

Australian Government
Commonwealth Environmental Water Office



# Peel flow targets water quality and river health

#### Event Update #1: 21 May 2021

Purpose:	Connect river pools, improve water quality, support recovery of native fish & other aquatic animals
Timing:	Late May – early June 2021
Target areas:	Peel River between Chaffey Dam and Woolomin

#### Supporting drought recovery

Following extreme drought conditions between 2017 and 2020, summer and autumn rainfall has provided good flows to much of the Peel River system. However, the section of river downstream of Chaffey Dam to the first tributary at Woolomin has missed out. Persistent low flows over the last two years means that refuge pools are in poor condition, with less food and habitat available.



Peel River 550 m downstream of Chaffey Dam on 3 May 2021 showing algal scum on the surface (NSW DPI Fisheries)

This river section supports threatened native fish species, platypus, rakali (native water rat), and turtles. Low flows mean that the river is not deep enough in places to allow native fish, such as silver perch and Murray cod, to move between refuge pools.

#### Water for the environment

Commonwealth and NSW water for the environment will be delivered now, before it gets too cold. Otherwise this stretch of river is unlikely to receive much flow until spring, when releases for downstream use are likely to resume.



Peel River upstream of Woolomin (NSW DPI – Fisheries)

#### Impact on future water availability

Town water security comes first and is provided before any other allocations are made. This release will not affect Tamworth's water security and will have a minimal impact on future allocations, with a ~1.5% reduction in current dam levels.

It represents less than one-third of available allocations to environmental water holders in the Peel.

The NSW Department of Planning, Industry and Environment (DPIE) provides a forecast of future water availability in their allocation statements.

These are available online at:

https://www.industry.nsw.gov.au/water/allocationsavailability/allocations/statements.

## Purpose of the Peel Flow

The autumn 2021 release of water for the environment will:



Support the recovery and condition of native fish and platypus

Increase the quality and quantity of available food and habitat

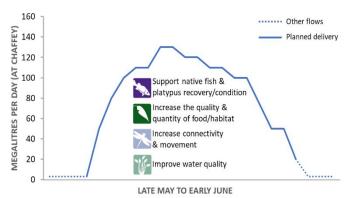
Increase connectivity and movement opportunities for native fish

Improve water quality and remove algal build-up

The flow will also benefit native fish in downstream reaches of the Peel River including Murray cod that were rescued during the drought and recently returned to the river near Tamworth as part of the NSW Native Fish Drought Response effort.

### **Delivery Plan**

Releases from Chaffey Dam will start on 24 May 2021, continuing for 17 days. This will provide a small baseflow in the river down to Woolomin, targeting flows up to 130 ML/day.



Baseflows provide water in the river at depths of 30cm to 50cm and allow aquatic animals to move around and find food. This section of river hasn't received baseflows since autumn 2019.

The total volume of Commonwealth and NSW water for the environment to be delivered in this flow is 1,565 ML. This will be made up of 395 ML of Commonwealth water, and 1,170 ML of the NSW Environmental Contingency Allowance.



Murray Cod (Gunther Schmida)

#### Partnerships and monitoring

Planning for the delivery of water for the environment has been undertaken by the Commonwealth Environmental Water Office, NSW Department of Planning, Industry and Environment – Environment, Energy and Science and NSW Department of Primary Industries – Fisheries.

Monitoring activities by NSW agencies will help to assess the environmental response to the flows.

#### Contacts

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We acknowledge the Traditional Owners of the Peel catchment and their continuing connection to land, waters and community. We pay our respects to them, their culture, and elders both past and present.