

Australian Government

Commonwealth Environmental Water Office

Southern Spring Flow 2020 - Update #2

23 October 2020

Flows are increasing

Good rainfall in early October provided a natural boost to river flows in the Murray.

In response, releases of water for the environment were increased to provide higher flows into the Barmah-Millewa Forest. This water will give low-lying areas of the floodplain a drink and provide extra habitat and food during the important Murray cod breeding period.

The target flow rate downstream of Yarrawonga is 15,000 ML/d (megalitres/day). This is the same amount as delivered last year, which provides water to only about 25% of Barmah-Millewa Forest.

Unlike in large natural floods these smaller flows will deliver only a small amount of organic matter (e.g., leaf litter, grass or bark) into the river and are unlikely to lead to hypoxic blackwater events.

River users will notice river levels increasing as the water makes its way downstream. Just like any other year, river operators actively monitor rainfall forecasts and will reduce or stop environmental flows if larger natural inflows occur.



Creek in Barmah Forest, Sep 2020. Keith Ward, GBCMA.

| Objectives | Provide food and shelter for native fish and other aquatic animals along the River Murray, from Hume Dam to the Coorong. |
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| Start date | September 2020 (Hume Dam release) |
| Total duration September – December 2020 | |
| Flow rate | Combined with other flows to target up to 2.2m (15,000 megalitres/day) downstream of Yarrawonga Weir. |
| Target areas | River Murray channel and key wetlands and creeks in Barmah-Millewa forest, Edward-Wakool system, Chowilla, Pike and Katarapko, Coorong, Lower Lakes and Murray Mouth. |

Results so far...

This release of water for the environment began in early September with a target flow rate of 7,000 ML/d and was increased to 8,500 ML/d in early October. At these flow rates, creeks in Barmah-Millewa forest received water to support habitat for Murray Cod and waterbird breeding.



Spotted marsh frog eggs, Barmah Forest. Keith Ward, GBCMA.



Australasian Bittern. Courtesy Keith Ward, GBCMA.

Early reports from field staff show animals and plants along creeks in the Barmah-Millewa Forest are starting to respond, with evidence of frog breeding.

Flows have also reached the Pike and Katarapko floodplains in South Australia. A portion of this flow is being delivered to support improved conditions for native vegetation, frogs, fish and waterbirds.

More results to come!

River scientists will be studying how well this flow is supporting the river food web (or food chain).

Food and nutrients are transported as flows move across floodplains and back into the river. Flows collect and dissolve carbon and other nutrients which are the building blocks of the food web.

Increasing the amount of this food is one of the key objectives of the flow.

Scientists will be measuring important nutrients and carbon at points along the river. Results will be compared at different sites to get a better understanding of how flows can be designed to better support the food web.

Monitoring started in mid-October and will continue for three months at eight sites along the River Murray between Tocumwal (NSW) and Renmark (SA).

Additional monitoring of native fish and waterbirds is being planned for key sites along the river.

What water is being used?

Commonwealth water for the environment being used for the flow is made up of water carried over from last year (2019–20) and 2020-21 allocations.

Adding water to operational flows already in the river means we are using water for the environment as efficiently as possible.

How can I keep track of this flow?

Further updates on the flow will be provided over the coming months.

More information on what's going on in the river includes:

- Real-time information on total River Murray flows <u>MDBA's River Murray Data</u>.
- <u>River Murray Weekly Report</u> updates on river operations, storage inflows, river gauge heights, rainfall and salinity
- Whose water is in the river—monthly update on proportion of water for the environment compared to other water users.

For more information, visit our website:

https://www.environment.gov.au/water/cewo/catch ment/southern-spring-flow-2020

This flow is a collaborative effort between Commonwealth and State government agencies, working together with river operators, scientists, First Nations representatives and community members.

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