



### **Gwydir Booming**

## Objectives, timing and volume of environmental water deliveries



To support waterbird breeding in the Gwydir Wetlands during summer 2022.



To maintain and improve the condition of vegetation in Mallowa Creek and Wetlands (from late December 2021 to Autumn 2022).

#### On the road to recovery

After a number of dry years, conditions are looking much better in the Gwydir. Flows in late 2020 and early 2021 started the process of recovery, with further rainfall, flows and flooding throughout 2021 and 2022. Monitoring has found vegetation is responding well. During the dry times, delivering water for the environment allowed native plants and animals to survive. This helped them to bounce back when wetter conditions returned.

# Aerial surveys find first significant waterbird colonies since 2012

Aerial surveys in late December 2021 found the first significant waterbird colonies in the Gwydir Wetlands since 2012. NSW Department of Planning & Environment – Environment, Energy and Science (DPE-EES) identified five waterbird colonies. These included nests of Royal spoonbills, Egrets, Nankeen night herons and Straw-necked ibis in and around the Gwydir Wetlands. Four of these colony sites were estimated to contain around 1,000 to 2,000 nests each.

A second DPE-EES flight in mid-January detected new areas of Straw-necked ibis nesting in the Central Gingham. Current surveys will determine colony size, stage of nesting and water depths at each site. This helps inform environmental water deliveries.

A number of threatened species have also been seen breeding in the Gwydir Wetlands State Conservation Area (SCA) including Black-necked storks, Blue-billed ducks, Freckled ducks and Magpie geese with goslings.

This is great news! Historically the Gwydir Wetlands have supported tens of thousands of waterbird nests. The last significant breeding was recorded in 2012.



Straw-necked ibis seen nesting in cumbungi during onground surveys undertaken by NSW National Parks and Wildlife Service (NPWS) and the Commonwealth Environmental Water Office (CEWO) in January 2022. Photo: Joanne Ocock, NSW NPWS.

# Water for the environment provides a helping hand to Gwydir waterbirds

Water for the environment is supporting breeding and giving baby birds the best chance to fledge and leave their nests. This is informed by gathering information about what the colonies are doing, assessing current conditions, river flows, rainfall and risks of high temperatures.

Water for the environment can stop wetlands drying out too soon, help lessen the risk of breeding birds abandoning their nests or chicks, reduce predation, and ensure food sources are available.

At present, environmental water managers are building on the work of mother nature, by providing follow on flows to maintain water levels around these important nests and breeding areas. Up to 32 gigalitres (GL) could be provided this summer (comprising both Commonwealth and NSW water for the environment).

Further on-ground and aerial monitoring will continue during deliveries to check in on these waterbird colonies.



Waterbird colony site. January 2021. Photo: CEWO.

### Water for the environment is supporting **Mallowa Creek and Wetlands**

Whilst monitoring found the Gwydir Wetlands SCA is responding well to recent flows, there are other areas that are still quite dry due to their current management.

Up to 15 GL of Commonwealth water for the environment is being provided for the Mallowa Creek and Wetlands. Deliveries started on Christmas Eve to last until at least the end of March 2022, helping creek and wetland vegetation recover from the dry. This flow event may continue into April, depending on how the vegetation, frogs and waterbirds are tracking. This is a good example of how environmental water is used adaptively depending on local conditions.



Mallowa Creek, January 2022. Photo: Jane Humphries, CEWO.

#### Working together

Environmental water management is a team effort, and we would like to say a big thank you to those involved:

- NSW DPE-EES staff who are working with WaterNSW to temporarily fix the Tyreel regulator to restore water to downstream sites at a critical time.
- Local landholders that have granted access to their property so monitoring can be undertaken.
- Monitoring undertaken by, and in conjunction with, NSW NPWS, NSW DPE-EES, CEWO, and the University of New England/2rog.
- Advice and information from the Gwydir Environmental Water Advisory Group.
- NSW DPE-EES water managers and CEWO Local Engagement Officers who work with local communities.

Commonwealth and NSW environmental water managers provide water for the environment. Both departments work in partnership with communities, scientists, government agencies and Traditional Owners - these contributions help identify the best outcomes from environmental water. WaterNSW's Water Insights Portal provides key information on how water is being managed and shared. It is an excellent reference.



CEWO's Local Engagement Officer, Jane spotted this Koala taking a nap while monitoring in early January.

Contact the CEWO Local Engagement Officer for further information:

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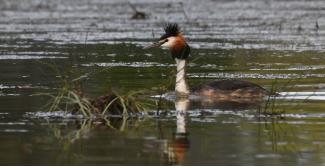
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Or the NSW DPE-EES Acting Gwydir Environmental Water Manager:

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Around 30 Great crested grebes were seen on one lagoon. Photo: Pat Johnston.

\*All waterbird and colony monitoring is undertaken with research and ethics approval and following waterbird colony monitoring protocols.

The Commonwealth Environmental Water Office pays respect to the Traditional Owners 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.