SOUTHERN RURAL WATER
WATER AVAILABILITY OUTLOOK
1 DECEMBER 2016

RURAL SYSTEM OVERVIEW

Southern Rural Water is responsible for managing a large part of the surface and groundwater resources for rural supply in Southern Victoria.

Agricultural customers, Power Generators and Urban Water customers use water as a critical business input and are therefore highly aware of local seasonal conditions and water supply outlook. As they are responsible for their own risk, they maintain close awareness on the availability of their water resources.

In irrigation districts, we review our allocation (available water) on a fortnightly basis and communicate this to our customers should allocations change. There are also water supply outlooks available on our website which is also communicated through regular "district update" newsletters.

Power generators and urban water corporations have access to the water allocation model which provides them with real time information on their water in Southern Rural Water storages.

Groundwater systems are generally resilient to short term dry periods but where required Southern Rural Water imposes controls enabled under license conditions. Unregulated surface water systems have Local Management Plans which outline the systems of rosters and restrictions applied during dry periods – and in many cases most summers. Implementation of rosters and restrictions are communicated directly to irrigators by local staff as required.

MACALISTER IRRIGATION DISTRICT

Current Position

Lake Glenmaggie, the principal source of water for the Macalister Irrigation District (MID), is at 99% of capacity and our Thomson entitlement is sitting at 100%. Recent rainfall has resulted in wet catchments and inflows exceeding our capacity to harvest.

We have declared a 100% allocation of high reliability water shares which continues to the end of the spill season on 15 December 2016.

This position is considered normal.

Outlook for the remainder of 2016/17

The normal outlook means that there is reasonable certainty that some low reliability water share allocation will be available this season.

Outlook for 2017/18

Lake Glenmaggie is a fill and spill dam and we are largely reliant on winter and spring rains to fill the dam to achieve a 100% allocation. Given the current wet situation and normal outlook there is lower risk that the dam will be fully emptied by the end of the season (which

is not unprecedented). If this eventuates, it will create a stronger reliance than normal on winter and spring filling from empty.

Other factors that may affect entitlement holders.

Lake Glenmaggie, like most storages in Australia is susceptible to Blue Green Algae (BGA) blooms if the environmental conditions are right. There is also a possibility that BGA blooms can occur in our channel systems. Our staff are trained in identification and sampling of BGA in storages, rivers and channel systems. Our Environmental Manage Plans detail our responses when BGA blooms occur.

We have no evidence that a bloom is any more likely to occur this season compared to previous seasons.

WERRIBEE AND BACCHUS MARSH IRRIGATION DISTRICTS

Current Position – Surface Water

There has been a break to the dry conditions seen throughout the 2015/16 season which resulted in the collective storage level being just 12% in June this year. Rainfall over the second half of winter and throughout spring has been well above average in the upper river catchments and in the irrigation districts. This has resulted in good river flows and inflows into our reservoirs. Pykes Creek and Melton reservoirs have filled and Lake Merrimu has risen to 60% with further inflows likely to continue over the next few months.

This has enabled the allocation to increase from 0% at the start of July to 100% of high reliability water share and 45% low reliability water by 1 December 2016.

In addition there is approximately 15% of HRWS available to customers as carryover from the 2015/16 season.

The high flows seen in the Werribee River, particularly in the lower reaches, have significantly reduced the salinity of the water. This has dropped from a high of 2500EC in the 2015/16 season to 300EC as at early October. This will greatly improve the quality of the river water/ recycled water shandied product delivered to the Werribee Irrigation District (WID). Consequently WID growers are likely to see better crops and with lower costs of production this season when compared to last year.

Outlook for the remainder of 2016/17 – Surface Water

The rainfall outlook for the rest of spring and early summer has eased but remains around a 50% chance of exceeding medium rainfall for this period. This will likely result in continued inflows into Lake Merrimu but we may see increased demand for irrigation water which is normal for this time of year. Therefore the outlook is for a high allocation season and potentially with average water use.

Outlook for 2017/18 – surface water

With the storage levels and current wet weather conditions it is likely that there will be a large volume of water carried over to the 2017/18 season. With the storages full and an increased volume of recycled water available to WID growers, it is likely that there is enough water available for the next two seasons.

Status – Groundwater

The Deutgam aquifer in Werribee South is at a 50% allocation. We will continue to review the monitoring data throughout the season to determine whether the allocation can be increased. At this stage it is likely to remain at 50% unless there is significant rainfall over the coming months. Groundwater levels are currently above the levels of last year and also the millennium drought.

There are no groundwater restrictions in Bacchus Marsh.

Status – Recycled Water

There is no restriction on recycled water supply. During the 2015/16 Melbourne Water agreed to increase the volume available for WID growers from 5,500ML to 11,000ML. This has significantly improved the security of water supply for the WID.

Status –Thomson Water

With the storage levels very low at the end of the 2015/16 season SRW purchased 3,000ML of Thomson/Macalister allocation from MID customers and assigned 1,800ML to City West Water for supply to the WID and 1,200ML to Western Water for supply to the BMID. Given the improvement in storage levels this water is likely to be carried over to the 2017/18 season.

Other factors that may affect entitlement holders.

Our Werribee basin storages, like most storages in Australia is susceptible to Blue Green Algae (BGA) blooms if the environmental conditions are right. This risk also exists for recycled water supply from the Western Treatment Plant.

Our staff are trained in identification and sampling of BGA in storages, rivers and channel systems. Our Environmental Manage Plans detail our responses when BGA blooms occur.

We have no evidence that a bloom is any more likely to occur this season compared to previous seasons

POWER GENERATION AND URBAN WATER SUPPLY

In Gippsland, the primary source of supply for the power generators and Gippsland Water is Blue Rock Lake which is currently 100% of capacity.

In the Werribee System, Western Water's share of Lake Merrimu is 13,185 ML or 67% of their full share and 40.5% of total storage and on the Maribyrnong system, Western Water's share of Rosslynne Reservoir is at 9,840 ML or 43.4% of their capacity and 37.4% of total storage.

UNREGULATED SURFACE WATER AND GROUNDWATER SYSTEMS

Gippsland

Most groundwater and unregulated surfacewater systems are as we would expect at this time of year. Most areas experienced average or above average rainfall for the 3-month period to the end-October. As such waterways and groundwater levels in Gippsland have not fallen to levels requiring restrictions. Areas reliant on dams for irrigation water, such as Thorpdale and Warragul, are in a good way with dams full and streams still flowing well.

Southwest Victoria

In the Southwest groundwater levels are normal for this time of year. Groundwater resources in particular are resilient, and during the millennium drought groundwater was an extremely important source of water. Whilst it takes successive dry years to have an impact on the overall resource, individual bore owners can experience problems accessing water if their bores are not deep enough into the water table, or their bore is not well maintained. We provide information to all landowners to be pro-active in their bore maintenance, and we provide advice and investigate complaints where bores malfunction.

The only aquifer with current restrictions is Deutgam in Werribee South which is at a 50% allocation or the season with the likelihood that it will remain there for the rest of the season unless there is a significant increase in rainfall over the coming months.

Most areas experienced above average rainfall for the 3-month period to the end-October. As such waterways in the South West have not fallen to levels requiring restrictions.

ATTACHMENT 1 – CURRENT ROSTERS AND RESTRICTIONS IN SOUTHERN VICTORIAN SURFACE WATER SYSTEMS

Basin	System	Restriction Level	Date Imposed	Restriction Trend (increasing, decreasing, no change)
Glenelg	Glenelg River	Nil	01/07/16	No Change
	Wannon River	Nil	01/07/16	No Change
	Grange Burn River	Nil	01/07/16	No Change
	Crawford River	Nil	01/07/16	No Change
Portland	Moyne River	Nil	01/07/16	No Change
	Eumeralla River	Nil	01/07/16	No Change
	Surry River	Nil	01/07/16	No Change
	Fitzroy River	Nil	01/07/16	No Change
	Darlots Creek	Nil	01/07/16	No Change
Hopkins	Hopkins River	Nil	01/07/16	No Change
	Mount Emu Creek	Nil	01/07/16	No Change
	Brucknell (Cudgee) Creek	Nil	01/07/16	No Change
	Merri River – Zone 1	Nil	01/07/16	No Change
	Merri River – Zone 2	Nil	01/07/16	No Change
Otway	Curdies River	Nil	01/07/16	No Change
	Gellibrand River	Nil	01/07/16	No Change
Barwon	Barwon River – Zone A	Nil	01/07/16	No Change
	Barwon River – Zone B	Nil	01/07/16	No Change
	Barwon River – Zone C	Nil	01/07/16	No Change
	Leigh River/Yarowee River	Nil	01/07/16	No Change
Moorabool	Moorabool River – Above Bungal	Nil	01/07/16	No Change

	Moorabool River – Below Bungal	Nil	01/07/16	No Change
Maribyrnong	Jacksons Creek	Nil	01/07/16	No Change
	Deep Creek	Nil	01/07/16	No Change
	Riddells Creek	Nil	01/07/16	No Change
	Barringo Creek	Nil	01/07/16	No Change
	Bolinda Creek	Nil	01/07/16	No Change
	Turitable Creek	Nil	01/07/16	No Change
	Willimigongon Creek	Nil	01/07/16	No Change
	Emu Creek	Nil	01/07/16	No Change
	Monument Creek	Nil	01/07/16	No Change
	Number 3 Creek	Nil	01/07/16	No Change
	Konagaderra	Nil	01/07/16	No Change
	5 Mile Creek	Nil	01/07/16	No Change
	Main Creek	Nil	01/07/16	No Change
Werribee	Upper Werribee River	Nil	01/07/16	No Change
Maribyrnong	Jacksons Creek	Nil	01/07/16	No Change
Bunyip	Bunyip River/Tarago River	Nil	01/07/16	No Change
	Lang Lang River	Nil	01/07/16	No Change
	Dandenong Creek	Nil	01/07/16	No Change
	Yallock Creek	Nil	01/07/16	No Change
South Gippsland	Agnes River	Nil	01/07/16	No Change
	Albert River/Jack River	Nil	01/07/16	No Change
	Bruthen Creek	Nil	01/07/16	No Change
	Franklin River	Nil	01/07/16	No Change
	Merrimans Creek	Nil	01/07/16	No Change
	Tarra River	Nil	01/07/16	No Change
	Tarwin River	Nil	01/07/16	No Change

	Mack/Greigs Creek	Nil	01/07/16	No Change
Latrobe	Latrobe River - Lower	Full share in Blue Rock	01/07/16	No Change
	Latrobe River - Upper	Nil	01/07/16	No Change
	Moe River	Nil	01/07/16	No Change
	Morwell River	Nil	01/07/16	No Change
	Narracan Creek	Nil	01/07/16	No Change
	Traralgon Creek	Nil	01/07/16	No Change
Thomson	Avon River – Section 1	Nil	01/07/16	No Change
	Avon River – 2, 3A & 3B	Nil	01/07/16	No Change
	Valencia Creek	Nil	01/07/16	No Change
Mitchell	Mitchell River	Nil	01/07/16	No Change
	Wonnangatta River	Nil	01/07/16	No Change
	Dargo River	Nil	01/07/16	No Change
Tambo	Tambo River - Lower	Nil	01/07/16	No Change
	Tambo River - Upper	Nil	01/07/16	No Change
Snowy	Snowy River	Nil	01/07/16	No Change
	Buchan River	Nil	01/07/16	No Change
East Gippsland	Cann River	Nil	01/07/16	No Change