



Issue 13 – Meeting 32

7 September 2017

This meeting covered land use, picking up the issue of farm-sourced sediment loss raised at earlier meetings.

TANK members opened the meeting asking for clarification on whether the Heretaunga Plains are “fully allocated” or “over allocated”. Xan Harding’s comments were helpful: “The Heretaunga Plains are fully-allocated on water usage, but over allocated on water take limits.”

Farm Systems and Environmental Performance *or, how to manage soils and diffuse agricultural pollution*

TANK GROUP member Xan Harding explained how everyone has an effect on the environment but that because of the area it covers farming has a more significant beyond-boundary impact on the local environment. Farmers are finely tuned to their property and the effect of their farming systems within their boundary however, less equipped to manage the beyond-boundary effects of their practices. Until recently, there has been little attention given to, and science to inform the ‘downstream effects’ of land use.

ON-FARM we need to consider the need for controls, as they may affect environmental values on-farm (for soil quality) and off-farm (for water quality). The Economic Assessment Working Group (EAWG) found where soil remains on-farm quality is stable overall. Where there are changes in on-farm soil quality they particularly relate to cropping cycles and cropping. Farmers are generally aware of problems caused by soil cultivation. However, more focus on understanding and adopting Good Management Practices can further improve on-farm soil quality and retention. Farm systems like organic and biodynamic farming can add to knowledge about good management practices, but developments should be science and market-led, which is already happening. No one disputes that building up soil carbon has multiple benefits – on-farm and off.

OFF-FARM many people are concerned about off-farm losses of Nitrogen, Phosphorus, pathogens, sediment and agrichemicals. Overseer® estimates N losses but is imprecise; less helpful for P and of no use for sediment or pathogens.

GOOD MANAGEMENT PRACTICE when widely adopted, may be sufficient to address current environmental concerns, but is it enough? GMP or GAP are industry-developed codes of good farming practice for improved outcomes. The national Land and Water Forum (LAWF) endorses development of better understanding about what GMP precisely means for different farming systems and land use activities.

AUDITED SELF-MANAGEMENT has wide international acceptance as a management framework for meeting a range of outcomes. LAWF endorses ASM systems to implement GMP in relation to environmental performance. It is a way of achieving behaviour change in a way that results in ownership of issues and

solutions, one-to-one guidance, peer support and adaptive management. It achieves better outcomes than a management regime that relies just on compliance with specified rules and minimum standards.

The NUMBERS generated by scientific models are a great guide to inform decision-making, but do not in isolation determine decisions.

WHAT WORKS WITH FARMERS is taking the time to get agreement on the problem. Working at a sub-catchment level is manageable and most effective. The numbers are helpful, but people are the key.

REGULATION incorporating GMP/ASM, in conjunction with regulator oversight, embodies a continuous improvement approach. It starts with environmental gap analysis, moving through behaviour change, problem ownership and extends beyond compliance.

QUESTIONS and COMMENTS

- Meeting environmental outcomes and constraints is part of a range of challenges for farmers who also have to manage other resources and impacts such as labour, capital, tenure, succession. A management framework would ideally be integrated with these other factors
- Science is one of the tools we use to inform, along with Mātauranga Māori, social values, etc.
- There is a challenge for the decision makers to make sure there is the right balance of carrot and stick.

The Sediment Loss Challenge

Peter Kay spoke on behalf of the Pastoral Farmer Reference Group - set up after a series of public meetings to inform farmers about the TANK process. They were initially asked to give advice about the TANK challenge to reduce sediment loss across TANK's catchments by 10- 30%. This sediment loss objective was based on information from SedNet modelling, heard by the TANK Group at meetings 23 and 24. The Farmer Reference Group wish to treat water quality as a whole - not just sediment - and is taking control of ways to do this before any rules are made.

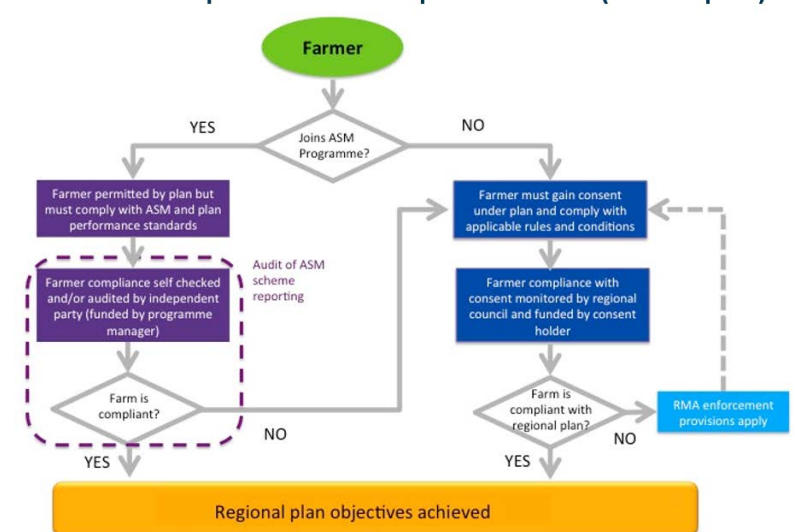
Peter shared his concern for how sheep and beef farmer impacts on water quality are seen by the wider community. The quality of water at testing sites on the Ngaruroro at Maraekakaho Rivers and on Tutaeuri River at Puketapu is still of a high quality. There is no Nitrogen problem in the either main stem, although there is a Phosphorus problem linked to the sediment loss issue.

Peter noted that while the farmers were first asked to consider the sediment challenge, they themselves

adopted a wider perspective for the best environmental outcomes that their preferred management option could enable. They felt this would promote collaboration and the development of good management practices rather than an approach that focussed solely on minimum standards.

Peter said that there is no current industry led model to steer the pastoral sector, although Beef+Lamb NZ have developed information about good management practices, encouraging preparation of farm plans, the formation of catchment groups and self-auditing.

Relationship of ASM to plan rules (example)



The Farmer Reference Group suggests a management framework to meet water quality objectives that includes membership of an industry led programme where it is available, or membership of sub-catchment landowner collectives that develop a plan for meeting the relevant water quality issues. Where a farmer does not want to participate in a collective, they will still need to prepare a farm environment plan, may require a 'consent to farm' and meet TANK Plan rules.

The Farmer Reference Group feels the above approach is more than setting limits - i.e. a minimalist view - and that this approach encourages and demands good management practice. It opens the door for more discussion on subjects beyond TANK's scope, e.g. improving water retention of a particular type of soil.

A proposed field day (October) will show the activity in pastoral catchments to manage N, P and sediment.

Farmer Management – creating a framework

The Farmer Reference Group considered several options for achieving sediment loss reduction by 10% - 30%. While the Regional Council will set the standards to be met, how these are implemented will be the role of GMP/ ASM and collectives.

OPTIONS for PASTORAL FARMERS

1. Management through industry or collectives – use GMP/ ASM by sector/ group, eg. Supply Fonterra. This option would include appropriate elements of 2. and 3.
2. Individual Farm Plans – as per Tukituki Plan requiring completion of 1,100 Farm Plans by a target date
3. Activity-specific rules setting minimum performance standards.

The Farmer Reference Group advocated for Option 1. This was endorsed by the TANK Group, provided there is further development of auditing, reporting and accountability details. They seek further advice from both the EAWG and the Farmer Reference Group to progress this.

The TANK Group also agreed this approach could be adapted to other sectors and environmental issues other than the sediment issue specifically considered by farmers.

Mary-Anne Baker noted that farm systems change quickly. Regulatory tools are unable to keep up with the rate of change happening in this (and other) sectors, and more likely to constrain innovation and agile change.

WATER CONSERVATION ORDER

James Palmer provided a brief rationale for the Council's submission. He noted that the Regional Council has always supported the TANK Group as the best way to set rules and limits for TANK's catchments in a way that accounts for the wide range of values the river has. In response to the WCO application, the Council opposes it as written, so that it can fully participate in the Tribunal process and ensure decision making appropriately accounts for the wide range of community values. If at the end of the TANK Plan Change process, the community feel there are still grounds for protection through an Order – that is the time to pursue a WCO application.

WIDER CONTEXT FOR THE TANK PLAN CHANGE

The Regional Council has most recently invested heavily in a science knowledge base, but managing community expectations – often in spite of the science – is proving to be the biggest challenge.

The Council is working to 'get stuff done' a lot faster. It will work more closely with communities of interest to achieve this. The new [Strategic Plan 2017-21](#) is a step to align the Council's resources more efficiently to 'swim



in the same direction'. Partnerships will be critical to getting stuff done, particularly our relationships with Tāngata Whenua.

The Council's attention now turns to a capital structure review, developing the Long Term Plan 2018-28 and functional reviews to ensure the organisation's staff focus and funding model is fit for purpose.

As this work comes together during the rest of 2017, the TANK Plan Change will benefit in 2018 through the levers that Council aims to be able to pull to incentivise behaviour change and ensure compliance.

COMMUNICATING WITH THE COMMUNITY

The Engagement Working Group are aware that community engagement needs to increase, in advance of TANK Plan Change consultation next year.

Staff are working on a video series to tell the TANK Plan story – for use in social media, sharing, presentations, events. These will include a TANK Plan overview, with bite-size videos on Allocation, On the Farm, Clive & Karamū, Ahuriri estuary, Stormwater and Sediment (covering riparian, sediment, shading). The TANK Plan booklet will be updated. The regular ThinkTANK e-newsletters go to 173 subscribers.

→ Contact [Drew](#) if you have any ideas to better engage the public.



OPEN MIC

Members of the TANK Group asked questions about Drinking Water source protection, asked for a future update from the Stormwater Working Group, and asked the Regional Council to report back on ways to retain water in the landscape (and the benefits of this).

NEXT TANK MEETINGS

- 10 October - Nutrient Management and Water Quality Attributes
- 18 October - Tutaeaki and Ngaruroro River flow management options, and Water Allocation

