



IRRIGATION NEWS

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DROUGHT UPDATE

The Murray Darling Basin Commission has advised that inflows of 660 GL into the Murray system storages for the period June to the end of January this season, represent 60% of the previous recorded minimum of 1,170 GL recorded in 1983 and 9% of the long term average of 8,000 GL for the same period.

Flows from groundwater systems to streams in the upper Murray have dried up.

Catchments are extremely dry and rainfall would need to be well above average to produce average inflows to our storages.

It is expected that storages will be near empty by the end of the season and next season's allocations will be dependent on rainfall and run-off over this Autumn, Winter and Spring.

Goulburn Murray Water, the Victorian water resource manager, has advised that the outlook for allocations at various points next season for our region is as follows:

- July 2007 – 0%
- Mid August assuming average inflows – 7%
- October 2007 assuming average inflows – 5 chances in 10 the allocation could reach 52% or higher, 2 chances in 10 of 100% and 1 chance in 10 of no allocation.
- February 2008 assuming average inflows - 5 chances in 10 the allocation could reach 100% and 1 chance in 10 that the allocation would be lower than 39%.

Goulburn Murray Water's next outlook announcement for 2007/2008 will be made on the 15th May and the first seasonal allocation for the 07/08 season will be on 2nd July 2007. Announcements are made every fortnight thereafter.

Storages and River operation March - April 07.

As at the 30th March major Murray system storages have fallen to the following levels; Hume Dam 5.5%, Dartmouth 12.7% and Eildon 7.6% of capacity. Allocations remain at 95% of water entitlement. Lake Victoria is at 37%.

River operation in our region remained relatively normal over the later part of February. River Managers now advise that releases from Hume are being reduced significantly in an effort to conserve water for use in the latter part of this season and next. As a result river levels are expected to reduce significantly in reaches not

controlled by weir pools. River levels below Torrumbarry could fall below those normally experienced in winter by late March. Levels at the end of weir pools are also likely to reduce due to lower flow into the pools.

River levels at Swan Hill are expected to drop to gauge height 0.6m (1,900 ML/day) by early April and may go below that level beyond that date.

Flow below Euston is expected to drop from about 5,000 ML/day to 1,700 ML/day by early April and if conditions remain dry and irrigation demand high, flows may potentially fall below this level by the end of April. As a comparison flows last winter, when many diversion pumps were stranded, were between 2,500 & 2,750 ML/day.

Flow at Wentworth is currently being reduced from 3,300 ML/day to around 420 ML/day by early April with South Australia to be supplied from Lake Victoria for the remainder of the season.

Under continued dry conditions water will still be drawn from storages to meet downstream demand however river operation will be sensitive to climatic events particularly hot weather and high demand, which may require the temporary draw down of weir pools, predominantly Locks 7, 8 & 9, in order to maintain supply locally and meet dilution flows to South Australia. Conversely, cooler periods or rain fronts which lead to a reduction in demand will allow releases to be cut back to conserve water in storages for later use and next season.

Issues to consider.

It is important that private diverters consider options and seek advice to ensure that pumping facilities are able to extract water from the river at low levels. Neither LMW nor River Murray Water guarantees water levels in the river or adjoining waterways (creeks and billabongs). The holder of a diversion licence, either a person or syndicate, carry the risk of low or high river levels and are responsible for ensuring their works are able to access water.

If extreme conditions continue, the major risk to LMW customers will more likely be during periods of low flow when irrigation demand is driven by extended dry conditions. Depending on the location of demand and the ability to service that demand from in-stream flow or from weir pools, this scenario could result in short term river levels lower than what may have been forecast. Again customers need to consider their individual situation ensuring pumps are able to be moved to lower levels. Private diversion pumps located between weir pools and on adjacent waterways are at most risk. Any rain events which reduce demand and lower extractions from the river will help ease this risk.

Conditions in the river may also be highly conducive to outbreaks of blue green algae. Please monitor your diversion site and storage tanks for scum and contact your diversion inspector if concerned.

Storages and River operation beyond April 07

If catchment conditions remain extremely dry with storages effectively empty, River Murray Water will have to rely on drawing down selected weir pools or sourcing water from Lake Mulwala to meet demand. Obviously it is too early to know the extent, timing or where weir pool manipulation may be required. Weir pools away from major population centres will be the first focus. Flows in our regions are expected to be the lowest seen for some considerable time. It is too early to predict the range of flows and subsequent river levels which might be experienced.

Issues to consider.

Any rain events which reduce demand and generate tributary inflows will help to maintain river flows and levels in weir pools. These events will also help conserve water for next season.

Low levels and flows may lead to saline groundwater inflows into the river which has the potential to increase salinity levels.

River users, if swimming or boating, should also be especially cautious of shallow water, snags, reefs and sand banks which under normal conditions would not present a risk.

On property storage

Customers, both pumped district and private diverters, must ensure adequate on farm water storage is available for domestic purposes. The Authority recommends a minimum of storage capacity of 45,000 litres or 10,000 gallons. As a rule of thumb, a family of four using 250 litres per person per day would have 45 days household and incidental usage with this storage volume.

How to stay informed.

LMW has developed a Drought Information site which provides links to all the latest storage level information, allocation outlooks and drought updates. This site can be accessed via the 'Rural' Section of our website www.lmw.vic.gov.au. Click on 'Drought Information' and choose your topic. Of particular interest to private diverters with pumps on the river is the 'River Information' page which links to flow and salinity forecasts and the Weekly Report on how the river is being managed. This report should be a 'must read' for all irrigators each week.

CARRYOVER

Formal Rules of Carryover as advised by the Minister for Water.

1. The volume of water an entitlement holder can carry forward is a percentage of their water right or licence, no matter what their seasonal allocations are.
2. Entitlement holders can carry forward a volume of water of up to 30% of the volume of their water right/licensed volume (which become high-reliability water share in July 2007).
3. Entitlement holders with access to sales water will also be able to carry forward a volume of water up to 30% of the volume of their new low-reliability water share.
4. A deduction of 5% of the volume of water carried over will be made to account for evaporation losses.
5. There will be no application form to carry over water. Water remaining in an entitlement holder's account at the end of season 2006-07 will be deemed to be carried over.
6. There will be no additional storage charge for water carried over.
7. Water carried over will be deemed to be carried over firstly against an entitlement holder's high-reliability allocation up to the 30 % limit. Water carried over above this limit will then be deemed carried over against the entitlement holder's low-reliability allocation up to the 30% limit.
8. There is no guarantee on delivery of water carried over, because delivery depends on there being enough water to meet river and irrigation district delivery losses. If delivery is not possible, the carried over water will remain in an allocation account. It can be traded to other areas where delivery is possible, or kept until delivery can be made.
9. For 2007-08, the volume carried over from 2006-07 plus the seasonal allocations cannot be more than 100% of the water entitlement.

In a snapshot the above means the following to our customers and uses the example of an irrigator with a 100 ML Water Right.

Your Water Right/Entitlement	100ML	This is the permanent water you own
Carryover Cap 30% of Water Right	30 ML	This is the limit you can carryover
Allocation this season at 95%	95 ML	This is the water you had available for use
Water used to date	65 ML	
Water traded off	10 ML	One or more temporary trades
Water still to be used	5 ML	
Water remaining in June	15 ML	Based on estimate of water still to be used.
Thus water available for Carryover	15 ML	Automatically carried over on 30/6/07
Deduction for losses on 1/7/07 minus 5%	0.75 ML	Covers delivery losses seepage and evaporation
Water available on 2/7/07 for irrigation	14.25 ML	Ring fenced and not subject to reduction.

- The volume able to be carried over is capped at 30% of your water entitlement, not this season's allocation. It does not relate to what you normally use or might have owned, it will be assessed on the volume of water entitlement you own on the 30 June 2007. For Private Diverters this means the volume quoted on your most recent account and titled "Water Share". In our example our irrigator is able to carry over 30 ML under the cap.
- The 5% deduction for losses, evaporation and seepage, will be made after carry over has occurred. Using our example the capped carryover volume is 30 ML. The actual volume available for carryover

is 15ML minus 5% (0.75 ML) providing 14.25 ML of water for use next season. This water is ring fenced and not subject to next seasons allocations.

- Water carried over is in the storages, available for use this season and fees relating to it will have been paid this season. The only fee payable next season is the Usage Fee applied in Districts.
- Using our example if the total of what you had used and traded off was 80 ML this season and you only have 15 left you can purchase 15 ML of temporary water on the market this season add it to your 15 and carryover 30 ML into next year.
- Conversely if the total of use and trade was 60 ML the carryover cap set at 30% of 100 ML or 30 ML, means that you will have 10 ML excess at the end of the season. If you don't elect to trade this volume it will enter the communal pool for allocation to all irrigators next season.
- Sales Water or what is to be known as a low-reliability water share is not available to our customers.
- If inflows this autumn, winter and spring are similar to last year, there is some risk that water carried over may not be able to be delivered. Under such circumstances it may be possible to trade carryover water to upstream locations where delivery is available. Alternatively you can keep the allocation until delivery is possible i.e. the following season.
- At no stage will Customers be allowed to apply any more water next season than the Annual Use Limit relative to your property. This limit will be set as part of the unbundling process and will be set at either your water right or highest level of past use, which ever is the greater.

Should you require assistance in regard to the above please contact Peter Ebner or Owen Russell at the Authority on 50513400

Options to obtain water for Carryover.

Conventional means such as using a broker, placing an advertisement in the paper, talking to other irrigators or placing a notice on your post office notice board are common.

An option open to irrigators this season, due to allocation being below 100%, is that for the first time irrigators in the High Impact Zones (Pumped Districts of Red Cliffs and Merbein and diversion areas west of Merbein) are able to trade in the difference between this year's allocation and their Water Right from a Low Impact Zone. For example an Irrigator in the HIZ holding 100 ML of water right with an allocation of 95 % has 95 ML of water available for use. Therefore they can purchase 5 ML of LIZ water and use it in the HIZ zone.

On Farm Options.

There are a numerous options to deal with low water availability on farm. The Authority recommends that customers contact their respective commodity groups and the Department of Primary Industries for advice and assistance specific to their individual operations.

Close off of Temporary and Permanent Water trading for 06/07

Temporary and permanent water trades will close on the 15th of June 2007, if you require any further information on water trading please call Owen Russell or Peter Ebner on 50513400.