

### FLAG MEETING NOTES: 23 November 2015

Waimea Plains Freshwater and Land Advisory Group (FLAG) – Meeting 11
23 November 2015
9.30am-3.30pm
TDC Council Chambers
FLAG members:         Philip Woollaston (Chair)         Matt Hippolite (iwi representative on FLAG) (Deputy Chair)         Gavin O'Donnell         Lawson Davey         Dennis Cassidy         Zane Mirfin         Heather Arnold         Mirka Langford         Martin Rutledge         Dean Rainham         Pierre Garguilo         Nick Patterson         Staff:         Mary-Anne Baker (Senior Environmental Policy Planner)         Joseph Thomas (Resource Scientist – Water)         Steve Markham (Manager Environmental Policy)
Lisa McGlinchey (Environmental Policy Planner) Trevor James (Resource Scientist – Environmental Quality)
Mary-Anne Baker (supplemented by other staff)
<ul> <li>FLAG=Freshwater and Land Advisory Group</li> <li>WWMC= Waimea Water Management Catchment</li> <li>TTIFAK = Te Tau Ihu Freshwater Advisory Komiti (interim name for group until finalised)</li> <li>NPSFM= National Policy Statement for Freshwater Management 2014</li> <li>NOF= National Objectives Framework</li> <li>TRMP = Tasman Resource Management Plan</li> <li>SOE = State of the Environment</li> <li><b>Unconfined aquifer</b> = are those where permeable strata are open to the ground surface.</li> <li>Surface water (rainfall and/or river flow) is able to seep from the ground surface directly to the aquifer.</li> <li><b>Confined aquifer</b> = 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.</li> <li>AGUA= Appleby Gravel Unconfined Aquifer</li> </ul>

**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.

#### **Meeting Objectives**

- Understanding current industry approach to adoption of good management practice
- Developing opportunities for improving understanding and uptake of good management practice
- Considering where industry good practice regimes fit within regional council plans for water quality management including meeting water quality objectives and limits.

#### **Session 1**

#### Issues arising since last meeting

#### Summary statement and public engagement

Summary document circulated and options for discussion/sharing discussed.

Looking for fastest and cost effective way of sharing information; - Sector group meetings supported –set up separate discussions with main sectors- industry leaders and certification bodies so that each of them can be brought up to speed with the challenges and opportunities. Then consider a combined meeting to discuss the way forward.

Action: Public engagement still necessary – use summary to prepare Newsline articles. End of year media statement from PW (Feedback opportunity to be provided)

DC: We need to understand how industry initiatives are changing and can complement what FLAG is doing.

PG: Sectors are at different stages - vege growers needing to do research and others supported by more science and actual research.

**Action:** February start. TDC to set up meetings with FLAG reps and key people. FLAG members to circulate to respective sector groups. TDC to target people who might be interested. (DR has good e-mail network for sector groups)

#### **Irrigation Workshop**

Combined workshop with both FLAGs on 26<sup>th</sup> November looking at irrigation efficiency and reliability of supply - what they mean and how plans need to account for them.

Efficiency session better for this FLAG to concentrate on. Need for both FLAGs to work together on this to prevent inconsistencies in management of generic issue

#### Session 2: Local industry good practice initiatives

There is variable content/approach by different sectors reflected in codes and accords, etc summarised and provided separately.

MGM work from ECan good model to start with. Other councils/communities elsewhere National and international context that we need to account for. Looking for good process and systems

#### Horticulture

DC – contacted other growers elsewhere in NZ. GlobalGAP is the minimum requirement for export but there are now many other targeted requirements depending on specific market, buyer and crop.

Concerns generally about Overseer use in horticulture, but work being done to refine the model better.

Bringing each of the GAPs in line with each other – work currently being done by Hort NZ (Matt Dolan a key contact) to raise NZGAP standard to meet new environmental challenges. Irrigation and management plans being required as next upgrade. Growers are being informed of this update work as part of audit process. Status of new requirements changes over time from recommended practice to required practice.

There are different standards for food/non food. NZGAP as minimum for all locally sold crops.

Looking forward to having more efficient monitoring auditing systems across and within industry.

## Have any other regions done a summary of these accord/code requirements? May have been as part of Ecan MGM project?

Action: – MAB to check if summary of codes/accord requirements done as part of ECan MGM project.

#### How does NZ's Gap approach compare internationally?

NZ has input into meeting sustainable horticultural standards in range of crops as part of the Global GAP development. Supermarkets can have different standards to this global minimum performance. GAP base for sustainable production on global scale. NZGAP being reviewed to reflect international best practice and fill gaps in relation to some environmental issues.

### ZM: Are there any overseas figures for nitrate that we can benchmark our performance against?

DR – Nitrate has been a big problem globally for years. Big programmes all round Europe. Not as bad as that in most areas of NZ.

There are common nitrate standards around the world (such as the 11.3mg/l for drinking water). Other areas with predominantly housed animals have issues with animal slurries. Global approach to nitrate management arose as many of these issues. Other programmes also address human and welfare aspects.

#### Market Gardening/commercial vegetable growing

PG

NZGAP plus supermarket programmes for cover crops and market gardens. Not for farm gate and farmers market grower (but not many at that level).

There are still unknowns about effects of market gardening on nitrate losses – the local growers have commenced an investigation/monitoring programme to examine this in the Plains.

New fertiliser application methods being invested into by local growers – all based on advanced European design.

Glasshouses moving more and more towards closed systems. The industry is currently looking to developing industry standard.

#### How long have the GAP programmes been in place?

Global GAP has been in place since 2007 (and from 1997 as Euregap), NZ GAP followed this and allows for slightly lower levels of performance – although this is being reviewed now.

PG – The industries need to get all standards up to a level that can be accepted by council. Levels of compliance costs need to be realistic. There is a need for practical systems that get good buy-in by everyone.

PW two different costs – doing the actual work to meet the standards and the costs incurred by following the actual standards. FLAG and council need to minimise the costs. Don't want to double up requirements or costs.

#### Pastoral farming – sheep and beef

GO: Sheep and Beef are working on a Farm Environment Plan approach around the country and doesn't want to see extra systems that duplicate what this is setting out to achieve. What is happening at national level useful for informing a local response.

Auditing and monitoring components may still be missing from the FEP system so far. It is an evolving system – new requirements keep getting developed. There are increasing price gaps from some meat processors as incentive for farmers to meet higher standards.

On-selling stock between regions or between farmers doesn't get caught up in current approach.

## ZM: Economic market led solutions will lead change – better than bureaucratic approach. Rogue operators - how to deal with them?

PG: Unlikely that there are any in the Plains for vegetables. It is a better situation here because in places like south Auckland, there are farmers markets and lots of private operators selling veges. Nelson is more led by supermarkets [who have their own GAP related programmes].

DC: We could explore making a water permit dependant on having GAP – keeps eye on compliance.

PW: size of farm and scale might have influence on level of effect and need for regulation.

DR: not entirely market led as farmers want to be good stewards nor do they wish to waste resources and increase their own operating costs.

#### ZM: Can industry do better at setting standards and being innovative?

DC: Yes it can – it is an evolving thing and the GAP in NZ originally started with minimum standards for agrichemicals. It is the industry gradually working towards more sustainable practices across all environmental and other (health and safety, welfare) outcomes. Need to understand what the bottom lines must be and look to evolving practices

ML: There needs to be time allowed to change. If farmer needs to invest \$300k for new effluent system time to allow for this is really important.

#### **Dairy Farming**

ML: All (3) Plains farms are Fonterra suppliers. Fonterra has performance standards it needs to meet in order to access overseas markets - as well as having adopted bottom lines and a sustainable dairying accord for its suppliers.

"Supply Fonterra" which includes animal welfare issues, is about environmental performance. It involves a yearly visit with questionnaire about on farm performance.

Any risks of non-compliance with performance standards is assessed (as well as actual noncompliance). The Fonterra Sustainable Dairy Advisor is given information about any identified on-farm risks for individual farms and works with the landowner to put in place a plan for managing the risk. **Nutrient and effluent management** - all farms need to submit reports on how they use nutrients – advisor runs the Overseer model with this information.

The Dairy Advisors are all audited to ensure they follow data input standards.

Dairy NZ also do random audits of dairy farms – to check that what Fonterra is reporting is actually happening. Fonterra customers also do random farm checks.

Fonterra looking to ensure Supply Fonterra assessment is reported at the farm scale and available to farmers on-line. The Farmer can thus pull data from the Supply Fonterra programme for their own RC or customer (the RC can't get this farm scale information from Fonterra or the dairy advisor).

JT: not all properties in the plains are irrigated. Especially not sheep and beef properties. The information that is collected has to be useful. It is expensive for some to collect and maintain data bases. Reporting on data/information is also costly.

#### Forestry

HA: The Forest Industry is happy to supply information, but it does need to be useful.

Only three companies with forestry land in the Plains – so it's easy to engage! All 3 are part of the Forest Stewardship Council and recent development of NZ standards as part of this. FSC includes environmental and social responsibilities.

Nutrient application is not the norm.

The FSC audited annually. Every 5<sup>th</sup> year there are 3 auditors looking at forest management for a week – intensive look at the company. Noncompliance could mean a loss of certification. FSC will open doors for markets.

#### **Other Pastoral Farming**

GO: Pastoral activity in plains probably won't fall within any of the meat processor supply agreements, but it probably makes up majority of pastoral land in catchment. I have a concern about addressing the cumulative effects of many small activities but not becoming overly bureaucratic. How to incentivise small operators where there are no trade drivers for them.

**PW what sort of area** is in pastoral use? - Have some data on land use – refer to the Landcare report.

What is the scale of pastoral farming activity that management measures needs to address? Lifestyle farmers have nitrate footprint, but are falling below industry radar. Need to understand the risks.

**Is there a register for 'certified' people**? People may just avoid the markets requiring the rules.

One solution is a rule that say "scheme membership" is required....If not a member then compliance with specified performance standards is required.

#### Grape Growing

PW: grape growers are in same mould as the other horticultural industries – it has both sustainable wine growing as well as growing organic approach. Organic/bio grow

requirements are slightly different as they are more about state of the soil. Sustainable wine growing is more about measuring inputs. The majority of growers in this region are processing on farm so are also covered by sustainable winegrowing. Organic systems maybe not looking at both aspects.

There is a requirement for external auditing for SW but biogrow do internal audits. Both are pretty rigorous schemes.

Growers cannot supply wine to export markets without a scheme of some sort.

The performance standards are updated regularly in all schemes. The outcomes sought are similar and likely to fit within a council regulatory scheme.

#### **National Initiatives**

National initiatives – other councils are increasingly looking to industry led FEPs – such as Gisborne and ECan.

ECan approach is linked to state of the zone and property nitrate leaching risks and using overseer. Farms need a land use consent in a red zone, but not a green zone. Where applicable they need an FEP from accredited auditors.

Action: – check scale for requirement for FEPs in Canterbury.

Anyone can join the industry programmes but costs involved to be members.

#### **Session 3: Developments nationally and by other councils**

#### Assessment of variations in risk of nutrient loss (group exercise)

Identify the factors that define risk and possible requirements to address them using a matrix approach to management requirements.

There is a need to be aware of IP issues when using specific industry standards. We need to abstract key performance standards that everyone needs to follow. Eg if we want a certain level of nitrates at Neimanns - then there will be need for some information about N inputs on farm to manage cumulative inputs.

Already have water meters – and water use data requirement. About nutrients – is it the same or less that we are aiming at? Modelling gave answers about current levels and predicted land use change effects. Is there a monitoring role in relation to vegetable growing and area covered?

### ZM – For Fonterra farms - would it be simpler for every dairy farm to have resource consent?

No – probably harder. Resource consent conditions may not be the same as what supply Fonterra looks at. Compliance with resource consent much less flexibility than industry standards.

Discussion about how to identify risk factors and develop some thresholds to define when action or management response necessary.

For land uses not within any industry programme use a FEP traffic light system for practices – minimum - good - best. Could use a template with a tick the box approach according to nature and scale. Need some certainty about standards/acceptable levels of information.

# ML what about the open ended nature of 'good – best practice? - when does the need for improvements stop?

Need to incorporate allowance for time to change systems.

#### risk factors and thresholds

Site Location	recharge zone, distance to stream	Setback distances – feeding out, break feeding	
	Stock access to waterways	cultivation Regulation to apply to more than just dairy?	Other stock not to cause water quality effect.
Site characteristics	Slope Size	lifestyle size seems to be about 3ha	Some lifestyle activities could be unsustainable
Farm system	intensity linked to nitrate losses		
		Closed versus open glass houses.	movement towards closed systems
Bare land management	Length of time not under crop/pasture? Cultivation set	Can specify 3m vegetated strip (and include drains)	
Nutrient	back		
management	Placement		onto (vege) crops – ie. on rows not broad acre
	Timing		should be when crops growing (season/temperature/type of fertiliser)
	High intensity stocking rates over small areas (feeding out/break feeding etc)		especially on gravelly drier areas for feeding out supplements. Also preventing pugging
Record keeping			key management component (without some form of property scale overseer rate
Crop/soil			
combinations Cultivation	Setback from water bodies	3m	

#### **Open/Closed glass houses**

6ha under glass for Ewers – with others in the Plains for flowers and other small crops. Some use irrigation water on grass for sheep. Nitrogen levels not that high but there are other nutrients in waste water. (Not sure about concentrations of all of them).

Some may dispose by soakage? New glass houses required to be closed. Glass houses need clean water because of need for pest and disease control.

#### Bare Land management

(under vege growing)

Length of time land is bare? No real performance standard. But is a cost to keep bare. Can 'cap' land when it's bare to slow down percolation. Ploughing makes water move through faster.

#### Crop/soil/timing combinations

Summer crops on ranzau need too much irrigation. Self-limiting because of running costs. Rotation more around soil health rather than nutrition. Usually have track along any water course and 3m distance. Usually in grass because easier to manage. Sometimes the water course is man-made for drainage. Can specify 3m vegetated strip (and include drains?)

**Nurseries** – discharge activity rather than land use activity? Could be high water use. Most fall outside GAP. Container different from open ground. Waimea Nursery mostly pipfruit and covered by industry gap. Efficient irrigation needed but uncertain about level of practice. No performance measures developed yet – pot emitters rather than overhead sprinklers? Use slow release fertilisers, nutrient losses should be less. **Action:** Check with NGIA Nursery Growers Industry Association. Mike Simpson.

**Grapes** – low risk factors. Often use sheep in winter. Some grapes irrigated at higher rate, e.g – sauvignon blanc at 2.5 more than pinot noir. Not that many water courses in vineyards, but would have 2.5 - 3m to m setback for access. 3m about right.

What about arsenic leaching from grape posts? Not as big a problem in Marlborough as first thought. Slowing replacing tantalised with steel.

Kiwifruit/pipfruit/berry all subject to GAP. Use efficient water practices. Kiwi Fruit slightly higher water and nutrient demand and more likely on better drained soils. New G3 variety will result in higher yield per ha.

**Poultry** (Lloyd) – run GAP some waste onto vege growers land. Not cultivated in immediately – could be left some weeks to mature. 6-8 year rotation for application of poultry mature. Use soil testing to work out nutrient needs. Can't get consistent results from overseer.

**Question about dead animal disposal** – offal pit, or burial normal. No regional facility for dead animals.

#### Land disturbance sources of sediment to be captured by land disturbance review.

From Global GAP development can understand where industry is going so as to align systems. Leslie McIndoe for Global GAP (hard to get hold of).

Good to have local government involvement in development of this – resource managers or chief execs could progress this with Global GAP.

Other national industry bodies working with regional/national conversations including MGM. Also working with MPI. Drivers for convergence across all these sectors/interests.

Spoke briefly about waste management on farms – have had culture shift in forest industry to stop use of rubbish pits at logging sites. Gradual awareness to better land management is part of industry shift to more sustainable land use.

But need better attention to compliance and monitoring by council to manage bad practice.

#### Session 4: Options discussion

Covered in previous session.

#### Session 5: Project Management

#### **Timeline and next meetings**

Short version of timeline/project plan for FLAG

Next Meeting hopefully early February (fruit season starts early March)

No certainty yet as to how well resourced for this work to continue at this stage.

Action: Circulate summary document and prepare media release.

Action: Send menu of dates for February meeting.

#### **Action Points – Council Staff**

No.	What	Who
1.	Public engagement still necessary – use summary to prepare Newsline articles. End of year media statement from PW (Feedback opportunity to be provided.)	tbc
2.	February start. TDC to set up meetings with FLAG reps and key people. FLAG members to circulate to respective sector groups. TDC to target people who might be interested. (DR has good e-mail network for sector groups)	tbc
3.	Staff to check if summary of codes/accord requirements done as part of ECan MGM project.	tbc
4.	Staff to check scale for requirement for FEPs in Canterbury.	tbc
5.	Check with NGIA Nursery Growers Industry Association. Mike Simpson.	tbc
6.	Circulate summary document and prepare media release.	tbc
7.	Send menu of dates for February meeting.	tbc

#### Action Points – FLAG members

No.	What	Who
8.	None.	

#### Next meeting

Date	(Meeting 12) None booked – likely to be 2016
Time	9.30-3.30pm
Venue	TDC Council Chambers
Chair	Philip Woollaston

**Subsequent meetings -** None booked – likely to be 2016.