennis was to be the replacement member – there were no objections.

Matt Hippolite – iwi update

- Iwi leaders determined at their last meeting to initiate the Te Tau Ihu Freshwater Advisory Komiti, as per individual Iwi Deeds of Settlement (TTIFAK - the group name is yet to be formalised)
- The iwi leaders have developed a draft Terms of Reference for the group and are in the process of mandating representatives for the committee.
- Iwi working with Marlborough and Nelson councils on freshwater policy
- TDC has sent a letter to all iwi leaders
- A letter has been sent to TDC regarding the liaison of the TTIFAK with the Waimea FLAG.
- Iwi have some concerns over the Waimea FLAG values and objectives
 - The area (extent/focus) where the FLAG is considering. Iwi want to see freshwater management undertaken on a whole of catchment basis
 - Iwi understand the potential for impacts under a no-dam scenario, but believe that management objectives should be aspirational and therefore should not include reference to impacts if a no-dam scenario occurs.

Do you have a timeline for the TTIFAK to address these issues with the FLAG?

MH: I suggest we put the values and objectives to the TTIFAK and give them a time frame for response. I have a representation mandate for some of the iwi, but not all of them so I cannot speak for all representatives.

Do you know the time frames for the TTIFAK establishment?

We are expecting them to be up and running in the next month.

Would the next Waimea FLAG meeting be an appropriate time to liaise with the TTIFAK?

Possibly.

Does the TTIFAK see the need for someone from the Waimea FLAG to attend one of their meetings and discuss what the FLAG has done so far?

Yes.

Who would do this?

Someone from FLAG - in addition to Matt H who will be there.

The FLAG mandate does include consideration of the wider catchment and we have begun looking at issues in upper areas.

While the focus is on the Waimea Plains – there are also outcomes for the whole district too. We may need to work backwards – determining limits here and then looking at what this requires.

Who should staff contact to discuss liaison?

I suggest communications go through Glenice Paine – (Glenice is the Chairperson of Te Atiawa and is the contact person for TTIFAK).

Session 2: Nitrate

Chris Hickey's work on nitrate

- This was looking at the relationship between water hardness and nitrate toxicity, because species are more tolerant of nitrate when water is harder.
- Recently further data has been collected for areas such as Neimann and Pearl Creek. Trevor and Joseph have provided data to Chris.
- Chris currently working on data and hopes to have something for the FLAG next week – but initial comments are that looking at data he expects the nitrate limits to be higher than that included in the ANZECC guidelines or NPS.
- Chris has developed a scaling technique to determine the relationship – and this is relatively new internationally.
- Chris has looked at the tolerance of New Zealand species – although limited- but before now the data has only been available for overseas species.

Will this provide information on other water bodies with similar hardness?

Yes – Chris has done some work in Hawke's Bay and what he will provide us with should be useable elsewhere.

Is the effect similar across different species?

TJ: No – it differs for different species.

But in every case there is an increase in tolerance with increasing hardness?

TJ: yes

Research on streams overseas suggest elevated nitrate and phosphorus disrupts the carbon cycle leaving streams looking healthy, but being devoid of life. Is this the case?

TJ: Yes, multi-stressor interactions can have more than additive effects on stream health. The carbon cycle is really important for stream health as the carbon adsorbs many contaminants. Again we have large ecological benefits from over-hanging trees - improves habitat and mitigates the effects of contaminant discharges.

Nitrate in drinking water

Discussion had on whether bacterial levels were important in nitrate toxicity - discussions with MOH directs FLAG to stick to 11.3 mg/L as the drinking water standard.

The current level comes from the World Health Organisation (WHO) doesn't it? – is there any suggestion of a review of this in the drinking water standards?

Yes it comes from WHO and there are no reviews of this indicated for the drinking water standards.

Internationally most of the drinking water authorities use a risk-based approach. We have not had an incidence of 'blue baby syndrome' locally that we know of [this issue drives the current level of 11.3mg/L].

Do we know how many drinking water supplies there are in the area?

Yes we have good records for supplies – we can assume if they are not on the reticulated network then they will be on domestic bores.

Our objectives should be aspirational and should apply to waters whether they are used for drinking now or in the future.

Drinking water users are advised that they have nitrate levels elevated above the guidelines – however it is up to individuals to decide whether they choose to drink it or manage it.

Does this information get covered in LIMs/PIMS?

Not sure that it is.

If people ask council staff about water quality it is made available. But it does not necessarily automatically go on LIMs/PIMS.

Action: staff to check requirement for drinking water quality information on LIMs/PIMS

Does council have records of all domestic bores – I assume not, as there is no requirement to register these?

Council has good records for those bores that required bore consent, however records are not good for shallow wells (eg dug wells/driven pipes) as these are permitted and some historic bores before bore permit requirement days.

If there were incidences of disease associated with Nitrate then council would need to be more active in warning users, however as there have not been incidences of disease this does not seem necessary.

AF: In the Canterbury situation, the onus is being placed on new irrigation schemes to supply alternative water supplies to any bores that show elevated nitrates as a result of irrigation.

Is there a mechanism to manage use of fertiliser for example, given its existing use rights?

MAB: Discharges to air, land or water do not have the same 'existing use' protection as land use. There could be new provisions in place which capture these allowing for a timeframe of adoption.

There are issues in other regions with on-farm disposal pits and a lack of records on these – do we have the same issue?

We have a rule on offal pits, but it then becomes a compliance issue and that only works if we know where these are.

Does anyone check what is going in these pits?

Most years we try to do a fly-over. In past years we have only found a few landfill areas on farms, usually in the remotest part of our district.

The biggest implication the Waimea FLAG will have is the legacy issue. I assume we have quite a few TDC bores above 11.3mg/L?

Yes, we have some sitting at the margin of 11.3, but the data shows the levels have been dropping.

I assume the lag time varies depending on which aquifer and where in the aquifer we are looking at?

Yes the lower confined is within the drinking water standards, as are parts of the upper confined aquifer.

Is there any work being done to look at the interactions between historic and current land use?

Yes, this will be covered in the modelling session next.

HortNZ benchmarking update

HortNZ have not progressed far enough to a final to share with the FLAG – HortNZ looking to ground truth the information.

What is timeframe for this work?

It should be within weeks.

Session 3: Modelling of Nitrate Leaching Losses

- Envirolink funding secured for some limited work – AF provided a 1 page summary of the Envirolink bid to FLAG.
- Information for climate, soil, farm systems input into SPASMO to estimate nitrate outputs.

Are we assuming glasshouses are self-contained for nutrient loss?

Yes, we are assuming this, but it may not be the case for all.

Should we be accounting for nutrient and drainage losses from uncontained glasshouses then?

Possibly, however the relatively small area under glasshouses may not justify that, unless we find they are a significant source.

Action: staff to discuss with Pierre G, etc whether there are uncontained glasshouses in the Waimea Water Management Catchment (WWMC) area.

Andrew F gave a presentation summarising the modelling work.

Key points:

- Modelling estimates what comes out of the soil profile due to land uses
- Still need consideration of how this relates to nitrate levels within the aquifers and associated water bodies (the attenuation question)
- FLAG need to determine what limits are required for receiving water bodies and then determine what this means to land uses in contributing areas.
 - Can land use be managed to achieve the water body limits
 - Need to consider flow paths, hotspots of nitrate, historic nitrate plume etc
- AF showed some initial N leaching results, but cautioned they are work in progress
- Modelling shows us that the gravelly Ranzau soils have the greatest leaching risks
- The modelling results have focussed on the low-land catchment (west of and below the gorge) as the water quality from the upper catchment is currently good.
- Flow nets can be used to look at how contamination may progress through aquifers (spatially and temporally).
- Main cause of nitrate levels reducing as they flow through aquifers here is likely to be from dilution.
- The key sensitive water bodies are Pearl and Neimann Creeks

Land use seems to be a greater driver of leaching than irrigation?

- This is probably a result of the assumed use of best practice for irrigation in the model.
- Market gardening practices including how crop residue is managed will also affect nitrate levels.

- Irrigation of crops or not will also affect how well they take up nitrates from fertilisers and N stored in the soil.
- There could also be issues due to legacy of what is in the soil

So the soil and groundwater nitrate legacy issue may be creating more of an issue than current landuse?

Potentially.

Could we get information from other regions to see if the model outputs are consistent?

Yes, but there is not a lot of comparable data for some crops around the country. There is good data for horticultural crops (apples) and grapes – but not for market gardening.

Is there a major influence of the uncertainty in our understanding of water movement through soil and groundwater on how realistic our understanding of nutrient transport is?

There were concerns in Canterbury of the impact of irrigation on groundwater levels and modelling suggested levels would rise in some areas – and this could be the same in Waimea.

Would you expect nitrate level attenuation to increase in a with-dam scenario due to more water going into aquifer?

Yes, we see this in the initial modelling as it counterbalances somewhat the extra nitrate from more intensive cropping going into the aquifer.

What is the age of the water in the lower confined aquifer?

From Aniseed Valley Road area down to lower Queen St it's 10-15 years, but it varies. The bore takes also increase flow rates in the aquifers.

There is already a nitrate load in the Lower Confined Aquifer but the historic plume of nitrate is moving towards the coast a bit more slowly than we expected based on groundwater gradients.

Under a sea level rise scenario – would the back pressure affect the model outputs?

Yes – one of the things the Waimea Dam project looked at as part of the evidence for the plan change (Landcare report LC1647) was the effect of sea level rise and the freshwater/salinity boundary would move inland about 500m by 2090.

Where is the sediment coming from in Pearl and Neimann Creeks?

TJ: Historic land uses and degradation of aquatic growths.

Are larger storm events helping to flush out sediment or is it adding sediment to those spring systems?

We don't know as we would need more monitoring, but it is likely that in high risk areas this would be adding more sediment to the system.

Research is showing a lot of sediment comes from bank reworking [ie bank erosion].

What could be done to control sediment in Pearl and Neimann Creeks?

Setbacks for cultivation, restoration of historic issues.

Good planted riparian buffers to keep stock out.

Is there much cultivation occurring in close proximity to these streams?

Not currently.

Discussion on pastoral land uses

AF: Our SPASMO modelling can only cover 5 farm systems (land uses). What do FLAG members think would be the most similar of these 5 to represent the other land uses listed in the table, in terms of fertilizer use and nutrient losses? [refer slide 14]

- Berries, hops, kiwifruit – most similar to apples
- Nurseries – use outdoor veges
- Pasture, grazing, lifestyle blocks - refer discussion below

Will we be separating pasture farming into that on flat and steeper land?

No – we would like to use an average.

FLAG discussion on pasture uses:

- It will also depend on fertiliser application etc.
- Lifestyle blocks might also have different outputs.
- The total area of pasture may be larger, but the intensively stocked pasture area is quite small.
- Extensive pasture and scrub is more like forestry

Could we look at the different types and divide these areas amongst other land uses relative to their comparable outputs?

Yes, potentially.

Action: staff to look at the relative differences in different types of pasture uses before setting an appropriate 'average' to use.

Is the need to use averages in the modelling a funding issue? ie we don't have enough money to do the work to separate these out?

Yes. But timeframes to do the modelling are also a constraint.

Do we have a record of lifestyle blocks – are these on council's wastewater reticulation or domestic?

We don't have a good accurate dataset of where domestic wastewater occurs as it is a permitted activity, but staff have previously looked at this and reported results to the FLAG [refer FLAG meeting 3].

Discussion on opportunities for identifying Good Management Practices for land uses

AF asked the FLAG where they thought the opportunities were for changing land/growing practices to most reduce nitrate losses.

Key discussion points:

- MR: tabled the matrix for good management report.

Is Canterbury the farthest ahead for this approach?

Yes – but not for horticultural crops.

- What about greater use of OVERSEER? – I was surprised at comments made at the last meeting that many horticulturalists are still applying fertiliser without use of tools like OVERSEER.
- I think we are trying to get everyone to agree to blanket issues, but we could get greater progress by identifying weak links and addressing these – eg riparian protection and set backs. An aerial survey might identify issues needing to be addressed.
 - I don't think this approach would work for nitrate leaching management.
 - Nitrates are only part of the problem.
 - Perhaps we keep this in mind when looking at sedimentation etc.
- Some soil types and some crops have greater risks for leaching – we need to look at the soils we have and looking at the crops suitable for these soils – the aspiration is that we are using the soils for their best use.

- Or do we do this more indirectly by directing the amount of irrigation allowed on certain soil types?
- We already have a historic set of land uses – we can influence the future and can direct current land users to best practice, but this may not result in real change for nitrate levels now.
- Or do we set leaching limits for certain soils and let growers figure this out through crop and irrigation combinations?

What are the impacts for the estuary?

Nitrogen is not a huge factor in the inlet yet – it is dwarfed by the deposition of fine sediment.

The nitrate issue we have in Waimea is largely historic so why would we set limits if we don't think this will impact the nitrate levels in the short to medium term?

We are also looking at future changes - if we look at scenarios such as increased market gardening this could have greater impacts on nitrate levels.

We still don't really understand to what extent do current land use practices on each soil type vs historic sources affect levels. Will this come from the modelling results?

The current land use outputs can be put over the nitrate plumes mapped from the historic sources.

We don't yet know what the difference between current practice and required good practice will be.

What other management method is there, other than requiring good practice?

Land use controls on what can be done – particularly on leaky soils.

The FLAG need to consider – which are the most important values for setting the appropriate limits.

For groundwater – there is an ecological component to recognise with respect to stygofauna. Nitrate toxicity is likely to be an issue for stygofauna.

Given we don't have numbers for the impact on stygofauna we may need to use proxies – the recent case law (2015 NZEnvC50) included evidence from Chris Hickey which identified that if water complied with drinking water standards it would provide protection to stygofauna. *[Chris Hickey established the chronic guideline for stygofauna based on surrogates was 17mg/L]*

We may need to get further information on this.

[Post meeting note – the Takaka FLAG is also interested in this issue and will be asking Mike Scarsbrook (scientist with expertise about stygofauna) for his assessment.]

Have we got agreed scenarios for the modelling?

We need to identify specific scenarios – there is limited funding – so FLAG needs to consider this further.

Will the lack of resources affect the accuracy of what you can provide the FLAG?

Yes, time is also an issue and we have deadlines to meet.

Discussion on issue of information, accuracy timing and funding

- If we don't have the tools we need to evaluate the information we are making decisions on – this is not a good position – do we take this back to council?
- The responses we have will need to reflect the certainty we have in the information.
- In the plan change process there may be challenges to models and science so if we can make it more robust now it would be better.
- I don't have much faith in the existing results - do you have sufficient time/funding to check the outputs?
 - We are working through this where there is sufficient data.

- Perhaps we can talk to HortNZ on what funding/work they have?
- AF: perhaps I need a greater understanding of the FLAGs timeline as the modelling can be an iterative process.

Action: AF to provide updated/refined scenarios to next FLAG meeting.

Action: AF to clarify histogram presented to group on what is greatest driver for nitrate leaching levels.

Project timeline – gantt chart

(Looking at the project timeline was brought forward in the agenda)

FLAG discussion of timeline:

- AF is available for presenting interim results at the May meeting, he is available for the 18th June meeting, but is tied up in July, but could come back in August with further results.
- Are we able to commit to monthly meetings? – general consensus that FLAG could.
- Feedback from Council is that the Takaka FLAG has higher priority, so slippage may occur in the Waimea FLAG programme as a result.

Action: staff to update Gantt chart for each meeting.

Session 3a: Management Objectives

LM advised the FLAG that the changes requested at the last meeting had been made to the Values and Objectives document, but that subsequently two aspects had been changed further by staff. These were discussed for FLAG feedback.

Note of interpretation

Consistency was needed – but there could be potential for some readers to assume iwi terms were used in a context that is explicit to iwi. Staff suggested a note of interpretation at the front of the document to clarify the use of terms in the document as applying to all cultures and spiritualities. Staff asked the FLAG for feedback on this suggestion:

The FLAG has previously asked for something different to how staff have reinterpreted use of Maori/English terms - do we need the note at all?

Different interpretations of Maori words possible.

Need to seek feedback from iwi advisory committee.

Will come back to this aspect after Values/Objectives are checked for translation of terms.

Action: staff to liaise with Matt to check for references in Values/Objectives document – via TTIFAK too.

Water Supply Objectives

Changes were made to the two management objectives to help with a more consistent interpretation.

Secondary definitions are always difficult – in future draft include the definitions referred to in the foot notes.

How would the new objectives be implemented with respect to salinity changes resulting from sea level rise?

Salinity effects from sea level rise would be considered a ‘natural’ occurrence and can’t be managed by Council except as a service provider (eg providing reticulated drinking water to affected areas).

The term ‘normal’ used in the objectives may not be easy to interpret.

Needs more definition.

This term is used in the Health Act – but not defined there either.

Could we remove the term 'normally'?

FLAG agreed this was a suitable solution.

Action: Staff to retain new objectives, but remove term 'normal' from the wording.

Is there a priority order suggested in the objectives?

There is no order – but the second objective recognises that in some situations water already needs to be treated.

Do we need a definition for contamination?

The Health Act refers to things that make water unpalatable or suitable. Aesthetics effects are not included. Contamination is by human agency.

Should we change the wording to “Existing quality protected for potable supply.”?

[Discussion lead to decision to leave wording as it is.]

Are we seeking improvement in groundwater regarding nitrate – do the objectives allow for this?

I think this is allowed for within the current wording.

We could add a new objective to clearly state this – general agreement to this approach.

Action: Add additional objective to say we will improve water quality to DWS for Nitrate.

Session 4: Implementation Methods and CHI

Implementation Methods

Mary-Anne Baker gave a presentation on methods available in the TRMP to management water quality.

Key points:

- The TRMP is in a hierarchy of policy under the NPSFM and RMA
- TRMP must implement the NPSFM
- Key methods
 1. **Investigations and Monitoring** – council to collect and share information
 2. **Advocacy and Education** – translating data into advice for individuals to use, support for community and individual projects
 3. **Works and Services** – eg new wastewater reticulation
 4. **Financial Measures** - both incentives (eg subsidies, rebates) and disincentives (fines)
 5. **Regulation** – the rules and enforcement action if non-compliance occurs. Can also include self-regulation (eg Fonterra industry standards)
 - a) Catchment loads (eg Lake Taupo)
 - b) Catchment loads to property limits (LUC based or by land use type)
 - c) Modelling and managed at property scale (performance standards, water quality at boundary, OVERSEER use, intensive land use requirements, good/best practice – farm environment plans)
 6. **No action** – results may be achieved without council involvement
- To achieve results - the best results come from people who are motivated
- Water quality is more difficult to address as linkages are complex, lags occur with historic pollution and much of the issue comes from diffuse contamination
- Mitigation methods – mostly based on natural processes to remove targeted contaminants
 - Land based management – treatment at source
 - Interception of contaminants along hydrological pathways
 - Bottom-of-catchment methods that treat contaminants in receiving waters
- Best practice – do we know what it is? – refer Canterbury MGM process
- Not just about council – many industries generating their own good practice guidance and performance standards – with the potential for council to take an auditing role
- Management needs to reflect community values to achieve change

- Management needs to drive the right behaviour

What is Tasman District Council doing to ensure consistency with Nelson City Council?

Not much as they have a very different dynamics – Nelson have only a few farms and a larger budget, but they will be following the same NPS-FM process.

Most of this comes down to economics, is the FLAG doomed to fail if there are not economic incentives to change behaviours?

The 'red' side of the graph (refer presentation) will involve adding cost, but there are other ways of incentivising. For example we worked with the Aorere community and it wasn't about rules and regulations – it was about the local farming community understanding the impact they were having on the local aquaculture industry which resulted in farmers putting in bridges etc to improve water quality outputs.

FLAG discussion on drivers:

- Incentives to assist farmers to achieve what they want to achieve faster
- The incentive does not have to match the cost – the QEII project is an example of this.
- From what I see in the field – peer pressure is a key driver.
- If we set objectives that are truly aspiration for the community
- I think there will be incentive in that to do something different from best practice would take a lot of work and compliance effort
- Opportunity for partnering with the industry – working through industry specific issues with industry bodies – utilising industry pride.

Does the Council use hierarchy in the objectives?

MAB: Yes – you could use a vision statement, with supporting shorter term goals.

TJ: This has been tried at other times, Council did not like high level aspirational goals unless they were comfortable that they were achievable, practical and affordable.

Actions: MH and PW to consider with staff how a hierarchical system might work for aspirational goals.

Are there examples of how this has been done elsewhere – ie did the One Plan do this?

Not sure – will have to look.

AF: We did have an aspirational vision statement for the Motueka catchment developed as part of the Valuing our Waters research.

Action: Staff to review other plans (eg One Plan) to see if hierarchical system/vision statements have been used.

There should be a level of consistency between the Takaka and Waimea FLAGs – is this the case?

There is consistency in what each group perceives the values to be. The management objectives will be more dependent on the water bodies.

What have regional councils been doing in terms of consistency between councils – eg the One Plan

MAB: Not sure this can occur – Tasman Council has a single plan already.

I think it is good that each community can determine how they want to manage their local water quality.

MR identified examples of management options/policy in the report developed for the Waimea Water Augmentation Committee “Assessing Water Quality Risks and Responses with increased Irrigation in the Waimea Basin” (refer recommendations pg 38-39).

Action: staff to create list of management measures available including consideration of ease, cost comparison and external funding options.

Perhaps we could get funding from MfE or MPI for speeding up implementation?

Cultural Health Assessments

LM gave the FLAG a summary of the Cultural Health Assessments done in Tasman that are held by Council.

MH: the method was originally developed as a means of iwi doing a rapid assessment of resource health and thereby being able to make an assessment of what can be taken at that site – originally driven by customary fisheries implementation/management - ie whether they could take more than the recreational guideline limits.

TJ: having been involved in these assessment – I believe it has a role sitting alongside the SOE monitoring programme and welcome more consideration of this.

I've seen use of cultural assessment information being pertinent to areas needing restoration.

For the iwi assessors who were involved, in terms of assessing numbers, some assessors were good, but others were there for training, but their scores were still included so some issue with capacity.

Very useful for cross cultural communication (both ways).

Would the TTIFAK be interested in continuing these assessments?

Yes – this is one of the aims of the group – and this has been progressed in Marlborough.

If we can implement a consistent framework as developed by Gail Tipa we can reduce issues associated with individuals skewing scores.

Where would reference to Cultural Health Assessments fit within Waimea FLAG work – could it be an implementation method?

In terms of councils water management it does not have a clear role and this needs to be discussed with the TTIFAK.

As a tool to inform the FLAG work it seems too long term, but it could be used in the implementation methods.

Cultural health assessments have been used in conjunction with local schools, but limited to safe sites etc.

Is there alignment with the SHMAK community?

[note: SHMAK is the Stream Health Monitoring and Assessment Kit]

SHMAK is being upgraded but I'm not aware of any comparison between Cultural Health Assessments and SHMAK.

Both use the 1-5 grading approach. SHMAK not used much in Tasman.

HA: Nelson Forests routinely use SHMAK as a quick assessment method across their forestry estate

(AF and TJ left at 2.15)

Session 5: Project Management

Public engagement

FLAG discussion on engagement needs:

- Need to have something concrete before we go out.
- How much is enough and not too much?

- Do we send out the management objectives as a first draft?
- Perhaps we test it on a test group?
- We need a summary of timeframes for the website
- Combine with media release at same time as timeframe
- Option to do an ongoing media release in Newline.
- We should make media releases available to industry groups for delivery to their respective groups – using hyperlink to TDC website
- Suggest promotion around LAWA website etc

Action: Staff to develop a summary of timeframes for the website.

Are you comfortable for the values and objectives to go out?

Not yet – maybe at the next round.

Not until it has been to the TTIFAK.

Action: Staff to work with PW on media releases and put in local papers and standing segment in Newline.

Action: FLAG to provide a list of industry groups to send media releases to staff.

Subsequent meeting dates

Next meeting dates agreed:

- Thursday 21 May 2015
- Thursday 25 June 2015
- Monday 20 July 2015

Action Points – Council Staff

No.	What	Who
1.	Staff to send out email form for members to register interests.	MAB
2.	Staff to check requirement for drinking water quality information on lims/pims	GS
3.	Staff to discuss with Pierre G, etc whether there are uncontained glasshouses in the Waimea Water Management Catchment (WWMC) area.	MAB
4.	Staff to look at the relative differences in different types of pasture uses before setting an appropriate 'average' to use.	AF
5.	AF to provide updated/refined scenarios to next FLAG meeting	AF
6.	AF to clarify histogram presented to group on what is greatest driver for nitrate leaching levels.	AF
7.	Staff to update Gantt chart for each meeting	LM
8.	Staff to liaise with Matt to check for references in Values/Objectives document – via TTIFAK too	MAB
9.	Staff to retain new objectives, but remove term 'normal' from the wording.	LM
10.	Staff to add additional objective to say we will improve water quality to DWS for Nitrate	LM
11.	MH and PW to consider with staff how a hierarchical system might work for aspirational goals.	MAB
12.	Staff to review other plans (eg One Plan) to see if hierarchical system/vision statements have been used.	MAB
13.	Staff to create list of management measures available including consideration of ease, cost comparison and external funding options	MAB
14.	Staff to develop a summary of timeframes for the website	LM
15.	Staff to work with PW on media releases and put in local papers and standing segment in Newsline.	MAB

Action Points – FLAG members

No.	What	Who
16.	FLAG to provide a list of industry groups to send media releases to staff.	ALL

Next meeting

Date	21 May 2015 (Meeting 9)
Time	9.30-3.30
Venue	tbc
Chair	Philip Woollaston

Subsequent meetings

Date	25 June 2015 (Meeting 10)
Time	9.30-3.30pm
Venue	TDC Heaphy Wangapeka Rooms
Chair	tbc

Date	20 July 2015 (Meeting 10)
Time	9.30-3.30pm
Venue	TDC Council Chambers
Chair	tbc