

Protecting and improving our icon sites

The Living Murray was established in 2002 in response to evidence that the health of the River Murray system is in decline. The Living Murray's first stage focuses on improving the environment at six 'icon sites' along the River.

The sites were chosen for their high ecological value—most are listed as internationally significant wetlands under the Ramsar¹ convention—and also their cultural significance to Indigenous people and the broader community.

The Living Murray icon sites are:

- Barmah-Millewa Forest
- Gunbower-Koondrook-Perricoota Forests
- Hattah Lakes
- Chowilla Floodplain, Lindsay-Walpolla Islands
- Lower Lakes, Coorong and Murray Mouth
- River Murray Channel.

The icon sites are important breeding sites for waterbirds and provide habitat for native fish, birds and plants. However, they have suffered ecological decline, and are at risk of further damage due to river regulation and other factors.

The aim of The Living Murray's first stage is to maintain the healthy aspects of the icon sites and begin addressing the decline in other areas. This is part of a larger effort to restore the health of the River Murray.

River restoration

The Living Murray is a partnership of the Australian, New South Wales, Victorian, South Australian and Australian Capital Territory governments. The program's implementation marks the beginning of a practical 'first step' step forward for one of the world's biggest river restoration programs.

Each icon site has an environmental management plan that outlines the desired environmental outcomes. The plans include the volume and timing of environmental water and structural works needed to realise these results. With input from local communities, the plans will be annually updated and made available on The Living Murray website.



Gunbower Forest is Cohuna Secondary College's local icon site. Photo: Sandra Volk

Ecological objectives

The icon site management plans include the following objectives. Each set of objectives is aimed at retaining, restoring or improving the site's ecosystem, habitats, and species of flora and fauna.

Barmah-Millewa Forest

- successful breeding of thousands of colonial waterbirds in at least three years in ten
- healthy vegetation in at least 55% of the area of the forest (including virtually all of the Giant Rush, Moira Grass, and River Red Gum forest)

Gunbower-Koondrook-Perricoota Forests

- increase the area of healthy permanent and semi-permanent wetlands
- restore breeding of colonial waterbirds for at least three years in every ten
- restore resident populations and breeding of indigenous frogs
- increase opportunities for floodplain access for riverine fish including Murray Cod and Silver Perch
- reinstate permanent populations of fish including Murray Hardyhead, gudgeons and Pygmy Perch in wetlands and watercourses throughout the forest.

Hattah Lakes

- restoration of the aquatic vegetation zone in at least 50% of the lakes to increase native fish and bird breeding and survival
- successful breeding events of colonial water birds to at least two years in every ten
- increase population size and breeding events of the endangered Murray Hardyhead, Australian Smelt, Gudgeons and other wetland fish.



The Living Murray's First Step focuses on six sites featuring unique natural values.

Chowilla Floodplain, Lindsay and Wallpolla Islands

- maintain high value wetlands
- retain current area of River Red Gum
- maintain at least 20% of the original area of Black Box vegetation

The Lower Lakes, Coorong and Murray Mouth

- an open Murray Mouth at all times
- more frequent estuarine fish spawning
- enhanced migratory wader bird habitat in the lakes.

River Murray Channel

- increased frequency of higher, ecologically significant flows in spring
- barriers to migration of native fish species between the sea and Hume Dam overcome
- channel stability maintained.

Links between the icon sites

The six icon sites each have specific characteristics that influence the way environmental water flows can be managed to achieve the ecological objectives.

Some flow events have the potential to achieve multiple ecological objectives at the icon sites. Water used for environmental purposes at one site can be used again downstream. Identifying the links between the sites and coordinating environmental water use will allow future environmental managers to take advantage of such flow events.

Other fact sheets in this series

- Our unique icon sites
- Communities and The Living Murray
- Market-based water recovery
- Infrastructure improvements to recover water
- Construction and other activities
- Local government and The Living Murray.

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¹ *Ramsar* is an international treaty that focuses on the conservation of internationally important wetlands. The convention was signed in 1971 at a meeting in the town of Ramsar, in Iran.

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