Macquarie-Cudgegong Environmental Water Advisory Group Meeting Summary 18 February 2025 Lazy River Estate Dubbo

On Tuesday 18 February 2025, the Macquarie-Cudgegong Environmental Water Advisory Group (EWAG) met in Dubbo to review the outcomes against their 2024/2025 water year annual objectives. The group further identified preliminary watering objectives for the 2025/2026 water year.

Environmental watering events and outcomes

Cudgegong River

The key watering objectives in 2024/2025 for the Cudgegong were to:

- Support native fish breeding and recruitment particularly river specialists (Murray cod, freshwater catfish, northern river blackfish, purple spotted gudgeon) and flow generalists (small-bodied natives i.e. carp gudgeons, galaxiids, flathead gudgeons).
- Support river productivity and processes by providing flow variability.
- Secure carryover for use in future years.

A Spring productivity pulse of 6,000 megalitres (ML) was ordered in October/November 2024 to support native fish breeding and recruitment. The pulse was followed by a period of elevated baseflow (85 ML/day) in the summer months. The flow finished at the start of February 2025, with more water being used than originally planned due to lower than anticipated water orders from other users.

An October 'small fresh' was provided at Rocky Waterhole to support river productivity.

Heavy localised rainfall below Windamere Dam in December produced significant flows in the Cudgegong River and Lawsons Creek. This flow, that broke out of the banks, provided native fish the opportunity to move freely (albeit for a brief time) along the full length of the Cudgegong River. A large amount of organic matter would have washed into the river during this event which, overtime, will boost food supply for fish, platypus, and other water critters.

In total, approximately 8,000 ML was delivered to support the 2024/2025 objectives. As of 28 January 2025, 9,116 ML of unused environmental water is available for carryover.

Macquarie River

The key watering objectives in 2024/2025 for the Macquarie River were to:

- Maintain and/or improve the condition of the Macquarie Marches wetland vegetation by inundating the inner 20,000 Ha of wetlands and river red gum woodlands for a duration of at least 90 days.
- Support vegetation condition at key Macquarie Marshes nesting sites with groupnesting waterbird sites targeted to be 'event ready'.

- Support native fish spawning and recruitment in the Mid-Wambuul Macquarie River between Warren and Marebone Weir by delivering a sequence of suitable flow events.
- Support waterbird populations and other fauna by providing wetland habitat.
- Support viable group-nesting waterbird breeding events, should they occur.
- · Support river and wetland processes while delivering water for other objectives.
- Provide ecologically meaningful flow connectivity between the Wambuul
 Macquarie River and the Barwon River, if the opportunity arises, or as part of delivering of other objectives.
- Secure carryover to support wetland vegetation within the inner 'blue zone' of the Macquarie Marshes (inner 4,000 9,000 Ha).



Southern Lagoons – Southern Marshes Nature Reserve



Monkeygar Swamp – Southern Macquarie Marshes

Satellite mapping suggests the 20,000 Ha inundation objective was exceeded with an estimated 37,000 Ha of wetlands inundated. Vegetation composition and structure at 5 large-scale nesting sites was maintained in an 'event ready' condition.

Current river flows are supporting native fish spawning with the Autumn pulse planned to enhance juvenile fish survival (known as recruitment).

As of 13 February 2025, it is estimated there will be approximately 175 GL of unused environmental water available as general security carryover.

Preliminary watering objectives for 2025/2026

The group reviewed water availability and potential environmental demands to inform water use decisions. The current water availability, antecedent condition and 3-month predictions of moderate rainfall point towards objectives that focus on 'maintenance' rather than 'enhance' or 'avoid loss'.

Priorities identified included:

- Maintaining vegetation condition of key waterbird breeding sites in the Macquarie Marshes.
- Supporting the recovery of native fish populations in the regulated river.

The group will meet again on 6 and 7 May 2025 to finalise environmental watering objectives and usage priorities for the 2025/2026 water year and beyond.