Fish deaths in Menindee

Menindee

After successive years of high flows and successful fish breeding events, extremely large numbers of fish are now congregating in the reach of the Darling River between Lake Wetherell main weir and Menindee town.

There have been mass fish deaths between Lake Wetherell main weir and weir 32 this week. The dead species are predominantly Bony herring, with very few large-bodied natives being observed in this event. This mass fish death event is due to extremely low dissolved oxygen levels being recorded in this river reach earlier in the week.

The Bureau of Meteorology has forecast maximum air temperatures at Menindee will increase to 40°C this weekend, before returning to cooler temperatures again next week. Low intensity heatwave conditions have been forecast from Friday 17 March through to Sunday 19 March.

As air temperature increases, so does the water temperature. The amount of dissolved oxygen water can hold decreases with increasing water temperature, which can add additional stress to fish that may already be struggling.

To maintain an oxygenated flow in the Darling River through Menindee township and reduce the risk of further significant fish deaths, releases from the Lake Pamamaroo outlet are being maintained. It is anticipated these targeted releases will be until early next week until the forecast temperatures have passed.

NSW and Commonwealth agencies will continue to assess the risks to fish health in this area through on-going monitoring. This can involve adjusting the timing, size and location of releases from the Lakes into the lower Darling River to maintain the quality of the water in the river.

Lower dissolved oxygen results are also being recorded overnight and early in the morning in the upper reaches of Lake Wetherell.

Releases from Lake Menindee have been reduced to assist in the flow of water from Lake Pamamaroo, past Menindee town and through to the lower Darling River. The majority of water being released to meet flow targets at Weir 32, downstream of Menindee town, is being drawn from Lake Menindee.

Lower Darling

In the lower Darling River, the majority of the floodwater has returned to the channel with some water remaining in larger billabongs and depressions, with the receding flows travelling down the Darling River arm of the Wentworth weir pool and merging into the Murray River.

The last of the floodwaters around Burtundy are now draining off the floodplain and back into the main river channel. As flows recede, fish can become stranded in disconnected waterbodies and billabongs on the floodplain where they may suffer from declining water depth, low dissolved oxygen levels due to higher air and water temperatures and exposure to predators as these waterbodies dry out.

We will continue to monitor the situation closely and keep the community informed. You can read our most recent factsheet update here.

Hypoxic blackwater is a naturally occurring phenomenon when large quantities of fish, bacteria, algae and other organic matter deplete the oxygen levels, especially throughout the night when photosynthetic generation of dissolved oxygen by water plants and algae ceases.

With the forecast of low intensity heatwave conditions over the weekend, the risk of hypoxia is high, as warmer water holds less oxygen than cold water, and fish have higher oxygen needs at warmer temperatures.

DPI will undertake sampling of the fish population between Weir 32 and Menindee Main Weir once flooding recedes.

To report areas in NSW where fish may be struggling or a fish death event has occurred, call the NSW Fisheries Hotline on 1800 043 536.

More information can be found here:

- https://www.industry.nsw.gov.au/water/allocations-availability/droughts-floods/drought-update/managing-drought-recovery/blackwater
- https://www.dpi.nsw.gov.au/fishing/habitat/threats/fish-kills/_nocache