Engagement of dairy farmers in the Lake Rotorua Catchment in meeting nutrient loss targets on dairy farms in the Lake Rotorua catchment.

Acknowledgements to:
Tanira Kingi, AgResearch
Stewart Ledgard, AgResearch
Mike Sprosen, AgResearch
Simon Park, Landconnect Ltd
Lee Matheson, Perrin Ag
Outline

• Context of the problem
• SFF projects in New Zealand
• This SFF project & outcomes
• Farmer engagement
  – Barriers
  – Enablers
• Success?
• The future
Lake Rotorua water quality

- Sustainable N load = 435 tN/yr
- Halve farm N loss
- New N rules, 140 tN
- $40m fund, 100 tN
- Farm Nitrogen Discharge Allowances...
Sustainable Farming Fund

• SFF projects in New Zealand
  – Aims
  – Hallmarks
  – Review 2013

A resourcing mechanism for tackling the economic, environmental and/or social sustainability issues of NZ’s primary industries. “Communities of interest” are supported to undertake applied research and extension projects on a shared problem or opportunity.
SFF project: Meeting nutrient loss targets on Rotorua dairy farms

**Farm system trial**
1. Nil-N fert
2. Plus-N, 140-160 kgN/ha

6 x 2 paddocks, each 25 suction cup samplers, regular leachate and pasture sampling

**Pasture plot trial with 3 N fertiliser rates**
1. Nil-N
2. Strategic-N, 30-40 kg N/ha in August and April
3. Current-N, 160 kgN/yr

**Modelling in Overseer and Farmax**
Farmer engagement

• Participation at four SFF field days
  – 8-31 farmers, 28-60 in total

• Other opportunities to engage:
  – Related field days or workshops
  – Primary Producer’s Collective
  – Farmer Solutions Project
  – N loss review
  – Stakeholder Advisory Group
  – Sustainable Milk Plans
Barriers to Engagement

• Multiple other opportunities
• Size of N reduction needed
• Focus on N –
  – modelling
• Legacy of suspicion
• Rules not set

• Consistent, widespread engagement isn’t easy...
Enablers of Engagement

• Hosts of field trials and modelling
• Project Manager
• External support  
  – Regulator funding secretariat  
  – DairyNZ  
  – Partners
• Farmer leadership
• The Matrix!
Lake Rotorua Dairy Farmers SFF

Farmer messages
• Concern at pasture quality under nil N fert
• Willing to investigate N and P mitigation
• Want to see practical local trials
• Assess whole farm systems

Proposing a new SFF Project based on P mitigation
Conclusions

• Farmer engagement is not easy
  – Don’t you know the history here?
  – “What are the rules?”
  – How much will I have to ‘shift’?
  – What is going to work here?

• Deep engagement of a few

• Matrix of touchpoints

• Plans for the future