Menindee Lakes Community Update

Menindee and surrounding communities

Like many areas of NSW bearing the brunt of wet La Nina conditions, the Menindee Lakes system has received an unprecedented amount of floodwater in the past 12 months.

For the past year WaterNSW has been working hard to protect the community from flooding as much as possible, and we feel for the local people whose lives have been affected.

Over that period the Lakes have received around 10,000 gigalitres of water – six times their capacity and more than five times what they would normally receive in a year.

What also makes the current flood unique is that it is the third successive major flood surge in the past year.



Image: Menindee main weir and surrounding water 14.01.23

Consecutive flooding events like these produce significant and compounding impacts, bringing new challenges to the river system, community and dam operators.

Throughout these flooding events WaterNSW has been releasing large quantities of water from the Lakes to manage storage levels and create space to capture future floods (otherwise known as airspace) to accommodate incoming flows.

This careful management helped avoid adding to flooding downstream of the lakes throughout 2022.



- Key Stats -

10,000+ GL

Inflows received over the past 12 months

2,000 GL

Average annual inflow to the lakes

1,731 GL Menindee Lakes capacity

319 GL Menindee Lakes additional temporary storage capacity during flood

8,000 GL

Approx. amount of water released over the past 12 months

114.5%

Menindee Lakes current storage level

25 January 2023

However, even with these constant water releases over the past 12 months, the Menindee Lakes have remained full since February last year.

With such little time between flooding events, by December there simply wasn't enough airspace for excess water to be captured or time for the water already in the lakes to be released safely.

With the huge amounts of flood waters arriving in December, well in excess of forecasts, some of the impacts we are seeing were unavoidable.

Fast forward to January, and WaterNSW is still continuing flood operations as huge volumes of water continue to enter the Lakes.

Throughout this event, WaterNSW has been working with the community via airspace reference panels and regular operational updates, and will continue to do so.



Menindee Lakes storage scheme

Timeline of the December/January flood event

February 2022

Floodwaters enter Menindee and are captured in airspace created in the Lakes prior to their arrival. This helps prevent flooding impacts in Menindee.

June 2022

Another flooding event produces major inflows into Menindee. Minor flooding in town with most flows captured in airspace created in the Lakes prior to their arrival. This minor flood level will remain for the coming months.

October / November 2022

While floodwaters had been entering the Menindee Lakes for months, larger flows – originating from rainfall events in the northern Murray-Darling basin, as far away as Queensland in the months prior – start to enter Menindee Lakes system.

WaterNSW – in consultation with SES, the State's flood combat agency – started increasing releases from the Menindee main weir to pass these flows and support generation of additional airspace in the Lakes. WaterNSW held airspace reference panels to consult with the community throughout this process to ensure there was no impact to homes or properties.

Operations update and warning issued to residents to prepare for flooding to rise above the moderate flood level.

Late November - mid December 2022

With larger volumes forecast to enter the Lakes, the main weir gates were fully raised in the last week of November.

This allowed upstream inflows to safely pass through, enabling WaterNSW to release the maximum amount of water possible. This created over 300 gigalitres of airspace, while also providing the added benefit of enabling fish migration upstream.

The main gates were then reinstated in mid-December as flood water started to arrive from upstream and releases had to be scaled back to help minimise flooding impacts.

These measures aimed to restrict those larger inflows from passing directly through the Menindee Lakes and causing larger and earlier flooding in the town.

Mid to late December 2022

Flows greater than forecast started entering the Lakes system on the back of higher-thanexpected flows returning from the floodplain via the Talyawalka Creek, which had branched out across the floodplain and re-joined the main channel of the Darling River upstream of the lakes.

The sheer volume of water entering the system reduced all the available airspace within the Lakes, however, WaterNSW was able to surcharge Lake Wetherell and make releases through the main gates to temporarily hold back some of the flood.

While these actions effectively reduced the height of the flood at the Menindee town gauge (from an estimated 10.7m down to 10.2m), excess water flooded some parts of the Menindee township.

On 31 December, the combined volumes of the Menindee Lakes almost reached their maximum surcharge level (2,049 GL).

Early January 2023

Flooding at Menindee town reached a peak of 10.26m on 6 January.

At its peak WaterNSW were releasing approx 75 gigalitres per day, and maintained this rate for a week – to ensure the safety of the dam structures and alleviate some of the flooding impacts.

Mid January 2023

WaterNSW started to decrease water releases, as the inflows started to recede. These actions created 56 gigalitres of airspace while continuing to hold back as much water as possible, as significant amounts of water still entered the system.



Water fowing through Menindee Lakes main weir 20.01.23

Historical storage volume, inflow and releases

In this graph you can see how total storage volume and monthly inflow and releases changed over the last 12 months.



Graph source: Water Insights

What's likely to happen next?

The BoM has declared that the flood in Wilcannia and Menindee has peaked. Depending on the rate of inflows, it looks like floodwaters could be in recession.

However, large volume inflows are likely to persist for several weeks. WaterNSW is planning to reduce the lakes' volume to close to their full, stable level, in order to maximise the amount of water resources left in the Lakes by the end of the event.

Once the incident is over, WaterNSW will conduct a post-event report. This report will identify learnings and recommend areas for improvement to future flood management in the area. The findings will be made publicly available.

More questions?

Visit the WaterNSW website for more **information including Q&As** to support this community bulletin: waternsw.com.au/community-news. You can also contact the customer helpdesk on 1300 662 077 or via customer.heldesk@waternsw.com.au

For questions on **flood warnings**, call a BoM Weather Connect Customer Service Officer by contacting the central phone number 1300 754 389 and selecting option 2, or by emailing weatherquestions@bom.gov.au.

For emergency help in floods and storms, call the NSW SES on 132 500. In life threatening situations, call Triple Zero (000) immediately.

