



Australia's Water Storage Information

Australia has around 500 publicly-owned water storages. The Bureau of Meteorology's Water Storage website contains information about more than 250 major storages with capacity greater than one gigalitre (1,000,000,000 litres – see next page).

Reporting water storage information

We currently report daily on just over half of Australia's 500 public water storages with a capacity of 1 GL or greater. Collectively, the storages we are reporting on hold over 90% of the water held in public storage. Over the coming year, a further 200 or so water storages will be added, though the aggregate volume of water reported on will increase only slightly. Data is supplied to the Bureau by 16 different operating agencies, and this will increase to over 40 when the remaining water storages are added.

Why is the Bureau collecting Water Storage Information?

The Bureau is working closely with water managers to improve the accuracy and currency of water information, which will be made freely available to all Australians.

Water managers in Australia work to ensure available water resources meet the needs of communities, industry and the environment. The information made available on the Water Storage website will deliver:

- improved resource use planning; regularly updated and accessible information helps to inform the process of forecasting and decision making on how water resources are used
- increased public awareness; this information is freely available to all Australians
- standardised information available from the one source; this is the first time that national water storage information has been available at a single website.

Why are some numbers different?

Some numbers reported on the Water Storage website differ from those reported by water agencies supplying data to the Bureau. This is due to:

- **standardisation:** we standardise all information received from many data suppliers across Australia. For instance, some suppliers report against total capacity including the 'dead storage', which is the water at the bottom of a dam, below the off-take pipe, that can't be accessed. We consistently report against the accessible capacity for each water storage.
- **smoothing:** some organisations smooth or round the data they publish. For example we might say the accessible capacity on a particular day is 3125 ML rather than 3100 ML, and this will affect the 'percentage full' value for the water storage.
- **data currency:** we sometimes update our daily values at different times to the data-supplying organisation, sometimes later, sometimes earlier. The methods we apply to aggregate data at various scales (eg. city, basin, supply system, state and national) include business rules that affect when we can publish a valid aggregate water storage value.

Whose numbers are correct?

Both sets of numbers are correct. The Bureau's Water Storage website allows everyone to compare standardised water information across Australia. In standardising this information, the Bureau reports on the volume of water accessible for use.

Why do some water storages have information that is older than others?

The Bureau receives data in many frequencies (by the minute, hour, day, week), and places are updated when valid data has been processed. Most recent data shown on Water Storage will be two days old due to its supply and processing.



Sense of scale: the Sydney Olympic Park Aquatic Centre pictured left holds about 2.5ML of water while Lake Gordon, Tasmania, has a capacity of 11,146 GL

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In other cases the data is commercially sensitive, particularly where dams are used for hydroelectric power generation in Tasmania or the Snowy Hydro Scheme. In these cases data on individual water storages will be delayed by two months.

Five largest water storages:

1. Lake Gordon in Tasmania with a capacity of 11,146 GL
2. Western Australia's Lake Argyle on the Ord River at 10,431 GL
3. Lake Eucumbene in New South Wales – part of the Snowy Mountains Scheme – at 4,366 GL
4. Lake Dartmouth in Victoria at 3,827 GL
5. Lake Eildon also in Victoria at 3,250 GL.

How much water do we use?

Australia's average water consumption is 432 litres per capita per day (Australia State of the Environment report, 2006). According

to the UN Human Development Report 2006, these figures make Australia the second highest per capita user of water in the world.

Litres, megalitres and gigalitres?

Water storage capacity is usually measured in megalitres (ML) or gigalitres (GL).

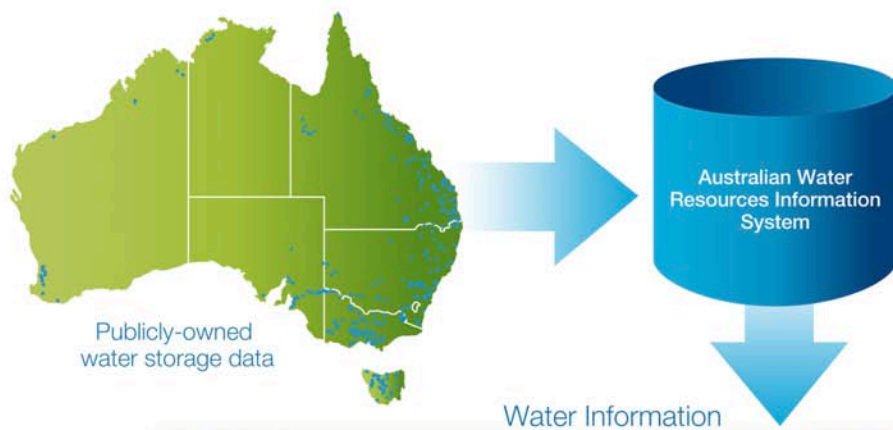
One megalitre (ML) is equivalent to 1,000,000 litres. It would fit in a container 10m high, 10m long and 10m wide and it weighs 1000 metric tonnes.

A standard Olympic-sized swimming pool measuring 50m long and 25m wide, contains 2.5 ML or 2.5 million litres of water.

One gigalitre (GL) equals 1,000,000,000 litres or 1,000 ML.

Lake Gordon's capacity is approximately equal to 4,459,000 Olympic swimming pools or 22 Sydney Harbours.

For more information: www.bom.gov.au/water



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Place: Australia
Date: 19 October 2010

Water Storage

Map

Snapshot Summary Changes

Australia

Latest Volume: 54,248,962ML
Accessible Capacity: 78,398,745ML

Graph Details

Australia by Cities and Systems

change for same time: Previous Year Previous Month Previous Week

Cities and Systems (8 available)	Latest Observation				Previous Year		
	Capacity (ML)	Volume (ML)	% Full	Date Reported	Capacity (ML)	Volume (ML)	% Full
Adelaide	197,405	179,051	90.7	17 Oct 2010	197,405	184,534	93.5
Brisbane	2,070,493	2,067,837	99.9	18 Oct 2010	1,759,389	1,298,425	73.8
Canberra	205,490	174,911	85.1	16 Oct 2010	205,490	105,540	51.4
Darwin	235,000	187,320	79.7	14 Oct 2010	235,000	168,800	71.8
Hobart	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Melbourne	1,812,175	868,470	47.9	16 Oct 2010	1,812,175	649,242	35.8
Perth	580,795	166,996	28.8	16 Oct 2010	580,795	285,751	49.2
Sydney	2,581,850	1,503,846	58.2	15 Oct 2010	2,608,840	1,494,415	57.3

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