



Securing an emergency town water supply for Broken Hill

14 November 2014

Why are the Broken Hill-Menindee water security measures occurring?

Drought has reduced inflows into Menindee Lakes to almost zero for some months. The dwindling storage poses a risk to the security of the water supply to Menindee and Broken Hill.

Weather forecasts indicate that the drought conditions enveloping central Queensland, north-west and northern NSW are likely to intensify over the summer.

What is being done to secure town water supply?

Short to medium term measures include suitable water being transferred from Lake Pamamaroo into Copi Hollow to minimise evaporation, while earthen banks will be built to pool water in the Lower Darling to sustain plantings such as vineyards and orchards, as well as supply landholders with essential water for stock and domestic use. **These types of measures have been implemented during previous drought situations.**

The Copi Hollow work will ensure water to Broken Hill and Menindee for at least 12 months to the end of 2015.

In the medium-term, a borefield will be sunk to access groundwater to serve as an emergency reserve water supply, as is the case in many communities in regional NSW.

Why isn't all the water in the lakes system being utilised for community use?

Much of the water in the system is too saline to be used for urban water supply without extensive water treatment, a situation which will be aggravated as evaporation increases salinity levels.

How much water is being consumed by northern irrigators?

Almost none – other than primarily high security. Northern NSW dams filled during the same prevailing rains that caused Menindee Lakes to fill in 2012. Since that time the situation in the north has been one of almost zero allocations to irrigators, and dwindling dam storages.

Pindari, Keepit, Copeton and Split Rock dams are now at or around 10 percent of capacity and are expected to be into dead storage space by February 2105, if there is no significant rainfall before then. This has in turn greatly reduced inflows into the Darling River system, which feeds into Menindee Lakes.

How much water is being released downstream from the lakes?

At present, approximately 1500 megalitres per week is being released to sustain the river and service water users with essential supplies. This is 1000 megalitres less per week that what would under normal circumstances be considered adequate to keep the river running.

Is evaporation a significant factor in water losses?

Evaporation at the shallow Menindee Lakes is a huge factor influencing the falling storage levels. For example, at Lakes Wetherell and Pamamaroo for the week 5-12 November, 6100 megalitres evaporated compared to releases totalling just 1790 megalitres.

Evaporation dramatically reduces both the quality and quantity of water in the lakes, a process which intensifies as water stocks diminish.

Is the population of Broken Hill being serviced differently to other regional communities in regards to urban water supply?

Forty-five out of 105 local water utilities in 2012-13 used groundwater as part of their urban water supply.

Approximately 20 percent of water supplied to towns in regional NSW was groundwater.

What happens now?

The NSW Government is making provisions for further water supply by establishing a groundwater program to be used only when there is insufficient surface water.

The NSW Office of Water will continue undertaking a groundwater investigation to find water to secure an 'emergency town water supply' for Broken Hill to be used during times when there is insufficient surface water to meet that need.

When a suitable supply is sourced, production bores will then be constructed to meet Broken Hill's emergency water supply requirements. This water will be treated by a desalination plant and/or other treatment methods as required to ensure the water meets NSW Health drinking water quality standards.

Once the Menindee Lakes system receives sufficient inflows to increase storage levels, Broken Hill's town water supply needs would be switched back to surface water supplied from the lakes.

The initial investigation commenced in early November 2014 and will continue into 2015.

Who can I contact for more information?

information@water.nsw.gov.au

www.water.nsw.gov.au

© State of New South Wales through the Department of Trade and Investment, Regional Infrastructure and Services 2014. You may copy, distribute and otherwise freely deal with this publication for any purpose, provided that you attribute the NSW Department of Primary Industries as the owner.

Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (November 2014). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of the Department of Primary Industries or the user's independent adviser.

Published by the Department of Primary Industries, a division of NSW Department of Trade and Investment, Regional Infrastructure and Services.