

**ECONOMIC IMPACT OF REGULATORY
POLICY ON DEVELOPMENT OF THE
WINE INDUSTRY IN THE
MOUNT LOFTY RANGES
WATER SUPPLY CATCHMENTS**

**Prepared by
Primary Industries and Resources South Australia
for the
Minister for Urban Development and Planning**

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EXECUTIVE SUMMARY

PURPOSE

This study was commissioned by the Minister for Urban Development and Planning to evaluate the effect of proposed planning and policy strategies and amendments, in particular, the 'Draft Planning Strategy for the Outer Metropolitan Area Region' and the 'Draft Mount Lofty Ranges Wineries and Ancillary Development Plan Amendment Report', on the growth, development and eventual economic viability of the grape and wine industry in the Adelaide Hills.

The intent is that the findings of this study will inform decision-making in relation to policy development and drafting Regulations. Current wine industry development is limited to 10 listed wineries, with cellar door activities also restricted. The Mount Lofty Ranges watershed provides 60% of the metropolitan Adelaide water supply and storage, and as such the community requires that activities within the watershed do not adversely impact on water quality.

BACKGROUND

The study has been undertaken in the context of changes to the regulatory environment in the Mount Lofty Ranges including water resources, environment protection, planning and development. It has referenced, in particular, the 'Draft Planning Strategy for the Outer Metropolitan Area Region', the 'Draft Mount Lofty Ranges Wineries and Ancillary Development Plan Amendment Report', the 'Water Quality Risk Assessment of Winery and Ancillary Development in the Mount Lofty Ranges Watershed' studies and the 'Adelaide Hills Watershed Winery Demand and Infrastructure Study'.

The task for this study is to assess the economic benefits that might be expected to flow from the proposed regulatory changes (and other regulatory options) against the risk that the resulting vineyard and winery expansion might have negative impacts on water resources, environment and habitation amenity of the region. Significant in this assessment will be a consideration of potentially negative environmental and economic impacts of existing vineyards becoming non-viable.

Sharply declining prices fetched by wine grapes and insecurity of contracts have forced grape growers in the Adelaide Hills Wine Region to a realisation that there is a need to restructure their business to secure a higher proportion of the value of the final product. Their ultimate goal is to expand and diversify sources of income, to secure a larger portion of the retail value of their labours and develop products to improve economic viability. Many growers are now choosing to produce their own wine under their own label and promote a tourist experience with ancillary services.

The Australian wine industry has been the fastest growing export product for the last decade with exports totalling \$2.5 billion in 2003-04, third only to beef and veal and wheat. South Australia has played a leading role in the development of the industry through substantial investments in new vineyard plantings and wineries and the creation of substantial employment opportunities. ABARE projects export sales to rise to around 1.2 billion litres by 2009-10, valued at around \$4.4 billion.

Wine, which grew by \$1.1 billion or at an average rate of 19.8% p.a. over the last decade, has been a major contributor to South Australia's export growth. A goal of South Australia's producers has been to focus industry effort toward higher value adding as a way of insuring against seasonal volatility associated with commodity focussed production.

In 2004, continued strong demand for premium wines, principally from 'new world' countries, was the result of increasing incomes, changing lifestyles and ongoing consumer interest in the potential health benefits attributed to wine consumption. Of particular relevance to the Adelaide Hills wine industry is that in the medium term, Australian exports are well positioned to take advantage of consumer preferences for premium wine consumption.

SURVEY

A survey of grape growers registered with the Phylloxera and Grape Industry Board of South Australia and located within the Mount Lofty Ranges found that 30 growers expressed a wish to establish a winery ranging from 5 tonnes to 1000 tonnes crush capacity at an estimated cost of up to \$5m, and 56 growers expressed an intention to establish at least one kind of ancillary development, including, but not limited to cellar doors, restaurants, tasting rooms and accommodation.

FINDINGS JUNE 2005 INDUSTRY SURVEY

- **Current Crush:** Eight of the ten currently approved wineries are operating with a combined crush of 10,915 tonnes.
- **Future Crush:** Twenty-one percent of respondents expressed an intention to develop a winery ranging up to a maximum crush of 1000 tonnes per year with the combined total projected new capacity exceeding 4000 tonnes per year.
- **Future Plantings:** Intentions to expand vineyard area have stabilised.
- **Ancillary Development:** Grape growers and wine producers believe that ancillary development is critical to economic viability.
- **Wine Tourism:** Survey respondents identified the Adelaide Hills Wine Region as one which has a core focus on tourism and the 'complete wine experience' and have structured their businesses (or business plans) to reflect this.
- **Direction:** Many of the wineries in the Adelaide Hills crushing under 250 tonnes are able to achieve medium to high profitability ratios because of the other "ancillary" services.
- **Production Costs:** While economies of scale are likely to exist in both grape and wine production *per se* (despite the findings of the survey), the economic viability of small firms in the wine industry in the Adelaide Hills is more likely to rely on their ability to capitalise on the tourist potential of the region by adding hospitality services to their product mix than in exploiting scale economies.

Whilst figures on profitability in the Adelaide Hills were not readily available, experience from an ABARE survey of grape growers in the Clare region, a region with similarities to the Adelaide Hills, revealed that growers with higher farm cash incomes had lower cash costs per hectare, spent less on labour and had lower capital invested per dollar of revenue earned. This supports the assumption that, notwithstanding survey evidence to the contrary, economies of scale are present.

ISSUES AFFECTING VIABILITY IN THE REGION

The prescription of water resources has been a major cause of uncertainty and nervousness in the wine and other agricultural industries in the Catchment zones.

Throughout the region a number of traditional primary industries are relocating to areas where land is cheaper, competition for water resources is lower and primary producers have more choices for their businesses. Some primary producers are also closing operations and selling land for urban development, as rezoning occurs, to take advantage of high market prices for residential development.

Moreover, increased competition in the global wine market is forcing winegrape prices downwards and, as indicated in the survey, is threatening the viability of smaller vineyards, especially in higher-cost regions such as the Adelaide Hills. This has two implications relevant to this study:

- Non-viable agricultural enterprises, such as vineyards, often become fire risks, harbours for pests and disease and sources of deleterious run-off; and
- The tourism potential of the Adelaide Hills provides an excellent opportunity for those in the industry to respond to competitive pressures by adding value to their grapes via winemaking and hospitality services.

TOURISM

SA Tourism Commission data showed that:

- In 2003, the Adelaide Hills tourism region attracted an estimated 97,000 overnight visitors who stayed around 300,000 nights in the region. Nearly 3% of all overnight visits in regional South Australia include a stay in the Adelaide Hills and the region accounts for over 2% of all visitor nights in regional SA;
- Domestic same day visitors from home contribute nearly 850,000 additional visits and the region attracts more same day trips from home than any other region except for Adelaide and Fleurieu Peninsula;
- Wine tourism attracts higher spending visitors to SA;
- Wine tourists spend around half a billion dollars in SA a year, including \$64.6 million on 3.9 million bottles of wine at cellar doors;
- Over a million overnight or day-trip visitors to SA visited a winery while they were here;
- Of all visitors to wineries in Australia, 23% visit a SA winery (from a total of 4.4 million overnight and day-trip visitors).

These findings are consistent with findings in the Hunter Valley and the Yarra Valley.

SCENARIO ANALYSIS

Three alternative scenarios, consequent to public consultation and decision on the Draft Planning Strategy and the Draft PAR, their development outcomes and subsequent economic impacts on the Adelaide Hills wine industry are analysed:

1. *Retain Current Development Policies, unchanged:* further development would be extremely restricted, with negative economic impact.

2. *Implement the recommendations of the Water Quality Risk Assessment Study of Winery And Ancillary Developments in the Mount Lofty Ranges Watershed (2004)*: subject to development proposals meeting certain criteria with respect to siting, design and best management practice, winery and ancillary development be allowed in the MLRW, with the potential for positive economic impact.
3. *Implement recommendations of Draft Mount Lofty Ranges Wineries and Ancillary Development Plan Amendment Report (2005)*: this PAR was based on the scientific findings of the Risk Analysis Study and, accordingly, it also recommends development under strict conditions that protect the environment, water quality and community needs. Safe and sensitive development would be permitted, with the potential for positive economic impact.

CONCLUSION

This study has found that there is documented, compelling scientific evidence that environmentally safe wine industry development is possible within Mount Lofty Ranges Watershed and that this will increase the economic product of the region while protecting and preserving the water quality requirements, the environment and other community needs. Global pressures, especially through increased consolidation of wine production and retail sectors, are threatening the viability of smaller operations.

However, while the 'boutique' winery trade has, to date, been relatively protected from the wider competitive pressures, it cannot expect to remain so indefinitely. Some industry commentators argue that the boutique market is becoming saturated by the rapid expansion of small winery numbers. In addition, the big wine companies are moving increasingly into the cellar-door sales and hospitality market. This suggests that those considering expansion of boutique cellar-door activity in the Adelaide Hills should be mindful that they are likely to face increased competition in the future and should develop their businesses with a sharp eye on the unit cost of products and services that they offer. One critical issue will be whether to establish their own (small) winery, capture scale economies either by collaborative winemaking or by outsourcing it to existing wineries, or examine the potential to establish combined cellar door facilities. This is not a matter for regulatory intervention, but might usefully be considered as part of any strategic planning that the Adelaide Hills wine industry undertakes.

The draft Mount Lofty Ranges Wineries and Ancillary Development Plan Amendment Report proposes amendments to the current planning policies, basing these on the contents of both the "Draft Planning Strategy For Outer Metropolitan Adelaide Region" and the "Water Quality Risk Assessment Of Winery And Ancillary Development In The Mount Lofty Ranges Watershed" and will provide the wine and wine tourism industries of the region with the potential to increase operational flexibility to take advantage of new opportunities in wine production and wine tourism.

It is the finding of this study that the economic viability of the wine industry in the Mount Lofty Ranges will be aided by amendments to the current development policies in the Development Plan.

ECONOMIC IMPACT OF REGULATORY POLICY ON DEVELOPMENT OF THE WINE INDUSTRY IN THE MOUNT LOFTY RANGES WATER SUPPLY CATCHMENTS

PURPOSE & SCOPE

The Minister for Urban Development and Planning, the Hon Paul Holloway MLC, has commissioned this study by PIRSA Grape & Wine Group on the economic impact of regulatory policy on development of the wine industry in the Mt Lofty Range's Water Supply Catchments.

The agreed scope for the economic study was to assess the impacts of regulation proposed in:

- Draft Planning Strategy for the Outer Metropolitan Area Region ¹;
- Draft Mount Lofty Ranges Wineries and Ancillary Development Plan Amendment Report; and
- Other related planning strategies;

And indicate how the findings of the study might inform decision-making, affect policy development and drafting Regulations.

In accordance with the scope, the study has:

1. Identified all existing vineyards, cellar doors, restaurants, wineries, processing plants and related auxiliary amenities within the Mt Lofty Ranges Watershed;
2. Surveyed, by questionnaire and selected interviews, wine industry members to seek their views on:
 - * Intentions for development (boutique wineries and auxiliary facilities) over the next 5 to 10 years and evaluate the capacity of existing infrastructure to provide the needs for that development;
 - * the viability of their vineyard, winery and related operations considering crush size and other critical factors (production costs, water supply, waste disposal);
3. Evaluated the impact of water-use prescriptions on existing and future development of the wine industry;
4. Summarised structural changes to agricultural industries in the study zone that have occurred over the last decade or so and projected for the next 5-10 years;
5. Constructed and compared contrasting scenarios and their likely outcomes; and
6. Undertaken a risk assessment against findings of scenarios.

The study has been undertaken in the context of the following elements of South Australia's Strategic Plan:

- To increase South Australia's export income and assist in meeting the industry-agreed sectoral goals including those by the food and wine industries;
- To better the Australian average employment growth rate within 10 years;
- Increase visitor expenditure in South Australia's tourism industry by increasing visitor numbers, length of stay and spending;
- Reducing our ecological footprint to reduce the impact of human settlements and activities;

¹ *Draft for Public Consultation, released April 2005*

- Timely and transparent government decision making;
- Aligning State and Local Government Strategic Plans; and
- Maintaining and developing viable regional population levels for sustainable communities.

The report has not addressed issues that may impact on economic viability of grape and wine business operations such as off farm income, the impacts of other enterprise choices that may be made by landholders and marketing and business operation choices that are not impacted by planning and development regulatory environment.

METHODS EMPLOYED IN THIS STUDY

The aim of this study is to identify key changes to planning and development policies proposed in the Draft Planning Strategy, the Draft PAR and any other relevant reports, and the economic affect they will have on the Adelaide Hills wine industry. Several methods and tools have been used to gather the data necessary to achieve this aim.

Discovery of Documents

The first step was to identify, obtain and examine all relevant reports, studies and planning policy documents to ascertain current policies and compare these with proposed changes, also any relevant documentation of wine industry production and economic data. A complete bibliography of documents, reports, etc, consulted is attached at Appendix 1.

The Wine Industry in the Mt Lofty Ranges Watershed

The size, distribution and diversity of the various components of the wine industry was ascertained through consultations with the PIRSA Spatial Information Services, the Phylloxera and Grape Industry Board SA (PGIBSA), Adelaide Hills Wine Region Inc (AHWR) and South Australian Tourist Commission (SATC).

Questionnaire

A questionnaire was sent to all wine grape growers registered with the PGIBSA and located within the Mt Lofty Ranges Watershed. A copy is attached at Appendix 2.

Interviews

As part of the research for this report, proprietors of several wineries and vineyards of varying sizes were interviewed. The information that they provided has been instrumental in building the basis for this study.

Senior officers in the Agriculture and Wine Division of PIRSA were consulted for their expertise and knowledge of structural changes in horticultural and livestock industries within the study zone both over the last 5 to 10 years and as projected in the next 5 years.

Scenarios

For this study, the outcomes and consequent economic impact for the Adelaide Hills wine industry from three potential but dissimilar scenarios were assessed.

The three most likely potential scenarios for the region are:

Scenario 1: Do Nothing

The existing Development Plan policies remain unchanged, which limits development to the existing 10 licences, all with the potential to reach 2,000 tonnes capacity. Pre-existing ancillary activities are permitted to continue as “Non-complying” developments but new developments are not permitted.

Scenario 2: Implement the recommendations of the Water Quality Risk Assessment Study of Winery and Ancillary Developments in the Mount Lofty Ranges Watershed

This three-stage study, commissioned by the State Government and conducted over four years, applied rigorous scientific investigation and analysis to all potential threats from wineries and ancillary developments to the environment and, in particular, water quality in MLRW and made recommendations based on the findings. These recommendations were that, subject to development proposals meeting certain criteria with respect to siting, design and best management practice, winery and ancillary development be allowed in the MLRW.

Scenario 3: Draft Mount Lofty Ranges Wineries and Ancillary Development Plan Amendment Report

The current (Draft) Plan Amendment Report proposes that there be restrictions on winery and ancillary development within proposed Watershed Priority areas, with the level of restriction dependent on the priority area and its sensitivity in relation to water quality.

Tourism

Information on wine tourism was extracted from data available through Tourism Research Australia, SA Tourism Commission, Australian Bureau of Statistics and The Australian and New Zealand Wine Industry Directory (Winetitles 2005).

BACKGROUND

Wine Industry Operating Environment

The Adelaide Hills wine industry is operating as part of a global wine market and cannot expect to be immune from the pressures of increasing competition in that market.

Some of the key features that are pressuring wine producers within Australia include:

- Australia is increasingly reliant on export trade;
- Fluctuations in exchange rates for the Australian Dollar;
- The price / volume structure of the wine market provides relatively small opportunity for higher priced wines (see Figure 1 below);
- Larger producers are able to benefit from economies of scale in grape growing, production, packaging and distribution.
- Small producers maintain viability through a diverse mix of services and product differentiation.
- Market access and quality maintenance are the keys to the survival and growth for all sized companies within the Australian wine industry;
- Surplus production is an issue in all wine producing nations, including Australia and it is a situation that adversely impacts on all operators, especially the small to medium size wine enterprises;
- The value and volume of Australian wine exports continues to grow;
- There is significant consolidation within the retail, distribution and production segments of the wine industry, placing increased pressure on all producers; and
- Retail consolidation has increased the difficulty for small producers in obtaining retail shelf space.

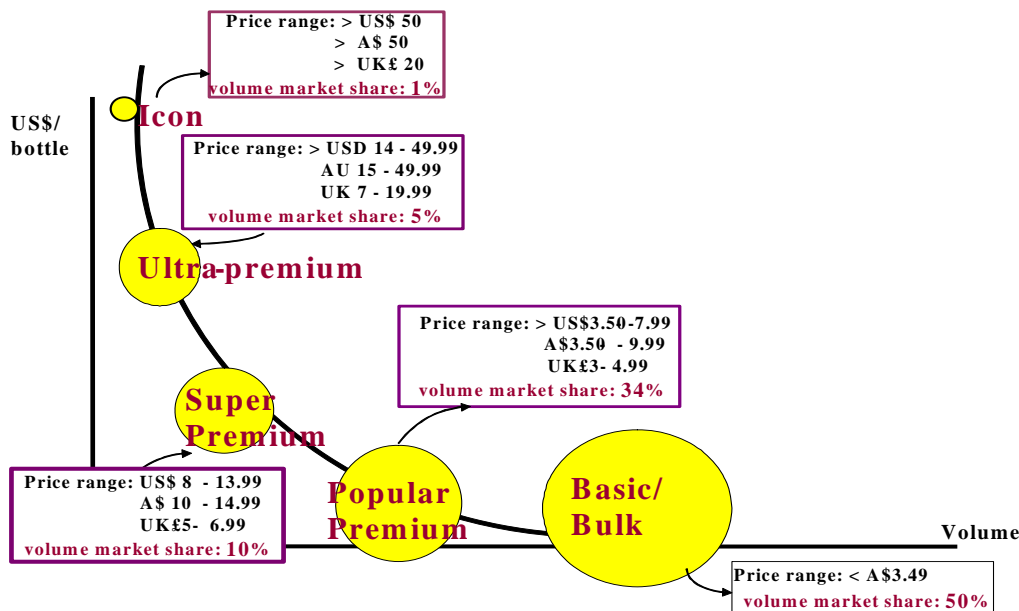


Figure 1: Global Price Points and their Share of Volume

A comprehensive discussion on these issues can be found in “A Report On The Impact Of Current Grape-Pricing Trends On The Riverland Region”, PIRSA, April 2005, found at <http://www.pir.sa.gov.au/sector2244.shtml>.

Wine Production Costs and Returns

Table 1 summarises average winemaking cost and return data from the Deloitte/Winemakers' Federation Annual Benchmarking Survey of Wineries (2003). Note that Direct Production Cost per case for the \$10-20m. category is 41% of that for the \$0-\$1m. category (\$38.72 compared with \$94.82) and the ratio of Total Costs per case is also 41%. The fact that the per-tonne cost of grapes is broadly similar for the four smaller categories indicates that the wine quality is also similar on average (notwithstanding the fact that boutique wineries tend to differentiate their wines by innovative or unusual winemaking treatments that can add to the unit cost). This data demonstrates the significant economies of scale in winemaking. Those economies are even greater for the *Over \$20m.* category but, from the average grape price paid, one can be confident that the main product for that category is from warm-climate grapes compared with cool-climate grapes from the other categories. Hence, the *Over \$20m.* category has been excluded from the above comparison. Independently conducted analysis by KPMG (2005) has confirmed this conclusion about the presence of scale economies.

What makes small wineries viable despite their cost disadvantage is the different mix of products and services that they provide. Typically, the hospitality component is much higher from small wineries. Wine tourists usually like to discuss, with the winemaker, family members or other staff, the characteristics of the wine they are tasting. Sampling the product over a meal at the winery is also popular. The brand recognition and consumer loyalty established via these experiences has been shown to influence purchasing decisions in other purchasing locations. In these hospitality components of the product mix, smaller wineries tend to have a competitive advantage.

Table 1: Revenue and costs of winemaking for different winery sizes

Winery Size (2003 turnover in \$m.)	\$0-\$1m.	\$1m.-\$5m.	\$5m.-\$10m.	\$10m.-\$20m.	\$20m.+
Revenue per case	148.23	100.10	107.02	67.96	47.29
Direct Production cost per case	94.82	59.12	51.74	38.72	24.89
Gross Margin per case	53.41	40.98	55.28	29.24	22.40
Total Cost per case	141.81	95.80	88.75	58.00	36.93
Profit per case	6.42	4.30	18.27	9.96	10.36
Advertising spend per case	10.73	5.31	2.23	2.65	3.78
Overheads per case	29.14	18.98	10.36	7.95	5.11
Packaging cost per case	26.71	24.07	17.66	15.54	8.24
Grape cost per tonne	1,512	1,666	1,259	1,428	786
Cost of purchased bulk wine per litre	1.84	3.21	3.17	1.81	1.36

Source: Deloitte 2003, p.4, 9.

The National Wine Market and Industry

There are some 1,899 wine producers in Australia, an increase of over 1,000 new wine producers since 1996. Of the 1,899 wine producers in Australia, the three largest wine companies in Australia have about 75% of the Australian market, and the largest 20 companies hold about 95%. The remaining producers are competing for just 5% of the market for Australian wine.

Wine production is a significant industry in Australia. In 2001, there were 1318 wine producers in Australia which directly employed 30 000 people in both winemaking and

grape growing (2001 Census), with further related employment in the retail, wholesale and hospitality industries. In 2005, the number of wine producers had grown to 1899, and while there are no corresponding estimates of Australian employment, it is assumed that direct employment in the industry has also grown significantly.

During 2002-03 the industry crushed 1.4 million tonnes of grapes to make 1085 million litres of wine. In 2003-04 the crush reached 1.9 million tonnes to make 1424 million litres of wine.

In 2003 total wine grape vineyard area reached 151 000 hectares of bearing vines, with a further 15 000 hectares of non-bearing vines. The area under vines stabilised, with a similar figure in 2004. Notwithstanding this, the area of bearing vines has more than doubled since 1996-97.

In 2001-02, for the first time, the volume of wine exported exceeded domestic sales. The value and volume of Australian wine exports continues to grow. The Australian Wine and Brandy Corporation reported that the moving annual total (MAT) for value of wine exported to November 2004 was \$A2.715 billion. Export volume was 636.5 million litres on a MAT basis. Domestically, sales of Australian wine totalled 417.4 million litres in the year 2003-04.

Australia's principal markets are the United Kingdom, the United States, New Zealand, Canada and Germany. Australia's largest wine export market in 2002-03 was the United Kingdom (209 million litres worth \$A860 million), closely followed by the United States of America (142 million litres worth \$A828 million). These markets continue to grow. In 2003-04, exports to the United Kingdom grew to 224 million litres. However, the value dropped to \$A849 million. The United States wine market grew to 174 million litres worth \$874 million.

In the medium term, Australian exports are well positioned to take advantage of consumer preferences for popular premium wines. By 2009-10, Australian exports are projected to increase to around 1.2 billion litres, with a value of around \$4.3 billion. By 2009-10, the United States is projected to surpass the United Kingdom to become Australia's number one export destination in both volume and value terms.

The South Australian Wine Industry

The Australian and New Zealand Wine Industry Directory (Winetitles 2005) reported that South Australia has 471 wine producers, an increase from 432 in 2004. In 2004, the Phylloxera and Grape Industry Board of South Australia recorded that South Australia's total winegrape crush of 920,194 tonnes came from a total vineyard area of 69, 827 hectares, including non bearing vineyards.

In the year 2003 - 04, the Australian Bureau of Statistics reported that South Australia produced 326.7 million litres of the total Australian volume of 584.4 million litres that was exported. The value of this to the South Australian economy was \$A1.4 billion.

One-third of Australian wineries that crushed 50 tonnes or more of grapes in 2002 were located in South Australia, including 11 of the nation's 20 largest processing facilities.

South Australia directly accounts for 48.9% of Australian production, however once further processing and packaging of product is taken in consideration, it is estimated that South Australia represents around 60% of production.

South Australia is renowned for its wine production and remains the focus for significant investment. It has a number of wine regions that are internationally acclaimed, including the Barossa Valley, Coonawarra, Clare Valley, McLaren Vale and the Adelaide Hills. Other regions such as the Padthaway, Wrattenbully, Mt Benson, Eden Valley and Langhorne Creek have also developed reputations as producers of quality wine. The Riverland is considered the engine room of the Australian wine industry.

The Mount Lofty Ranges Wine Industry

The study area comprises the Mount Lofty Ranges Watershed. Within the Watershed, there are three wine regions found in part or whole, the Adelaide Hills Geographical Indication Region (GI), the Southern Fleurieu and the Barossa Valley. Because the latter two regions have only a limited area within the MLRW, only the Adelaide Hills Wine Region is considered in detail. A GI is an official description of an Australian wine zone, region or sub-region, which has been defined, by the Australian Wine and Brandy Corporation. The Adelaide Hills GI region is within the Mount Lofty Ranges Zone.

Viticulture has established in the Mount Lofty Ranges Watershed (MLRW) because of the quality of the soil, the cool climate and reliable rainfall favouring the production of cool climate varieties of wine.

The Adelaide Hills Wine Region lies above an altitude of 400 metres and varies from a gently sloping landscape in the east, to deep gullies with steep slopes where the region borders Adelaide.

The region is undoubtedly cool climate with the folds and undulations of the hills creating a wide range of mesoclimates. In seeking and using these climate differences, the vineyards tend to be small in area and often very steep. Hand pruning and picking is often a necessity as well as a choice.

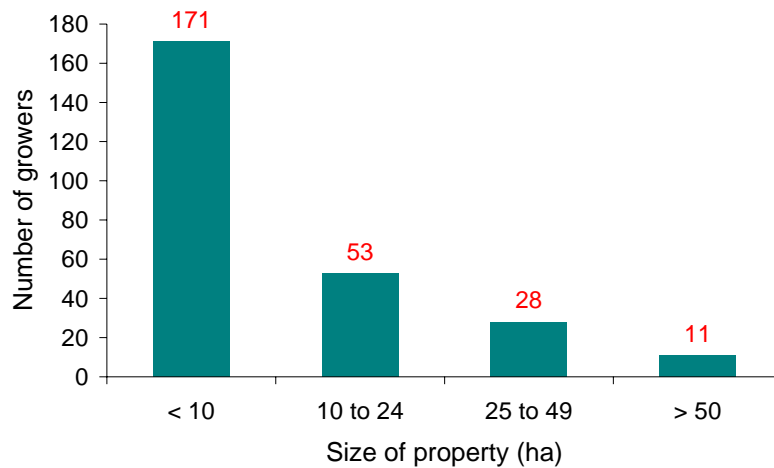
The Adelaide Hills GI wine region has gained recognition internationally as one of Australia's premier cool climate wine-producing regions. Most producers are in the "boutique" segment of the industry, that is, producing low volume, high quality (premium and super premium) wines.

The Phylloxera and Grape Industry Board of South Australia (PGIBSA) reports that there are 263 growers in the Adelaide Hills Wine Region with some 3322 hectares planted to bearing wine grape varieties. This area in the Adelaide Hills now under vine represents 4.8% of the state plantings. Of these 263 growers the majority have properties of less than 10 hectares. Figure 2, below, indicates the number of growers in the Adelaide Hills by property size.

Typically, wineries own and operate larger properties and therefore produce a larger proportion of grapes grown. However, only 11.5% of the 2004 Adelaide Hills crush was winery grown, which compares to an average of 24% for the whole of South Australia, meaning that the majority of wine grapes are grown by independent growers. Given that,

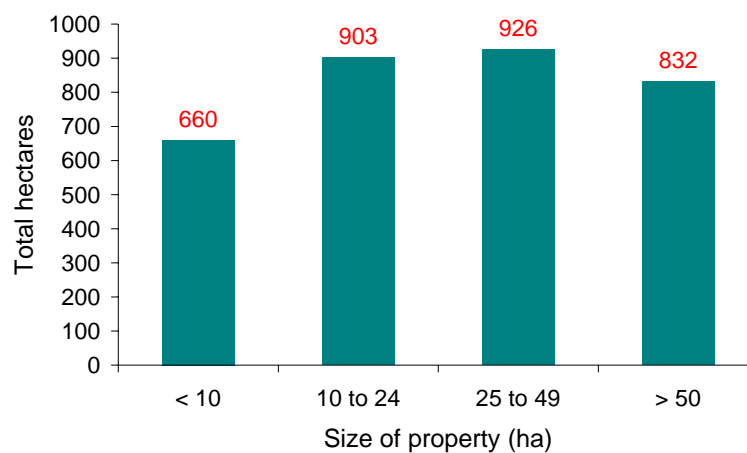
as discussed below, 30 growers have expressed interest in establishing their own winery, it is likely that regulatory restrictions are the major cause of this feature of the region.

Partly in response to those restrictions, a number of the independent growers have contracts to supply out-of-region wine producers. Figure 3 shows the total number of hectares held in varying property sizes and that the total harvest volume for the Adelaide Hills is quite evenly spread across the different property size classes.



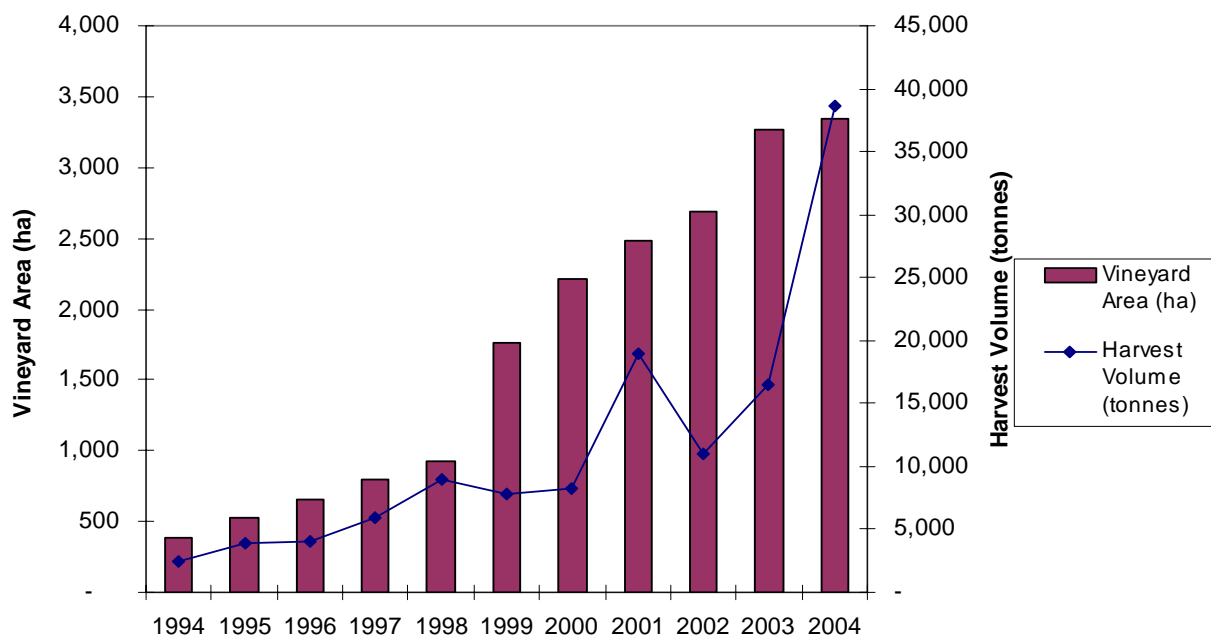
Source: Phylloxera and Grape Industry Board of South Australia

Figure 2: Number of Growers in each vineyard-size category in the Adelaide Hills (2004).



Source: Phylloxera and Grape Industry Board of South Australia

Figure 3: Total vineyard area in each vineyard-size category (2004).



Source: Phylloxera and Grape Industry Board of South Australia

Figure 4: Adelaide Hills Vineyard Area and Harvest Volume – 1994 to 2004

Figure 4 shows the rapid growth in vineyard area and harvest volume over the last decade and the near-cessation of plantings in 2004. Long-term average mature-vine yields are unlikely to exceed 9 tonnes per hectare but, in good seasons such as 2004, 14-15 tonnes appear achievable. If vineyard area stabilises at around 3,500 hectares, average harvest volumes of 30-35,000 tonnes are likely once all of those vines have reached maturity.

The total value of grapes from the Adelaide Hills in 2004 was more than \$56 million, up from \$27.6 million in 2003. The average value of \$1,458 per tonne is unlikely to be repeated in 2005, or in the next few years, thus a harvest value in the vicinity of \$35-40 million appears to be a reasonable estimate. As can be seen from Figure 4, yields vary greatly between seasons and prices also vary, so the fluctuations will continue to be significant.

The Australian Wine and Brandy Corporation reports that the total crush for South Australia in 2004 was 920,145 tonnes, giving the Adelaide Hills 4.2% of the total South Australian crush.

The characteristics of the region provide unique small-scale tourism opportunities, which is enhanced by the proximity and accessibility to metropolitan Adelaide. A commonly held view among grape and wine producers in the Adelaide Hills is that tourism is of vital importance to economic survival of smaller wineries.

Due to sharply declining prices fetched by wine grapes and insecurity of contracts, grape growers in the Adelaide Hills Wine Region have realised that in the current economic climate – that of oversupply, fiercely competitive global trade and retail consolidation –

they need to restructure their business to secure a higher proportion of the value of the final product.

Consequently, increasing numbers of growers are choosing to make their own wine, market it under their own label and promote the Adelaide Hills tourist experience by providing ancillary services (cellar doors, restaurants, bed and breakfasts etc). The goal is to expand and diversify sources of income, to secure a larger portion of the retail value of their labours and products thereby achieving economic viability.

Development and promotion of the Adelaide Hills Wine Region as a premier wine-tourism destination is critical to achieving this vision. This strategy is consistent with the analysis summarised in the above section, *Wine Production Costs and Returns*, which demonstrated that the viability of small wineries depends on their capacity to add hospitality services to their product mix. As discussed below, the current planning regulations severely curtail the industry's ability to respond to competitive pressures in this way.

According to the Wine Industry Directory (Winetitles 2005), marketing strategies vary between wine-producing companies. Of 60 producers in the region, 31 exported product to markets in Europe, North America and Asia. All but four stated that they utilised mail order, and 32 advised that they had access to cellar door facilities, some of which were outside the region.

The Mount Lofty Ranges Wine Industry Regulatory Environment

Development of the wine industry in the Adelaide Hills and its affect on the water resources in the MLRW has been subjected to scrutiny, involving several studies and reports, over the last five years.

In 2001, Development Plan policies for the Mount Lofty Range's Water Supply Catchments limited wine industry development to 10 listed wineries. In October 2003 and October 2004, notices of prohibition on the taking of water, together with the Notices of Intent to Prescribe the water resources of the Eastern and Western Mount Lofty Ranges, respectively, were published in the Government Gazette. These restrictions to development have caused widespread uncertainty and disquiet in the industry with respect to its long-term future.

After public release of the Stage 3 report of the EPA-commissioned study, "Environmental and Planning Assessment of Winery and Ancillary Development in the Mount Lofty Ranges Watershed – Planning Implications" (April 2004), the Minister for Urban Development initiated the Mt Lofty Ranges Wineries and Ancillary Development Plan Amendment Report.

The draft Planning Strategy for the Outer Metropolitan Adelaide Region ("the Draft Planning Strategy") was released for Public Consultation in April 2005. The principal proposals within the Planning Strategy, with potential to substantially impact the wine and other agricultural industries, are the establishment of Priority Areas within the Watershed with respect to sensitivity to water quality and classification of various developments within each area as either Compatible or Incompatible.

Upon release of the Draft Planning Strategy, the Minister for Urban Development and Planning commissioned the present study, to assess the economic impact of the proposed Regulations, if adopted, on the wine industries in the Adelaide Hills Wine Region and to include the PAR and any other related planning and development studies or reports.

FINDINGS & RESULTS

The Wine Industry in the Mt Lofty Ranges Watershed

The map at Appendix 3 shows the locations of vineyards, wineries, cellar doors and restaurants and their relationships to boundaries of the Outer Metropolitan Region, the MLRW and the Priority Areas proposed for the MLRW.²

Principal Relevant Documents, Studies and Reports

The commission for this study was to assess the economic impact on the Adelaide Hills wine industry of changes to planning and development policies proposed in a “Draft Planning Strategy for the Outer Metropolitan Adelaide Region” released for public consultation in April 2005, and the “Draft Mount Lofty Ranges Wineries and Ancillary Development Plan Amendment Report” initiated in November 2004. The recommendations and proposals contained in these have, in turn, been based on the findings and recommendations from other, preceding studies and reports.

Accordingly, the principal documents that have formed the platform for this study are:

1. The Draft Planning Strategy For Outer Metropolitan Adelaide Region, April 2005
2. The Mount Lofty Ranges Wineries and Ancillary Development Plan Amendment Report (Draft) June 2005
3. The Water Quality Risk Assessment Of Winery And Ancillary Development In The Mount Lofty Ranges Watershed Studies
4. Adelaide Hills Watershed Winery Demand And Infrastructure Study (the “Demand and Infrastructure Study”)

1. The Draft Planning Strategy for Outer Metropolitan Adelaide Region, April 2005 (“the Draft Planning Strategy”)

The key recommendations in the Draft Planning Strategy with potential for economic impact on the wine industry are the delineation of the MLRW into three Priority Areas based on assessed sensitivity with respect to water quality, demand and waste disposal.

² The map in the appendix is reduced from an original of 1:100,000 scale and, thus, cannot be easily read. The CD included with this report (in the sleeve attached to the inner rear cover) contains the original map and also “ArcReader” which is used to view the map. For the reader wanting to study the map in greater detail and higher resolution, it is recommended that the map in the appendix be used to identify the area and detail required, then locate and view it from the CD using ArcReader.

The following is extracted from the Draft Planning Strategy:

Priority areas in the Watershed

Map 1 on page 19 illustrates the priority areas 1, 2 and 3 for the watershed.

Priority 1 areas (P1) are those catchments and sub-catchments that discharge directly upstream of reservoirs or diversion weirs where water is taken into a water treatment plant. The provision of the highest quality public drinking water is the primary use in P1 areas. These areas need to be developed and managed to ensure there is only a beneficial impact on the water resource. These areas make up 22 percent of the Watershed.

Priority 2 areas (P2) include:

- land upstream and within 2km of a secondary water supply reservoir or diversion weir
- land within 100m of an aqueduct along the River Torrens and Onkaparinga Rivers used for conveying pumped River Murray water into downstream reservoirs
- high run-off sub-catchments (exceeding 250mm annual rainfall equivalent)
- land within 1 in 100 year average recurrence interval flood plains.

P2 areas need to be developed and managed to ensure there is a neutral or beneficial impact on the water resources. These areas make up 11 percent of the Watershed.

Priority 3 areas (P3) include all remaining parts of the Watershed including catchment areas set aside for possible future water supply reservoirs. In P3 areas it is acknowledged that water supply catchment functions co-exist with agricultural, residential, commercial and industrial uses. P3 areas need to be developed and managed to ensure there is a negligible, neutral or beneficial impact on the water resource. These areas make up 66 percent of the Watershed.

Existing uses in the Watershed

The introduction of Priority areas and the proposed changes to planning policy are not intended to reduce the viability of existing uses in the Watershed. It is essential that sustainable primary production and townships in the Watershed are retained. It is recognised that improving and preserving water quality in the Watershed will be much more difficult if there is a decline in agriculture and further fragmentation and development of rural land for non-farm activities. It is important to ensure a balance is achieved between the multiple uses of the Watershed and this includes supporting existing use while controlling incompatible new development.

Table 2 lists the compatibility of land uses and developments for each Priority Area as presented in the draft Planning Strategy for the Outer Metropolitan Adelaide Region released in April 2005 for public consultation.

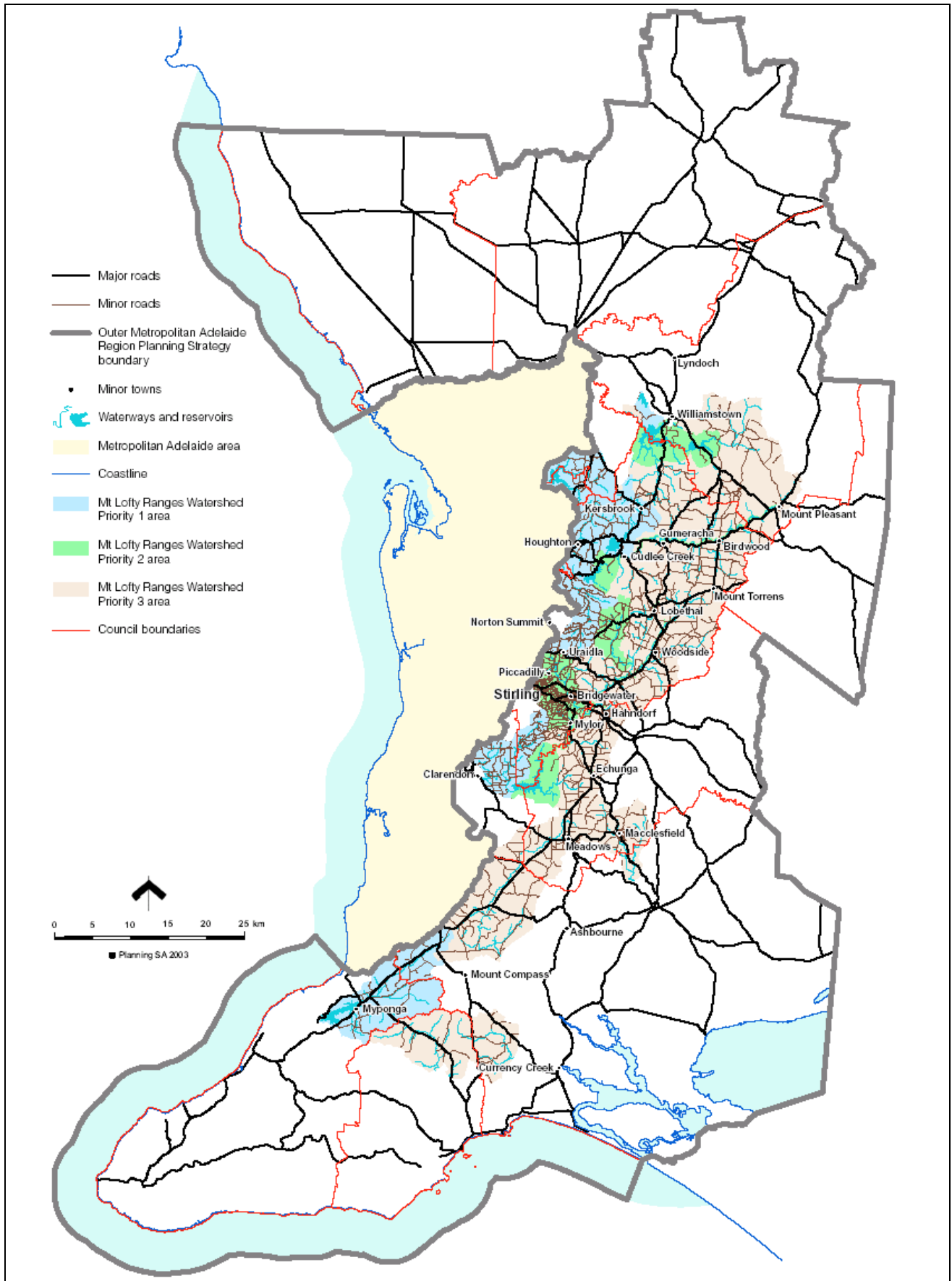
In summary, in relation to the wine industry, the Draft Planning Strategy finds and recommends that:

- appropriately managed agricultural activities contribute positively to water quality in MLRW and supports continuation of existing use while controlling incompatible new development;

- viticulture and other perennial horticulture are incompatible for Priority Area 1, whilst compatible only under certain conditions (unspecified) in P2 and P3 Areas;
- built developments (which includes accommodation facilities, restaurants, cafes galleries and other such public amenities) are incompatible in P1 and P2 unless connected to sewer or septic tank waste disposal system (STEDS), and are compatible in P3 but only under certain conditions (unspecified);
- wineries are incompatible in P1 and P2 unless connected to sewer or septic tank waste disposal system (STEDS), and are compatible in P3 but only under certain conditions (unspecified). It implies that the number of approved wineries remain restricted to the existing ten prescribed in 1999 and that the crush size be limited to maximum 2000 tonnes/year;
- cellar door sales buildings are compatible in all Priority Areas 1, 2 and 3, but only under certain conditions (unspecified)

These recommendations propose amendments to the current restrictions to the establishment of wineries and ancillary developments in the Mount Lofty Ranges within designated priority areas.

HOWEVER, industry does not support the blanket ban imposed on vineyard plantings and other agricultural practices (eg horticulture) within Priority 1. This recommendation should be reviewed.



Map 1: Priority Areas in the Mt. Lofty Watershed

Table 2: Compatibility of selected developments with the water quality management objectives for each Priority Area.

<p>This table identifies select land uses and developments and whether new development of this nature is compatible or not with the water quality management objectives for each Watershed Priority area. The policy direction provided by the strategy and table will necessitate the strengthening of current planning policy in Development Plans in some cases (mainly in Priority 1 and 2 areas) and allow the relaxation of current planning policy in other cases (mainly in Priority 3 areas). It is important to note that</p> <ul style="list-style-type: none"> the policy direction provided by the strategy and table for each Priority area applies to all zones in each of the Priority areas, including township zones that are encompassed by the Priority area designation the terms 'incompatible' and 'compatible under certain conditions' which are used in the table provide direction for the development of planning policy and do not relate to terminology used in Development Plans or in the <i>Development Act 1993</i> interpreting the strategy and table into planning policy in Development Plans through a plan amendment report will involve refining of current policy and consideration of other relevant strategies in the <i>Planning Strategy for the Outer Metropolitan Adelaide Region</i>. 				
Land use description	Priority 1	Priority 2	Priority 3	Overview of current planning policy (included for consultation purposes only)
PRIMARY INDUSTRY USES				
Annual cultivated horticulture (market gardening, turf farms, intensive floriculture)	Incompatible	Incompatible	Compatible under certain conditions	Considered on merit in rural zones, except in those parts of the Watershed that are in the Hills Face Zone where horticulture is non-complying in most cases.
Perennial horticulture (orchards, viticulture)	Incompatible	Compatible under certain conditions	Compatible under certain conditions	Considered on merit in rural zones, except in those parts of the Watershed that are in the Hills Face Zone where horticulture is non-complying in most cases.
Dairies which are not replacement dairies	Incompatible	Incompatible	Compatible under certain conditions	Considered on merit in rural zones
Intensive animal keeping, including feedlots, zoos, poultry sheds, dog kennels, catteries	Incompatible	Incompatible	Compatible under certain conditions	Non-complying
Aquaculture involving husbandry and/or supplementary feeding in a water flow through system	Incompatible	Incompatible	Compatible under certain conditions	Non-complying
Forestry	Compatible under certain conditions	Compatible under certain conditions	Compatible under certain conditions	Considered on merit in rural zones
OTHER LAND USES / DEVELOPMENTS				
Land division which creates additional allotments	Incompatible	Compatible under certain conditions in urban zones* for aged accommodation. Incompatible for other development in other zones.	Compatible under certain conditions in urban zones. Incompatible in other zones.	Non-complying in rural zones. Subject to minimum zone criteria, ie minimum allotment sizes, in urban zones.

Table 2 (continued)

Land use description	Priority 1	Priority 2	Priority 3	Overview of current planning policy (included for consultation purposes only)
Land division (boundary rearrangements) which would create allotments containing 2 or more habitable dwellings	Incompatible	Incompatible	Compatible under certain conditions in urban zones. Incompatible in other zones.	Considered on merit
Any built development that generates greater than 1500L of wastewater per day per allotment and is not connected to sewer or STEDs including built development that is additional to an existing development on the allotment.	Incompatible	Incompatible	Compatible under certain conditions	Considered on merit
Cellar door sales buildings**	Compatible under certain conditions	Compatible under certain conditions	Compatible under certain conditions	Non-complying (other than if associated with 10 identified wineries)
Wineries (up to 2000 tonnes crush/year) that are not serviced by sewer or STEDs**	Incompatible	Incompatible	Compatible under certain conditions	Non-complying (other than 10 identified wineries)

* Urban zones includes centre zones, township zones, country living zones, commercial zones and industry zones
 ** Subject to review and further investigation as part of the Mount Lofty Ranges Winery and Ancillary Development Plan Amendment Report

2. Draft Mount Lofty Ranges Wineries and Ancillary Development Plan Amendment Report (PAR)

The PAR was initiated in November 2004 consequent to public release of the Stage 3 Report of the EPA-commissioned study, “Environmental and Planning Assessment of Winery and Ancillary Development in the Mount Lofty Ranges Watershed – Planning Implications” (April 2004). The fourteen-member PAR Working Group comprised representation from: Planning SA; Environment Protection Authority SA; SA Water; Department of Water, Land and Biodiversity Conservation; Department of Transport and Urban Planning; Primary Industries and Resources SA, Department of Trade and Economic Development; SA Tourist Commission; SA Wine Council; Adelaide Hills Wine Region Inc; and, the Councils of Mount Barker, Adelaide Hills and Barossa.

The PAR consists of three parts: an Explanatory Statement that briefly summarises the rationale for the amendment and nature of the proposed changes; a statement of Investigations that explains the investigations undertaken; and, the technical instructions and policies that comprise the actual Development Plan amendment.

Key background documents informing the PAR in assessing planning policy for the MLRW were the Planning Strategy for Regional South Australia (2003) and the detailed objectives in the Mount Lofty Ranges Regional Strategy Plan (1993). As the PAR was initiated to assess the appropriateness of existing planning policies in light of the scientific

investigations, findings and recommendations of the “Water Quality Risk Assessment of Winery And Ancillary Developments in the Mount Lofty Ranges Watershed” Stages 2 and 3 reports (the “Risk Assessment Study”), it draws extensively on these documents to inform its decision-making processes and recommendations.

It also draws widely from State and Local Government policy, planning and development documents and publications defining technical standards etc., as appropriate, for example, the handling, treatment and disposal of wastewater, sewage, etc., and, finally, refers to the Draft Planning Strategy.

The PAR considers all aspects of planning and development including: risk to water supply and receiving waters; freight and traffic; conflict of land use; impacts on rural character; inappropriate retail development; water availability and access to electricity; and, setting of Public Notification Levels. For each of these critical considerations, the PAR assesses existing and proposed policies against the aims and objectives of the relevant planning documents cited, focuses these through the prism of the robust scientific procedures applied in the Risk Assessment Study, then makes its own “Policy Response” statements.

There are a total of twenty-three (23) recommendations by way of policy responses. These policy responses are in three categories:

- nine (9) recommend amendments to the current restrictions on development;
- two (2) recommend qualified facilitation of development; and,
- twelve (12) endorse or reinforce existing policies and restrictions that ensure appropriate restrictions such that will protect water supply, the environment, the rural character, the community generally, and from placing excessive demand on existing infrastructure.

The proposed Plan Amendment Report policies do not guarantee that any applicant can establish a winery, cellar door or ancillary development. The onus will remain on an applicant to meet the relevant policy criteria and failure to meet any of the criteria may result in an application not being successful.

- It is recommended that consideration be given within the Plan Amendment Report to enabling joint cellar door facilities, housing a number of local wine producers, to be established. This would enable small wine producers to establish a cellar door presence where otherwise they may not be able afford the establishment costs, or would only be able to operate during limited hours, primarily on weekends. In conjunction with this, a review of liquor licensing policies would also be required. [Do cellar door facilities that are *jointly* owned/run need special consideration? It appears that cellar door facilities are already okayed in the Draft PAR. Surely joint ownership or management is not an issue for the PAR? If so, the point is valid, however. We would not want the PAR to preclude that option.

The Draft PAR recommends amendments to the current restrictions on, even encouragement of, development of wineries and ancillary business in the Mount Lofty Ranges Watershed but strongly endorses policies that protect water quality, the environment and other community values.

3. The Water Quality Risk Assessment of Winery and Ancillary Development in the Mount Lofty Ranges Watershed Studies (“the Risk Assessment Study”)

This three-stage study, commissioned by the State Government and conducted over four years, applied rigorous scientific investigation and analysis to all potential threats to the environment and, in particular, water quality in MLRW and made recommendations based on the findings. These recommendations were that, subject to development proposals meeting certain criteria with respect to siting, design and best management practice, winery and ancillary development be allowed in the MLRW.

The Stage 2 Report found that:

- There is very little risk to water quality in reservoirs or down stream uses from winery or ancillary development, which could be further reduced to a 1 in 10,000 year risk via best-practice management;
- Alcohol-based refrigeration brine, untreated winery waste and sewage collection and treatment for ancillary development have potential to impact on water quality and aquatic systems, however risk, with best management practice is very low;
- The primary potential cause of spill events was determined to be human error;
- Siting of wineries in relation to the nearest watercourse influences risk and volume of spills reaching watercourses; and
- Irrigation re-use of untreated or partially treated wastewater is not considered appropriate for the MLRW

Best management practice measures to minimise risk included:

- Roofing and housing processing equipment and tanks
- Secured buildings and infrastructure
- Containment features, such as bunds, isolation facilities and retention basins
- Treatment of waste prior to disposal
- Independent auditing of environmental management plans;

where the risk criterion was defined as a 1 in 10,000 year likelihood event; a 1 in 100 years event likelihood is the benchmark for acceptable risk.

The Stage 3 Report, “Planning Implications”, has nine recommendations for refinement of planning policy in relation to wineries and ancillary developments as follows:

1. The Development Plan be amended to make winery and/or ancillary development exceptions to ‘non-complying’ in the MLRW if appropriately sited and designed;
2. Include a new objective in the development Plans applying in the MLRW relating to best practice, innovation and sustainable winery development;
3. Require siting criteria relating to setbacks from watercourses, setbacks to dwellings (or other sensitive uses) and access to designated arterial roads to be included in the non-complying exemption provisions;
4. Require treatment to the satisfaction of the EPA for all wastewater used for irrigation re-use;
5. Include incentives designed to achieve the desired outcomes relating to risk management, amenity and community benefit through the categories of notification;
6. Consider the expansion of exemption criteria within the non-complying principles, to embrace measures identified within the Stage 2 Technical Assessment report able to be included in the Development Plan;

7. Encourage use of non-regulatory measures, such as environmental management plans, for day-to-day management of wineries and ancillary developments in MLRW
8. Consider requiring independent audits as part of EPA licence renewals; and
9. Consider facilitating stand-alone cellar door sales and restaurant development (that satisfy the same non-complying exemption criteria relating to wastewater etc applicable to winery development) by treating them as merit development.

Ancillary development is defined as “facilities such as cellar door food and wine sales, restaurant facilities, art and craft displays, and similar value-added activities ancillary to but not directly related to the production of wine”, the meaning adopted for this report.

Stages 2 and 3 Reports of the Risk Assessment Study advise that there is very little risk to water quality in reservoirs or down stream uses from winery or ancillary development and recommends amendments to the current restrictions in compliance with planning, design and licensing requirements that reduce risk by 100-fold the benchmark of acceptable risk and are sensitive to the environmental, aesthetic and community standards of the region.

4. Adelaide Hills Watershed Winery Demand and Infrastructure Study (the “Demand and Infrastructure Study”)

In 2001, the SA Government carried out a detailed study to determine infrastructure demands of Adelaide Hills Wine Region to 2010 and to address risk assessment of wineries in MLRW. In the study a questionnaire was sent to all vignerons and wine companies in the region, eliciting data on their forward plans. There were 63 responses to the questionnaire resulting in 51 follow-up interviews. Among those surveyed there was almost unanimous belief that restrictions in the Watershed PAR would adversely affect wine and tourism in the Adelaide Hills and preference for a regimen where every application would be considered on merit. A majority identified a close connection between wine and tourism, with critical mass of facilities and attractions a key, that is, there being a sufficient number of small wineries, cellar doors, restaurants, galleries, etc., for a total tourist experience with a good range of experiences and possibility of “chance” discoveries.

There was strong support for maintaining the character of the Hills and no support for large wineries, that is, greater than 2000, tonnes, consistent with the “boutique character” of the Region. A high proportion considered that planning and regulatory authorities did not understand the nature of viticulture or wine industries in the Hills. Industry placed emphasis on retaining a clean and green image, ability to manage waste, etc. There was a general view that industry needed more information of the grounds for refusal of development applications coupled with feedback on resolving problems. Most stressed the importance to recognise that viticulture/wine is replacing more polluting industries such as dairies and potato farms. The clean green image and preservation of the environment was considered paramount for operators and fundamental to their survival.

The 2001 study exposed a strong industry belief that Adelaide Hills is destined to become known as the best cool climate wine area in Australia. Almost all respondents insisted that only grapes grown in the Hills would be processed in wineries proposed for the Hills.

Growers expressed concerned about grape prices and that without their own value-adding facility they will remain “at the mercy” of large companies. Many expressed concern that a cap on crushing facilities in the GI will increase the processing costs forcing more to truck fruit out of the Region. The high cost of transport to process outside the Region was the major driver of the desire for developing on-premise crushing. Fear of introduction of *Phylloxera* with processed product returning to the region also drove this desire for on-site processing. Respondents were asked if they were interested in a winery in their current vineyard. The desired wineries and tonnages indicated are listed in Table 3.

Table 3: Survey projection of winery numbers and grape crush, 2001

Size	Number of wineries	Total tonnage indicated
< 50 tonnes	14	610 tonnes
51 to 100 tonnes	4	400 tonnes
101 to 200 tonnes	2	300 tonnes
201 to 500 tonnes	5	2300 tonnes
501 to 2000 tonnes	5	10,000 tonnes
Total	30	13,610 tonnes

Source: Adelaide Hills Watershed winery demand and infrastructure study, 2001

There was no agreement on the minimum size for a viable winery, some asserting they can exist on 50 tonnes, others insisting that cost of equipment dictated non-viability under 150 tonnes.

In the study, the industry estimated that in 2001 more than 50% of the grape crop was contracted to wineries out of the region and, further, estimated the number of wineries that would be developed to 2010 as shown in Table 4.

Table 4: Industry estimate in 2001 of winery numbers and grapes processed in 2010

Size	Number of wineries (2010)	Total tonnage indicated (2010)
<250 tonnes	10 to 15	<2500 to 3750
500 tonnes	10	5000 tonnes
2000 tonnes	5	10,000 tonnes
Total	25 to 30	<17,500 to 18,750 tonnes

Source: Adelaide Hills Watershed winery demand and infrastructure study, 2001

In assessing the availability of grapes in the region, the “Demand and Infrastructure Study” quoted the PGIBSA estimates from its 2001 report as being 20,800 tonnes in 2006 and 30,000 to 35,000 tonnes in 2010 but with a significant proportion being contracted to wineries out of the area (50% of the 2001 crop and 70% of new plantings). It was

estimated that fruit available to be crushed in the Hills would be less than 15,000 tonnes. In the event, the estimate for 2006 was conservative, with 37,000 tonnes harvested in 2004 and an estimated 26,000 tonnes likely in 2006 if it is an “average season”.

Among the producers and companies, surveyed in the Demand and Infrastructure Study and that produced wine, the cost of production per bottle was \$4.50 to \$6.

Respondents were asked to identify specific issues they considered imposed an impediment or negative affect on the industry in the Adelaide Hills. Chief issues identified were restrictions to development and perceived opposition from planning approval agencies, electricity supply, communications and roads (including signage).

The Demand and Infrastructure Study, 2001, revealed a strong support in the Hills wine industry that its future viability would depend on development and promotion of the region as a wine tourism destination. This was reflected in the number that had plans or intentions to establish a winery or ancillary development to diversify and expand their enterprise and sources of income.

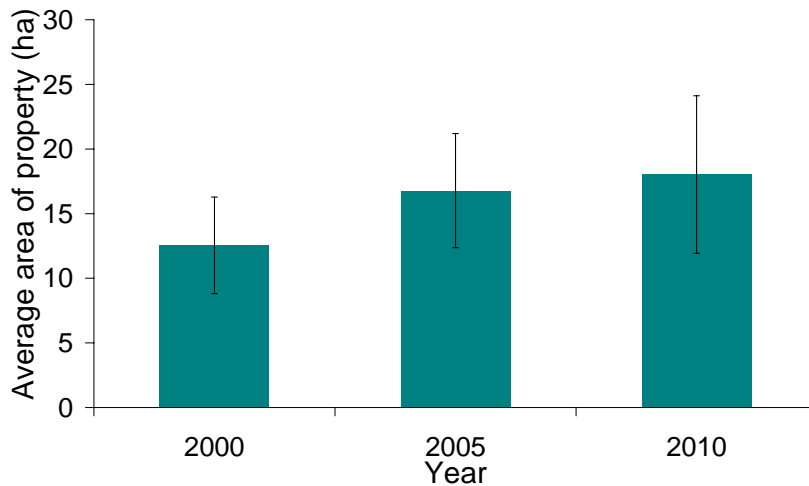
The 2005 Survey

In June 2005, PIRSA undertook a survey of wine grapegrowers registered with the Phylloxera and Grape Industry Board of South Australia. A total of 302 questionnaires were mailed to wine grape growers and located either within the Adelaide Hills Wine Region or, if not in the region, within the MLRW. One hundred and thirty-nine completed forms were returned to PIRSA, a response 46%.

Data provided by respondents yielded information areas of vineyards, grape production, costs of producing grapes per tonne and per hectare, prices paid per tonne for grapes, contract details, wine production, future plans and issues perceived as affecting long-term viability of the their enterprise and the industry generally.

The areas of vineyards owned by respondents ranged from 0.75 to 140 hectares, the single largest group being in a group of holdings of less than 5 hectares.

Between 2000 and 2005 there was substantial increase in the area of land on which wine grapes are cultivated but further expansion planned to 2010 is small (Figure 5), continuing a trend of declining annual rate of increase in areas planted to vines.



Source: 2005 Survey

Figure 5: Land areas in the Mount Lofty Ranges Watershed bearing wine grapes. Data from PGIBSA shows that new areas planted to vineyards peaked in 1998, 2000 and 2001 but the annual rate of increase has declined rapidly since then, as shown in Table 5 and in Figure 5 above.

Table 5: Adelaide Hills Plantings of Wine-grapes by wine type and Year.

Year	New areas planted in hectares		
	Red	White	Total
Pre-1997	494	540	1035
1997	260	103	363
1998	386	186	572
1999	194	97	292
2000	166	219	386
2001	98	262	361
2002	24	161	185
2003	7	126	132
2004	3	85	88

Source: Phylloxera and Grape Industry Board of South Australia

Both the total harvest (Figure 6) and yield (Figure 7) of wine grapes increased from 2002 to 2005, with a peak, “bumper” year in 2004. Production goals of most respondents for future years, presumably resulting from small increase in areas planted and maturing of vines to full productive potential, forecasts total production similar to that in 2004.

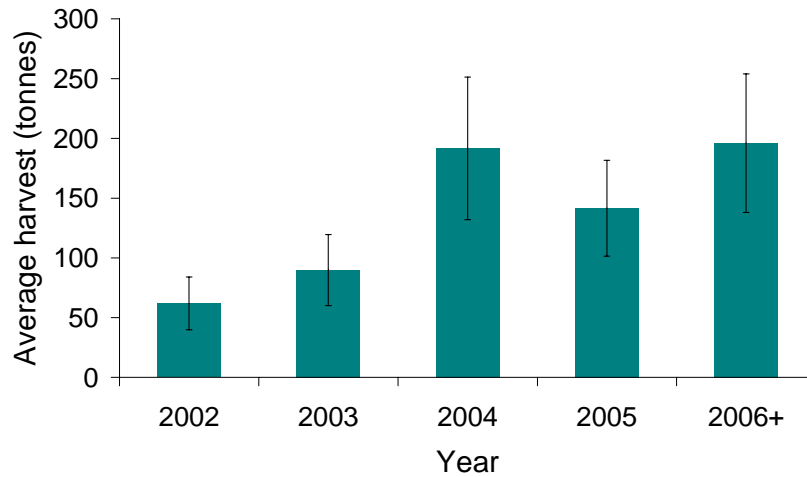


Figure 6: Average total tonnes of wine grapes harvested 2002-2005 and forecast 2006+.

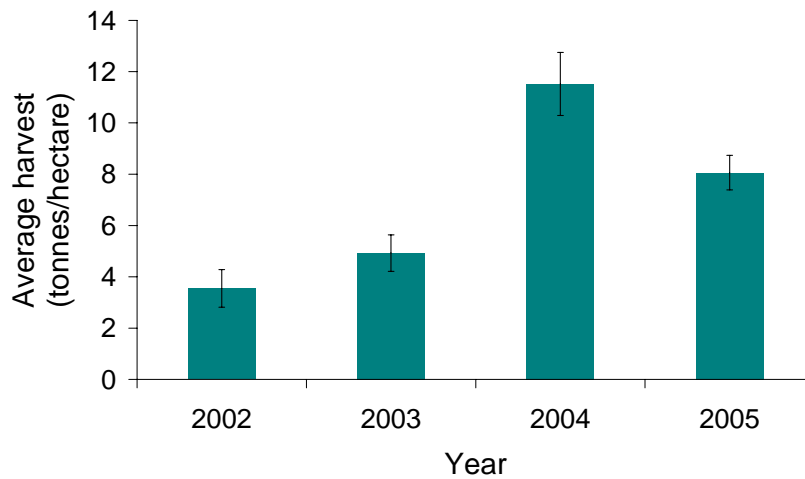


Figure 7: Average yield of wine grapes in tonnes per hectare, 2002-2005.

From 2002 to 2005 the cost of production of grapes per hectare rose marginally (Figure 8) while cost per tonne fell as newer plantings reached full productivity (Figure 9).

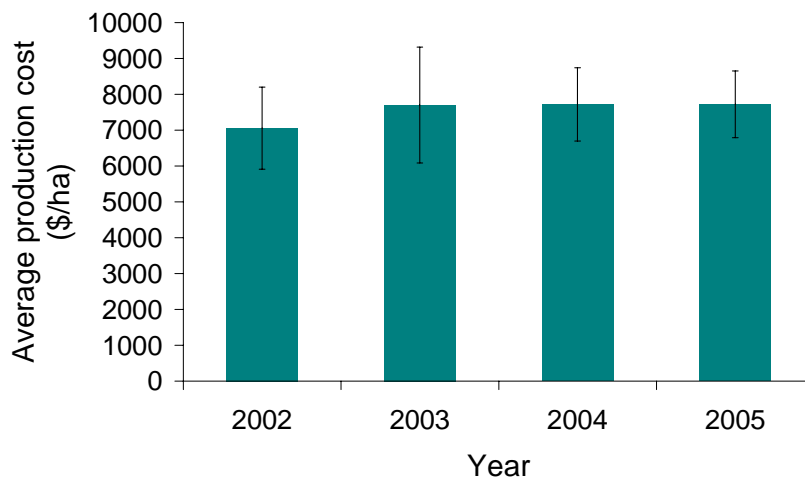


Figure 8: Cost per hectare of production of wine grapes in Adelaide Hills.

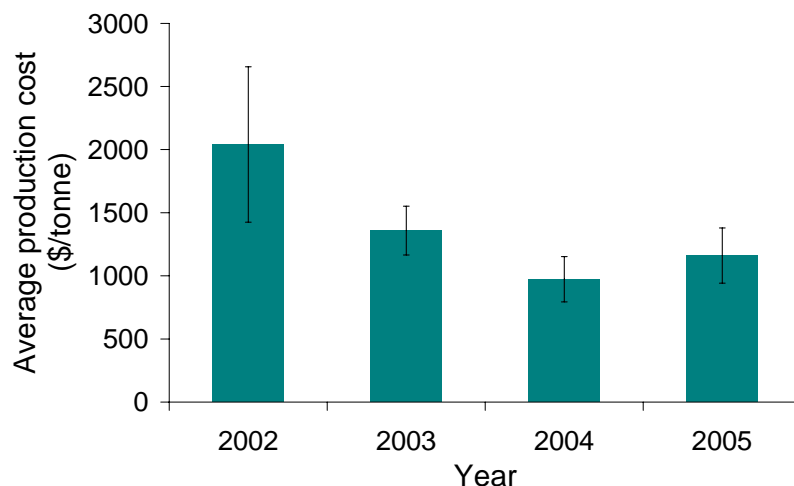
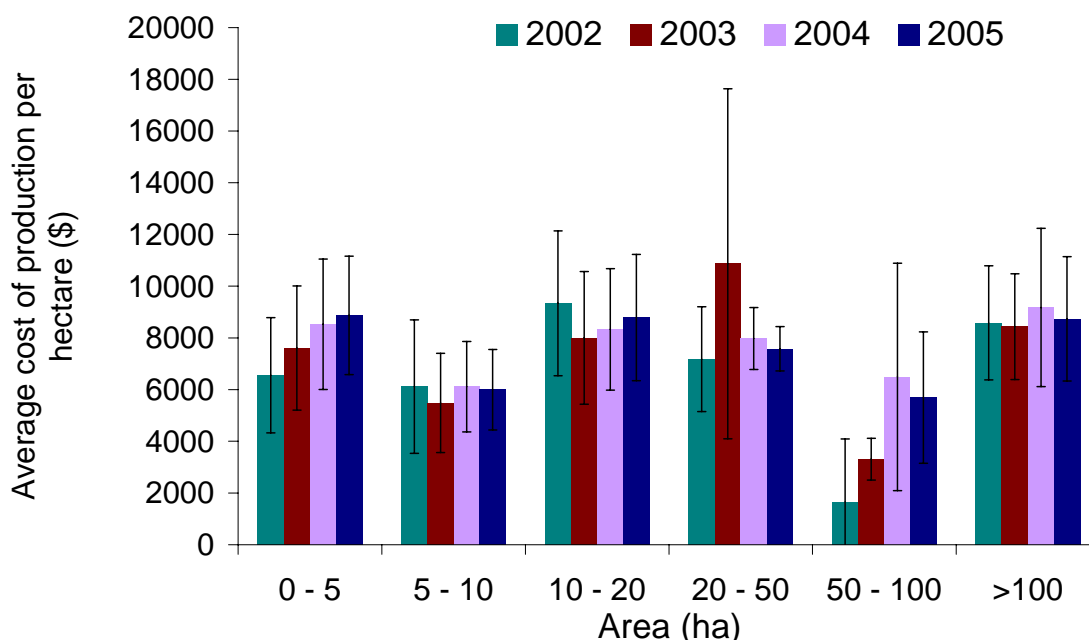


Figure 9: Cost per tonne of production of wine grapes in Adelaide Hills.

Survey respondents were grouped into six classes by area of vineyards and the costs of production of grapes compared between the classes within each year. Figures 10 and 11 show that within years, there is no difference in the average cost of production either (\$) per hectare (Figure 10) or (\$) per tonne (Figure 11) between the different land-area classes. This indicates that there is no apparent benefit from ‘economy of scale’; increasing the area of a vineyard does not confer advantages in production costs. This



conclusion is at odds with numerous analyses of winegrape production costs, which show that the salary of a skilled vineyard manager and other overhead costs constitute a high proportion of total costs. Typically, larger vineyards have the capacity to defray those overhead costs over more output and therefore reduce the cost per tonne (and per hectare). The most likely explanation is, as observed in other such surveys, that smaller farmers tend to ignore the opportunity cost of their labour (and often the depreciation cost of the vineyard and plant) as, to varying extents, the enterprise is considered a “lifestyle

choice". At the other end of the scale, tax considerations can bias the data in the opposite direction. As the survey did not specify which costs should be included, there is no way of ascertaining the source of the discrepancy. The implications of the discrepancy will be discussed below.

Figure 10: Cost per hectare of production of wine grapes in Adelaide Hills by area.

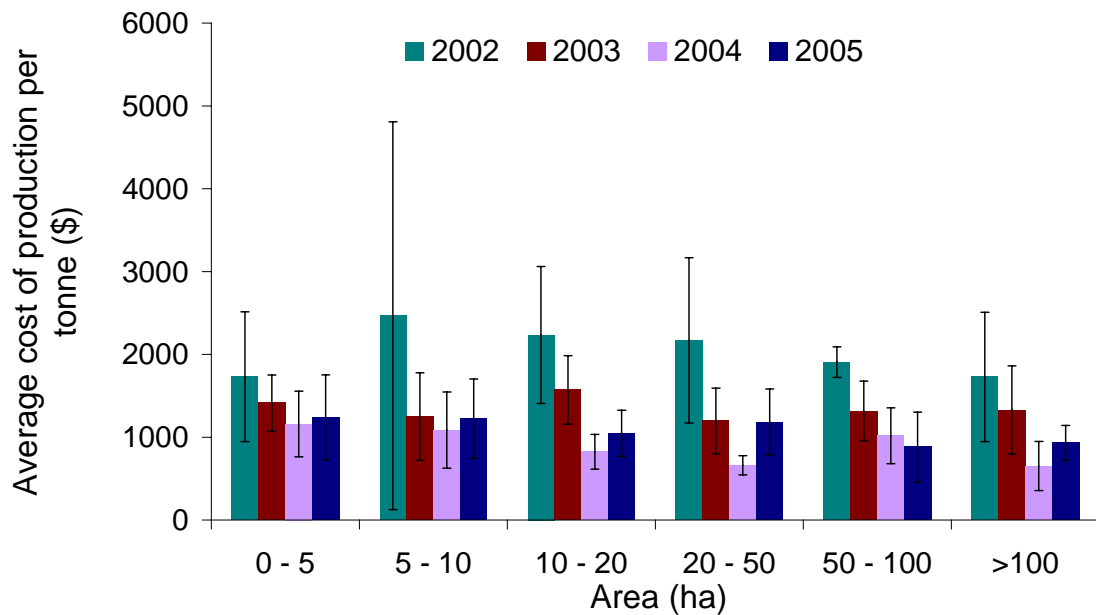


Figure 11: Cost per tonne of production of wine grapes in Adelaide Hills by area.

Figure 12 shows a trend, the prices received by growers for their grapes falling over the last three vintages.

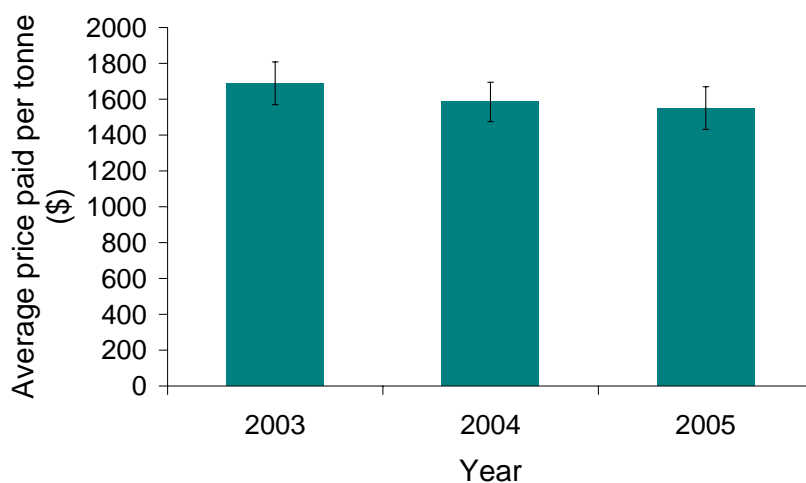


Figure 12: Price per tonne paid for wine grapes grown in the Adelaide Hills.

Of the 139 respondents, just over half (72 or 53%) had contracts for the sale of their grapes and, as can be seen in Figure 13, having a contract appears to secure a higher price. Of the 72 respondents with contracts, 63 also stated dates of expiry as follows:

- eight (8, or 13%) expired in 2005
- ten (10 or 16%) expire in 2006
- twenty (20 or 32%) expire in 2007/2008

that is, 60% will be out of contract by the end of the 2008 vintage.

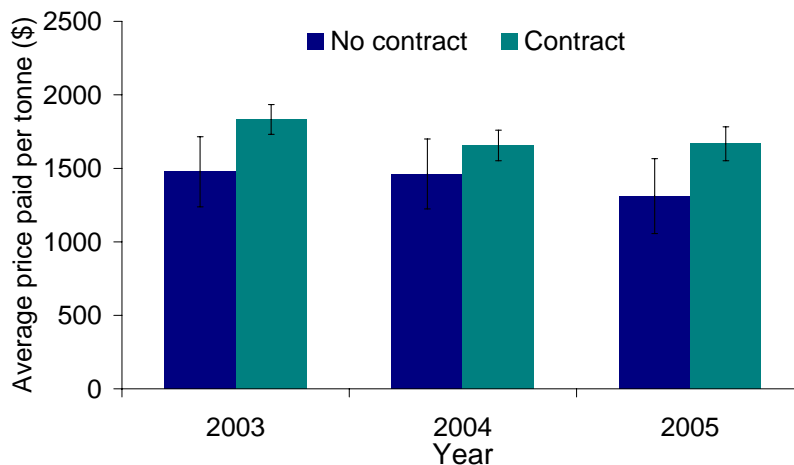


Figure 13: Comparison between contract and non-contract prices paid for wine grapes.

Among respondents, 52 or 37% said that they have their own wine label and, over the last four years, the percentage of growers choosing to crush their own wine has increased steadily (figure 14).

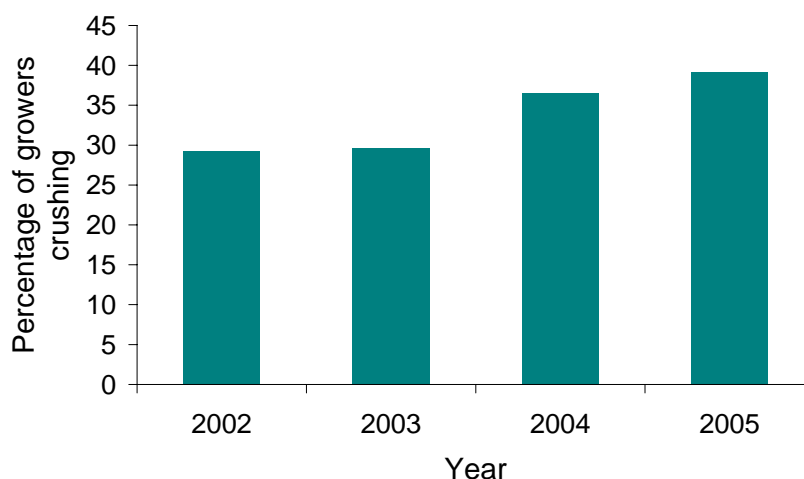


Figure 14: Percentage of wine grape growers in the Adelaide Hills crushing a proportion of their crop for own label for the years 2002 to 2005.

Eighty-one per cent (81%) of respondents expressed an intention to increase the volume of wine produced over the next five years, the intended increase ranging from 1,200 litres

to 520,000 litres. If these intended increases are achieved, the total volume of wine produced by respondents in the Adelaide Hills Wine Region will increase from 3,648,650 litres to 4,310,600 litres by 2010.

Thirty growers, representing 21% of respondents, expressed an intention to establish a winery if permitted. The sizes indicated ranged from 5 to 1,000 tonnes capacity, with estimated costs of establishment up to \$5 million. Twelve indicated their intended capacity was 50 tonnes or less, and a further four intended capacity between 50 and 250 tonnes.

Forty-five percent (45%) of producers completing the survey stated an intention to include ancillary ventures at their vineyard in the future. A number of possible ancillary ventures were mentioned, with some growers aspiring to incorporate multiple ancillaries into their business.

A summary of the ventures proposed and the number of growers interested in establishing each is listed in Table 6. By far the most popular proposal was for cellar doors, with 43 growers interested in establishing one in the future. Restaurants (10), tasting rooms (9), and accommodation (8) were also high on the respondents' list of proposed expansion and diversification. A number of other ancillaries, including cafes, art and craft stores, function centres and other local produce stores were mentioned in the responses.

Table 6: Ancillary ventures desired by wine grape growers, in the Adelaide Hills Region

Ancillary	Number
Cellar door	43
Accommodation	8
Gallery	2
Restaurant	10
Mail/direct order cellar	2
Eco-tourism	2
Function centre	3
Art and craft	4
Local produce	1
Tasting room	9
Café	4

From the responses in the survey combined with data from the interviews, the following production information was generated.

Wine Production Costs and their influence on the Nature of Industry Development in the Region

More than 139 responses make up the data for the following *Cost per bottle* (winemaking) figures in Figure 16.

Figure 16 shows the average cost (\$) per bottle of wine produced in the Adelaide Hills in relation to the size of the corresponding crush (tonnes) from which they are derived, in five groups of size intervals over four years. There is no trend apparent and confidence intervals overlap. Any non-overlapping bars are due to a sample size of 1, and thus no confidence interval can be calculated, to read this as an actual difference would be an inaccurate conclusion. The survey showed no major difference in the cost per bottle as

crush size increases suggesting that increasing crush size does not confer any economy-of-scale benefit or cost advantage to the cost of production per bottle of wine. Again, this result is at odds with other studies, including the Deloitte benchmarking study summarised under the heading *Wine Production Costs and Returns* above. The most likely explanation for the discrepancy is the same as that for grape production costs.

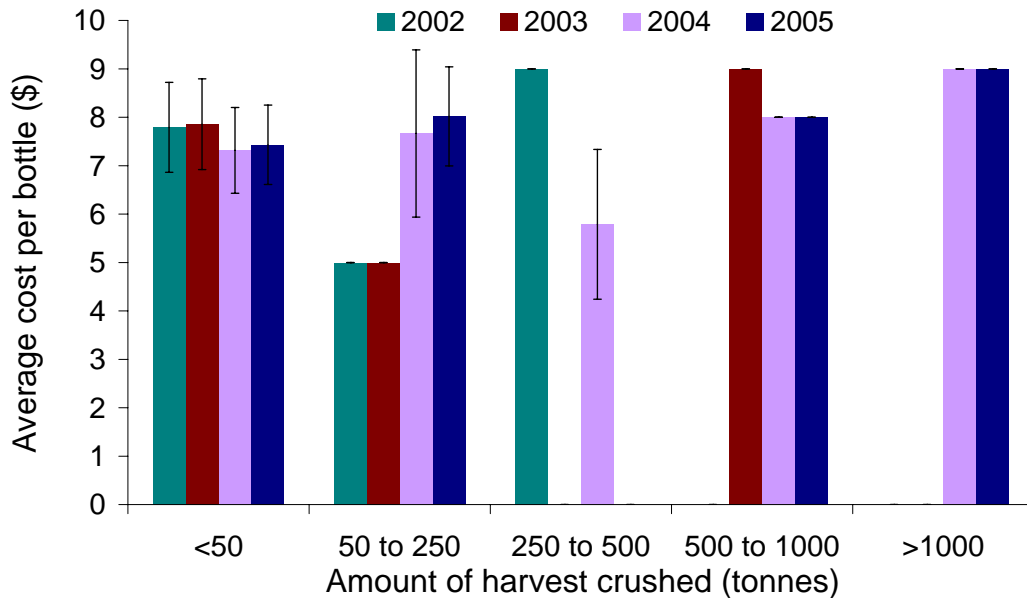


Figure 16: Costs of wine production for different sized wineries.

Notwithstanding the survey evidence, it is extremely likely that scale economies exist in the production of Adelaide Hills grapes and wine. However, for numerous reasons, grape production in the Adelaide Hills will always be relatively high-cost and small in scale. Those reasons include:

- the cooler climate, which limits the tonnage of grapes that can be ripened successfully;
- the greater variability of micro-climates, soil types and land aspect to the sun;
- fragmentation of land titles; and
- high land values.

This means that growers in the region must find other ways to respond to the competitive pressures discussed under the heading *Surplus Production* above. The tourism potential of the Adelaide Hills provides an excellent opportunity for those in the industry to respond to such pressures. As survey respondents have indicated, that opportunity can be exploited by adding value to their grapes via winemaking and hospitality services.

However, while the ‘boutique’ winery trade has, to date, been relatively protected from the wider competitive pressures, it cannot expect to remain so indefinitely. Some industry commentators argue that the boutique market is becoming saturated by the rapid expansion of small winery numbers. In addition, the big wine companies are moving increasingly into the cellar-door sales and hospitality market. This suggests that those considering expansion of boutique cellar-door activity in the Adelaide Hills should be mindful that they are likely to face increased competition in the future and should develop their businesses with a sharp eye on the unit cost of products and services that they offer.

One critical issue will be whether to establish their own (small) winery or to capture scale economies either by collaborative winemaking or by outsourcing it to existing wineries. This is not a matter for regulatory intervention, but might usefully be considered as part of any strategic planning that the Adelaide Hills wine industry undertakes.

Another potential matter for such strategic planning will be how best to exploit synergies in building the profile of the region as a wine tourism destination. The distinctive *terroir* of the region generates wines that are also distinctive and these characteristics have the potential to add significantly to the South Australian wine tourism experience. Thus there are synergies both between individual wineries in the region and between this and other SA regions. Examples of strategic planning outcomes might be an agreed environmental management system for vineyards, wineries and related developments and an agreed code of conduct on architectural and aesthetic standards that would ensure compliance with planning guidelines while projecting a sophisticated presence to wine tourists.

Issues Identified as Affecting Viability of the Wine Industry

The survey questionnaire invited respondents to identify issues considered as threatening the operation of their enterprises.

Issues most cited among respondents were uncertainty concerning security of future water supply (25 respondents) and a perception of restrictive development policies or at least a restrictive interpretation by planning approval authorities (23). Other matters indicated as issues for concern were roads (including signage, 14), electricity supply (14), urban encroachment (10) and communications (5) and fewer mentions of oversupply, dependence on majors for sales together with contract and price insecurity, waste disposal, availability of land and labour supply.

Water Security Issues

In October 2003 and October 2004, notices of prohibition on the taking of water, together with the notices of intent to prescribe the water resources of the Eastern and Western Mount Lofty Ranges, respectively, were published in the Government Gazette. These developments have been a major cause of uncertainty and nervousness in the wine and other agricultural industries in the Catchment zones. A two-year moratorium on increasing the amount of water taken was declared, during which DLWBC is to prepare regulatory impact reports to accompany Cabinet submissions relating to prescription. An integral part of the process is a period of public consultation and a study of the costs and benefits of the proposed prescription on small business, the environment, families and society in the region. This stage has been completed for the Eastern Mount Lofty Ranges, but is still in progress for the Western sector

“Small Business Impacts of Proposed Prescription in the Eastern Mount Lofty Ranges” (December 2004) is a report prepared by EconSearch Pty Ltd and Scholefield Robinson Horticultural Services for Department of Land Water and Biodiversity Conservation. It is expected that this report will be released by the Minister in August 2005.

The public consultation period for the Western Mt Lofty Ranges has closed. The report of this and the associated cost-benefit study is not yet available. The findings of this cost-

benefit study into prescription impacts should be considered in the context of impacts on the wine industry on release.

Structural Changes in Other Agricultural Industries in Mt Lofty Ranges Watershed

The Outer Metropolitan Adelaide region produces many high-value primary industry commodities and generates a large share of the State's total value of agricultural production.

There is significant economic diversity among primary industries in the region including horticulture, organic farming, commercial forestry, aquaculture and grazing. Throughout the region a number of traditional primary industries are relocating to areas where land is cheaper, competition for water resources is lower and primary producers have more choices for their businesses. Relocation is also occurring to areas where there is less risk of conflict between agricultural enterprises and neighbouring residential or incompatible productive land uses is less. Some primary producers are also closing operations and selling land for urban development, as rezoning occurs, to take advantage of high market prices for residential development.

Traditionally there has been a wide diversity of primary industries in the MLRW zone, including production of field and tree crops, dairying and viticulture. Pressures from high land values with resulting urban encroachment, competition for water and increasing constraints on land use has resulted in changes in land uses and the structure of some of these industries in the watershed.

The draft Planning Strategy recognises that it is essential that sustainable primary production and townships in the Watershed be retained. Improving and preserving water quality in the Watershed will be much more difficult if there is a decline in agriculture and further fragmentation and development of rural land for non-farm activities. It is essential that a balance be achieved between the multiple uses of the Watershed, including support of existing agricultural use.

In recent years, various studies, reports and proposed planning strategies and regulation refer predominately to cropping sectors of primary production and do not consider grazing enterprises. This is a significant oversight or omission as the risk from pollution by animal excreta on microbial qualities of water is far greater than any from horticulture.

Increasing economic pressure on primary producers in the Adelaide Hills risks driving a significant proportion of small operators out of their enterprises. These pressures include rising council rates and taxes in the face of deteriorating infrastructure; restrictions on access to water; restrictions on development; perception that Government is anti-primary producer, that it concerns itself only with the environmental needs or fashionable wants of city dwellers.

Unless there is a change in this perception and primary producers feel that they have support and encouragement from Governments to provide long-term security, there is a danger that many will cease operating their enterprises. The consequent retirement of land from primary production without removing the former commercial crop can present serious biosecurity risks including:

- uncontrolled pests and disease to spread to neighbouring, continuing enterprises
- overgrowth of weeds that would provide harbour for exotic vertebrate pests

- present substantial fire hazard (e.g., overgrown rows of crops would not only provide fuel but also seriously impede access to fire trucks etc.) The increased fire hazard also has implications for subsequent water contamination such as uncontrolled runoff of ash, topsoil, animal excreta, etc.

This should be compared and contrasted with support for well-managed production systems whose operators generally see themselves as having land custodial responsibilities and are sensitive to environmental and economic pressures. Well-managed properties have appropriate and timely responses and inputs; weed, pest and disease control; runoff control and soil conservation; responsible and controlled use of chemicals, waste production and disposal etc with minimal cost to Government.

Existing agriculture practises in the Adelaide Hills region include:

Horticulture:

Vegetables

The area of land used for vegetables has been declining rapidly over the past 20 years, with many vegetable properties being converted to wine grapes. Despite this, the remaining few hundred hectares (producing potatoes, lettuce, broccoli, sprouts etc) provide valuable economic input to the region, but are likely to decline further due to cost of land, availability of water, and difficulty with mechanisation in the hilly terrain.

Apples

The area of land under apples has remained static but production has increased significantly as the industry has invested in new high density trellised orchards. Approximately one third of producers have adopted high-density orchards and the proportion is increasing steadily. This results in significant reduction in time for recovery of capital (down from 12-15 years to around 7-8 years). The use of grassed orchard floors in these production systems reduces the risk of erosion, leaching, pollution of waterways to the year of establishment.

Changing international markets has the potential to affect the apple industry. China is poised to become the largest apple exporter in the world and if it targets Australia that would put pressure on Hills producers. Their main protection is increasing productivity. Some protection may be provided if the local industry adopted an export focus itself, adopting varieties, presentation etc., for overseas markets and thereby anticipating the product likely to be offered to Australia from overseas.

The UK has emerged as an important market for the SA apple industry. Access to UK markets requires compliance with Eurepgap, forcing growers to focus on using sound environmental management systems.

Pears

Land area under pears has remained static. Some producers have adopted intensive cropping methods but only a very small proportion and there is no sign of a rush to these methods. Little, if any, change is anticipated over the next five to ten years.

Cherries

There has been major expansion of the cherry industry over the last 5 to 10 years; with the area under cherries almost trebling. The Lenswood system of high-density trellised orchards covered in bird netting have increased yields from about 5 tonnes to 15 tonnes/hectare. Almost all producers have already adopted these intensive methods. The size and productivity of the industry is expected to remain relatively unchanged over the next decade.

Olives

Area committed to olives has remained static and is expected to increase only marginally.

Figs

There have been a few new plantings of fig trees over recent years and will remain static.

Strawberries

The majority of South Australia's strawberry industry, valued at approximately \$12m is located in the Mt Lofty Ranges. New opportunities are emerging for strawberry production to be expanded in controlled environment greenhouses. These production systems offer greater productivity, reduced labour costs, and extended production seasons.

Dairy:

In 2000 there were 102 dairies operating in the MLRW and by 2004 the number had declined to 78, a reduction of 25%. This is slightly lower than the reduction in number of dairy enterprises over the same five year period for the Hills and Fleurieu regions combined (36%) and the State industry overall (33%).

The South Australian Dairy Authority (SADA) forecasts that over the next five years, continued decline in the number of operating dairies in the Hills is expected but at a slower rate of around 3% per annum, leaving about 68 operating dairies in 2009. The area of land used for dairying will decline only slightly, if at all, as much of the reduction in number of enterprises is expected to result from merging/consolidation of neighbouring farms. It is anticipated that herd sizes will be 200 to 250 cows producing 7000 litres per cow per year, compared with the State wide forecast of 350 cows producing 7500 litres per cow per year. Operations will comply with EPA waste management requirements and with SA Water regulations.

There have been substantial structural changes in most of the agricultural industries and in land use in the Adelaide Hills over the last five to ten years. Almost all industries regard the period of great or rapid change to have ended, that

land use and productivity have stabilised and forecast only slight change in the next five to ten years. PIRSA senior industry advisors support these industry opinions.

Scenarios

Scenario 1: Do Nothing

The Government's current Development Plan restricts wine industry development to ten wineries licensed before 2001, with the maximum crush for each limited to 2,000 tonnes. Associated wine tourism development, such as cellar doors and restaurants are currently listed as non-complying in the Rural Zones of the Watershed.

The current Development Plan, with these policies, has been criticised because:

- it is seen as being unfair in conferring growth opportunities to the ten existing wineries.
- it enables other industries to develop value adding facilities, subject to design and siting criteria, while denying the wine industry this opportunity.
- does not address actual pollution risks of wineries.

Current crush data and responses to the 2005 survey indicate that not all approved wineries crush grapes and the amount crushed is below the potential 20,000 tonne crush approved for the region.

Cellar door facilities and other ancillary winery development on rural land in the Watershed are restricted to those with current development approvals. New cellar door and other development are restricted to townships.

The restrictions imposed give an unfair advantage to those already having approvals and restrict the opportunity for appropriately located and designed facilities that would bring the region enhanced economic and employment benefits associated with winery and tourism related development.

The restrictions on viticulture, wineries and ancillary development are based on assumptions of risk to water quality and pollution in the catchment areas. These assumptions are not supported by the technical findings, derived from rigorous scientific inquiry, of the Risk Assessment Study.

Scenario 2: Implement findings of the Risk Assessment Study

As described in detail above (pages 22 and 23), the Risk Assessment Study demonstrated that with appropriate measures and controls, there was little risk associated with winery development. The study also concluded that that the risk level for ancillary development was also low, provided that appropriate measures and controls were applied.

The wine industry has argued for the findings of the study, as expressed in the Stage 3 Report, to be implemented in entirety, through the PAR, as the detailed work carried out quantified the water quality risks and demonstrated that the level of those risks was able to be adequately managed and controlled.

Implementation of this option would provide the wine industry with maximum opportunity for development within the region. It would permit wineries in addition to the existing approved 10 facilities, as well as cellar door and associated development, subject to the strict criteria identified by the consultants throughout the entire Mount Lofty Ranges Watershed.

Scenario 3: Draft Mount Lofty Ranges Wineries and Ancillary Development Plan Amendment Report

The Draft PAR, its basis, methods and policy recommendations are described in detail above (page 8)

The PAR has also reviewed planning policy for the rural Zones in the nine affected Council Development Plans in the non-watershed areas of the MLRW Region to ensure a consistency of policy approach for wineries, cellar door sales outlets and restaurants.

The policy approach recommended by the PAR places maximum restrictions on development in Priority 1 area, with lesser restrictions on areas 2 and 3. The principle impact of these policies is that:

- Within Area 1, wineries crushing greater than 250 tonnes/annum not connected to a Septic Tank Effluent Disposal Scheme (STEDS) or Sewer is non-complying.
- Restaurants are non-complying within Area 1, other than where connection to a STEDS or Sewer is proposed.
- Cellar door sales outlets are exempted from non-complying in the rural Zones in the MLRW Region subject to achieving specific scale, design and siting criteria.
- Restaurants in association with cellar door sales outlets and/or wineries are exempted from non-complying in the rural Zones in the MLRW Region (except for Area 1) subject to achieving specific scale, design and siting criteria.

The approach undertaken within the PAR reflects community attitudes and desires for protection of the metropolitan water supply, notwithstanding the findings of the Risk Assessment Study.

Both Scenarios 2 and 3 comprise policy changes that are based on scientific investigation and analysis that recommends qualified changes to the current restrictions on development within MLRW without compromising the environment, water quality or community expectations.

Scenario 1 maintains restrictions based on assumptions of risk to water quality that have been shown to be scientifically incorrect. Thus Scenario 1 is not supported by the technical findings of the Risk Assessment Study, it prevents development and is anti-competition.

Scenario 2, adopting the recommendations of the Risk Assessment Study, would provide the wine industry with maximum opportunity for development within the region. The recommendations are based on rigorous scientific and technical enquiry and sets standards that reduce to negligible risk to the watershed.

Scenario 3, similarly, is based on the scientifically robust inquiry of the Risk Assessment Study but also takes into account sensitive issues of community expectation particularly

with respect to the water quality Priority Areas, which concept had not been advanced prior to release of the reports of the study. These community values are real and valid and are not cancelled out by the scientific assessment of negligible risk. Accordingly, this study concludes that amendments to the restrictions, as proposed in the draft PAR, will have wider public acceptance and be seen as having greater sensitivity and regard to the community concern for a “triple bottom line” outcome.

Tourism

The Regional Tourism Profile for the Adelaide Hills, published in July 2004 was commissioned by the SATC. It found that, in 2003, the Adelaide Hills tourism region attracted an estimated 97,000 overnight visitors that stayed around 300,000 nights in the region. Nearly 3% of all overnight visits in regional South Australia (excludes Adelaide tourism region) include a stay in the Adelaide Hills and the region accounts for over 2% of all visitor nights in regional SA. On average, overnight visitors to the region stay 3.1 nights with internationals staying around 5 nights, interstate visitors 4 nights and intrastate 2.5.

Domestic, day-trip visitors contribute nearly 850,000 additional visits and the region attracts more day-trip visitors from home than any other region except for Adelaide and Fleurieu Peninsula. Adelaide residents comprise a large proportion (76%) of these day trips. Visitor numbers to regional attractions and events provide another indicator of visitation to the region.

The 2003 Cellar Door Research, commissioned by the SATC, shows:

- Wine tourism attracts higher spending visitors to SA;
- Wine tourists spend around half a billion dollars in SA a year, including \$64.6 million on 3.9 million bottles of wine at cellar doors;
- Over a million overnight or day-trip visitors to SA visited a winery while they were here;
- Of all visitors to wineries in Australia, 23% visit a SA winery (from a total of 4.4 million overnight and day-trip visitors).

Respondents to the 2001 and 2005 surveys identified the Adelaide Hills Wine Region as one that has a core focus on tourism and the ‘complete wine experience’. Consequently, many have structured their businesses (or business plans) to reflect this. These areas include: restaurants, cellar doors, bed & breakfasts, (wedding) reception centres etc.

A substantial proportion of respondents have identified areas within their business to include the above.

Comparative Regions

Tourism Research Australia’s “A Profile of Wine Visitors in Australia 2003” was released in 2005 to quantify wine tourism within Australia. It finds that wine tourism generates income and employment at wineries and provides broader benefits to the surrounding regions. These benefits include regional income and employment through goods and services purchased, such as food, beverages, accommodation, transport and other attractions.

The Adelaide Hills Wine Region has a number of similarities to other wine regions such as the Yarra and Hunter Valleys. They are close to principal metropolitan areas and generally produce high quality, high value wines. These interstate wine regions are, in comparison to the Adelaide Hills Wine Region, more highly developed for wine tourism.

For New South Wales, the profile advised that there were 392 wine producers and 323 of these, or 82.4% had cellar doors, with 128 of these having on site restaurants or serving light meals. The Hunter Valley is around two hours drive from Sydney and includes approximately 30% of the State's wineries, with a crush smaller than that of the Adelaide Hills Wine Region.

The profile advised that there were 521 wine producers in Victoria, with 427, or 82% of these having cellar doors. Of these cellar door facilities, 152 had on site restaurants or served light meals. The Yarra Valley is 40 kilometres east of Melbourne and attracts a significant number of wine visitors.

While producers in these regions often have established domestic markets through mail order and retail chains, and have also developed export markets, there is a strong reliance on wine tourism, through cellar door and restaurant operations, as a base to establish viable businesses. These activities provide employment opportunities in the region both directly and indirectly.

Table 7: Comparative regional data, 2003, various sources.

Region	Hectares	Tonnage	Value \$M	Wineries	Cellar Door
Adelaide Hills	3 269	16 481	27.5	55	16
Yarra Valley	2 500	12 000	20.5	56	42
Hunter Valley	4 469	23 151	21.6	110	91

DISCUSSION

The 2005 survey has shown that the rate of expansion of viticulture in the Adelaide Hills has slowed sharply over the last five years and further expansion planned for the next five years is insignificant. These findings are consistent with data gathered by PGIBSA.

Increase in overall production of grapes in the region has levelled off as new plantings have declined and the majority of vines (planted four to seven years ago) have reached their full productive potential. As full productivity has approached, the cost of production per tonne of grapes has fallen and is stabilising, while the cost per hectare has remained relatively unchanged, rising only marginally, probably in line with inflationary increases.

In the meantime, the return to growers per tonne of grapes has fallen considerably and margins have substantially narrowed. Prices received by growers with contracts have been higher than those not having contracts. Many existing contracts are near to expiry and there is an increasing trend for wine makers to not renew them, causing anxiety among growers for further erosion of margins.

Research in this study shows that many of the wineries in the Adelaide Hills crushing under (and sometimes well under) 250 tonnes achieve medium to high profitability ratios because of the other “ancillary” services they provide as part of the “experience”. These services included cellar doors, bed & breakfasts, food, galleries etc. and attractive pricing options for the wine products.

As the focus of the Adelaide Hills region is to provide a total “wine experience” the consensus within the industry is that economic viability can not be prescribed in terms of tonnes crushed alone, as these other ancillary services need to be factored in to the equation.

As the Adelaide Hills is a low tonnage, ‘tourism focussed’ region, it is through this ‘whole’ approach that individual wineries (regardless of crush size) can attain “economic viability”. All such ancillaries will not only add value to any vineyard, increasing revenue, but most importantly increasing the profile and attractiveness of the Adelaide Hills region as a tourist destination.

The South Australian wine industry in general has seen a significant growth in the number of small, or boutique wineries in many wine regions over recent years. Many of these have expressed a desire to establish cellar door facilities but the scale of individual production and licensing requirements means that an individual cellar door is often not economically viable. There have been calls from numerous regions for restrictions on cellar door facilities to be eased so that joint cellar door facilities can represent multiple wine producers from a region. This would provide those producers with additional market exposure while providing economic efficiencies through shared costs in the operation of the facility and boost tourism development in the study region.

Data gathered by various tourist authorities indicate that development of wine tourism in the Adelaide Hills is substantially below its potential. There is considerable potential to increase the volume of tourism and, consequently, income to the region. This confirms that the vision that the industry has for its path to future viability is realistic and soundly based. The 2001 Demand and Infrastructure study revealed a high level of intention in the industry to establish wineries and ancillary developments. Results of this current survey indicate that the number of individuals with these desires has increased.

Restrictions on development within the MLRW, imposed in 2001, have inhibited expansion and diversification of wine businesses, growth in the profile of the region as wine tourism destination. This has caused widespread disquiet among grape growers and smaller wine makers.

The draft Planning Strategy and draft PAR both recommend new planning policies relating to the development of wine industry and its’ ancillary activities within the Mount Lofty Ranges Watershed but do not compromise the water quality, environment, aesthetics or other community benefits from the sensitive catchment areas. The amendments, if implemented, will allow sensible, sensitive and safe growth and prosperity of the wine industry in the Hills region.

Policy amendments that encourage regional growth, thereby stimulating local economy, are consistent with, and contribute to the objectives of South Australia’s Strategic Plan (2004) to increase prosperity and build communities. They also contribute to the vision of the South Australian wine industry/Government strategic planning document, *Wine: A*

Partnership 2005-2010, that “By 2010, the wine industry and the South Australian Government will have, in partnership, grown the contribution of the wine industry to the State to at least \$3.1 billion per annum.”

CONCLUSION

The commission given to this study was to determine the economic impact, on the wine industry in the Adelaide Hills region, of policy amendments and planning strategies proposed in the Draft Planning Strategy and the PAR.

There has been significant structural change within the region’s primary industries, including urban encroachment, growth in hobby farming, the decline of potatoes and dairying and the expansion of tree crops and viticulture.

The retirement of land from primary production can create a serious biosecurity risk– as the control of pests, diseases and weeds diminishes. It can also create substantial fire hazard.

The Adelaide Hills Wine Region is characterised by low volume, high quality cool region varietals that suit the requirements of the boutique winemaker of ultra-premium and super-premium wines. A combination of local, national and global factors has imposed intense economic pressure on the region’s wine industry with implications for long-term survival.

Those factors include:

- Oversupply of some grape varieties;
- Non-renewal of expiring contracts with larger winemakers;
- Falling prices paid for grapes;
- Fiercely competitive global trade;
- A rising Australian dollar; and
- Consolidation of national and international retail chains.

In this environment, the wine industry of the Adelaide Hills GI, as detailed in the survey results, sees its future survival depending on it increasing its share of retail value through increased local value adding and by developing and promoting the wine tourism experience. Current planning policies for rural land prevent this from happening by:

- Limiting wineries to ten licenses existing in 1999;
- Restricting ancillary developments such as cellar doors, tasting facilities, cafes, etc., to urban zones only or being associated with the ten identified wineries; and
- Classifying viticulture as Non-complying

The current policies are at odds with the findings of the Risk Assessment Study and are contrary to South Australia’s Strategic Plan which aims to increase prosperity and build communities, while simultaneously augmenting progress toward the vision of *Wine: a Partnership 2005-2010*, namely that “By 2010 the wine industry and the South Australian Government will have, in partnership, grown the contribution of the wine industry to the State to at least \$3.1 billion per annum”.

The Department of Water, Land and Biodiversity Conservation's study into the impact of water prescriptions on small business needs to be considered as to its impact on the wine industry once it has been released.

Proposals in the draft Planning Strategy for the Outer Metropolitan Adelaide Region (April 2005), if adopted, would amend current policies. The Strategy delineates the Mount Lofty catchments into three Priority Areas based on water quality sensitivity and classifies various land uses within each as "Compatible" or Incompatible":

- Viticulture is classified as incompatible in Priority Area 1 and compatible under "certain" (unspecified) conditions in Areas 2 and 3. This proposal imposes restrictions on the establishment of grapevines, totally rejecting them from Priority Area 1, which is contradictory to the findings of the Risk Assessment Study. **This proposal retains some restrictions on expansion of viticulture in the wine region. This proposal to restrict agricultural practices is not supported by industry and is not supported by the findings of this study.**
- Wineries up to 2000 tonnes annual crush are incompatible in Areas 1 and 2 if not serviced by sewer or STEDS, while compatible in Area 3 under "certain" (unspecified) conditions. These conditions would be specified in any Plan Amendment Report introduced to amend the development policies of the affected areas. This proposal will permit the development of wineries crushing more than 250 tonnes of grapes per year provided it is connected to sewage (unlikely on rural land) or a Septic Tank Effluent Disposal System. This significantly increases potential for development, in contrast to current policies that limit wineries to the 10 identified wineries licensed in 2001, provided that they are able to meet all the criteria specified by the Plan Amendment Report. **The requirement for connection to effective sewage disposal, particularly in Area 1 is sensible and meets community expectations for new development in sensitive areas.**
- Cellar door sales buildings are compatible in all three Areas, under "certain" (unspecified) conditions. These conditions would be specified in any Plan Amendment Report introduced to amend the development policies of the affected areas. This proposal is an easing of the restrictions imposed in current policies, which limit new development either to urban zones or the sites of the 10 identified wineries, thereby increasing the potential for expansion and growth of the wine industry in the region. **Enabling cellar door facilities to be established within the region is reasonable and of relatively low impact.**
- It is proposed that restaurants and other "built development" (which could be cafes, galleries, local craft and produce shops etc.,) be incompatible in areas 1 & 2 unless connected to sewage or STEDS and compatible in Area 3 under "certain" (unspecified) conditions. These conditions would be specified in any Plan Amendment Report introduced to amend the development policies of the affected areas. This alters the restrictions embodied in current policies that restricts these developments to urban zones or to association with the 10 identified wineries. **Requiring these developments to be connected to approved effluent disposal systems is reasonable and meets community expectations for new development in sensitive areas.**

Although representing an alteration to the current policy framework, these proposals do not acknowledge the findings of the Risk Assessment Study which advised that the wine industry does not present any significant risk to water quality or downstream uses and that such risk can be reduced to negligible by requiring appropriate siting, design and best practice management procedures as prerequisites to licensing or re-licensing of premises. If adopted, the changes to policy proposed in the draft Planning Strategy would still impose impediments to growth and development of the wine industry in Adelaide Hills, potentially jeopardising its viability.

The draft PAR has a policy framework based on the contents of the draft Planning Strategy and takes into account the Risk Assessment Study. It advises that to protect the environment and water quality are of highest priority and, accordingly, planning and development policies should contain an element of caution. It does not classify winery activities as incompatible with the water sensitivity needs of Areas 1 & 2, but proposes planning requirements such as design, siting, setback, best practice management, spill control and containment measures, waste disposal and independent audit in accordance with the findings and recommendations the Risk Assessment Study so as to reduce risk to 1:10,000 year event likelihood.

As in the draft Planning Strategy, the PAR proposes that wineries on rural land within Priority areas 1 and 2 with annual crush exceeding 250 tonnes be required to be connected to sewage or STEDS. It differs from the draft Planning Strategy in proposing the maximum crush permitted be increased from 2000 to 2500 tonnes per year.

Similarly, the draft PAR does not classify ancillary development as incompatible in Priority Areas 1 & 2, but again proposes policies that adopt the findings of the scientifically robust Risk Assessment Study, recommending siting, design, waste disposal and size prerequisites that ensure maximum protection of water quality, the environment and public interests. **It is recommended that consideration be given in any Plan Amendment Report to enabling joint cellar door facilities to be established.**

In acknowledging and basing its proposals on the scientific rigour and recommendations of the Risk Assessment Study, the draft PAR proposals will reasonably alter further the current policy restrictions on winery and ancillary development in the MLRW thus paving the way to greater economic activity and better prospects for viability.

Findings of the 2005 producer survey, like those of the 2001 Demand and Infrastructure Study before it, found that there is high level of interest in the Adelaide Hills wine industry to expand and diversify enterprises to enhance future viability. **Both studies found these ambitions to be both modest and highly sensitive to maintaining the clean, green image of the region, and that in fact, business and industry survival depended on it.**

The study found that there is documented, compelling scientific evidence that environmentally safe wine industry development is possible within Mount Lofty Ranges Watershed. The proposed Mount Lofty Ranges Wineries and Ancillary Development Plan Amendment Report proposes amendments to the current planning policies based on both the "Draft Planning Strategy For Outer Metropolitan Adelaide Region" and the "Water Quality Risk Assessment Of Winery And Ancillary Development In The Mount Lofty Ranges Watershed".

The proposals contained in the draft PAR indicate a reasonable and balanced easing of restrictions to development of the wine industry increasing the economic potential of the region while protecting and preserving the water quality requirements, the environment and other community needs and deserve qualified support as the policies are subject to further refinement and public consultation.

It is the finding of this study that the economic viability of the wine industry in the Mount Lofty Ranges will be aided by the proposed amendments contained in the Draft PAR. It can be anticipated to have a positive economic impact on the grape and wine industries in the Adelaide Hills region by permitting expansion, growth and diversification of enterprises which will boost wine tourism and the income it generates, which are currently far below their potential.

DATA SOURCE ACKNOWLEDGEMENTS

Vineyard Data Supplied by the Phylloxera and Grape Industry Board of SA.

Winery data compiled from the following Sources:

Planning SA

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Topographical data supplied by Department for Environment and Heritage, SA

Phylloxera and Grape Industry
Board of South Australia



Government of South Australia
Primary Industries and Resources SA

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A profile of Wine Visitors in Australia 2003, Tourism Research Australia, Tourism Australia 2005-07-26

The Australian and New Zealand Wine Industry Directory, Winetitles, 2005

What will the market let a winery pay for grapes? KPMG, ABARE Outlook Conference, 2005

Annual Financial Benchmarking Survey for Australian Wine Industry 2003, Deloitte and Winemakers' Federations of Australia

APPENDIX 2: LETTER AND QUESTIONNAIRE FOR 2005 SURVEY

3rd June 2005

Dear Grape grower / Wine maker

Update of Development Plan Policy within the Mount Lofty Ranges Region applicable to the wine industry

Late in April 2005, Planning SA released the Planning Strategy for Outer Metropolitan Adelaide Region. It contains recommendations for regulation of planning and development that affect the grape growers and winemakers in the defined region. You are in this category.

The impact of the wine industry on the Mount Lofty Ranges Watershed (MLRW) has been the subject of several studies and reports over recent years^{3, 4, 5, 6, 7} and the draft Planning Strategy is, more or less, the culmination of those studies and their recommendations. Significantly, this document establishes three Priority Areas in the Mount Lofty Ranges Watershed and the suggested means of dealing with land uses/ development within each of these.

In response, the Minister for Urban Development and Planning, Hon. Paul Holloway, has commissioned the PIRSA Grape & Wine group to carry out a study of the economic impact of the draft Planning Strategy on the wine and ancillary industries with a view that these be considered as part of the detailed policy formulation being undertaken as part of the PAR. Note that the status of the Planning Strategy document is a "Draft for Public Consultation". You can access it on the Internet at http://www.planning.sa.gov.au/planstrat/pdf/Outer_metro_strat.pdf

To assist the PIRSA Grape & Wine group complete its economic impact study, we ask you to complete the attached questionnaire and return immediately in the return-postage paid envelope. We apologise for the short timeline of this request but the Minister requires the report by the end of June 2005.

Please note that we respect your privacy and do not request that you disclose your personal details unless you are entirely happy to do so. These details are helpful but not essential to our study and analysis.

³ Water Quality Risk Assessment Study of Wine and Ancillary Development in the Mount Lofty Watershed Region: Stage 1: EPA, June 2002

⁴ Water Quality Risk Assessment Study of Wine and Ancillary Development in the Mount Lofty Watershed Region: Stage 2: EPA, February 2003

⁵ Environmental and Planning assessment of Winery and Ancillary Development in the Mount Lofty Ranges Watershed: Stage 3: EPA, 30 April 2004

⁶ Water sensitive areas and landuse compatibility in Adelaide's Mt Lofty Ranges water supply catchments: EPA & SA Water, 9 February 2004

⁷ Economic Impacts of Land Use Changes in the Mount lofty Ranges Watershed: SA Water, November 2004

The Phylloxera and Grape Industry Board of SA has distributed this letter on our behalf and none of your details have been disclosed to us. If you would like us to contact you for an opportunity to have greater input please give us your name and contact details. Alternatively, you may like to contact us for more information or discuss issues related to the Strategy and our study. If so, please call David Pritchard, Policy & Planning Officer, Grape and Wine, on 8463 3181.

Yours sincerely,

KRIS ROBERTS
A/DIRECTOR, GRAPE & WINE
PRIMARY INDUSTRIES AND RESOURCES SA

Mt Lofty Ranges Watershed Vignerons and Winemakers Survey Questionnaire

Please Note: all information on this form will be treated as confidential

1. Location(s) of vineyards(s) (e.g., Hahndorf):

Area planted to grapes: *Current*..... ha *5 years ago* ha *Planned (to 2010)*ha

2. What was your harvest in:

2002tonnes; 2003 tonnes; 2004tonnes; 2005tonnes; (2006+t est.)

3. What do you estimate to be your cost of producing grapes, including harvesting?

2002 \$...../ tonne; 2003 \$...../ tonne; 2004 \$...../ tonne; 2005 \$...../ tonne

2002 \$...../ ha; 2003 \$...../ ha; 2004 \$...../ ha; 2005 \$...../ ha

4. Do you have a contract to supply grapes to a winemaker? Yes / No

If yes, when does your contract end?

What were you paid for your grapes? 2003 \$...../ tonne; 2004 \$...../ tonne; 2005 \$...../ tonne

5. What proportion of your harvest did you:

Crush yourself? 2002%; 2003%; 2004.....%; 2005.....%

Sell? 2002%; 2003%; 2004.....%; 2005.....%

6. Do you have a current wine label? Yes / No

If no, please go to Question 7. If yes:

(a) Do you source all fruit from within the Adelaide Hills Region? Yes / No

If not, what proportion do you acquire from outside the Region? % (approx)

Do you intend to increase the proportion brought from outside the Region? Yes / No

(b) Where is the fruit / wine:

Crushed? Matured?

Bottled? Warehoused?

(c) What is the total volume wine you produce? litres

(d) What do you estimate to be the total cost for you to produce a bottle of wine (incl. grapes, crush, waste disposal, bottles, closures, capsules, labels, packaging, etc)? \$/bottle

(e) Do you have plans to increase the volume of production? Yes / No

If yes, by how much and by when? Litres year

7. Do you plan to open a winery/establish a label in the next 10 years? Yes / No

Details (where, crush size tonnes, crushing location, etc):

.....

Have you an indicative cost of construction? (Approx.) \$

APPENDIX 3:

WINERIES WITHIN PRIORITY AREAS IN THE MT LOFTY RANGES WATERSHED

- WINERIES**
- 8 Wineries in Priority 1 Area
 - 14 Wineries in Priority 2 Area
 - 40 Wineries in Priority 3 Area

- WINERIES WHERE WINE IS MADE ON-SITE**
- 1 Winery in Priority 1 Area where Wine is Made On-Site
 - 3 Wineries in Priority 2 Area where Wine is Made On-Site
 - 11 Wineries in Priority 3 Area where Wine is Made On-Site

- WINERIES WITH A CELLAR DOOR**
- 3 Wineries with Cellar Doors in Priority 1 Area
 - 5 Wineries with Cellar Doors in Priority 2 Area
 - 20 Wineries with Cellar Doors in Priority 3 Area

Legend

- Wine-Processed On-site
- Wine-Processed On-site, with Battery
- Wine-Processed Off-site
- Wine-Processed Off-site, with Battery
- Wine-Processed Off-site, with B&B
- Wine-Processed Off-site, with Battery and B&B
- Wineries not included in M&R Project Area
- Cellar Doors
- Wine
- Property with Wine
- Vineyards Located by the EPA
- Remnant Native Vegetation
- Wooded - Mt Lofty Ranges
- Wine Regions
- Local Government Area
- Outer Metropolitan Region
- Priority 1 Area
- Priority 2 Area
- Priority 3 Area
- Place
- Town
- Highway (Road)
- State Road
- State Road within Backup Area
- Unsealed Road
- Unsealed Road within Backup Area
- Winery Track
- Water Bodies

SCALE 1:40000
 0 5 10 Kilometres
 August 2005

This map was prepared for the M&R Project by the Department of Environment and Heritage, South Australia. It is based on data provided by the Department of Environment and Heritage, South Australia, and the Department of Planning, South Australia.

Notes
 1. The map shows the location of wineries within the Mt Lofty Ranges Water Supply Catchments. It does not show the location of wineries outside the catchments. 2. The map shows the location of wineries within the Mt Lofty Ranges Water Supply Catchments. It does not show the location of wineries outside the catchments. 3. The map shows the location of wineries within the Mt Lofty Ranges Water Supply Catchments. It does not show the location of wineries outside the catchments.

Disclaimer
 The Department of Environment and Heritage, South Australia, does not warrant the accuracy or completeness of the information provided on this map. The Department of Environment and Heritage, South Australia, is not responsible for any errors or omissions on this map.

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- WINERIES WITH AN BATTERY**
- 1 Winery with an Battery in Priority 1 Area
 - 2 Wineries with an Battery in Priority 2 Area
 - 3 Wineries with an Battery in Priority 3 Area

- WINERIES WITH ACCOMMODATION**
- 0 Wineries with Accommodation in Priority 1 Area
 - 1 Winery with Accommodation in Priority 2 Area
 - 2 Wineries with Accommodation in Priority 3 Area