

FLAG MEETING NOTES: 23 January 2015

23 January 2015 9.30am-3.00pm
9.30am-3.00pm
Takaka Fire Station
FLAG members: Graham Ball (GB) Greg Anderson (GA) Mirka Langford (MLa) Neil Murray (NM) Tony Reilly (TR) Mik Symmons (MS) Mike Newman (MN) Kirsty Joynt (KJ) Piers MacLaren (PM) Matt Rountree (MR) Margie Little (MLi- iwi representative on FLAG) — Margie had to leave at 2pm Martine Bouillir (MB- council representative on FLAG) Staff: Mary-Anne Baker (MAB - Environmental Policy Planner) Lisa McGlinchey (LM -Environmental Policy Planner) Joseph Thomas (JT -Resource Scientist - Water & Special Projects) Trevor James (TJ- Resource Scientist — Freshwater & Environmental Quality) Rochelle Selby-Neal (RSN -Independent Facilitator) Andrew Fenemor (AF -Landcare Research)
Mike Newman
Lisa McGlinchey (supplemented by other staff)
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 SOE = State of the Environment WCO = Water Conservation Order application for Te Waikoropupu Springs and recharge area 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. Cussion points have been grouped into similar topics and are not necessarily in the order

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

Purpose of Meeting

- Review and finalise the values and management objectives
- Review and discuss the Water Wheel attributes and modelling work
- Golden Bay Economy discussion to start gathering information

Welcome and Karakia

Values, science and decision making

Margie Little opened the meeting with a review of the iwi involvement with the Springs.

Margie expressed her strong personal sense of kaitiakitanga [guardianship] for Te Waikoropupu Springs and outlined her ongoing struggle for decades to protect the springs from inappropriate use or development. She highlighted the exhausting toll that such efforts take on the individuals involved, especially in the absence of robust planning provisions. She asked the FLAG to discuss and consider the outcomes sought by the Water Conservation Order application for Te Waikoropupu Springs within the FLAG process. She expressed the desire for an appropriate and enduring level of protection for the Springs. She also asked the FLAG to approach the consideration of water management from a personal values and beliefs viewpoint, as well as from a science viewpoint, as both are needed for a balanced outcome. She did not want to coerce the group in its decision making – but wanted to ensure her views about the importance of the springs were known and understood.

Other FLAG members contributed the following observations:

- Science and personal spirituality are not mutually exclusive. We may need to use science terms to discuss aspects, the general *feel* of the FLAG group is one of connectedness with nature.
- Everyone needs to advocate for their needs. Let everyone get their position on the table so we can discuss everyone's viewpoints and needs.
- There was some frustration with meetings only every two months, it was wasting tax payers money without much progress –the process needed to be sped up as water users need outputs. [note: the FLAG has been meeting 1-2 monthly as availability allows]
- As a community we can celebrate what has been done with the Springs they have been purchased back into public ownership and their management improved over the vears

In response to questions about what was being sought through the WCO and the concerns needing to be addressed, these aspects were of particular interest to members:

- the lack of an abstraction limit to the amount being abstracted from the springs and its recharge areas
- the lack of minimum flow specified to protect the Springs,
- the impact of existing irrigation, the metering of all takes and the need for cutbacks during droughts.
- The presence of nitrate in Spring water
- The springs and water volume are somewhat loosely protected –there are no formal allocation limits currently and we need to use science to understand what the needs of the springs are and put in more specific protection rules in the Plan.
- The current informal limits were established in 1990 the FLAG needs to ask how robust are the current limits?
- That is the understanding of what the FLAG is to do to look at the allocation limits.

The large consents do have meters and meters will now be required for all consented takes according to the size of the take (takes between 5 and 10L/sec will need meters by 2016 and those less than 5L/sec by 2018, unless a rule in the TRMP requires them sooner).

[Post meeting note: The requirement for water meters came in under the Resource Management (Measurement and Reporting of Water Takes) Regulations 2010.]

Process management

There is still uncertainty about how a WCO process might run where the FLAG process seeks to address the same issues. The WCO process is managed by the Minister for the Environment, not the Council.

While the group discussed how the two processes might run side by side or not, there was not enough information to understand the implications.

MAB – the FLAG group has to decide on what the management objectives for the Springs are and whether the Springs are outstanding or nationally significant. If the iwi are satisfied that the FLAG are addressing the issues at the appropriate level then they can pursue the Springs protection through the FLAG process, as well as achieve more long term fixed protection from the WCO process. Hopefully we can come to an agreement as to what each process can deliver.

Other observations by the FLAG members included;

- The FLAG process is very transparent, but the WCO currently seems not to be as transparent and it creates nervousness (as a land owner) as to what is involved.
- WCOs end up as a very transparent process that is why they take so long.
- But we haven't seen it yet and it is good we have a copy to review now.
- I think we can get to the same place without iwi having to put money into the WCO process to specifically drive it separately from the FLAG process.

So the FLAG can go for the same objectives as the WCO and there will be a backup to the process of pursuing the WCO process?

In considering this question a range of views were expressed by staff and group members:

- The group needs to decide on whether there needs to be a WCO as an implementation method to achieve the FLAG's objectives.
- The FLAG could choose to have two layers of protection as the TRMP is more easily changed, and the WCO gives a high level of fixed protection. The FLAG can still seek to protect in essence what the WCO is seeking to do.
- I feel the FLAG process should be complimenting the WCO and that WCO should be the way to go.
- If you have two entirely different processes the FLAG could be undermined the FLAG is the community driving the process, but the WCO will be in the hands of the Minister for the Environment the FLAG and WCO applicants need to look at which process will provide the best process to achieve the outcomes desired which will gain better buy-in and reflection of the local community.
- It was also noted that the FLAG could also work to progress the outcomes sought in the WCO - those outcomes will be sought through either or both processes.
- A WCO process could take 5-6 years.
- Others in the FLAG have been involved in a WCO process (elsewhere in NZ) and said it can be very divisive – it 'sends everyone into their corner' and the FLAG process is much more inclusive and collaborative.

It was expressed that the FLAG support Margie's view: we want to achieve the same thing – so perhaps consider parking the WCO for now and [don't spend iwi] money while the FLAG process evolves and if it doesn't achieve what you want then you can proceed with the WCO.

MAB. We still need to have a conversation between FLAG, Iwi - as the WCO applicants, and MfE about the two processes and how these can complement each other.

Action: staff to seek meeting with applicants, FLAG and MfE on the WCO-FLAG processes.

[the meeting was then continued as per the agenda]

Water permit waiting list

MAB gave an overview of the permits and waiting list.

Once applied for the water take permits get captured by the legislative process which council must follow.

Conversations need to be had with water users about a more collective, community-based approach to allocation and water sharing, as well as water storage and use of funds collectively as a community, rather than individually by separate permit holders – to this end staff are looking to initiate a meeting with irrigators to discuss this.

TR identified that the irrigators have met since the last FLAG meeting and decided to form an 'irrigators group' (Corrigan Sowman as chair) including current and potential water users (so they are looking at the future as well) and will be looking to work with Council and Trustpower.

RSN asked if the FLAG wanted non-irrigator attendees at the water users meeting to represent the FLAG at these meetings. Graham Ball and Piers McLaren expressed interest in attending at least the first meeting. Tony Reilly, Mirka Langford and Kirsty Joynt would all be attending the irrigators group meeting.

Questions arising:

There are two consent applications jumping the waiting list – where will this lead? MAB - This can make it difficult and doesn't give much confidence to those on the waiting list. Those applying for permits will need funding for the science to support their applications. A collective approach will help address this.

JT - The current limit is informal so people can challenge it. People are on a voluntary waiting list and they can proceed with an RMA application at any time.

TR - At the first irrigators meeting they discussed queue jumping and the consensus was to hold off applications and pursue it collectively with the FLAG process.

MAB -Those applying for consents could face large costs in supporting their applications if going it alone.

What are the current limits for water takes?

[note: this answer has been expanded post meeting for clarity]

There is an informal (not in the TRMP) limit of 500 L/s for all combined surface and ground water takes in the Arthur Marble Aquifer (AMA) Recharge Area. This is the unconfined area of the Arthur Marble Aquifer, which also feeds Te Waikoropupu Springs. This zone is shown in the Takaka Water Resources summary document [refer to the online pdf bibliography for this document]. The 500L/s water take limit is currently fully allocated.

For other rivers and zones where there are no other guidance or limits, there is a default allocation limit (refer Policies 30.1.3.15 and 30.1.3.16) based on 10% of the 5 year, 7 day Mean Annual Low Flow (MALF).

For example, if the 5 year, 7 day-MALF of a river is estimated to be 200L/s the default water take limit would be 10% of this at 20L/s. The combined surface water takes from that river could not exceed 20L/s. The allocation limit could be raised to 33% of the 5year, 7day-MALF (eg 66L/s) depending on whether there are significant values that might be affected (refer Policy 30.1.3.16).

At low flow times, do water permit holders have to stop pumping?

[note: this answer has been expanded post meeting for clarity]

Currently the 7day-MALF is not a default cease take trigger. Rationing or cease take requirements could be addressed individually in each water take permit.

Under the default allocation system, the TRMP does not specify rationing triggers and consented water takes can keep taking their allocated share of the flow according to any rationing conditions in their consent.

If there are no rationing or cease take conditions in the consent, then permit holders can keep taking their allocation, regardless of the actual river flow. During very dry periods their allocated rate will become a greater amount of the remaining flow in the river.

The three large water take consents for the Upper Takaka River (within the AMA recharge area) have cease take provisions within their consents. This requires them to stop taking water when the river flow at the Council flow recording site at Harwoods on the Upper Takaka River reaches 1,630 L/s.

There are also salinity triggers for reduction and cease takes for a permit near the sea.

There is also an option under drought or low flow conditions for Council to bring in rationing restrictions or cease take requirements for any water users, under Section 329 of the RMA (Water Shortage Direction). This has not yet been used in Takaka.

The plan process the FLAG is undertaking is to enable the setting of more detailed provisions for water management, including the need to set triggers for reductions, restrictions and cease take. The FLAG needs to refine and develop the minimum flows, allocation limits, rationing and any cease take provisions for all the Takaka water bodies.

Pohara Beach Issues

On the 29 Dec 2014 high levels of bacteria were measured - well over national guidelines – these were re-sampled and this was just under the guidelines. A third sample was over again, so warning signs went up in conjunction with the Department of Health (DOH).

Since then samples have been again just under the guidelines. Initially we didn't know where the bacteria was coming from – but we did know there had been high levels in the Pohara Creek (behind Penguin Cafe) so this was thought to be the source. Council initiated sampling across the beach to narrow down the source, which confirmed Pohara Creek as the source – this has reduced the signage area on the beach to just around outfall.

The latest beach results have been fine, but the warning signs remain in place, as there are still high levels in the creek and the cause has not yet been identified. We have increased the frequency of monitoring and the compliance and engineering departments are working to find the source of the problem. They are looking house by house at sewer connections etc.

All obvious sources have been checked and the source still not yet found.

The lag time between taking a sample and getting results causes difficulty in management, but this is something that can't be changed.

The beach water is failing about every one in 20 samples. There is no real link between when the peaks in bacteria occur and when the peak tourist numbers occur.

Is this issue within the FLAG scope? Yes it is.

Is the problem coming from further up or lower down? It is in the urban area.

Do we know if it is human?

Not yet, but we are trying to sample this – it is not so easy to get the sample at the right time or big enough to get the source sampling done.

Don Mead paper

AF and JT have been asked to peer review Don Mead's paper and they have some questions about conclusions reached and assumptions made. There are some investigations that might need to be done to answer some of the key questions raised by the paper. Staff are looking to meet with Don to discuss these aspects.

The paper will also be peer reviewed before it is published.

It may be possible then for Don to meet with the FLAG to discuss the outcomes.

Process management

RSN has made a list of all the presenters and topics the FLAG have expressed interest in finding out more about and will send this out after the meeting.

Action: RSN to send out list of presenters and topics to FLAG

Public consultation – RSN asked if the FLAG would agree to put a media release out after each meeting – with Mik to sign off. Group agreed with proviso that release to go directly to Golden Bay Weekly – not through TDC staff, as it is from the FLAG group, not TDC.

Action: staff to draft media release and send to Mik for approval and forward to GB weekly.

FLAG topics

None raised.

Session 1 – Project Management – timelines and milestones

Project Management – timelines and milestones – (MAB/AF/RSN)

MAB reviewed what had been done so far and the key work and milestones for the next quarter and updated the FLAG on the MSProject gantt chart illustrating the project timeline and milestones.

Key points:

- Several topics will be running concurrently after this meeting (meeting 5) including public consultation on the values and objectives, water wheel modelling and staff compiling potential implementation methods
- Drafting of plan change suggested at end of 2015
- Notification date suggested around April 2016

Questions arising from the Project Management summary:

When would a minimum low flow become operative?

As soon as it is notified it would become 'effective' and any new applications will be subject to the provisions as it deal with water management. It becomes operative once appeals (if any are received) are settled.

JT – timing at end of process unfortunately around Christmas break.

This is the best timeline, it is likely that there will be things that take longer than expected. Ideas to speed things up were welcomed

There are a lot of consultations plotted?

[These are place holders]. The sense has been to keep the community on board – the media releases may assist this.

FLAG need to think about how community consultation is done.

Changes have been made to the website – and some FAQs are coming [along with a status page].

Policy Planning – values and science in decision making – (MAB/AF/RSN)

Staff and FLAG discussed the importance of both values and science in decision making.

Questions or discussion topics arising from the policy planning discussion:

The science is important, but the decisions we make are influenced by our values.

AF provided the quote – "The process is one that combines fact based (what is) with value judgements - what should be".

PM: Science is just organised knowledge and if you don't like the knowledge you can go and check it for yourself – but it doesn't tell us what to do – that comes from our value.

MB – happy for scientist minded people to go over details to answer the more general information – want to talk more how we do day-to-day in the community.

MS- trying to deal with flow and quality – but flow is very physical aspect, while quality is about land management practice and if we establish minimal flows then that will dictate how we managed acceptable quality standards.

Couldn't we bring in a minimum flow earlier?

Lower flows result in less dilution of pollution. JT– it depends on what kind of minimum flow – there is hard and soft flow.

The water quality part is the harder part to do – but perhaps we can consider separating out the water quality and quantity. In the interests of integration we may keep it together, but will consider alternatives.

Action: staff to consider approach to water quality and quantity consideration.

AF – how much water could be allocated to protect river values and springs flows –this requires an understanding of water resources. Value judgement of what water quality is appropriate – we may find there is lots of water from an allocation point of view – but this might not be useable from a quality point of view. We will need to look at them together at some point.

Did the Canterbury work come up with economic indicators?

They certainly looked at the economic consequences of various water management/land use options.

Water users will need to understand what water use methods will be needed when they use the allocated water to avoid creating a water quality issue.

JT - We are not currently over-allocated in Takaka currently – we are fully allocated in the recharge area, but have still not reached the 10% level in the rivers.

We do need to know what the (minimum flow and rationing) level needs to be in the rivers – eg Anatoki, Waingaro.

In some areas access to water or storage can be very expensive regardless of there being water available.

If any of the FLAG have ideas of how to better organised and speed up the process to fit with their view better please let staff know.

Session 2 - Values and Management Objectives

Presentation 1 – Final Draft of Values and Management Objectives Summaries

Lisa McGlinchey (Environmental Policy Planner) outlined the final draft of the values descriptions and management objectives reviewed at the last meeting, including some further changes made by staff since the last meeting.

The FLAG were asked to review the document with the aim of approving it for public release and feedback.

Key points from presentation:

- Document still draft iterative and may be changed in response to further discussions and feedback.
- Comments already received from FLAG incorporated into this draft with some questions still needing answers identified in red text.
- Haven't yet considered any levels of particular significance for any values, but NPS requires us to 'protect significant values of outstanding water bodies.
- Freshwater and coastal water integration required managing freshwater while ensuring coastal water managed.

Does freshwater include groundwater?

Yes covers all water below the ground.

Cultural /spiritual

FLAG discussion on meaning of value and objectives.

- Value is aspirational question of degree of impact it's an ideal to aim for, but can never be achieved...e.g. one cow may cause problem.
- Wordsmithing still needed.
- Wai tapu applies to Te Waikoropupu meaning the main spring is free of human waste. Agree it should also apply to other Takaka springs– (they might have indirect sources of waste).
- Need to include definitions for all maori words.
- Wai tapu needs to apply to all springs in catchment? but very hard to manage.
- Concerned about state of Onekaka River should not be contaminated, but isn't clean just 3km from forest boundary. Look at potential solutions to any identified problem.
- The management objectives say what is supposed to be what we want. Have had proper conversation about values driving objectives. Need to be clear about what we want.
- ANZECC guidelines should be adopted (TJ: but ANZECC are guidelines and triggers not standards).
- Different concepts between direct and indirect discharges... need to define 'direct' (if not through land or wetland it is not direct).
- Concerned about scale of project too many other smaller rivers and significant issue is Takaka.

Should Wainui Bay be included in the management area?

Some concern that geology and soils are too different. But general agreement that the area is part of the Golden Bay community.

Action: Staff to add Wainui Bay to Takaka Water Management Catchments definition and maps.

Is Wainui Falls wai-tapu?

After lots of debate and recognition of its 'special nature' and that people have spiritual connection decided not to include it as wai tapu, as the falls are used differently – people swim in it for example.

Wai tapu is a form of protection in iwi terms...in RMA terms is more something that is in conservation land? This is a way of being on the same wavelength? There are other wahi tapu in GB – the biggest is Te Waikoropupu springs.

Lots of other similar falls in region? Very important to tourists, but not as much as Te Waikoropupu Springs.

Challenge to think outside the square, make big decisions and set high standards and look into future. Remember everything is connected.

Different people may have other water bodies that are special in different ways. Are we mixing "sacred and special"?

Water is a taonga – but not all water is wai tapu. In iwi terms there are different types/levels. Differences captured in objectives already. The state and quality of water reflects on the people.

RSN proposed to continue discussion of the remaining values and objectives at a future meeting. It was agreed to continue with the remainder of the agenda.

Action: Staff to amend cultural and spiritual values based on comments made and add further consideration of values and objectives to future meeting (meeting 8?) agenda.

Session 3 – Attributes and Key Sites for the Water Wheel

Presentation 2 – Key Sites and attributes – Lisa McGlinchey and Andrew Fenemor Lisa McGlinchey (Environmental Policy Planner) gave a presentation on the key sites identified in FLAG sessions and feedback so far, along with staff considerations of monitoring sites and results (presentation shortened as less time available).

Andrew Fenemor explained the need for identifying key sites and attributes and how these link to the Water Wheel process.

Lisa McGlinchey then showed the FLAG an excel summary matrix of potential water wheel attributes identified by staff and FLAG members for each of the values and the key sites where these might be measured.

Key points from presentation:

- List of kev sites based on:
 - Site importance for a particular value or characteristics to protect/maintain (eg popular swimming sites)
 - Sites with existing known issues (eg periphyton overgrowth)
 - Existing trigger sites eg Takaka river at Harwoods triggers water rationing in three current water take permits
 - o Sites with existing monitoring data for a particular attribute
- 13 key sites where identified across the management area
- Some attributes are best looked at across the whole Takaka water management area
- For some attributes and sites there is currently no data is available
- Sites/attributes need to be further reduced to no more than 12 for the water wheel work (ie for 12 spokes on the water wheel)
- Some indicators need more work to refine e.g do we choose compliance with guidelines at all bathing water sites rather than at one key representative site.

 Need sites that are most representative of the attribute and risk and those that will be affected by possible future scenarios for comparison in water wheel work.

AF Explained about need to decide on sites and attributes, following a sequential decision making process that helps manage the full set of sites, risks and values. No time to go through spreadsheet, but overview given of steps already taken:

- 1. NOF and council spreadsheet of all attributes across all values,
- 2. Cut down list by staff and informed by FLAG meetings
- 3. List presented at meeting further reduced by staff and FLAG feedback sheets.

Did anyone on the group who gave feedback choose the blue shaded sites?

Feedback was limited to two chosen sites and this sheet collated all the feedback – this did not mean that the FLAG members did not agree with the other sites.

There was a question about pathways of the wastewater from the TDC wastewater treatment plant through groundwater and the impact of this on setting of limits in river. – This was noted.

Progressing Water Wheel attribute/site selection

The FLAG was asked to pick their 12 most important of the coloured boxes in the excel summary. When picking the 12 – think about where significant changes are possible in the catchment. The Water wheel will illustrate current state and project what might be the state under future scenarios.

Option1 – FLAG to take spreadsheets home and cut down list to 12 key attributes for Water Wheel

or

Option 2 - Establish sub-committee to work with staff.

Option 1 chosen by FLAG, but with further guidance requested from staff.

Action: Staff to provide some criteria to FLAG for selecting the top 12.

Action: Staff to pick their top 12 and send to FLAG members.

Session 4 – Project Management

Future meetings

Covered prospect of Thursday 5th March – 2 hour evening session to cover water wheel update and Trustpower talk.

Next meetings 6 March and 17 April. March 20th or 27th as options to meet half day in addition to keep project timeline on track. Tony not available, Margie not sure. MAB to cover in e-mail to FLAG to determine date.

Action: MAB to confirm date for half day meeting on either 20th or 27th March

Next meeting dates arranged:

- 5th March (6.30-8.30pm) evening meeting to meet with Trustpower and Andrew Fenemor to update on Water Wheel work
- 6th March fieldtrip
- 20 March [date confirmed post meeting] additional morning meeting to go over values descriptions and management objectives
- 17 April
- 8 May

Field trip organisation

FLAG discussion of field trip organisation and desired itinerary/outcomes.

- MR offered to drive.
- TR and PM to assist in planning draft itinerary for circulation and comment.
- KJ offered the power station as a site to meet.
- Martine wants to make sure we are clear why we are visiting a particular site if FLAG can just be told information then just do that.

Desired outcomes/information sought:

- How can farmers use water efficiently (eg high/low input farming systems)?
- When you add x amount of water what return does that give (diminishing returns)?
- How are constraints going to hurt water users financial or otherwise?
- Visit points:
 - Effluent systems
 - o pivot vs other irrigating methods
 - o high vs low input farming
 - o electric fishing
 - o continuous digital monitoring

Action: Staff to liaise with Tony R and Piers M to plan itinerary and organise field trip.

Other summary comments from FLAG

RSN asked the FLAG if they had any other comments they would like to make:

- Need fiercer chairmanship to reduce waffle
- I think the FLAG needed to discuss these aspects -
- There was a lot of repeated discussion good for RSN to step in quicker we are all in agreement and want the same things.
- Sometimes in group processes this is needed to ensure everyone is feeling heard.
- The FLAG can't look at staff all the time as the decisions need to come from FLAG.
- If there are questions, put in email please and 'reply all' so everyone is involved in the topic discussion.

[MLi had to leave at 2pm]

Session 5 – Invited Speaker: Mike Warn (Chartered Accountant)

Presentation 5 - Golden Bay Economy - Mike Warn

Michael Warn (GB chartered accountant) gave an overview of economic information associated with GB utilising department of statistic results, including job and employment statistics and answered questions from the FLAG.

Key points from the presentation:

- Mikes client base includes a very large number of small businesses largely as bigger companies use accountants out of the Bay – about ½ of his clients are out of Bay and ¼ overseas. Of those in the Bay not very many are connected to water resources.
- The FLAG may like to go to NZ Statistics (Lynn Mackie) to get further targeted and detailed data
- The department of statistics does not collect specific tourism data it is included in accommodation, retail and food statistics

Questions and comments arising from presentation:

Is there any breakdown of agricultural data?

The FLAG needs to go to StatsNZ for the next level of data.

It appears there are two large employers who account for over 100 people and the numbers have stayed static over the census period – who are these?

They are likely to be Fonterra Factory and Solly's Transport.

What trends do you see?

There are links to immigration – housing booms linked to immigration boom.

Also driven by age of population - but if they are older, but still working will add to economy. Driven by Fonterra and dairy prices.

Beef prices seem good in comparison.

Is it unlikely that dairy would change to something else?

International indications for dairy are good, but there are also indicators that could result in adverse impacts on the industry.

How are mussels and aquaculture?

MR: Water temperature has been up to 24 degrees – normally around 20 to 21 this time of year so it has been a poor spat collection year – potential for a bad year ahead.

Corporate understanding of industry outlook may be out of sync with realities.

Wainui Bay is very important to the industry for catching spat (best catch this year – best in 12 years).

Scallops - indicators are good that populations are restoring

Is money staying in the bay? What is the social-economic situation most sensitive to? This is a difficult question to answer.

It is hard to get workers here – pay is quite good for some industries, but still having issues. IT – some quite hidden away – with clients not necessarily in the Bay.

Which of these industries are related or influenced by the way we manage water? – need to understand this for determining economic indicators?

Water quality was one of the issues for Talleys to stop processing, as water line was contaminated with E.coli.

How much milk does the Fonterra factory need to stay viable? *Unsure.*

MLa: all of the local milk, plus extra from out of Bay, is processed in the Bay, also a lot of processed products leaving the Bay. Not as profitable as other larger plants in NZ.

If existing industry could get more water – would this create more jobs?

It would depend on the type of industry

Perhaps wine a better product for profitability?

Motupipi vineyard required lots of spraying due to moisture over summer.

Last year was a good payout year for dairy – what impact did this have?

It spun off to have a positive effect on others – although most of the money stays with the dairy owners.

MLa For every 5\$ pay out, put 1\$ into local economy.

Going to get difficult if dropping from 8\$ to 5\$ - break even or less.

Do farmers put in irrigation systems because it is an asset or do they actually use/need it?

There is not a big bonus tax wise for irrigation systems. Irrigation is an investment in the property and leads to an increase in production.

How is riparian restoration and fencing on farms paid for?

Most is paid by landowners. DC helps pay for some fencing and planting and Forest and Bird and other community groups help plant and tend trees in some areas.

Why aren't some streams fenced?

TR: Some of ours are not fenced because the streams are steep and the cows won't go down there so fences are not required.

What about bridges or underpasses?

MLa: Farmers pay – NZTA used to pay 25-50%, but now only pay \$12,000 per underpass.

What land is lost from fencing off waterways?

Some but this is offset by better management of stocking and less stock loss.

Retail saying this is a good year – some cafes say 100 cups per day and summer came 6 weeks earlier this year.

Sounds like it is more local people in tourism – perhaps people can't afford Aussi so they are visiting GB.

Do you have any idea of cost of pollution at Pohara?

No, but people very keen to know where it came from and signage certainly has an effect.

For the group to get a better understanding of effects on economics, where should they go?

Michael referred the FLAG to the summary on the front page of his handout regarding further information.

MS volunteered to drill down into the statistics data to get further detail.

Action: Mik to review data and determine appropriate question to put to StatsNZ for further detail.

Would house price be a good economic indicator?

Not necessarily for water.

What is having the most impact on the GB economy – what indicator would you use? World front drives local economy – things are messy overseas so numerous potential impacts on NZ in terms of immigration and tourism, etc.

The overall perception of NZ economy is good.

Action Points - Council Staff/Facilitator/Advisor

No.	What	Who
1	Staff to seek meeting with WCO applicants, FLAG and MfE on the WCO-FLAG processes.	MAB
2	RSN to send out list of future possible presenters and topics to FLAG	RSN
3	Staff to draft media release and send to Mik for approval and forward to GB weekly.	MAB
4	Staff to consider approach to water quality and quantity consideration – re separation of process.	MAB
5	Staff to add Wainui Bay to Takaka Water Management Catchments definition and maps.	LM
6	Staff to amend cultural and spiritual values based on comments made and add further consideration of values and objectives to future meeting (meeting 8?) agenda.	LM/ MAB
7	Staff to provide some criteria to FLAG for selecting the top 12 attributes/key sites.	MAB
8	Staff to pick their top 12 attributes/key sites and send to FLAG members.	LM
9	MAB to confirm date for half day meeting on either 20 th or 27 th March	MAB
10	Staff to liaise with Tony R and Piers M to plan itinerary and organise field trip.	MAB

Action Points - FLAG members

No.	What	Who
1	Mik to review data and determine appropriate question to put to StatsNZ for further detail.	MS

Next meeting

Date	Thursday 5 March 2015 (Meeting 6) - NOTE: EVENING MEETING
Time	6.30pm – 8.30pm
Venue	Takaka Fire Station
Agenda Items	Trustpower talk Water Wheel update with Andrew Fenemor
Preparation	None.

Subsequent meetings

Date	Friday 6 March 2015 (Meeting 7)
Time	9.30am -3pm
Venue	Takaka Fire Station

Date	Friday 20 March 2015 (Meeting 8) – NOTE: MORNING MEETING ONLY	
Time	9.30am -12.30pm	
Venue	Takaka Fire Station	

Date	Friday 17 April 2015 (Meeting 9)
Time	9.30am -3pm
Venue	Takaka Fire Station

Date	Friday 8 May 2015 (Meeting 10)
Time	9.30am -3pm
Venue	Takaka Fire Station

Information and resource documents identified during meeting

Date	Title	Author/Source
Date	Tiue	Author/Source
	none	

^{*}Key documents available electronically will be added to the online PDF document bibliography.

Issues or topics identified during meeting for future consideration

Topic/Issue Description	Requester
none	•

^{*}Issues or topics unable to be addressed at the meeting, but requiring future consideration will be recorded in the Takaka FLAG 'Information Eddy'.