

# DPEW Environmental Outcomes Monitoring Program: Northern MDB Vegetation Condition Study

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Surface Water Science Team are collecting data to better understand the response of riparian and floodplain vegetation communities to flow. March - July 2022.

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Under the Department of Planning and Environment - Water (DPEW) Environmental Outcomes Monitoring Program, the DPEW Surface Water Science Team uses science to better understand how environments are supported by water in our rivers and floodplains in partnership with other government agencies and land managers. This helps all of us improve the management of surface water in NSW under the *NSW Water Management Act 2000*.

The team is currently working to improve our understanding of how different water dependent vegetation communities respond to flows. As part of this program, scientists from the Surface Water Science Team are monitoring River Red Gum, Coolibah, River Cooba, Black Box and Lignum communities. The team is measuring vegetation community responses to groundwater levels and surface water flows. Sites are located across the Northern Murray-Darling Basin in the Barwon-Darling, Border Rivers, Gwydir and Namoi catchments.

## Data collected

- Surveys record the number of weed and native plant species present.
- Community condition is scored at each site.
- Photographs of the vegetation and the tree canopy are taken to record change in the condition of the trees over time.
- The size and health of the trees and shrubs will be assessed at each site.
- The size and number of mature, young and juvenile trees are recorded.



## What DPE Water will do with the data

- DPEW will use this information to monitor how vegetation community condition changes over time in response to water management actions delivered under rules in Water Sharing Plans.
- By comparing the data collected from different parts of the Northern MDB, we can determine which groundwater levels and flow conditions provide the best outcomes for vegetation communities. This information will assist in testing the Environmental Watering Requirements of these communities.
- This information helps DPEW to evaluate the effectiveness of rules in Water Sharing plans, and to understand the outcomes for the environment of the implementation of the Murray-Darling Basin Plan.
- Results of the study will be publicly available, and landholders and managers will be able to request a copy of the data collected from their property.

## Who can I contact for more information?

If you have any queries or comments, or to find out more about the project, contact a project lead:

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You can also learn more about our surface water science work on our website:  
<https://water.dpie.nsw.gov.au/science-data-and-modelling/surface-water>