



*Healthy Rivers,  
Healthy Communities*

## Wet conditions continue to help the Lower Balonne recover!

### Objectives:



Help native fish move and breed



Reconnect rivers in the Lower Balonne



Inundate Narran Lakes (Dharriwaa) Ramsar site to encourage waterbird breeding

In the 2022–23 year to date 1,462 gigalitres (GL) has flowed past the St George gauge. Of this, approximately 111 GL, or 7%, was Commonwealth water for the environment.

These flows have continued to support areas of the Lower Balonne and assist in maintaining river connection, waterbird breeding and fish spawning. The wet conditions are likely to continue into summer, with higher than average rainfall expected across the catchment.

## Waterbird breeding

In 2021-22 Dharriwaa experienced its first large-scale colonial waterbird breeding event in 10 years thanks to wet conditions and environmental flows.



Straw-necked ibis making nests on lignum bushes. Photo: Pat Johnston and Joanne Ocock, NSW NPWS. Photos taken as part of surveys approved under scientific license.

Over 12 different colonial waterbird species have started nesting across the wetland this spring.

Recent surveys estimate at least 5,000 Straw-necked ibis are nesting again in the lignum-dominated wetlands on Narran Lakes Nature Reserve.

Two pelican colonies have been observed at Dharriwaa, the first pelican breeding since 1998. Surveys estimated over 5,000 pelican nests in total. Dharriwaa is one of only two places that pelicans breed in the northern Murray-Darling Basin.



Pelican nesting site, Dharriwaa, October 2022. Photo: Joanne Ocock, NSW NPWS. Photos taken as part of surveys approved under scientific license.

There was enough water in Dharriwaa this year for a successful bird breeding season without the CEWO having to implement [a grant program to secure additional flows](#).



Straw-necked ibis, Dharriwaa. Photo: Pat Johnston and Joanne Ocock, NSW NPWS. Photos taken as part of surveys approved under scientific licence.

## River connection and native fish spawning

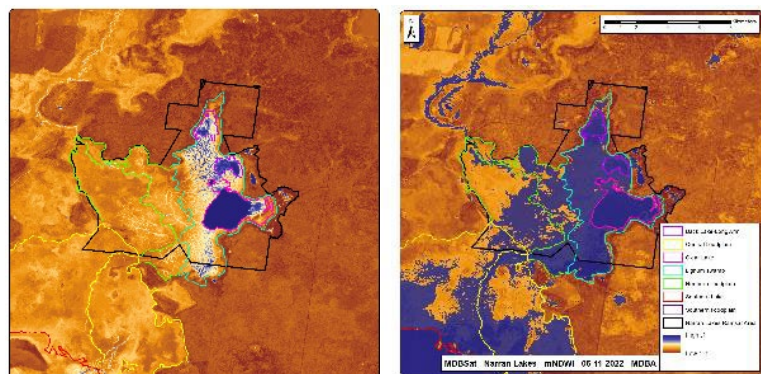
The increased natural flows have maintained connection between the Barwon-Darling (Baawan-Baaka) and the Condamine-Balonne River systems since July 2022.

This had positive effects for Basin ecosystems as a whole, increasing habitat and vegetation. In particular, the continued connection helped Golden perch (Yellow belly - or 'dhagaay' in Gamilaraay/ Kamilaroi language and 'gagalin' or 'bidyin' in Wiradjuri language) to spawn, grow and move through the river system.



Golden Perch from monitoring projects in the Lower Balonne. The presence of different sized fish indicates that they have been able to breed on multiple flows since 2020. These breeding events are assisting with population recovery ahead of the next dry period. Photo: CEWO

High rainfall and flows this year in the Lower Balonne have inundated nearly all the Narran Lakes Ramsar site. In addition, these wet conditions have allowed the Lakes to connect back to the Barwon, which has been uncommon in recent years.



The Sentinel satellite images above taken on 20 April 2021 (left) and on 6 November 2022 (right) show the change in inundation between those periods from local rainfall and environmental flows.

## Continued monitoring

Monitoring activities in collaboration with state partners have continued in the Lower Balonne this year. Current projects involve measuring:

- Inundation and flow (to understand where water flows with increased rainfall)
- Vegetation growth and maintenance (to understand location of food sources and nesting sites for fish, birds, and other native species)
- Hydrology (to understand water movement)
- Waterbird nesting (to increase knowledge on breeding patterns and locations)
- Fish populations and spawning (to increase knowledge of fish breeding and population sizes).

The CEWO acknowledges the contribution of our partner agencies and monitoring providers in the Lower Balonne, including CSIRO, QLD Departments RDMW, AF and DES, Southern Queensland Landscapes, NSW Departments PE and NPWS, the Narran Joint Management Committee, WaterNSW, University of NSW, UNE and 2Rog Consulting.



CEWO's Local Engagement Officer Jason Wilson explaining about recent flows into Dharriwaa. Photo: CEWO

Contact the CEWO Local Engagement Officers for further information:

**Jason Wilson** (Walgett, NSW)

☎ 0418 210 389

📧 [jason.wilson@awe.gov.au](mailto:jason.wilson@awe.gov.au)

**Jane Humphries** (Moree, NSW)

☎ 0437 141 495

📧 [jane.humphries@awe.gov.au](mailto:jane.humphries@awe.gov.au)