

FLAG MEETING NOTES: 19 September 2014

Purpose:	Takaka Freshwater and Land Advisory Group (FLAG)– Meeting 3
Date:	19 September 2014
Time:	9.30am-3.00pm
Venue:	Takaka Fire Station
Present:	<p>FLAG members: Graham Ball Greg Anderson Mirka Langford Neil Murray Tony Reilly Mik Symmons Mike Newman Matt Rountree Kirsty Joynt Margie Little (iwi representative on FLAG) Martine Bouillir (council representative on FLAG)</p> <p>Staff: Mary-Anne Baker (Environmental Policy Planner) Lisa McGlinchey (Environmental Policy Planner) Joseph Thomas (Resource Scientist - Water & Special Projects) Trevor James (Resource Scientist – Freshwater and Environmental Quality)</p> <p>Rochelle Selby-Neal (Independent Facilitator) John Bright (Aqualinc / Landcare Research)</p>
Apologies:	Piers MacLaren Andrew Fenemor (Landcare Research)
Notes taken by:	Lisa McGlinchey (supplemented by other staff)
Definitions and Abbreviations	FLAG=Freshwater and Land Advisory Group NPS-FM 2014 = National Policy Statement for Freshwater Management 2014 NOF= National Objectives Framework TRMP = Tasman Resource Management Plan (the Plan) TWMC = Takaka Water Management Catchments 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.

Note: records of discussion points have been grouped into similar topics and are not necessarily in the order discussed at the meeting.

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.

Purpose of Meeting

- *Values – what are we managing water for?*
- *Understanding how values fit into the planning framework*
- *Prioritising values / prep work for management objectives*

Session 1 – The Planning Framework: NPSFM-NOF & TRMP

Welcome and Karakia

Matters arising since last meeting – Martine requested staff expand on abbreviations used in notes.

Presentation 1 - National Objectives Framework - Lisa McGlinchey

Lisa McGlinchey (Environmental Policy Planner) gave a presentation on the National Objectives Framework within the National Policy Statement for Freshwater Management.

Key points from presentation:

- Eight key steps to framework:
 - What are we managing our water bodies for? (our values and objectives)
 - What attributes (water characteristics) are important for our values and objectives?
 - What state do the attributes need to be to achieve our values/objectives?
 - What is the current state of these attributes?
 - How do our desired and current states compare?
 - What are the threats and risks to the attributes and achieving the objectives?
 - How can we manage the attributes and the threats and risk?
 - Review of can we afford it? Will this be effective?
- NPS-FM NOF provides
 - 13 national values, including two compulsory values:
 - Ecosystem Health (river, lake, wetland and aquifers)
 - Human health for secondary contact recreation (boating and wading)
 - Some attributes for the two compulsory values (rivers and lakes)
 - Attribute grades (4 category system, A to D) for those attributes identified
- Existing TDC work in TRMP and State of the Environment (SOE) monitoring provides:
 - 9-27 values (depending on categorisation), many similar to NOF but 6-9 with no easy fit into NOF categories
 - Many attributes already monitored as part of the SOE monitoring programme
 - Some attribute grades in SOE - many using a 3 category 'traffic light' system
- Other values and attributes may be identified by FLAG or water users/communities

Questions and topics of discussion arising from presentation:

How long will the FLAG planning outputs last?

In legal terms the Plan has a 10 year life, but new data and new events can drive plan changes in the interim.

Challenge for group to make it a document that allows for change. Need to also provide an implementation program to ensure plan is given effect to – especially for other partnerships

We might be aiming for an 'A' grade, but realistically can only achieve a 'B' in a certain time frame – can framework/plan account for this?

Yes, we can use time frame objectives.

You can also choose limits more stringent than the NPSFM

There is a lot of wriggle room in the NPSFM.

The NPSFM provides the framework on which to put the community's expectation. It provides technical support. MfE will continue filling in the gaps. It is up to the community to decide where they want to go.

So are we only looking 10 years ahead?

No – you can look 50 years ahead if you want, but we need to also take into consideration possible future changes.

If everyone has a 25year timeframe in mind – we can all work towards this.

Yes.

Looking at the national framework – there seem to be no iwi values?

Yes there are - they are represented in the values and further in the descriptions of the values

Action – FLAG members to read NPSFM: Appendix 1 on the NOF values and attributes

Presentation 2 - Takaka Values and Objectives - Mary-Anne Baker

Mary-Anne Baker (Senior Environmental Policy Planner) gave a presentation on the Values and Objectives for Takaka within the Tasman Resource Management Plan (TRMP).

Key points from presentation:

- The Takaka provisions added to the TRMP in 2001 as a place holder until a group such as the FLAG could look at issues further
- Schedule 30A has high level descriptions and only covers water quantity – there are no associated water quality uses/values in the Plan in Schedule 30B
- Management objectives listed are not very useful as they are not linked to what is there and what needs to be
- Only larger water bodies listed, coastal waters are included – what other water bodies need to be there?
- Bird habitat and kayaking values are recent additions as part of the plan change for Part 4 (activities in beds of lakes and rivers) of the TRMP
- There is some concept of significance for some values – eg regionally vs locally significant.
- There was no specific methodology for determining the hierarchy of significance – utilised RiVAS (River Values Assessment System) approach. This used expert panel assessment of attributes and scores providing a ranking at a regional level - eg expert white water kayakers ranked the Takaka Rivers for kayaking value
- RiVAS carried out for irrigation, salmonid fishing, native birds, natural character, swimming and kayaking
- Because some values are identified as regionally significant – this affects the water allocation defaults – they are stricter with a greater significance of these values.

Questions and topics of discussion arising from presentation:

When you say ‘value’ regarding the kayaking RiVAS example, do you mean “they like to kayak it”

Yes. It also includes the quality of the kayaking experience.

Does natural character mean aesthetic values?

Partly – the attributes used in RiVAS will help identify how characters were ranked.

Different approaches were taken for different values – for example we needed to identify who are our swimming experts? - we ended up taking large maps to local high schools for the kids to identify the swimming holes.

Accessibility might also affect the significance of swimming holes to individuals – ie you can get to it but others can't

Significance rankings are valuable for use in default scenarios, but need to be reviewed through development of specific catchment limits.

Do you have any information from tourists on what they value for water when they come here?

No, but we expect there will be information out there that we can use. Likely that what locals value for recreation/amenity etc is also valued by tourists

Kayakers will be tourists. They are often using social media to communicate good spots to each other.

The Takaka FLAG has a relatively ‘open book’ [starting afresh] for determining values and objectives important for water bodies in the Takaka Water Management Catchments.

Session 2 – Identifying and Prioritising Values

Identifying and Prioritising Values - Step 1

Summary ‘Wordle’ of values - summary of values exercise from last meeting

RSN walked the group through a ‘Wordle’ summarising the outputs from the values sheets exercise done by the FLAG members at the last meeting.

[A ‘Wordle’ is a visual summary of the frequency of words in a list. The more a word is used, the larger the word shows in the word cloud. Refer www.wordle.net for more information.]

Two Wordle images were presented to the group – they used the same information, but for the first (top image below) the words were entered as they were written. For the second (bottom image) the words were categorised so that words relating to similar concepts were combined – eg ‘mauri’, ‘energy’ and ‘life force’ were grouped under ‘mauri’. Categorising also considered if the value was expressing something spiritual, ecological or economic.



The Wordles highlighted: mauri, pure, fishing, livelihood and well-being as key concept values from the FLAG members. ‘Economic’ was relatively small, but many thought this was also captured in the term ‘livelihood’.

Questions and topics of discussion arising from the Wordle Summaries:

Is there anything that is surprising in the Wordle images?

I feel that livelihood captures economic.

RSN: Economic included words such as income and business, Livelihood included “food for family”

RSN asked Margie Little to define the maori terms around water (eg waiora and mauri) for the FLAG.

Mauri – everything has mauri – the essence – the life force, even if it is a stone. Mauri gives energy to exist. Because water has always been treasured by maori they look at a more spiritual concept of it and it is wrapped up with concept of kaitiakitanga – the need to protect.

Margie noted Te Waikoropupu Springs Management Plan document included useful information on the maori values and definitions of water [excerpt provided below].

“Water is of great significance to tangata whenua because it expresses all dimensions of life:

- (i) Taha wairua – the spiritual;*
- (ii) Taha hinengaro – the intellectual;*
- (iii) Taha tinana – the physical; and*
- (iv) Taha whānau – the social.*

Tangata whenua have a classification system that links the spiritual dimensions with those of the physical:

- **Wai Ora** Water of life, the purest form of freshwater. It gives and sustains life, can rejuvenate damaged mauri/life force and counteract evil. Wai-ora is of such spiritual significance that is used in ceremonies such as baptism and dedication of children. Te Waikoropupū Springs falls within this classification.
- **Wai Māori** Water that is used for every day purposes such as drinking.
- **Wai Tai** Sea water that is potentially dangerous.
- **Wai Mate** Water that has lost its mauri/life force. It is damaged or polluted beyond its capacity to rejuvenate either itself or other living things. Wai-mate can contaminate the mauri/ life force of other living things or other waters.
- **Wai Kino** Water that is spoiled or polluted and that contains rocks or submerged snags. This water has the potential to be detrimental to life.
- **Wai Tapu** Waters of death, water burial site. These waters are tapu / sacred due to loss or other events and are subject to restrictions.”

Group Session 1 – identify and prioritising values

The FLAG members were asked to write their values on post-it notes and place these under the appropriate geographical areas with:

- Black pen – write down values.
- Red pen – write if economic, ecological or spiritual etc or national/regionally/local significant

The geographical areas included:

- All catchments (surface and groundwater)
- Catchments that flow to the Motupipi Estuary

- Te Waikoropupu Springs (and recharge areas)
- Coastal Catchments (west of the Takaka River)
- All Groundwater

Prior to the exercise there was some discussion on what was meant by 'value'.

What is a value – is it a value? a use? an activity?

It could be an association (mauri, spiritual importance) or a physical use (eg swimming/fishing).

Value for water = the things that matter to you.

[There was some expression by members of 'internal' values vs 'external' values – suggesting economic more an external value, while spiritual was a more internal value.]

I want to brainstorm – for example what does 'well-being' mean? Otherwise I think that we will be repeating values exercise done previously...

Eg for well-being - kayaking gives me mental health

Well-being for me means all life would not survive

Ask yourselves the question – what do you want to manage the water for?

The water is important to me for _____

It is important to me that the water is managed for _____

[side discussion] National park vs lowland values/uses can be very different across boundaries – can be difficult to represent – concerned that they not be 'averaged' which would result in losing the difference in values in these areas...

Prioritising Values - Step 2

Group Session 2 – Prioritising Values

The FLAG divided into groups to discuss the values listed under each geographic area from the previous group exercise and discuss the priority of these values – with the question: what would we manage the water for - over all the values listed?

Some members found the session challenging and uncomfortable.

Photo records were taken of the outputs.

Action: *staff to analyse outputs and provide a summary back to FLAG for comment and discussion with the aim to start forming management objectives.*

Feedback from FLAG on sub-group discussions:

- *Similar outputs - with activities and values*
- *Only one had tourism – but that is the elephant in the room – if tourism is not there we will have a lot of cows!*
- *Tourism has seasonal pressures which need to be considered*
- *Generational use by tourists – some families have been coming here for years and years*
- *Tourism is also part of economics and livelihood*
- *There is a gap – the iconic nature of Golden Bay.*

Questions and topics of discussion arising from Group Session 2:

How do you incorporate aesthetics into it? – Takaka Valley is stunning, it is such a personal thing and getting agreement is difficult (eg the Significant Natural Areas Group)

We have been focussing on quantity and quality of water – but it is open to the group to consider if other aspects need to be included such as riparian management, public access etc

Ecosystem health is dependent on riparian vegetation.

The planning process tends to compartmentalise – can be a challenge to ensure all values are reflected.

Economic vs sustainable causes people to adjust the level of water – tendency to take the 'easy' option to down grade expectations – but need to keep in mind that our systems - Te Waikoropupu - is a special area – with the 2nd highest reported water clarity in world.

[Davies-Colley et al 1995 described Te Waikoropupu Springs as having close to the theoretical maximum water clarity (average 63m). However, more recent results from Blue Lake in Nelson Lakes National Park has now caused revision of the maximum to over 80m.]

Where is the Water Conservation Order (WCO) for Te Waikoropupu Springs at in the process?

The Minister for the Environment has asked for further information from the iwi applicants before they accept the WCO application for processing.

The WCO is not a council process. Council will probably end up providing a lot of the data to the board in making their decision, but it is a separate process from the FLAG process. Expectation that FLAG process will be faster than WCO process.

Would the Water Conservation Order be above the Plan?

Yes. The Plan cannot be inconsistent with any WCO.

The FLAG process is easier for the community to engage in.

It is a very difference process – the WCO doesn't get into the same detail as the RMA planning process, however the Plan will need to do this to be consistent with the WCO.

Prioritising Values - Step 3

Group Session 3 – Individual Rankings

The FLAG members were asked to take 10 blue dots and apply these to the values identified by the group in the previous exercise. They could stick all 10 dots on one value or spread them across 10 values as a means of prioritising which values were most important to them.

MAB: We are no-longer planners, but brokers in language and differing interests.

Photo records were taken of the outputs and the post-its, with dots, were transferred in their groupings to flip-chart paper for further analysis.

Action: staff to analyse outputs and provide a summary back to FLAG for comment and discussion with the aim to start forming management objectives.

Session 3 – Water Allocation and Flows

Presentation 3 – Water Allocation and Flows – Joseph Thomas

Joseph Thomas (Resource Scientist - Water & Special Projects) gave a presentation on the water allocation and flows within the Takaka Water Management Catchments.

Key points from presentation:

- *Highlighted that recharge areas differ from geological areas – the Arthur Marble Aquifer (AMA) recharge area also includes all the land area that flows into the unconfined aquifer areas.*

- *500l/s is an informal policy limit set in 1990-1991 by the Nelson-Marlborough Regional Council.*
- *Council beginning to get good water usage data – by 2016 every water take with a permit will be metered. In the future we will have better data.*
- *Current data shows that in the AMA Recharge Zone usage is peaking at about 80% of the allocated limit*

Questions and topics of discussion arising from presentation:

Regarding the Takaka River drying up - has it always been like that – that it disappears at certain times of the year?

Yes.

Are you saying that everyone who pumps water has a meter? And do you check them?

Yes for the consented takes, currently the larger ones are, but by 2016 they will all be metered. Yes, we check them.

What about in town?

Most are permitted activities- eg for household use – so do not need meters – everything that requires a consent will need to be metered.

Some systems have automatic triggers that stop pumping when the river reaches a certain level.

Does that mean that people are applying for much more than they need?

It is partly how they set up their irrigation systems – it is unlikely that we will have 100% irrigated all at once. If you have the same crop you are more likely to reach a higher percentage of your allocated amount.

We currently allocate on the basis of soil type – so you can grow any type of crop on the land - up to the soil limit. This is different to the Waimea Plains where they are over allocated and allocation is based on crop type.

Is there a charge per volume of water used?

No, we don't charge for water under permits, but RMA Sec 36 administration charges apply for monitoring and managing the resource. The bigger the permit, the bigger the Sec 36 charge. Council only charges by volume use for reticulated supplies.

We only have longer term data for the three largest permits, now there are regulations more are metered so the data will get better.

Only three permits have a cease take trigger – none of the rest have any rationing or cut back triggers.

Can a cease-take trigger be retrospectively applied?

That is one of the questions the FLAG need to decide – if this is done.

There are A-B-C permits used in Marlborough – using a stick and carrot approach and it encourages water storage – could this be used here?

We don't currently have this system – it is something the FLAG could look at as an option. Our approach so far is to provide an equitable security of supply (effectively all 'A' permits). Different securities of supply could be used in the TWMC.

Where would applications on the waiting list take use relative to the graph [slide 8]?

Waiting applications would take the total allocation up to ~480,000m³/week [graph shows current allocation at 300,000m³/week].

– so FLAG need to decide “Are we happy leaving the allocation level where it is?”

We only have an informal waiting list in Takaka. It has 11 people on the waiting list. The total amount waiting for is 291.9 l/s from Upper Takaka to Hamama. Most have a permit already and want more water.

500l/s is allocated in the recharge area – of this 239l/s is allocated to the Takaka River - 3 properties have close to half the allocation and they all get cut off when the river reaches MALF (Mean Annual Low Flow) - they have low security of supply. The other permitted ones without a trigger can keep taking.

The FLAG needs to decide if they give everyone the same security of supply (everyone has trigger cut offs).

This is only part of the water in the Arthur Marble Aquifer. The water we don't see coming out at Te Waikoropupu Springs seeps out into the Bay.

The Arthur Marble Aquifer is recharged by karst uplands, the upper Takaka River and rainfall in the Takaka Valley.

Why is it that the Anatoki flow at the One-Spec Bridge seems to be lower?

Water is going into the gravel aquifer – it is a losing river.

How does the Cobb dam factor into this?

The Cobb dam actions are separate from the water take process and are managed how they need to for the dam purposes – the water take permits will trigger depending on water levels in the river, regardless of the dam activities.

Storage can provide a buffer for when trigger/rationing occurs.

We have storage in the Cobb, but we don't have control over its release because there are other considerations in its management.

How many more of the permits are going to be issued while the FLAG is wrangling with issues?

None, but there is nothing stopping anyone on the waiting list from challenging Council's position in court.

The three existing consents in the AMA recharge area were granted in early 2000s. Others have since been allowed outside of the recharge zone.

How was the Mean Annual Low Flow (MALF) level set?

It has a long history – there is no specific science basis – but it was the best estimate at the time of what was thought was needed to protect values.

Discussion on water take permits

Consents are usually subject to conditions providing for review during term of consent including where new plan rules are applicable. However, it is more common to review conditions/permits at the time of renewal.

Permits are commonly issued for 15 years – this is also a policy choice. The more often businesses have to apply for a new consent the larger the cost and investment uncertainty.

If there are other things the FLAG have questions on please send these through to staff for coverage/discussion at the next meeting.

Where you set the limits will affect how the values are affected and how we meet our objectives.

Regarding the relationships between low flow and river health – low flows are a natural occurrence, but how long can a river ecosystem function at a low flow before there are impacts?

Each river system is different. We don't have a lot of data on ecological effects or modelling of impacts.

This is an important question the FLAG will need to consider as long periods of low flow can lead to high levels of periphyton which is the one of the attributes for the NOF compulsory ecosystem health value.

It all depends on how much habitat is lost. The riffle dwelling fish are the first to be affected by low flows –if these are important in the river system then this could have a big impact.

Rivers with steep banks tend to be less affected.

IFIM = Instream Flow Incremental Methodology. It is a flow assessment approach and others include expert panel assessment, percentage of MALF, etc.

Session 4 – Mapping Priority Areas and Futures Scenario

Group Session 4 – spot exercise – good areas that need to maintain as they are.

FLAG members put yellow/red dots onto TWMC in areas that are perceived as important and are good.

Yellow – areas to maintain as they are

Red – areas to improve or enhanced

Adding note of whether it relates to quality (1) vs quantity (2) or both.

Group session 5 – futures scenario

The FLAG broke up into groups and discussed the future scenario identified in a handout summary – including consideration of climate, housing and a group list of aspects. The groups then reported back their key points to the wider FLAG.

Report back:

Group 1

- *Climate change – already happening, can feel we can see it – frosts/no frosts where not typical. More intense rainfall and more intense drought.*
- *Takaka township might not be protected enough from flooding due to bigger events*
- *Bigger storms = more sediment in rivers*
- *Didymo a localised problem – in East Takaka a problem. Upper Takaka 90% has reduced to 30% cover. Other affecting factors.*
- *Irrigation – will need to manage for variability in climate, hoping with better technology and efficiencies we won't need more irrigation.*
- *Housing – down in Takaka and up in Pohara – no security of water supply in Pohara – may need to get from Takaka.*
- *Pollution- optimistic about pollution – use technology to pollute less*

Group 2

- *Population predictions – not sure these were correct as don't take into account tourist numbers*
- *Mining- not sure if mining is for fertiliser, gold mining has water quality/quantity effects. Gravel extraction has disturbance of river beds and ecosystem impacts*

- *Flow changes – reduce flows and flooding – a raft of implications – reduction of aquatic biota*
- *Flooding and sedimentation downstream – impact on zoning and development, damage to infrastructure expensive*
- *Increased reliance on water storage*
- *Forestry / deforestation – landslides and sedimentation*
- *Old septic tanks – health effects*

Group 3

- *Riparian planting – if there is more erosion plantings will be at risk*
- *Fonterra pushing planting with dairy industry, element of green-washing*
- *Needs stock exclusion at same time*
- *Width of riparian areas important for protecting water quality*
- *Will only happen if people choose – unless you're a dairy farmer*
- *Housing – sea level rise effects may cause population shifts to lower risk areas*
- *Subdivision in coastal areas - Pohara, Patons Rock?*
- *Population decrease in Takaka concerning. Move from Takaka township to coastal areas*
- *Channelling rivers – some river training in Rameka Creek to protect state highway, channelling of larger rivers unlikely*
- *Climate change – may lead to warmer waters – greater algae blooms if nutrients not managed – also potentially better swimming.*

Group 4

- *Climate change –*
 - *more demand on water in summer, more flooding in rivers – impact on pests and diseases*
 - *Low population change – would not change*
 - *Warmer temperatures*
- *Dairying – higher rainfall, higher intensity resulting in higher runoff so more nutrients/bacteria/sediment – may need to house stock more both in winter and summer extremes*
- *Flooding will give flushing effect on rivers*
- *More irrigation and better use of irrigation – more efficient – might need to change pasture species used and use crops*
- *Willows – keen on more natives – there is a place for willows, but want more natives.*
- *Pohara water – they can afford it.*

Additional comments:

Less houses in Takaka, more in Ligar Bay – but if 20% increase in tourism – we are still facing the same issues as with population growth, but all hitting in a peak season.

Session 5 – The Water Wheel

Presentation 4 – The Water Wheel - John Bright (Aqualinc)

John Bright (Aqualinc) gave a presentation on the Water Wheel, an approach and a visual tool used for communication and comparison of attribute grades and states associated with water body values under differing management regimes.

Key points from presentation:

- *The Water Wheel approach has been used elsewhere in NZ (eg Ruamahanga) and helps work through the National Objectives Framework - in setting standards and limits.*

- It can assist in setting minimum (hands off) flows, allocation limits, nutrient load limits and conditions in consents.
- Setting limits almost always involves making trade-offs. It is important to make trade-offs transparent and ensure all aspects (environment, economy, cultural, social) are considered
- The Water wheel approach is designed to be collaborative – it has three components:
 - Collaborative – consensus seeking
 - Toolbox – of methods, models,
 - Water Wheel – a way of visualising different scenarios, presenting how things might look in the future across all things you care about.
- Water Wheel parts:
 - Each of spokes represent attributes – eg periphyton, MCI, eel habitat, etc
 - Blank spokes are where no data or no indicator / attribute is identified.
 - Attributes need to be selected through a collaborative process
 - Traffic light system and length of spoke illustrate state of attribute (mimics A-D grading system in NOF)
 - Designed to make a lot of information more readily understood
- Water Wheel can be worked out for various parts of the catchment – might see spokes changing in colour down a catchment.
- Need to go through values identification process, then attributes identification and then determine at what level do we put the transition between grades (some are prescribed, some will need to be identified)
- Key question for FLAG - How much should the status of some attributes be allowed to decrease in order to allow other attributes to increase?
- Values and their attributes are connected.
- We set limits based on how much ecology changes and how much we derive from water use.
- Can use Water Wheel diagrams to compare different limit regimes to see what impacts these have on different values – ie current and various proposed options.
- Water Wheel process (via Landcare and Aqualinc) might be able to contribute to:
 - How FLAG process could be refined
 - Providing catchment modelling
 - Assisting with indicator/attribute development – especially socio-economic indicators – this was a recognised gap with previous work – eg employment and nature of employment. We are close to being able to understand the impact of cutting irrigation in Canterbury on Christchurch.
- The Water Wheel work is funded by the Ministry of Business, Innovation and Employment (MBIE) – the contribution to the FLAG process would be funded by MBIE.

Questions and topics of discussion arising from presentation:

Do you have modelling for all the attributes we might come up with?

Not necessarily – one of the challenges is to come up with modelling to fit the attributes you identify. Also the solution may not necessarily be modelling – it could be qualitative using expert opinion.

In the Water Wheel – I would like to think ours spokes are more green than red.

The colour of the spokes will depend on the thresholds you set – the stricter the thresholds the more red/orange you will get.

In past work - how long has the process taken to put the attributes through the modelling?

We can do them between monthly meetings with no problem. Where there are different attributes it will take longer. But it depends on methodology required.

So from the FLAG you need to know what we want to manage our water for and what are the attributes?

Yes, and the sooner we know the better – we can start putting them into the models, etc

How do you fit groundwater into the system?

Groundwater in only indirectly in the models – we would need to build a separate model for groundwater in Takaka.

Surface water may reflect what is happening in groundwater, but we would need to look at whether the results were applicable or not.

MAB: Do you feel the FLAG would want to use the Water Wheel process?

Yes – especially as it is being funded by MBIE.

Who is Aqualinc?

A privately owned Christchurch consultancy that focuses on water management.

Session 6 – Process and Project Management

Project Management - Next Steps

Staff need to collate information from group sessions into a form that everyone is happy with and that will help populate the Water Wheel.

Staff are feeling pressured behind the scenes with timing of meetings and suggest removing the October meeting to allow for staff to collate information and discuss with FLAG during this time via email instead.

It was requested that everyone use the 'reply all' function to ensure everyone kept in the loop.

FLAG agreed to cancel the scheduled 17 October meeting and instead meet next on the 21 November 2014.

Council Report Back

There will be an opportunity for the FLAG to report back to the Environment and Planning Committee (EPC) on the 13 November 2014. We need to identify a nominated spokesperson to talk to the EPC and provide ongoing liaison between the FLAG and Council and to provide input into the FLAG agendas.

A request was made for nominations or self-nominations for the role of spokesperson.

Martine nominated Mik Symmons due to his experience with community-council liaison and as he is well respected by others. This nomination was seconded by Matt Rountree and agreed to by Mik.

Martine is still to provide an avenue for mail-out of any press releases, etc though her network.

Action: Mik to make a report back to EPC on 13 November 2014.

Action: Staff to add Takaka FLAG report back to EPC agenda for 13 November 2014.

Action: staff to add a standing agenda item to call for any additional items from FLAG members to add to future agendas.

Press release

Mary-Anne highlighted that it was a good time to put out a press release advising the community of the FLAGs progress to date.

FLAG happy for a press release to occur with release to be sent to the Golden Bay Weekly.

Action: staff to draft release for sending around FLAG for comment. Release to be high level big picture stuff to let people understand where the FLAG is at in the process and that things are transparent.

It was also suggested that a 5 minute presentation be done at one of the Community Board meetings, which was thought to be a good idea.

Action: Mik to make a short presentation to the February 2015 Community Board meeting.

Public consultation

It was suggested that once the FLAG had the water values identified – to then check back with the community – this could be done in a number of ways (eg invite specific people to a workshop on these, have a public meeting/open day, invite specific representatives to FLAG meetings to discuss topics, Survey Monkey survey).

Could also use questionnaires for the community– what does water mean to you?

The FLAG need to start thinking about this now – especially if consultation is to be done in early 2015 – what method will be most effective / efficient?

There is lots of other public consultation by Council between now and February 2015.

Our goal is to get the overall tick from the wider community on where the FLAG has got to with the values and objectives.

General Discussion - Question/comments arising from today's meeting

Is there room for improvement in the mapping of the aquifer lines - in particular in the Waingaro area?

Only if people wanted to spend a lot of money to investigate the geology.

They would need lots of money and 5 deep bores (bores ~60m to reach marble) to better define the boundary of the unconfined/confined parts of the Arthur Marble Aquifer.

We have drawn it with the best information we have.

What is the +/- value for the unconfined/confined boundary on the maps?

Probably about 1km – certainly not more than 10k

How do you put a value on aesthetics?

For example in the McKenzie Country – centre pivot aluminium sprinklers resulted in a subsequent loss of trees to allow for irrigators to function.

Others have the attitude that “We just don’t like it – we don’t want it here.”

Also a big change from natural brown to big green irrigated patches.

An example of this is red shade cloth in Riwaka – this went to the Environment Court – it was considered to be a part of farming practice and was a reasonable use of land. It is a question of reasonableness and cost – just because you don’t like it, is that reason enough to stop it from happening?

Need to be clear on our mandate – eg how you choose equipment to irrigate is not a controlled activity.

There is also a trade-off as some of the ones that might have greater aesthetic impact may have a better environmental impact.

I think this is outside the FLAG’s brief – we are looking at water quality and quantity and how we see things happening in 50 years.

Planting out the corners might be a good mitigation approach - Fonterra doing something similar on-farm, and Forest and Bird doing a lot of planting locally.

How do we best deal with information to share with the FLAG members? Do we identify outside reading or topics for discussion at the meetings?

An example was provided of Don Mead presenting information on Te Waikoropupu Springs (based on the science within the Water Conservation Order application) and the desire to discuss the validity and implications of his information.

Don’s report was not peer reviewed, some potential for disagreement on the science.

Action: staff to add agenda item to next meeting to discuss whether the group invite Don to provide a summary of Te Waikoropupu Springs and Water Conservation Order information to group.

Action: FLAG members to email thoughts/preference on providing material for reading vs discussion at a future meeting to Mary-Anne Baker for staff to identify a preferred approach.

Action Points – Council Staff/Facilitator/Advisor

No.	What	Who
1	Staff to analyse outputs of group sessions and provide summary back to FLAG for comment - with aim to start forming management objectives and provide information that will help populate the water wheel.	MAB/LM
2	Staff to add Takaka FLAG report back to 13 November EPC agenda.	MAB
3	Staff to draft press release for sending around FLAG for comment.	MAB
4	Staff to draft agenda for next meeting – including standard agenda item to seek any items to add to future agenda and discussion of whether to invite Don Mead to provide summary of WCO information to group.	MAB

Action Points – FLAG members

No.	What	Who
1	FLAG members to read NPS-FM: Appendix 1 on the NOF values and attributes	ALL
2	Mik Symmons to make report back to EPC on 13 Nov.	MS
3	Mik Symmons to make short presentation to the February 2015 community board meeting.	MS
4	FLAG members to email thoughts/preference on providing material for reading vs discussion at a future meeting to Mary-Anne Baker for staff to identify a preferred approach.	ALL

Next meeting

Date	Friday 21 th November 2014 (Meeting 4) [note October meeting cancelled]
Time	9.30am - 3pm
Venue	Takaka Fire Station
Draft Agenda Items	TBC
Preparation	See FLAG action points above.

Subsequent meeting

Date	TBC
Time	9.30am -3pm
Venue	Takaka Fire Station