
Department of Planning and Environment

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Snowy Montane Rivers Increased Flows: Operations Plan 2022-23

HIGH FLOW RELEASES INTO THE UPPER MURRUMBIDGEE RIVER BELOW TANTANGARA DAM

May 2022





Acknowledgement of Country

The Department of Planning and Environment acknowledges that it stands on Aboriginal land. We acknowledge the Traditional Custodians of the land and we show our respect for Elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

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1.SMRIF release strategy

The annual Snowy Montane Rivers Increased Flows (SMRIF) Release Strategy is available on the department’s website at:

www.industry.nsw.gov.au/water/basins-catchments/snowy-river/initiative/snowy-montane-rivers

For the 2022-23 water year, the New South Wales, Victorian and Australian governments have committed a volume of approximately 36,979 megalitres (ML) to be released as SMRIF from storage.

Release pattern

The 2022–23 release strategy uses the natural flow-scaling approach to deliver three flood pulse events with flow peaks greater than 1,000 megalitres per day (ML/d), but less than 2,000 ML/d from the Tantangara Dam (Figure 2-1), through a manually operated outlet valve.

The SMRIF release pattern has been designed to include three high-flow events from Tantangara Dam into the Upper Murrumbidgee River. These high-flow releases are designed to more closely mimic the natural characteristics of the Murrumbidgee River, including snowmelt and ‘freshes’ that occurred before the construction of the Snowy Mountains Scheme.



Figure 1-1 Tantangara Dam wall pictured from downstream. The outlet valve can be seen at the lower left of the wall (A).

2. Key components of the strategy

The 2022–23 daily flow release strategy is shown graphically in **Figure 3-1**. The planned Upper Murrumbidgee flow pattern set out in Figure 3-1 includes:

- Some daily flow variability to reflect a scaled natural flows pattern.
- Thirteen flows above 500 ML/day across seven peak events.
- Three daily high flow peaks above 1,000 ML to move fine sediment and inundate low lying benches. The highest of these is 1,500 ML/day.
- Although the peaks are accentuated, they are still smaller than the ‘pre-scaled’ size of the original Murrumbidgee above Tantangara flows (highest peak in 2016-17 reference year was 4,823 ML/day on 4 October).
- Twenty cease-to-flow periods ranging from 2-21 days, with the shorter cease to flow periods during the summer months.
- Continuous flows between 2 June and 15 November 2022.
- A series of small pulses provided from December 2022 to April 2023.

It is statistically likely that substantial natural tributary inflows will occur along the river that contribute substantially to the flow regime and ecosystem processes occurring in the lower reaches of the Upper Murrumbidgee River.

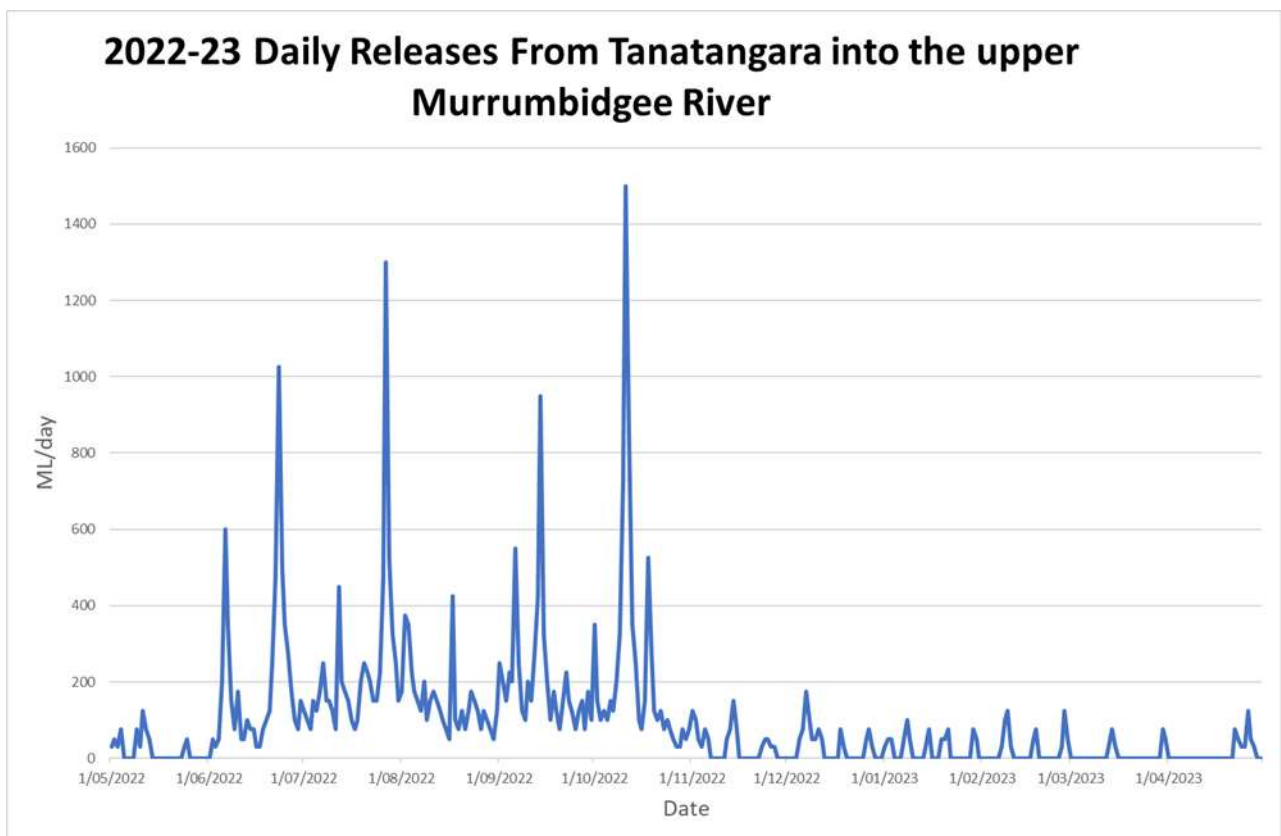


Figure 2-1 . Daily releases from Tantangara Dam for 2022-23

Note: The release dates for the high-flow events are weather-dependent and are subject to change.

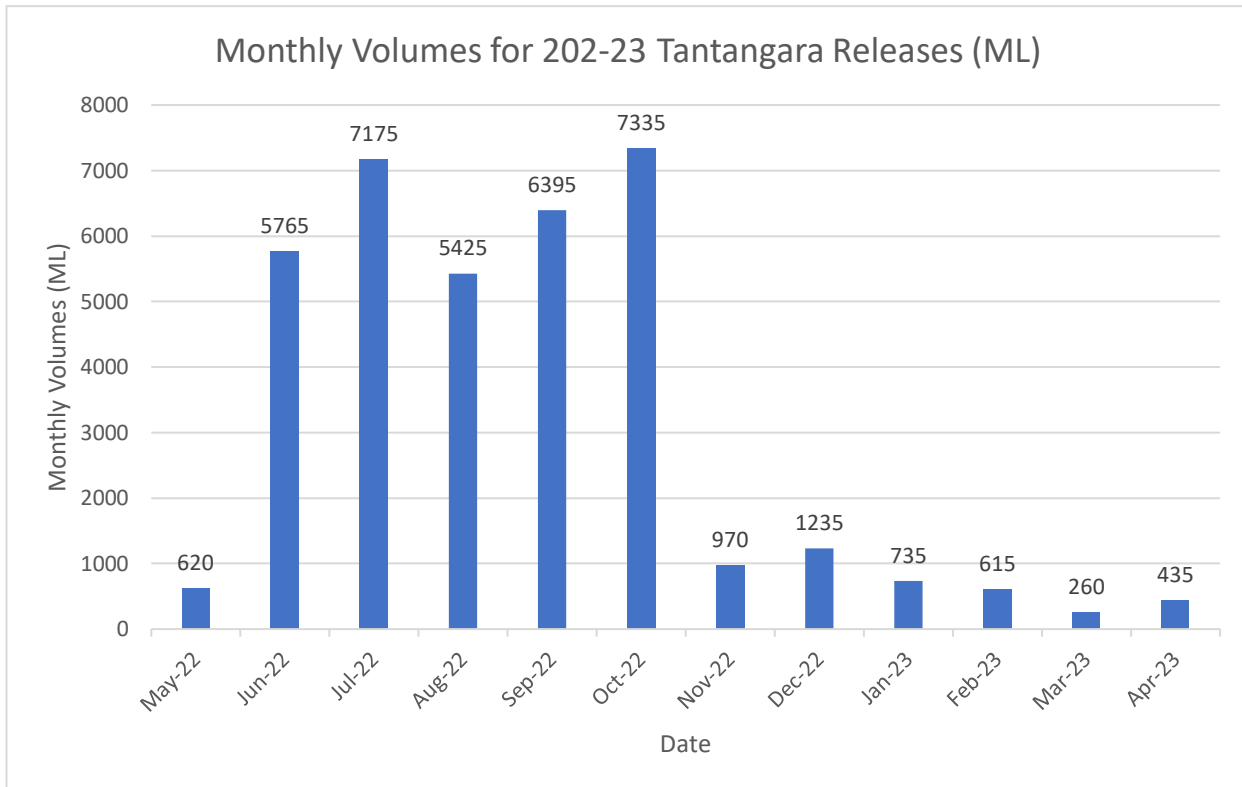


Figure 2-2 The Upper Murrumbidgee River below Tantangara Dam total monthly discharge pattern for 2022-23

3. Release dates for 2022-23

Key dates for high flow events are outlined in Table 4-1.

Table 3-1 Release schedule

Date	Volume
Thursday 23 June 2022	Daily peak flow of 1,025 ML/d over 24 hours
Wednesday 27 July 2022	Daily peak flow of 1,300 ML/d over 24 hours
Tuesday 11 October 2022	Daily peak flow of 1,500 ML/d over 24 hours

Note: The 24 hour release period from Tantangara Dam commences at 12.00pm, this is to allow for manual operation.

4. Safety Management

Measures to ensure safe management of high-flow SMRIF releases are detailed in the Snowy Montane Rivers Increased Flows Safety Management Plan, which is available on the DPE-Water website at: www.industry.nsw.gov.au/water/basins-catchments/snowy-river/initiative/snowy-montane-rivers/upper-murrumbidgee-river-increased-flows