

2015 REGIONAL RESULTS

(2014/2015 GROWING SEASON)



www.mclarenvale.info/saw
www.sustainableaustralia.info

Credits

Publisher

McLaren Vale Grape Wine & Tourism Association

(www.mclarenvale.info)

Chair

John Hill

General Manager

Jennifer Lynch

Sustainable Australia Winegrowing (SAW) Coordinator

Kendra White

For inquires regarding SAW, please contact:

Kendra White

E: Kendra@mclarenvale.info

P: 8323 8999

Disclaimer and Creative Commons

This booklet represents information obtained from authentic and highly regarded sources. Every reasonable effort has been made to give reliable data and information, but the publisher cannot assume responsibility for the validity of all material or for the consequences of their use. It has been compiled from the PhD research study conducted under the direction of Dr Irina Santiago-Brown, with results analysis completed by Kendra White.

Information in this booklet is published in good faith and we do not accept responsibility for damage which may arise from any possible inaccuracies. Under Creative Commons Licensing, reproduction or usage of this publication must be attributed to Sustainable Australia Winegrowing (SAW), McLaren Vale Grape, Wine & Tourism Association.

 2015

Printed October 2015

About the Program

The Sustainable Australia Winegrowing (SAW) program is the result of a series of initiatives developed by the McLaren Vale Grape Wine and Tourism Association (MVGWTA) since the early 2000's. These initiatives were developed with the objective to improve viticultural practices, fruit quality and financial viability in the region. Among others, the initiatives included seminars and workshops, a growers' bulletin (CropWatch) providing information and pest and disease alerts for the region from weather monitoring stations, field days and research trials.¹

In 2005, the Association also released a series of materials and codes to support growers' development, including the financial benchmark for McLaren Vale growers, and a Pest and Disease Code of Conduct in 2006. The growers voluntarily endorsed both documents in 2007. In this same year the Soil Management, Water Management and Preservation of Biodiversity Codes were also released.¹

While the investments in grower education made by MVGWTA yielded dramatic on-farm results for many growers, the Association was unable to measure and discuss the outputs of these investments because a process for systematically measuring on-farm results had not been developed.

In 2009, MVGWTA launched the Generational Farming pilot program and compiled the most relevant tools and information available to develop a self-assessment tool for growers to improve their sustainability.

In 2010, the Association was fortunate enough to hire Dr Irina Santiago-Brown while she assessed all major global viticultural sustainability systems for her PhD research. The learnings from the research were applied to improve the assessment methodology and revamped into the current SAW program.

Sustainable Australia Winegrowing was created to maximize growers' and regional overall sustainability, and aims to minimize environmental impacts. The data capture and reporting provides growers with the best management tool to demonstrate their performance against their regional peers and recognised best practice.

Sustainable Australia Winegrowing is now available to any grower across Australia, and is accredited by the Australian Wine Research Institute (AWRI) for full Entwine Membership.

For more information on Sustainable Australia Winegrowing visit: www.mclarenvale.info/saw/overview

¹ Dr Irina Santiago-Brown, Implementation Manual Sustainable Australia Winegrowing—SAW, 2015



Note from Coordinator

Sustainable Australia Winegrowing has seen many changes since its inception in 2009. As Generational Farming, the program was provided to growers in a paper workbook format. In 2010, the program changed to an online format, and in 2011 the program became known as McLaren Vale Sustainable Winegrowing Australia. In 2014, the name changed one final time to what it is today: Sustainable Australia Winegrowing (SAW).

Despite a multitude of changes from 2009, the ethos of SAW has remained the same. Sustainability does not work in isolation, and in order to secure a successful industry for future generations, growers must work together to evolve with best practice. SAW has consistently helped achieve a continuous improvement in McLaren Vale's sustainability, and it is my pleasure to say it will do the same for the many other regions who will be starting the program next season.

Every member of SAW should be proud of what they have done this season, not only in vineyard management, but also by being a positive example to farmers across Australia. Without each one of your efforts, the region would not have the compelling story it does today. In this moment, McLaren Vale is a better place because of your participation, and will be an even better place tomorrow.

Lastly, a very special thank you to Dr Irina Santiago-Brown for all of her hard work getting SAW off the ground, as well as ensuring its success for many years to come.

Kendra White

Sustainable Australia Winegrowing Coordinator

McLaren Vale Grape Wine & Tourism Association

October 2015



2014/2015 Season Summary

SAW 2014-15 SEASON SNAPSHOT	
Members	131
Distinct Vineyard Sites	201
Total Farm Area (Ha)	4,410.1
Total Area Under Vine (Ha)	2,954.1
Area Under RED Grapes (Ha)	2,661.4
Area Under WHITE Grapes (Ha)	209.7
RED Grape Production (t)	15,719
WHITE Grape Production (t)	1,604
Average RED Grape Productivity (t/Ha)	5.9
Average WHITE Grape Productivity (t/Ha)	7.6

The 2014/2015 Sustainable Australia Winegrowing season has proven to be another successful year. Growers improved performances in almost every aspect of the program, from sustainability through to area under vine.

The program grew to 131 members in 2015 — an 11% increase year to date. SAW represented 201 distinct sites in McLaren Vale, covering 4,410 hectares of farm area. For area under vine, the program represented 2,954.1 hectares, accounting for 39.5% of the whole region's area under vine — a 6% increase in under vine area from last season.

Total crush for SAW Members was 17,323 tonnes, with 15,719 tonnes of red grapes and 1,604 tonnes of white grapes. By variety, Shiraz was the most widely produced grape at 1,589 hectares, claiming 53.8% of total vineyard area within the program. Cabernet Sauvignon was the second most planted variety for SAW Members at 17.9% of total vineyard area and 513.3 hectares. Similar to last year, Shiraz, Cabernet Sauvignon, Grenache, and Mataro dominated the total program production at 83%.

SAW Members continue to see a steady price for their wine, with 84% of red wines produced sold for \$15 or more, and 73% of white wines produced at the same price point.



Comparisons

	South Australia	McLaren Vale	SAW	Comparisons		
				SAW vs South Australia	SAW vs McLaren Vale	McLaren Vale vs South Australia
TOTAL grapes (t)	716,593	28,434	17,323	2.42%	60.92%	3.97%
Total RED (t)	422,684	25,421	15,719	3.72%	61.83%	6.01%
Total WHITE (t)	293,909	3,014	1,604	0.55%	53.22%	1.03%
TOTAL under vine area (ha)	76,118	7,464	2,954	2.11%	39.58%	9.81%
RED area (ha)	54,395	6,417	2,661	4.89%	41.47%	11.80%
WHITE area (ha)	20,563	837	209.7	1.02%	25.05%	4.07%
Others (unknown, rootstocks, etc)	961	203	82.9	8.63%	40.84%	21.12%

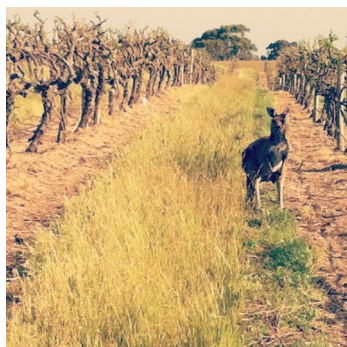
Note: South Australian and McLaren Vale data from the SA Winegrape Crush Survey 2015. The Phylloxera Board estimates that the non-response rate from respondents is 10%.

The above table highlights the key statistics for the industry via Sustainable Australia Winegrowing, McLaren Vale and South Australia as a whole. SAW represents over half of McLaren Vale's total crush at nearly 61%, and accounts for 2.4% of South Australia's crush. The program contributes 61.8% of McLaren Vale's total red grape crush, and 53% of the region's white grape crush.

As a region, McLaren Vale provides nearly 4% of South Australia's total crush, 6% of the red grape crush, and 1% of white grape crush. McLaren Vale accounts for 9.8% of South Australia's total area under vine, with SAW Members owning 39.5% of McLaren Vale's area under vine.

Season 2013-14	Season 2014-15 (Current)	% Increase (+) or Decrease (-)
Vineyards included: 116	Vineyards included: 131	+11.4%
Sites included: 185	Sites included: 201	+7.9%
Blocks included: 1,301	Blocks included: 1,401	+7.1%
Area: 2,791.3 Ha	Area: 2,954.1 Ha	+5.5%

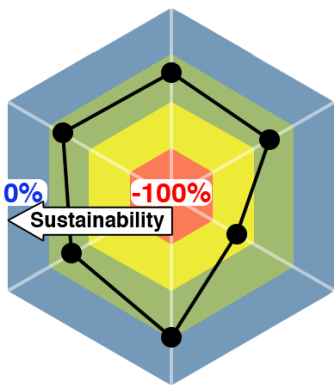
In just one year, Sustainable Australia Winegrowing increased its credentials steadily from the previous season. Vineyards included increased 11.4%, with blocks included gaining 7.1%. Total area under vine in the program increased 5.5%, with number of sites breaking the 200 mark.



Where and How To Read the Graphs

Where to find the graphs:

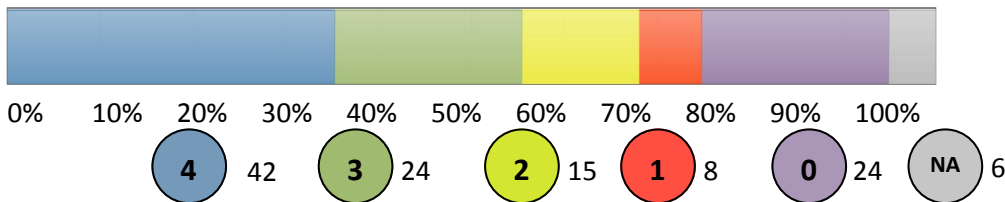
The graphs for each individual Member and region can be found in the online system as soon as the results are released. The graphs are located in the "Reports" section of the system. Users can select to view reports in up to three columns to facilitate the comparison between years and keep track of their individual and regional performances. Regional results published in this report reflect the date of its publication. The online system automatically updates the regional reports as individual data is changed. A slight variation between the data published in this report and the online system may occur after the individual growers auditing process by independent third party auditors.



The spider graphs show values relative to the maximum 'perfect score' that can be achieved. The attributed weight (importance) for each item is taken into consideration and is displayed on the table below the graphs.

Results are shown as percentage change between maximum possible points and the score for the specific member or region. The centre of the graph represents -100% (minus one hundred percent), the worst possible result or least sustainable situation. The outer edge of the graph represents 0% (zero percent), the best possible result, i.e. 'perfect score' or most sustainable situation. The closer to zero (the outer edge), the better the result. The sustainability journey is about moving from the centre to the edge of the spider graph.

Stacked 100% Bar Graphs



The Stacked 100% Bar Graphs show the count of absolute values for each topic. The attributed weight (importance) for each item is not taken into consideration.

The count above shows how many members responded in each category. The graph results are shown in percentages of the total, out of 100%.

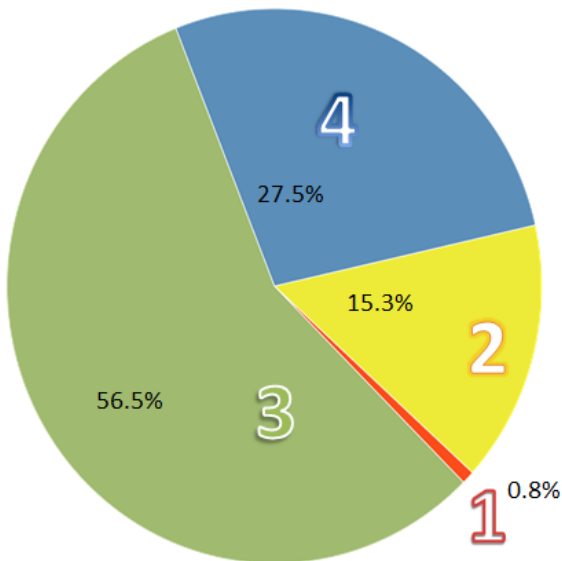
How to interpret the results and colours

Each colour represents a category of the workbook, varying from grey (non-applicable) through 0 to 4. The aim is to move from the right to the left as shown in the image below.



Factsheet: Members, Farming Systems and Sizes

Members by Sustainability Category



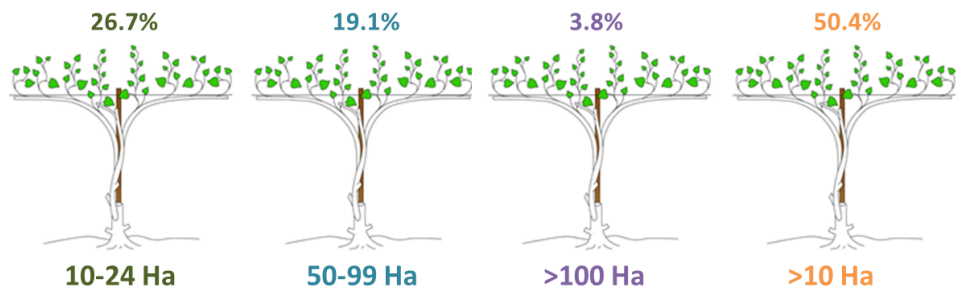
SAW Members continue to improve on overall sustainability with 27.5% performing at 'best practice' (category 4), and 56.5% for category 3. Category 2 came in at 15.3% for the year, while 'least sustainable/needs attention' (category 1) represented 0.8%.

Categories 2 and 4 increased from the 2014 season, proving that McLaren Vale SAW Members are making bigger strides towards best practice as a region. To that end, categories 1 and 3 decreased from last year, suggesting that Members as a whole are moving forward through the sustainability scale.

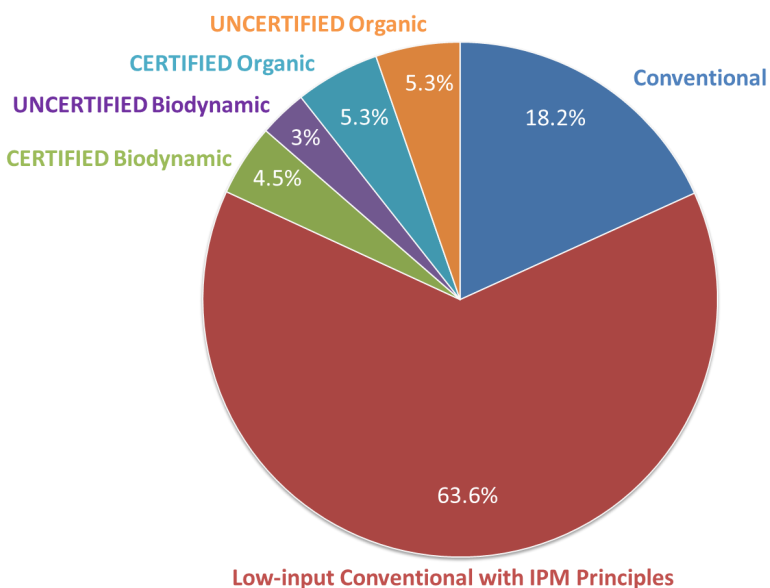
The region increased overall sustainability by 0.57% for the year. While this is not as big of a jump as previous years, due to a large influx of new Members, more Members scored in the 1 and 2 categories for the year.

Consistent with previous years, SAW Members are primarily under 10 hectares in size, covering 50.4% of the program. Only 3.8% of Members are over 100 hectares.

Growers by vineyard size



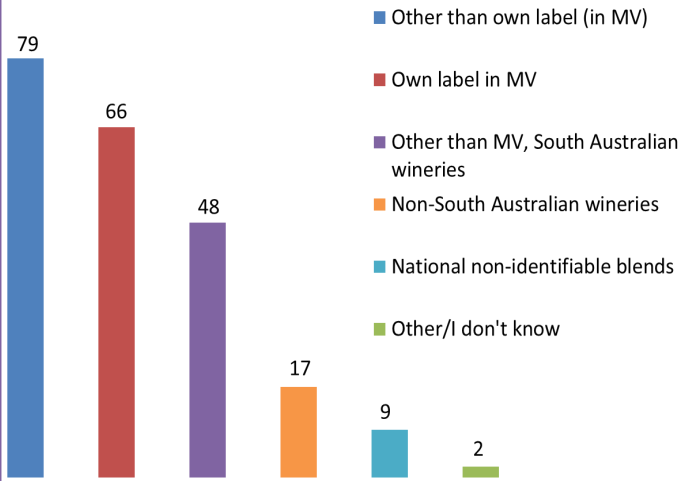
Farming Systems



Farming systems within the program have seen a slight change in percentages from last year. Low-input Conventional with IPM principles grew from 58.6% in the 2013-14 season, to 63.6% for this season. Conventional decreased from last season, from 22.4% to 18.2%. More SAW Members became certified in both Biodynamic and Organic systems from 2014, while there was also an increase in uncertified members for the same systems, respectively.

Land Use, Grape Production and Wines

Number of Members in Each Grape Destination Category

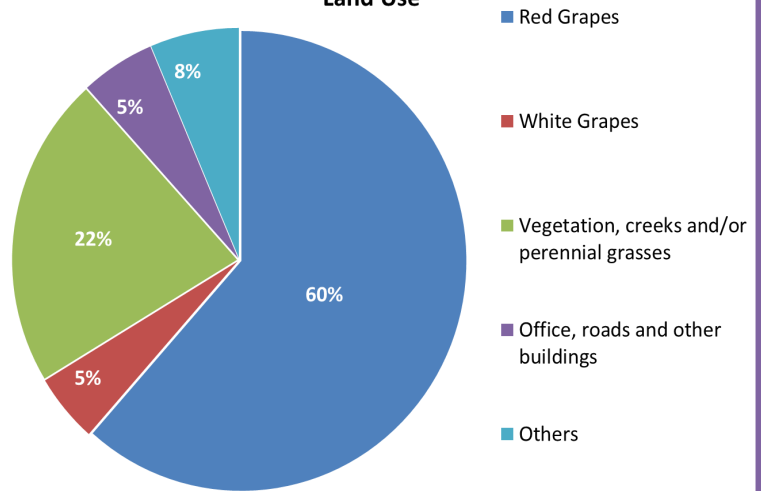


At nearly 66%, Sustainable Australia Winegrowing Members produced the most wine for a label other than their own (in McLaren Vale), or for their own label in McLaren Vale. Wine produced for South Australian wineries outside of McLaren Vale increased from 37 respondents last year, to 48 this year. 12.6% of Members produced wine that was destined for interstate wineries, non-identifiable blends, or other.

As in previous years, no SAW Members categorised their grapes as being used for international wineries or labels.

Land use for SAW Members continues to be dominated by red grapes at 60%. White grapes have seen a decrease from 7% last season to 5% this season, highlighting the region's consistent tendency to plant red varieties. There was a slight increase in vegetation, creeks and/or perennial grasses from last year (+1.5%).

Land Use



YES 91.7%

NO 8.3%



Harvest all grapes produced by members

YES 92.4%

NO 7.6%

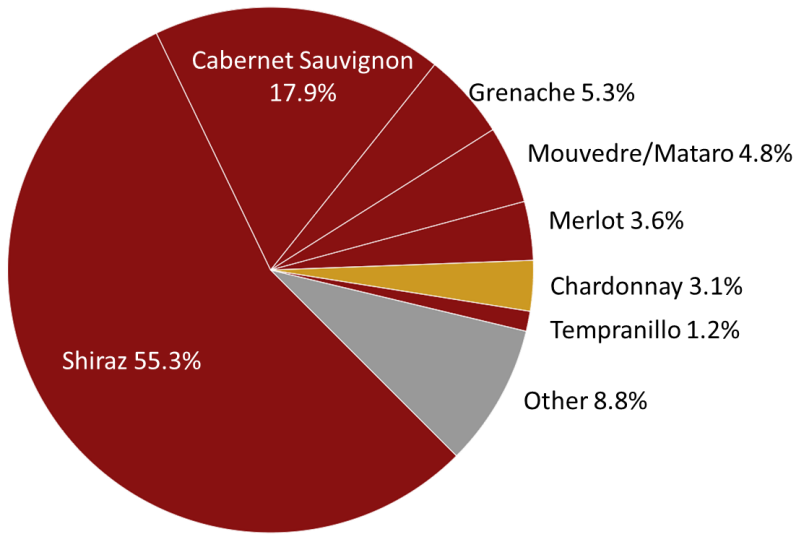


100% usage of grapes harvested (sold or winemaking)

Members of the program enjoyed high percentages for use of all grapes harvested this season. Nearly 92% of Members harvested and used all grapes they produced. The 'no' category for both questions fell below the 10% mark, suggesting that SAW Members experienced minimal wastage of fruit.

Grapes (Area Under Vine)

ALL

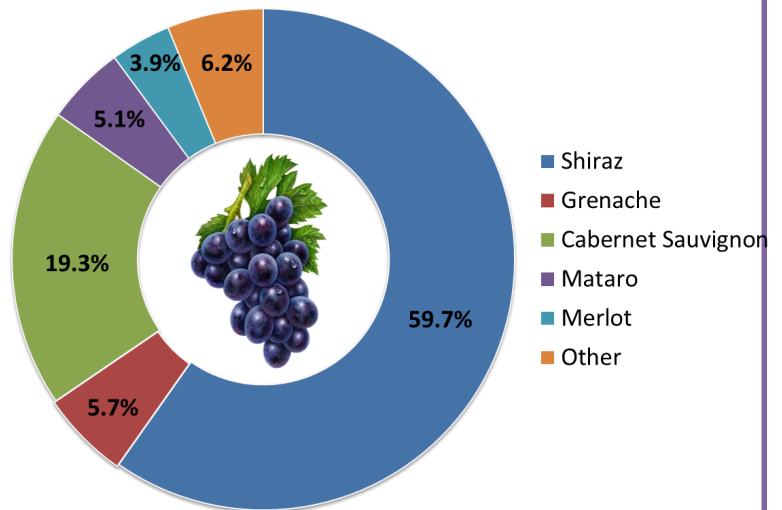


Similar to previous seasons, Shiraz represents 55.3% of area under vine, while Cabernet Sauvignon accounts for 17.9%. Grenache also resulted in little change from last season, at 5.3%. While Grenache represents a small percentage of area under vine, it is an important variety for the region as the third most planted grape for the last three seasons.

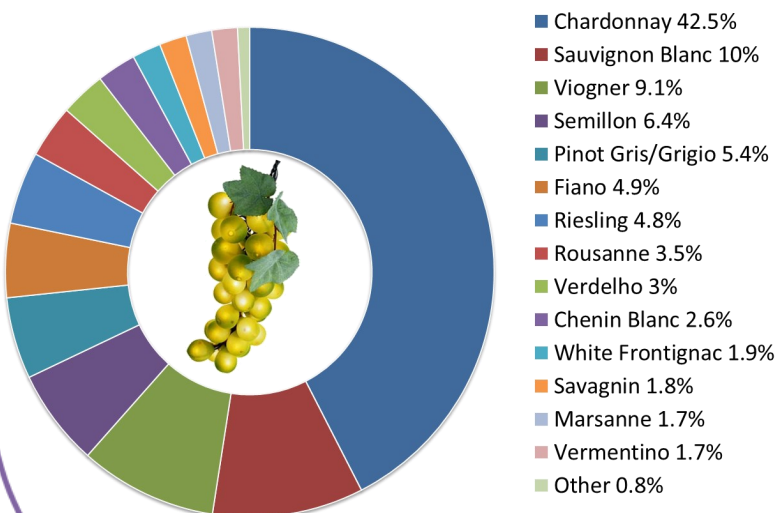
For red varieties, SAW Members dedicated 2,661.4 hectares of area under vine, produced 15,719 tonnes of grapes, and averaged 5.9 tonnes per hectare.

Of these red varieties, Shiraz, Cabernet Sauvignon and Grenache were the mostly widely grown. Mataro stayed almost unmoving from 2014, while Merlot saw a slight decline from the previous season, dropping from 4.2% last season to 3.9% this year.

ONLY REDS



ONLY WHITES



White varieties were diversely planted, however Chardonnay continued to be the most prevalent in the region, albeit slightly down in production from last year.

There were 209.7 hectares of area under vine for white varieties, producing 1,604 tonnes, averaging to be approximately 7.6 tonnes per hectare.

Wine Retail Prices 2014/2015

Number of Members by White Wine Retail Prices



Note: Members were able to select more than one option for retail prices, leading to higher total responses than total number of SAW Members.

SAW Members' wines predominately retailed for \$15-\$19.99, with 37% of responses in this category. 28% of Members' wine retailed at \$20-\$29.99.

The third most common retail price for white wine was \$7-\$14.99, accounting for 17% of member responses.

Combined, 17% of members answered 'I don't know' or retailed between \$30-\$49.99. No white wine retailed for below \$7 or above \$50.

Number of Members by Red Wine Retail Prices

Red wine retail prices produced higher numbers than white. At 27%, the largest percentage of wines retailed at \$20-\$29.99. Red wines priced between \$30-\$49.99 were similarly represented at 24%.



The third highest percentage of wines was above \$50 with 17% of reported wines in this category.

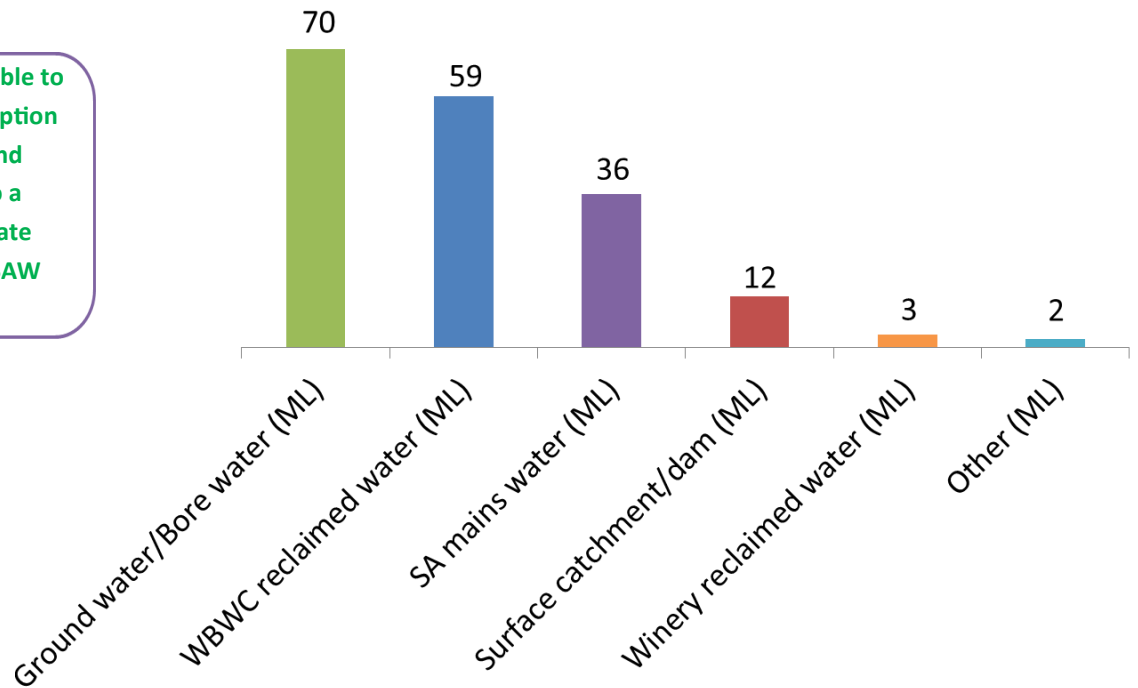
Only 6% of red wine retailed for \$14.99 or below, and 26 Members reported not knowing the retail of wine produced from their grapes (9%).



Water: Irrigation Sources and Water Usage

Number of members in each water source

Note: Members were able to select more than one option for irrigation sources and water usage, leading to a higher total response rate than total number of SAW members.



Sustainable Australia Winegrowing Members continue to utilise ground/bore water, Willunga Basin Water Company (WBWC) reclaimed water, and South Australia mains water as the three main sources for irrigation.

Ground/bore water accounted for 38% of responses, WBWC reclaimed water represented 32% of responses, and SA mains water came to nearly 20%. Surface catchment/dam water, winery reclaimed water, and 'other' together contributed just over 9% of responses.



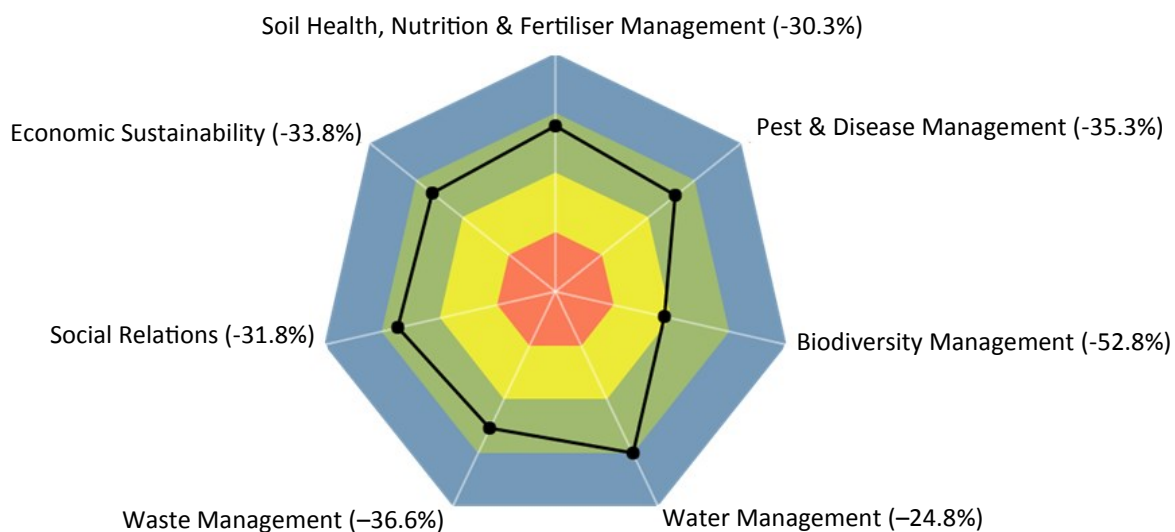
REMEMBER!

When inputting your irrigation sources and water usage, be sure to use **mega litres (ML)**!

If applicable, be sure to convert your kilo litres (KL) to ML before you input your data next season.

1,000 kL = 1 ML

Workbook Overview



Sustainable Australia Winegrowing consists of 7 chapters (excluding Main Survey), of which there are 150 sub-topics. The chapters cover Soil Health, Nutrition & Fertiliser Management, Pest & Disease Management, Biodiversity Management, Water Management, Waste Management, Social Relations, and Economic Sustainability.

The weighting of each chapter is reviewed by a team of authors followed by external peer reviewers to ensure best practice is truly represented in each topic. Soil Management and Pest & Disease Management are both weighted at 20%, while Biodiversity Management, Water Management, and Waste Management are all weighted at 15%. Social Sustainability is weighted 14%, and Economic Sustainability is 1%. The low weight of Economic Sustainability is due to introducing it as a new chapter that requires an external peer review, however even with a low weighting, it is an invaluable aspect of the program.

The overall sustainability category for McLaren Vale is **green** and the region has a -35.1% gap to reach best practice in all chapters.

Water Management continues to be a strong chapter for the region, with only -24.8% deficit to reach the “perfect score.” The weakest chapter for this season was Biodiversity Management, with a -52.8% deficit to reach best practice.

Want to help the region and your vineyard improve for next season?

Be sure to keep an eye out for future announcements to get involved in training sessions, workshops, and seminars.

In addition to attending events, utilise the **action plans** at the back of this results book to make a plan to improve for next year!



All Chapters: Comparison

Comparison between 2013-14 season to 2014-15 season (current)

Chapter	Gap to reach the 'Perfect Score'	Gap to reach the 'Perfect Score'	% Change from previous season vs current season
	2013-14	2014-15 (current)	
Soil, Health, Nutrition and Fertiliser Management	-31.0%	-30.3%	2.2% improvement
Pest & Disease Management	-35.3%	-35.3%	No change
Biodiversity Management	-54.6%	-52.8%	3.3% improvement
Water Management	-24.8%	-24.8%	No change
Waste Management	-36.1%	-36.6%	-1.3% decline
Social Relations	-31.0%	-31.8%	-2.5% decline
Economic Sustainability	-33.9%	-33.8%	0.3% improvement
Overall Workbook	-35.3%	-35.1%	0.57% improvement

As seen in the table above, there was a variance of improvements, declines and unchanged scores from last season to the current season.

Biodiversity Management resulted the greatest improvement at 3.3%. The table provides evidence that Biodiversity is the chapter that requires the most improvement to reach best practice as a region. The improvement in this chapter from last year suggests that SAW Members are actively working toward more sustainable practices with increased attention to biodiversity.

SAW training courses provided to Members focused on encouraging use of action plans, as well as lectures focused on biodiversity management in the vineyard, with printed maps of each attendee's property to identify areas to improve biodiversity. The improved score for the Biodiversity Management chapter relies heavily on public education and hands on assistance.

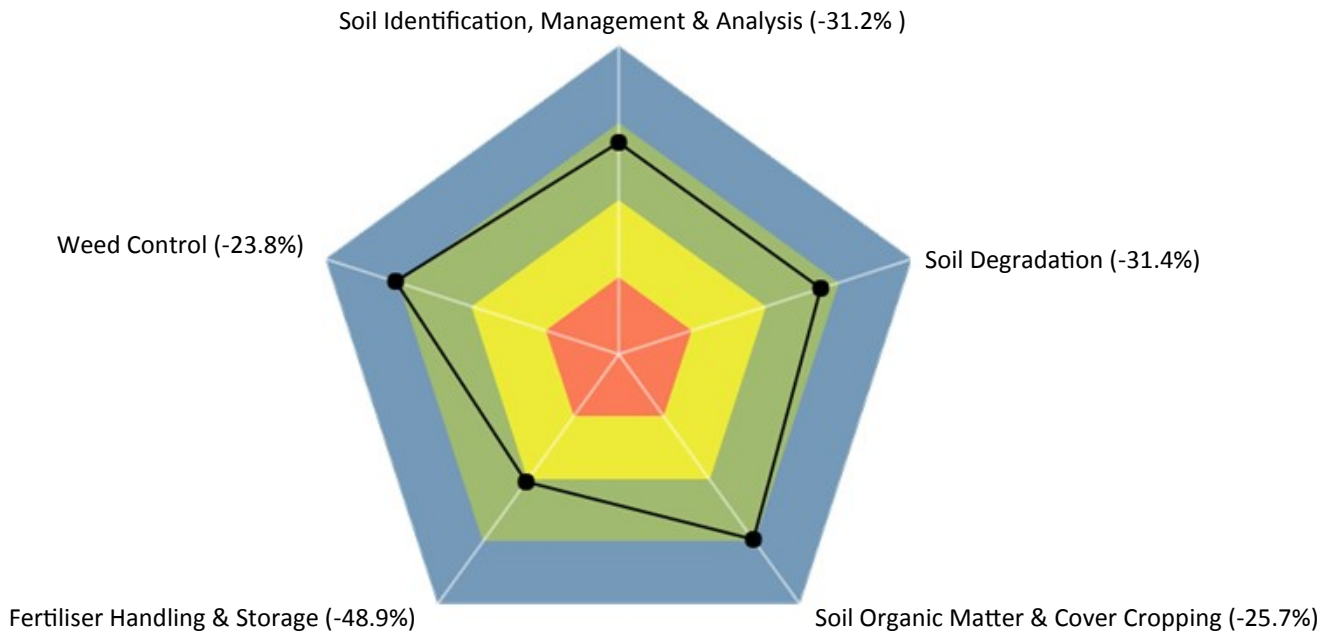
Both Pest & Disease Management and Water Management stayed the same from the previous season.

Waste Management and Social Relations declined from last season, and therefore will receive continued support through workshops, training courses and seminars in the coming year.

Comparison between 2013-14 season to 2014-15 season (current)

2013-14 Growers per sustainability category			2014-15 Growers per sustainability category		
Category	Count	%	Category	Count	%
4	30	25.9%	4	36 (+16.67%)	27.5%
3	71	61.2%	3	74 (+4.05%)	56.5%
2	13	11.2%	2	20 (+35%)	15.3%
1	2	1.7%	1	1 (-50%)	0.8%
REGION: -35.3% TO REACH PERFECT SCORE			REGION: -35.1% TO REACH PERFECT SCORE (+.57% INCREASE IN SUSTAINABILITY)		

Soil Health, Nutrition and Fertiliser Management



Soil Health, Nutrition and Fertiliser Management is weighted 20% for the overall workbook. Within this chapter, the sub-topics and their weightings are Soil Identification, Management & Analysis 30%, Soil Degradation 20%, Soil Organic Matter & Cover Cropping 15%, Fertiliser Handling & Storage 10%, and Weed Control 25%.

The spider graph above shows each sub-topic and the percentage gap to reach the 'perfect score.' Weed Control was closest to best practice with a -23.8% gap. Fertiliser Handling & Storage requires the most improvement with -48.9%.

McLaren Vale as a region scored **green** in this chapter, with -30.3% to reach best practice.

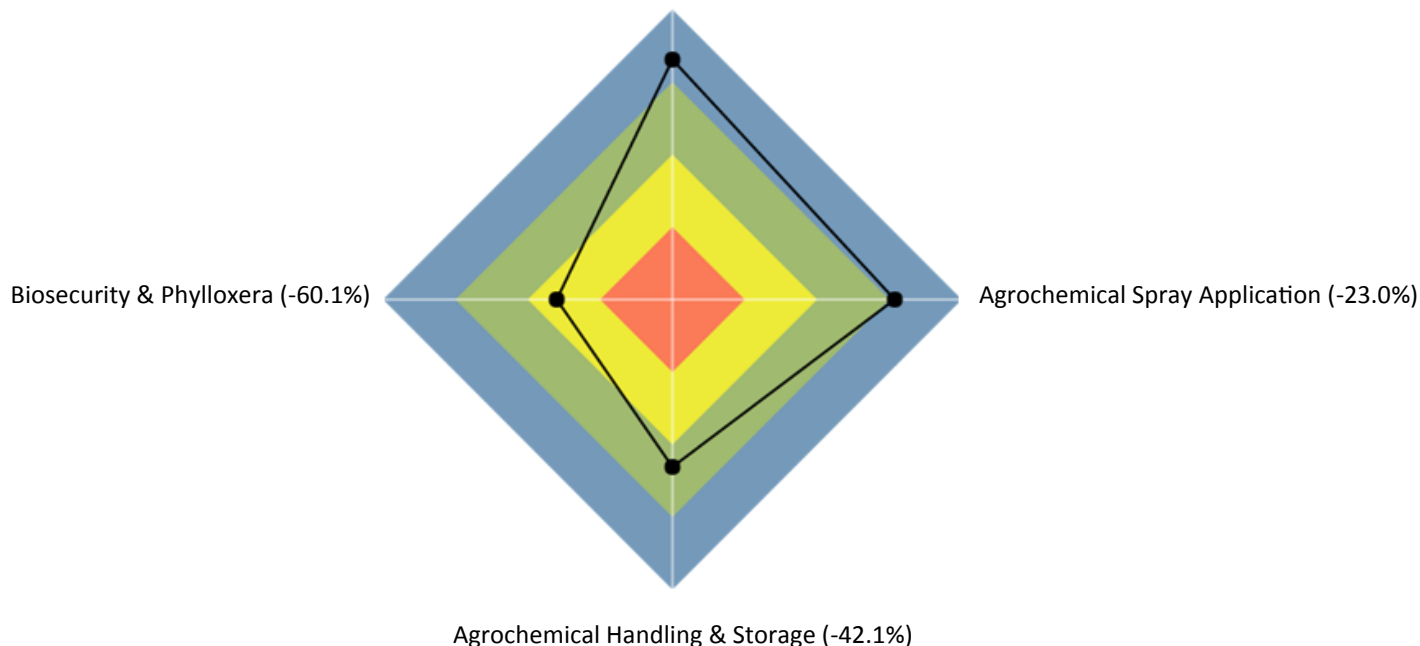


The total amount of herbicide applications for SAW Members was 209, with 101 respondents reporting. There was an average of 2.1 herbicide applications per account.

More detailed information about herbicides can be found on the Spray Diary page (pg. 22) in this booklet.

Pest & Disease Management

Pest & Disease Identification, Management & Analysis (-17.3%)



Pest & Disease Management is weighted 20% for the overall workbook. In this chapter, Pest & Disease Identification, Management & Analysis contributes 30% weighting to the chapter, while Agrochemical Spray Application weighs 25%, Agrochemical Handling & Storage 15%, and Biosecurity and Phylloxera accounts for a further 30% of the chapter’s weighting.

Pest & Disease Identification, Management & Analysis produced the best results in the chapter with only –17.3% to reach best practice. Biosecurity & Phylloxera had the weakest result with –60.1% to reach the ‘perfect score.’ Agrochemical Spray Application saw improvement from last year, going from –26.3% in 2013-14 to –23.0% in the current season. Agrochemical Handling & Storage finished with –42.1% to operate most sustainably.

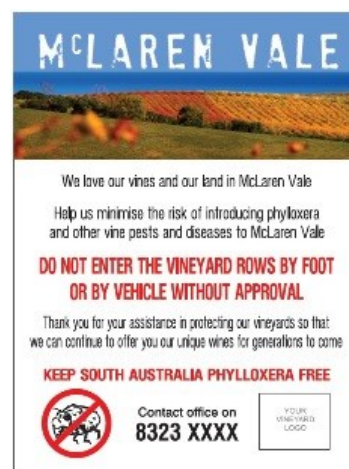
The region scored **green** for Pest & Disease Management, with –35.3% left to reach best practice for the chapter.

Do you have a Phylloxera sign on your vineyard?

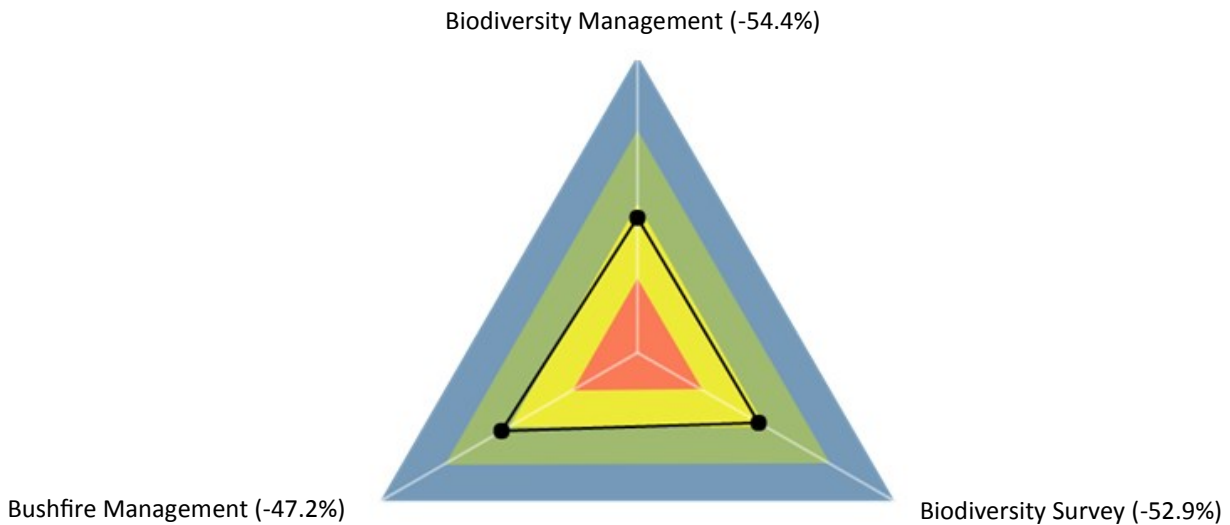
Displaying a sign such as this one can increase awareness not only for workers entering your vineyard, but for tourists. In addition, installing one of these signs will allow you to score higher in the Pest & Disease chapter of SAW.

The more awareness there is around Phylloxera, the stronger the fight to prevent it becomes.

Spread the word— not the pest!



Biodiversity Management



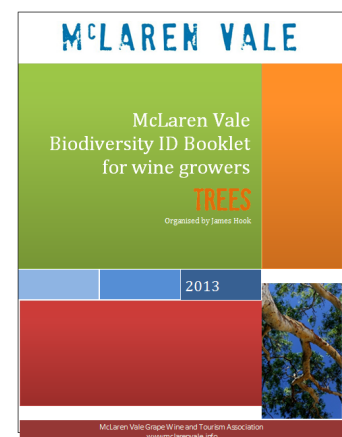
Biodiversity Management is weighted 15% in the assessment. There are three sub-topics within the chapter which include Biodiversity Management with 47% weighting, Biodiversity Survey with 40% weighting, and Bushfire Management 13% weighting. At -47.2%, Bushfire Management was the closest to reaching best practice within the chapter. Biodiversity Management requires a -54.4% improvement, and Biodiversity Survey has -52.9% left to best practice.

As a region, Biodiversity Management is **yellow** for the chapter, with a -52.8% gap to reach the 'perfect score.'

Scoring higher individually and as a region for Biodiversity Management is an important goal.

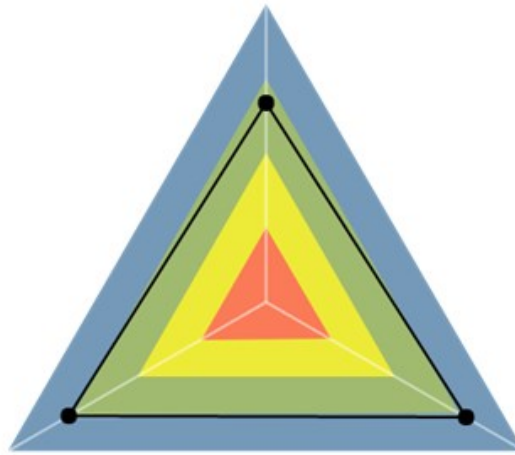
You can increase scores by utilising the McLaren Vale ID Booklets (available in printed or PDF format upon request at MGVWTA) highlighting native and/or pest trees, weeds and birds. You can use these booklets to assess your own property or the wider region to take appropriate action eradicating pests, or planting certain grasses or trees to encourage beneficial insects, birds and other wildlife.

Additionally, you can get involved in volunteer opportunities to improve McLaren Vale's biodiversity as a region!



Water Management

Water Source & Quality (-33.2%)



Irrigation System & Maintenance (-23.3%)

Irrigation Management (-22.4%)

Within the Sustainable Australia Winegrowing chapter weightings, Water Management accounts for 15%. The three sub-topics that form the chapter are Water Source & Quality with 20% weighting, Irrigation Management 47% weighting, and Irrigation System & Maintenance 33% weighting.

Irrigation Management was the strongest sub-topic, with a -22.4% gap to best practice. Irrigation System & Management scored similarly, with -23.3%. Water Source & Quality has the most to improve, with -33.2% to most sustainable practices.

The region scored **blue** for Water Management with -24.8% to best practice.

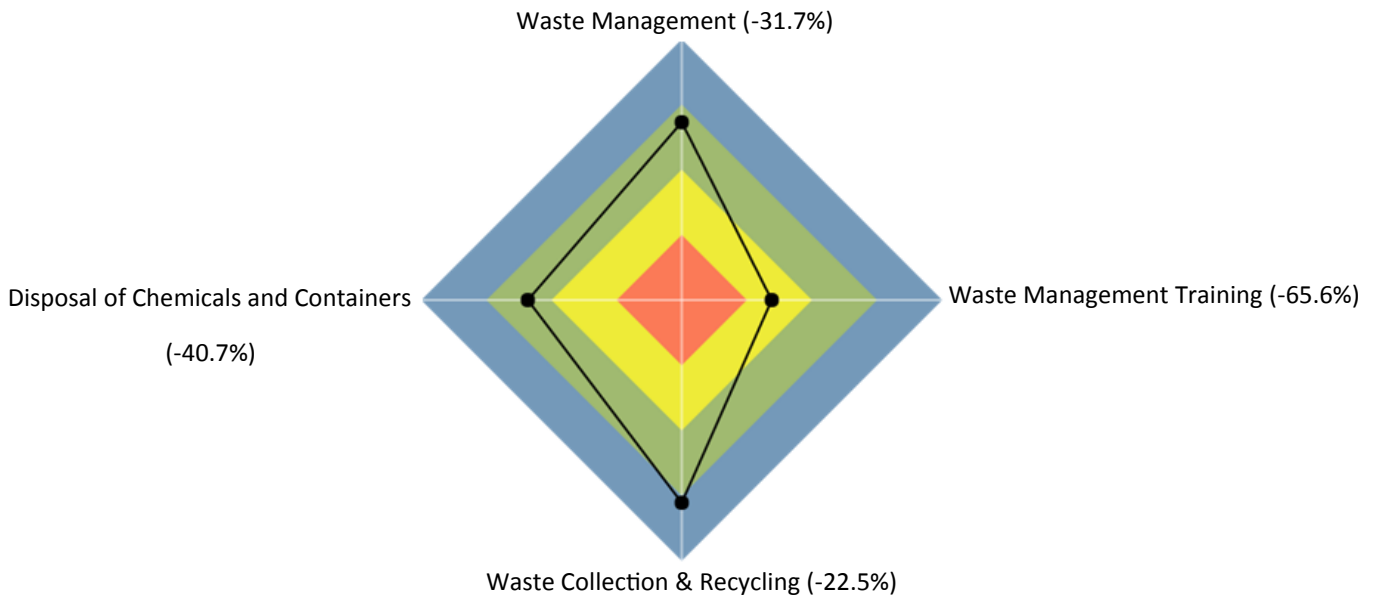
The three most utilised water sources in the program were ground/bore water, Willunga Basin Water Company (WBWC) reclaimed water, and South Australia mains water.

Reclaimed Water



In the Water Management chapter, 54.9% of respondents said that they would change or at least consider switching to reclaimed water if it became available to them. 38% of respondents said that they would definitely change to reclaimed water if it became available, and 4.5% answered that they would not use reclaimed water as an irrigation source.

Waste Management



Waste Management is the third chapter weighted 15%, and is comprised of four sub-topics. These sub-topics are weighted as Waste Management 20%, Waste Management Training 20%, Waste Collection & Recycling 40%, and Disposal of Chemicals and Containers 20%.

Waste Collection & Recycling was the closest sub-topic to best practice with -22.5% . Waste Management Training requires the most improvement with -65.6% . Waste Management scored green with -31.7% , and Disposal of Chemicals and Containers also scored green with -40.7% .

Waste Management has a -36.6% gap to claim best practice, and the region scored **green** for the chapter as a whole.

Did you know?

Composting household waste in addition to your vineyard waste is a fast and easy way to score higher in SAW.

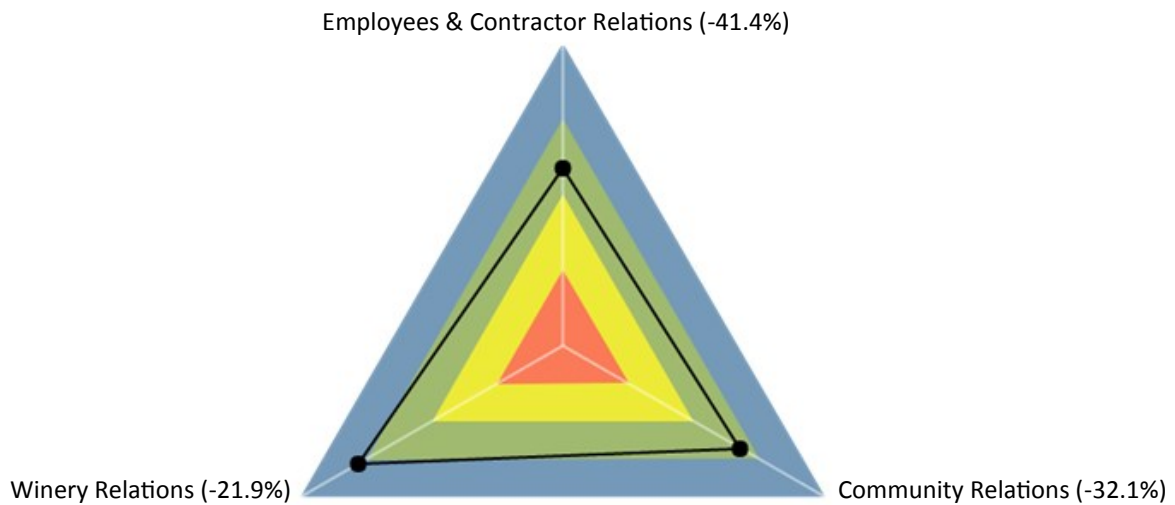
As a rate payer, you're eligible to receive subsidises for the purchase of a selection of compost bins, Bokashi buckets and worm farms from your local council!

On top of these subsidies, City of Onkaparinga provides annual workshops on how to successfully compost to ensure you get the most out of your waste.

*Please note, this is not an endorsement for a third party service.



Social Relations



Social Relations is weighted 14% for the total assessment. Within this chapter three sub-topics are weighted at 33% each. The sub-topics include Employees & Contractor Relations, Community Relations, and Winery Relations.

Winery Relations had the best results with -21.9% , while Employees & Contractor Relations had the most room to improve with -41.4% . Community Relations resulted with -32.1% .

The chapter as a whole resulted in the **green** category with -31.8% to reach maximum points.

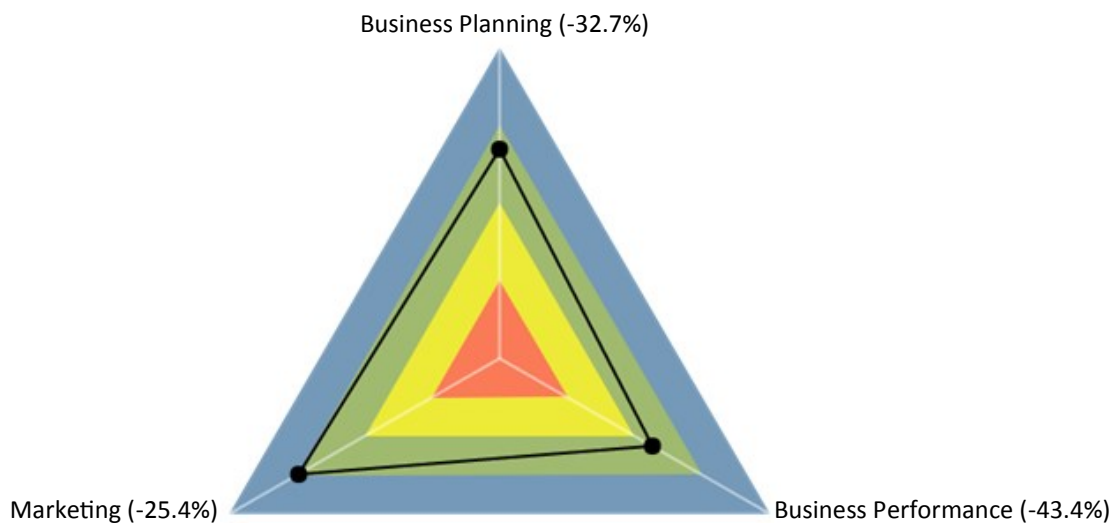


Sustainability doesn't work in isolation...

While you are taking action by participating in SAW, it is equally important to talk to other growers about the program and the benefits of sustainable farming.

You can score extra points in the Social Relations chapter by helping to bring one new member into the program. In addition, providing feedback to the SAW Coordinator also contributes to a higher score.

Economic Sustainability



As a new chapter, Economic Sustainability is weighted 1%. This chapter is yet to be peer reviewed, and will undergo this process in time for next season. To that end, every question in this chapter had a N/A option to allow members the choice as to whether or not to answer.

Within Economic Sustainability there are three sub-topics. These sub-topics and their weight include Business Planning (33%), Business Performance (33%), and Marketing (33%).

Marketing resulted in the strongest result with -25.4% , while Business Performance held a -43.4% gap to best practice. Business Planning resulted in -32.7% .

Overall, Economic Sustainability was categorised as **green** with -33.8% as the remaining percentage to best practice.

Save time, money, and make a good impression on customers just by a quick tidy!

Ensuring your vineyard is well presented with tools, machinery, etc. properly stored is key not only for a good first impression to potential customers, but also for efficiency. Employees who know where things are located are less likely to waste time looking for something instead of being productive.

You can score higher in SAW simply by tidying your vineyard and feeling confident that a visitor would associate it with professionalism and attention to detail.



Spray Diary

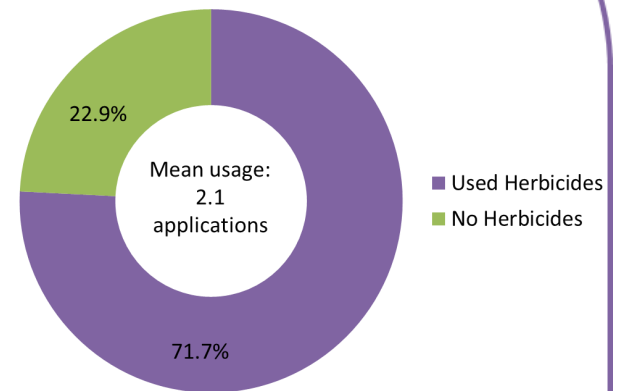
Spray Target	Area (Ha)	% Area of Members	Average Times
Biodynamic	135.5	4.6	14.8
Black Spot	6.4	0.2	1
Botrytis Bunch Rot	740.5	25.1	1.2
Bud Mite	129.4	4.4	1
Downy Mildew	1096.8	37.1	4.7
Garden Weevil	72.6	2.5	1
Grapeleaf Rust Mite	211.2	7.1	2
Grapevine Moth	1.2	0.0	1
Grapevine Scale	39.1	1.3	1
Herbicide**	615	20.8	3.2
Herbicide Spot Spraying	7.6	0.3	1
Light Brown Apple Moth	529.2	17.9	1
Mealybug	15.3	0.5	1
Nutrition*	1243.3	42.1	3.8
Phomopsis Cane and Leaf Spot	26.6	0.9	1
Plant Growth Regulators	10.9	0.4	1.9
Powdery Mildew	2304.6	78.0	8.2
Rust Mite	55.1	1.9	1
Snail	79	2.7	1.6
Wetting/Adjuvant Agent	702.8	23.8	5
(Not Matched)***	669.3	22.7	6.4
(Unspecified)***	265.3	9.0	1.2

Important Notes

*The system only allows the capture of nutrition through foliar sprays. Some growers might have used composts or liquid fertilisers through drip lines (fertigation).

** Because the data is captured retrospectively after vintage 2014-15, many growers did not report herbicide spraying properly in our online system. This table shows that only 20.8% of the area was sprayed with herbicides; however this number does not properly reflect the 101 Members who responded in the workbook as having applied herbicides.

*** In most situations, targets were placed automatically into the unmatched or unspecified categories because of misspellings in the importing process from other spray diaries maintained by growers.



The doughnut graph above represents the usage of herbicides during the 2014-15 growing season.

101 SAW Members reported having applied herbicides at least once during the season, representing 71.7% of program participants. The average applications per year was 2.1.

30 SAW Members reported no use of herbicides for the year, which accounts for 22.9% of participants.

18.1% of vineyards in the program were managed biodynamically or organically, either certified or un-certified.

Note:

There is a discrepancy between the reported herbicide applications between the above two graphs. This is because the doughnut graph highlights responses to a direct question of whether herbicides were used, whereas the table on the left allows growers to include canopy sprays targeting pests & diseases, but potentially omit other herbicide applications.

The table above lists the spray targets, area (ha) sprayed, the percentage area for each spray target, and the average spray applications annually.

Powdery Mildew continues to be the main target for the region, covering 2,304.6 hectares and an average of 8.2 sprays per year.

Grapevine Moth was the least targeted pest, with 1.2 hectares sprayed.

This form was created to help you to set your goals to continuously improve your business in a sustainable way. Your current scores for the chapters should be recorded here, as well as your improvement goal for chapters and sections. The goals should be set to be achieved by your next assessment. You'll need to consult the on-line system to know what is required in each section to achieve each score. Remember to target the most important topics for your business and feasible to be achieved in a year. You might not be able to improve all your topics in period of a year. Only plan what is feasible for you!

Member/vineyard sites



1 SOIL CHAPTER

your score

improvement goal



Improvement goals by sections

	0	1	2	3	4	NA
Soil Identification, Management & Analysis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Soil degradation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Soil Organic Matter & Cover Cropping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fertiliser handling & storage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Weed control	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Actions required: how and who



2 PEST and DISEASE CHAPTER

your score

Improvement goal

Improvement goals by goals

	0	1	2	3	4	NA
Pest & Disease Identification, Management & Analysis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Agrochemical Spray Application	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Agrochemical Handling & Storage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Phylloxera and Other Pests Prevention	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Actions required: how and who



3 BIODIVERSITY MANAGEMENT CHAPTER

your score

improvement goal

Improvement goals by sections

	0	1	2	3	4	NA
Biodiversity Management & Audit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biodiversity Audit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bushfire Management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Actions required: how and who



4 WATER CHAPTER

your score

improvement goal

Improvement goals by sections

	0	1	2	3	4	NA
Water Source & Quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Irrigation Planning & Application	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Irrigation System & Maintenance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Actions required: how and who



5 WASTE MANAGEMENT CHAPTER

your score

improvement goal

Improvement goals by sections

	0	1	2	3	4	NA
Waste Management Planning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Waste Management Training	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Waste Collection & Recycling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dispose of Chemicals and Containers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Actions required: how and who



6 SOCIAL RELATIONS (Workers, Community and Wineries)

your score

improvement goal

Improvement goals by sections

	0	1	2	3	4	NA
Employees & Contractor Relations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Community Relations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Winery Relations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Actions required: how and who

7 ECONOMIC SUSTAINABILITY



your score

improvement goal

Improvement goals by sections

	0	1	2	3	4	NA
Business Planning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Business Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Marketing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Actions required: how and who

Notes

www.mclarenvale.info/saw

www.sustainableaustralia.info

