

## Critical water planning for the Murrumbidgee Valley

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### Resources

#### Rainfall

Location	Total July Rainfall (mm)	Long Term Average July Rainfall (mm)	% of Long term average	August Rainfall (mm) to date. (Aug 1-12)	Location
Thredbo Village	278.2	163.3	170	136	278.2
Gundagai	78.8	64	123	67	78.8
Griffith	40.2	33.5	120	27	40.2
Hay	38.9	31.1	125	24	38.9

Widespread rainfall fell in the Murrumbidgee Valley in late July and into the first weeks of August. Many stations received above average July rainfall. The catchment is now wet and further rainfall should produce good runoff.

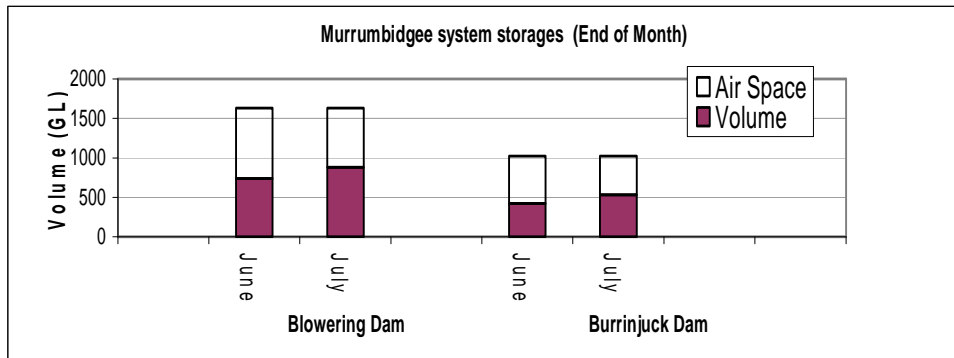
The Bureau of Meteorology has indicated that there is an even chance of getting median rainfall across the Murrumbidgee Valley through until October 2010.

#### Storage

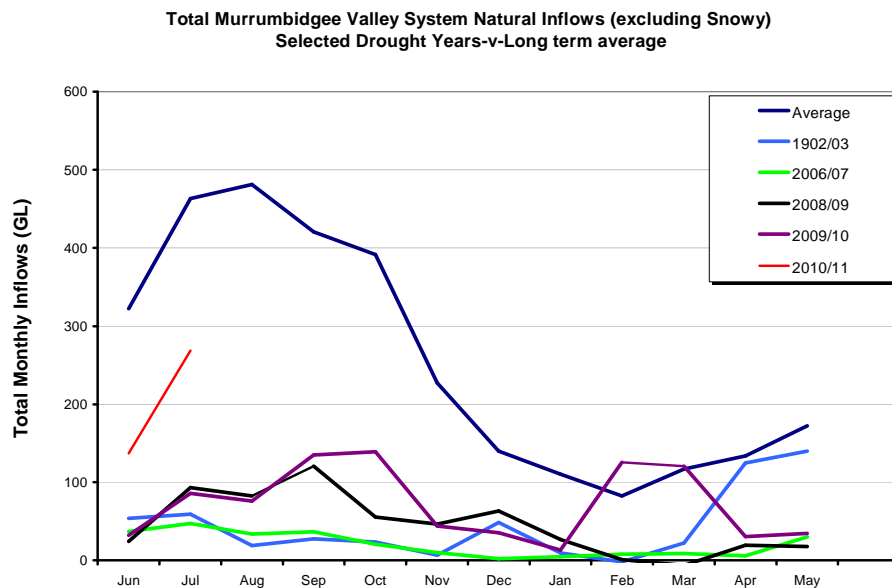
The following table shows Murrumbidgee Valley storage levels at 12 August 2010 and compares these volumes with those at this time last month and this time last year.

Storage @ 12 August 2010	Volume (GL)	Percent of capacity	Change in Volume from this time last month (GL)	Volume at this time last year (GL).	Change in volume from last year (GL)
Burrinjuck Dam	565	55	+130	395	+170
Blowering Dam	985	60	+170	670	+315
<b>Total</b>	<b>1550</b>			<b>1065</b>	

## Long-term Dam levels



## Inflows



## What this means

Flows in the upstream tributaries of the Murrumbidgee River have risen sharply on a number of occasions in recent weeks in response to passing weather systems and runoff from wet catchments. Inflows are tracking well above those of recent drought years but remain well below the long term average.

Many of these tributaries have risen again as the result of last week's rainfall.

The increased water availability has enabled NSW Office of Water to increase the high security allocation, including town water supply and domestic and stock entitlements by 15 per cent to 95 per cent of entitlement.

While there is not enough water available to make a general security allocation at this stage, today's announcement has not included inflows from last week's rain event.

Supplementary access was declared for reaches of the Murrumbidgee River during July, with the opportunity to access water from supplementary flows progressively announced as flows passed downstream. This provided equitable access to water users.

Storage volumes are currently at their highest since 2005, but much of this water is carryover from 2009/10. While catchment conditions are considerably better than they have been in recent years, it is still too early to consider the continuing water shortage over.

### **Additional water for the Snowy River in 2010-2011**

On 11 August 2010, NSW Premier Kristina Keneally announced that an agreement between the NSW, Commonwealth and Victorian Governments would provide an additional 56.3 GL in 2010-11 to provide for higher environmental flows in the Snowy River in the next two years.

The agreement allows for an additional 24.2 GL, in addition to 38 GL already set aside under existing arrangements, to be released from Jindabyne Dam to the Snowy River so that releases of Snowy River increased flows in 2010/11 will now exceed 62 GL.

The agreement also provides for the immediate repayment of the Mowamba Borrowings Account that had been unpaid as a result of the ongoing drought in the southern Murray-Darling Basin.

NSW contribution to additional flows will come from NSW environmental water entitlements in the Murrumbidgee River, so that there is no impact on consumptive water users in the valley, while the Commonwealth Government will pay the costs of forgone power generation by Snowy Hydro Limited.

The NSW Office of Water is working with the Snowy Scientific Committee and Snowy Hydro Limited to develop the optimal release strategy, which would mimic natural flows where possible.

### **Trade**

The water trading market opened on 1 July and restrictions necessary in 2009/10 because of the large undelivered trade volume have been removed. Nevertheless trade activity will be closely monitored and decisions may be taken to manage further trade out of the valley if the undelivered trade balance approaches 100 GL. Currently there is about 28 GL to be delivered.

### **Environmental flow management**

In November 2006, water credited to the Murrumbidgee Environmental Water Account was 'borrowed' to secure the delivery of critical human needs in the Murrumbidgee Valley. Repayments have been occurring over the past two years.

With the suspension of the Murrumbidgee Regulated River Water Sharing Plan due to critical drought conditions, it is now timely that a share of resource improvements (since 1 June 2010) is being put aside for environmental purposes to reflect the plan rules.

It has been agreed that minimal flows will be maintained from Burrinjuck and Blowering Dams were appropriate, and any consequent translucency/transparency under-release will be credited to the Environmental Water Account for future delivery. Also, now that high security allocations have reached 50 per cent, a proportion of further improvements in water availability in 2010-11 will be used to repay the outstanding borrow.

Carryover rules for the environmental account water will be reviewed in about March 2011 to determine the maximum volume that can be carried over into 2011-12.

It is proposed that discussions with the Critical Water Advisory Group will be continued to provide input to the on-going sharing of available resources until the Water Sharing Plan re-commences.

Some recent environmental watering has been accomplished particularly in the Lowbidgee area boosting ecosystem health by virtue of the good tributary flows in July. In addition, investigations are underway to identify whether there is an opportunity to 'piggy-back' some environmental account water on elevated stream flows to maximise its effectiveness.

### Urban water usage

Following advice from the Critical Water Advisory Group, the Murray and Murrumbidgee town water restrictions policy will be adjusted for the 2010/11 water year. There will be no NSW Government water restrictions until **1 September**.

It is the responsibility of councils to manage water restrictions within their area of responsibility, but the Critical Water Advisory Committees in the Murray and Murrumbidgee Valleys have generally agreed to a policy that restrictions should be linked with water availability for high security.

Town water restriction policy:

<b>High Security water allocation</b> (as a percentage of the licensed entitlement)	<b>Level of town water restrictions</b>
Less than and up to 20 per cent	Level 4 – no outside watering
Greater than 20 per cent and up to 40 per cent	Level 3a – maximum of four hours watering per week. No lawn watering
Greater than 40 per cent and up to 60 per cent	Level 3 – maximum of eight hours watering per week.
Greater than 60 per cent and up to 80 per cent	Level 2a – maximum of eight hours watering per week, including restricted lawn watering
Greater than 80 per cent and all water for critical human needs for the next water year has been reserved	To be determined by council

In addition to the trigger points, the following rules will apply:

- Councils may purchase water on the temporary market to allow town water restrictions to be eased from Level 4 up to Level 3 restrictions. However, this does not apply to groundwater in towns where water is being diverted from emergency bores that have been funded by the NSW Government to provide for critical human needs.
- Councils will be able to water parks, school grounds and sports fields within their town water supply allocation.
- Private diverters and domestic bore owners will be required to observe the same restrictions as their local council area.

- Town water supplies from aquifers are subject to same restrictions as surface water.
- Murrumbidgee Town Water Supply is now at 95 per cent of entitlement.

## Compliance

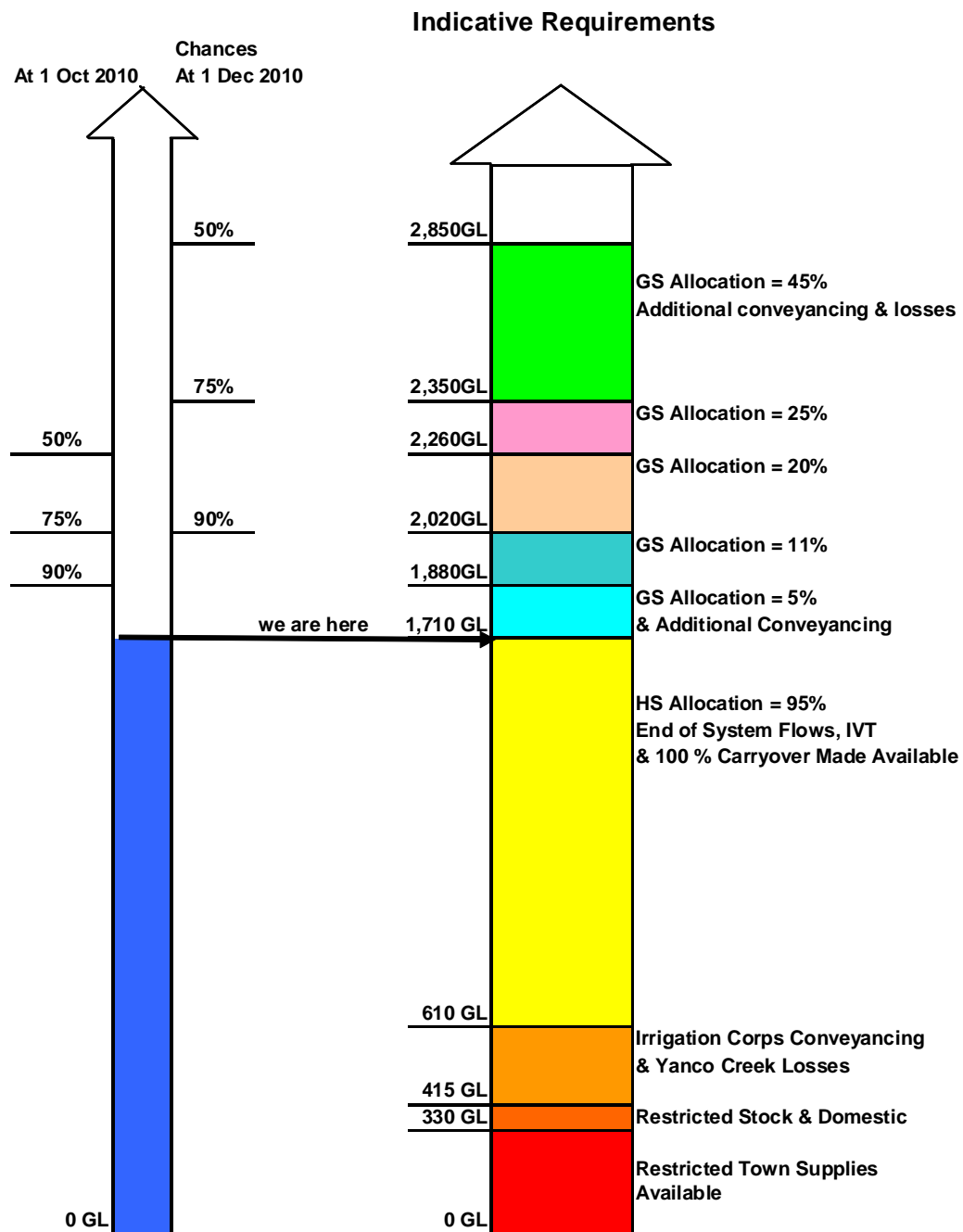
The NSW Office of Water's Drought Contingency Planning Program will only work if everyone adheres to the restrictions where these apply and is conservative with **all** water use. To ensure that the system is run fairly, the community should report any suspected breaches to the NSW Office of Water's Compliance Unit via phone 1800 633 362 or by email to [watercompliance@water.nsw.gov.au](mailto:watercompliance@water.nsw.gov.au) All reports are treated confidentially.

## Outlook and water availability for 2010/11

Probability of improvements - Murrumbidgee 2010					
Chances of Improvement (Normal climate sequence)	Inflow Condition	GS Allocation %			
		By end Aug	By end Sep	By end Oct	By end Nov
9 chances in 10	90%	1%	5%	8%	11%
3 chances in 4	75%	3%	11%	18%	25%
1 chance in 2	50%	7%	20%	34%	45%

## Murrumbidgee Valley Indicative Outlook

As at 15 August 2010



The figures used to calculate this diagram are based on all years of record. Recent flow conditions and the outlook for median rainfall for the remainder of winter and spring warrant the change from the dry tercile (driest 1/3 of years) calculations used previously.

Note: Volumes are indicative only and subject to change in response to rainfall conditions.

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The NSW Office of Water is a separate office within the  
**Department of Environment, Climate Change and Water**