A roller coaster ride in the Australian wine industry

Over the past 15 months the Australian Wine Industry has experienced a rollercoaster ride from oversupply to undersupply. Jim Moularadellis from Australia’s Bulk Wine Specialists, Austwine, offers the following analysis:

Current Water Allocations

It is a time of critical water shortage throughout the Murray Darling Basin, and the bulk wine market has become inextricably linked with the availability of irrigation water. So here is a summary (see Table 1, page 98) of current allocations for the major grapegrowing regions in South East Australia:

With the exception of New South Wales, the current water allocations as detailed above are insufficient for vineyards. Grapegrowers in Victoria and South Australia must obtain additional (temporary) water from other water license holders to ensure that their vineyards survive.1
At the time of writing, 11 December 2007

Table 1.

<table>
<thead>
<tr>
<th>Current * Water Allocations for major SE Australia vineyard regions</th>
<th>Suspended 2007 water re-credit / critical water</th>
<th>General security</th>
<th>High reliability / High security</th>
</tr>
</thead>
<tbody>
<tr>
<td>New South Wales – Murray Valley</td>
<td>50% / end Mar 08</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>New South Wales – Murrumbidgee Valley</td>
<td>-</td>
<td>0%</td>
<td>90%</td>
</tr>
<tr>
<td>Victoria – Murray Valley</td>
<td>-</td>
<td>-</td>
<td>26%</td>
</tr>
<tr>
<td>South Australia – Murray Valley</td>
<td>-</td>
<td>-</td>
<td>32%</td>
</tr>
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</table>

* At the time of writing, 11 December 2007

Spring 2006 – the start of the roller coaster ride

The present violent swing to undersupply can be traced back to before the 2007 vintage and the pivot point in the market occurred during Spring 2006. Three things happened at that time: 1. Widespread spring frosts occurred in many regions of South East Australia, most notably throughout the Limestone Coast and Victoria. 2. A very dry winter and drought severely reduced the cropping potential of Australia’s vineyards, and, 3. South Australian River Murray water allocations were reduced within a single irrigation year for the first time (to 60%).

With one notable exception, wineries did not chase grapes for the ensuing 2007 vintage, generally taking a ‘wait and see’ approach. Broadly speaking, the wine industry breathed a sigh of relief at the prospect of a modestly sized vintage, after the previous three very large vintages of 1.9 million tonnes each.

February 2007

The grape harvest commenced and crops came in even lower than expected from the drought, frosts and water restrictions. The domestic bulk wine market burst into life in February as lots of players entered the market as buyers, sales volumes spiked (see figure 1) and prices began to climb. Wineries scrambled to cover their requirements with bulk wine, or if available, grapes. However, wineries were very cautious about the prices they offered, in case their requirements with bulk wine, or if available, grapes. However, wineries were very cautious about the prices they offered, in case the undersupply turned out to be short lived. The rollercoaster ride had begun.

July – August 2007

As widely foreshadowed by the relevant authorities, due to the continuing drought, opening water allocations for the year starting 1 July 2007 were set at 0% for the River Murray in NSW, Victoria and SA. The expectation was that some water would become available as the irrigation season progressed, but great uncertainty existed as to what those allocations might be.

When small allocations were announced, temporary water trading along the Murray Darling Basin opened at around $1000 per ML. This was double the price of the previous year and about 20 times the price of the year before that. Significant water became available from 28 August 2007, when NSW Murrumbidgee High Security Licensees were allocated 60% of their licensed volume and this water was the source of much of the water trading, particularly into SA and Victoria where allocations were less than 10% at the time.

However, the cost of temporary water now added over $200/t to the cost of growing grapes in the inland irrigated areas. This was significant when compared to 2007 grape prices, which were in the vicinity of just $300-$400/t.

For the first time in several years wineries chased growers to secure grapes and offered contracts for 2008 and beyond. Growers, sensing a fundamental change in the market due to highly restricted water availability, resisted signing up in expectation of higher grape prices to come. Grower organisations called for wineries to post their prices early so that the economics of the grape growing season for 2008 could be assessed: there would be no point in growers incurring the additional cost of buying temporary water, if grapes prices continued at or below the cost of production, as had been the case for the past several years.

In contrast, Griffith was the place to be as water allocations (then at 60%) were easily the highest of the main inland irrigated regions. Not only did Griffith expect to fill the expected shortfall of grapes, as the other inland irrigated regions struggled to cope with the severely limited water availability, but with water allocations there at a relatively high 60%, they expected to enjoy a significant cost advantage also. Market players expected the shortfall in the 2008 grape crop in regions with low water allocations would keep prices very firm indeed.

The scramble for grapes, which started at the beginning of 2007 vintage, was now well entrenched in the market. Petiole

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Domestic Brokerage Transactions

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"Austwine Sales Volumes"

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"Austwine Sales Volumes"
earlier in the year, did not call wineries either. An eerie silence emerged in the market as growers and wineries formed differing views about the size of the 2008 crop. Late in the month the Australian Wine and Brandy Corporation announced that it forecast a 2008 wine grape crop of 1.22m tonnes, about 20% less than the drought and frost constrained 2007 crop of 1.419m tonnes.4

Early October 2007
By now, most wineries had declared (at least base) prices for 2008 vintage, 4-5 months earlier than usual. The economics of the 2008 vintage could now be calculated, and prices were such that buying temporary water was economically viable for vineyard owners. Larger growers began to purchase water quickly to cover their requirements, whereas smaller growers were generally slower to react. But smaller growers did take their protest over their meager permanent water allocations to the steps of Parliament House in Adelaide. Water allocations for Victoria and SA Murray Valley did rise, slowly, to the 13-18% range, while the NSW Murrumbidgee High Security Licensees allocation increased to 75% on 2 October. In Griffith, both wineries and growers were grinning: at an allocation of 75%, Griffith had a shot at having a good year, while everyone else was struggling not only to supply, but to keep their vineyards alive.

Mid October 2007
Vineyard flowering and fruit set looked promising, and wineries were still hard at it chasing grapes for 2008. Temporary water prices, now at $1,200/ML, peaked at this level, and then fell to $1000 later in the month. Despite the drought and very limited water availability, it appeared that at more than $1000/ML, water supply exceeded demand as very few crops remained viable; rather than grow annual crops such as cotton or rice, it was more lucrative to simply sell off this year’s water allocation to growers of permanent crops. The rollercoaster ride began to take its most recent turn.

November 2007
Wineries slowed down their grape purchasing activities in light of increasing, but still small water allocations. Falling water prices indicated there might just be enough water in the Murray Darling Basin for grapegrowers, mainly because few other industries could afford such water prices. Wineries stopped calling growers to buy grapes. Growers, expecting higher grape prices than those posted earlier in the year, did not call wineries either. An eerie silence.

December 2007 – present developments at the time of writing
The price of temporary water continues to fall, and is at around $500/ML at the time of writing. Water allocations continue to rise, albeit very slowly, which releases further water for temporary trade, putting further downward pressure on temporary water prices. The increased allocations are made in light of average rains during November in a number of regions; average rain has not been seen for quite some time. Inflows into the Murray Darling system still remain low due to the earlier dry conditions.

Growers have started calling wineries to tie up a deal for 2008, but now it’s the wineries who aren’t calling back, worried the crop will be too big in light of the grape prices they posted a couple months earlier. Growers need those prices to pay for the temporary water they purchased. Its crunch time.

Likely size of 2008 wine grape harvest
Vintages 2004, 2005 and 2006 were all extremely large at around 1.9m tonnes and 2007 was 1.419m tonnes. In fact, 2006 would have been more than 2m tonnes had significant quantities of grapes not been left on the vine or harvested to ground.5

It is our view that there is quite a bit of mis-information in the

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mainstream media about the likely size of the 2008 vintage. At the very least, there is certainly a wide range of differing views, but there exists a good possibility that the vintage will be larger than current popular or mainstream press articles suggest.

Most commentators are focusing on the drought, pointing to its negative impact on the likely size of the 2008 wine grape harvest. At first glance this seems to make a lot of sense, but consider the following factors:

- irrigation water in the Murray Darling Basin is available, albeit it is extremely expensive, currently 10 times the price it was two years ago, having peaked at around 20 times earlier this year
- the price of temporary water is about $500/ML and falling, down from a recent peak of $1200. The fall in price suggests surplus water in the Murray Darling system at the current extremely high price levels, which limit the economic viability of lower value crops such as rice and cotton, thus releasing water for higher value crops such as wine grapes. Growers of such crops can make more money simply by selling their water entitlements for the year to growers of permanent plantings such as vineyards
- the prices being offered by wineries for grapes have risen sufficiently to cover the extra cost of temporary irrigation water
- most large grapegrowers have purchased sufficient annual irrigation water to generate a full grape crop and the large growers account for a big part of vineyard area. But there are lots of smaller growers and no doubt they have a significant influence on the mainstream media. For example, in SA Riverland, there are 1000 very small growers6 (out of a total of 1500) but they account for just 18% of vineyard area. The top 3% of growers (51 growers) account for 40% of vineyard area.
- Australian vineyards seem to crop well after drought years. See Table 2 below.7

Despite promising spring and summer storms, the drought is definitely not over yet, so the above analysis may be a little premature for the 2008 vintage.

Putting aside the possibility of hail, widespread disease or other similar calamity, as the drought and irrigation water issues play themselves out, the above analysis suggests that the 2008 wine grape crop could well be more than 2007 (1.419m tonnes).

A lot depends on water, of course, and the price of temporary water compared to the price of grapes in light of such low permanent allocations.8 Record high water prices have been embedded into grapegrowing cost structures9 for many growers who bought temporary water early, when only a few months ago, the expectations were for a miniscule grape crop in 2008.

At present, the economics are compelling for grapegrowers to buy sufficient water to generate a full crop in all the inland irrigated regions. Any other outcome is not economically sensible in light of current expected grape prices for 2008 of $450 - $750 per tonne and falling temporary water prices.10 See Table 3.

Table 3.

<table>
<thead>
<tr>
<th>Grape Crush `000 Tonnes (% Change)</th>
<th>Expected 2008 Grape Prices</th>
<th>Cost of water if you bought in August @ $1,200/ML and 16% allocation</th>
<th>Cost of water if you bought in December @ $500/ML and 29% allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Drought year minus 1 year</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1982/3 Drought</td>
<td>499</td>
<td>1,000</td>
<td>1,002</td>
</tr>
<tr>
<td>1994/5 Drought</td>
<td>777</td>
<td>1,060</td>
<td>1,002</td>
</tr>
<tr>
<td>2002/3 Drought</td>
<td>1,606</td>
<td>1,060</td>
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</tr>
<tr>
<td>2006/7 Drought</td>
<td>1,902</td>
<td>1,060</td>
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<td><strong>Drought year</strong></td>
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 Critically, the recent falls in the price of temporary water tend to indicate that there may actually be enough water to irrigate all the vineyards of South East Australia, which was by no means clear a couple of months ago when the price of water was rising.

Conclusion

Will we have too little or too much wine this year, grown in the drought parched Murray Darling Basin? If the 2008 wine grape crop is not small, and there is mounting evidence to support this, what does this mean for wineyard and vineyard profitability? Bulk wine might rapidly shift from its recently re-established place on the asset side, back to the liability side, of the wine business balance sheet.

Strap yourself in for a continuation of the roller coaster ride. The Australian wine industry is presently anything but predictable.

About the author

Jim Moularadellis is chief enthusiasm officer (CEO) of Austwine, Australia’s Bulk Wine Specialists. He has recently been named 2007 Entrepreneur of the Year, Services, for South Australia.

Established in 1993, Austwine celebrates 15 years of service to the wine industry during 2008 and is currently in the top 25 Fast Movers for South Australia, an index of South Australia’s fastest growing companies.

References

1 A vibrant market exists in the trade of water licenses, which grant the licensee the right to extract water from rivers, throughout the Murray Darling Basin. The system is complicated, involves numerous government agencies who issue an array of various licenses, each conferring different rights and obligations on license holders. Broadly speaking, however, there are two types of water trades: Permanent Trades: This is the permanent transfer of the right to extract water. All licenses are subject to allocation restrictions such as those detailed in Table 1. Temporary Trades: This is the most common type of trade, which allows the licensee the right to extract water for the current water year, being the 12 months ending 30 June each year. This is sometimes referred to as leasing water, annual water, or temporary water as the license rights and obligations revert back to the original owner at the end of the current water year. In a number of regions it is referred to as 100% water as only the water volume allocated can be traded. As allocations increase across the irrigation season, more 100% water becomes available to trade.

2 1 ML = 1 Megalitre = 1,000,000 litres.

3 Assuming water usage of 5 ML per hectare: With 5ML of permanent water license, at a 16% allocation, means a grower needs to buy 84% of vineyard water requirements on the temporary market, or 4.2 ML/ha. At a cost of $1,200 per ML and an assumed vineyard yield of 20 tonnes/ha, water will cost the grower $252 per tonne of grapes produced.

4 The Australian Bureau of Statistic has made a preliminary revision of this estimate, to 1.47m tonnes.

5 Phylloxera and Grape Industry Board of SA estimates that in South Australia during the 2006 vintage approximately 70,000 tonnes were left unharvested in or during the 2006 vintage approximately 70,000 tonnes were left unharvested in or harvested to waste. South Australia represented about 48% of the national wine grape crop that year (source: AWBC Annual Report 2006-2007).

6 Those with a vineyard of less than 10 Hectares. Source: Phylloxera and Grape Industry Board of SA


8 See Table 1.

9 See calculations in footnote 3 above.

10 At current average allocations of 29% in the Victoria and South Australia Murray Valley, and a current price of $500/ML for temporary water, the cost of water equates to $89 per tonne. ■

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