



# Water Resources and Outlooks

Effective with 1 September 2009 Allocation

#2712330



# Outline of Briefing

- 1 September 2009 seasonal allocation
- Inflow trends and resource position
- Seasonal allocations and outlook released on 15 August
- Groundwater allocations and availability
- Early system operations

The logo for Goulburn-Murray Water is located in the top left corner. It consists of a white oval containing the text "GOULBURN-MURRAY" in a small, black, sans-serif font above the word "WATER" in a larger, bold, black, sans-serif font. Below the text is a stylized blue wave graphic.

GOULBURN-MURRAY  
WATER

# 1 Sep 2009 Seasonal Allocations

- Murray system at 2% HRWS
- All other systems at 0% HRWS
- No allocations this time last year
- Shortfalls to allocation in all systems
  - Goulburn allocation anticipated on 15 September
  - Other systems still experiencing very low inflows (allocations unlikely on current trends)



# Water Resource Diagrams

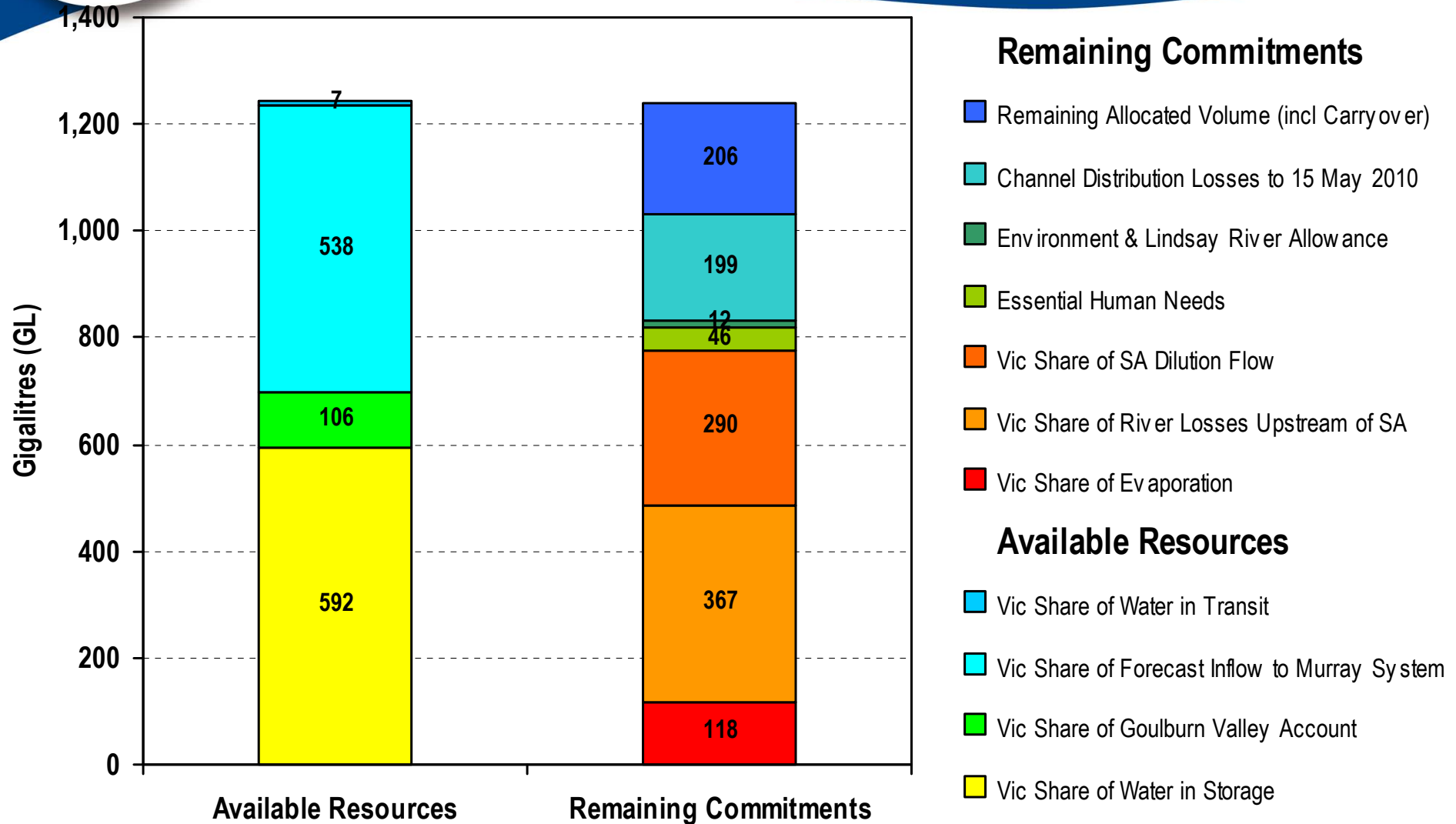
- Visual representation of resource and commitment at a point in time
- Available at:  
[www.g-mwater.com.au/news/drought-response/](http://www.g-mwater.com.au/news/drought-response/)



# Murray System

Breakdown of Water in Store and Commitments

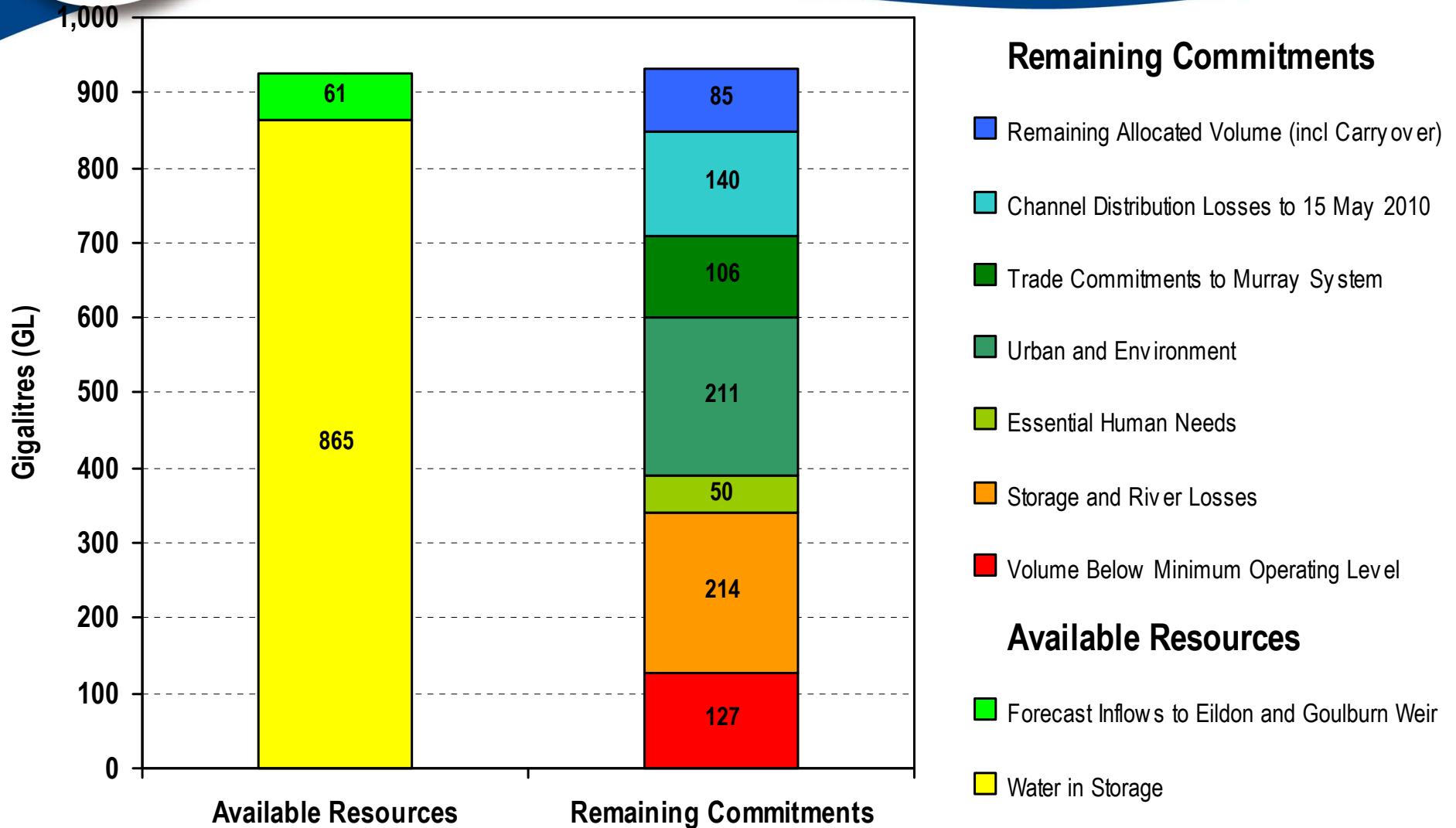
1 September 2009





# Goulburn System

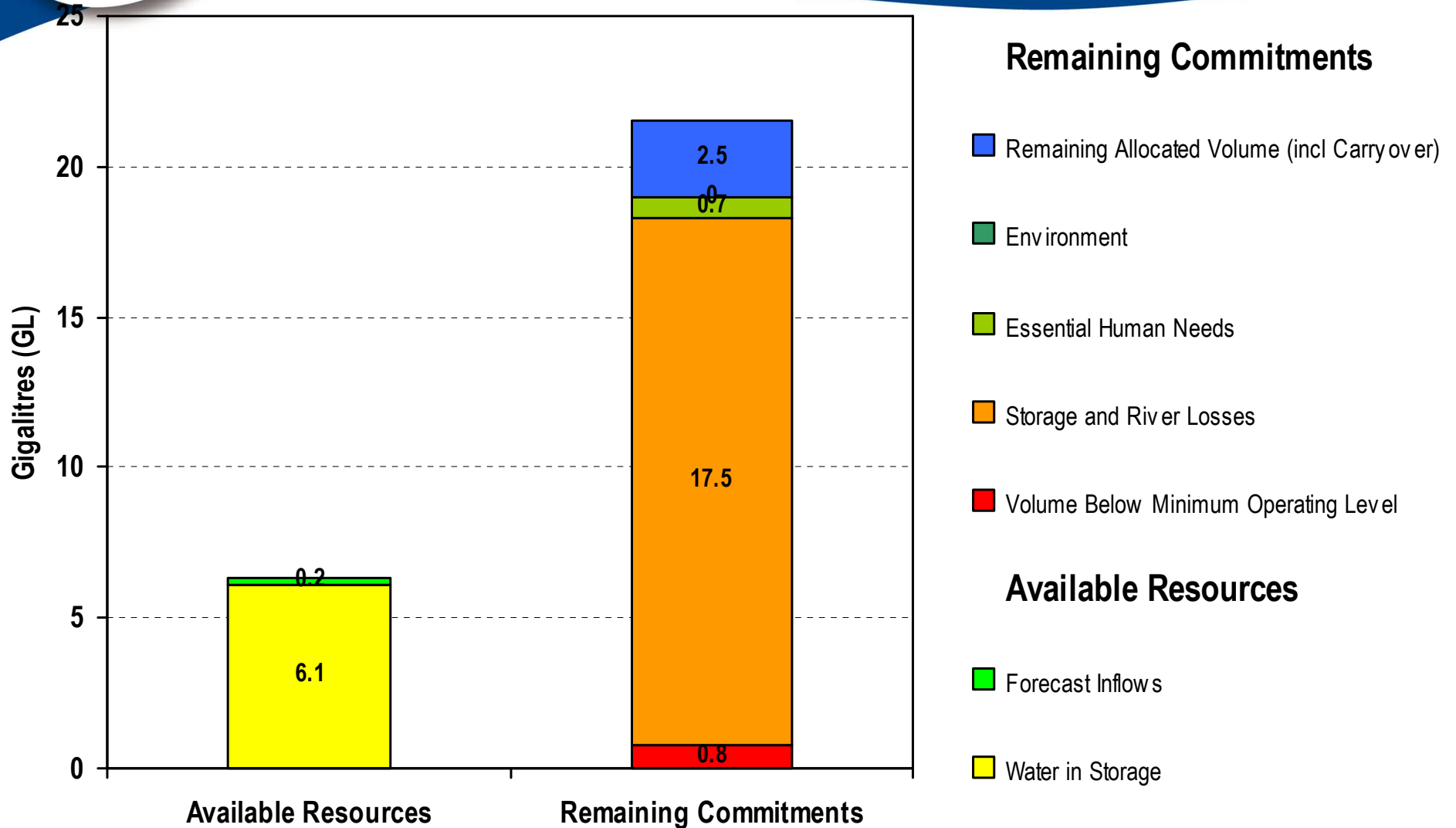
Breakdown of Water in Store and Commitments  
1 September 2009





# Broken System

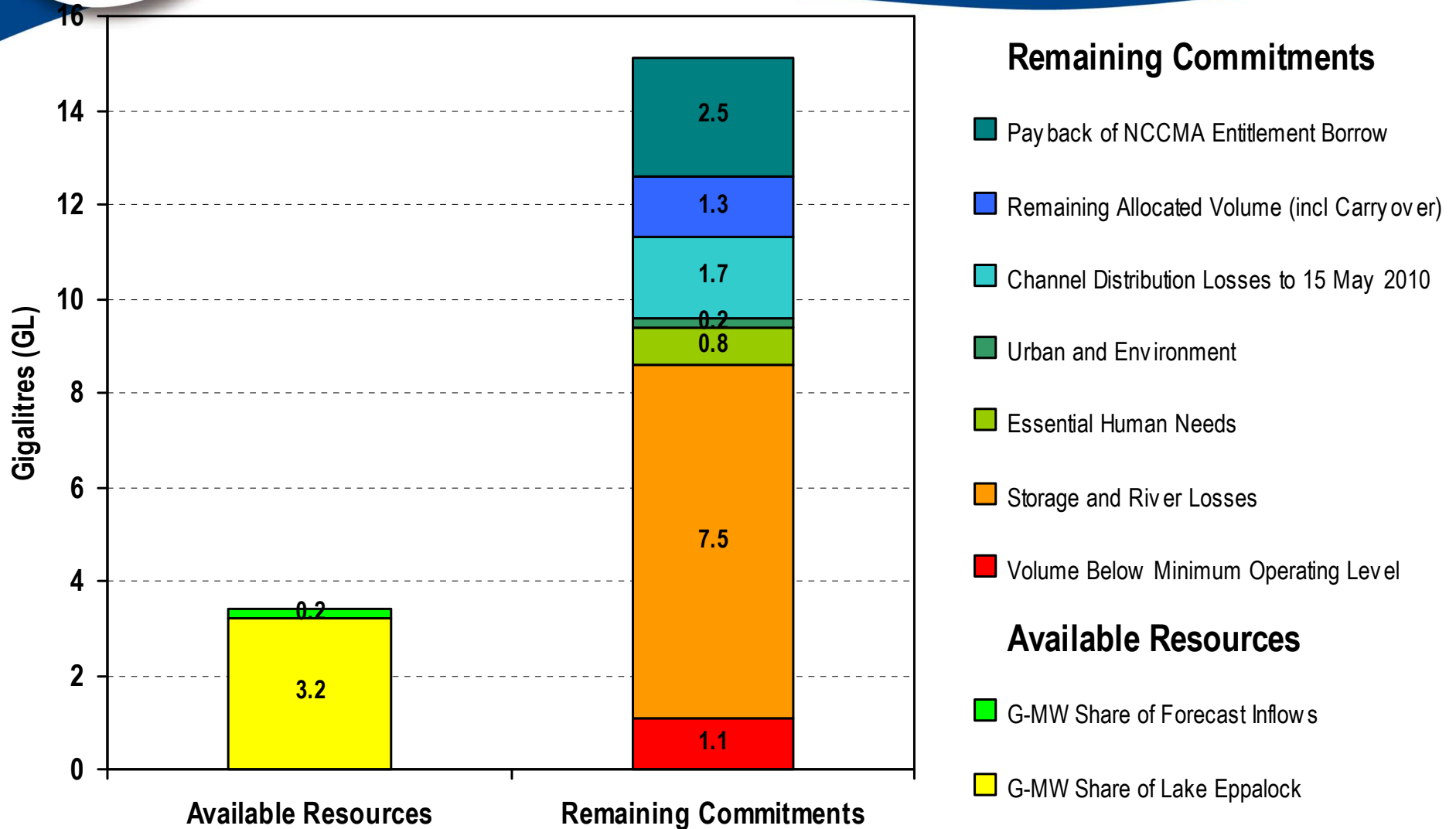
Breakdown of Water in Store and Commitments  
1 September 2009





# Campaspe System

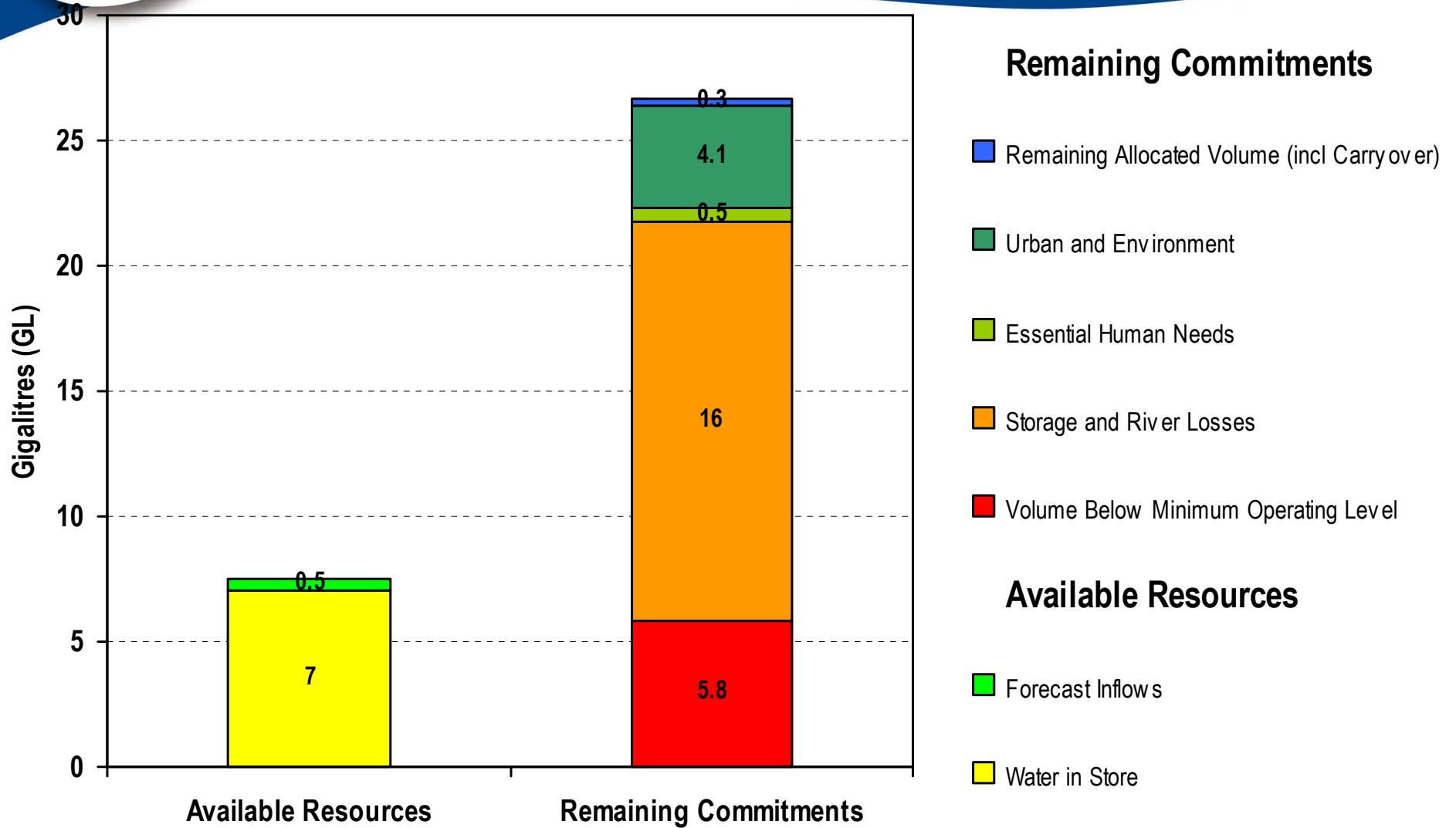
Breakdown of Water in Store and Commitments  
1 September 2009





# Loddon System

Breakdown of Water in Store and Commitments  
1 September 2009

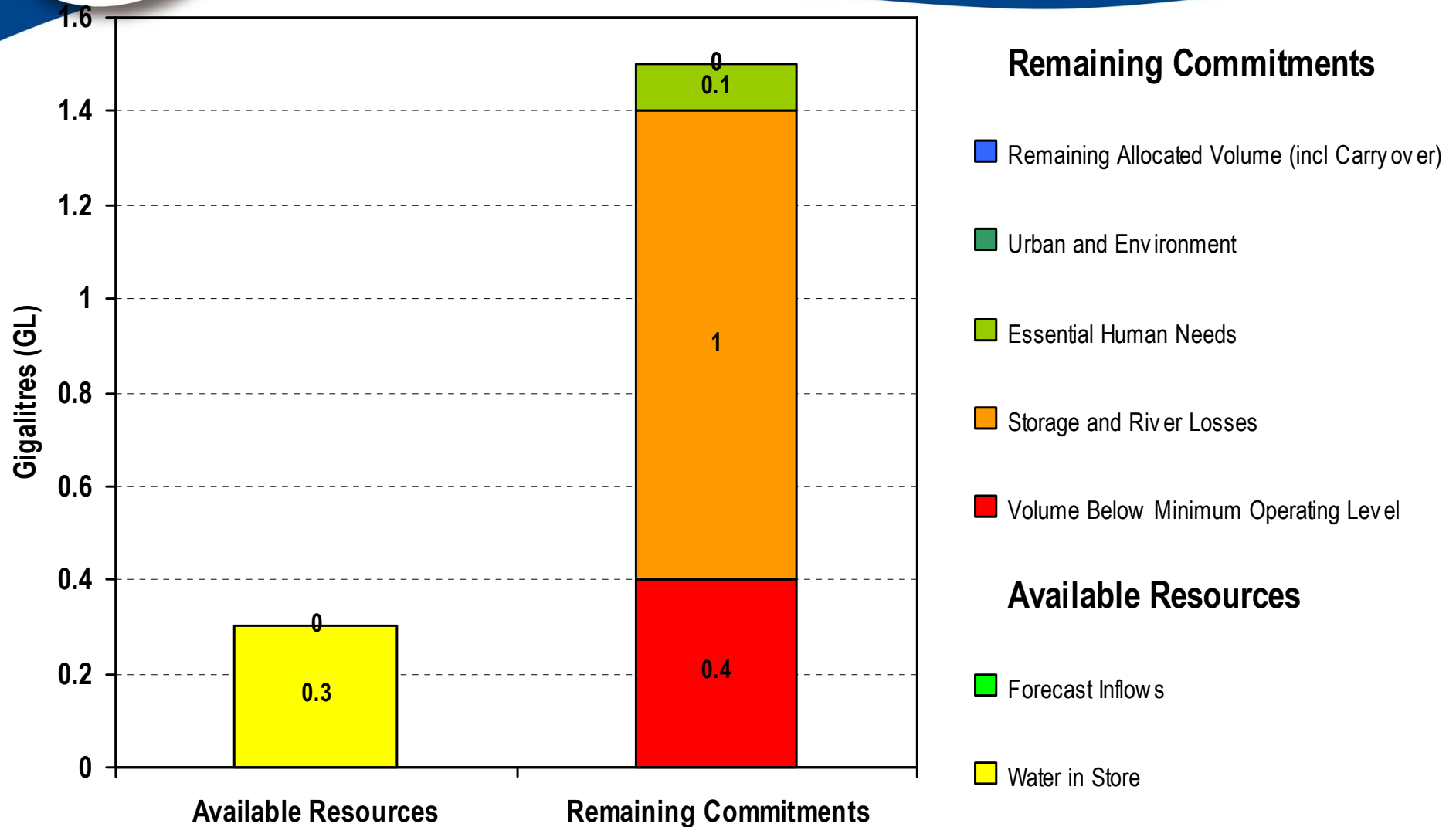




# Bullarook System

Breakdown of Water in Store and Commitments

1 September 2009



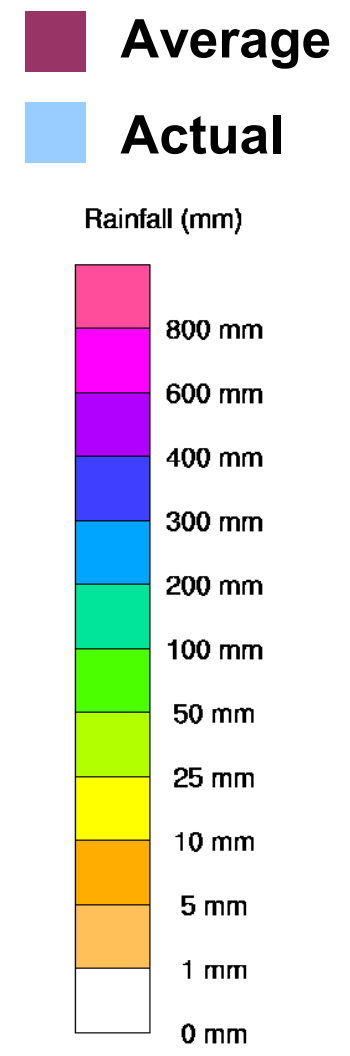
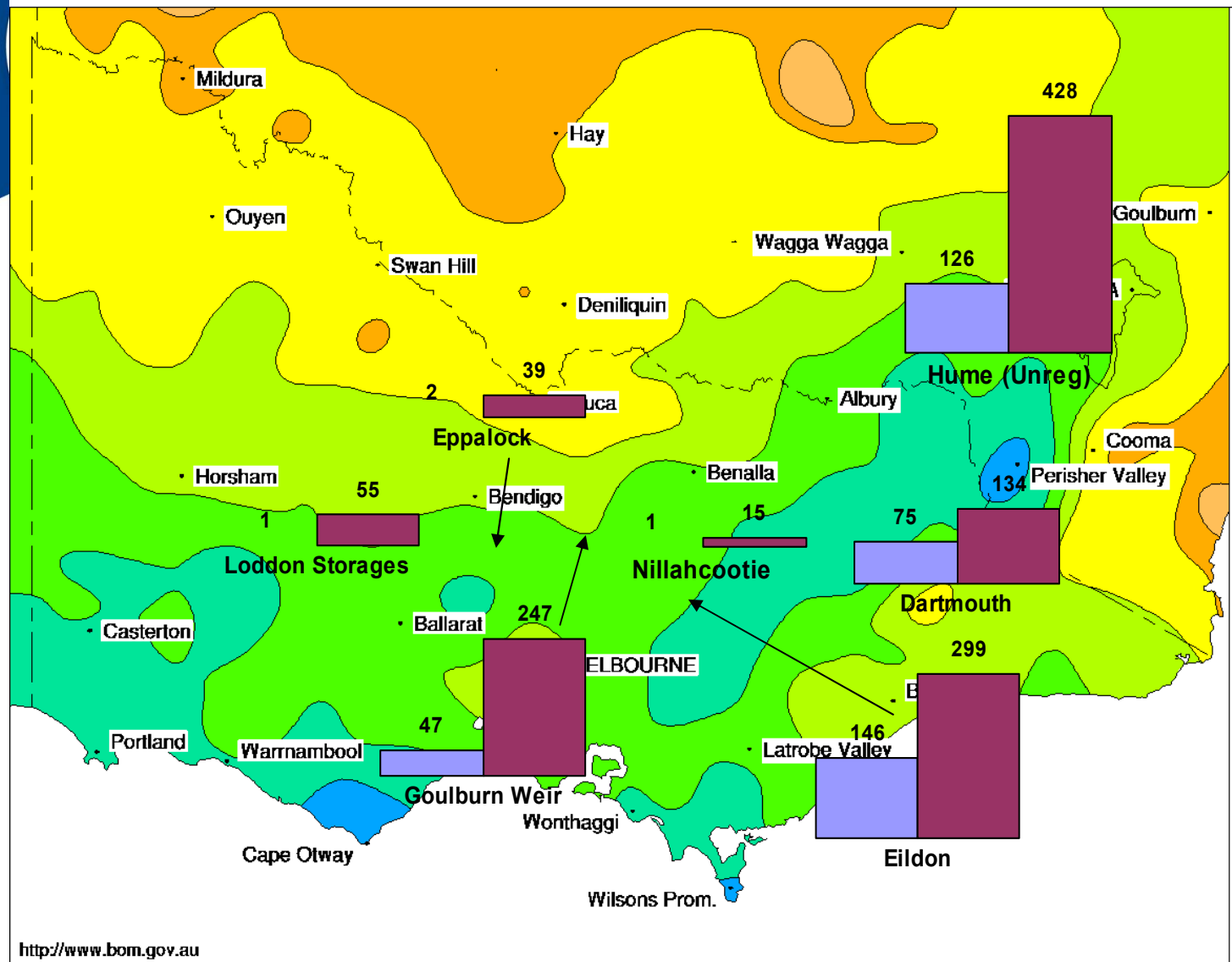


# Inflow Trends & Resource Position

# Victorian Rainfall (mm)

August 2009

Product of the National Climate Centre



<http://www.bom.gov.au>

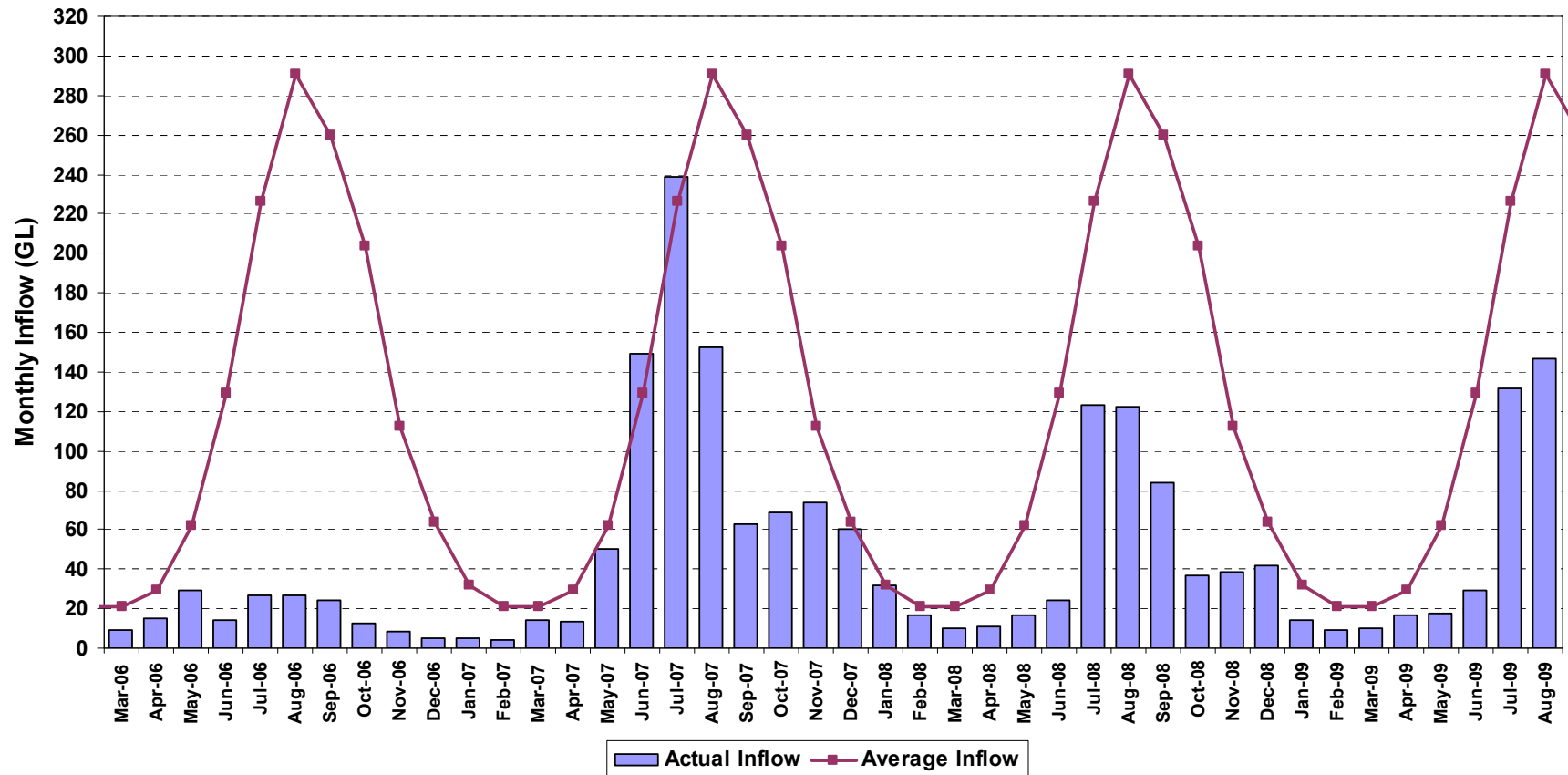


# August 2009 Inflows

Storage	Inflow (GL)	% Average	% PoE
Dartmouth	74.8	56	72
Nillahcootie	0.9	6	95
Eildon	146.2	49	81
Goulburn Weir	47.0	19	97
Eppalock	1.6	4	94
Loddon	1.2	2	97

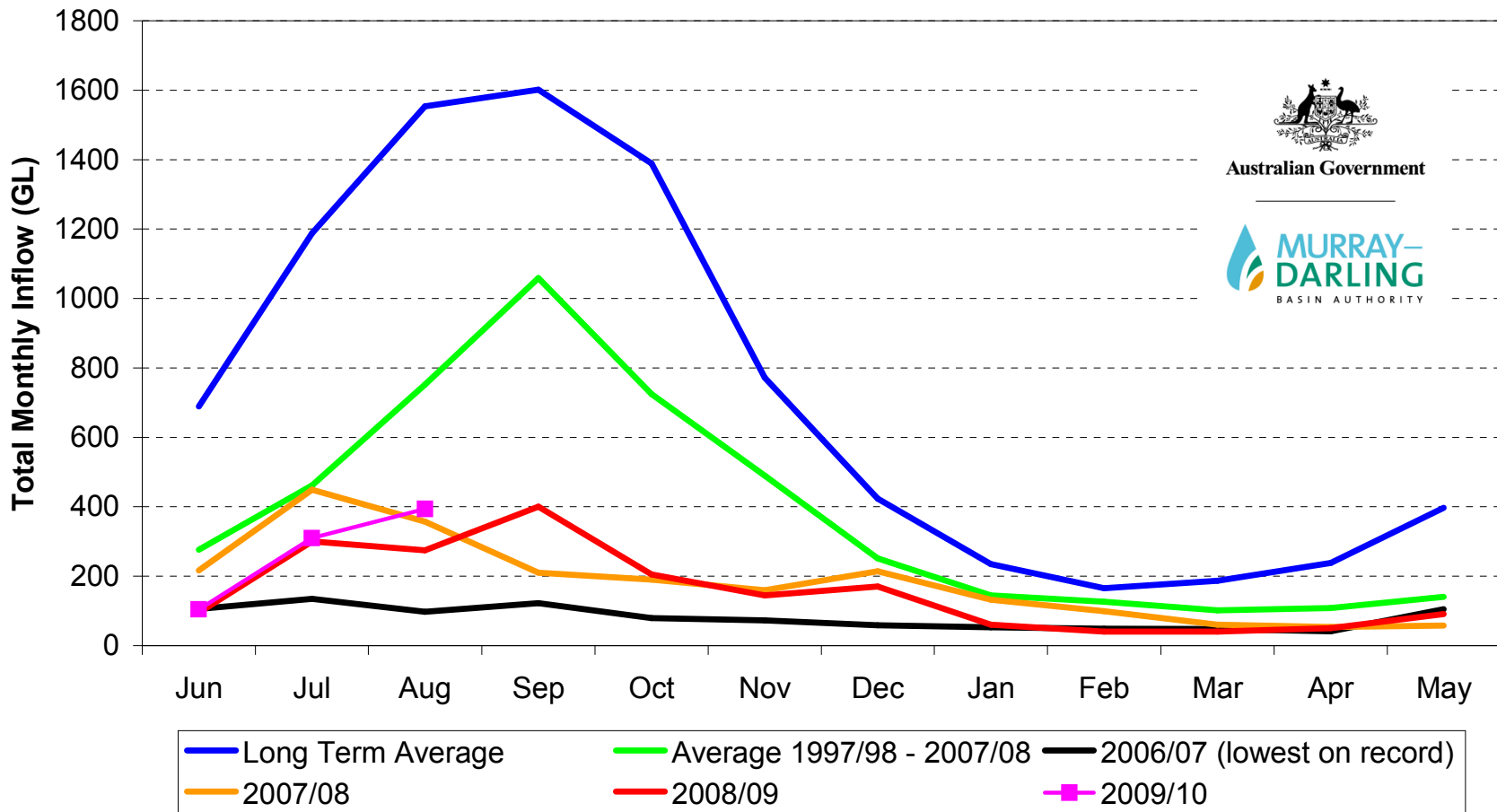


## Inflows to Lake Eildon Updated to 31 August 2009





### Murray System Monthly Inflows (Excluding Snowy and Darling Inflows)





# Storage Volumes (31 August)

Storage	2009 (GL)	2008 (GL)
Dartmouth (Total)	802.0	753.0
Dartmouth (Vic active)	418	470.0
Hume	480.0	1014.0
Hume (Vic active)	240.0	463.0
Buffalo	19.0	17.3
William Hovell	13.9	13.8

Dartmouth and Hume Vic active based on 24 August 2009



# Storage Volumes (31 August)

Storage	2009 (GL)	2008 (GL)
Eildon	699.9	711.7
Waranga Basin	150.7	118.1
Nillahcootie	6.1	12.7
Mokoan	0	21.4
Eppalock (G-MW)	17.3	20.9
Cairn Curran	3.5	8.3
Tullaroop	3.3	4.5



# Allocation Outlooks

- Updated middle of each month
- Based on current catchment conditions and expected response



# Allocation Outlook

## MURRAY

Scenario	15-Oct-09	15-Dec-09	15-Feb-09
Wet	70%	89%	100%
Average	38%	58%	70%
Dry	4%	16%	24%

## GOULBURN

Scenario	15-Oct-09	15-Dec-09	15-Feb-09
Wet	63%	91%	100%
Average	36%	54%	61%
Dry	12%	19%	25%

## **BROKEN**

<b>Scenario</b>	<b>15-Oct-09</b>	<b>15-Dec-09</b>	<b>15-Feb-09</b>
Wet	49%	100%	100%
Average	4%	40%	59%
Dry	0%	0%	0%

## **CAMPASPE**

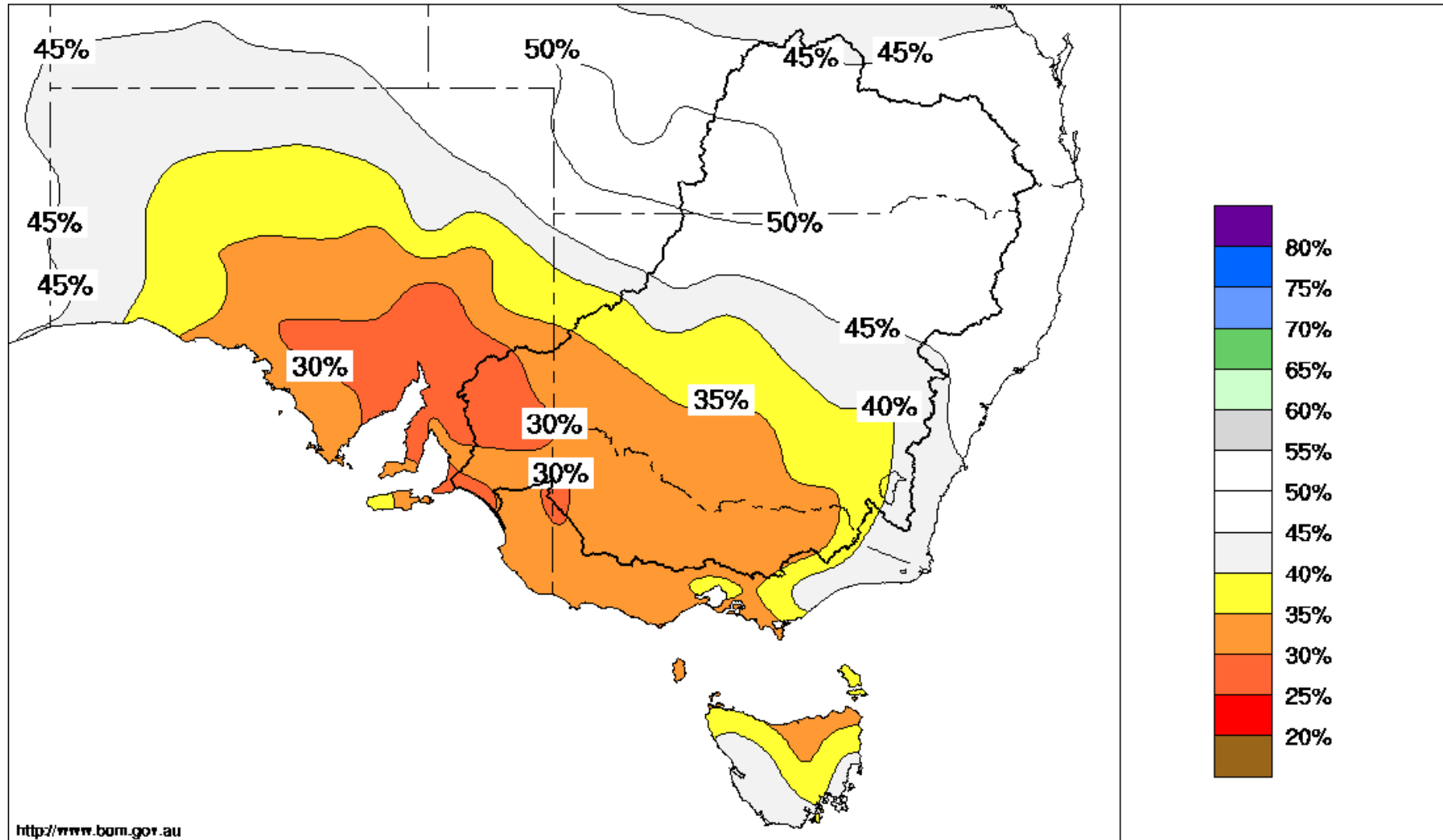
<b>Scenario</b>	<b>15-Oct-09</b>	<b>15-Dec-09</b>	<b>15-Feb-09</b>
Wet	20%	79%	100%
Average	0%	0%	0%
Dry	0%	0%	0%

## **LODDON**

<b>Scenario</b>	<b>15-Oct-09</b>	<b>15-Dec-09</b>	<b>15-Feb-09</b>
Wet	86%	100%	100%
Average	0%	0%	8%
Dry	0%	0%	0%

# Chance of exceeding the median Rainfall September to November 2009

Product of the National Climate Centre



<http://www.bom.gov.au>



# 2009/10 Operations

- Temporary Qualification of Rights apply in all regulated water systems
- Grants access to water for essential needs when allocations low (or zero)
- Reduces environmental flow obligations
- Mandates extra environmental monitoring



# 2009/10 Operations ../2

- Goulburn and Murray systems
  - Delivery of carried over allocation (and 2009/10 allocation in the Murray system) available throughout the season
  - Further resource improvements will contribute to increased allocations



# 2009/10 Operations ../3

- Broken, Campaspe, Loddon and Bullarook
  - Low rates of release being maintained
  - **Delivery of carryover available in Broken only due to catchment inflows below Nillahcootie**
  - **Carryover not available in other systems**
  - Check plan updates with each allocation
  - Customers should invoke personal contingencies
  - ***Still in most productive inflow period***



# Conclusions

- Poor outlook under dry conditions
- Next resource improvement in Goulburn to contribute to allocations
- Extent of allocation will be determined by inflows over coming months
- Delivery available throughout season in Murray and Goulburn systems
- Operating plans are updated with each allocation announcement



# Conclusions ../2

- Limited water availability also causes environmental risks
- Adaptive management plans used to mitigate risk while water is available