



*Healthy Rivers,  
Healthy Communities*

## Water for the environment has helped the Mallowa Creek & Wetlands to thrive

### Objectives:

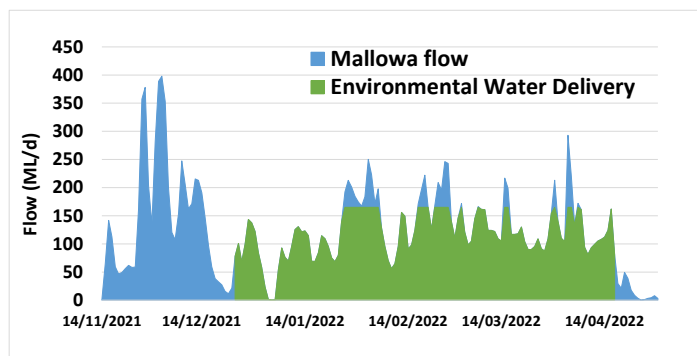


Supporting the recovery of plants and animals following the drought.



Supporting large-scale bird breeding by providing foraging habitat.

A total of 13.6 GL of Commonwealth environmental water was delivered to the Mallowa Creek and Wetlands over Summer-Autumn 2021-22, in the pattern and timing outlined below (green).



## Vegetation improvement

The wet conditions and water for the environment have helped the creek and wetland recover and thrive following the drought.

This image from the Mallowa Creek Wetlands (east) shows how well this section is looking following flows during Spring and Summer.



Photo: Ben Vincent, UNE.

The images below show an improvement in vegetation condition and abundance from inundation between Spring (top) and Autumn (bottom) in parts of the Mallowa Creek Wetlands.



Spring 2021. Photo: Ben Vincent, UNE.



Autumn 2022. Photo: Ben Vincent, UNE.

## How else has this water helped?

Water for the environment helped provide foraging habitat for birds that bred in huge numbers elsewhere in the Gwydir Wetlands.

Monitoring undertaken in March found an increase in waterbird species richness and abundance in response to flows (compared to earlier Spring surveys when it was dry).

*In March, CEWO staff appreciated the opportunity to visit local landholders and managers to help build our knowledge on the Mallowa Creek and how environmental flow deliveries can be improved. CEWO is looking to meet with all interested Mallowa landholders during June or July to further improve environmental water management in the Mallowa. Please contact Local Engagement Officer Jane Humphries for further information.*



## Working together & delivering adaptively

This Mallowa Creek event was an excellent example of how environmental water deliveries are carried out adaptively based on local conditions and landholder feedback. Flows were extended into April based on variable early delivery and feedback on vegetation condition. Deliveries ceased in mid-April when impacts increased downstream from flows combining with unforeseen local heavy rainfall.

This flexible approach provides a more positive outcome for landholders while not compromising the overall environmental outcome.

The satellite image below shows the extent of the inundation from water for the environment and local rainfall as seen by the Sentinel-2 satellites on 2 April 2022.

Commonwealth and NSW environmental water managers work in partnership with communities, scientists, government agencies and Traditional Owners to help identify the best environmental water outcomes. The Gwydir Environmental Water Advisory Group provides advice and input, which informs decisions on water use in the Mallowa and elsewhere.

Monitoring is undertaken in conjunction with NSW National Parks and Wildlife Service (NPWS), the NSW Department of Planning & Environment – Environment and Heritage Group (DPE-EHG), the Commonwealth Environmental Water Office (CEWO), and the University of New England (UNE)/2rog (through [Flow MER](#)).



*Mallowa Creek. 24 January 2022. Photo: Jane Humphries, CEWO.*



*Egrets feeding in the lower Mallowa Wetlands. 9 March 2022. (Photo captured during approved scientific monitoring). Photo: Jane Humphries, CEWO.*

Contact the CEWO Local Engagement Officer for further information:

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Sentinel-2 satellite image of Mallowa Creek from the regulator to the Moomin taken on April 2<sup>nd</sup> 2022, showing the inundation extent from environmental flows and local rainfall. Check out <https://projects.users.earthengine.app/view/slideview-mallowa2> for an interactive swipe map (built by the Murray-Darling Basin Authority).

**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.**