Langhorne Creek Weather Station Statistics

Michael Cutting, Natural Resources SA Murray Darling Basin

Background

An automatic weather station owned and operated by the SA Murray-Darling Basin NRM Board was installed at Lake Breeze vineyard in November 2006 and has been collecting local weather information since this time.

The Langhorne Creek station is part of an extensive automatic weather monitoring network operated by the SA MDB NRM Board consisting of 31 automatic weather stations and 7 rainfall only monitoring sites. All sites report data to a dedicated website on an hourly basis which is available for viewing at: www.aws-samdbnrm.sa.gov.au.

2012/13 Seasonal Summary

Note: Due to an error with the rainfall collection device at the Lake Breeze site rainfall figures have been taken from the Bureau of Meteorology observations recorded at the Langhorne Creek Post Office.

As illustrated in Figure 26 below, 330.5mm of rainfall was recorded during 2012/13 (July – June) which was slightly less than the 377.8mm recorded in 2011/12.

The 2012/13 evapotranspiration (ET) figure of 1,245.5mm was approximately 10% higher than the level observed in 2011/12 and was the highest seasonal total recorded since the station was installed in 2006.

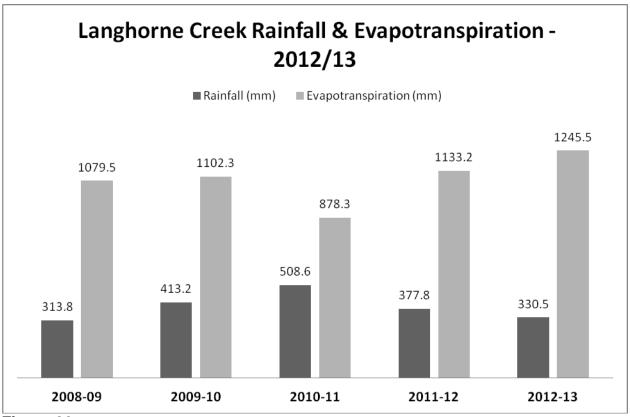


Figure 26

Figure 27 shows the distribution of rainfall during the 2012/13 irrigation season at Langhorne Creek. As was the case in 2011/12 the monthly rainfall distribution was more typical following several seasons of very wet summers in 2009/10 and 2010/11.

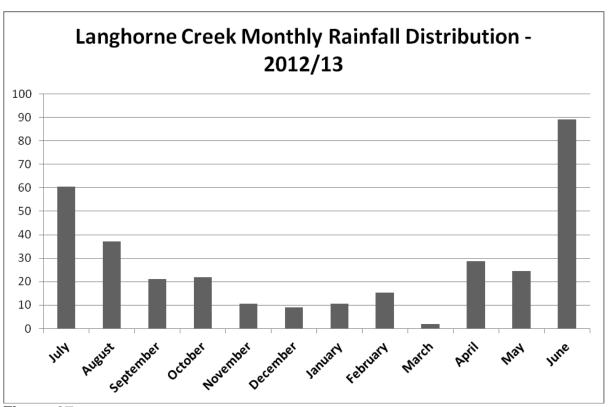


Figure 27

In terms of temperature extremes the hottest daily maximum recorded at the Lake Breeze site was 43.3°C on the 4th January 2013 and the coldest -1.9°C which was recorded on the 7th July 2012.

During 2012/13 there were 4 days of above 40°C recorded at the Lake Breeze weather station site with the average maximum summer temperature being 26.4°C.

The maximum daily evapotranspiration figure of 10.9mm was recorded on the 4th January 2013 which was also when the maximum daily temperature was observed and the highest daily rainfall total (ex Post Office) of 25.2mm was observed on the 1st June 2013.

Angas Bremer Water Management Committee Inc

Annual Public Meeting Minutes

26th August 2013 Langhorne Creek Bowling Clubrooms

Attendees: Sylvia Clarke, Enys Watt (DEWNR), Graham Green (DEWNR), Jarrod Eaton (DEWNR), Cameron Welsh (Natural Resources SA Murray Darling Basin/DEWNR), Ben Fee (PIRSA), James Stacey, Mac Cleggett, Rob Giles, Rex Jaensch, George Borrett, Mick Burns, Peter Silver, Dale Wenzel, Stephen Stafford-Brookes, Barry Potts, Ray McDonald.

Apologies: Darren Aworth, Guy Adams, Rob Tonkin, Jeff Whitaker, Michael Cutting (Natural Resources SA Murray Darling Basin/DEWNR), Michael Clements, Loene Furler.

Meeting open: 7:15pm

<u>Opening address by Chairman James Stacey</u>: The committee has been working on the Eastern Mt Lofty Ranges Water Allocation Plan with Cameron Welsh and Michael Cutting, from Natural Resources SA Murray Darling Basin. Work has also been continuing with Dr. Richard Stirzaker from CSIRO to move from the FullStops to a more targeted project, making use of the data collected already and progressing the project to the next stage.

The Biodiversity Fund project has started but we didn't have any luck getting money in the second round of the Fund because of changes to the Federal Government's Carbon Tax policy. The SA Murray Darling Basin NRM Board has offered the committee funding to continue its operations for the next 2 years. The Irrigators Code of Practice and the Reporting will be taken over by the Board in future which will limit the committee's funding beyond this time.

Mr Stacey has been representing the ABWMC on the River Murray Advisory Council (the Angas Bremer region used to be represented by Sam Newell). He remarked that it is important to have a presence on this Council but it is a big commitment. The River Murray Water Allocation Plan is difficult to understand and the level of expectation on the Council members is very high. The ABWMC has had good meeting attendances this year, which is a change from 3 years ago

Enys Watt, (DEWNR): Presented the 2012 Groundwater Status Report.

See attached slides and report.

when it nearly folded from lack of interest.

Mr. Rob Giles asked how the private irrigator's salinity results from the groundwater bore water samples submitted to DEWNR, compare with the data from the Government observation wells. Ms Watt indicated that they only used the corporate data for the Groundwater Status Report. The irrigator's salinity results go into the DEWNR salinity database, however, the department prefers to use their own data as they have better quality assurance. The irrigator's samples can be used to fill in the gaps if needed. Mr Giles pointed out that the irrigator's samples would give a good picture of what's going on, including the influence of recharge bores close to extraction sites, and it would be good to give the irrigators some feedback.

It was decided that the data from the irrigator's samples would be accessed through DEWNR and included in the Angas Bremer District Annual Report.

<u>Jarrod Eaton (DEWNR):</u> Presented the latest news on the South Australian River Murray Private Carryover Policy.

See attached slides.

In late 2011 South Australia received formal water storage rights for the first time, however, SA's water spills first. SA is choosing to use the Hume Dam as this is less likely to spill than other options. The Department needs to submit a Carryover Plan to the MDBA. When formulating the plan they assess the risk of spill, the physical limitations (such as unregulated flows) and water quality considerations. The MDBA then assesses the plan. If water flow is needed to keep the

mouth of the Murray open, the MDBA would be likely to reject a plan to store carryover water at that time.

The State wears the risk of spilling as the irrigators said they didn't want to wear the risk themselves. Because of this, and because the Carryover policy is quite complex to understand, it is being managed quite conservatively. The Bureau of Meteorology provides the likelihood of high flows in upstream areas, which is used to assess the risk of spill.

Mr Eaton pointed out that in the Angas Bremer region River Murray water is able to be recharged into the aquifer which acts as an alternative carryover scheme.

Ben Fee (PIRSA): Presented the latest funding offer which had only been announced at the end of the previous week.

See attached slides.

\$265 million will be available to assist the River Murray irrigators. The aim is to get the allocated River Murray water volumes down to the Sustainable Diversion Limit in the River Murray Water Allocation Plan. Irrigators were able to get 90% productivity when they only had 60% of their allocation, as many have a greater allocation than they need in most years and use this as a buffer in drier years. The idea of the new funding offer is to buy back the buffer water but to also manage the resulting risk to the irrigator's business e.g. putting in more annual crops rather than all perennial, or expanding the size of the property. This will be a new process where water returns and businesses will be looked at together. If you sell your buffer water you will need to reinvest the money in your business. The reinvestment doesn't need to be in the same region as the property but does need to be spent in South Australia.

The funding is coming from 2 different Federal Departments as it will also provide Irrigation Industry Assistance. The grants will be managed through PIRSA. There is also a \$25 million Research and Innovation Program. Research and Business Centres will be situated in Loxton and Murray Bridge. \$12.5m will also be available to representative bodies and non-irrigators. \$155m will be available for Riverland Environmental Management and there will also be some money to keep industry clusters going.

Expressions of interest will be through the website, and the forms will be out in 6 weeks time. It is possible that money might be available for bore pumps to recharge River Murray water into the aquifer. Succession planning is also part of this program. In order to prevent a few big businesses taking all the money available, 20% of funds will go to the big companies, 60% to medium size and 20% to small businesses.

Sylvia Clarke: Presented the 2012-13 Interim District Irrigation Annual Report.

Mr Rob Giles asked for more information about the NRM Board taking over reporting and reinforced that the irrigators need timely feedback and don't want to see this area go backwards. Mr Cameron Welsh from Natural Resources SA, Murray Darling Basin reported that when the committee's functions are taken over by the Board, reporting will be very similar to how it is now and irrigators will receive timely feedback and a District Irrigation report.

Lian Jaensch from Langhorne Creek Grape and Wine Inc asked that the new sites from the Biodiversity Fund project be added to the Langhorne Creek Environmental Assets Map. Sylvia Clarke agreed to do this.

Sylvia Clarke: Presented the new draft Code of Practice. General consensus on the changes was gained from the 10 irrigators present. It was agreed by all that the Draft Code of Practice would be sent out again to all irrigators with their District Annual Report, asking for any further feedback. The ABWMC would then take any feedback into account and accept a final version of the Code of Practice at the first meeting in the New Year (2014).

Official Business:

5 members were due to retire by rotation – Mac Cleggett, George Borrett, James Stacey, David Eckert and Rob Tonkin.

David Eckert and Rob Tonkin did not stand for re-election. Mac Cleggett, George Borrett and James Stacey declared that they would stand for re-election and were renominated at the Annual Public Meeting and their nominations were accepted.

No formal nominations for other committee members had been received prior to the meeting.

Nominations were called from the floor. None were received.

The Chair moved that the renominating members be accepted for positions on the committee.

Seconded - Mac Cleggett. Carried by the meeting.

James Stacey suggested those present ask around for interested people to join the committee.

Other Business:

Mac Cleggett asked Cameron Welsh to explain how the existing user process associated with the Eastern Mt Lofty Ranges Water Allocation Plan was going to work for flood irrigators in the region and questioned whether only those closest to the rivers will have to pay the levy, while others will get the water. Mr Welsh responded that the Department of Environment, Water and Natural Resources was still finalizing its position at the moment and a representative would come down to Langhorne Creek before Christmas to get feedback from irrigators. The proposed licensing procedure would go through the NRM Board and then to the ABWMC. The Dept will have to undertake broader engagement after that.

James Stacey thanked everyone for attending and thanked the ABWMC staff and committee members.

Meeting closed at 9:10pm.

Mr Barry (Bazz) Potts approached the Chairman after the closure of the meeting and offered to join the committee. His offer was accepted by the Chair.

Audited Accounts 2012-13

Category Description	1/07/2012- 30/06/2013
INCOME	
AB BUSINESS PLAN-22.2012 AB Business	
2013-2015	10,000.00
Other AB BUSINESS PLAN-22.2012 AB B	10,030.00
TOTAL AB BUSINESS PLAN-22.2012 AB	20,030.00
ABWMC Interest Income	•
Other ABWMC Interest Income	76.92
TOTAL ABWMC Interest Income	76.92
SEWPAC	5 (Table 10)
Income	12,450.00
TOTAL SEWPAC	12,450.00
TOTAL INCOME	32,556.92
EXPENSES	
2012 SALINITY MAN PROMO	
Other 2012 SALINITY MAN PROMO	7,500.00
TOTAL 2012 SALINITY MAN PROMO	7,500.00
AB BUSINESS PLAN EXP	7,500.00
	170.62
Advertising AUDIT	295.45
Insurance	2,504.42
Meeting Cost	3,090.51
Post & Stationery	735.46
Printing	923.64
Project Cordinator	14,827.23
Travelling	287.92
Other AB BUSINESS PLAN EXP	23.18
TOTAL AB BUSINESS PLAN EXP	22,858.43
Angas Bremer Retained Funds Exp	
Other Angas Bremer Retained Funds Exp	1.20
TOTAL Angas Bremer Retained Funds Exp	1.20
ASR WATER QUALITY EXPENSE	
ASR Risk Ass	754.22
TOTAL ASR WATER QUALITY EXPENSE	754.22
BIODIVERSITY PROJECT	
Contractor	10,092.50
Equipment	630.48
Postage	21.82
Project Coordinator	13,973.99
Stationery	183.41
Travelling	1,216.36
TOTAL BIODIVERSITY PROJECT	26,118.56
BLDG ON WATER QUALITY	
INCOME	
PROJ 118.2013	-1,000.00
TOTAL INCOME	-1,000.00
TOTAL BLDG ON WATER QUALITY	-1,000.00
LC ROOTZONE SALINITY	
Expense	3,993.23
TOTAL LC ROOTZONE SALINITY	3,993.23
TOTAL EXPENSES	60,225.64
OVERALL TOTAL	-27,668.72

Net Worth - As of 30/06/2013:2

As of 30/06/2013 (in Aus. Dollars)

	30/06/2013 Balance	
Account		
ASSETS		
Cash and Bank Accounts		
Angas Bremer Water Managemnet	59,545.58	
TOTAL Cash and Bank Accounts	59,545.58	
TOTAL ASSETS	59,545.58	
LIABILITIES		
Other Liabilities		
ABN Whitholding	7.34	
Tax Control	295.42	
TOTAL Other Liabilities	302.76	
TOTAL LIABILITIES	302.76	
OVERALL TOTAL	59,242.82	

INDEPENDENT AUDIT REPORT ANGAS BREMER WATER MANAGEMENT COMMITTEE INC

Audit approach

We have audited the accounts comprising the Profit and Loss Statement and Balance Sheet of the Angas Bremer Water Management Committee Inc for the year ended 30 June 2013.

The committee members are responsible for the preparation and presentation of the accounts and the information they contain. We have performed an audit of these accounts in order to express an opinion on them to the members.

Our audit has been planned and performed to provide a reasonable level of assurance as to whether the accounts are free of material misstatement. Our procedures included examinations on a test basis, of evidence supporting the amounts and other disclosures in the accounts and the evaluation of accounting policies and significant accounting estimates.

These procedures have been undertaken to form an opinion whether, in all material respects, the accounts are presented fairly in accordance with the applicable accounting policies, so as to present a view which is consistent with our understanding of the operations.

The accounts have not been prepared as a general purpose financial report in accordance with Statements of Accounting Concepts and Accounting Standards.

The audit opinion expressed in this report has been formed on the above basis.

Audit opinion

In our opinion, the financial statements of Angas Bremer Water Management Committee Inc represents a true and fair view of the financial position as at 30 June 2013, in accordance with Australian Accounting Standards and other mandatory professional reporting requirements in Australia and to the members of the Angas Bremer Water Management Committee Inc.

Glyn Morris & Co Pty Ltd

ANDREW MORRIS MIPA TIA

Signed this 7th day of August 2013

Langhorne Creek Grape and Wine Inc Report 2012-13

The Langhorne Creek Grape and Wine Inc have been involved with a range of environmental projects over the year.

- Photo monitoring of the bushland monitoring sites has continued.
- Red Gum Health project: A review of the sites was undertaken earlier in the year. Unfortunately it appears that much of the planting at one of the sites was inundated by flood waters soon after planting and many of the little plants became water logged and did not survive so there has been limited success at this site and not much to show for the effort. Mother Nature at work! The other site shows some promise but the planting are too small yet to have any measurable effect on the Red Gum Health. Hopefully flood waters through this site have boosted the remnant Red Gums in the meantime and fortunately the plantings were on higher ground. This site may warrant some follow up spraying and nurturing in the future if funds can be found.
- Funding was obtained from the SA Murray Darling Basin NRM Board for work at Mosquito Creek Reserve and Alfred Langhorne Park. This work was coordinated by Linley Cleggett with the local School and the LCGW office acting as sponsors and supporters. All the hard work was done by Linley from obtaining the grants to fund the work, to managing the expenditure of the funds. Excerpts from Linley's report are below:

Mosquito Creek

The seats are repaired, initially built by the local school children, look good and are being used.

The olive and pepper trees are dead, and will be removed when completely dry. No longer a seed source, but germination from past seeds will need to be monitored. An unexpected cost was the rabbit baiting programme. Rabbits have been prolific in the area.

The plants were purchased and planted in autumn, and have had a perfect season to establish. Mostly hard to propagate, rarer shrub and lower story plants. These will be an invaluable part of the ecosystem.

Birdboxes are ordered and will be installed.

Alfred Langhorne Park

Funds for the park were originally committed for repairing a tank stand and improving seating and other amenity at the park. In the meantime Alexandrina Council has committed to fix the tank stand and through the Sculpture Symposium, which will include Langhorne Creek this coming year, seating will be installed.

The funds were therefore redirected to the purchase and planting of more plants, books, guides, birdboxes and signage.

Angas Bremer Irrigators Revegetation Association Inc. Annual Report 2012-13

Little to report this year other than the election of new Office Bearers.

Chairperson – Mick Burns, Treasury Wine Estates Secretary – Russell Shutz, Fabal Wines Treasurer – Nicole Clark, Kimbolton Wines

The committee has also been looking at insurance options for the group.

The main issue of signing off on Landholders agreement remains unresolved as we are still waiting for the Minister to sign off on the Eastern Mt Lofty Ranges Water Allocation Plan.