

REPORT FOR THE WEEK ENDING

Wednesday, 23 January 2008

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Rainfall and Inflows

During the past week, good falls of rain were recorded across most of the Murray-Darling Basin (see map). Very heavy rainfall in the north-west resulted in major flooding in both the Warrego and Paroo River catchments.

In the southern half of the Basin, the best falls of rain occurred in north-east Victoria, with up to 100 mm recorded in the catchments of the Goulburn and Ovens Rivers. The best response in streamflow was in the Goulburn River with a peak flow of 3 900 ML/day at Shepparton. However, the response in other streams was only small with total inflow to the River Murray System reaching a peak of 8 000 ML/day compared with a peak of 17 000 ML/day for the pre-Xmas rain event (see graph on last page). There was also very little effect on the storage levels of Dartmouth and Hume Reservoirs. However, it did cause a significant temporary reduction in evaporative losses and irrigation demand along the river.

The Victorian Alps and Snowy Mountains of New South Wales, which are the main water yielding areas for the River Murray, are still very dry after many years of below average rainfall. It will take sustained heavy rainfall to provide a significant increase in streamflows.

The effect of the recent rain in the north

Above average rainfall in the northern half of the Basin during December resulted in a peak flow of 20 000 ML/day moving past Wilcannia on the Darling River and downstream into Menindee Lakes. This was the highest flow at Wilcannia since March 2001. The storage of Menindee Lakes is currently 240 GL, and is expected to continue increasing to about 400 GL over the next few weeks. (This compares to a total storage capacity in Menindee Lakes of about 1 700 GL.) There is also additional water currently moving down the Warrego River, but only a small fraction of this is expected to make its way to the Darling River and then into Menindee Lakes. Most of the water will spread out over the floodplain, including spilling over to the lower reaches of the Paroo River, where it will be soaked up by parched soils or evaporate.

A significant benefit of the recent rain is that some of the wetlands in the northern half of the Basin – which have been dry for some years, are now getting a valuable watering.

River Operations

As a result of the recent rain and increased inflows from the Ovens and Kiewa Rivers, the release from Hume Reservoir was reduced from 8 500 ML/day to 4 500 ML/day. If there is no further rain, the release is expected to slowly increase during the coming week.

The rain also caused the level of Lake Mulwala to rise by 15 cm from 124.4 to 124.55 m AHD. The level should return back to the current target operating range of 124.2 to 124.5 m AHD (40 to 70 cm below Full Supply Level) in the next few days.

At Torrumbarry Weir, the flow increased from 6 000 to 7 200 ML/day as a result of local rainfall and reduced irrigation demand during the week. Over the next few days the flow is expected to increase to about 8 500 ML/day as a small peak originating from the Goulburn River passes through. The higher flows have allowed the weir pool to be raised to Full Supply Level. Further downstream, Euston Weir pool has also been raised, and should reach Full Supply Level in the next few days. However, the

additional water stored in these weir pool may only be temporary as it may need to be released over coming weeks to help meet demand for water in Sunraysia and South Australia, in preference to increasing the release from Hume Reservoir.

On the lower Darling River, releases from Menindee Lakes which commenced on the 7th January, have now arrived at Burtundy and are expected to reach Wentworth on the River Murray in the next few days. Water quality monitoring at Burtundy and Pooncarie on the lower Darling has indicated that the salinity of the initial flush of water is up to 1 700 EC before quickly reducing back to about 300 EC. Although the water from the lower Darling River will be diluted by the fresher water in the River Murray, it is still expected to cause a short term rise in salinity to about 500 EC for a couple of days, immediately downstream of Wentworth. The higher salinity water will be diverted into Lake Victoria for further dilution. As a result of this operation, the effect on river salinity downstream of Lake Victoria is expected to be small.

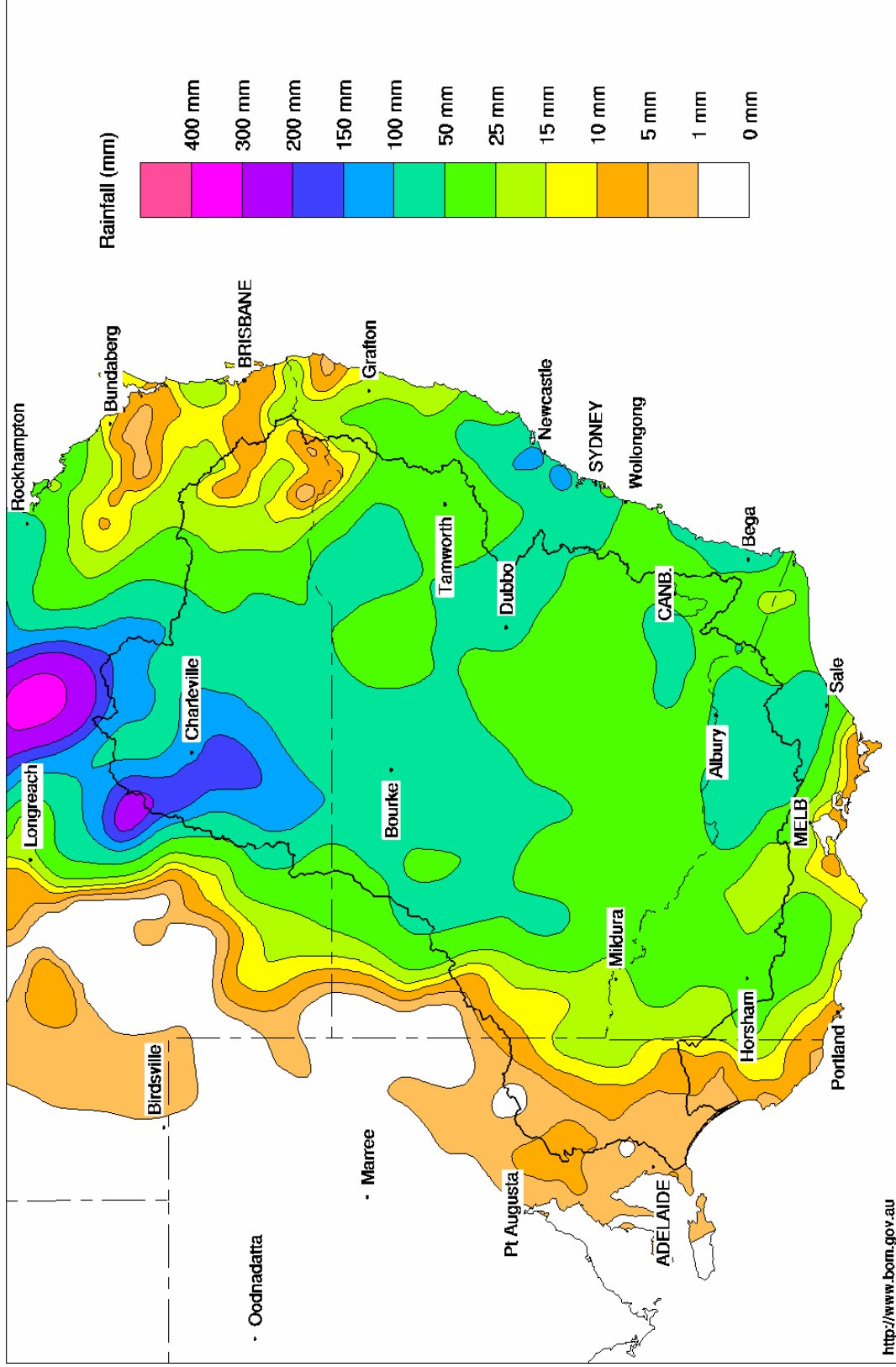
Along the lower Murray in South Australia, the recent rain and cooler weather has reduced irrigation demand and evaporative losses. This has allowed all weir pools to be raised to Full Supply level, or slightly higher. The Lower Lakes, however, received very little rain and the level (which is currently -0.16 m AHD or 16 cm below mean sea level) continues to gradually fall.

The Murray-Darling Basin Commission, in cooperation with the South Australian Government, has announced that it would start releasing up to 4.6 GL of environmental water to protect critical drought refuges on the Chowilla floodplain and to prevent irreversible damage to the environment downstream of Lock 1 (see attached media release). This is in addition to the previously announced 6 GL of environmental water provided to the Wakool River and Merran Creek in NSW, and 0.5 GL for the threatened population of Southern Pygmy Perch in Millewa State Forest.

DAVID DREVERMAN
General Manager

Murray Darling Rainfall Analysis (mm) Week Ending 23rd January 2008

Product of the National Climate Centre



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MEDIA RELEASE

Date: 21 January, 2008

MDBC releases environmental water for South Australia

The Murray-Darling Basin Commission (MDBC) today announced it would start releasing up to 4.6 GL of environmental water this month to protect critical drought refuges in South Australia and to prevent irreversible damage to the environment.

MDBC Chief Executive Dr Wendy Craik AM said critical refuge areas on the Chowilla Floodplain, one of the icon sites of The Living Murray, would receive up to 2.6 GL.

Another 2 GL would go to mitigating the risk of acidification at a number of environmentally significant wetlands below Lock 1 on the Murray River.

"The MDBC partner governments agree these are among the highest priority sites for use of the very small volume of environmental water available in the River Murray system this season," Dr Craik said.

"The water, available through the MDBC's Living Murray program, is part of 12.8 GL carried over from last water year for environmental use. This water is not available for irrigation use and will not impact on the availability of water for consumptive users."

Dr Craik said two of the areas in critical need of water, Werta Wert Wetland and Twin Creeks, would be watered immediately, while watering at another three areas would be deferred until early Autumn.

"The river red gums, black box, and many other species that occur in this system are threatened by these prolonged drought conditions and need some respite," Dr Craik said. The maintenance of these drought refuges is critical for the recovery of wildlife and vegetation at Chowilla, including nationally threatened species such as the Southern Bell Frog.

These species are particularly vulnerable because this drought has been preceded by many years of 'human induced' drought, which has significantly reduced flooding events in the lower Murray. This has reduced the ability of many floodplain species to withstand extended dry periods.

South Australia's Minister for Environment and Conservation Gail Gago says "I welcome the life supporting environmental flow of the Chowilla Floodplain - SA's largest area of River Red Gum woodland containing some trees up to 200 years old and part of the Riverland Ramsar site (Ramsar recognises internationally significant wetland sites)."

"Unfortunately there will still be large areas that will continue to decline through lack of water, but we hope the area to benefit will provide a vital life support for important species," said Minister Gago.

Dr Craik said that, in addition, downstream of Lock 1 there is the risk of acidification in some wetlands, caused by drying after long periods of being continuously wet.

“This could have catastrophic, long lasting impacts on the environment and on water quality. By providing this small but crucial amount of water now, we hope to avoid irreversible damage in the future.

This announcement brings the total environmental water provided by MDBC this season to 10.6 GL (this includes the recent announcement of 6 GL of water for the Wakool River and Merran Creek to protect critical fish habitat).

For media inquiries contact: Sam Leone, phone 0407 006 332

Trim ref: 08/1088

Water in Storage

MDBC Storages	Full Supply Level (m AHD)	Full Supply Volume (GL)	Current Storage Level (m AHD)	Current Storage		Dead Storage (GL)	MDBC Active Storage (GL)	Change in Storage for the week (GL)
				(GL)	%			
Dartmouth Reservoir	486.00	3 906	410.72	676	17%	80	596	+4
Hume Reservoir	192.00	3 038	174.05	563	19%	30	533	-32
Lake Victoria	27.00	677	23.68	312	46%	100	212	-2
Menindee Lakes		1 731 *		233	13%	(- -) #	0	+70
Total		9 352		1 783	19%	--	1 341	+39

* Menindee surcharge capacity 2050 GL

% of Total Active MDBC Storage = **16%**

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

Major State Storages

Burrinjuck Reservoir	1 026	424	41%	3	421	+0
Blowering Reservoir	1 631	435	27%	24	411	-14
Eildon Reservoir	3 390	757	22%	100	657	-12

Snowy Mountains Scheme

Snowy diversions for week ending 22-Jan-2008

Storage	Active storage (GL)	Weekly change (GL)	Diversion (GL)	This week	From 1 May 2007
Lake Eucumbene - Total	582	+9	Snowy-Murray	+3	289
Snowy-Murray Component	468	+6	Tooma-Tumut	+3	139
Target Storage	1 520		Nett Diversion	0.1	150
			Murray 1 Release	+4	490

Major Diversions from Murray and Lower Darling (GL)

New South Wales	This week	From 1 July 2007
Murray Irrig. Ltd (Net)	.0	46.3
Wakool System loss	0.0	5.4
Western Murray Irrig.	0.7	13.1
Licensed Pumps	3.3	50.8
Lower Darling	0.3	6.8
TOTAL	4.2	122.4

Victoria	This week	From 1 July 2007
Yarrawonga Main Channel (net)	1.1	49
Torrumbarry System + Nyah (net)	5.9	77
Sunraysia Pumped Districts	3.0	56 *
Licensed pumps - GMW (Nyah+u/s)	0.2	7
Licensed pumps - LMW	7.6	93
TOTAL	17.8	282 *

* please note that these values do not include Millewa pumping figures.

Flow to South Australia (GL)

Entitlement this month	217 *	(5 000 ML/day)
Flow this week	35.0	
Flow so far this month	106	
Flow last month	114	

* Reduced to approx. 109 GL during December drought contingency operations

Salinity (EC)

(microsiemens/cm @ 25° C)

	Current	Average over the last week	Average since 1 August 2007
Swan Hill	60	60	90
Euston	100	120	110
Red Cliffs	-	-	-
Merbein	130	110	140
Burtundy (Darling)	1 680	530	1 280
Lock 9	110	110	150
Lake Victoria	200	190	180
Berri	300	310	380
Waikerie	410	410	600
Morgan	470	480	660
Mannum	850	840	570
Murray Bridge	750	730	570
Milang (Lake Alex.)	3 650	3 410	2 580
Poltalloch (Lake Alex.)	2 920	2 910	2 180
Meningie (Lake Alb.)	4 010	3 830	2 840
Goolwa Barrages	25 880	22 810	16 220



River Levels and Flows

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	-	-	-	600	R	900	1 350
Jingellic	4.0	1.26	207.78	1 600	F	1 480	1 840
Tallandoon (Mitta Mitta River)	4.2	1.47	218.36	750	F	930	810
Heywoods	5.5	1.94	155.57	4 700	R	6 660	9 360
Doctors Point	5.5	2.15	150.62	5 360	S	7 150	9 910
Albury	4.3	1.19	148.63	-	-	-	-
Corowa	7.0	1.51	127.53	5 170	F	7 820	9 270
Yarrowonga Weir (d/s)	6.4	1.38	116.42	7 540	S	7 440	7 780
Tocumwal	6.4	1.87	105.71	7 620	R	7 690	7 770
Torrumbarry Weir (d/s)	7.3	2.41	80.96	7 250	F	6 780	5 960
Swan Hill	4.5	1.33	64.25	6 740	R	6 170	5 700
Wakool Junction	8.8	2.51	51.63	6 130	R	5 800	5 540
Euston Weir (d/s)	8.8	1.36	43.20	6 760	R	6 390	5 850
Mildura Weir (d/s)	-	-	-	6 320	F	5 720	5 260
Wentworth Weir (d/s)	7.3	2.94	27.70	5 430	F	4 340	3 860
Rufus Junction	-	3.06	19.99	4 130	R	4 250	4 100
Blanchetown (Lock 1 d/s)	-	0.05	-	1 560	R	1 460	1 140
Tributaries							
Kiewa at Bandiana	2.7	0.99	154.22	595	F	420	520
Ovens at Wangaratta	11.9	8.47	146.15	2 133	F	1 300	550
Goulburn at McCoys Bridge	9.0	2.90	94.32	3 592	R	1 730	770
Edward at Stevens Weir (d/s)	-	1.13	80.90	860	F	850	660
Edward at Liewah	-	1.09	56.47	542	R	390	380
Wakool at Stoney Crossing	-	0.94	55.43	1	S	0	0
Murrumbidgee at Balranald	5.0	1.88	57.84	1 398	F	1 370	1 320
Barwon at Mungindi	-	3.54	-	835	R	520	310
Darling at Bourke	-	4.91	-	7 117	F	8 590	24 820
Darling at Burtundy Rocks	-	1.22	-	2 000	R	290	0

Natural Inflow to Hume (ie pre Dartmouth & Snowy Mountains scheme)	2 160	1 730
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Weirs and Locks

Pool levels above or below design level

Murray	FSL (m AHD)	u/s	d/s		FSL (m AHD)	u/s	d/s
Yarrowonga	124.90	-0.35	-	No. 7 Rufus River	22.10	+0.01	+0.76
No 26 Torrumbarry	86.05	-0.02	-	No. 6 Murtho	19.25	-0.04	+0.03
No. 15 Euston	47.60	-0.03	-	No. 5 Renmark	16.30	+0.00	+0.13
No. 11 Mildura	34.40	+0.00	+0.12	No. 4 Bookpurnong	13.20	+0.02	+0.43
No. 10 Wentworth	30.80	+0.01	+0.30	No.3 Overland Corner	9.80	+0.09	+0.21
No. 9 Kulnine	27.40	-0.05	-0.31	No. 2 Waikerie	6.10	+0.10	+0.22
No. 8 Wangumma	24.60	-0.30	+0.15	No 1. Blanchetown	3.20	+0.16	-0.70

Murrumbidgee	FSL (m AHD)	relation to FSL	d/s gauge ht.		Flow (ML/day)
			local (m)	(m AHD)	
No. 7 Maude	75.40	-0.05	1.431	70.781	1516
No. 5 Redbank	66.90	+0.04	1.203	62.503	1490



Lower Lakes

FSL = 0.75 m AHD

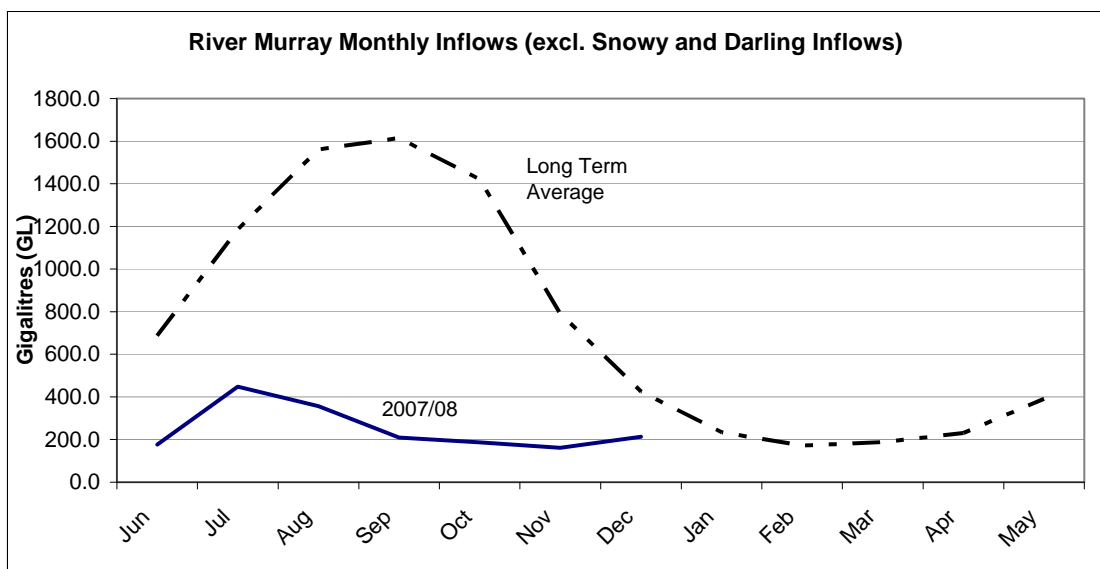
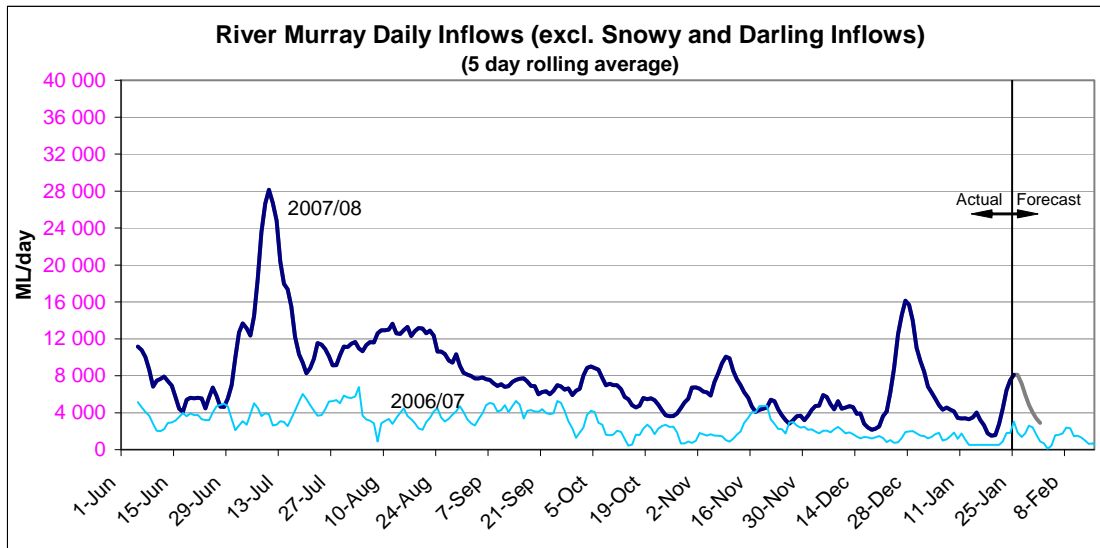
Lake Alexandrina average level for the past 5 days	(m AHD)
	-0.16

Barrages

Fishways @ Barrages

	Openings	Level (m AHD)	Status	Rock Ramp	Vertical Slot
Goolwa	128 openings	-0.17	All closed	-	Closed
Mundoo	26 openings	-0.28	All closed	-	-
Boundary Creek	6 openings	-	All closed	-	-
Ewe Island	111 gates	-	All closed	-	-
Tauwichee	322 gates	-0.13	All closed	Closed	Closed

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



State Allocations (as at 24 Jan 2008)

NSW - Murray Valley

Suspended water re-credit	65%
Critical water	end of March 2008
High security	0%
General security	0%

NSW - Murrumbidgee Valley

High security	90%
General security	9%

South Australia - Murray Valley

irrigation allocation	32%
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Victoria - Murray Valley

high reliability	34%
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Victoria - Goulburn Valley

high reliability	47%
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NSW : http://www.naturalresources.nsw.gov.au/water/state_mm_murr_water_quality.shtml#alloc

VIC : <http://q-mwater.dds.com/news.asp>

SA : <http://www.dwbc.sa.gov.au/media.html>