

Macquarie-Cudgegong Environmental Water Advisory Group

Meeting summary of the pre-planning meeting held 25 February 2026 at Lazy River Estate, Dubbo NSW.

The Wambuul Macquarie–Cudgegong Environmental Water Advisory Group (EWAG) met in Dubbo to discuss catchment conditions and review environmental watering outcomes for the 2025–26 water year. The group undertook preliminary planning for the 2026–27 water year by discussing proposed environmental watering objectives. The meeting also included an update on the review of the Macquarie–Castlereagh Long Term Water Plan 2020.

Weather and catchment conditions

Conditions across the catchment have been dry, with warmer than average temperatures over the past 3 months. Forecasts suggest below average rainfall with continued warm temperatures expected through to the end of the water year.

Burrendong Dam storage level decreased from approximately 50% in July 2025 to just above 30% by February 2026. Windamere Dam remained relatively stable, decreasing slightly from around 90% to approximately 85% over the same period. Current indicators suggest the catchment is moving towards emerging drought conditions.

Wambuul–Macquarie River update

Environmental watering during the 2025–26 water year delivered a sequence of winter and spring flow events followed by summer baseflows. Approximately 156 gigalitres (GL) of environmental water has been used across the winter and spring events.

Satellite mapping indicates around 28,166 hectares (ha) of the Macquarie Marshes was inundated including approximately 12,775 ha in the northern marshes, 11,754 ha in the southern marshes and 3,636 ha in the eastern marshes. This outcome was partly compromised by the watering delays arising from non-urban metering legal issues – possibly by up to 5,000 ha total maximum inundation plus a reduction in duration in some other areas – no objective information on this impact is available at this stage.

Environmental responses were generally positive in areas wetted. The flows supported wetland vegetation and habitat for waterbirds and other fauna, while providing river connectivity during winter and spring 2025. Although large-scale waterbird rookeries did not occur this water year, a good diversity of waterbird species were observed, including brolgas and the threatened Australian painted snipe.

Summer smoothing and flow floor activities occurred with support from WaterNSW and the irrigation industry to support native fish recruitment, particularly for species such as freshwater catfish in the mid-Wambuul Macquarie River. Fish monitoring is currently continuing to determine the ecological outcomes.

Environmental water accounts remain in a relatively favourable position with approximately 108 GL expected to be carried over at 1 July 2026 for future use – more if it rains.

Cudgegong Regulated River update

Environmental watering in the regulated Cudgegong River during 2025–26 included a spring ‘small fresh’ and elevated summer baseflows to support native fish recruitment and river productivity. The baseflow event remained ongoing through summer and has helped maintain stable river conditions for fish and other species.

Approximately 7,000 megalitres (ML) of environmental water is expected to be carried over at 1 July 2026 for future use.

Planning for the 2026–27 water year

Members began preliminary discussions on environmental watering rolling objectives and annual objectives for the 2026–27 water year. The Resource Availability Scenario method suggests conditions can be defined as moderate to wet. However, recent dry conditions, declining water storages and 3-month predictions indicate planning for dry conditions may be more appropriate.

The group discussed the trade-off between using environmental water in spring 2026 versus retaining volumes for carryover for spring 2027. This is a difficult decision as deliverability of spring 2027 water is not guaranteed. Further analysis and scenario analysis will be presented at the May 2026 meeting to support the group’s decision making.

The draft rolling and annual objectives outlined below were considered by the group at the meeting. The objectives have not been finalised and are pending amendments and group consensus of the finalised objectives at the next meeting.

Wambuul–Macquarie River: draft rolling objectives (2 years from July 2026 to June 2028)

- Maintain and enhance the condition of target wetland and riparian vegetation, particularly semi-permanent wetland vegetation (reeds, couch, mixed marsh, marsh club rush), lignum and river red gum communities.
- Assist native fish populations to recover and self-populate, support spawning and recruitment in the mid-Wambuul Macquarie River, particularly ‘flow generalists’ and ‘in-channel specialist’ species like Murray cod and freshwater catfish.
- Support group-nesting waterbird species:
 - Provide foraging habitat for waterbirds and nesting opportunities for general waterbirds.
 - Actively support viable group-nesting waterbird breeding events in the Macquarie Marshes when they occur.
 - Keep key rookery nesting sites in the Macquarie Marshes in an ‘event ready’ condition.
- Provide habitat for flow-dependent fauna such as platypus, rakali and frogs.
- Support wetland and river processes that underpin ecosystem functions.
- Provide ecologically meaningful connections between the Wambuul Macquarie River and the Barwon River for the movement of flow-specialist migratory native fish into the catchment (e.g. golden and silver perch) and contribute to environmental outcomes in the Barwon River and broader Murray-Darling system.
- Boost ecosystem resilience to future drought by:
 - Securing future maintenance flows by carrying over General Security balance.
 - Supporting fish refugia in response to deteriorating conditions where feasible.
 - Providing flows to support threatened fish species if required.

Wambuul–Macquarie River: draft annual objectives for 2026–27

Wetland vegetation

- Using a spring pulse to inundate the inner 9,000–15,000 ha of semi-permanent wetlands and river red gum woodlands, with the extent of optimal duration (at least 90 days) dependent upon the rainfall.
- Maintain the condition of river red gum, lignum, river cooba and common reed at key inner Macquarie Marshes waterbird rookeries.

Native fish

- Provide flows that support recruitment of ‘flow generalist’ and ‘river specialist’ species in the mid-Wambuul Macquarie River – targeting the known needs of freshwater catfish between Dubbo and Gin Gin Weir.

Waterbirds

- Support general waterbird populations by providing seasonal wetland foraging and nesting habitat.
- Support viable large-scale waterbird rookeries, should they occur.

Other Fauna

- Support other river and wetland fauna such as frogs, turtles, platypus and rakali by providing inundated foraging and breeding habitat and boosting riverine aquatic system productivity.

Connectivity and river processes

- Support key river and wetland processes while achieving other objectives.
- Minimise bank slumping by using long flow event recessions.

Secure carryover for future use

- Secure carryover (volume and targets to be confirmed) to provide support for the Wambuul-Macquarie River and Macquarie Marshes in spring 2027.

Cudgegong River: draft rolling objectives (2 years from July 2026 to June 2028)

- Assist native fish populations to recover and self-populate in the regulated Cudgegong River, particularly ‘flow generalist’ and ‘in-stream specialist’ fish species like Murray cod, freshwater catfish, northern river blackfish and small-bodied natives.
- Support river productivity and processes by improving flow variability, within delivery constraints.
- Examine opportunities to enhance the Putta Bucca wetlands using environmental water and complementary measures.
- Build knowledge, experience, and community awareness, in:
 - Environmental water operations in the Cudgegong.
 - Infrastructure constraints to water management including Rocky Waterhole crossing and Lawson Park weir.

- Enhancing Putta Bucca wetlands.
- Other potential beneficiaries of managed environmental water, like platypus, rakali, riparian vegetation, local groundwater systems, aquatic macroinvertebrates, birds and river processes.

Cudgegong River: draft annual objectives for the 2026–27 water year

- Support native fish spawning and recruitment – particularly:
 - in-stream specialists: Murray cod, freshwater catfish (endangered), northern river blackfish, purple spotted gudgeon (endangered); and
 - flow generalists (carp gudgeons, mountain galaxias, flathead gudgeons).
- Support river productivity and processes by providing flow variability.
- Secure water to carry over for use in future years.

Long Term Water Plan update

An update was provided on the review of the Macquarie–Castlereagh Long Term Water Plan (LTWP) 2020, which is undergoing its 5 year review. The presentation outlined the purpose of LTWPs and their role in guiding environmental water management. Updates were provided on the development of environmental water requirements for Rocky Waterhole, including the addition of an overbank flow requirement, and broader considerations such as climate change, and risks and mitigation strategies under declining water availability.

Potential investment opportunities were highlighted to improve ecological, cultural and operational outcomes. First Nations aspirations from Tubba Gah People and Trangie Traditional Owners were shared, focusing on restoring ecosystems, improving flows and protecting cultural values.

Upcoming engagement opportunities include public exhibition of the LTWP in mid-2026 and possible workshops.

Next meeting

The next EWAG meeting is planned for May 2026 at Charles Sturt University in Dubbo, where the group will continue planning environmental watering objectives for the 2026–27 water year.