

FLAG MEETING NOTES: 15 September 2014

Purpose:	Waimea Plains Freshwater and Land Advisory Group (FLAG) – Meeting 4		
Date:	15 September 2014		
Time:	9.30am-12.30pm		
Venue:	TDC Council Chambers		
Present:	FLAG members: Nick Patterson (Chair) Matt Hippolite (iwi representative on FLAG) (Deputy Chair) Mirka Langford Philip Woollaston Gavin O'Donnell Martin Rutledge Pierre Garguilo Lawson Davey Andrew Kinnimoth Heather Arnold Zane Mirfin (council representative on FLAG) Dean Rainham (co-opted member) 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)		
Apologies:	none		
Notes taken by:	Lisa McGlinchey (supplemented by other staff)		
Definitions and Abbreviations	 Id FLAG=Freshwater and Land Advisory Group NPSFM= National Policy Statement for Freshwater Management 2014 NOF= National Objectives Framework TRMP = Tasman Resource Management Plan 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 		
Note: records of dis	cussion points have been grouped into similar topics and are not necessarily in the order		

discussed at the meeting.

Session 1 – Previous Issues; and MGM Workshop Overview

Chair Nick Patterson welcomed co-opted member Dean Rainham to the group.

Confirmation of previous meeting notes

Meeting 3 meeting notes accepted by the FLAG group as an accurate reflection of the meeting.

Presentation 1 – Matrix of Good Management (MGM) Overview – Mary-Anne Baker

Mary-Anne Baker (Senior Environmental Policy Planner) gave a presentation on the Canterbury Matrix of Good Management (MGM).

Key points from presentation:

- The MGM is a collaborative approach between Canterbury Regional Council and agricultural industries
- The MGM will:
 - o Define what is good practice across a range of farming systems
 - Use a systematic approach to determining Nitrogen and Phosphorus use and losses across the different farming systems
 - Use Overseer program to model expected Nitrogen and Phosphorus losses
- Intended to have table of Nitrogen and Phosphorus benchmarks by 2015
- Expectation that by 2017 farms will be applying best practice
- The MGM work will be useful in Tasman District especially for catchment based N and P modelling

Action – summary paper on matrix to be added to FLAG bibliography

Questions and topics of discussion arising from Mary-Anne's presentation:

Is the matrix only for Nitrogen and Phosphorus loading?

Yes – but it is a nice template for further use on other attributes.

When are we likely to use the outputs of this work in Tasman?

We will hear from HortNZ on Wednesday regarding this – some work is already available for our use.

Do we hold back a little to see what is coming out nationally/regionally before we make decisions?

Partly – we will see how things align with the HortNZ time frames. There have been some challenges with the Overseer program - for scientists to make it applicable across different farm systems – but there is some benchmarking we can do sooner.

JT:overseer has been driven by drystock/dairying –however the new version has more options – but we have no information on vegetables. We don't know how useful or calibrated the numbers are for the crop types in Waimea.

Mirka noted she sees a lot of variation in Overseer outputs in dairy use. Seeing some big differences even on neighbouring farms, with similar farming systems and the same soil types. Outputs can depend on how the information provided by farmers is interpreted by staff – they have a guide and cross checking to assist in consistent use.

Kapiti coast feedback for market gardening was that Overseer wasn't working.

Overseer getting more complicated to get more accuracy, but this is making it difficult to use by farmers, and farmers don't necessarily understand how the information they provide is put into Overseer. Need a more consistent way of gathering data needed to input into Overseer.

Also need best practice information to inform data collection. Some farmers have gone away from measuring to discussing best practice around the table. Not sure how best practice is controlled.

Often best practice and numbers are both needed – once farmers see the numbers they understand the impact of their systems and of changes to achieve best practice.

Action – run an Overseer example at a future FLAG meeting.

Canterbury Regional Council is leading the charge on technical information gathering – regarding leaching and effects. Canterbury and Waikato Regional Councils have lots of research being undertaken. There is a lot of MPI money going into this research.

We shouldn't lose sight of the bigger picture - that we are looking at improving water quality.

Session 2 – National Objectives Framework; and Values and Objectives

Presentation 2: National Objective Framework (NOF) Overview

Lisa McGlinchey (Environmental Policy Planner) gave a presentation on the National Objectives Framework.

Key points from presentation:

- The NOF is a framework how we implement the NPS-FM
- Key decisions/questions within the framework include:
 - What we are managing our water bodies for (our values and objectives)?
 - What attributes are important for these values/objectives?
 - What state do the attributes need to be to achieve our objectives?
 - What is the current state of these attributes and how do they compare with the desired state?
 - o What are the threats and risk to the attributes/objectives?
 - How can we manage the attributes and threats/risks?
 - Can we afford it and will it be effective?
- The Values come from a range of sources: the NOF, the TRMP and water users/FLAG
- The Attributes come from a range of sources: existing guidelines, the NOF, TDC monitoring programmes and water users/FLAG
- Staff are working to fit existing work into the national framework

Questions and topics of discussion arising from Lisa's presentation:

Are we being too complex? Yes we need to justify decisions – but are we over analysing things? For example we have previously seen up to 4000 swimmers in Waimea River – obviously this is an important value. Do we need to categorise?

We need to give ourselves the tools to achieve swimming water quality. The TRMP is lacking with respect to water quality – it has some policy etc, but not the detail. We need to have a framework that makes sense in a logical way.

There is a huge difference between direct and indirect effects. If Council is going to say to vege growers you can't do something they do now – they need sufficient science and justification to stand up in court to achieve this. Some things are obvious, but others are very diffuse.

If there is a no-dam situation then the situation is very different.

This process needs to be a science driven process – we need to all have a good understanding of the science.

The FLAG need to focus on an audit of where we are now – there is a lot of information – could we do transects across the Plains?

I've spent a lifetime watching our water quality degrade and haven't seen any improve – we could be doing some simple stuff to get improvements now – while we delay things are getting worse.

If it was easy we'd have done it already – the link between land practice and water quality has not been well understood.

It would be good to do some obvious quick wins – "low hanging fruit" while we work towards understanding limits etc.

Some work is already occurring – such as works to restore the Pearl and Neimann Creeks? Sediment removal, fencing, planting etc.

Are we assuming that we will have water? – but we won't know if we have a dam until 2015. Life without a dam would not workable for me so I am looking at things from a dam perspective - Are others still looking at it from both scenarios?

We need to spend time looking at both scenarios – especially the no-dam as this has some of the biggest impacts.

We need to be able to defend both the dam and no dam scenarios.

TRMP Schedule 30B has been through a public process – these are the values we should be aiming for. How is this FLAG process going to fit with the irrigation renewals and the dam process? As ultimately the limits being set will affect the dam process. How do the time frames match up? Will it allow time for landowners to fully consider the impacts on them?

It is a challenge for the FLAG to meet the desired timeframes – we will have to do the best we can to indicate the direction to be taken. We don't know what current practice is, so we are a bit in the dark as to how much things might need to change on-farm. Once we have done this analysis we should be in a better position to know where things are going. The 1st July 2015 target for a dam decision is fixed.

I thought we were looking at in-stream values? – these are the same within the dam and no-dam scenarios as the allocation system is operating above the level for protection of in-stream values?

In a no-dam situation we will need to look at the impact on in-stream, as well as abstractive users.

In a no-dam situation it will be impossible to meet all in-stream values without intervention – eg stream temperature.

Where are we now? - not sure we know that. Some Nitrate hotspots, but generally we talk about the Waimea River being in general good health.

We need to understand what we want for our water and to then figure out where we need to go.

Has there been a simple nutrient and water audit? Eg have industry been asked what nutrients are going on the Plains – and asking nutrient providers how much is being purchased on Plains – plus rainfall etc to identify a total loadings?

Not yet - this may be discussed in the next steps in the gap analysis.

Presentation 3 – Objectives and Values in TRMP – Mary-Anne Baker

Mary-Anne Baker (Senior Environmental Policy Planner) gave a presentation on the current values and objectives for the Waimea water bodies in the TRMP and a group break-out session was undertaken to discuss the values for the water bodies and a white-board exercise was done to identify threats and risks.

Key points from presentation:

- Water bodies, values and objectives listed in Schedule 30B of TRMP have already gone through a public planning process
- The only objectives that change in the with/without dam scenarios are those for the Waimea River
- Some of the values listed need further definition
- Attributes need to be identified for the values and objectives listed
- Threats and Risks to the values, objectives and attributes need to be indentified

Group Break-Out Session 1 on Defining Values

Group Break-Out Session 1 - Report Back

Group 1 Feedback:

- Some changes and definition needed
- Cultural and spiritual values should be a value under all water bodies.
- Water quality that has lower risk for water drinking 'lower risk' needs further definition
- Remove 'existing' aquatic ecosystems if a water body was degraded then we would just be maintaining something that is not good enough
- Re: 'Meet the need of abstractive water users' how? allocation? time of year? what needs? Who says?- 'meeting' and 'needing' need to be defined
- Need to add efficiency and effectiveness to abstractive uses how do we move to being more efficient and effective with our water use?
- Recreation contact or other and where does navigation come in? eg kayaking down river - with no water
- Wai-iti River is missing from water bodies considered
- Abstractive users some specific mention of irrigation for food production NOF attributes talk about both irrigation and food production

Comments/Discussion on Group 1 feedback

- The Wai-iti River was initially left out to make the FLAG's job smaller to manage time and ability to meet timeframes.
- We're talking water quality not quantity
 - Cultivation NOF includes mention of both quantity and quality aspects
- Removing the word 'existing' from aquatic ecosystems could have big impacts on what needs to be done.
 - What ecosystems are there?
 - o Double edged sword should we just add "maintain and improve" to wording.
 - How much of the ecosystem has been lost? should we be improving these.
 - What about new (different types) of aquatic ecosystems?
 - o May need to take guidance from NOF
 - What about adding "naturally occurring"?
 - Are we looking at what was historically there and restoring it? eg historically Pearl Creek had reasonable numbers of giant kokopu – but may not be there now.
 - Consensus: "existing" not right wording. Need to bring in consideration of "maintain and improve"

Group 2 Feedback:

- There needs to be reference to industrial uses
- Stygofauna needs to be included
- Some reference to numbers eg nitrogen levels for certain crops.
- Waimea River define what we mean by recreation eg swimming (E.coli/water clarity); dog walking (cyanobacteria); whitebating and trout fishing; food gathering smelt fishing; what recreation are we talking about?

- Spring fed creeks 'existing' not the right word eg giant kokopu presence.
 Whitebait spawning; wildlife corridor; stygofauna; food gathering; recreation activities bird watching etc
- Add 'spiritual and cultural' for Wairoa, Lee and Roding Rivers
- Coastal water quality for shellfish needs to be wider eg anecdotal evidence that flounder have a particular flavour from estuary.

Group 3 Feedback:

- Tried to match up NOF with TRMP values
- Human consumption is that what is in a glass or food produced that may be consumed?
- Recreation national standards include risk of moderate infection vs low risk for water in TRMP
- Terms vague and open to interpretation need to refine a bit
- Cultural/spiritual needs to apply NOF comes under Wai Tapu or sacred waters, but definition might be too narrow
- Stock water might need further definition
- Irrigation in NOF –soil type and crop type criteria might need to be included that aren't in the NOF
- Ecosystems in relation to rivers they should be swimmable if you can swim in Waimea River at any time, should take care of the ecosystems aspects. If you could swim in it, would you eat food that came from it or drink it?

Comments/Discussion on Group 3 feedback:

Why does landscape only come in under coastal – should this come into other areas too?

Is it a value you want to provide for? And if so what attributes are important for this?

TJ – with regard to the exclusion of the Wai-iti River – what if something happens in the Wai-iti that affects Waimea? – eg impact on cyanobacteria levels in Waimea River.

Yes - if there is something that needs to be managed for the Waimea that is from the Wai-iti catchment the FLAG will need to consider it. Staff suggest that the Wai-iti catchment is included in any future modelling done for the Waimea Plains.

Wai-iti is very interconnected with the Waimea – and some areas of Wai-iti are significant and may have impacts from roads and urban areas.

Time and resource limitations are not appropriate drivers to exclude the Wai-iti River. We are considering very important issues for local economics etc – we need to consider the Wai-iti to give good advice to Council. If we need more time to do this, then we need more time.

I don't think we can make informed decisions if we don't include one part of the upper catchment (the Wai-iti).

We need to bear in mind that we can't afford to chase excessive detail in any of the headwaters, but Wai-iti is still a significant part of catchment.

It is important for Council to receive regular updates from the FLAG on how the group is progressing, plus key issues that need to be addressed – such as inclusion of Waiiti catchment. The next EPC meeting is on the 13 November 2014 and should have a briefing to the EPC from the FLAG Chair.

Action: Staff will collated Break-Out Session 1 group feedback and staff will provide adjusted Schedule 30B wording for comment through emails and at the next meeting.

Our aim is to try and simplify the text where possible, but we need to also clearly define particular terms.

Threats and risks – white board exercise

FLAG members were asked to consider what threats and risks there might be to water quality and objectives in the Waimea Plains:

- Landuse intensification not always negative if done right with new technologies management of landuse intensification
- Irrigation inefficiency
- Nutrient budgeting
- Population growth commercial/industrial demand
- Climate change
- Land use change especially urbanisation
- Riparian management filters/buffer lack of progress/prioritisation– that there is no progress to rectify this. Boost productivity by riparian more than water quality
- River management practices -Vehicles in river
- Social value changes

Action: staff to consider need for overview of Tasman Growth Supply and Demand Model to FLAG at a future meeting.

We need to consider how these threats/risks might impact on water quality – perhaps at a later meeting. We also might need to look at what we think the Waimea Plains might look like in the future. We need to be clear on what we want – and then how we get there.

Questions and topics of discussion arising from whiteboard exercise:

None of those aspects listed necessarily have to be negative – they could have positive implications

We should consider threats, risks <u>and</u> opportunities. It is the FLAGs job to send the right message so that they are positive changes.

Session 3: Waimea Estuary and Water Quality Attributes

Presentation 4 – Waimea Estuary – Trevor James

Trevor James (Resource Scientist – Environmental Quality) gave a presentation on the Waimea Estuary and recent research into estuary habitat mapping and sedimentation.

Key points from presentation:

- Report recently completed on latest round of broad scale mapping and fine scale monitoring for Waimea Estuary (report will be available on Council's website once it has been received by the Council ~2 October 2014)
- Monitoring started in1990. Latest run in 2014.
- Estuary is a 'sink' for catchments, naturally infills ~1mm/yr. Sediment in Waimea Estuary one of the critical things a key contaminant.
- Broad scale mapping shows historic high levels and negative aspects are getting worse.
- Seagrass is declining this is also linked to sedimentation
- 31 species of recreation/commercial fish supported in Waimea Estuary
- Very soft muds are expanding in area sediment plates are not aggrading, but getting more softer muds
- Fine scale monitoring shows sediment mud content is increasing both in extent and in greater proportion of mud this means less invertebrates and subsequently less birds and fish.

- All but one plate show the surface layer of estuary is staying static, but the extent of sediment coverage is growing and more fines are present in sediments
- Sediment cores show that during the 1950-60s there was up to 10mm/yr accumulation of sediment. Evidence suggests activities such as orcharding with discing practices leading to massive soil loss (1m off tops of hills down into valleys) may have occurred earlier
- More recent sediment accumulation rates are 1-2mm per year
- Still some remaining questions to answer: Why is estuary becoming excessively muddy? Will it dissipate or always be muddy? How much sediment gets exported out to Tasman Bay? once we answer these, we will know if there is something we can do to improve things
- Also need to consider what is the desired state of the estuary? What is achievable?
- The level of sediment has impacted on cockle beds and historic users pre-40s say there use to be really good cockle beds but these are no longer available.

Questions and topics of discussion arising from Trevor's presentation:

Is there anything in the sediment cores to provide more detailed information?

We could do pollen analysis – but haven't done. Have done caesium dating and lead dating (lead dating didn't work). We could also do isotope analysis to determine the source of sediments. Getting further detail is expensive and time consuming – we have sufficient information to say there is a historic slug of sediment and more recently it is not so bad. Potentially historic sediments are getting redistributed, but it also could be compacting to result in no bed level change.

Source is a key point – do we need to confirm that sediment is coming from the rivers, rather than coming from other parts of the estuary?

Yes– source determination is a key recommendation from the report – some useful technology to do this is relatively new.

Has Ken Grange done any of this work?

No – the Motueka Integrated Catchment Management project did some cores off the Motueka River mouth and Cawthron was involved. Ken is involved in the working group looking at biodiversity and scallop productivity on the seabed of Tasman Bay.

Do we know what sediment is coming from land/rivers into the estuary and going straight into Tasman Bay? (ie not settling in the estuary)

There is a very brown turbid layer that is flushed out of the estuary on every out-going tide on windy days – we don't yet know the volumes involved – this is one of the key questions to answer by further research.

In terms of the flow of sediment from rivers to sea, dams are seen as a 'constipating' structure in the system – if we built a dam would it infill and how fast?

The proposed dam is in the head waters which is a very low sediment output catchment. It has been estimated that it will take hundreds of years for the dam to fill in. Dams can be drained and emptied out – but this unlikely to be required due to the long timeframe for infilling.

The loss of sediment from the Waimea Plains is expected to be low due to the flat nature etc. We can ring-fence some areas as low source of sediment.

So where is sediment coming from?

This is a good question we need to answer. There are some roading and forestry practices that have led to discharges, but these have not been quantified.

Is growth of the margin of estuary a natural process? Is it a bad thing?

Naturally there are estuary infilling rates of 1mm/year – we are not far off this compared to historic infilling rates. It can have adverse effects in that with greater proportions of fine

sediment there is a reduction in the diversity of species – and subsequent loss of sea grass further affects estuary health.

Do we have any warning signs that species diversity is declining in the estuary? Is this affecting the birds etc? Are the numbers of flounder and kahawai staying the same?

Yes, we are seeing more tolerant invertebrate species over intolerant ones. Getting increases in some bird species, decreases in others – although some effects particularly on international migratory species could be due to pollution and reclamation in China and Korea.

Most of the birds are using areas of seagrass – they don't tend to use excessively muddy areas.

Fish numbers in the estuary have not been monitored since a one-off survey in 1990.

The FLAG group need to try and understand what influence stream water quality is having on the estuary and ecological systems, and need to decide if the current quality of the estuary is acceptable or not. We know it is changing, but we are not sure why.

Have there been other estuary studies in NZ – are we better or worse than elsewhere? Yes, a large number of estuaries are monitored right around NZ – in 33 estuaries listed on Figure 6 of the Broad-scale Mapping report, Waimea is amongst the worst.

Group Break-Out Session 2 – Values and Attributes

The FLAG members broke into small groups and where asked to go through sheets with the values and objectives (from TRMP Schedule 30B) for each water body in the Waimea Catchment and identify what they thought were key attributes for the values identified.

Action - Staff to collate session outputs and email around for further comment

Questions and topics of discussion arising from Group Break-Out Session 2:

Seems like a specialist role – not sure I have the background to determine the appropriate attributes.

We will look to the scientists and what other councils have used for guidance. Existing guidelines information will provide a numerical range for attributes, not which number we are going to pick to achieve in Waimea.

Need to get science to back decisions on where bands are.

There is science for many attributes, some others don't have any background data.

Identifying the attribute will be easier - deciding want number you want will be the hard bit – eg what number of species you want to protect.

Martin R highlighted that the background report for the Waimea water plan change "Assessing Water Quality Risks and Responses with Increased Irrigation in the Waimea Basin" refers to "moderately disturbed ecosystems" – can we use the attributes identified in this and then go back and assign grades? Choosing how you decide to measure – eg median vs frequency – should reflect the guidance in the NOF.

There has been some work on the National Environmental Monitoring and Reporting (NEMaR) to try and achieve consistency, which can be made use of.

JT: one of the challenges will be to determine where and how do you monitor – this can vary greatly on rivers etc. The nitrate drinking water limit is very conservative – it was determined using a risk based system using the World Health Organisation (WHO) levels.

We need to make sure we consider relationships between attributes and conflicts.

Conflicts will begin once we start choosing numbers.

How we get to the number is as important as the number itself.

It would be good for staff to provide a summary for attributes and grades showing "this is what we currently have in our plan, or this is a gap; this is what WHO has and this is what MfE has – with indications on which are conservative and why they are that way so the FLAG can decide which one to follow.

We need to know the ones in the red (D) category so we can look at which ones we want to change or focus on.

We need to understand changes from the top to the bottom of Waimea Plains.

We need to connect what we are monitoring and why we are monitoring –link our monitoring to our values/objectives.

Would background info developed for the previous plan change be a good starting point? (eg work by Roger Young and Andrew Fenemor)

Yes, but some information has been overtaken by the NPS-FM: National Objectives Framework.

Should we bring in experts to provide advice? To discuss our thinking and provide a good steer?

Yes, we will need the technical expertise - in developing numbers.

Is it possible to have three bands across the Waimea Plains – with upper, mid, lower – overlaying data available to provide a snaps-shot of where things are at –for the attributes we think are important.

This was partly done in earlier water quality summaries [eg groundwater nitrate maps] – but further data could be repackaged in a more spatial sense with approximation between data points.

Action – staff to consider alternative ways of communicating existing water quality data spatially.

We need to look at where are we now and what is the trend – how this group works together – what is the vision, what is the aspiration goal, where are we headed and how are we going to get there? We could miss the whole goal by focussing on numbers.

We're a long way short of adding numbers.

Let scientist add numbers and we just tell them where we are going to go.

Does more time need to be spent on attributes before we move on? – today a bit rushed

A general 'yes' from group Perhaps also review where we are going as a group Repackage information on existing quality.

The next steps in the process, once attributes identified, is to populate the bands (NOF/SOE grades). Then look at where we are at now on these bands.

Session 4: Progress Review

Progress against plan

We are clearly behind the plan – these are complex issues and the FLAG group has not had enough time to consider them – we need to go back and look at attributes and better understand them – scientists to explain what the attributes are and why we measure them.

It would be useful to have a summary of what are the various ranges are for each attribute under different guidelines (eg NOF/WHO/SOE etc).

Action: staff to further explain attributes, which are measured and why and provide a summary of current grading systems across the various sources.

Was there any information that came out of the Value Our Waters project that might be of use?

The VOW project didn't really get into detail – more a focus on values rather than attributes.

Can we rank and pick the top 5 attributes -

Hopefully the values-attribute spreadsheets will help highlight those that are important.

Community interest

Is there a preference for how feedback is given to the community at this stage - perhaps a press release?

Yes, media release a good idea and should make the point that we are in an information gathering and sharing phase. Could put in summary of key values?

Make public aware that meeting notes are on website.

Not sure media release would be beneficial. Potentially a bit pointless at moment – but happy with letting them know what we are doing and what is available on the website.

Action: Staff to draft press release for FLAG comment.

Do we have list of milestone and progress against these. Need to identify consultation relative to milestones

Yes – had a list and putting this into a gantt chart Need to fit into this the consultation points.

Report back to EPC on 13 Nov 2014

We need to reconfirm chair – everyone was happy for Nick to continue as chairperson.

Should we have deputy chair to cove when nick not available?

Group agreed and Matt Hippolite was elected deputy chair.

Hortnz meeting (17 Sept 2014)

Chris Keenan coming to talk to flag about what HortNZ is doing – esp what they are doing to get Overseer applicable to other farming types and the potential for benchmarking projects in Waimea. The meeting will be in the Wangapeka-Heaphy room at Council.

Action – staff to send out HortNZ meeting agenda

Agenda Items for Next FLAG Meeting (17 November 2014)

- Attributes
- Fieldtrip in afternoon

Action – FLAG members to send any specific location they want to see – staff to collate itinerary.

Subsequent meeting dates and meeting duration

FLAG group discussed next available meeting time after the holiday break and agreed that a longer meeting was necessary to adequately address the volume/complexity of the information being considered.

Action Points – Council Staff

No.	What	Who
1	Summary paper on matrix of good management to be added to FLAG bibliography	LM
2	Run an Overseer example at a future FLAG meeting.	MAB
3	Staff will collated Break-Out Session 1 group feedback and staff will provide adjusted Schedule 30B wording for comment through emails and at the next meeting.	MAB
4	Staff to consider need for overview of Tasman Growth Supply and Demand Model to FLAG at a future meeting.	MAB
5	Staff to collate Group Session 2 outputs and email around for further comment	MAB
6	Staff to consider alternative ways of communicating existing water quality data spatially.	TJ/GS
7	Staff to further explain attributes, which are measured and why and provide a summary of current grading systems across the various sources.	MAB
8	Staff to draft press release for FLAG comment.	MAB
9	Staff to send out HortNZ meeting agenda [completed]	MAB
10	Staff to collate field trip itinerary.	MAB

Action Points – FLAG members

No.	What	Who
1	FLAG members to send any specific location they want to see during the field trip in November to Mary-Anne.	ALL

Next meeting

Date	17 September 2014 (Meeting 5) HortNZ liaison meeting	
Time	1.30-4.30	
Venue	Wangapeka/Heaphy Rooms (adjacent to Council chambers)	
Chair	Nick Patterson	
Draft Agenda Items	AttributesFieldtrip in afternoon	
Preparation	na	

Subsequent meetings

Date	17 November 2014 (Meeting 6)
Time	9.30-3.30pm (note extended meeting time frame)
Venue	TDC Council Chambers and field trip (afternoon)
Chair	Nick Patterson

Date	11 February 2015 (Meeting 7)
Time	9.30-3.30 (note extended meeting time frame)
Venue	TDC Council Chambers
Chair	Nick Patterson

Information and resource documents identified during meeting

Date	Title	Author/Source	
2013	Assessing Water Quality Risks and Responses with	Landcare Research &	
	Increased Irrigation in the Waimea Basin	WWAC	
2014	Waimea Estuary broad-scale mapping report	TDC	
*Kou documents to be added to the online document library			

*Key documents to be added to the online document library.

FLAG MEMBERS PLEASE NOTE: If you have any questions or need anything between meetings, then please contact Mary-Anne Baker by email: <u>marya@tasman.govt.nz</u> or by phone ddi 03 543 8486.