

COMMUNITY INFORMATION SHEET • WATER RESOURCES

Drought, climate outlooks and resilience

What happens to water users when the rain stops and what a credible dry-year plan looks like

The key idea: judge every water promise in a drought

Australia's water system is designed around a hard truth: dry years are not exceptions, they're the design case. Any water commitment a facility makes should be read the same way. A supply that works on average conditions but fails in drought isn't a supply. It's a gamble, with other users holding the downside.

How the system responds when it dries

Allocations shrink by security class: **high-security** users (towns, some industry) are cut last; **general-security** users (most irrigation) are cut first and deepest. Water markets move: prices rise, temporary trades reallocate what's available. Utilities impose restrictions in stages. The system works, but it works by making someone go without, which is why a new high-security industrial user changes the dry-year arithmetic for everyone below it.

Climate outlooks raise the stakes

Long-term projections point to more variable rainfall and more intense hot, dry spells across much of Australia: exactly the conditions when evaporative cooling demand peaks (sheet 03). Facilities being approved now will operate into the 2050s; assessing them against last decade's rainfall is planning for a climate that's already gone. The Bureau of Meteorology's outlooks and state water plans are the reference points.

What a credible dry-year plan contains

Four elements: **switchable cooling** (the ability to run drier modes at higher electricity cost when water tightens); **secured contingency supply** (recycled sources are largely drought-proof, a structural advantage, sheet 04); **clear trigger points** aligned with the region's restriction stages; and **an agreed place in the queue**, stated publicly, so the community knows who gets cut first. "We'll work with authorities" is not a plan.

What good practice looks like

- Dry-year operation modelled and published, not asserted.
- Facility restriction triggers aligned with, or ahead of, community restriction stages.
- Recycled or other drought-resilient supply preferred and secured in advance.
- The facility's dry-year priority relative to towns and farmers stated in writing.

Questions to ask

What does this facility do in a one-in-twenty dry year, in litres and in cooling mode? When restrictions hit residents, what restrictions hit the facility? Is its contingency supply contracted, or hoped for?

Want to know more? The Bureau of Meteorology publishes seasonal and long-term outlooks; your state water agency publishes drought response plans and security class rules. This sheet is general information, not legal or planning advice; a specific proposal is confirmed by qualified assessment.