

Department of Water and Environmental Regulation

Department of Primary Industries and Regional Development

### Bridging the gap between soil testing and true practice change for improved fertiliser management

Revitalising Geographe Waterways

Breanne Brown GeoCatch, Western Australia breanne.brown@dwer.wa.gov.au

#### Project context

- 10 years of running excellent soil testing program
- in partnership with Dept Primary Industry & Regional Devt (DPIRD)
- 420 000 hectares soil tested 51% grazing farms tested
- 80% of paddocks high P
- Surveys = high P-based fertiliser
- Knowledge approved practice change







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## What support do farmers need to change practices around fertiliser management on grazing properties?





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# Type of support tested to foster practice change





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## Methodology

- 80 farmers involved in soil testing
- 8 case study farms selected
  - for 3 years agronomic support
  - subsidised
- Test effectiveness of 1:1 support over time on practice change



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### Case study farmer #1



### Results of soil tests

SOIL NUTRIENT STATUS						
TARGET PRODUCTION: 90% of maximum						
High	Medium	High	Low			
Р	к	S	рН			

"I was actually quite surprised to see how much residual fertiliser was in the soil from previous practices, where we just threw out super every year like we have been doing forever."



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After initial session with agronomist Ross:

- Cancelled 30 tonnes order of super phosphate in March 2017
- \$\$\$
- Ordered 30 tonnes of lime to boost pH



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## Timing very important -the tendency to revert to the old way was when 1:1 support was critical



🎁 Thesaurus.plus



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#### Subsidies – try before you buy

For \$300 farmers could access: \$5000\* worth of soil sampling, lab analysis & mapping

\$2000\* worth of tissue testing

\$3000\* worth of 1:1 support

\*indicative total amounts per case study farmer



Source: stock.adobe.com

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## Benefits – for Ross

 Cattle live weights up by 50kg entering feedlot

• Less spend on feed

• \$41 000 increase in profit



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### Benefits – for water quality

(Preliminary findings)

	Farms (n)	P applied Before (total kg)	P applied After (total kg)	Reduction
Case study farms	Q	21 776	14 667	220/
Other Farms	0	21,770	14,007	5576
(after 12 months)	12	25,290	22,057	13%
Case study farms (after 3 years)	8	21,776	12,392	43%

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## Learnings for future extension

- Knowledge alone is not enough
- Confidence to change practices improved with extra support over time
- 1:1 model is expensive is it better? (longitudinal study required)



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1:1 agronomic support over time, and at critical times, can start bridging the gap to true practice change around fertiliser management on grazing farms



By Frits Ahlefeldt

Source: starcana.com

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## Thank you



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