

PLANNING TO BE PROFITABLE IN 2011

By: Rob Sands



INTRODUCTION

- Surviving your Bank Review
- Managing your Inputs
- Enterprise Profitability

Surviving your Bank Review

- In 2011 we will see some lenders refuse to increase current overdraft limits or not offer the full amount requested.
- Be Proactive and not reactive.
- Keep the Bank informed NOW. Don't wait until March next year.
- Start with a pre harvest budget update.

Factors concerning your Bank

- Equity % - Net Debt
- Net Debt to income
- Security Ratio
- Historical Performance
- **MANAGEMENT ABILITY and the PLAN for 2011**

Impress your Financier

- Be Organised
- Have a clear plan and future direction
- Know your enterprise margins.
- Let them know how you intend to turn your position around.
- Appear optimistic and focused (to a point!)
- Drive the discussions, don't just agree with everything the bank manager says
- Present to them information prepared from an independent source, usually a Consultant.

Managing Seasonal Finance

- Cashflow timings
- Cropping Percentage
- Cropping Costs
- Personal expenses
- Machinery payments & purchases
- Fixed Costs
- Debt repayments & Interest rates
- Off-farm asset's

Cashflow Timings

- Defer Expenses and bring forward income.
 1. Negotiate with suppliers now to see if they are willing to delay 2011 input payments to Harvest 2011. Talking mainly fertiliser and chemicals.
 2. Pre-order inputs but only pay as you pick them up.
 3. Consider using credit cards to your advantage but stay within the interest free period. Only 4-6 week relief.
 4. Sell produce when it is ready. Don't try and pick the market.
 5. Consider Cash or Harvest loans with a high drawdown percentage for the **2010 Harvest. Cash is King.**

Cropping v Livestock

- You may need to adjust your mix to stay under the overdraft limit.
- Livestock obviously incur less upfront expenses.
- If you have a genuinely profitable sheep enterprise it can help alleviate short term cashflow issues
- For most, cropping will still generate the best return, so reducing it too much can result in longer term financial problems
- Given value of sheep could be sold to help fund the cropping program. Buy back in a few years time if need be.

Cropping Costs

- Talk about in more detail with Managing Inputs.
- Adjust your rotation.
- Strategic use of fertiliser and chemical. Talk to your Consultant/Agronomics – NOT THE FERTILISER COMPANY OR CHEMICAL REP.
- Consider each paddock on a case by case scenario. Target the low input, low risk paddocks for 2011.
- Don't expect the bank to look favourably upon your business if you make no attempt to become more productive or efficient.

Personal Expenses

- Critical overview of this area. Are you high or low compared to our benchmark of 10% of calculated farm receipts.
- Reduce if possible but don't go overboard.
- Holiday is essential. IT IS NOT A LUXURY.
- Best to delay the ski boat though (does not present well).
- Consider the opportunity of earning off farm income.

Machinery Payments & Purchases

- Delay non essential machinery upgrades or modifications. If there is no immediate benefit delay.
- Buy second hand instead of new.
- Consider re-financing existing machinery or paying interest only for 2011.

Fixed Costs

- Are harder to reduce but critical overview is still required.
- Are your insurers, accountant, consultant etc providing the best service at the best price?
- Don't be afraid to get quotes and change if required.
- Many shires allow rates to be paid in installments.

Debt Re financing & Interest Rates

- Approach the Bank about deferring term loan principal repayments.
- Seek a better deal on interest rates and fees from your bank manager. They are certainly negotiable.
- If dissatisfied with the bank answers consider refinancing with another financier BUT BEAR IN MIND IN THIS ENVIRONMENT THIS WILL BE DIFFICULT UNLESS YOU ARE IN A REASONABLE POSITION.

Off Farm Assets

- To cash in or not to cash in?
- Consider the return on investment of the farm v the off farm property.
- These investments are good to have but maybe this year is the year to cash them in?
- Look beyond just this year. Often these are used for more than just investment. i.e. Retirement house, part of succession plan. Think about the long term consequences of liquidating these assets.

Surviving the Bank Review

- **MAIN MESSAGE**
- **BE PROACTIVE AND START PREPARING A PLAN FOR 2011 BEFORE HARVEST 2010.**

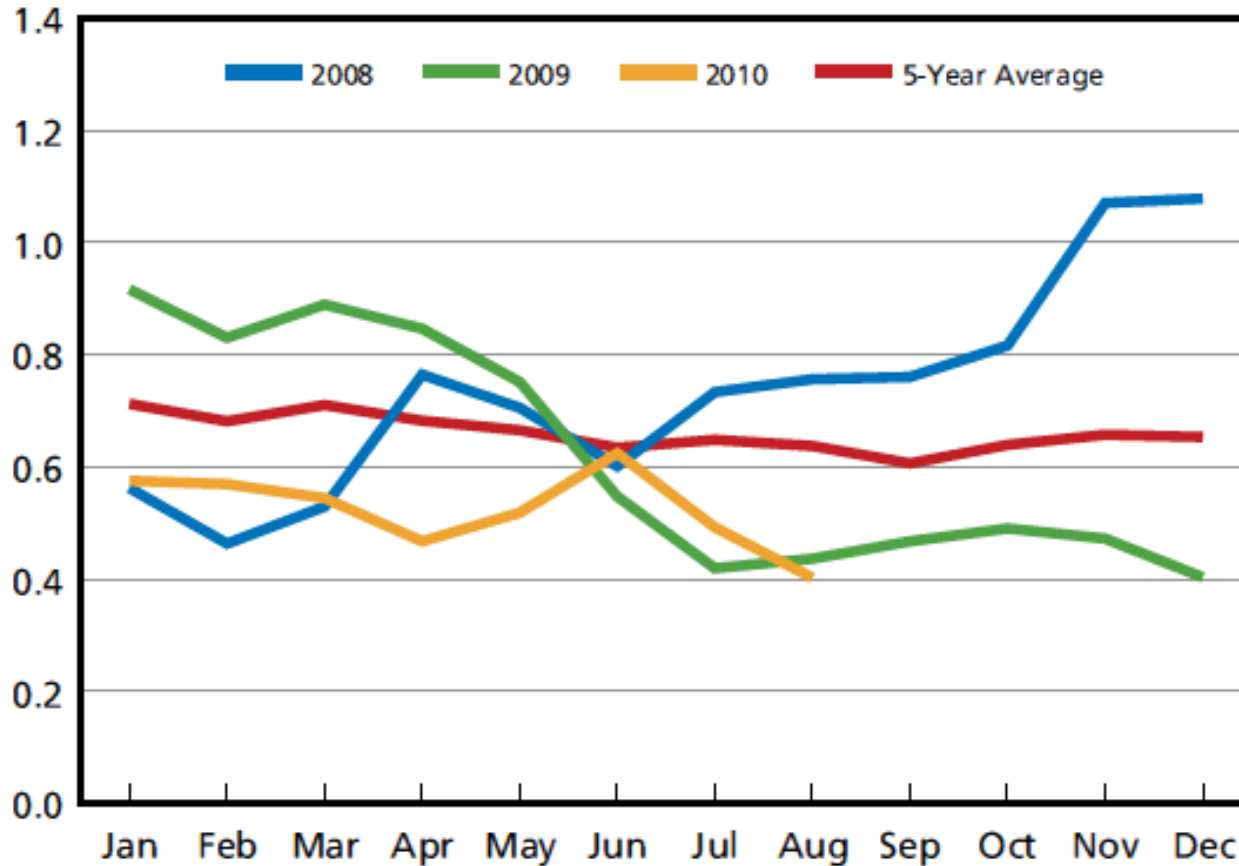
Managing Inputs

- Essential part of the 2011 plan
- Concentrate on Fertiliser & Chemical.

Fertiliser Prices

US Producers' DAP Ending Inventory

Million Short Tons Product

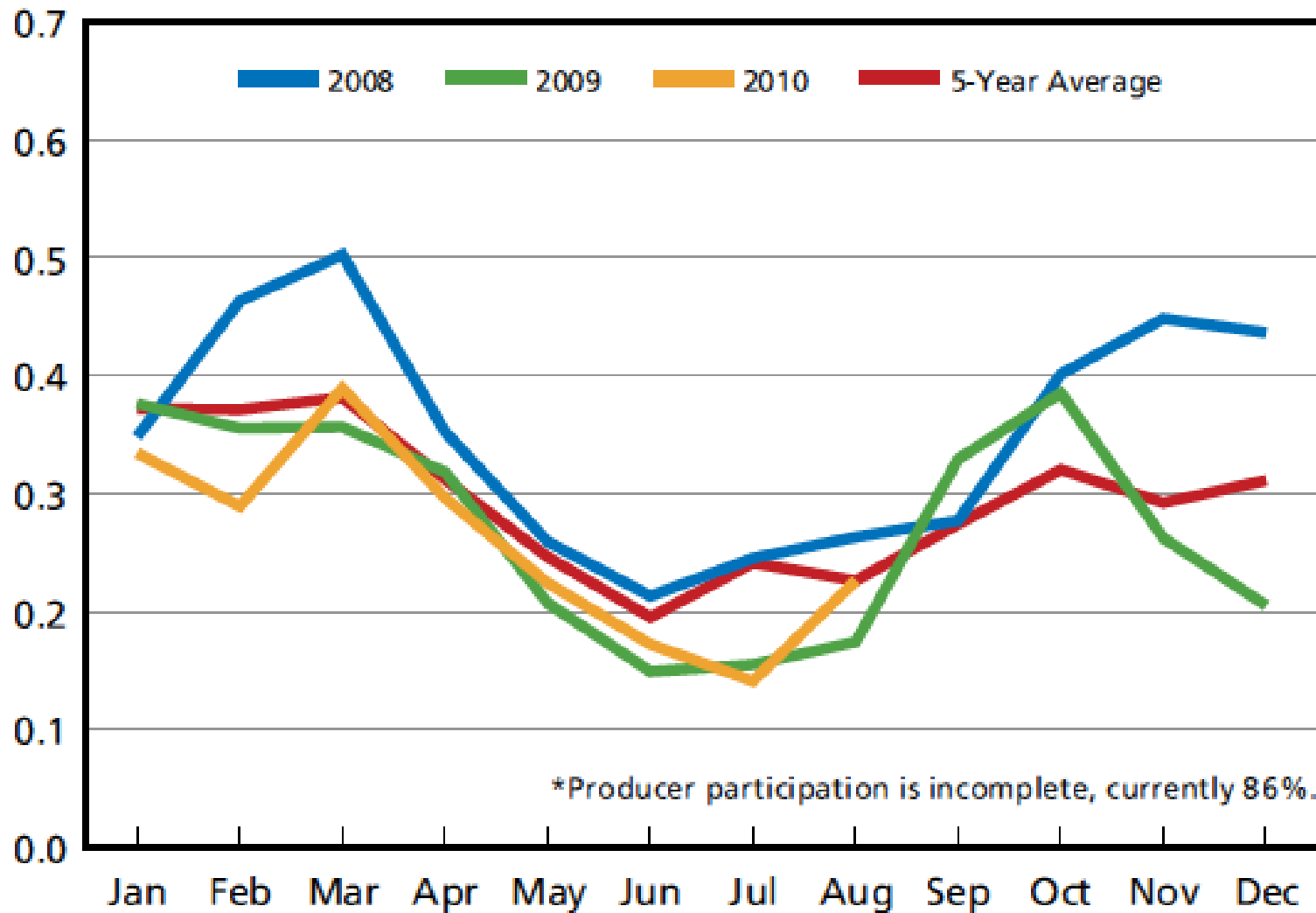


Source: TFI

August ending inventory was down by 90,000 tons from the previous month and 37% below the previous 5-Year Average

US Producers' Urea Ending Inventory*

Million Short Tons Product

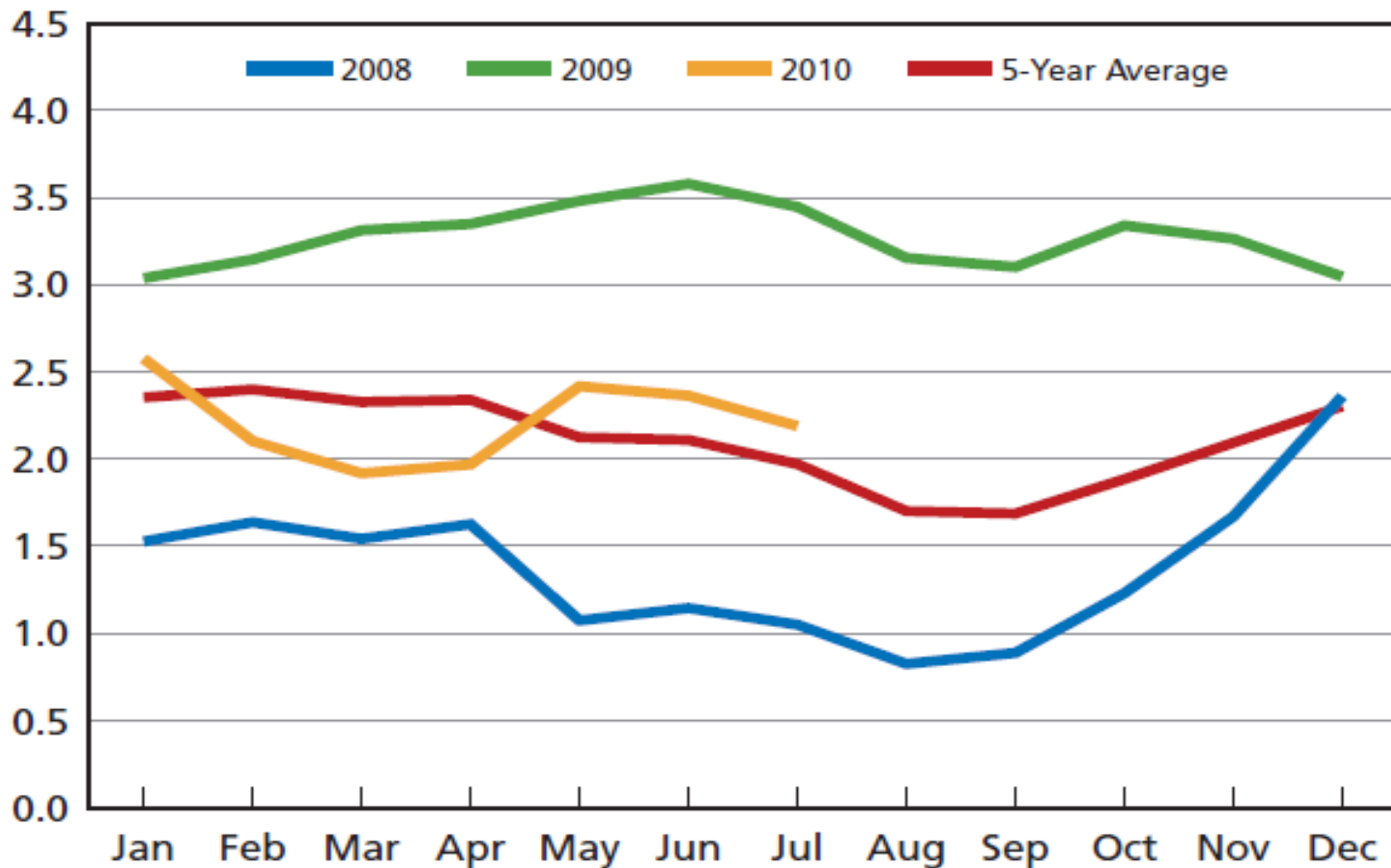


Source: TFI

August ending inventory was up by 85,000 tons from the previous month and the same as the previous 5-Year Average

North American Producers' Potash Ending Inventory

Million Metric Tonnes Product

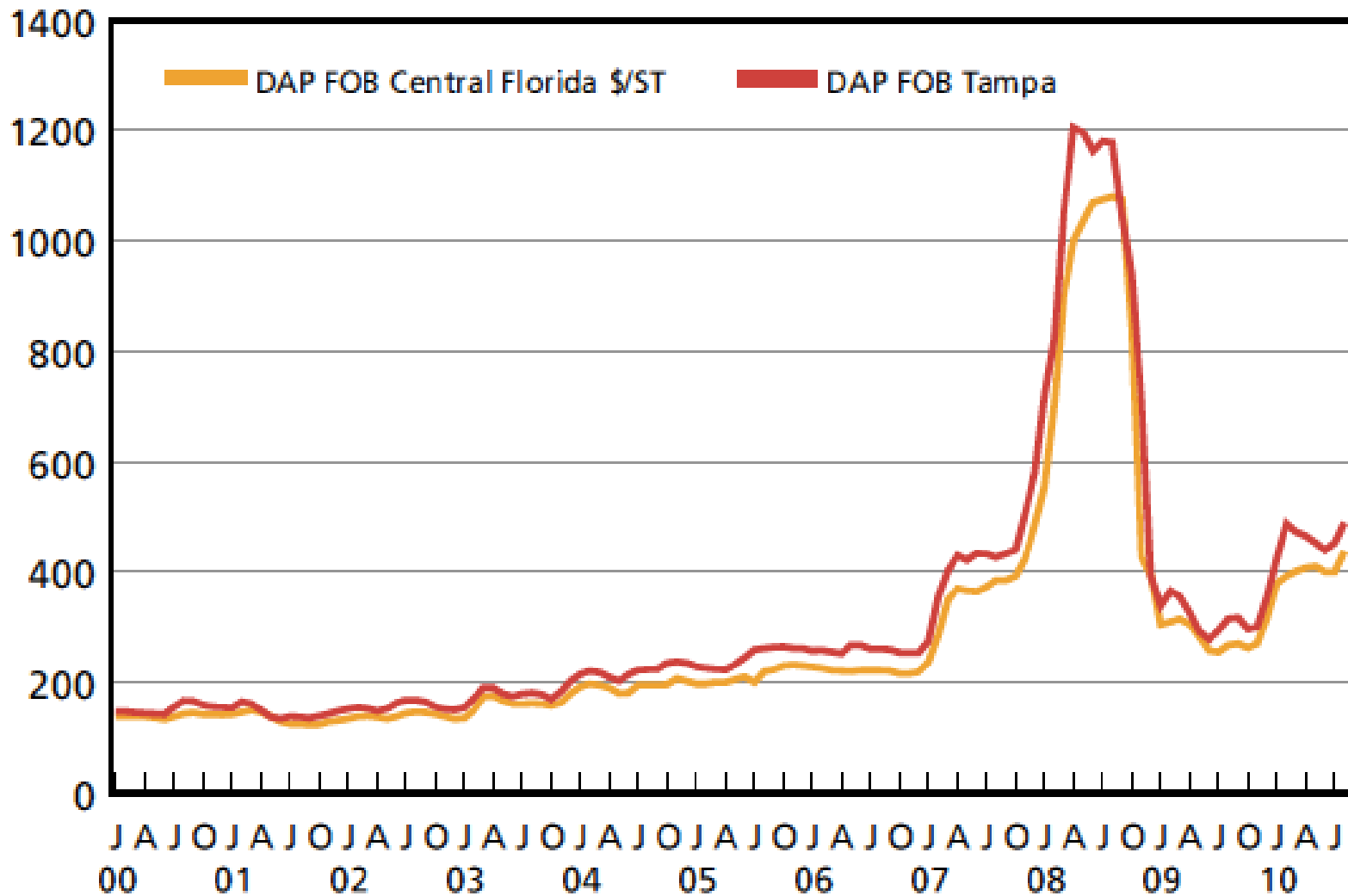


July ending inventory was down by 174,000 tonnes KCI from the previous month and 11% above the previous 5-Year Average

Source: TFI (IPNI data) and PotashCorp

DAP (Spot)

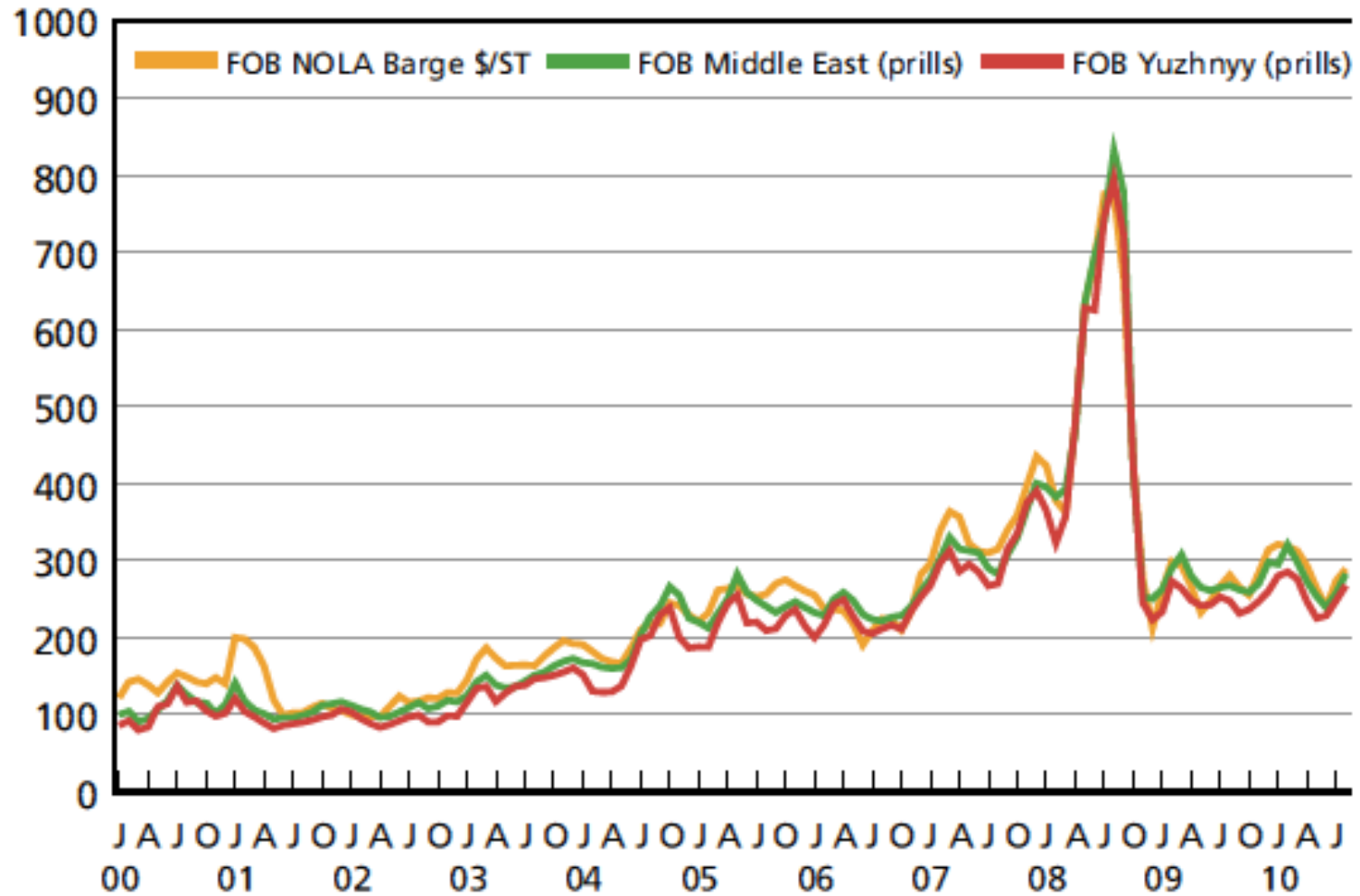
\$US/MT



Source: Fertecon

Urea (Spot)

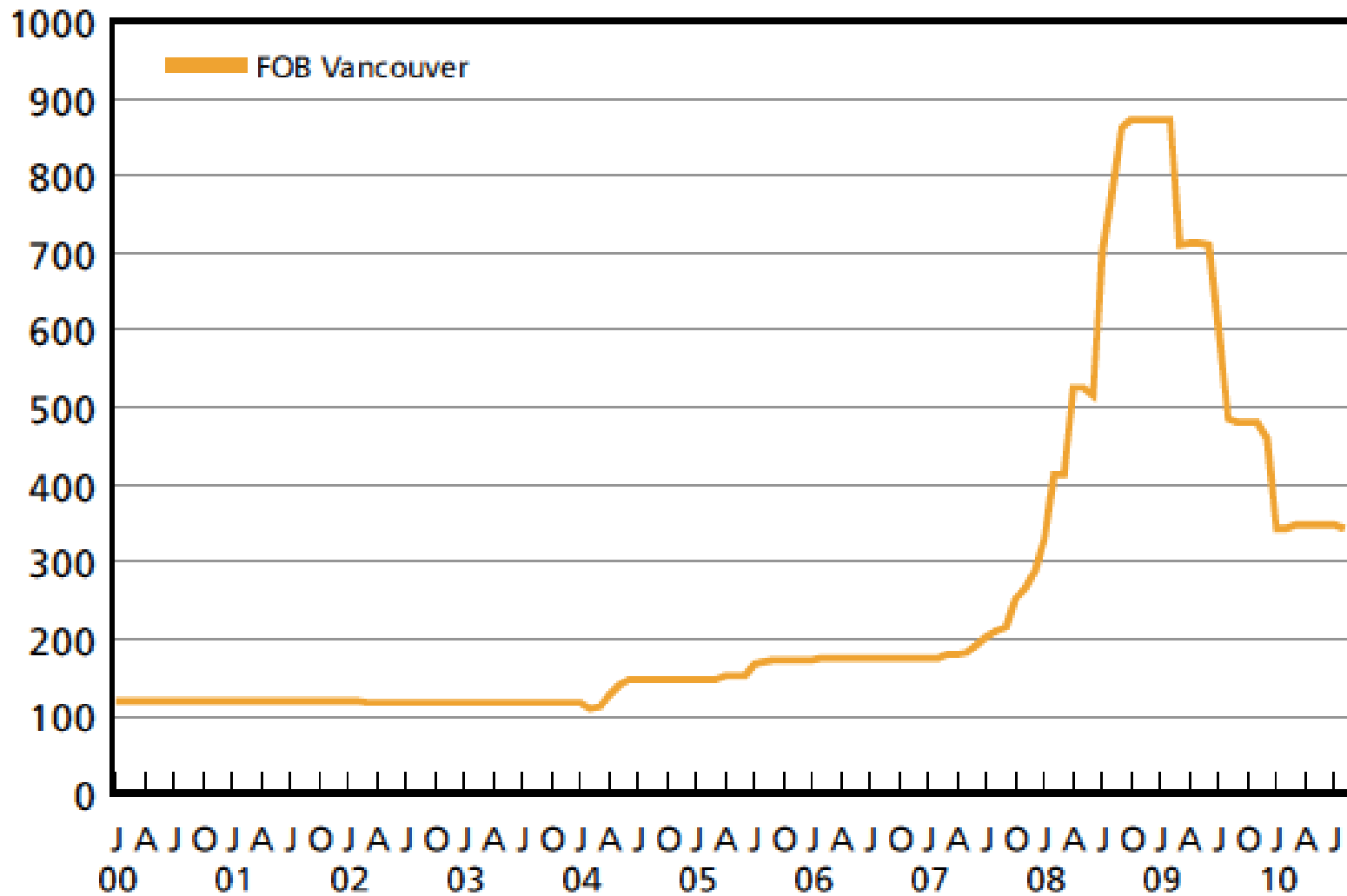
\$US/MT



Source: Fertecon

KCl (Spot)

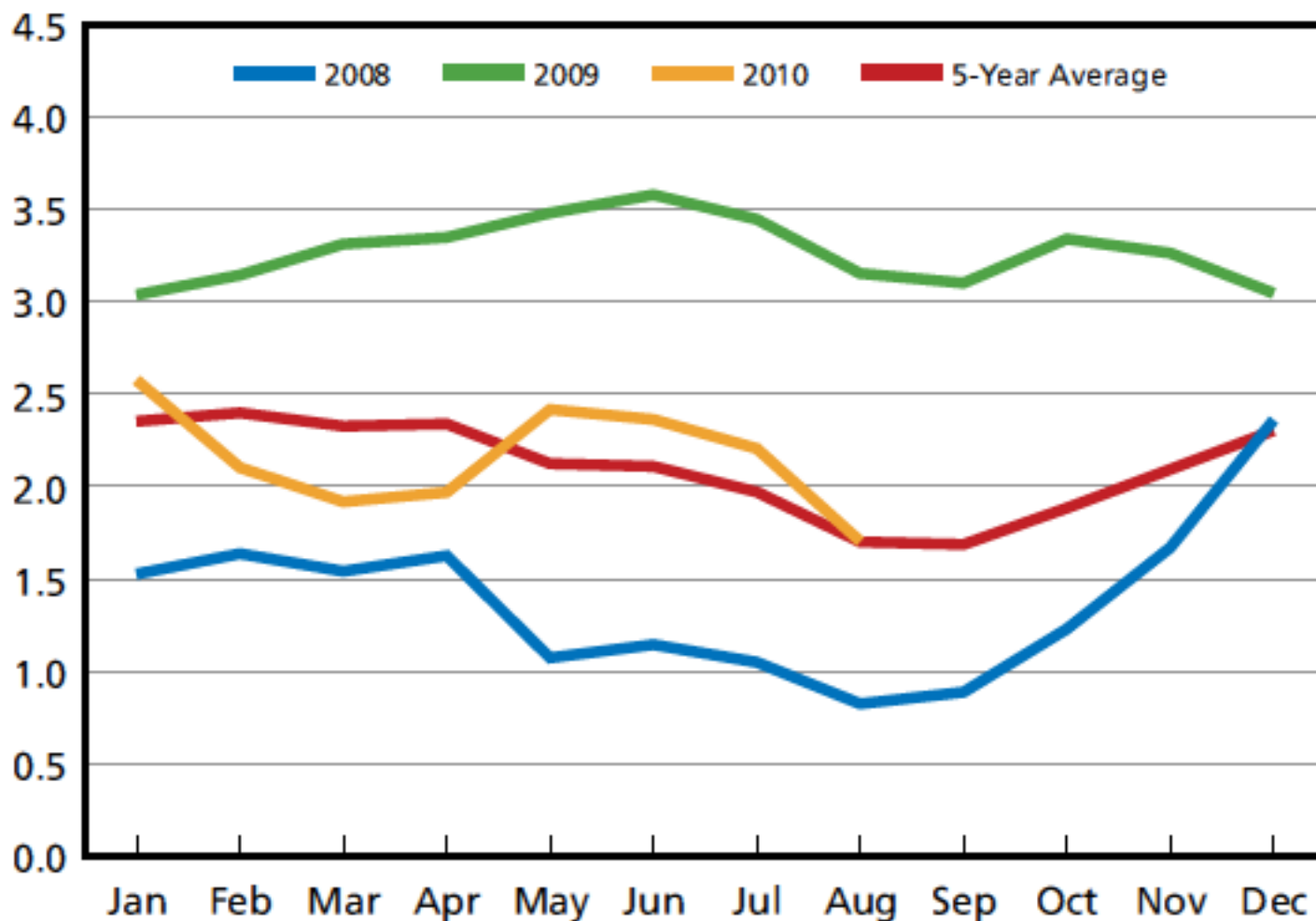
\$US/MT STD Grade



Source: Fertecon

North American Producers' Potash Ending Inventory

Million Metric Tonnes Product



August ending inventory was down by 502,000 tonnes KCI from the previous month and the same as the previous 5-Year Average

Source: TFI (IPNI data) and PotashCorp

World DAP Price Table 1

Forecast Scenarios									Current
									US \$ Profit Level
	03/04	04/05	05/06	06/07	07/08	08/09	9/10	7 Year Average	10/11
DAP Tampa US \$	\$200	\$220	\$245	\$400	\$1,000	\$800	\$300	\$452	\$475
US Dollar	0.77	0.77	0.75	0.78	0.88	0.67	0.92	0.79	0.92
FOB Aus \$	\$260	\$286	\$327	\$513	\$1,136	\$1,194	\$326	\$577	\$516
Freight Aus \$	\$100	\$100	\$50	\$80	\$200	\$20	\$30	\$83	\$33
Other Costs AUD	\$15	\$16	\$17	\$18	\$19	\$20	\$20	\$18	\$20
Total Costs \$/t	\$375	\$402	\$394	\$611	\$1,355	\$1,234	\$376	\$678	\$569
DAP \$/t List Price	\$520	\$575	\$570	\$610	\$920	\$1,169	\$589	\$708	\$852
Profit \$/t	\$145	\$173	\$176	-\$1	-\$435	-\$65	\$213	\$30	\$283
Profit Margin %	39%	43%	45%	0%	-32%	-5%	57%	21%	50%
Difference to Current List Price		Current Price	\$852	Av. difference to Forward Estimates					\$137
5yr Av. of AUD Price		\$772	Av. at current Exchange Rate			\$692	24 August 2010		

World DAP Price Table 1

Forecast Scenarios	Forward Estimates					
	Low	Current	High	Low	Current	High
	Average	Average	Average	High	High	High
	10/11	10/11	10/11	10/11	10/11	10/11
DAP Tampa US \$	\$475	\$475	\$475	\$475	\$475	\$475
US Dollar	0.80	0.92	0.95	0.80	0.92	0.95
FOB Aus \$	\$594	\$516	\$500	\$594	\$516	\$500
Freight Aus \$	\$33	\$33	\$33	\$33	\$33	\$33
Other Costs AUD	\$20	\$20	\$20	\$20	\$20	\$20
Total Costs \$/t	\$647	\$569	\$553	\$647	\$569	\$553
DAP \$/t List Price	\$722	\$644	\$628	\$822	\$744	\$728
Profit \$/t	\$75	\$75	\$75	\$175	\$175	\$175
Profit Margin %	12%	13%	14%	27%	31%	32%
Difference to Current List Price	\$130	\$208	\$224	\$30	\$108	\$124

Urea Manufacture Economics	7 Year Average	Current	Forward Estimates					
		US \$	Low	Current	High	Low	Current	High
		Nat. Gas \$ Profit Level	Current Average	Current Average	Current Average	High High	High High	High High
	Average	10/11	10/11	10/11	10/11	10/11	10/11	10/11
Natural Gas Price US\$	\$6.54	\$4.80	\$4.80	\$4.80	\$4.80	\$6.00	\$6.00	\$6.00
US Dollar	0.82	0.92	0.80	0.92	0.95	0.80	0.92	0.95
Natural Gas Price MMBtu	\$8.06	\$5.22	\$6.00	\$5.22	\$5.05	\$7.50	\$6.52	\$6.32
Natural Gas (gj per tonne)	22.88	22.88	\$23	\$23	\$23	\$23	\$23	\$23
Natural Gas Cost in Urea \$/t	\$184	\$119	\$137	\$119	\$116	\$172	\$149	\$144
Fixed Costs \$/t	\$104	\$120	\$120	\$120	\$120	\$120	\$120	\$120
Total Costs \$/t	\$289	\$239	\$257	\$239	\$236	\$292	\$269	\$264
Urea Price \$/t	\$479	\$517	\$357	\$339	\$336	\$492	\$469	\$464
Profit \$/t	\$191	\$278	\$100	\$100	\$100	\$200	\$200	\$200
Profit Margin %	70%	116%	39%	42%	42%	69%	74%	76%
Difference to Current List Price		\$107	\$160	\$178	\$181	\$25	\$48	\$53

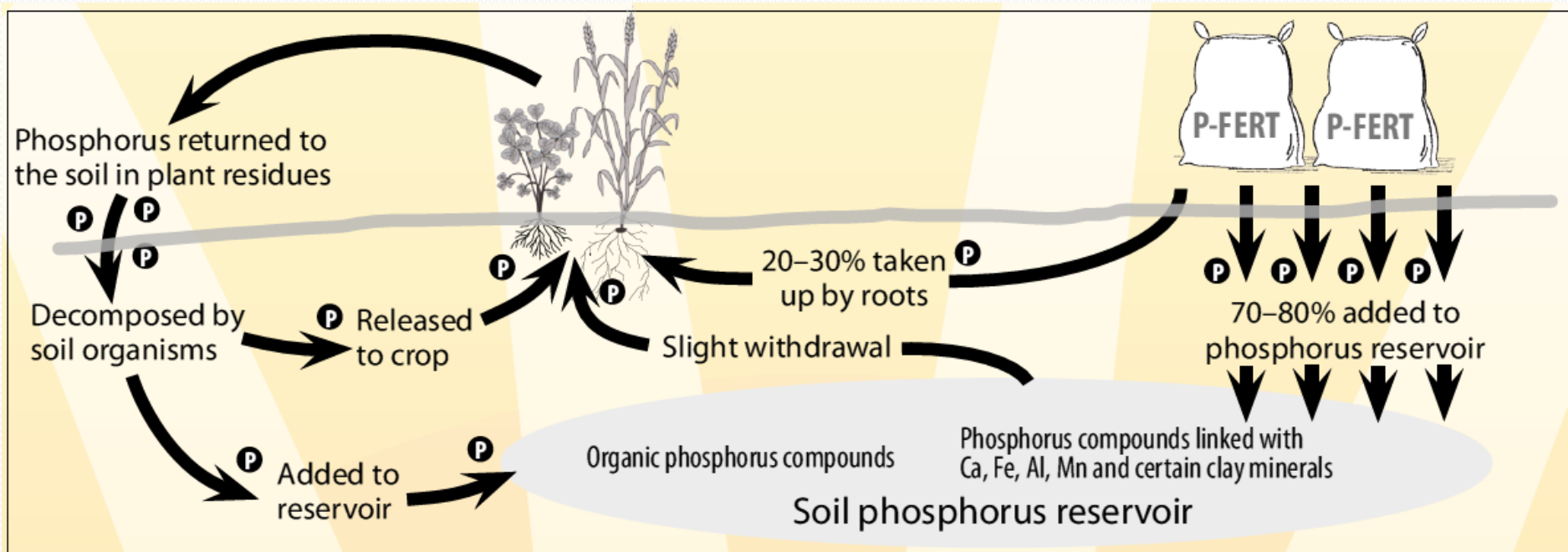
Fertiliser Pricing Recommendations

- Inventory Levels Low.
- Demand Increasing.
- Prices likely to increase.
- Current List prices have a reasonable margin built in.
- Negotiate hard with suppliers NOW. For large orders aim for \$60 - \$100/tonne below list price for DAP,MAP and \$30 - \$50/tonne for Urea.
- Don't delay: as time increases your bargaining power will diminish.

Fertiliser Mobility

- P completely immobile in soil
- N most mobile of all macro nutrients, followed by S
- K reasonably immobile, except in light sandy soils.
- Trace elements immobile in soil.

Phosphorus Cycle



How Low to go with P

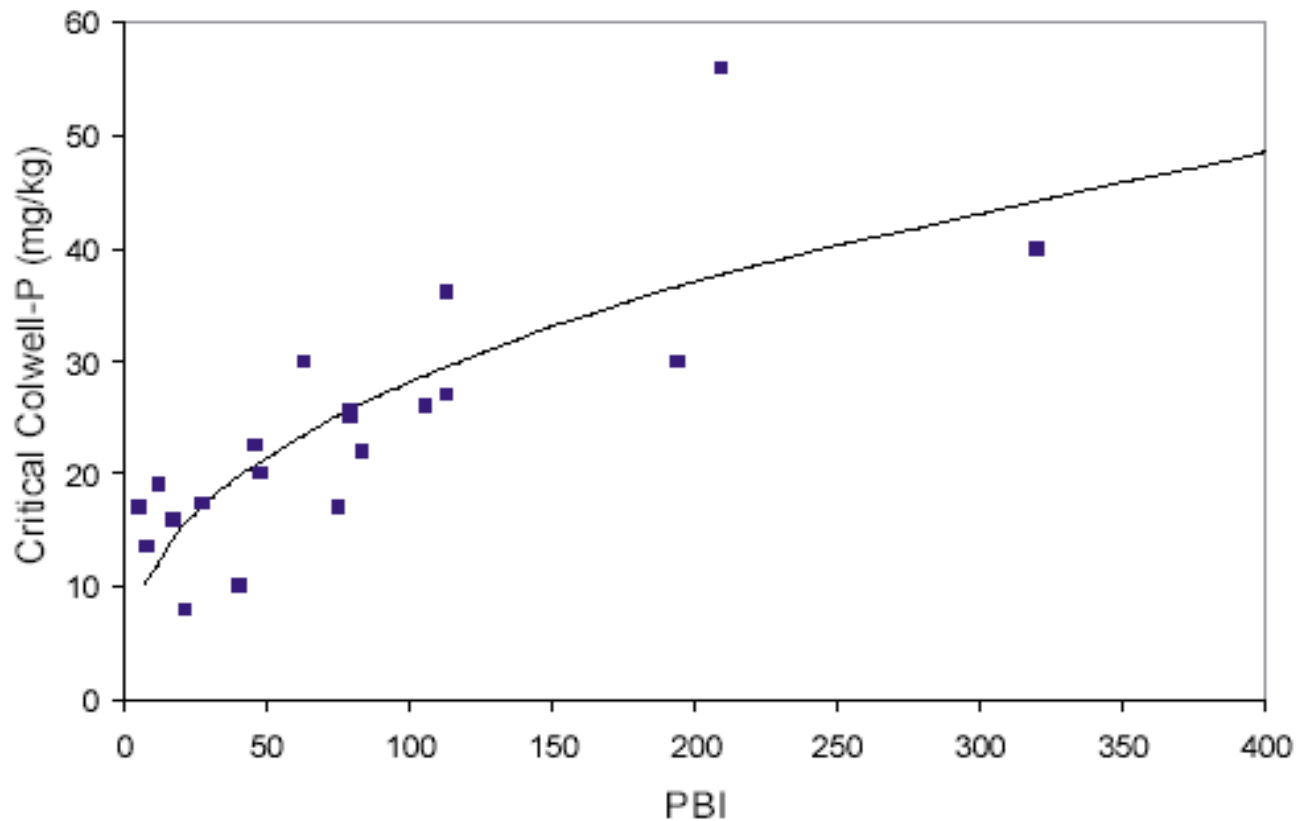


Figure 3: Relationship between PBI and the critical Colwell soil P value (0 – 10cm) determined at 90% maximum grain yield of wheat (Moody 2007).

Rules of Thumb

Phosphate Buffering Index (PBI)	Responsive (mg P/kg)	Marginal response (mg P/kg)	Non responsive (mg P/kg)
<50	<20	20-25	>25
50-100	<30	30-40	>40
100-200	<40	40-50	>50
200-300	<60	60-70	>70
300-600	<90	90-110	>110

Using Colwell extraction method (based on 0-10 cm sample)

PBI only measure that should be used

$$\text{PBI} = 152 - 154 \exp -[0.00051 (\text{reactive Al})], r^2 = 0.93$$

$$\text{PBI} = -0.013 (\text{PRI})^2 + 2.64 (\text{PRI}) + 15.05, r^2 = 0.93$$

However, the relationships was poor for reactive Fe (133 data points) and differed for each of the 2 field studies and the paddock study, so no consistent, reliable approach for converting reactive Fe to PBI values could be determined. We recommend that reactive Fe is no longer used in the region, and that only PBI is used to estimate P sorption.

Summary for P

- YOU MUST DO SOIL TEST TO DETERMINE P STATUS AND P RETENTION IN THE SOIL.
- Don't mess with Low P soils
- Don't mess with high PRI or PBI soils
- Depending on base soil level of P, PRI and Target yield look at putting on removal plus 20%.

Nitrogen

- Research from Merredin Department of Ag indicates no residual N if you have had more than 250mm of Total rainfall for the year or Wheat yield > 0.5 t/ha.
- In many cases yields and rainfall may meet this criteria. Amount of residual varied from 5 – 15 units of N.
- Soil Test will tell you what you have “at the point in time” you took the sample.
- Don't put all N up front. Split application is best.

Quick Notes on K

- K is relatively immobile in the soil and only leaches on light sandy soils
- On duplex soils the K concentration increases as you go down the soil profile
- Cereals take up most K from tillering to stem elongation so fertiliser response on duplex soils is marginal.

Potassium Responses

Exchangeable K (meq/100g)

Soil texture	light	medium	heavy
Responsive	<0.25	<0.35	<0.45
Marginal response	0.25–0.4	0.35–0.55	0.45–0.75
Non responsive	>0.4	>0.55	>0.75

Quick Notes on S

- Most WA soils have higher S levels in the subsoil, especially duplex soils.
- In WA there has only been S deficiency in sandy soils.
- In WA trials have indicated no yield response by applying S to cereals.

Sulphur Rules of Thumb

Extractable sulphur (S)

Soil sulphur benchmarks using the KCl40 method for measuring soil sulphur levels are:

Responsive

Less than 6mg/kg

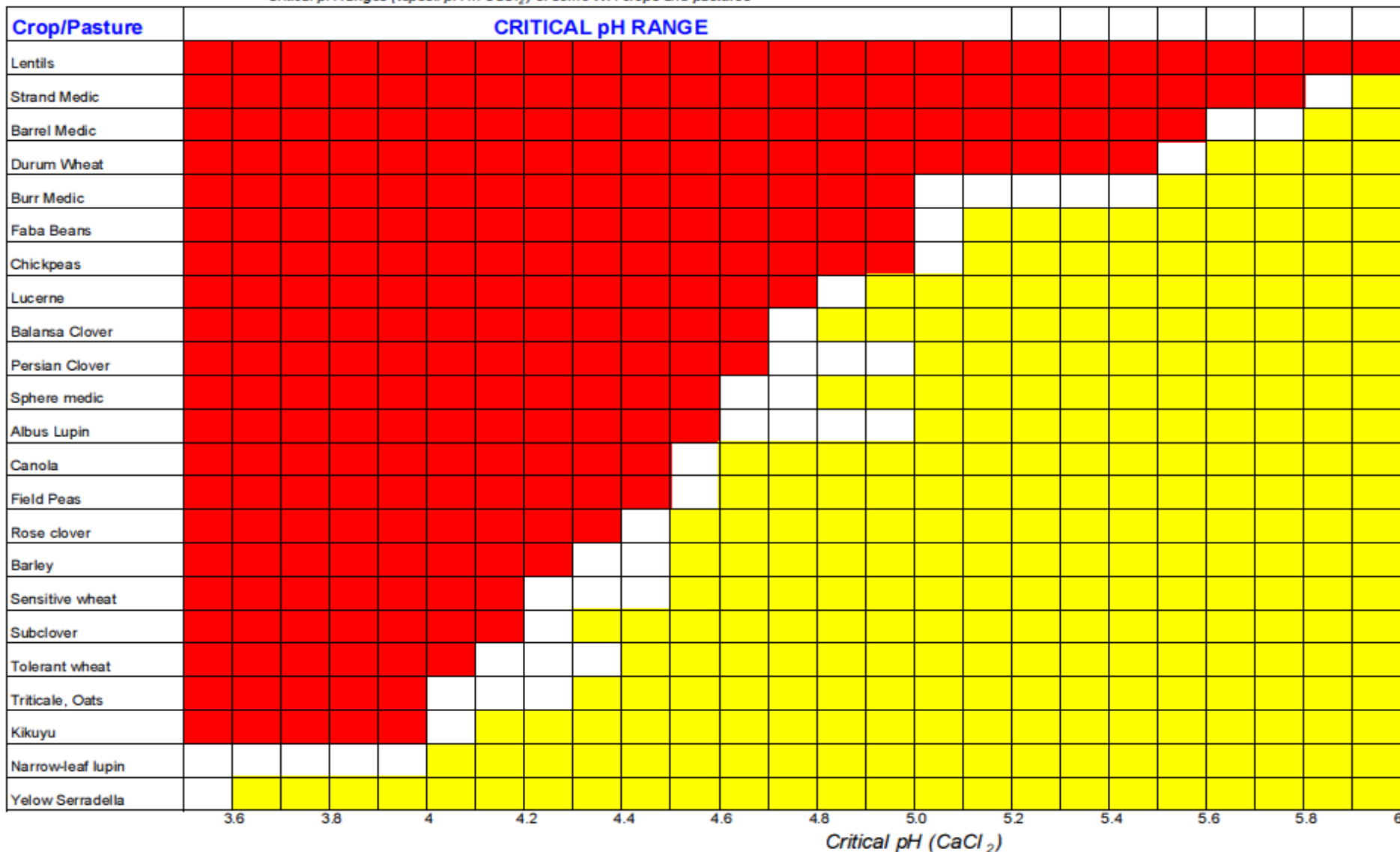
Marginal response

Between 6 and 8 mg/kg

Non responsive

Above 8 mg/kg

Critical pH ranges (topsoil pH in CaCl₂) of some WA crops and pastures



Species	Soil test level above which yields are reduced		Sensitivity
	AI (% of Cation Exchange Capacity)	0.01M CaCl2 (mg/kg)	
Lucerne Barley Medics Canola	5	2	highly sensitive
Red clover Phalaris Sub clover Wheat	10	4	sensitive
Woolly pod vetch Ryegrass Some oats Tall fescue Cocksfoot	20	8	moderately tolerant
Oats Triticale Cereal Rye Lupins	30	13	highly tolerant

Wagga Trial

Depth	pH _{Ca}	%Al ^A
(cm)		
0-10	4.13	31.0
10-20	4.22	42.6
20-30	4.57	15.6
30-40	4.87	4.7
40-50	4.96	2.3
50-60	5.02	1.9

Lime application

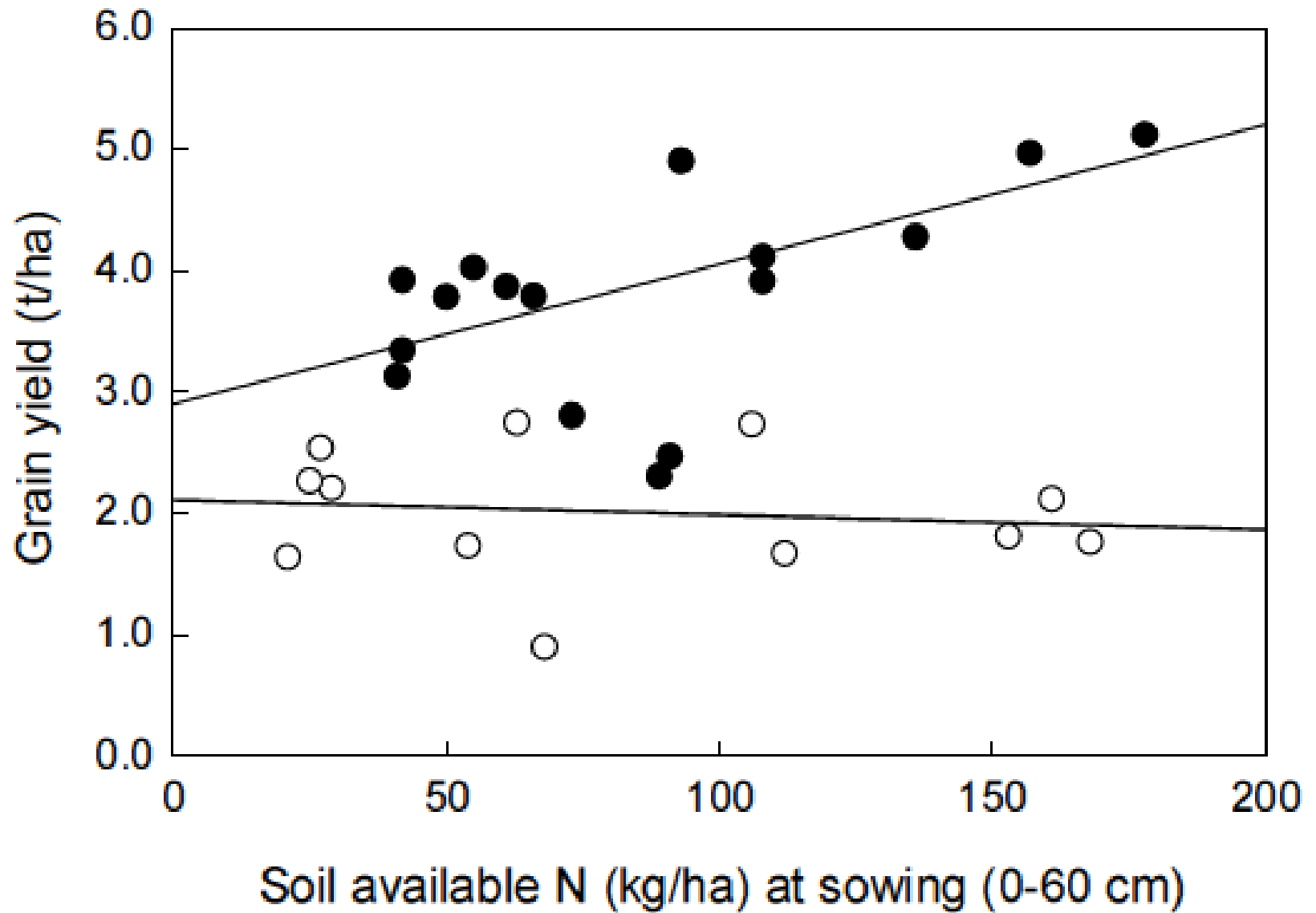
- The initial lime was incorporated into top 10 cm of soil at 3.7 t/ha in 1992, which was 1.2 t/ha higher than the commercial liming rate.
- The target was to maintain pH_{Ca} in the top 10 cm depth at 5.5 over the 6-year liming cycle.
- The maintenance lime was top-dressed at rate 1.6–1.8 t/ha every 6 years.



Wheat crops on limed (left) and unlimed treatments (right)

Table 1. Average crop responses to lime from 1992 to 2003 (excluding 1994)

Treatment	Phase	Crop	Limed treatment	Unlimed treatment	Lime responses	
			(t/ha)	(t/ha)	(t/ha)	%
AP/C	Phase 2,4,6	Wheat (1992-2003)	3.01	1.45	1.56	107
PP/C	Phase 4	Oats (1993-1996)	2.48	1.96	0.52	26
		Triticale (1997, 1999-2003)	2.77	1.88	0.89	47
		Canola (1998, 2000, 2001, 2003)	1.66	0.83	0.84	101
	Phase 5	Peas (1992-1995)	1.21	0.36	0.86	241
		Lupins (1996-2003)	1.41	1.39	0.02	1
	Phase 6	Wheat (1992-2003)	3.19	1.45	1.73	119



Fertiliser Inputs

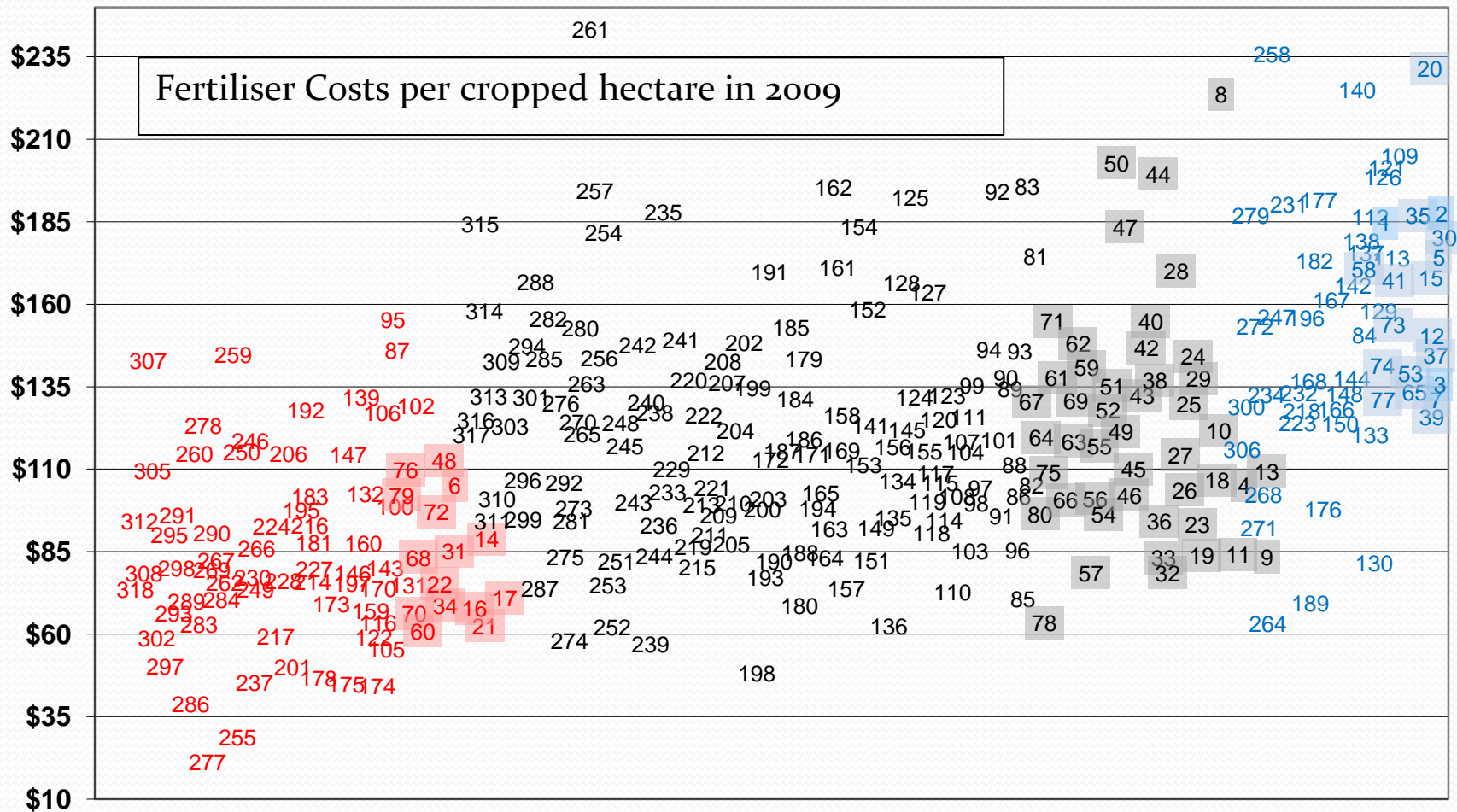


Chart 1. Low Rainfall Wheat Yields and Growing Season Rainfall

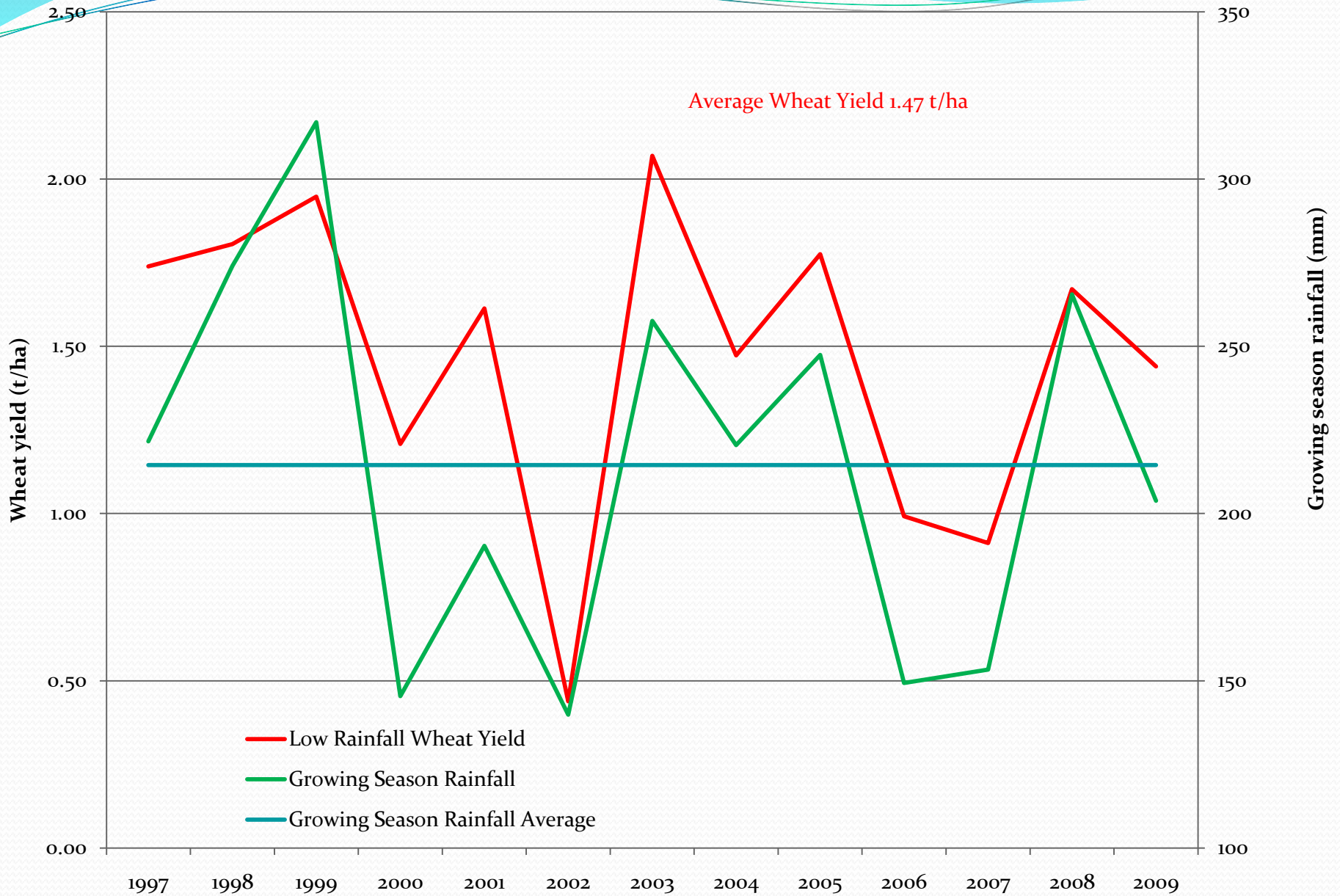
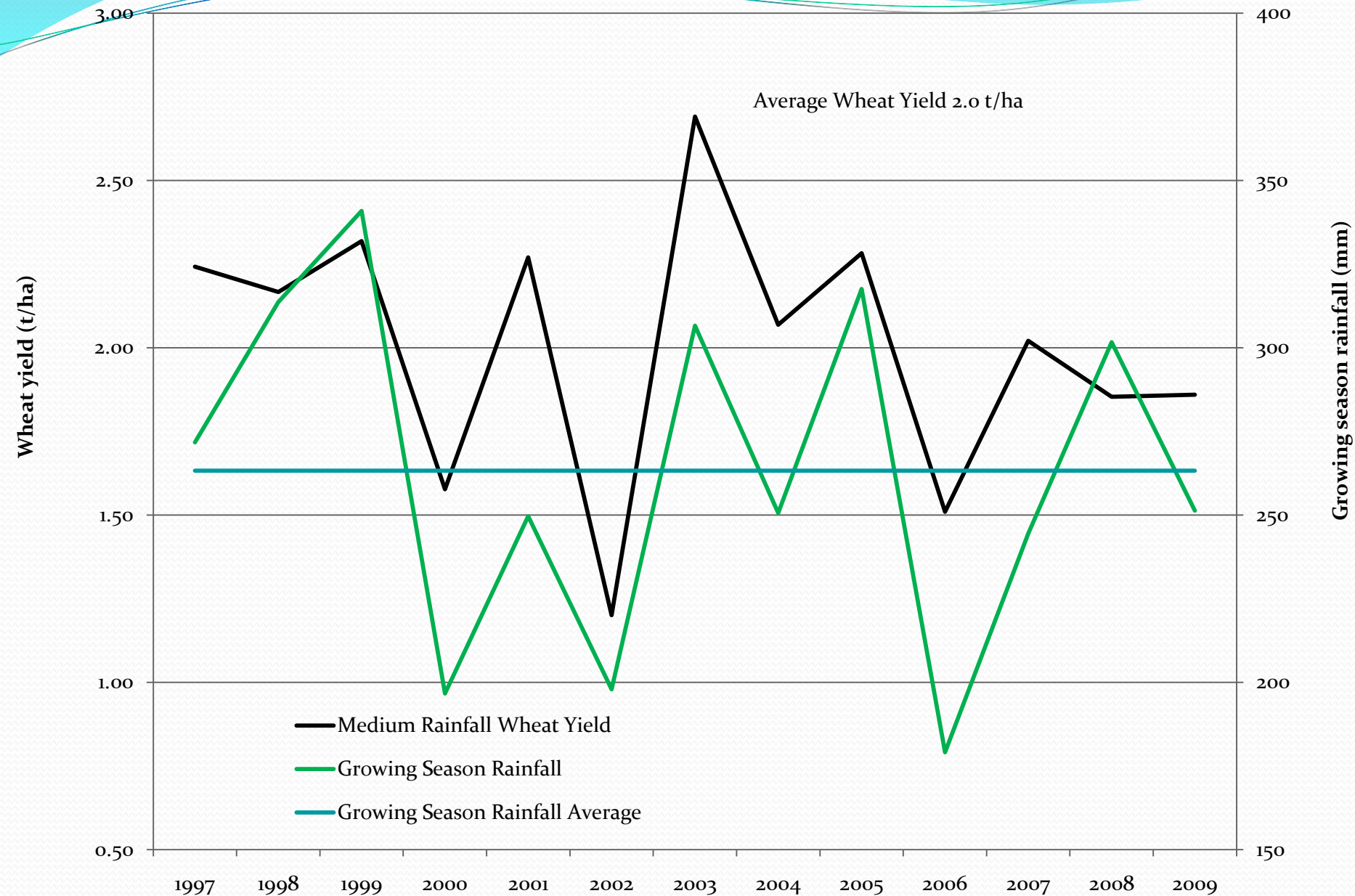


Chart 2. Medium Rainfall Wheat Yields and Growing Season Rainfall



Fertiliser & Profitability

- 5 Year average operating profit for Wheat
 - i. Low Rainfall \$29/ha
 - ii. Medium Rainfall \$75/ha
 - iii. High Rainfall \$91/ha

Using Agflow at \$777/t (12.8 units of P) the effect of increasing the P rate from 6 – 8 units per hectare is \$36/ha to \$49/ha i.e. \$13/ha increase in cost.

Fertiliser & Profitability

- If not responsive to P this can reduce your profit by
 - 45% in the Low rainfall zone
 - 17% in the Medium rainfall zone.
-
- **SMALL CHANGES IN FERTILISER RATE MAKES A LARGE DIFFERENCE TO POTENTIAL PROFIT.**

Herbicides

- Consider the cost benefit of spraying before doing so.
- Use low cost but effective options. They still exist
- Seek advice from a consultant/private agronomist rather than a company agronomist, they are more focused on your profit.
- Its not about yield, its about **PROFIT**
- Be aware of potential savings by pre-purchasing chemicals NOW for 2011.

Managing Inputs

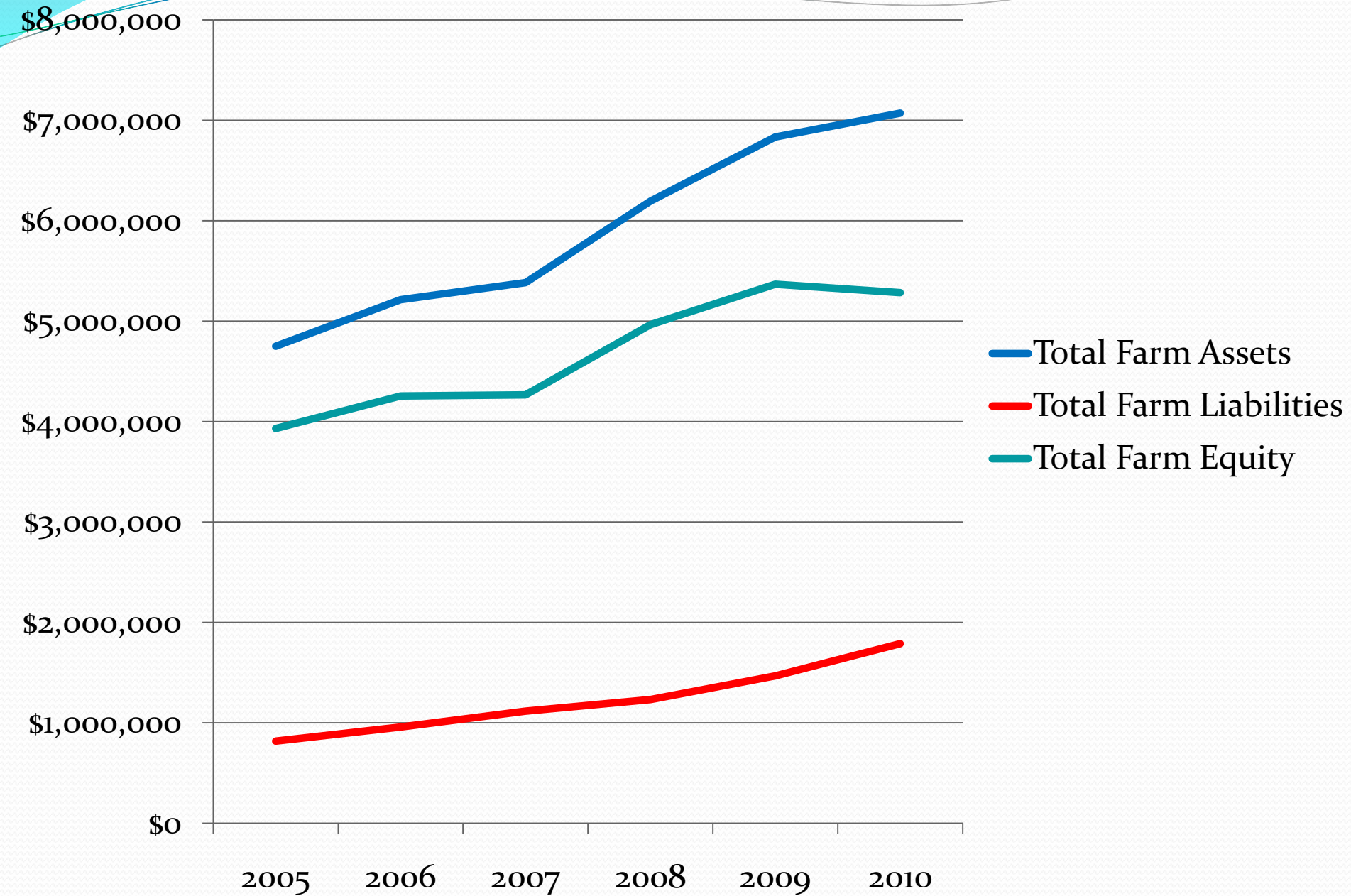
- **MAIN MESSAGES**

- Try and source fertiliser and chemical requirements now for next year.
- Fertilise for the five year average yield only.
- Consider the effect on profitability a small change in fertiliser rate has.
- Consider a more basic fertiliser.
- **MUST SOIL TEST (including some sub soil) TO DETERMINE RESIDUAL FERTILISER IN THE SOIL**

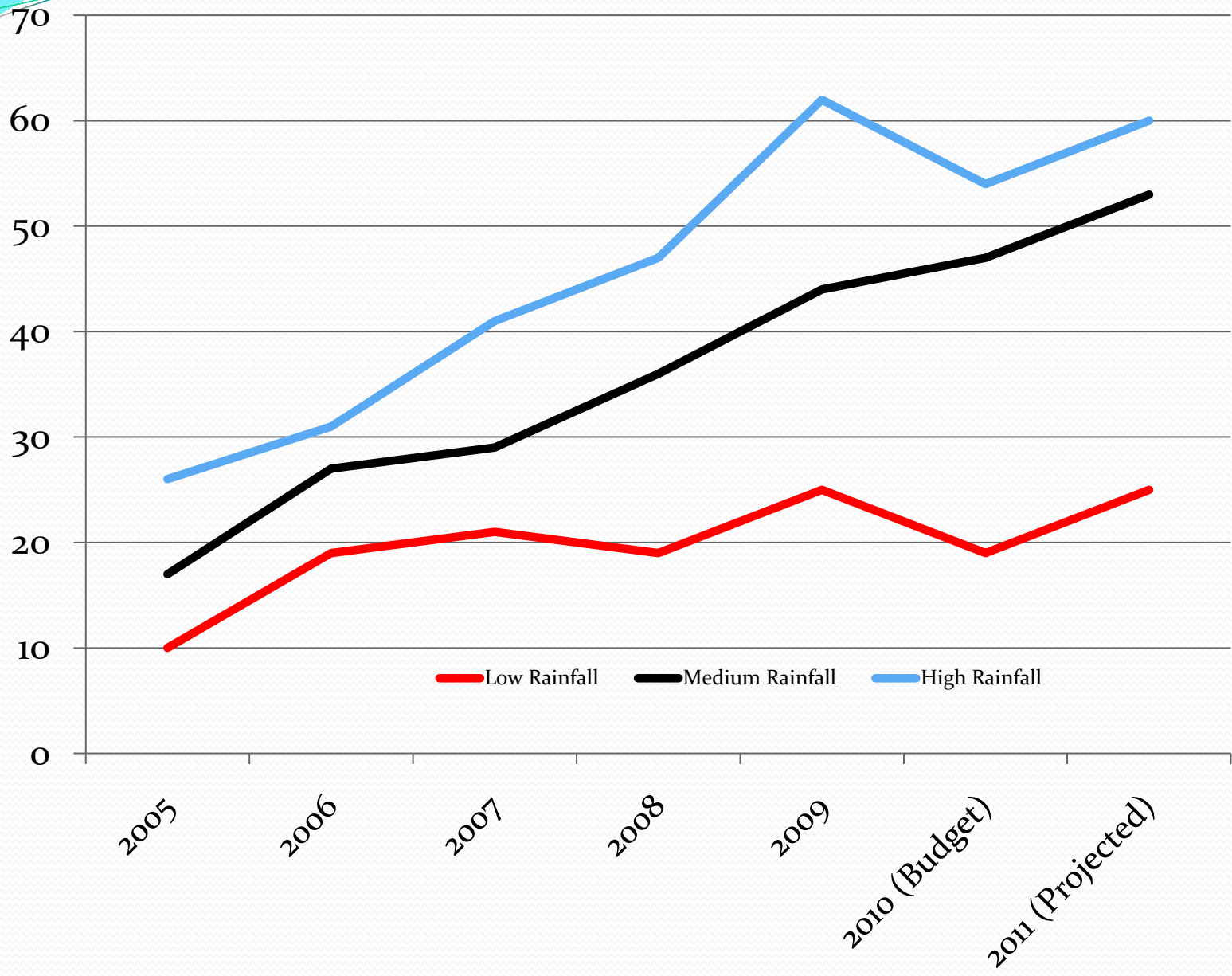
Enterprise Profitability

- Based on 2009/10 Profit Series
- 5 year average yields
- Current fertiliser pricing
- Lower fertiliser rates
- Wheat price @ \$270/t FIS.
- Also included interest as this has increased significantly in the last five years.

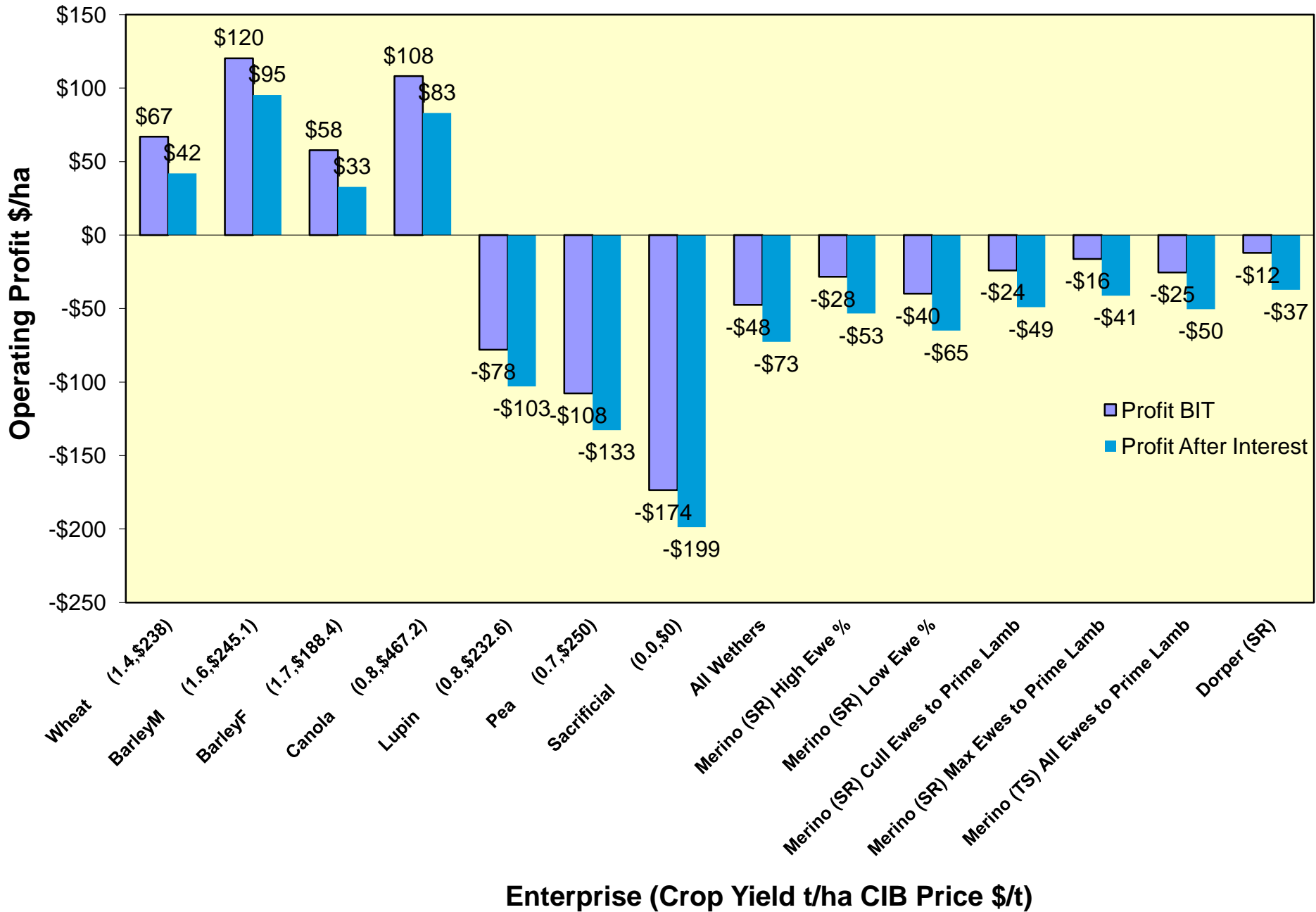
Equity of Farmanco Client Base 2005 - 2010



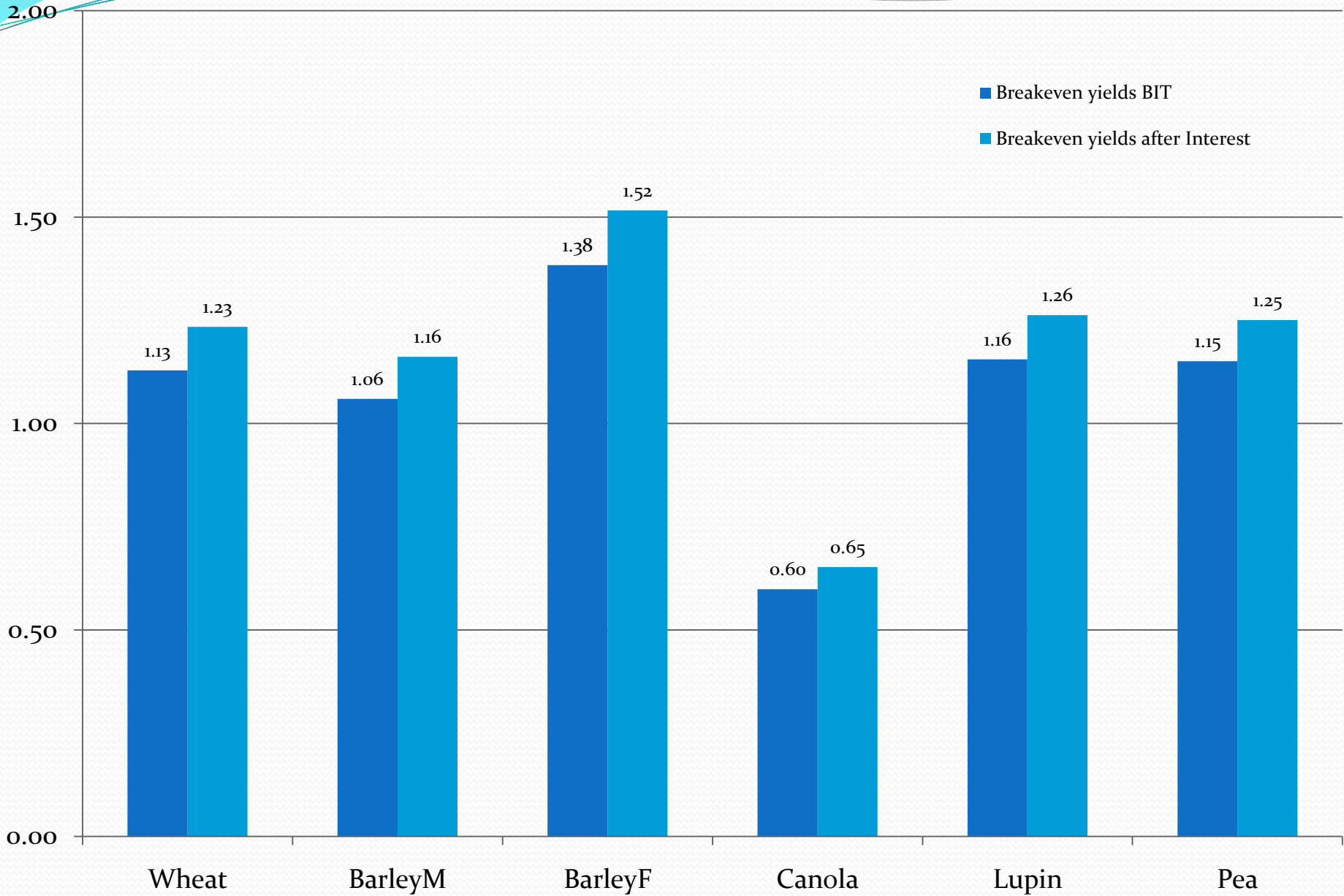
Net Finance Costs (\$/ha)



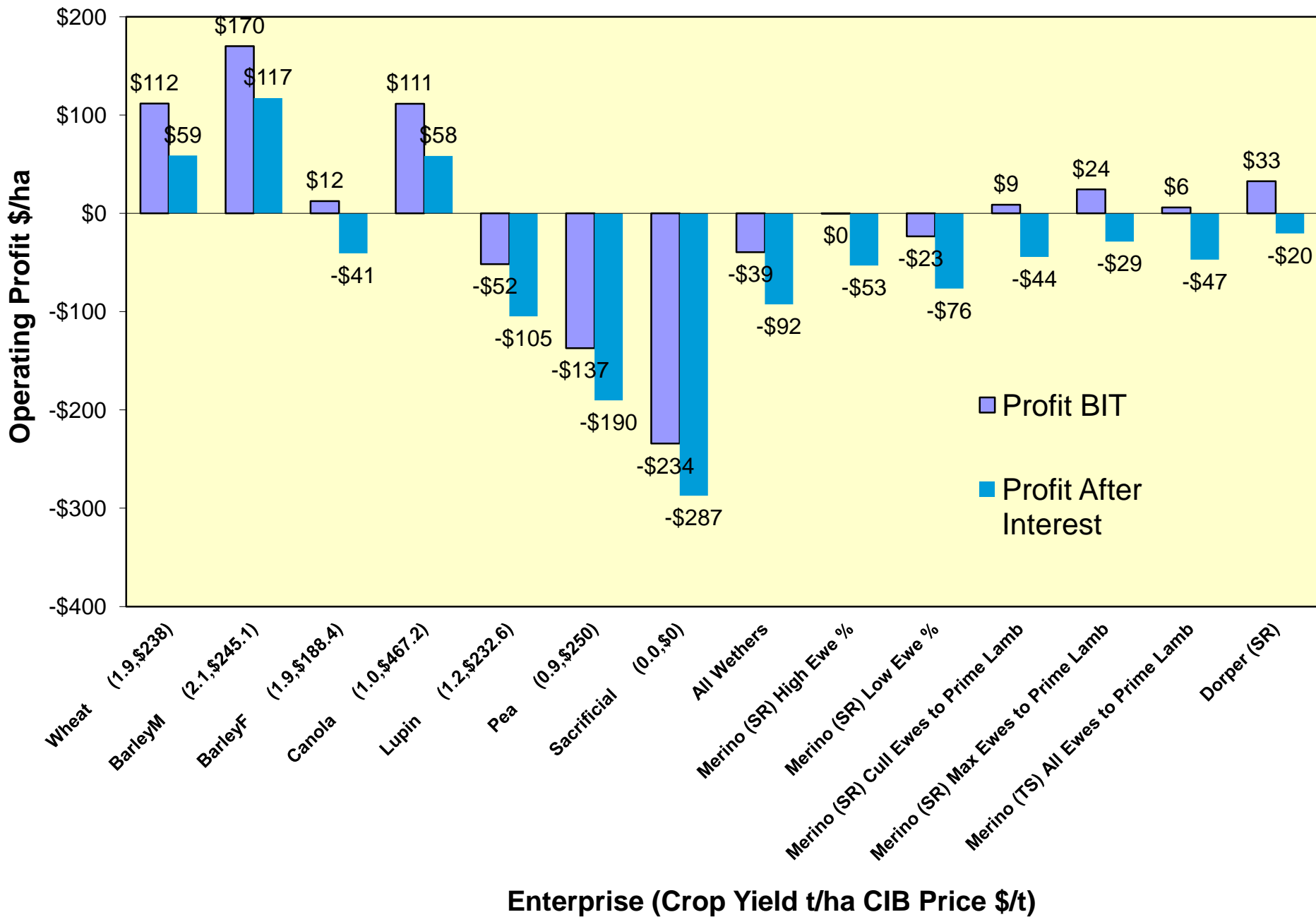
Low Rainfall Enterprise Profitability – Wheat @ \$270/t FIS, Sheep @ 2.2 dse/wgha



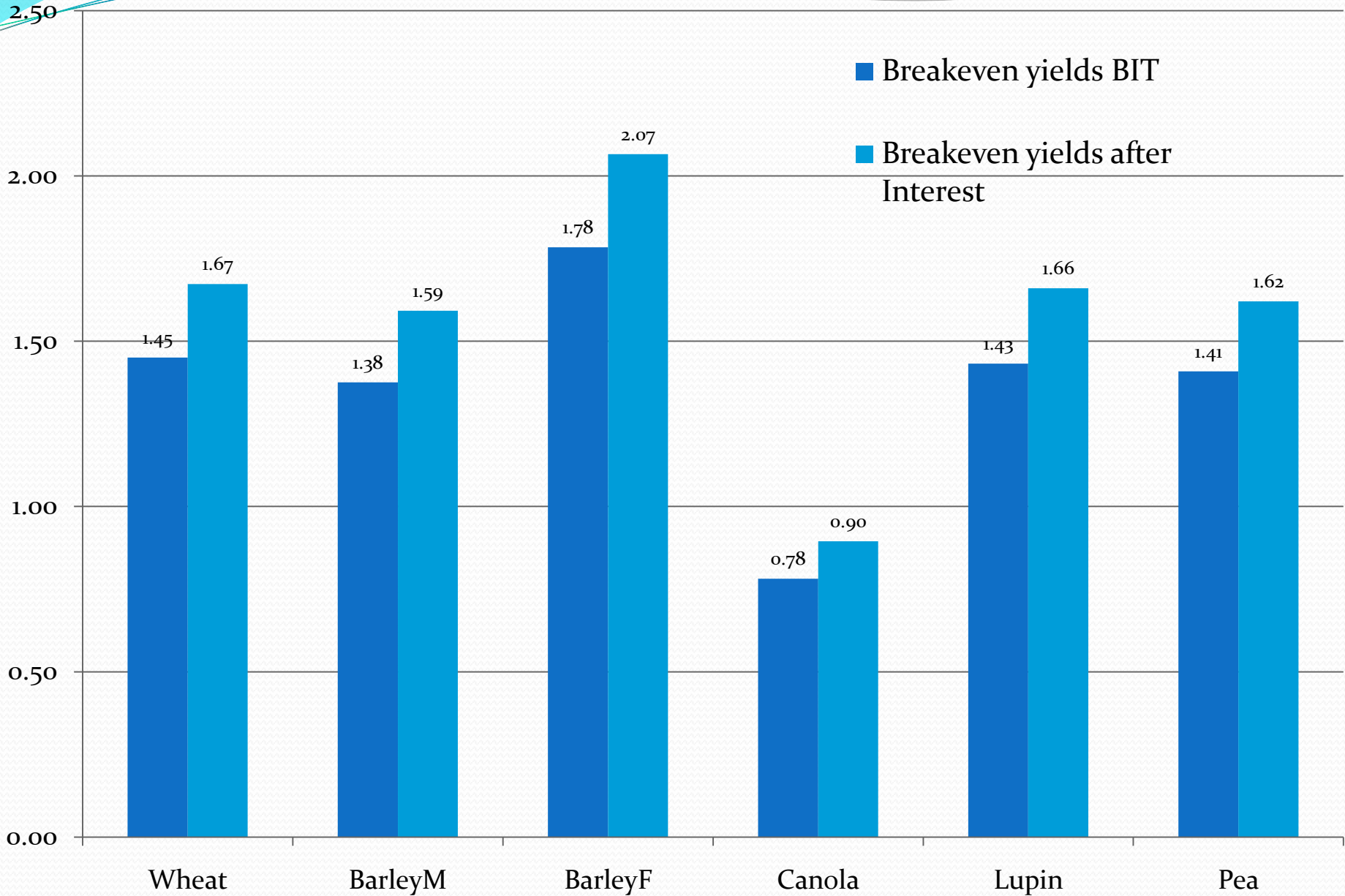
Low Rainfall - Break-Even Yields Wheat @ \$270/t FIS



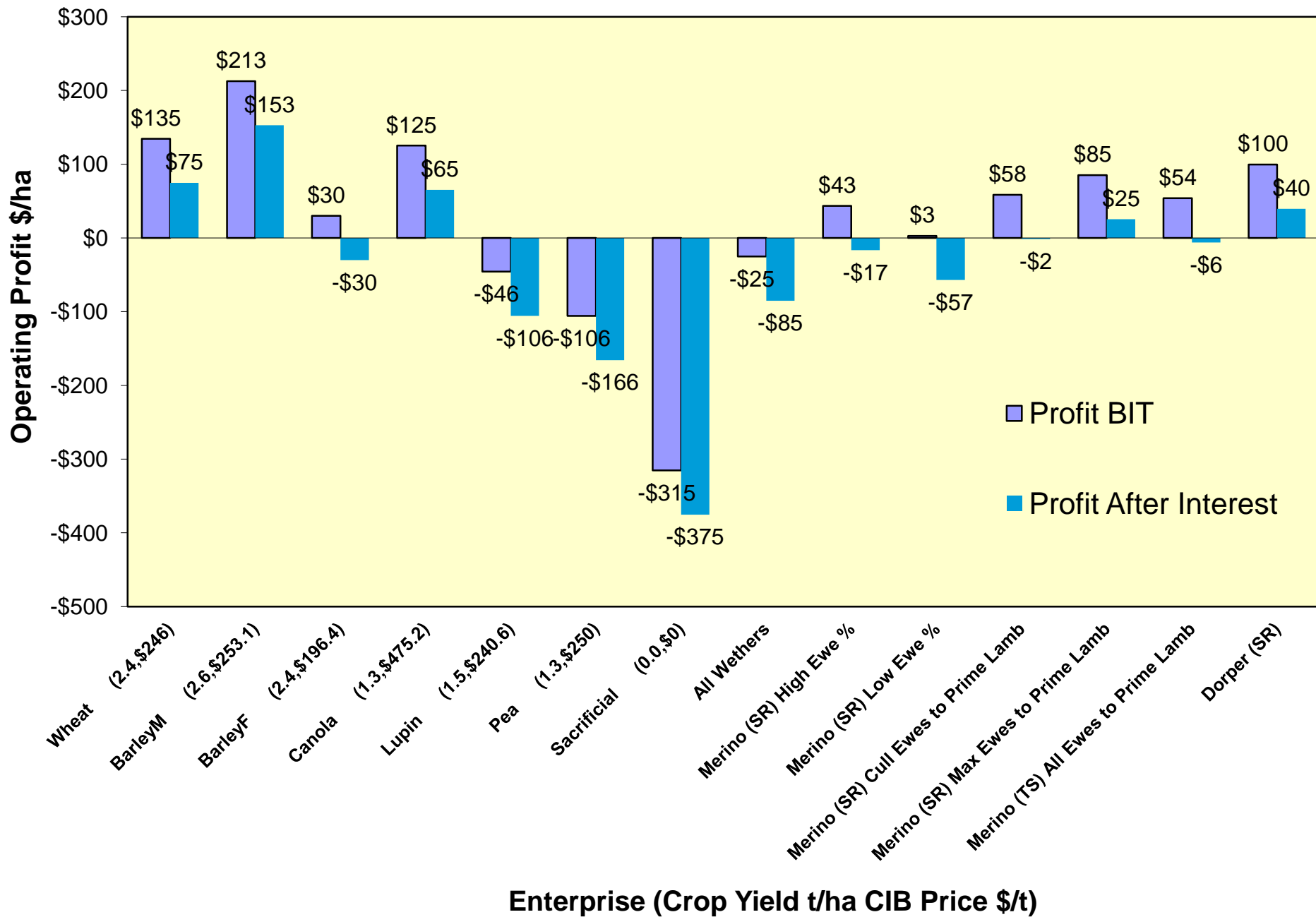
Medium Rainfall Enterprise Profitability - Wheat @ \$270/t FIS, Sheep @ 4.37 dse/wgha



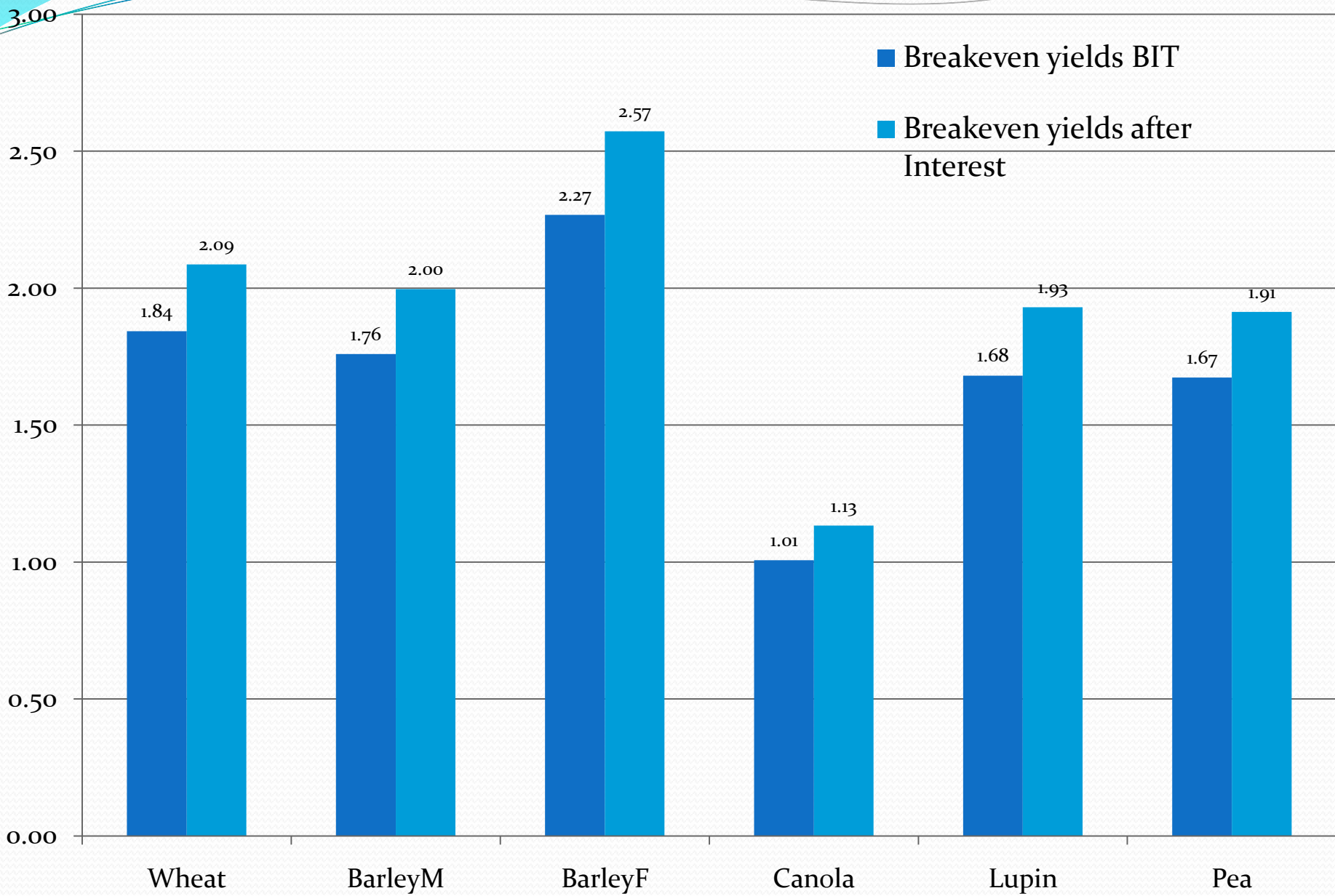
Medium Rainfall - Break-Even Yields Wheat @ \$270/t FIS



High Rainfall Enterprise Profitability- Wheat @ \$270/t FIS, Sheep @ 7.53 dse/wgha



High Rainfall - Break-Even Yields Wheat @ \$270/t

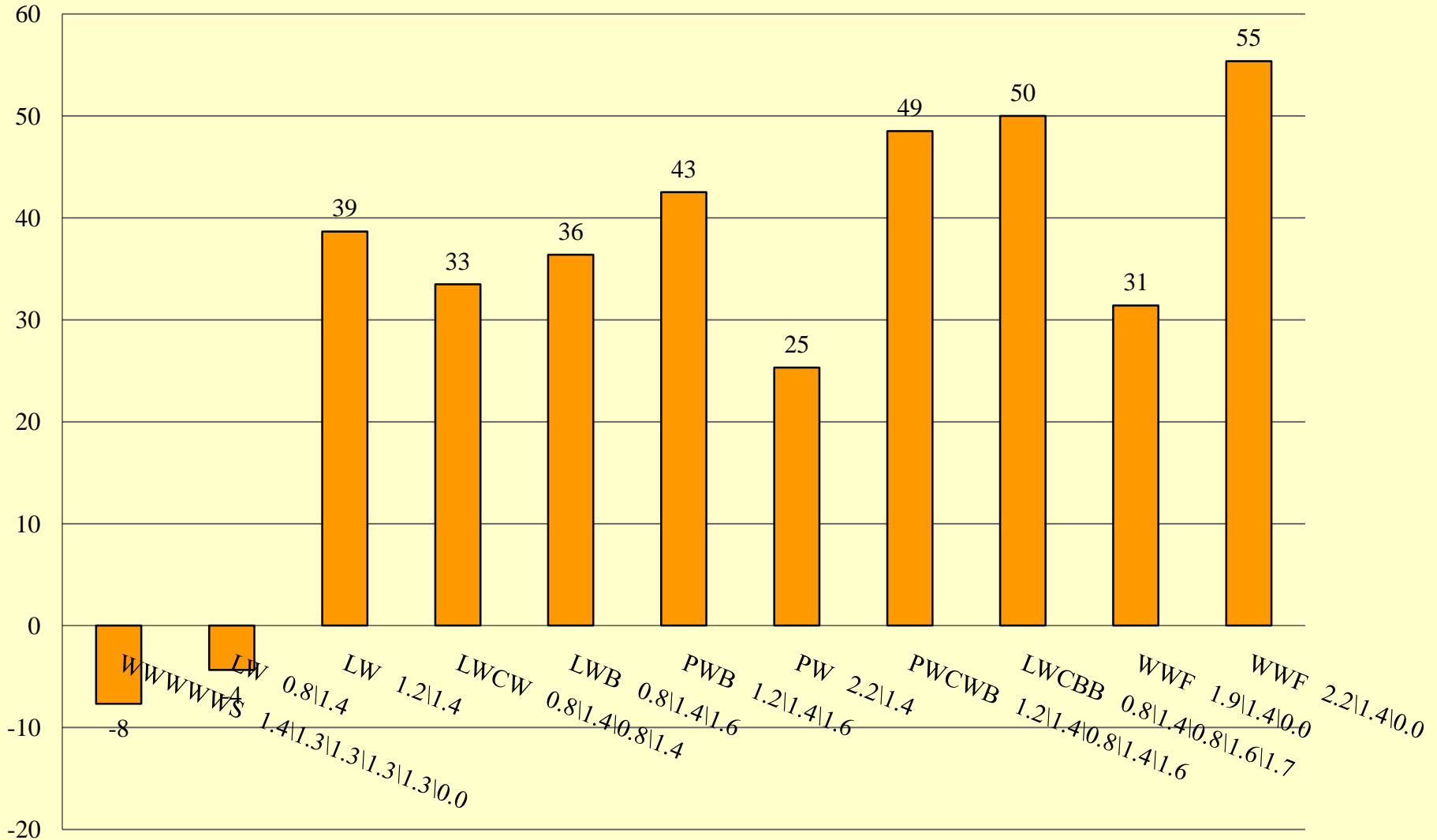


Enterprise Profitability

- MAIN MESSAGES
- Wheat, Malt Barley and Canola will still drive profitability, even at current fertiliser prices
- Be sensible about inputs applied to reduce the capital at risk.
- Breakeven yields (after interest) are reasonable for wheat prices > \$270/t FIS.

LOW RAINFALL ROTATIONS Rotation Operating Profit

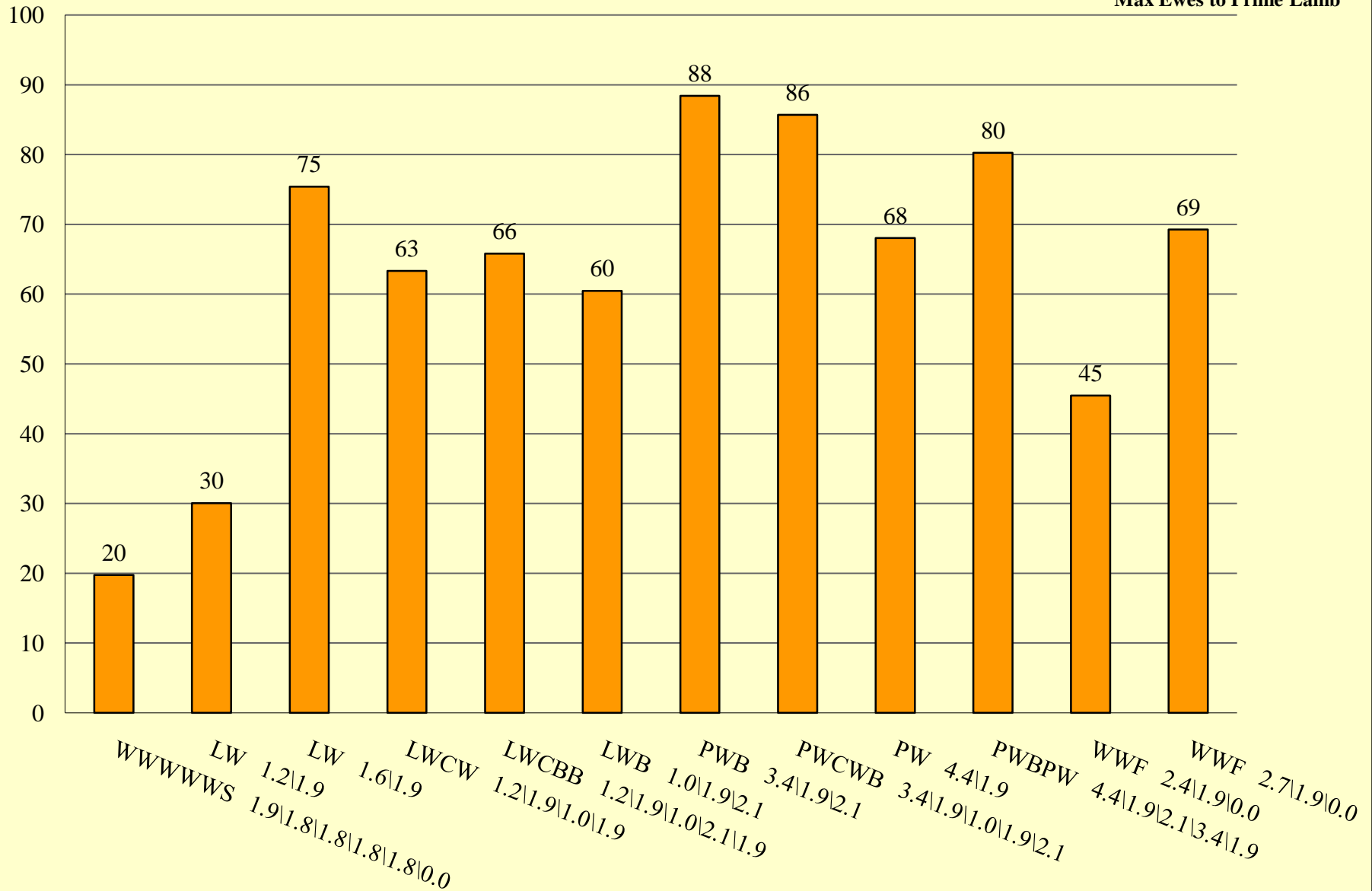
Sheep Enterprise Used in
Pasture Phase = Merino (SR)
Max Ewes to Prime Lamb



MEDIUM RAINFALL ROTATIONS

Rotation Operating Profit

Sheep Enterprise Used in
Pasture Phase = Merino (SR)
Max Ewes to Prime Lamb



TAKE HOME MESSAGE

- PLAN
- PLAN
- PLAN

Phosphorus

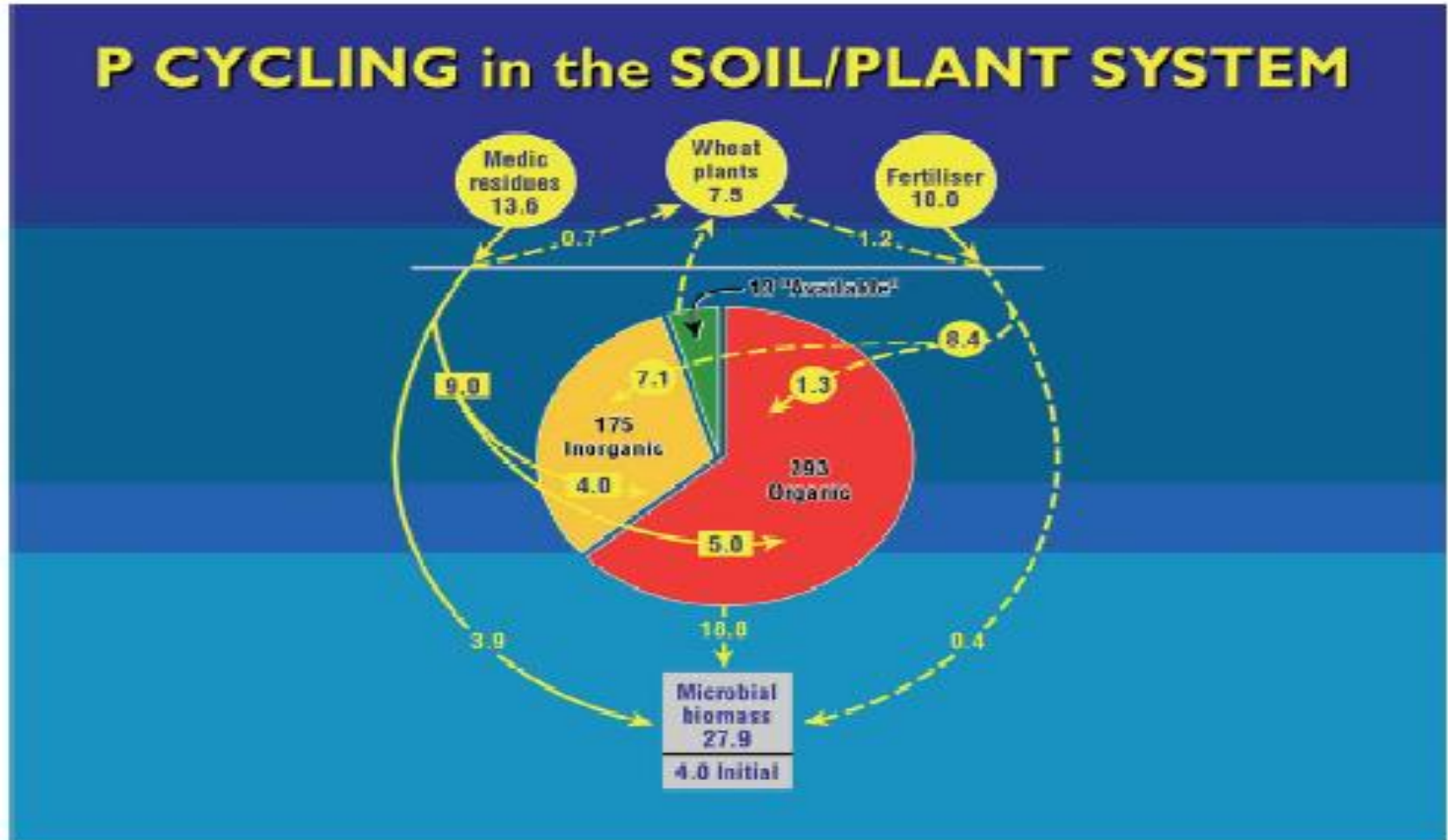


Figure 2. Distribution and movement of P from P fertiliser and crop residues added to a calcareous soil in SA. Values represent kg P per hectare in each pool, and arrows indicate movement of P in the 3 months after planting (from McLaughlin et al. 1988).