



Northern Basin 2021–22 Summary

This fact sheet highlights the use of Commonwealth water for the environment over the 2021–22 water year in the northern Murray-Darling Basin

Despite COVID-19 restrictions and flooding during 2021-22, CEWO's intrepid staff still ventured out. There were many highlights, just to name a few:

- Engaging with students in schools including Lightning Ridge Central School for NAIDOC celebrations.
- Visits to Dharriwa, Gwydir Wetlands, and Macquarie Marshes.
- Continuing to work with First Nations to imbed cultural values and recognise traditional knowledge in how we use water for the environment.
- Radio interviews on 2WEB Outback Radio and ABC Toowoomba.
- Meeting with communities when COVID-19 restrictions allowed.
- Sharing flow and monitoring updates through email and social media ([Twitter](#) / [Facebook](#)).
- Collaborating and working with partner agencies during the year, including QLD and NSW environmental water managers and science teams, and monitoring providers, just to name a few.

Useful links

Water Management Plan 2022-23:

<http://www.dcceew.gov.au/water/cewo/publications/water-management-plan-2022-23>

Catchment summaries for 2022-23:

<https://www.dcceew.gov.au/water/cewo/publications/overview-water-mgt-planning-2022-23>

2021-22 Macquarie updates:

<https://www.dcceew.gov.au/water/cewo/catchment/macquarie/2021-22-macquarie-river-valley-updates>

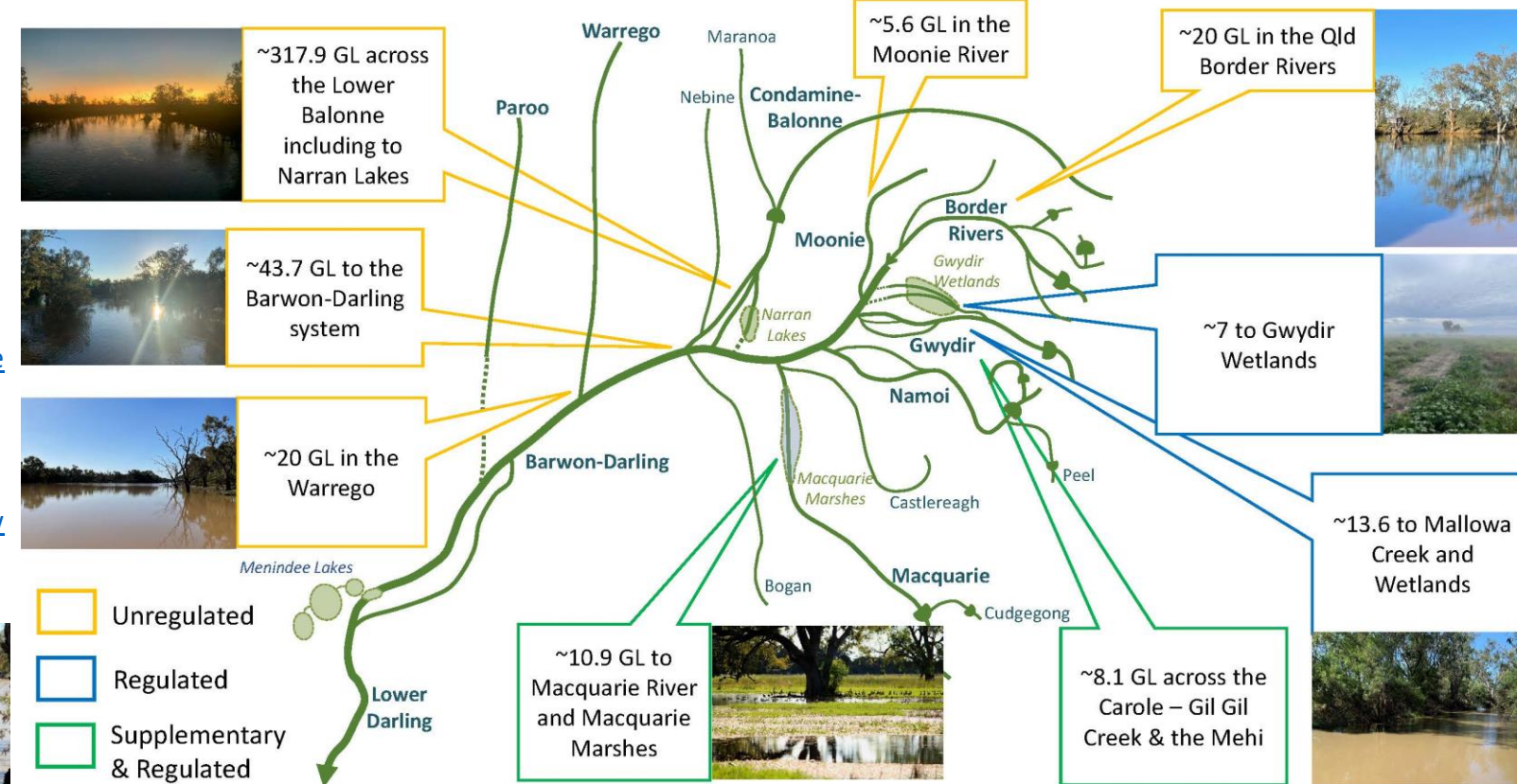
2021-22 Gwydir updates:

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

Barwon-Darling & Condamine Balonne

<https://www.dcceew.gov.au/water/cewo/catchment/northern-unregulated-rivers/history#202122>

A snapshot of Commonwealth water for the environment in the Northern Basin during 2021-22



 Unregulated
 Regulated
 Supplementary & Regulated

Local Engagement Officers

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

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CEWO's Northern Basin Team

As well as the passionate northern LEOs, there are a number of dedicated staff working on the catchments of the Northern Basin, including environmental water managers, delivery, and communication officers.



Photo courtesy of Mal Ridges, NSW DPE



Above: CEWO's northern Basin Local Engagement Officers: Jane, Sally and Jason



Left: CEWO's Northern Basin Delivery Team with the A/g CEWH outside and learning together during a planning meeting for the 2022-23 water year

The wettest season in 10 years & the biggest e-water event in the northern Basin supports recovery

Cycles of 'boom' and 'bust' dominate the northern Murray-Darling Basin, with extended dry periods often broken by flooding rains. After years of drought, the current 'boom' along with the help of water for the environment is helping to rejuvenate the landscape and community after the long dry. Although, there is still a way to go!



Left: Cattle egret. Photo: Jared Reid, 2Rog. Right: Intermediate egret. Photo: Nicola Brookhouse, NSW NPWS



*All waterbird colony photos captured during approved scientific monitoring

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Condamine-Balonne

We have seen the wettest conditions in the Lower Balonne since 2012. More than 4,500 GL flowed past the St George gauge in Queensland in 2021–22.

Almost 317 GL of Commonwealth water for the environment was accounted for at St George with over 127 GL flowing past the NSW-QLD border. We also accounted for just over 1 GL of Commonwealth water for the environment in the Nebine Creek.

These flows supported the ecological values of large areas of the Lower Balonne floodplain including the Ramsar listed Narran Lakes (Dharriwaa). Flows from the Culgoa and Bokhara rivers provided over 1,200 GL to the Barwon-Darling (Baawan-Baaka), helping connect all the way to the Menindee Lakes. Over 700 GL reached Dharriwaa, one of the largest volumes in recent decades with more to come!



Little egret. Photo: Pat Johnston – courtesy of NSW NPWS

Barwon-Darling

The Baawan-Baaka is flowing well, thanks to good rainfall, natural flows and Commonwealth water for the environment. Around 44 GL of Commonwealth water was protected between July and September 2021 helping the river system continue to recover. Native fish have benefited from the flows, which have helped them move down the river and given them greater opportunities to breed and feed.



Barwon River at Dangar Bridge, Walgett. Photo: Jason Wilson, CEWO.

Gwydir

After a number of dry years, conditions are looking better in the Gwydir. Flows in late 2020 and early 2021 started the process of recovery, with further rainfall, flows and wetland flooding throughout 2021 and 2022. Vegetation is responding well to the flows. Delivering water for the environment during the dry times helped native plants and animals to hang on. This has also helped them to bounce back stronger now wetter conditions have returned.

A total of 13.6 GL of Commonwealth environmental water was delivered to the Mallowa Creek and Wetlands in Summer-Autumn 2021–22 to help the creek and wetland continue to recover and thrive.

Between December 2021 and March 2022, 7 GL of Commonwealth and ~21.4 GL of NSW water for the environment was delivered to the Gwydir Wetlands including internationally significant sites to support waterbirds breeding in large numbers for the first time in a decade. This breeding event was important as it contributes to waterbird numbers rebuilding across the northern Basin.

Commonwealth water for the environment also supported the Mehi and Carole systems.



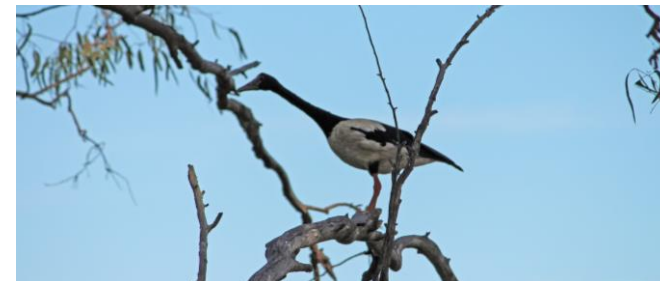
Old Dromana Ramsar site, March 2022. Photo: Joanne Ocock, NSW NPWS

Macquarie

Widespread rainfall over the Macquarie Valley in late 2021 meant significant river flows and wetting of the Macquarie Marshes. Waterbirds benefitted from these wet conditions, with large scale colonial waterbird breeding occurring. It is estimated that waterbird colonies across the Marshes comprised of over 150,000 nests!

The iconic Macquarie Marshes continue to provide important foraging habitat for these young birds.

By mid-November 2021, ~60 gegalitres (GL) of NSW and ~5 GL of Commonwealth water for the environment had been delivered to support native fish, wetland vegetation and waterbird habitat in the Marshes. While flows from Burrendong Dam, tributaries and rainfall generally maintained water levels in the Marshes, an additional ~1 GL of NSW and ~5.5 GL of Commonwealth water for the environment was delivered between February and May to support the colonies to completion and provide foraging habitat for juvenile birds.



Magpie goose at Mole Marsh, March 2022. Photo: Hayley Behnke, CEWO

Moonie, Border Rivers and Warrego

Across the Border Rivers, Moonie and Warrego, unregulated licences have contributed more than 45 GL to natural flows in these systems during the 2021–22 water year.

The Commonwealth Environmental Water Office pays respect to the Traditional Owners and First Nations of the Murray-Darling Basin. We acknowledge their enduring cultural, social, environmental, spiritual and economic connection to the rivers, wetlands and floodplains of the Basin. We are committed to continuously improving how we work with First Nations across the Basin to manage water for the environment.

Monitoring highlights in the northern Basin during 2021–22 found:

- Widespread colonial waterbird breeding throughout the northern Basin including at Gwydir Wetlands, Macquarie Marshes and Dharriwaa.
- 10,000 waterbird nests, mainly Straw-necked ibis, at Dharriwaa.
- 150,000 pairs of Ibis, Egrets, Spoonbills, Herons, Cormorants and Darters at Macquarie Marshes.
- 45,000 waterbird nests comprising Ibis, Egrets, Herons, Spoonbills, Cormorants and Darters in the Gwydir Wetlands.
- Golden perch breeding in the northern unregulated tributaries and moving into the Barwon-Darling and Menindee Lakes, and then down the lower Darling (Baaka) and Great Darling Anabranch.
- Large numbers of young Murray cod and Golden perch in the Macquarie River following rainfall, dam releases and delivery of environmental water.
- Vegetation condition improving at internationally and nationally significant sites including Dharriwaa and the Culgoa Floodplain. Mallowa Creek and Wetlands also saw improved conditions.

Monitoring is undertaken by, and in conjunction with, NSW Department of Planning & Environment—Environment and Heritage Group including NSW National Parks and Wildlife Service, NSW Department of Primary Industries-Fisheries, University of New England, University of NSW, 2Rog, MDBA, CSIRO, Narran Joint Management Committee and Queensland agencies, including the Departments of Environment and Science; Regional Development, Manufacturing and Water; Agriculture and Fisheries and Southern Queensland Landscapes.

Planning where to deliver water for the environment is a collaborative effort, and we would like to thank the community members, First Nation peoples, scientists, state government agencies, and industry with whom we partner.