



CarbonLink



On-ground experience of
carbon farming in other states

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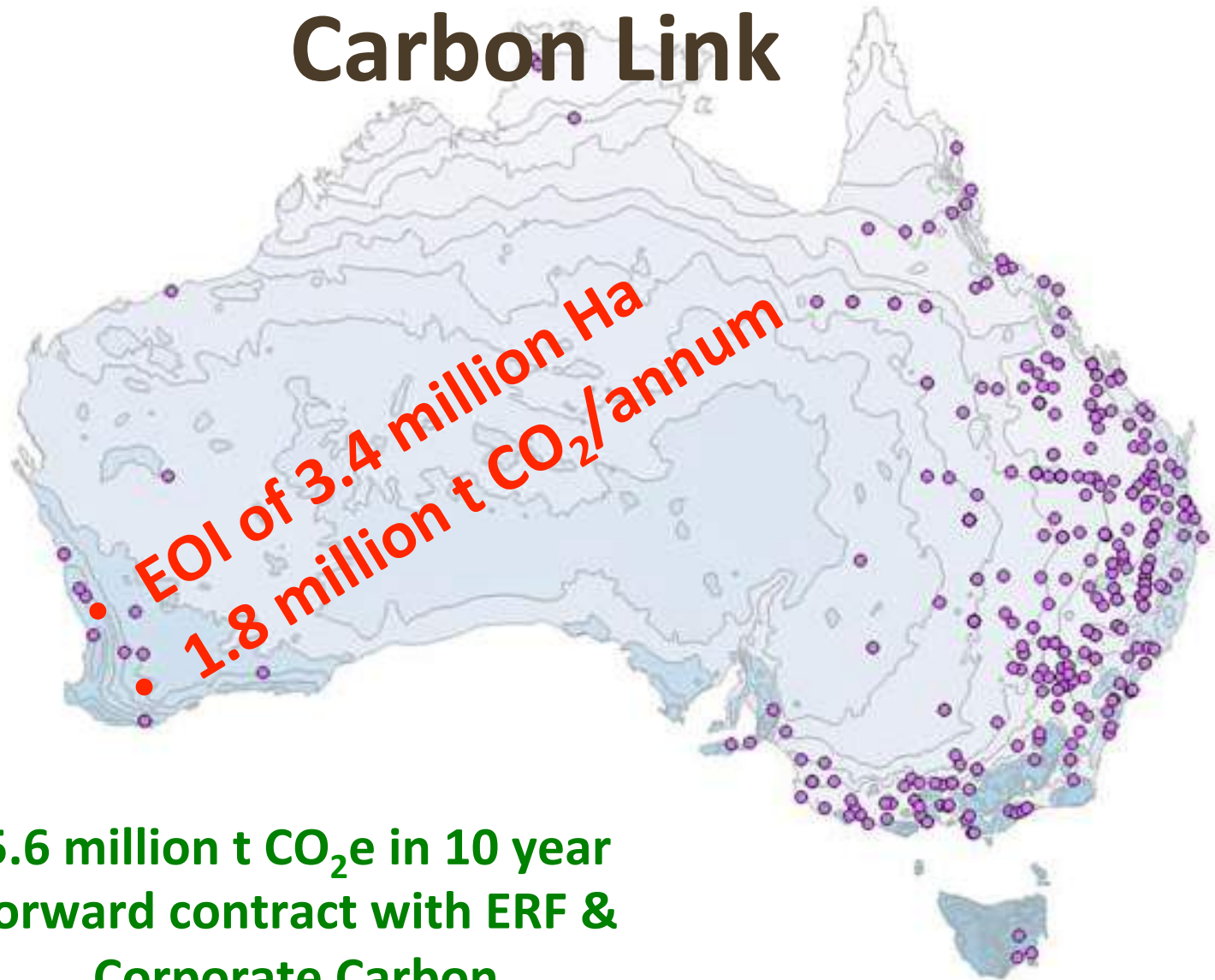
**“A Nation that destroys its
SOIL,
Destroys Itself.”**

Franklin Roosevelt



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Topics to cover

What is a project worth?

How do you make this happen?

What has to change for you?

Managing Risk

Topics to Cover

What is a Carbon Project worth?

4 Key Drivers of Return

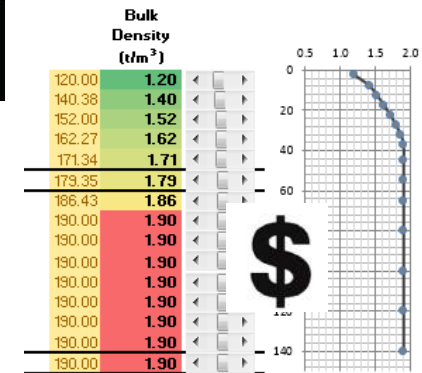
1. Sequestration rate



2. Price of carbon



3. Cost of measurement



4. Scale of project



Accurate Measurement

	(Soil Organic Carbon t/ha (0 - 30cm))			
	Random 1 Bulk Density	Random Average Bulk D	Random Individual Bulk D	Stratified Random + Sensors
Mean	23.25	24.63	23.99	24.49
Variance	18.25	28.23	11.02	0.11
SE	4.27	5.31	3.32	0.33

Viscarra-Rossel 2013. Internal Report

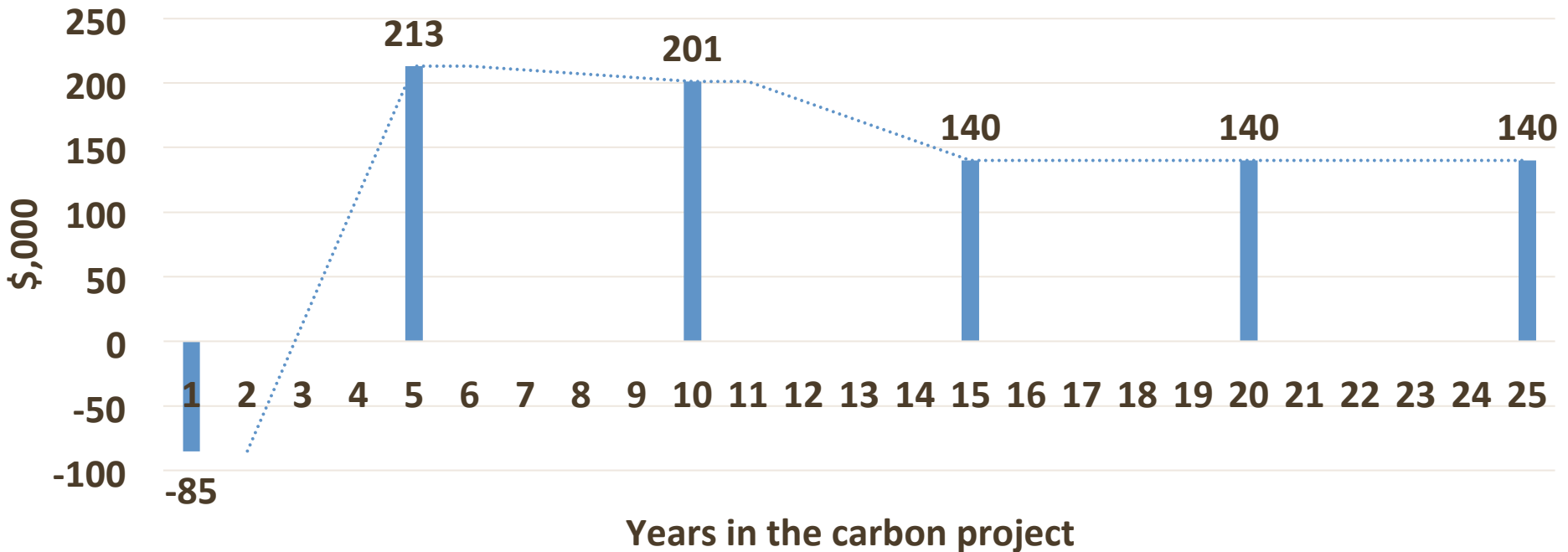
Cashflow

(0.5 tSOC/ha/year)

4000ha @ \$10/t and 25% buffer

Lumpy

EBIT for the soil carbon project



NPV \$370,403

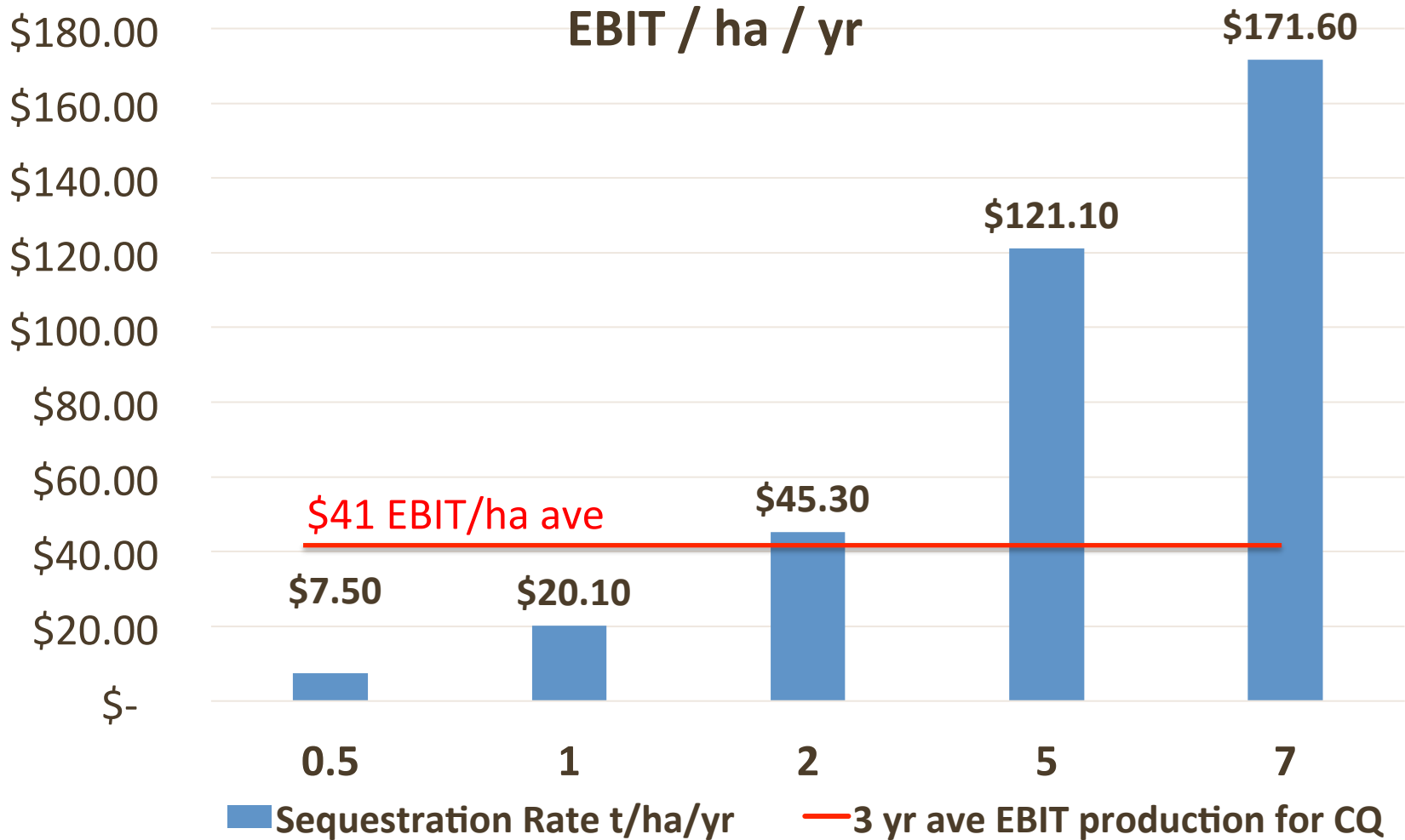
Annual Average ROI 15%

Based on Constant price and Constant costs @ Conservative Rates



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Business Case



Economic Benefits

- **20-30% increase in production EBIT**
- **30-50% IRR on Setup cost**
- **20-40% Return on Investment in Baseline**

Productivity Benefits

- Improved soil fertility
- Increased carrying capacity
- Increased water holding capacity
- Enterprise risk hedge
- Management of price and drought risk

Topic to Cover

How can this be achieved?

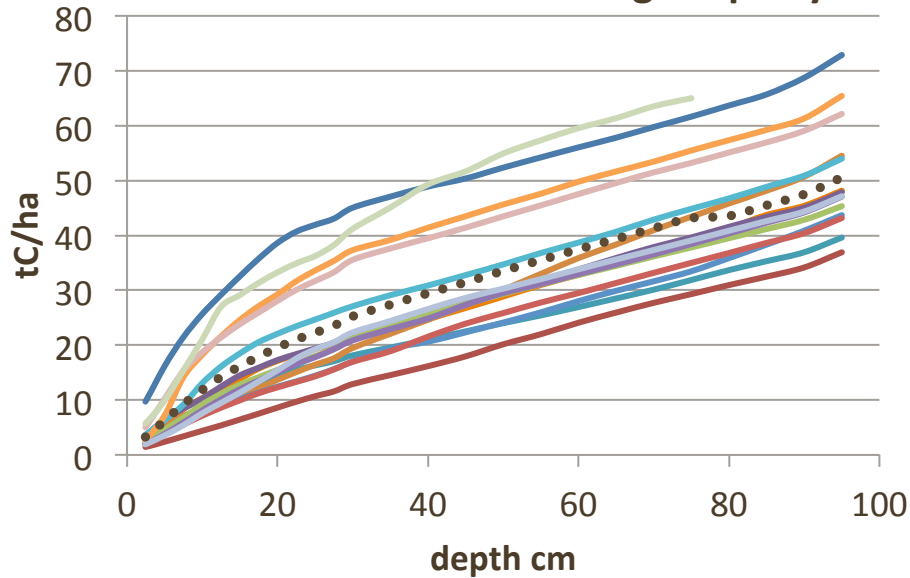
Central Queensland trial – May 2016

Average SOC difference = 9t/ha

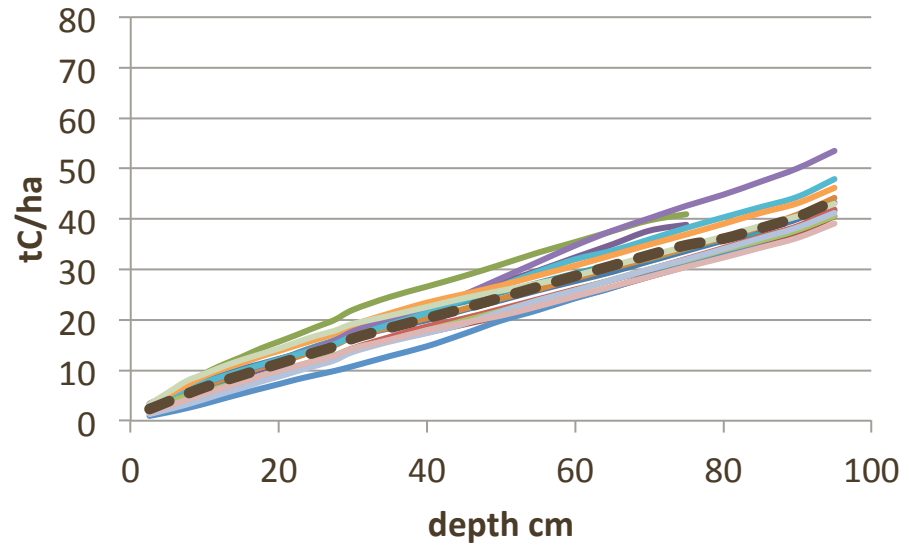
0.64t/ha/yr increase in SOC

14 years

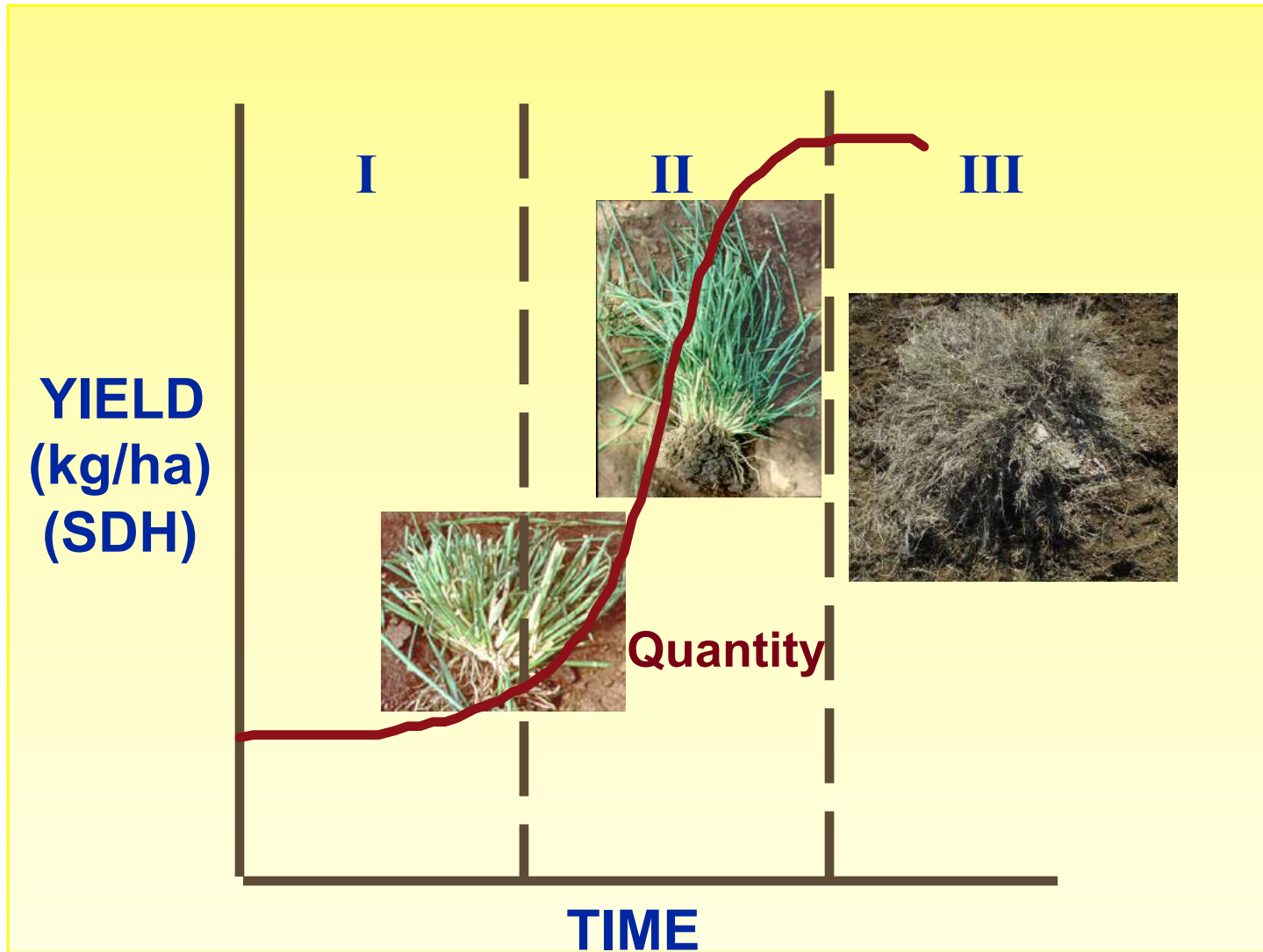
Timed Controlled Grazing Property



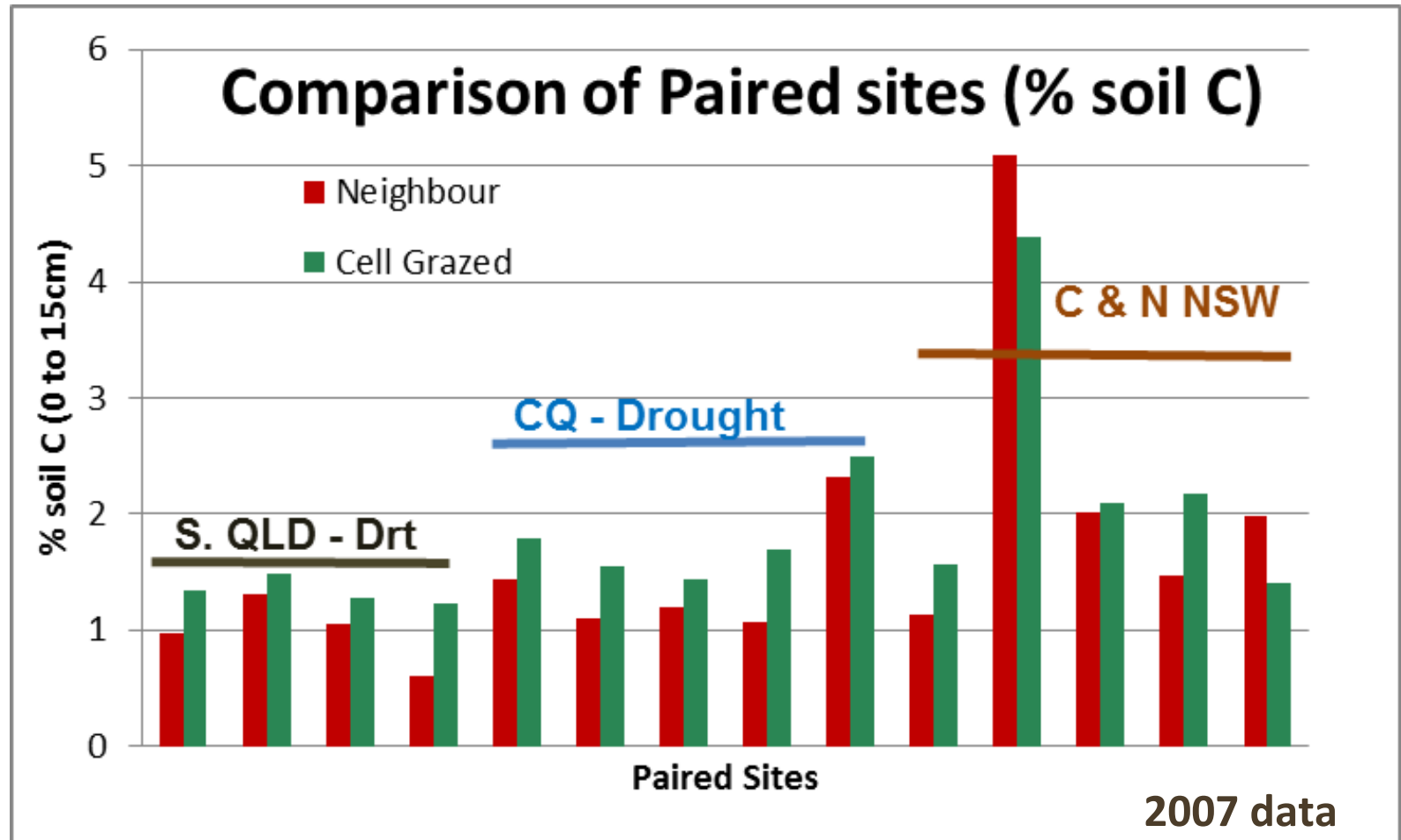
Set Stocked Property



Perennial Growth Curve



What has been achieved?



What does it look like?

Soil



What does it look like?

Plants

Overgrazed Cocksfoot



Well Grazed Cocksfoot



Topic to Cover

What needs to change?

What has to be changed?

Very Little

- Stock Management is the same
- Pasture management is the same
- Records are the same

Stock and Pasture management Regenerative Grazing Management Principles

1. PLAN, MONITOR & MANAGE GRAZING

2. PLANTS NEED ADEQUATE REST

3. MATCH STOCKING RATE to CARRYING CAPACITY

4. MANAGE LIVESTOCK EFFECTIVELY

5. MAXIMUM STOCK DENSITY for MINIMUM TIME

6. MANAGE for BIODIVERSITY

What has to changed

Very Little

- Stock Management is the same
- Pasture management is the same
- Records are the same

Changes

- Every 5 years carbon measurements
- 6 monthly check in with Carbon Link / Consultant to confirm compliance
- Support and Advice on Catalytic inputs and drivers for sequestration

Topic to Cover

Managing Risk?

HOW can the RISKS be mitigated?

Permanence

- Buffer Pools
- Not counting labile Carbon
- Modelling
- Monitoring (Satellite)

Management Ability

- Catalytic Inputs
- Good grazing management

Fire, Drought

- Buffer Pools
- Not counting labile carbon

Supply

- Forward contracts
- No risk of reversal if doing a pasture project which stays in pasture.

In summary

Large economic and production benefits

Huge potential to increase sequestration rate

Little change to current management

Most of the risks have been mitigated

How do you get started?

- **Grazing Management**
- **Record keeping**



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