

Macquarie-Cudgegong Environmental Flows Reference Group

Meeting Summary 22+23 February 2021, Lazy River Estate Dubbo

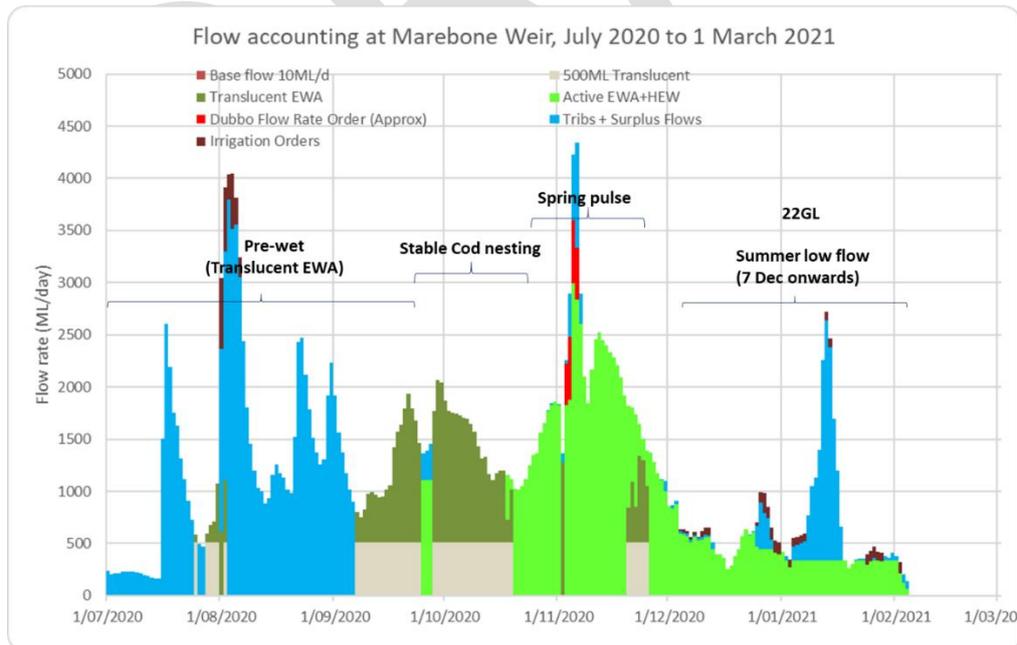
Attendees: Ian Rogan (Chair), Debbie Love, Garry Hall, Rob McLellan, Melissa Gray, Richard Woodlock, Bev Smiles, Bill Johnson, Mahmood Khan, Tim Hosking (SWARCO), Nerida Sloane (CEWO), Paul Keyte (Exec Officer), Peter Thomas (MDBA). *Day 1 only:* David Duncan, Jo Ocock, Rod Price.

Apologies: Danielle Flakelar, Rob Smith, Tim Haeusler, Julie Lovell, Sri Sritharan

WATERING UPDATE – 2020-2021 water year to date

Key notes include:

- Increased use of the Translucent EWA compared to other years due to adoption of the default *Water Sharing Plan* triggers by the EWAG, and those triggers occurring.
- 750ML supplementary water use in early August (36 hr event)
- Nil Cudgegong EWA available – Windermere mostly below 110GL threshold and when above it there were no triggering events.
- Inundation in the Marshes ~5months for the Blue Zone 9,000ha, parts of the Pink zone 19,000ha ~3months inundated. Positive outcomes noted for Marshes vegetation, waterbird diversity and waterfowl breeding, frog breeding.
- Monitoring found larval Murray cod, freshwater catfish, yabbies, carp and mussels. Juvenile Murray cod found over summer.
- Total environmental water use 1 July 2020 to 4 Feb 2021 was 140GL comprising:
 - 750ML Supplementary licenced use (August)
 - 42GL Translucent EWA triggered flows
 - 45GL Active EWA managed flow
 - 52GL HEW (NSW +CEWO) managed licenced flow



Water remaining in accounts at 1 March 2021: 54GL HEW and active EWA + 3.3GL Translucent EWA (can be triggered after 15 March)

PRELIMINARY WATER PLANNING SESSION

Water demand

- MDBA 'Resource Availability Scenario' – DRY. A suggested focus on 'maintenance'.
- Demands tables, based around Long-Term Watering Plan 'Environmental Water Requirements'. Some flow categories approaching thresholds for needing water in 2021 due to time since the 2016 flood and the record drought since, such as outer River Red Gum woodlands and Golden Perch spawning flows.
- Observations about drought recovery to date positive but with more work to do.

Predicted conditions

BoM 3month prediction of higher than average chance (60-70%) of above median conditions.

Future objectives

The EFRG-identified priority objective for the remainder of 2020-2021 water year and into 2021-2022 is to continue to support the drought recovery of the Macquarie Marshes. This includes working to re-establish resilience in wetland vegetation communities, particularly the inner 19,000ha areas of semi-permanent wetlands.

Watering Actions

Given the limited water availability, to achieve this key objective most efficiently, it was resolved to:

- 1) deliver a pulse in the autumn/winter to maintain and rebuild inundation extent and retain soil moisture and groundwater stores
- 2) Carry over the remaining account balance for a possible Spring 2021 pulse event depending on the conditions

WaterNSW needs to undertake maintenance works on the Burrendong Dam Penstock between 1 May and mid-July 2021, constraining the period of releases.

It was resolved by the EWAG by Consensus to:

- 1) **Provide an Autumn-Winter small pulse event: In the absence of significant tributary flows by mid-March, order a flow in March-April-May 2021, prior to Burrendong Penstock works, of approximately 40 days duration up to 26GL in volume at Marebone weir.** This Autumn pulse will be directed into the Southern and Northern Marshes and aims to:
 - a. support continued wetland plant growth within 4,000 to 9,000 hectares of semi-permanent, mixed marsh and inner river red gum vegetation communities.
 - b. support watering efficiency and duration of inundation – benefitting soil moisture retention, shallow groundwater recharge and maintaining flows in primary channels
 - c. Enhance the benefit from possible rainfall and tributary flows over Winter and early Spring 2021
- 2) **Carry over the remainder (currently approximately 30GL) to the 2021-2022 water year.** This volume would be subject to detailed planning effort in May 2021 and beyond.

The next meeting will be held on Tues 4 and Wed 5 May 2021. VENUE DUBBO TBC