

Meeting Summary
2021/22 Macquarie-Cudgegong EFRG Teams Meeting
Tuesday 26 October 2021 Venue: Microsoft Teams

Attendees: Ian Rogan (Chair), David Duncan, Robert McLellan, Melissa Gray, Garry Hall, Bill Johnson, Jo Ocock, Sri Sritharan, Rod Price, Bev Smiles, Debbie Love, Ajantha Prathab, Mahmood Khan, Richard Woodlock.

DPIE Staff support: Paul Keyte (Exec officer, Notes), Tim Hosking SWARCO

Meeting Observers: Nerida Sloane, Hayley Behnke, Charlie Carruthers (DPI Fisheries), Stephanie McCaffrey (DPI Fisheries)

Apologies: Danielle Flakelar, Julie Lovell, Rob Smith, Peter Thomas MDBA

EFRG agency representative changes: DPI-Fisheries restructure means Stephanie McCaffrey and Charlie Carruthers will represent the DPI Fisheries.

MEETING OBJECTIVES:

- It was agreed at the September EFRG teleconference to review water demand in late October due to the uncertainty around water availability and outcomes of colonial waterbird breeding in September/October
- Provide recommendations to guide water use from this point forward to meet watering objectives, and to review those objectives if needed.

WATERING UPDATE (by DPIE EES and Water NSW):

DPIE EES and Water NSW provided updates about recent flows and the status of the Macquarie Marshes and Macquarie River (relevant to proposed watering objectives). This included:

- initial observations from the DPIE EES **Annual bird surveys** of the Marshes, with good diversity but middling abundance compared to previous 10 years.
- Recent **Inundation Mapping** by satellite, which showed 4 October extent of approximately 42,193ha across all three subsystems of the Marshes, with the Northern Marshes having the largest extent.
- **River Flows**
 - As previously determined, environmental water was used to fill 'holes' in the river flows up to 2,500ML/day at Marebone. Approximately 36GL of environmental water used, mostly translucent Environmental Water Account (EWA) earlier in the water year.
 - Flood Mitigation Zone (FMZ) releases (transparent operations in 'Bay 1') has been the main source of flows in the river since the last meeting.
 - Strong flows into the Barwon River – up to 800ML/d though gauging problematic.
- **Native Fish Outcomes.** Key information included:
 - Good flows at Baroona however water temperatures have been below 17 degrees upstream of Baroona which may not be optimum for fish breeding.
 - Flow at Bells Bridge – Water temperatures below the 22 degrees needed for optimal Golden Perch fry survival, though flow rates have produced an excellent opportunity to import Golden Perch from Barwon-Darling into our catchment.
 - Fish will still breed at lower temps but have a higher egg mortality.
 - Fish will still move even if temperatures are below optimal water temps.
- **BOM forecast** – Still an optimistic rainfall outlook over the next 3 months.
- **Colonial Waterbird Activity:** Known colonial activity includes:
 - 200-300 Straw-necked Ibis at Monkeygar Swamp
 - Australian white Ibis, cormorants/darters and Magpie Geese in small colonies in various locations (10-50 nests)
 - Egrets and herons in T-Block (50+ nests, TBC)

- **Summary: Not a big breeding response to the conditions yet. We still appear to be on the cusp and further rainfall will determine what response from here.**

WATERSNSW UPDATE

- Burrendong will be below 100% by tomorrow and out of FMZ operation.
- Windamere 36.4%
- Catchment is drying up.
- Potential irrigation usage for summer 2021-22 likely to be relatively high, depending on conditions.
- **Water temps:** D/S Burrendong 12 degrees, Barooka 17 degrees. Spillway not used due to Blue-Green algae concerns - duty of care.
- **Cold water pollution options at Burrendong Dam:**
 - Thermal curtain has been decommissioned
 - WaterNSW committed to investigate alternative options and will report in November.

PROPOSED WATER OBJECTIVES AND EVENTS

The main watering outcomes set at the September meeting have been met: Marshes vegetation recovery in drought year 2, ensuring the Marshes is 'event ready' for colonies and secured carryover.

Support for Golden Perch connectivity objective while conditions favourable. Possible higher flows in regulated river during warmer months from tributary flows or irrigation deliveries.

Waterbird Colonies: possible difficult decision approaching around the need to support egret colonies. Egrets are longer breeders would take ~1,500ML/day @ Pillicawarrina until February 2022. Uncertainty about size of egret colonies to be resolved ASAP. Ideally we need rainfall to occur in the catchment to secure more FMZ flows or account balances for colony support.

PROPOSED WATERING ACTIONS

Interim continuation of flow maintenance for another month (November) and review at the end of November at EFRG meeting. Save some water by reducing total flow rate arriving Marebone to just below 2,500ML/d. Reduce flow into both the Eastern Marshes (to 350-400ML/d) with the remainder into the Macquarie River.

It was noted that Translucent EWA is available until the end of November, so may trigger before then.

FISH MONITORING

Current CEWO-DPI-Fisheries negotiations around fish monitoring in the Macquarie. Members raised the possible need for future enhancement of the Barwon River acoustic array into the Macquarie.

COMMUNICATIONS

Some recent ABC media. CEWO and EES continue to prepare event update newsletters. Targeted engagement around the upcoming EWAG recruitment. DPIE EES and DPI-Fisheries native fish webinar planned in early November.

CUDGEGONG RIVER

EES still considering committee model for Cudgegong. Preferred model is an EWAG 'sub-group' with optional membership from the main group. Not sure when the WSP will be signed off though. Ideally would like to combine selection process. Would be good to have a foundation meeting perhaps in March 2022.