







Murrumbidgee Quarterly Snapshot – March 2025

The Murrumbidgee Flow-MER team has been productive in the field from January to March 2025, conducting monitoring of vegetation, fish, frogs, tadpoles, turtles and waterbirds. We've also been actively engaging with First Nations – the Mutthi Mutthi, Nari Nari and Wiradjuri on a range of activities.

reducing biodiversity, including wetland species that need it to live and breed. Abdullah's project will focus on the extent of encroachment, how encroachment is affected by water for the environment, climate change and other factors, and how it can be managed to minimise its spread into wetland areas.



Snipe Swamp (formerly Cherax Swamp), January 2025 Photo: Fleur Stelling

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Cultural outcomes

Three Mutthi Mutthi members Cheryl, Jedda and Maxine participated in our waterbird surveys in the Western Lakes and North Redbank. The trip was a wonderful opportunity to build and foster relationships between our scientists and the Mutthi Mutthi, collaborating on country and sharing knowledge about monitoring techniques and waterbird species. Our team is always eager to learn more about Country from the Mutthi Mutthi perspective, and the joint participation on these waterbird surveys was a great chance to do so.



We carried out the second vegetation ground surveys from mid to late January, monitoring the vegetation using transects at 18 sites over 6 days. Many of the sites were dry, or with a relatively small amount of water remaining, while others including Bala, Banim, Nap Nap, Yaradda, Narwie West and Steam Engine had more water which the native vegetation was responding to.

Abdullah, one of our team's PhD candidates, recently presented his proposal to study river red gum spread into wetlands in the Murrumbidgee (known as encroachment) using remote sensing. This encroachment harms the wetlands ecosystem by disrupting its natural balance and



Monitoring birds at the Western Lakes with the Mutthi Mutthi, February 2025. Photo: Fleur Stelling

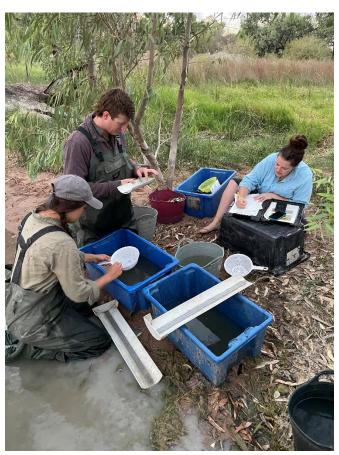


We also continued to work with Nioka, our Cultural advisor and Wiradjuri Aboriginal Liaison Officer to plan community activities including plant propagation; a Bioblitz day to share knowledge about culture, wildlife and plants at Fivebough Swamp; and other opportunities for knowledge exchange.

In late March we worked with Nari Nari rangers to undertake monitoring of lignum stands at Gayini using drones. Three sites were inspected and surveyed using a drone to observe the condition of lignum under different watering regimes.

Native fish

In January our team of 4 field staff surveyed 9 sites over 5 days for fish, frogs, tadpoles and turtles. Surveys targeted wetlands that had received Commonwealth environmental water in the mid and lower Murrumbidgee systems. Highlights included an abundance and diversity of frogs and tadpoles at Steam Engine Swamp, and presence of flat-headed gudgeon at Paika Lake South and Yarradda West. The team are currently analysing the results which will aid in understanding the impact of environmental water.



Field staff monitoring fish at Paika Lake, January 2025.

Photo: Fleur Stelling



Field staff member Audrey with an eastern long necked turtle, Paika Lake, January 2025. Photo: Fleur Stelling



In late February 2025, we conducted our third waterbird survey of the 2024-25 season across 14 sites in the North Redbank and Western Lakes regions. This survey helps us track how the system is responding following Commonwealth environmental water delivery.

Some of the sites that were previously inundated, such as Penarie Creek, Reedbeds Reserve, and Murrundi, had dried out completely. Additionally, many sites in North Redbank, including Narwie West, Forest, Paul Coates, and Glenn Dee, were still dry. However, Tori Lignum Swamp in North Redbank was starting to fill up, and we were excited to see it attracting a variety of waterbirds, including cormorants, egrets, ibis, and ducks during the survey on February 26, 2025.

Paika Lake continued to be a hotspot for waterbirds, with the highest abundance of species recorded across the surveyed sites, just as in previous surveys this season. Hoary-headed grebes and Australian wood ducks were some of the most commonly spotted species. We also had some notable sightings, including Australasian shovelers, Australian shelducks, black-fronted dotterels, and spotless crakes around various sites in the Western Lakes.