



Australian Government

Commonwealth Environmental Water Office

# Lower Darling/Baaka Spring Flow 2020-21 Update #2

November 2020

## Murray cod are breeding in the Baaka!

**Objectives** Support Murray cod breeding, recruitment and health along the lower Darling/Baaka, from Menindee Lakes to Wentworth.

Support the spawning of golden perch and their movement from Menindee Lakes into the lower Darling/Baaka

**Start date** 15 September 2020

**Duration** To mid-January 2021

**Target areas** Murray cod breeding habitat in the lower Darling/Baaka channel



Photo: Jason Thiem, DPI Fisheries looking for Murray cod larvae in the lower Darling/Baaka River. (Photo: DPI Fisheries)

### What's happened so far....

Around nine gigalitres of water for the environment has been released into the lower Darling/Baaka River since mid-September 2020. River flows were raised to 400 megalitres a day (roughly double the flow that would otherwise have been in the river, but a small volume compared to the size of the lower Darling/Baaka river channel). This was to help boost the river health and support recovery of native fish after years of very dry conditions, which included the devastating fish deaths in 2018–19.

### How are the fish faring?

Fish surveys carried out by NSW DPI Fisheries have found:

- Murray cod have spawned, with larvae present throughout the lower Darling/Baaka
- adult golden perch throughout the lower Darling/Baaka, which scientists have reported are 'ripe' and ready to spawn
- juvenile golden perch in the Menindee Lakes, which have moved into the lakes following breeding upstream triggered by the February/March flow events in the Northern Basin.

## What are we doing next?

Based on these results, the advice of local fisheries experts is that a small increase in flows down the lower Darling/Baaka now, can be expected to:

- inundate more of the river channel, providing increased food and habitat for the Murray cod larvae thereby improving their chances of survival;
- trigger a golden perch spawning event throughout the length of the lower Darling; and
- support dispersal of juvenile fish from the lakes into the main river channel.

A flow pulse in late November 2020 will increase baseflows from 400 megalitres a day to approximately 1,500 megalitres for a few days and recede to 700 megalitres a day for about two weeks. Flows will slowly return to 400 megalitres a day by late December. The timing of this increased flow is important to continue supporting Murray cod larvae and to maintain the positive outcomes to date.

The entire flow is expected to use up to ~26 gigalitres of water for the environment (including the water delivered to date). This planned volume was agreed following extensive discussions with the community and balances flows for fish, habitat in Menindee Lakes and long-term water security for all water users.

## Not all smooth sailing

Unauthorised modifications to the Pooncarie Weir during the drought are likely to have some impact on the ability of fish to move up and down the lower Darling/Baaka. However, monitoring results show a modest increase in flows to improve the health of the fish population is an opportunity we cannot afford to miss. The outcomes described above are

achievable despite the weir modifications. Relevant agencies are working with the local shire council to explore options to remove the unauthorised works and restore fish passage.



Photo: Fish surveys found young golden perch have travelled from the northern tributaries and are using the Menindee Lakes as nursery habitat. (Photo: DPI Fisheries)

## Working together

This work would not be possible without the support of our water delivery partners—NSW DPIE EES, NSW DPI Fisheries, NSW National Parks and Wildlife Service, the Arthur Rylah Institute, WaterNSW and the Murray-Darling Basin Authority.

More information:

<https://www.environment.gov.au/water/cewo/catchment/baaka-spring-flow-2020>

## Local Engagement Officer

Contact the Commonwealth Environmental Water Office Local Engagement Officer for further information:

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