



Whilst COVID-19 restrictions slowed down engagement activities, below are the highlights from CEWO's engagement with northern Basin communities in 2020-21:

- Appointed a third Local Engagement Officer for the northern Basin (Sally Dickinson based in Queensland).
- Engaged with students in schools including Lightning Ridge, Collarenebri and Walgett on the importance of river and wetland health.
- [Continued to work with First Nations to support cultural values and recognise traditional knowledge in how we use water for the environment.](#)
- Strengthening more formal relationships with representatives of the Gomeroi Nation in the Gwydir catchment.
- Radio interviews on 2WEB Outback Radio.
- CEWO staff (including the CEWH and interim CEWH) met with community members and visited catchments, when COVID-19 restrictions allowed.
- Participated in meetings in the northern Basin convened by NSW and Queensland agencies.
- Shared information through email, including flow updates and the latest monitoring stories.
- Participated in the annual Murray-Darling Association conference (a meeting of local government councils).
- Social media via [Twitter](#) and our new [Facebook](#) site.

Local Engagement Officers

The CEWO has three Local Engagement Officers based regionally in the northern Murray-Darling Basin. They can be contacted for further information:

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*Healthy Rivers,
Healthy Communities*



CEWO's northern Basin Local Engagement Officers. Left: Sally and Jane. Right: Jason and Jane



Useful links

Water Management Plan 2021-22:

<http://www.environment.gov.au/water/cewo/publications/water-management-plan-2021-22>

Catchment summaries for 2021-22:

<https://www.environment.gov.au/water/cewo/publications/overview-water-mgt-planning-2021-22>

2020-21 Macquarie updates:

<https://www.environment.gov.au/water/cewo/catchment/macquarie/2020-21-macquarie-river-valley-updates>

2020-21 Gwydir updates:

<https://www.environment.gov.au/water/cewo/catchment/gwydir-refuge-pool-2020-21>

Northern Waterhole Top-up:

<https://www.environment.gov.au/water/cewo/catchment/northern-waterhole-top-up>

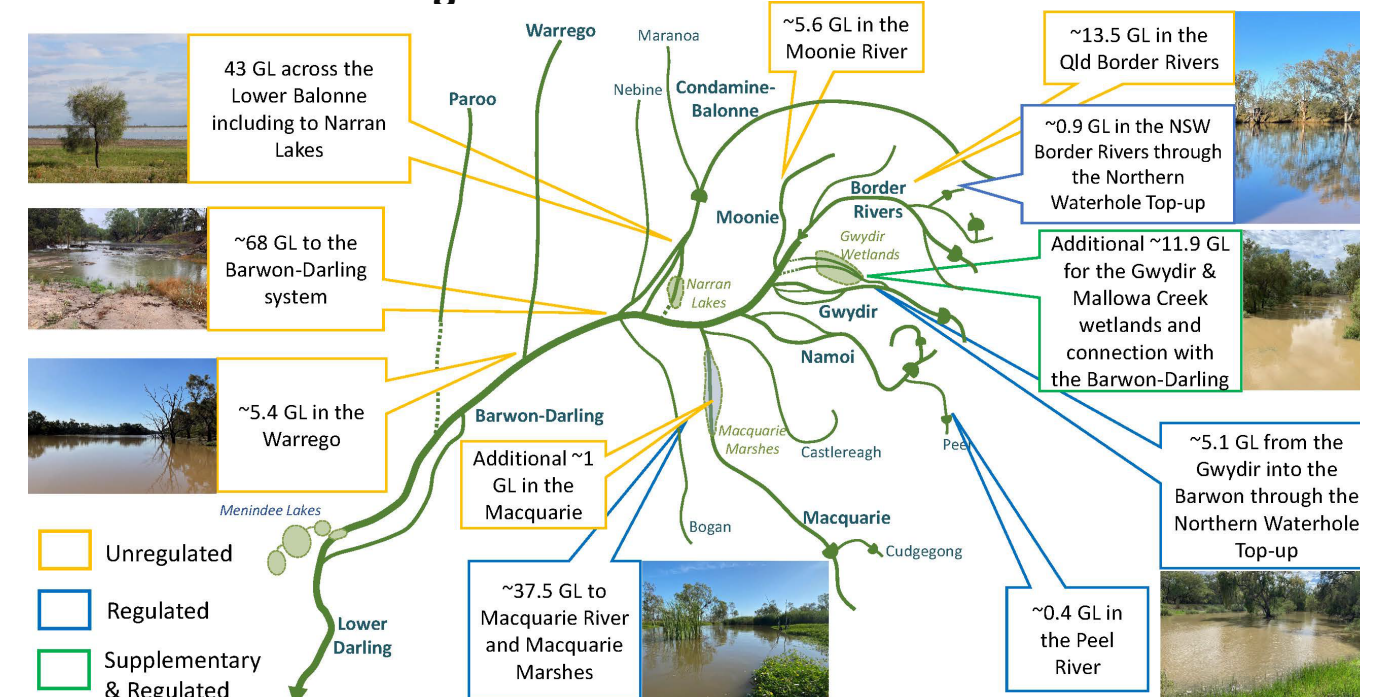
Lower Balonne Flows 2021:

<https://www.environment.gov.au/water/cewo/catchment/lower-balonne-updates-2021>

Barwon-Darling Connectivity Flow 2021:

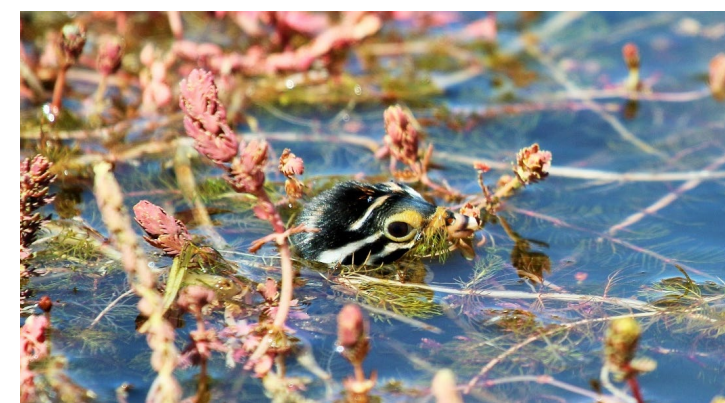
<https://www.environment.gov.au/water/cewo/catchment/barwon-darling-connectivity-flow-2021>

A snapshot of Commonwealth water for the environment in the northern Basin during 2020-21

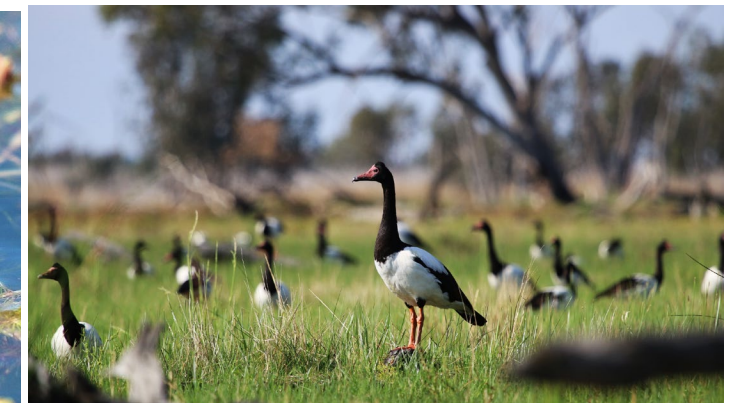


The four years from 2017 to 2020 were the driest and warmest on record for the northern Murray-Darling Basin. So we were all relieved to see some rain and subsequent flows in December 2020 and January 2021. Heavy falls in March saw flooding in some rivers, with flows continuing in the Barwon-Darling (Baawan-Baaka) into the new water year. The 2020-21 water year saw the start of recovery in the northern Basin, both of ecosystems and communities. The Commonwealth Environmental Water Office (CEWO) hopes that this will continue.

During the hot and dry conditions in early summer, Commonwealth and NSW water for the environment was released proactively to help native fish survive. When it finally started to rain, our water licences protected a portion of the natural flows to help these ecosystems recover.



Left: Australasian grebe chick, Macquarie Marshes, February 2021. Photo: Nicola Brookhouse, NSW National Parks and Wildlife Service (NPWS)



Right: Magpie geese, Macquarie Marshes, February 2021. Photo: Nicola Brookhouse, NSW NPWS

Northern Basin 2020–21 Summary

This fact sheet highlights the use of Commonwealth water for the environment over the 2020–21 water year in the northern Murray-Darling Basin - September 2021

Condamine-Balonne

Following widespread rainfall, more than 330 gegalitres (GL) passed St George from January to April 2021. Of this water, 31 GL reached Narran Lakes. Around 43 GL of Commonwealth water for the environment was left instream across all the Lower Balonne rivers to boost flows from March to mid-April 2021. This helped replenish the Ramsar-listed Narran Lakes and builds on the environmental benefits from last year's flows.



Clear Lake (within the Narran Lakes System) in April 2021. Photo: Jason Wilson, CEWO

Barwon-Darling

During the first half of 2021, around 68 GL of Commonwealth water was left in-river to enhance flows along the Barwon-Darling. About 32 GL had flowed past Wilcannia by 30 June 2021, improving the connection between the Barwon-Darling and Lower Darling. These flows assist native fish to travel between the river systems and increase their opportunities to feed and breed.



Sampling dissolved oxygen at Collarenebri, January 2021. Photo: University of New England (UNE)



Nankeen night heron (*Collarenebri*), January 2021. Photo: UNE / 2rog

Gwydir

A total of ~11.9 GL of Commonwealth water for the environment was delivered to improve the condition of parts of the Gwydir Wetlands Ramsar site and to enhance the connection between the Barwon-Darling and Gwydir. In addition, ~8.8 GL of NSW water was delivered to support bird breeding and improve the condition of vegetation within the Gwydir Wetlands.

5.1 GL of Commonwealth water was also delivered from the Gwydir as part of the [Northern Waterhole Top-up](#). This enhanced connection between many northern Basin rivers, topped up pools and reduced the number of cease-to-flow days, particularly along the Barwon River.



Gwydir River yellowbelly. Photo: NSW Department of Primary Industries - Fisheries

Macquarie

Approximately 37.5 GL of Commonwealth water for the environment, along with 100 GL of NSW water, was delivered during September 2020 to February 2021. This water supported native fish (especially Murray cod) breeding and gave baby fish their best chance for survival and growth. These flows also helped wetland vegetation in the Macquarie to recover after the extended drought.



Marsh Club-Rush, Macquarie Marshes, November 2020. Photo: Nerida Sloane, CEWO

Moonie, Border Rivers and Warrego

Across the Border Rivers, Moonie and Warrego, unregulated licences have contributed more than 23 GL to natural flows in these systems during early 2021.

In partnership with NSW, 0.9 GL of Commonwealth and 2.0 GL of NSW planned water for the environment was provided from the Border Rivers as part of the [Northern Waterhole Top-up](#).

Namoi

In autumn 2021, 0.4 GL of Commonwealth water for the environment was delivered in combination with 1.2 GL of NSW water, to provide a baseflow in the Peel River downstream of Chaffey Dam where there had been persistently low flows. Flows supported drought recovery by increasing available habitat, improving water quality, and providing opportunities for native fish to move.

Managing water for the environment is a collective and collaborative effort, working in partnership with communities, Traditional Owners, scientists and government agencies. Their contributions are gratefully acknowledged.

The CEWO acknowledges the Traditional Owners of the Murray-Darling Basin. We pay our respects to them and their elders both past and present.

Highlights from monitoring in the northern Basin during 2020-21

- Some ecosystems have started to recover following the severe drought. In the Gwydir Wetlands, wetland vegetation started to grow in areas that had not been inundated since 2012. In the Macquarie Marshes, wetland vegetation actively grew in response to flows, including areas that had burnt during the drought.
- Migratory bird species such as Latham's snipe, Sharp-tailed sandpiper, and the nationally endangered Australasian bittern and Australian painted snipe were observed in the Macquarie Marshes. In the Gwydir, endangered waterbird species including Freckled duck, Black-necked stork, and Black-tailed godwit were spotted. Small-scale breeding of magpie geese occurred in both the Macquarie Marshes and Gwydir Wetlands.
- In April, following inflows to the Narran Lakes, 33 waterbird species were observed, including brolgas and freckled duck, which are both listed as threatened in NSW.
- In the Warrego, native fish, frogs and turtles were found using refuge waterholes. In the Macquarie and Gwydir, 8 and 9 frog species were detected respectively. Frogs successfully bred in the Marshes and the Gwydir Wetlands.
- In the Macquarie River, water for the environment supported successful spawning and recruitment of Murray cod. Larval freshwater catfish and golden perch plus young yabbies and mussels were also found. Golden perch spawned and recruited in the Condamine-Balonne.
- Monitoring is undertaken by, and in conjunction with, NSW Department of Planning Industry & Environment—Environment, Energy and Science, NSW Department of Primary Industries-Fisheries, NSW National Parks and Wildlife Service, Queensland agencies including Department of Environment and Science, and University of New England/2rog.