



Delivering the Freshwater Package

Tools for the Arable Sector
Diana Mathers



Our Sector



FAR Environmental and Social Best Practice Strategy



Education and Extension

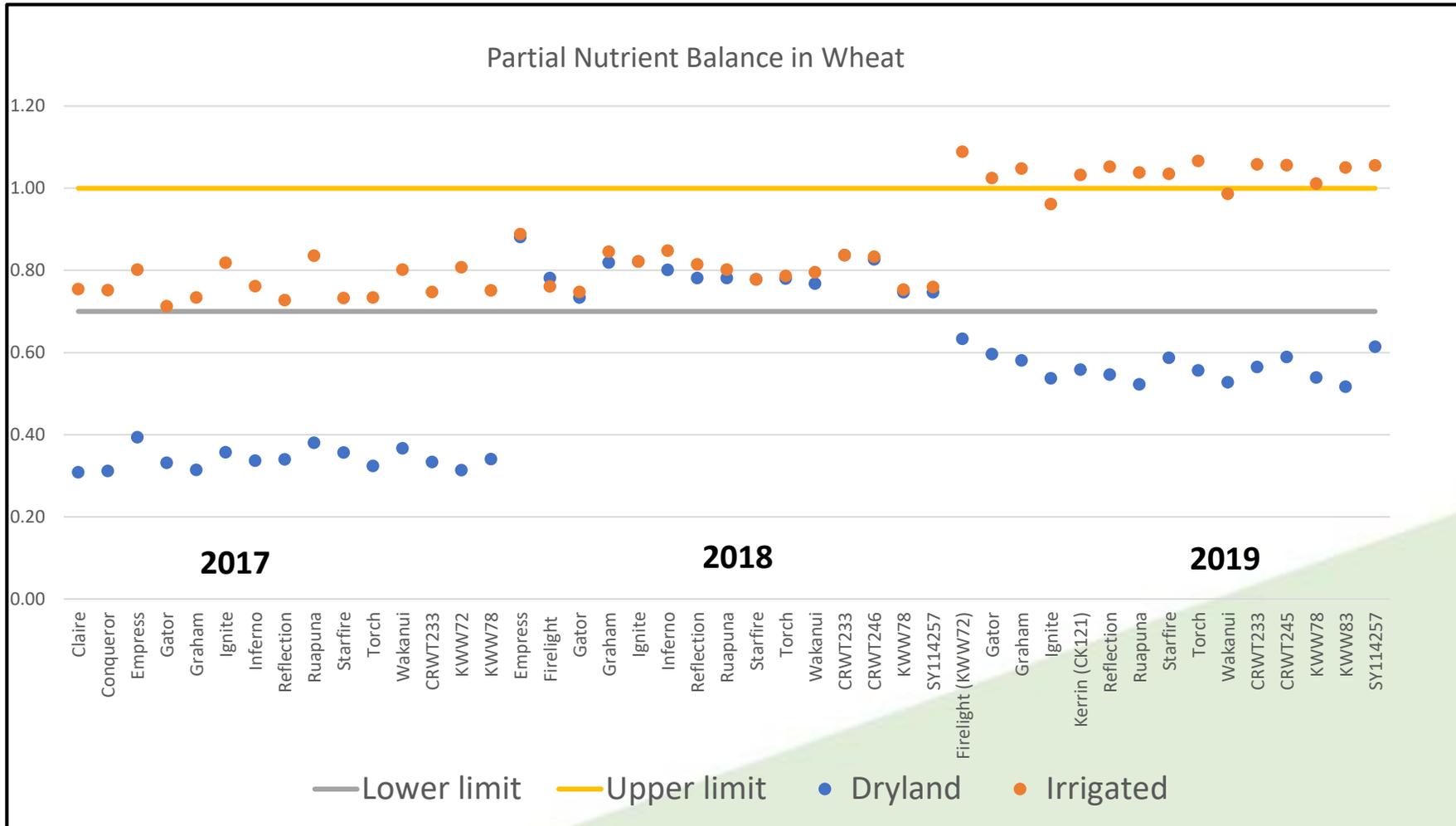


Measurement and monitoring



Environmental Indicators

Some thinking about the value of irrigation



A World Champion Wheat Crop
 Yield = 17400 kg grain / ha
 Grain Protein = 8.6%

300 kg N applied as fertiliser

$PNB = (17400 \times 0.086 \times 0.17) / 300$

PNB = 0.85

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ONLINE CROP MANAGEMENT

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ProductionWise[®] Online Crop Management

Provides free access to:

- Digital farm mapping
- Online operations diary
- Grain management tools
- and more!



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Map Your Property

Use high resolution imagery to map your paddocks and storage facilities. Create as many farms as you need. Build your farm the way you want.

1000 BLOCK 12.2ha	SOWN Wheat	OPERATION 0 completed
1000 BLOCK 17.2ha	SOWN Cereals	OPERATION 2 completed
1000 BLOCK 15.8ha	SOWN Barley	OPERATION 2 completed
1000 BLOCK 18.4	SOWN Fallow	OPERATION 0 completed
1000 BLOCK 17.42ha	SOWN Not sown	OPERATION 1 completed
1000 BLOCK 19.5ha	SOWN Not sown	OPERATION 0 completed

Organise Your Activities

Easily record your operations. Our comprehensive data lists & multi-paddock tools make operation recording quick and easy.

Latest News



Version 1.5 Update Released

Thu 07 March 2013

Version 1.5 release includes remembering operation costs and input prices in My Diary to streamline data entry.. [Read more.](#)

Record keeping & planning

- Digital farm mapping
- Paddock record keeping
- Paddock planning
- Available for both growers and advisers

Apple & Android Offline Apps

- Record observations, operations and inputs
- Work offline with no mobile reception
- For both grower and adviser accounts

New Developments

Automatically generates an Overseer NB
Will soon generate a GHG emission report

www.productionwise.co.nz

Foundation for AraNz Research | Copyright © 2013 GrainGrowers

Fresh Water Plans



Plan Requirements

A farm map identifying features and other risks to the health of the freshwater ecosystem.

A risk assessment across specific activities.

A schedule of actions to manage identified features and address identified risks.

FEP Templates and Guides

FARM ENVIRONMENT PLAN



FOUNDATION FOR ARABLE RESEARCH



Canterbury Arable Farms

FARM ENVIRONMENT PLAN GUIDE



FOUNDATION FOR ARABLE RESEARCH



Canterbury Guide

6 Management Sections

Soils

Nutrients

Irrigation

Collected effluent

**Waterway and Riparian
Management**

Point Sources for Nutrient Losses

+

Optional section for winter grazing

and soon

GHG emissions and Biodiversity



Targets, Risks and Actions

Management Section for the Freshwater Plan

Nutrients

Refers to pages 13-18 in the Template Guide.

Management Objective	To use nutrients efficiently and minimise nutrient losses to water Nutrient losses do not exceed consented nitrogen loss limits.	
Targets	Nitrogen losses from farming activities are at or below Good Management Practice Loss Rates and nitrogen limits. Nutrient losses do not exceed consented nitrogen loss limits. Available mitigation measures for nitrogen losses are implemented. Phosphorus losses from farming activities are minimised. The amount, rate and timing of fertiliser applied does not exceed the agronomic requirements of the crop. Fertilisers are stored, loaded and applied in ways that minimise the risk of spillage, leaching and loss to water bodies.	
Identified Risks	Risks associated with nutrient management on the farm:	
Key Actions Management changes to reduce environmental risks relating to nutrient management	When	Evidence of completion

Documenting Farm Practices

<p>Good management practices currently employed to address the environmental risks associated with nutrients</p> <p>Use this list of management practices to identify what is already being done on your farm and what you might consider changing in the future.</p> <p>Your answers will assist with the development of a plan to reduce and manage the environmental risks on your farm</p>	<p>Level (Indicate answer) Y = Yes S = Sometimes N = No NA = Not applicable</p>
<p>Develop a soil testing strategy to ensure all paddocks have regular soil tests and the sample collection is representative of the cropped area.</p>	<p>S</p>
<p>Test the soil before preparing a crop nutrient budget for available N (AMN test) and/or mineralisable N (Deep N test). <i>The AMN test is a measure of Nitrogen mineralised under specific laboratory conditions. The actual amount of nitrogen that will be mineralised in the field depends on soil temperature and moisture. The deep N test measures the nitrate-N and ammonium-N levels at the time of sampling.</i></p>	<p>S</p>
<p>Prepare a pre-season nutrient budget for each crop, taking into consideration a realistic crop yield (use your long-term average yield as a guide) and likely soil supply of N (from soil tests) and amount of residue from the previous crop. <i>Your fertiliser consultant or farm advisor will prepare pre-season crop budgets for you if required.</i></p>	<p>Y</p>
<p>Prepare a post-season nutrient budget to show how well your risk assessment and management practices are improving the nutrient management on your farm. An Overseer nutrient budget is an example of a post – season nutrient budget. <i>Overseer nutrient budgets also provide useful information about nutrient flows on the farm.</i></p>	<p>N</p>
<p>and more follow</p>	

A FAR Wish List

Farm Advisors for arable farmers have a good understanding of the arable system, its risks to the environment and opportunities to mitigate these risks.

The Tools we have are used by farmers and farm advisors to deliver the Freshwater Package and other national objectives to build resilient, sustainable businesses.

Arable FEPS are developed with farmer input and are more than an expensive tick box exercise.





Thank You

ADDING VALUE TO THE BUSINESS OF CROPPING



FAR[®]