



Australian Government



MURRAY-DARLING BASIN AUTHORITY

The Living Murray

Planned works in the
Gunbower Forest

THE LIVING MURRAY

The Living Murray is one of Australia's largest river restoration programs, a major step towards ensuring that the Murray is a healthy working river into the future.

Six sites along the Murray River have been identified as priority icon sites, including Gunbower-Koondrook-Perricoota Forests.

Under The Living Murray, a program of works is being developed at each of the icon sites to make sure that available environmental water is used efficiently and ecological benefits are maximised.

The Living Murray is a joint initiative funded by the New South Wales, Victorian, South Australian, Australian Capital Territory and the Commonwealth governments, coordinated by the Murray-Darling Basin Authority.

Gunbower Forest

Gunbower Forest, situated on the Murray River floodplain downstream of Echuca, is an internationally important river red gum wetland complex. Spanning 20,000 hectares, the forest is home to many endangered plants and animals, such as the giant banjo frog and intermediate egret. Gunbower Forest also contains many sites of Indigenous cultural significance and is popular for recreational activities such as kayaking, fishing and bushwalking.

Gunbower Forest relies on regular flooding to maintain a healthy ecological environment. However, river regulation and a drier climate mean that the frequency and duration of flooding of Gunbower Forest has decreased significantly over time.



River red gum on Murray River bank

The forest is now rarely flooded and as a result over 80% of river red gums are now highly stressed or dying.

The future health of Gunbower Forest depends on the development of a water management option capable of delivering managed floods into the forest. This is vital for colonial waterbird and native fish breeding, as well as for the health of flood-dependent species such as iconic river red gums.

The Living Murray proposal for Gunbower Forest will use water management structures, commonly known as 'environmental regulators' to achieve widespread flooding of the forest. The water management structures have the flexibility to be operated under a range of flow scenarios depending on seasonal conditions and available water.

Proposed works

The major works proposed for Gunbower Forest under The Living Murray (see schematic diagram) aim to increase the frequency of flooding to river red gums in the mid-section of the forest by diverting water from Gunbower Creek via an existing irrigation channel into an arm of Spur Creek, which passes close to the forest boundary. The water will be dispersed through the forest to approximately 4,750 hectares of river red gums and wetlands before spilling back into Gunbower Creek near the Koondrook township.

The proposed option will involve the construction of a new environmental regulator and levees on Gunbower Creek, and the widening and deepening of the channel connecting Gunbower Creek to Spur Creek. Erosion control works will also be required at the Spur Creek outfall and in the lower part of the forest where the water returns to Gunbower Creek.



Broad-shelled turtle at Safes Lagoon



Little Reedy Lagoon after receiving water allocation

Work will also be carried out to refurbish three existing regulators, and install an additional environmental regulator in the lower end of the forest. These regulators will work with existing infrastructure to deliver water from Gunbower Creek to 2,500 hectares of permanent and semi-permanent wetlands in the lower and mid-sections of the forest.

The proposed water infrastructure combined has the flexibility to be operated at smaller volumes when less water is available, to take account of seasonal conditions, and to achieve specific ecological objectives. It also allows for a considerable proportion of water to be returned to the Murray River after the required flooding period.



Boats moored on shore

Progress to date

This project is a joint initiative of the North Central Catchment Management Authority, Department of Sustainability and Environment, Murray-Darling Basin Authority, Goulburn-Murray Water and Parks Victoria.

Investigations are currently underway to inform the development of the project, including flora and fauna, hydrological, soil and salinity assessments, and the development of a cultural heritage management plan in consultation with Indigenous stakeholders. Pending the necessary approvals, construction of the wetland regulators in the lower end of the forest is expected to begin in late 2010. Concept designs are currently being prepared for the large-scale river red gum flooding option, with construction expected to begin in 2011.

An ongoing process of community engagement will keep community stakeholders and other interested parties informed and involved in the development of this important project, which will ensure the future health of Gunbower Forest for generations to come.

Further information

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For more information on The Living Murray, visit the Murray-Darling Basin Authority website: www.mdba.gov.au



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Black box trees

Schematic diagram of the proposed Gunbower Forest water management structures

