THE
BARMAH-
MILLEWA
FOREST

significant ecological asset
The Barmah-Millewa Forest is the largest River red gum forest in Australia. It covers approximately 66,000 hectares of floodplain between the townships of Tocumwal, Deniliquin and Echuca. The Barmah-Millewa Forest is recognised nationally and internationally and is protected under migratory bird agreements with China and Japan and the Ramsar Convention on Wetlands.

The forest contains a diverse range of wetland environments and supports large breeding colonies of Australian White and Straw-necked ibis. It provides habitat for the endangered Superb parrot, the Murray River crayfish and many other threatened plant and animal species, including native fish and reptiles.

There are important connections to the Barmah-Millewa Forest amongst Indigenous peoples and the broader community. Consequently, the forest contains a cultural landscape that reflects both Aboriginal and non-Aboriginal activities.

The Barmah-Millewa Forest is downstream of Hume Dam and Yarrawonga Weir, which regulate River Murray flows. As a result, the natural pattern of river flows and flooding in the forest has altered significantly. There is now less variability and an overall reduction in the volume of water.

Storage of catchment runoff in winter and spring has reduced the frequency and extent of natural floods across the floodplain. However, water released for irrigation during the summer months has increased unseasonal flooding of low-lying floodplains.

These changes to the natural wetting and drying cycles of the forest have resulted in the decline of vegetation communities and associated fauna.
Living Murray Ecological Objectives

The Living Murray objective for the Barmah-Millewa Forest is to enhance forest, fish and wildlife values by:
- 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, River red gum forest, and some River red gum woodland).

These are interim objectives, which will need to be assessed and refined, with scope for additional objectives to be identified in the future.

The Asset Environmental Management Plan

The Barmah-Millewa Asset Environmental Management Plan (the Asset Plan) will guide the application of available environmental water in order to achieve the Living Murray ecological objectives. Available environmental water includes the forest’s existing allocation (nominally 100 gigalitres/year of high security and 50 gigalitres/year of low security water) and any new environmental water recovered through the Living Murray and made available to the Barmah-Millewa Asset.

Key Areas of the Plan

The Asset Plan will build on existing plans for the Barmah-Millewa Forest, including the work undertaken on the forest watering program over the past 10 years with considerable input from the Barmah-Millewa Forum. The Asset Plan will be monitored, evaluated and updated on an annual basis, and consists of three main sections.

- Part A—‘The Strategic Plan’ gives a description of the asset, its key values, and the ecological objectives and targets. It also covers water requirements, potential threats and corrective measures, and water management options. The plan includes the management framework as well as the consultation, monitoring and reporting requirements for the next five years to achieve the ecological objectives.

- Part B—‘Annual Operating Plan’ presents the environmental condition of the asset, the priorities for water application and the details of the actions, including the works and measures to be implemented in the given water season to achieve the ecological objectives. It also details the monitoring and reporting activities for the year. The seasonal outlook drives these activities.

- Part C—‘Business Plan’ contains the financial arrangements for achieving the ecological objectives on an annual and long-term basis.

Management Options

Any increased environmental water allocations through the Living Murray will be used to improve the flows to the significant ecological assets, complemented by actions under the Environmental Works and Measures Program, to maximise environmental outcomes.

The existing Environmental Water Allocation (EWA) for the Barmah-Millewa Forest will remain a separate parcel of water, for accounting purposes, from the 500 gigalitres/year to be recovered and applied to the six significant ecological assets. In 2005–2006, the Barmah-Millewa Forest EWA will continue to be managed according to its interim operating rules and triggers, in a manner complementary to achieving the ecological objectives for this asset.
The Asset Plan identifies priority water management areas (for example Kynner Creek) and specific priority sites for watering from environmental flows, when the right triggers are met. Target areas will include Moira grass plains and meadows and waterbird breeding areas.

The Asset Plan includes works funded through the Environmental Works and Measures Program that will improve water management in the forest, including constructing or modifying structures such as regulators. These changes will help achieve ecological outcomes in priority areas within the forest.

**Community Involvement**
Community involvement in the development, implementation and monitoring of plans, works and actions related to the application of water at the Barmah-Millewa Asset, will be via two avenues.

An Asset Consultation Reference Group will provide community advice on refining the ecological objectives, water management and complementary land management activities.

The Asset Plan will take into account Indigenous social, spiritual and customary objectives. Consultation with Indigenous communities will be undertaken in a manner that is appropriate to Indigenous discussion and decision-making processes.

In addition to advice from the Asset Consultation Reference Group, there will be opportunities for broad community input with people and groups that have an interest in water management within the asset.

‘The Asset Plan includes works that will improve water management in the Barmah-Millewa forest.’

Goanna. The Barmah-Millewa Forest provides breeding habitat for a number of species including fish, frogs and reptiles.
The Living Murray

The Living Murray aims to address the decline in the health of the River Murray system that threatens the Basin’s industries, communities, and natural and cultural values.

The Australian, NSW, Victorian, SA and ACT Governments have committed $500 million to achieve the environmental objectives agreed under the Living Murray, through recovered water being built up over a period of five years to an estimated requirement of an average 500 gigalitres* per year.

Water recovery projects will address overallocation of water resources, with the recovered ‘environmental water’ to be used to achieve environmental benefits at the six significant ecological assets.

The ecological assets were chosen because of their importance as breeding sites for waterbirds, habitat for threatened species, and for their social, cultural and heritage significance.

Each asset has an Environmental Management Plan that explores the ecological objectives for the asset and identifies the volume and timing of environmental water and structural works needed to achieve those objectives.

The Living Murray is a partnership of the Australian, NSW, Victorian, SA and ACT Governments.

All Living Murray activities are guided by the Living Murray Business Plan and the Intergovernmental Agreement on Addressing Water Overallocation and Achieving Environmental Objectives in the Murray-Darling Basin.

A Living Murray Environmental Watering Plan provides the framework for making decisions on the volume, timing and frequency of water to be provided to each of the significant ecological assets.

Each asset has an Asset Environmental Management Plan to identify the water required to meet the Living Murray objectives for the asset and to guide the management process.

Overall management of each asset remains the responsibility of the partner Governments through their land management agencies. The Asset Managers for the Barmah-Millewa Significant Ecological Asset are Forests NSW and the Department of Sustainability and Environment, Victoria.

*One gigalitre of water is equal to one billion litres, or approximately the same volume of water as 1000 Olympic size swimming pools.
Copies of the Barmah-Millewa Asset Environmental Management Plan are available for download from www.thelivingmurray.mdbc.gov.au

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