



Healthy Farms Healthy Rivers

NEWS

Welcome to *Healthy Farms, Healthy Rivers News*, the new name for the Integrated Catchment Management Newsletter.

This is part of the name change for Waikato Regional Council's Integrated Catchment Management (ICM) work to Healthy Farms, Healthy Rivers. We feel this name better reflects the work we do, as well as the strong connection between land and water.

This issue focuses on the work outside the farm gate that equips rural professionals with on-farm tools to help farmers make more informed decisions about managing nutrients. We also report on the Tools to Farm Within Limits conference at Karapiro and Massey University's Intermediate Nutrient Management course in the Waikato.



Waikato River

Groundbreaking conference looks at 'tools to farm within limits'

Rural professionals with an interest in nutrient management from around the country converged at a conference at Karapiro in June.

Around 170 rural professionals attended the Tools to Farm Within Limits conference, organised by Fert Research and the New Zealand Association of Resource Management. Delegates came from research organisations, various primary industry organisations, agricultural consultancies, fertiliser companies, universities, government institutions, iwi organisations and regional and district councils.



Conference delegates at the Tools to Farm within Limits conference

The conference included presentations from three leading farmers with quite different approaches to farming within limits.

Drystock farmer Mike Barton outlined the history of the nitrogen cap in the Taupō region. He responded to the cap by getting rid of the breeding cow herd, and he now aims to grow his young stock as fast as possible. He has significantly changed his business model and now strongly focuses on promoting his Taupō Beef brand, which is the growing edge to his farming business. His hope is that with a change to high value (rather than commodity product) he can build the cost of environmental protection into his brand of beef and secure premiums for producers.

South Island farmer Craig Mackenzie spoke on his use of new precision agricultural technology to discover the variability of his soils and manage his farm more precisely. By using an electro-mapping tool on his soils, he has dropped his nitrogen use from 300 to 170kg N/ha with no drop in milk production. He can now put nitrogen on between the urine and dung patches. As a result, clover growth has increased a lot, with no reduction in dry matter production.

Keith Riley from Woodville has improved his resource use efficiency. By reducing his effluent volume from the shed by 60 per cent his electricity costs also dropped 35 per cent. He once used 113m³ of water per day but has reduced this to 47m³ per day, effectively increasing his effluent storage from 110 to 270 days. This is driven by Keith's desire to work towards water and effluent efficiency.



Waikato Regional Council display at the conference

Other speakers covered a range of topics relating to farming within limits.

Land and Water Forum chairman Alastair Bisley outlined challenges faced nationally. The Government has invited the forum, which comprises 60 major users and stakeholders of water, to come up with a decision making process for freshwater quality and quantity. Alistair warned that without limits there is no guard against over allocation and uncertainty for both environmental outcomes and economic use. The Forum uses collaborative approaches to deal with a wide range of conflicting views among the members and to gain their commitment to the outcomes of their discussions.

Raukawa environmental manager Stephanie O'Sullivan presented a Māori worldview of water. She stated it should be recognised the Waikato River is degraded and should not be required to absorb further degradation as a result of human activities. She also touched on co-management and the Vision and Strategy for

the Waikato River. For Māori, restoration includes being able to take food from and swim safely in the river and it is recognised that it may take decades to change the current situation and achieve the vision.

Dairy NZ's Mike Scarsbrook stated that farming is all about managing limits and noted that farmers already work with climatic, biological, financial, social and environmental limits. He sees nitrogen has become a key indicator for dairying. Setting limits will be the focus of intense national, regional and catchment scale debates. Increasing milk volume while holding and reducing the environmental footprint is the new challenge and Mike emphasised proposed solutions should be based on sound science to ensure that they will solve the problem. It will require continued investment in research and development

Emeritus Professor Russ Tillman of Massey University noted that advice to farmers on nutrient management had changed considerably over the last 40 years. He reflected that limitations on spreading technology had resulted in broad scale fertiliser recommendations in the past.

Russ noted that there is an increasing regulatory need for nutrient management plans rather than just nutrient budgets. He also noted that new technologies are providing opportunity to improve nutrient use efficiency and reduced environmental impact.

At the end of the conference, the general consensus was that that nutrient limits are coming and will affect farming. The conference provided an excellent forum to focus discussion on the challenge to farm within limits to ensure that solutions are practical and based on sound science. It was agreed that the conference should be held annually so that further discussion can occur.

Encouraging attendance at sustainable nutrient management course

Twenty eight rural professionals spent three days at a Massey University course in the Waikato in August, lifting their understanding of sustainable nutrient management.

Waikato Regional Council and Dairy NZ jointly sponsored and supported the course and invited key industry people to enrol. Farm consultants, vets and others working in agriculture related fields paid normal course fees to attend.

Participants had spent the previous month reading up on nutrient management, so came primed for the course, which was run by Massey University's Professor Mike Hedley and three other staff.

The course ended with a two hour exam, which many found a bit daunting, given that some had not sat an exam for many years.

It is encouraging to see rural professionals investing in new nutrient management skills that place them in a stronger position to serve the rural community.



Course participants at the Waikato Intermediate Nutrient Management course

This course and the advanced nutrient management course will be part of a proposed requirement for nutrient management certification. The certification process will ensure that farmers receive the best advice available on nutrient management planning.

The next issue of Healthy Farms, Healthy Rivers News will focus on Variation 6 and the recent changes to water allocation in the Waikato region.