

A profile of the Darling River system

Life in the landscape



The Darling River is an integral part of the Murray–Darling Basin system. It carries life-giving water across the landscape, sustaining towns, farms and a unique array of native plants and animals.

It is part of a connected system. Events that occur in the Darling River can have a significant impact on the health of the Murray River and its tributaries.

Native fish populations, food webs and water quality across the southern basin are all influenced by the movement of water through the Darling River.

A long and winding river

The Darling River begins between Brewarrina and Bourke, where the Barwon and Culgoa rivers merge. It meanders south-south-west until it

meets the Murray River at Wentworth. It is fed by the rivers and floodplains of the northern Murray–Darling Basin along with the many tributaries along its path.

From its official source to its meeting place with the Murray, the Darling River is 1472 kilometres long.

Most of the water which flows through the Darling River originates in southern Queensland and northern NSW. Rainfall over the floodplains in this region is captured in rivers which merge one by one to form the Darling River. The Darling then continues its journey through semi-arid country toward Menindee. There, a series of floodplain lakes, known as the Menindee Lakes, capture high flows which in turn feed into the Darling River and, during higher flows, the Darling Anabranch.



The Darling River has a rich Aboriginal cultural heritage dating back tens of thousands of years. The region is occupied by a number of Aboriginal nations and is commonly known as 'Barka' by the Barkindji people.

The Menindee Lakes

The Menindee Lakes consist of four main lakes connected to the Darling River and to each other via a series of channels.

The lakes have been adjusted over time to service industry needs with increased storage capacity for downstream users (including Victoria, NSW and SA) and to supply drinking water to the township of Broken Hill.

Lake Cawndilla – the southernmost lake within the Menindee system – connects to the Darling Anabranch via Redbank Creek which feeds Packers Crossing. This is the delivery point for environmental water into the Darling Anabranch.

The upper Menindee Lakes connect with the Lower Darling River via Weir 32. Flows into this section of the river support a range of agricultural and environmental assets.

When flows exceed 12,000 megalitres per day at Weir 32, water can enter the Darling Anabranch from the Darling River via the Darling Anabranch offtake.

Sharing the river resource

The waters of the Darling River are shared for different purposes under regulations in Queensland and NSW and across the partner states of the Murray–Darling Basin. Although the river flow is intermittent, it is important the sharing of this water is sustainable to protect Aboriginal values and maintain a healthy river system, as well as providing water for towns, industry, agriculture and floodplain pastoral enterprises.

Native fish of the Darling River

The Barwon–Darling is a renowned 'hot-spot' for native fish recruitment. The Menindee Lakes system provides important habitat for these young fish to grow. The Lower Darling and Darling Anabranch transport golden perch from Menindee Lakes and Lake Cawndilla to the Murray River where they are able to colonise sites hundreds to thousands of kilometres away.

Reduced flows through the Darling River system mean fewer opportunities for native fish to breed, feed and disperse. Reduced frequency of flows from Lake Cawndilla into the Darling Anabranch will likely mean fewer opportunities for native fish to move into and repopulate the southern connected rivers.

This is where the Department of Planning, Industry and Environment (DPIE) plays an important role by providing flows that help fill some of the gap left by reduced flows in the system. Natural flows in the Barwon–Darling are important to allow fish to recruit (breed), survive and disperse.

River pulses provide breeding cues for golden perch while flows of particular heights provide nesting habitat for Murray cod. Environmental water connects isolated pools where native fish seek refuge during periods of low flow. The movement of water through the river channel and across in-stream benches (raised sections of the river bed) also energises the food web providing food for fish to eat as they grow.

Cover photo: the Darling River meets the Murray, E Wilson/DPIE. Above left to right: Bourke Weir, T Cooke; Darling River, T Cooke; Moon over Darling Anabranch, P Brown.

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