

GOL GOL COMMUNITY REFERENCE GROUP - RESTORING

THE GOL GOL WETLANDS

What & Where?

Located on the NSW side of the Murray River, within the Gol Gol settlement, is the Gol Gol Wetlands. This ephemeral system consists of a 1027 hectare (Ha) swamp with a capacity of 10,000 megalitres (ML) and a 494Ha lake with a capacity of 6000ML connected by a 13km creek.

Prior to regulation of the Murray River, the Gol Gol swamp would fill every 3-5 years during periods of flood, via the Gol Gol Creek with overflows into the Gol Gol lake. Once floods receded, and water returned to the Murray, pools were left in the swamp and lake for some time. During these wetting events, the Wetlands supported a diverse range of freshwater flora and fauna, as well as being foraging and breeding sites for many migratory birds listed under the Japan-Australia and China-Australia Migratory Bird Agreements.

To the local community, the wetlands was a recreational hot spot, where children played and families picnicked. The wetlands are also of incredible cultural significance to the local Barkindji and Kureinji Aboriginal people.

Regulation of the Murray introduced major challenges for the Gol Gol wetlands. After the weir at Lock 11 was installed, the river level raised by over 2 metres causing the wetlands to flood all the time, disrupting the natural cycle. Regulators at the Murray, swamp and lake were installed over time, to deliver restricted flows and attempt to restore the natural cycle. Unfortunately, the intense restriction of flows, causing disruption to natural wetting cycles, combined with the use of Gol Gol Creek as a conveyance channel for horticultural irrigation, has left the wetlands in a state of decline.

Community Driven Landcare

The Gol Gol Community Reference Group (GGCRG), a long-time member of Western Landcare NSW Inc., work tirelessly to raise awareness of the Gol Gol wetlands and deliver projects that rehabilitate and restore the ephemeral system. GGCRG's mission statement **'Restoring the Gol Gol Wetlands'**, is a core environmental objective but at all times, the group remain mindful of the community need for irrigation, urban development and cultural uses.

The group was established in 1992, by passionate local champions who lived and worked in and around the wetlands prior to degradation. Early objectives focused on advocacy for better land and resource management of the wetlands. In 2005, GGCRG ran a project in collaboration with Murray Darling Working Wetlands Group and LaTrobe University, **'The Oral History of the Gol Gol Wetlands'**. The project, which culminated in the publication of a book, collated anecdotes from the community about the recreational and cultural use of the lake and swamp in addition to capturing valuable local ecological knowledge and histories. This publication serves as a critical record of the wetlands prior to degradation and helps set realistic restorative targets for future management and rehabilitation of the wetlands.

Current GGCRG Chair, 'Curly Roberts' continues to lead the group in the same vein, constantly advocating and promoting opportunities for community to learn about the wetlands, while forging strong relationship with local, state and federal government agencies. It is thanks to these efforts, that large grants and infrastructure have been secured, making progress on the restorative goals.



Actions & Collaborations

Collaborations between GGCRG and the Department of Climate Change, Energy, the Environment and Water (DCCEEW) supported by University New South Wales Sydney (UNSW), Murray Darling Working Wetlands Group (MDWWG) and Birdlife Mildura have delivered objectives and achieved incredible environmental outcomes at the wetlands in recent years.

GGCRG advocated for Ewater delivery to Lake Gol Gol, during 21-22 Murray flood and intermittently to November 2023. Early drone surveys were conducted by DCCEEW supported by BirdLife Mildura. In a single survey, 62 species and up to 1182 birds were recorded, as well as 6 frog species identified by MDWWG. Common and less common species were recorded, with many waterbirds seen roosting atop the lignum in deeper parts of the wetlands. Since this wetting event GGCRG have worked collaboratively with DCCEEW to secure funding for significant projects but most notably, the civil works construction and installation of a flume gate regulator totalling \$230,000. The infrastructure, with in-built technology will enable Ewater delivery during regulated flows, making future EWater applications more viable. The regulator, installed in December 2024 "is a gamechanger", says Curly Roberts, "enabling greater capacity to manage licensed environmental water delivery when the wetland needs it most".

Since installation, Ewater flows have been secured with the assistance of Mark Henderson - DCCEEW. From 17/3/2025 to 17/06/2025, 1225 ML was delivered which saw the entire southern bowl and most of the northern bowl at Lake Gol Gol covered.



Future Objectives

Lake Gol Gol is a focal point for the community who are keen to see restorative action. It is GGCRG aim to use the capabilities of the flume gate regulator to secure further environmental flows to the lake. Future flows will support the health of existing flora and fauna and promote lignum regeneration in over grazed/degraded areas, which in turn will support future rookeries for waterbird breeding. Some long-term goals, include refencing of the perimeter and exploring opportunities for public access while driving further community engagement and awareness by hosting educational visits and future events such as World Wetlands Day at the lake.

Environmental Outcomes

The Ewater delivered up to November 2023, saw large numbers of waterbirds take residence at Lake Gol Gol, which resulted in the establishment of a multispecies waterbird breeding rookery spanning 14 ha. After ground surveys of the breeding site were conducted, by Dr Jennifer Spencer and Mark Henderson - DCCEEW, noting significant results, follow up drone surveys were conducted by Dr Roxane Francis and Dr Yannick Tidou - UNSW Sydney to identify breeding stage, nest counts and species diversity.

Drone surveys conducted on 16th November 2023 provided high resolution georectified orthomosaic which enabled UNSW Sydney's Emily Garnder to document 547 Australian white ibis nests, 6 straw-necked ibis nests and 5 spoonbill nests. The rookery was concentrated in two locations at the far western and far eastern sections of the southern bowl. This was due to the notable lignum, which benefited from the previous wetting events, enabling suitable nesting habitats for the waterbirds. There were clear differences in the lignum density on either side of a fence running east-west approx. 50m south of rookery locations, likely due to grazing.

After the drying of regime, DCCEEW staff conducted assessments which saw the northern end of the lake and parts of the southern bowl, endure significant lignum regeneration.



Scan the QR code, to check out some amazing photography of Lake Gol Gol, the rookery, flume gate regulator and more...