



RIVER MURRAY WEEKLY REPORT

FOR THE WEEK ENDING WEDNESDAY, 5 MARCH 2014

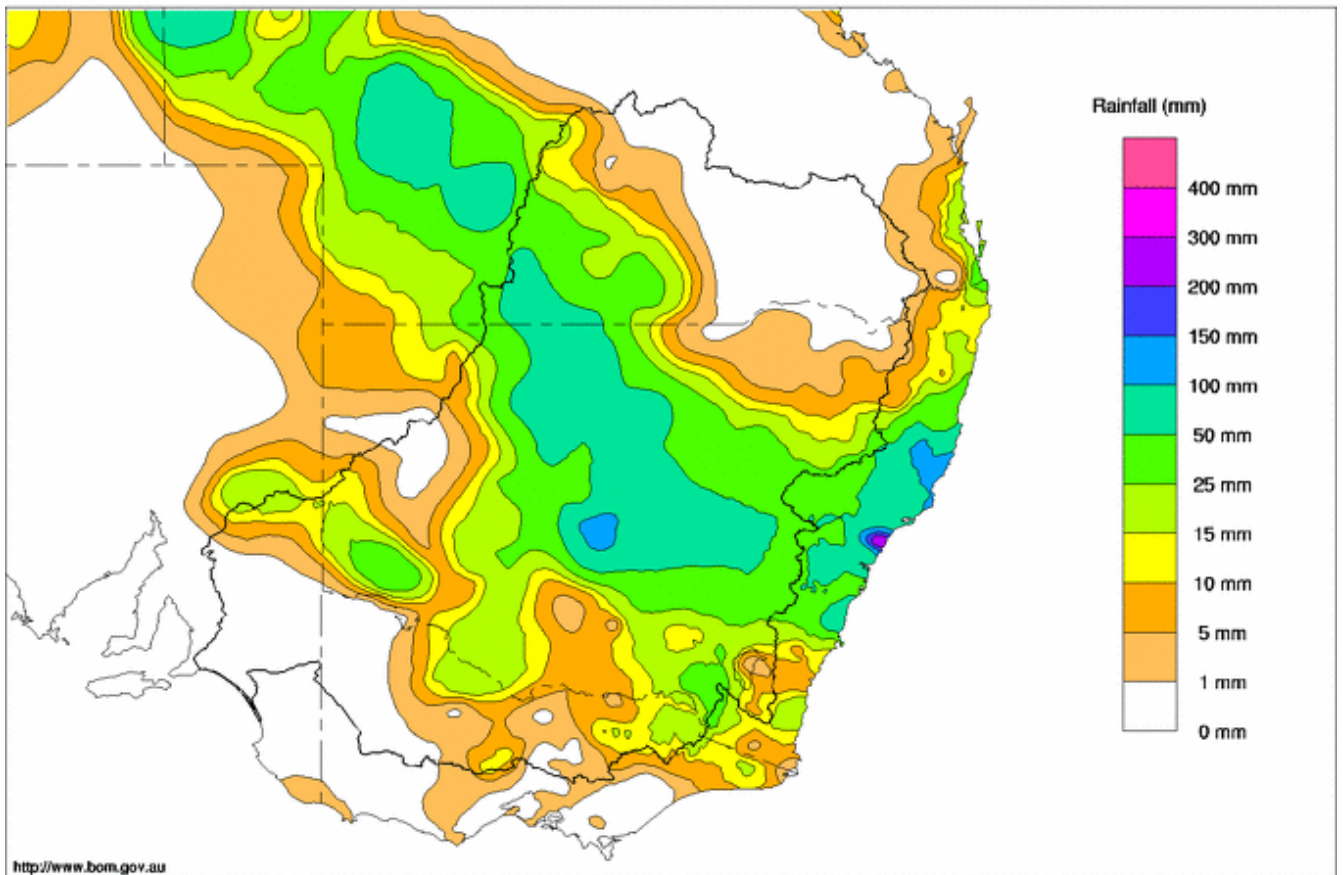
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Rainfall and Inflows

There was further rainfall over the past week across large areas of NSW as storms continued to develop along a low pressure trough. Some rain also extended into Queensland and Victorian areas of the Murray Darling-Basin, although most of the north-east and far south-west remained dry (Map 1).

Some of the highest weekly rainfall totals were recorded in central NSW including 99 mm at Lake Cargelligo, 95 mm at Trundle and 93 mm at Parkes. Further west on the lower Darling River, Burtundy recorded 75 mm. In Queensland, 54mm was recorded at Eulo in the Warrego catchment, while in Victoria, the highest totals recorded within the Basin were 36mm at Lalbert, 29 mm at Archerton and 27 mm at Kerang.

Murray-Darling Rainfall Totals (mm) Week Ending 5th March 2014
Product of the National Climate Centre



Map 1 - Murray-Darling Basin rainfall for the week ending 5 March 2014 (Source: Bureau of Meteorology).

There were only small changes in flow along most upper Murray tributaries this week. On the upper Murray, the flow at Biggara increased at the beginning of the week to 520 ML/day in response to rain and has now gradually receded to 380 ML/day. The Mitta Mitta River at Hinnomunjie Bridge and the Ovens River at Wangaratta continued to average 120 ML/day and 250 ML/day respectively.

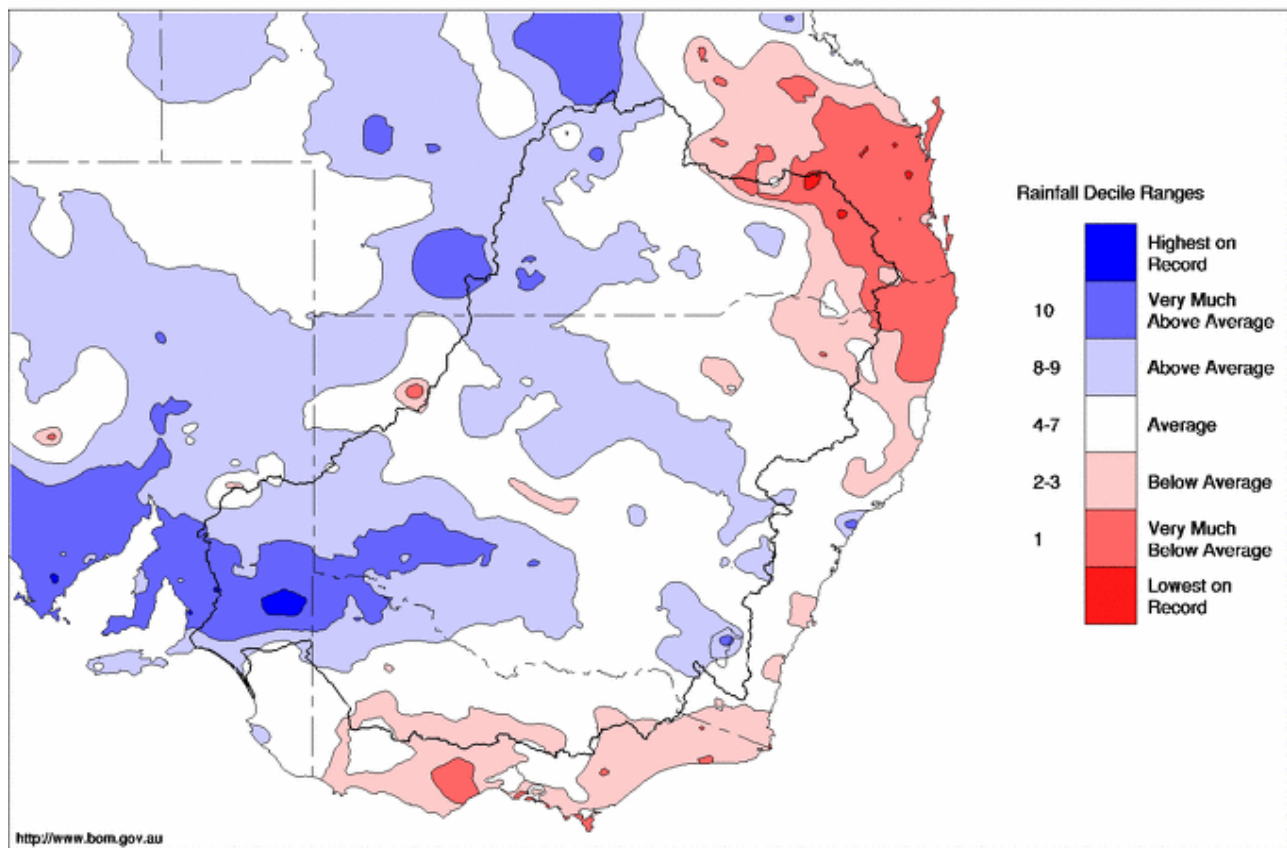


February 2014 Summary

There was a welcome return to higher than average rainfall across many parts of the Murray-Darling Basin during February, although in some areas, the recent run of dry weather continued. Across western, south-western and some central and south-eastern districts, there were several significant rain and storm events during the month and many locations recorded above average to 'very much above average' monthly totals. However in the south, conditions along the Victorian divide remained rather dry and in the north-eastern Basin, very dry conditions have persisted over the upper Condamine and Border Rivers catchments (Map 1).

Across the Basin as a whole, the Bureau of Meteorology (BoM) has reported that rainfall was 21% above the long-term mean, with an area-averaged total of 49.0 mm.

Murray-Darling Rainfall Deciles February 2014
Distribution Based on Gridded Data
Product of the National Climate Centre



Map 2 - Murray-Darling Basin rainfall deciles for February 2014 (Source: Bureau of Meteorology).

Inflows to the River Murray System (excluding Snowy and Darling and environmental inflows) receded further during February with around 80 GL recorded for the month. The total was slightly higher than February last year, but over 100 GL less than the long-term average.

River Operations

River operations over the autumn period will continue to prioritise the conservation of water in the upper River Murray storages. If current conditions continue, the release from these storages will tend to reduce over the next few months as demands diminish and flows in the River Murray will generally decrease as a result. However, river conditions will be influenced by rainfall and updates will be provided in coming weekly reports.



MDBA active storage decreased by 102 GL this week and is currently 5,120 GL or 61% capacity. This total is slightly below the long-term average storage for this time of year and is the first time storage has fallen below average since November 2010. At Dartmouth Reservoir, storage decreased by 14 GL to 3,488 GL (91% capacity). Earlier in the week the release, measured at Colemans gauge, was decreased from 2,000 to 1,500 ML/day and is expected to remain at this rate over the coming week.

At Hume Reservoir, the storage volume decreased by 93 GL to 1,361 GL (45% capacity). The average release from Hume this week was approximately 14,500 ML/day, up 1,000 ML/day from last week. An anticipated increase in demands over the coming week may result in a higher release over the coming days.

The total diversions to the major Yarrawonga irrigation offtakes increased to 35 GL this week. The average pool level at Lake Mulwala this week was 124.73m AHD. A pool level between 124.7 and 124.8 m AHD will continue to be targeted over the coming week. The release from Yarrawonga Weir was reduced from 9,700 ML/day to 9,200 ML/day this week. Further reductions to releases will be considered over coming weeks in order to conserve water in upper Murray storages.

On the Edward River, flow through the Edward and Gulpa Creek offtakes this week averaged 1,600 ML/day and 350 ML/day respectively. The flow downstream of Stevens Weir remained at 1,100 ML/day for most of the week, following the peak of 2,500 ML/day on 21 February. The flow at Stevens Weir will reduce to 600 ML/day over the next week. The flow at Moulamein is currently 1,500 ML/day and is expected to start decreasing. The flow in the Niemur River at Mallan School is currently 300 ML/day.

The Goulburn River at McCoys Bridge continued to recede to 950 ML/day and will remain steady over the coming week.

The flow in the Murrumbidgee at Balranald peaked at 2,660 ML/day on 3 March 2014 in response to a rain event a fortnight ago. This flow is expected to recede to a steady 1,000 ML/day next week. The flow downstream of Euston Weir has risen to 9,500 ML/day, from 8,400 ML/day, in response to the rainfall event in the Murrumbidgee and is likely to begin receding over the next week.

The Menindee Lakes storage volume decreased by 16 GL over the last week to 438 GL (25.3% capacity). The release from the lakes is targeting 350 ML/day on the Darling River at Weir 32. As a result the flow at Burtundy is continuing to recede towards a base flow of around 320 ML/day.

On the Murray at Wentworth, downstream of the Darling confluence the flow is currently 8,410 ML/day and is expected to rise to around 9,000ML/day this week.

The Lake Victoria storage volume increased 5 GL to 465 GL (69% capacity). This increase in volume was primarily a result of higher flows in the River Murray following the significant rain event two weeks ago.

The flow to South Australia averaged 6,700 ML/day this week. At the Lower Lakes, the 5-day average water level in Lake Alexandrina is currently 0.61 m AHD.

For media inquiries contact the Media Officer on 02 6279 0141

DAVID DREVERMAN
Executive Director, River Management



Water in Storage

Week ending Wednesday 05 Mar 2014

MDBA Storages	Full Supply Level	Full Supply Volume (GL)	Current Storage Level	Current Storage		Dead Storage (GL)	Active Storage (GL)	Change in Total Storage for the Week (GL)
	(m AHD)		(m AHD)	(GL)	%			
Dartmouth Reservoir	486.00	3 856	480.22	3 488	90%	71	3 417	-14
Hume Reservoir	192.00	3 005	181.88	1 361	45%	23	1 338	-93
Lake Victoria	27.00	677	25.16	465	69%	100	365	+5
Menindee Lakes		1 731*		438	25%	(- -) #	0	-16
Total		9 269		5 752	62%	- -	5 120	-117
Total Active MDBA Storage							61% ^	

Major State Storages

Burrinjuck Reservoir	1 026	458	45%	3	455	-1
Blowering Reservoir	1 631	890	55%	24	866	-42
Eildon Reservoir	3 334	2 499	75%	100	2 399	-37

* Menindee surcharge capacity – 2050 GL

** All Data is rounded to nearest GL **

NSW takes control of Menindee Lakes when storage falls below 480 GL, and control reverts to MDBA when storage next reaches 640 GL

^ % of total active MDBA storage

Snowy Mountains Scheme

Snowy diversions for week ending 04 Mar 2014

Storage	Active Storage (GL)	Weekly Change (GL)	Diversions (GL)	This Week	From 1 May 2013
Lake Eucumbene - Total	1 498	+1	Snowy-Murray	+0	651
Snowy-Murray Component	694	-3	Tooma-Tumut	+0	234
Target Storage	1 410		Net Diversion	0	417
			Murray 1 Release	+1	938

Major Diversions from Murray and Lower Darling (GL) *

New South Wales	This Week	From 1 July 2013	Victoria	This Week	From 1 July 2013
Murray Irrig. Ltd (Net)	26.7	940	Yarrowonga Main Channel (net)	8.2	260
Wakool Sys Allowance	3.0	31	Torrumbarry System + Nyah (net)	14.5	405
Western Murray Irrigation	0.6	23	Sunraysia Pumped Districts	2	100
Licensed Pumps	5.8	188	Licensed pumps - GMW (Nyah+u/s)	1.6	152
Lower Darling	3.9	190	Licensed pumps - LMW	4.3	251
TOTAL	40.0	1372	TOTAL	30.6	1168

* Figures derived from estimates and monthly data. Please note that not all data may have been available at the time of creating this report.

** All data above is rounded to nearest 100 ML for weekly data and nearest GL for cumulative data**

Flow to South Australia (GL)

* Flow to SA will be greater than normal entitlement for this month due to the delivery of additional environmental water.

Entitlement this month	186.0 *	
Flow this week	46.7	(6 700 ML/day)
Flow so far this month	36.2	
Flow last month	201.7	

Salinity (EC) (microSiemens/cm at 25° C)

	Current	Average over the last week	Average since 1 August 2013
Swan Hill	80	110	90
Euston	110	110	100
Red Cliffs	130	120	110
Merbein	140	130	120
Burtundy (Darling)	530	490	510
Lock 9	170	180	180
Lake Victoria	220	230	250
Berri	390	370	270
Waikerie	350	400	310
Morgan	400	400	310
Mannum	340	340	330
Murray Bridge	380	370	350
Milang (Lake Alex.)	730	730	670
Poltalloch (Lake Alex.)	580	590	540
Meningie (Lake Alb.)	2 640	2 720	2 630
Goolwa Barrages	1 090	1 120	1 320



River Levels and Flows

Week ending Wednesday 05 Mar 2014

River Murray	Minor Flood Stage (m)	Gauge Height		Flow (ML/day)	Trend	Average Flow this Week (ML/day)	Average Flow last Week (ML/day)
		local (m)	(m AHD)				
Khancoban	-	-	-	530	F	450	440
Jingellic	4.0	1.12	207.64	580	F	590	540
Tallandoon (Mitta Mitta River)	4.2	1.86	218.75	1 700	F	2 100	2 120
Heywoods	5.5	3.22	156.85	14 700	R	14 780	12 720
Doctors Point	5.5	3.05	151.52	15 390	R	15 390	13 660
Albury	4.3	2.07	149.51	-	-	-	-
Corowa	3.8	3.05	129.07	14 400	F	14 960	13 560
Yarrowonga Weir (d/s)	6.4	1.55	116.59	9 270	S	9 330	9 690
Tocumwal	6.4	2.19	106.03	9 020	S	9 120	9 370
Torrumbarry Weir (d/s)	7.3	1.99	80.54	5 590	F	5 910	7 300
Swan Hill	4.5	1.26	64.18	5 960	R	6 060	7 350
Wakool Junction	8.8	3.14	52.26	8 150	R	8 360	8 950
Euston Weir (d/s)	8.8	1.89	43.73	9 540	R	8 960	8 420
Mildura Weir (d/s)	-	-	-	-	-	-	-
Wentworth Weir (d/s)	7.3	3.06	27.82	8 410	R	8 070	8 840
Rufus Junction	-	3.65	20.58	7 460	R	5 830	4 680
Blanchetown (Lock 1 d/s)	-	0.72	-	4 470	F	3 950	4 080
Tributaries							
Kiewa at Bandiana	2.7	0.69	153.92	180	R	210	240
Ovens at Wangaratta	11.9	7.82	145.50	260	S	250	290
Goulburn at McCoys Bridge	9.0	1.49	92.91	950	F	1 010	1 660
Edward at Stevens Weir (d/s)	-	1.58	81.35	1 420	F	1 210	1 700
Edward at Liewah	-	2.37	57.75	1 750	F	1 720	1 320
Wakool at Stoney Crossing	-	1.57	55.06	760	F	860	760
Murrumbidgee at Balranald	5.0	2.68	58.64	2 300	F	2 390	630
Barwon at Mungindi	-	3.12	-	0	F	60	150
Darling at Bourke	-	4.03	-	130	F	200	110
Darling at Burtundy Rocks	-	0.85	-	420	R	400	960

Natural Inflow to Hume	600	840
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(i.e. Pre Dartmouth & Snowy Mountains scheme)

Weirs and Locks Pool levels above or below Full Supply Level (FSL)

Murray	FSL (m AHD)	u/s	d/s		FSL (m AHD)	u/s	d/s
Yarrowonga	124.90	-0.13	-	No. 7 Rufus River	22.10	+0.10	+1.29
No. 26 Torrumbarry	86.05	+0.00	-	No. 6 Murtho	19.25	+0.10	+0.18
No. 15 Euston	47.60	+0.04	-	No. 5 Renmark	16.30	+0.09	+0.27
No. 11 Mildura	34.40	+0.09	+0.22	No. 4 Bookpurnong	13.20	+0.10	+0.78
No. 10 Wentworth	30.80	+0.04	+0.42	No. 3 Overland Corner	9.80	+0.15	+0.39
No. 9 Kulnine	27.40	+0.08	+0.01	No. 2 Waikerie	6.10	+0.17	+0.30
No. 8 Wangumma	24.60	+0.00	+0.31	No. 1 Blanchetown	3.20	+0.16	-0.03

Lower Lakes FSL = 0.75 m AHD

Lake Alexandrina average level for the past 5 days (m AHD)	0.61
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Barrages

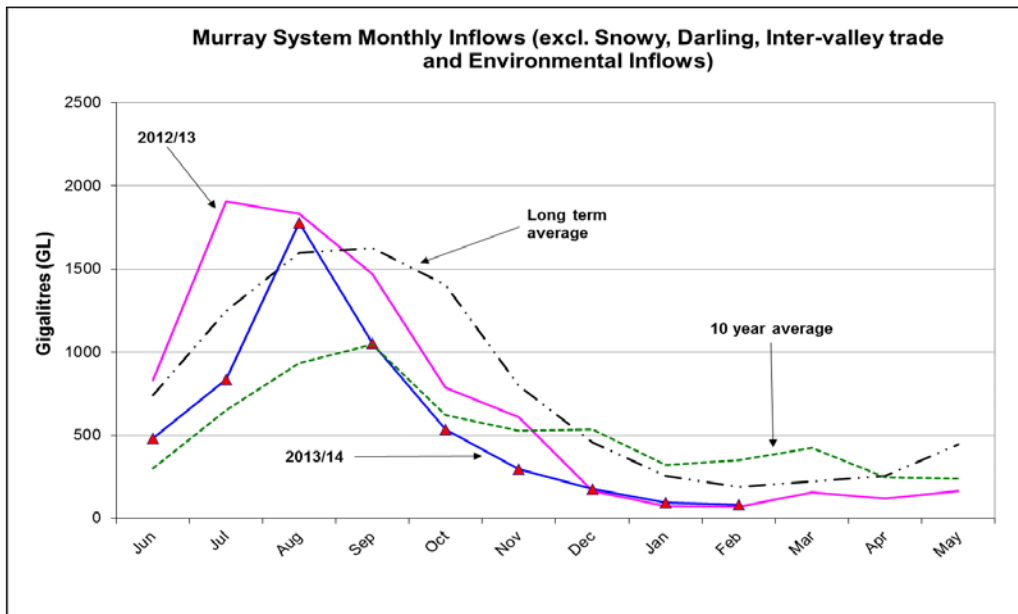
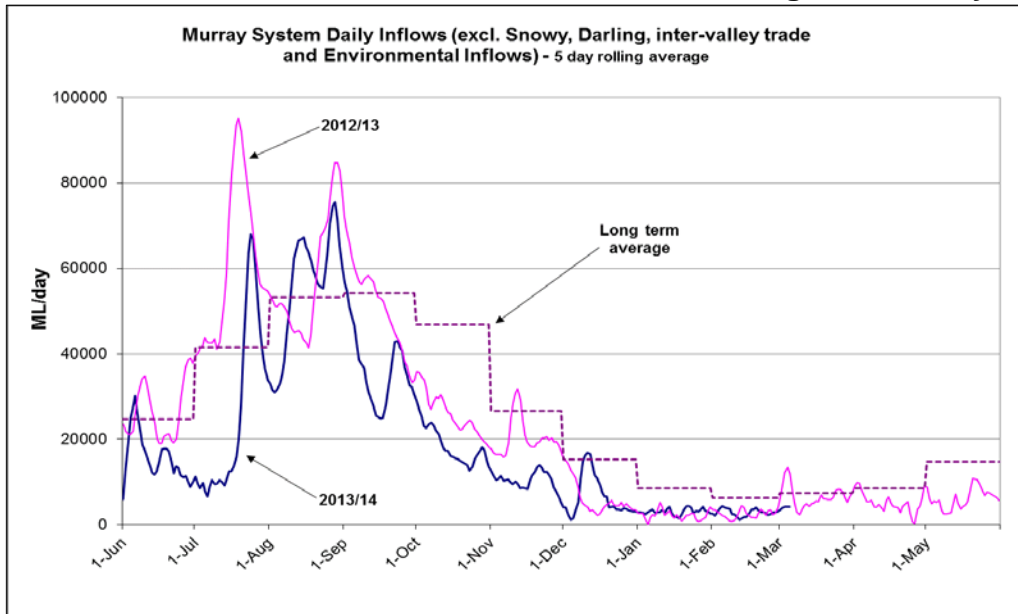
Fishways at Barrages

	Openings	Level (m AHD)	No. Open	Rock Ramp	Vertical Slot
Goolwa	128 openings	0.61	1	-	Open
Mundoo	26 openings	0.53	All closed	-	-
Boundary Creek	6 openings	-	0.1	-	-
Ewe Island	111 gates	-	All closed	-	-
Tauwichee	322 gates	0.52	1	Open	Open

AHD = Level relative to Australian Height Datum, i.e. height above sea level



Week ending Wednesday 05 Mar 2014



State Allocations (as at 05 Mar 2014)

NSW - Murray Valley

High security	100%
General security	100%

Victorian - Murray Valley

High reliability	100%
Low reliability	0%

NSW - Murrumbidgee Valley

High security	95%
General security	59%

Victorian - Goulburn Valley

High reliability	100%
Low reliability	0%

NSW - Lower Darling

High security	100%
General security	100%

South Australia - Murray Valley

High security	100%
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NSW : <http://www.water.nsw.gov.au/Water-management/Water-availability/Water-allocations/Water-allocations-summary/water-allocations-summary/default.aspx>

VIC : <http://www.g-mwater.com.au/water-resources/allocations/current.asp>

SA : <http://www.environment.sa.gov.au/managing-natural-resources/river-murray>