Reef Trust Tenders – Wet Tropics and Burdekin

The story so far

— How the Reef Trust reverse tenders worked
— Cost-effective decision making
— Relationship with regulations
— What are participants trialling
— Relationship with fertiliser suppliers
Reverse Tenders

– Tenders allowed us to focus on a specific management practice - nitrogen fertiliser application

– Tenders target *surplus* nitrogen fertiliser

– Encourage farmers to better match rates with crop needs - increase their *nitrogen use efficiency*

– Aim to achieve cost-effective nitrogen reduction

Nitrogen Use Efficiency

– The tender focussed on reducing nitrogen fertiliser rate while maintaining yield
  • It has the greatest potential to reduce runoff
  • It can be audited (through tax records, GPS application, and receipts)
  • Yield varies for a range of factors, not just fertiliser applied and difficult to measure with accuracy

– Not aimed at reducing productivity – built a lower limit into the metric
Our offer to cane farmers

1. Determine whether they can lower their nitrogen fertiliser application rates and how (i.e. improve their nitrogen use efficiency)
2. Offer up this reduction (surplus) “for sale” to the Australian Government – included a minimum reduction
3. Propose a price they would be willing to accept
4. Submit all this in a tender application (a ‘bid’)
5. Compete with other farmers for funding

Additional requirements

- On-farm changes, including the reduced application rate, are complemented by a range of Minimum Standard of Practices
- Completion of 3 modules of the Smartcane BMP
- Development of a farm nutrient management plan.
Determining the cost effective offers

- PRS and EBI generated for eligible bids
- **PRS** (Pollutant Reduction Score – the kg of nitrogen to be reduced over a 3 year period)
- **EBI** (Environmental Benefits Index) ($/PRS)
- Metric to rank the $/kg of N reduced
- Application of a confidential reserve price

Integrity of our investments

- Monitoring and reporting by local Service Provider
- Random audits
- Verified data records
- Fertiliser purchase receipts
- GPS in Burdekin

- Always looking for new suggestions...
Relationship to regulations

- Tender did not pay for farmers to move themselves to a regulated rate
- Set a regionally specific upper limit from which rates could be reduced
- Based on 6 Easy Steps method

Fertiliser rates – Wet Tropics examples
Participant trials

- Move to block or farm yield potential
- Change of product - entec coated in urea; liquid fertiliser and controlled release product
- Change timing of fertiliser application
- Apply fertiliser sub-surface
- Change irrigation timing – including add weather pattern forecasting
- Budget nitrogen from alternative sources

Participant trials

- Construction of recycle pits
- Install new fertiliser box
- Upgraded technology to vary the rate of nitrogen applied
- New tractor with GPS
- Installation of cameras on planter and tractor for more efficient distribution of billets
- Install press wheels behind discs on fertiliser box to seal fertiliser
Relationship with fertiliser suppliers

- Farmers seek agronomist advice on fertiliser application
- Trailing different products as a means to reduce application
- Farmers are required to provide records of fertiliser purchase

Where to from here

- Planning a repeated tender design
- Farmers will have multiple rounds to place a bid
- Apply lessons learned from Wet Tropics and Burdekin
- Continued consultation to inform adaptive management
Reef Trust

− Seeking new projects ideas for future phases
  − Align with principles for investment
  − Will be considered by Reef 2050 Independent Expert Panel

− Partnership projects / co-investment models are attractive