



Water Asset Management Strategies

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Who is Waterfind



- Waterfind provides a fully integrated market service – brokerage, exchange platform, conveyancing, information and market analysis
- Involved in trading since 1980s
- Waterfind was born in 2003 with the aim of overcoming market inefficiencies

Outline




1. Case Studies of Water Market Strategies
2. Future developments for Water Markets

Case Studies

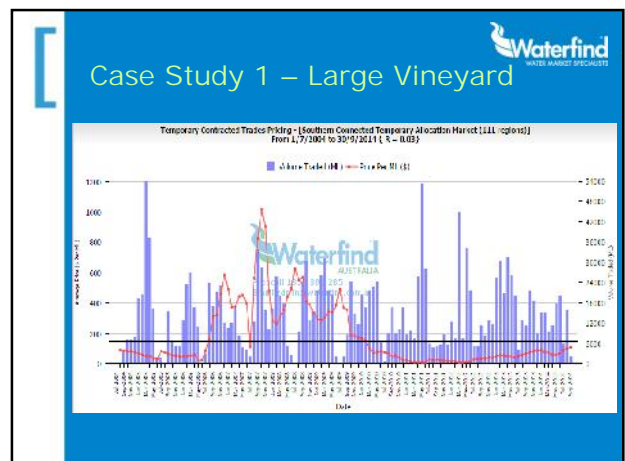


- Water market and supply strategies are now core part of Agribusiness's business plans
- The next development challenge is to use water markets to support productivity growth
- 3 Case studies that provide insight into how this can be achieved

Case Study 1 – Large Vineyard



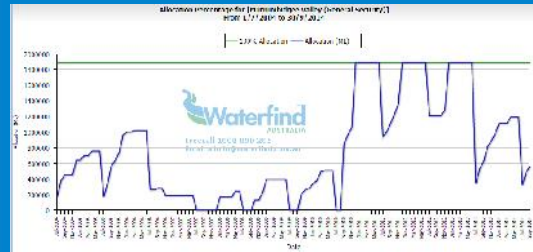
- Large Vineyard operator
- 5,000 ML of HR Entitlements – \$8.7 Million
- Estimated Cost of Capital – 8%
- Annual Water Holding Cost – \$700,000 or \$140 per ML



Case Study 2 – Broadacre Farm

- Broadacre farm – Previously produced Rice, has transitioned to Soybeans and Corn
- At full production 1,700 ML is used for Irrigation
- Holds 1,200 ML of GS Entitlements – \$1.14 Million
- Purchases the remainder from allocation markets
- Estimated Cost of Capital – 8%
- Annual Water Holding Cost – \$91,200

Case Study 2 – Broadacre Farm



Case Study 2 – Broadacre Farm

Allocation Level	Cost per ML to Hold Entitlement	Cost per ML to Buy Allocation	Average Cost of Water (Full Production)
10%	\$760	\$400	\$425
25%	\$304	\$150	\$177
50%	\$152	\$80	\$105
100%	\$76	\$50	\$68

Case Study 3 – Medium Vineyard

- Medium Vineyard operator
- Does not hold Water Entitlements
- All water supply through Allocation markets – purchases 1,500 ML per year

Case Study 3 – Medium Vineyard

Water Availability Estimate	Season	Median Seasonal Allocation Cost %	Maximum Seasonal Allocation Cost %
DRY	2004/05	4.46%	12.77%
AVERAGE	2005/06	3.36%	5.10%
DRY	2006/07	16.88%	22.93%
DRY	2007/08	6.30%	12.32%
DRY	2008/09	2.52%	3.15%
AVERAGE	2009/10	2.81%	4.22%
WET	2010/11	0.61%	1.92%
WET	2011/12	1.01%	1.52%
AVERAGE	2012/13	2.93%	4.24%
AVERAGE	2013/14	3.50%	4.80%
	Average	4.54%	7.57%

Water Market Developments

- Permanent Entitlements
 - Expected higher cost
 - Security of Allocations
 - Lower Administrative Costs
- Temporary Allocations
 - Expected lower cost
 - Higher administration
 - Risk of timing error – higher cost

Water Market Developments



- Gross Value of Irrigated Agricultural Production (GVIAP) in 2009-10 was \$11.5 Billion pa
- NWC estimate of Total Value of Water Entitlements is \$13 Billion
- If 25% of the value of entitlements can be transferred to investment - GVIAP could grow by up to \$230,000,000 pa

Water Market Developments



- Waterfind is working on solutions to support Agribusiness unlock value held in water assets, these include;
 - Supporting Investment in water assets
 - Forward Contracts for water allocation

