

Environmental releases to the Severn River

October 2015

During October, DPI Water and partner organisations, Office of Environment and Heritage, DPI Fisheries and the Ashford Local Aboriginal Land Council, are releasing of 6,000 megalitres (ML) of environmental water from Pindari Dam to the Severn River.

The release will provide for the maintenance or 'stimulus' of instream and riparian ecological processes within the Severn River and has been designed to support Murray Cod breeding, hatching and growth of their larvae and improve habitat.

The *Water Sharing Plan for the NSW Border Rivers Regulated River Water Source 2009* allows for an environmental flow to be released from Pindari Dam for this purpose.

In recognition of the Aboriginal cultural values that this flow release may provide, DPI Water is currently consulting with members of the Ashford Local Aboriginal Land Council and Traditional Owners of the Ashford area in the establishment of a Gamilaraay name for the flows.

The releases

The planned total release of 6,000 megalitres **will commence 1 October for a period of approximately 40 days.**

Flows from Pindari Dam into the Severn River will increase from the current 50 megalitres per day to 80 megalitres per day on Thursday 1 October and will peak up to 210 megalitres per day on 13 October. It is expected that the Severn River downstream of Pindari Dam will rise by 0.3 metres during the peak flow of 210 megalitres per day; however, this may vary depending on local conditions.

These flows will be gradually reduced returning to 'normal' low flow conditions by 7 November.

Monitoring

Monitoring and evaluation of the physical and ecological response will be undertaken by officers from DPI Water and NSW DPI Fisheries.

Participants in the *Save the Severn Program*, an on-ground River Restoration and Rehabilitation project based on the Severn River between Pindari Dam and Kwiambal National Park, will also be on the ground recording observations of platypus activity.

Benefits

Murray Cod have a relatively strong population in the Severn River.

The release will commence in line with the Murray Cod spawning season and timed to avoid any potential impacts from a flow peak and to minimise potential Cold Water Pollution impacts. The following understanding of local Murray Cod populations has been factored into the release pattern:

- The pre-spawning condition of fish is enhanced by late-winter flows that prime the system with productivity and access to suitable spawning habitat. This is expected to have been met by the recent late-July natural event.
- Murray Cod have an earlier spawning season in this region than southern populations, undertaking spawning activities in late August/early September, with possible secondary spawning events in late September from those that missed the first run.
- Research from across the Basin indicates that Murray Cod, a nesting species, require stable flows during the spawning time frame to avoid nest abandonment and maintain eggs, which can take up to 14 days to hatch.
- The recruitment of Murray Cod larvae benefits from a secondary, gradual and stable peak after the spawning season to allow for dispersal of drifting larvae and their access to suitable prey and habitat.

For more information

1. Save the Severn Program

Ashford Local Aboriginal Land Council; email: landcouncil@ashfordlalc.com

2. NSW Border Rivers Regulated Rivers Water Sharing Plan Stimulus Flow release; email: water.enquiries@dpi.nsw.gov.au

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