



Collaborating to use seasonal streamflow forecasts in operational decisions

Collaboration with the Bureau provides WaterNSW with guidance on expected future storage levels to inform decisions about water releases.

Working together to develop forecasts of three-month total inflows for Burrinjuck and Blowering Reservoirs has worked well, particularly for the main filling period of winter–spring.

Forecasts for Goobarragandra River at Lacmalac provide information on flows into the Tumut River downstream from Blowering Reservoir, and are potentially useful when making decisions about releasing water from the reservoir.

By continuing to work together, WaterNSW is integrating information from streamflow forecasts into planning and operational decisions.

The Bureau has also identified improvements to increase forecast use. For example, breaking down three-month total forecast volumes into monthly volumes, as required by WaterNSW's monthly planning model, and providing streamflow forecasts beyond three months. Moreover, the Bureau is working on the adoption of rainfall forecasts from a new high-resolution seasonal model and enhanced streamflow modelling methods.



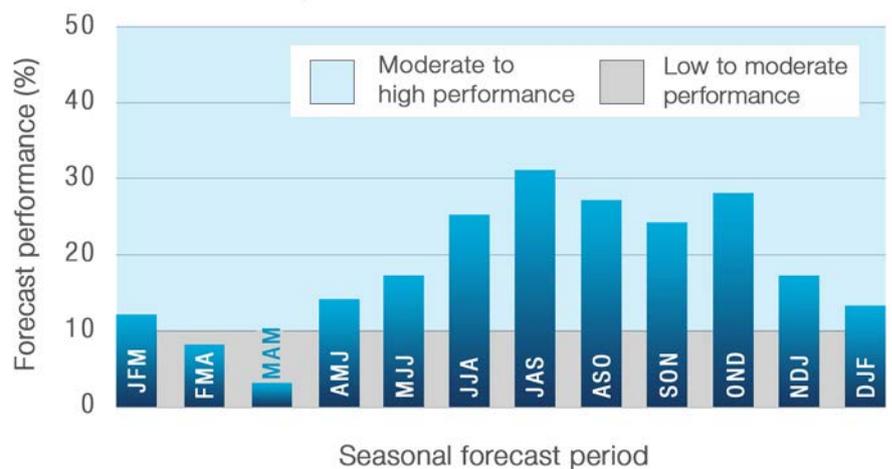
Burrinjuck Dam



Blowering Dam

Seasonal streamflow forecasts performance at Burrinjuck Reservoir, relative to 1950–2010 observations. Forecasts for winter and spring are most skilful. Forecast performance is represented by the Cumulative Ranked Probability Skill score, which compares the Bureau forecasts against those based only on long-term average flows.

Burrinjuck Reservoir: inflow forecasts





Seasonal streamflow forecast service

What are seasonal streamflow forecasts?

Seasonal streamflow forecasts are issued monthly by the Bureau, predicting how much water is likely to flow in selected streams or catchments over the next three months. They are presented as probabilities—that is, the likelihood of a given volume of water flowing into a stream, based on recent climate and catchment conditions.

Why are they important?

Seasonal forecasts help water managers and users make informed decisions. For example, deciding which water source to use, or allocation of environmental flows etc.

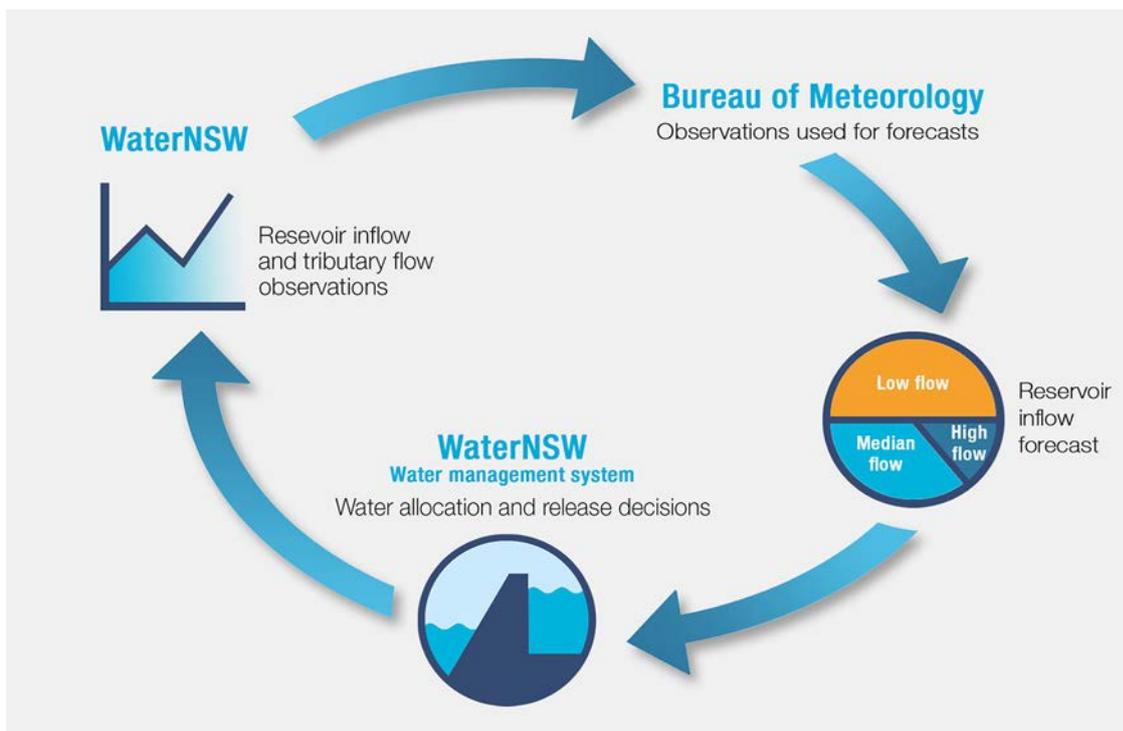
What areas do the forecasts cover?

The forecasts currently cover 161 locations across all Australian States and Territories and are available on the Bureau's public website.

Value to WaterNSW

The Bureau's forecasts of flows into key water storages are valuable inputs to existing WaterNSW water management technology for both regulated and natural river systems in the Murrumbidgee valley. This ensures operational efficiency where the needs of irrigators, the environment and other customers are balanced with minimal water wastage.

The streamflow forecasts are available on the Bureau's public website so all stakeholders in the Murrumbidgee region, such as irrigators, can also assess seasonal water availability. All organisations will continue to work collectively to further improve water information for operations and management of the Murrumbidgee River.





WaterNSW is Australia's largest water supplier and a leader in developing infrastructure solutions for water supply security and reliability. Two thirds of water used in NSW is supplied by WaterNSW. Expert staff manage 42 large dams across NSW to deliver water from dams, pipelines and the State's rivers for agriculture and drinking water supply customers.

WaterNSW provide a single point of contact for the day-to-day business needs of water customers including the management of groundwater, regulated and unregulated

water. They also protect the health of drinking water catchments that supply among the highest quality water in the world.

Each year WaterNSW supplies water to the Murrumbidgee valley, one of 14 regulated river valleys in regional NSW serviced by WaterNSW. Burrinjuck Dam and Blowering Dam are located in the Murrumbidgee region and are managed to supply 894 retail customers in the valley with water for their business needs.

FIND OUT MORE

To learn more about the Bureau's seasonal streamflow forecasts, visit www.bom.gov.au/water/ssf or email water_ssf@bom.gov.au

WaterNSW: www.waternsw.com.au email: Customer.Helpdesk@waternsw.com.au or call 1300 662 077



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