



# Allocation of Water for Environmental Purposes

## (Forestry Policy Statement Number 5. 3)

### Key Statement

Environmental allocations of water from regulated rivers are essential to maintaining the ecological health and functioning of riverine ecosystems and should have equal status to water allocations for agricultural, industrial, domestic and social purposes.

### The Issue

The ecological health of many riverine ecosystems in Australia has diminished as a result of water extraction and regulation of flows.

### Background

The health and functioning of Australia's rivers and associated wetlands and riverine vegetation are largely determined by unique flow and flood regimes. Appropriate flood events in terms of frequency, duration, timing and amount are essential for the regeneration and growth of most floodplain vegetation communities and trigger reproductive cycles for a wide range of associated fauna.

Past management of rivers and streams in Australia has focused on the storage, extraction and delivery of water for agricultural, industrial and domestic purposes.

Changes to the natural flow and flood regimes of rivers as a result of these activities have frequently adversely affected rivers and associated vegetation. Retention or diversion of stream flow changes the frequency, duration and size of flood events. This often results in a reduction in the inundation of wetlands, particularly at times when natural regeneration processes occur. Supplying stored water for irrigation purposes reverses stream-flow seasonality and changes water temperature, depth, current and chemistry. These changes can have profound implications for the ecological integrity of riverine ecosystems and for the long-term social and economic values from these environments.

Water has been made available for environmental purposes to a limited extent from some regulated rivers. Specific allocations of stored water for environmental purposes are now being established for several of the regulated river systems in the Murray-Darling Basin.

Foresters from Victoria and New South Wales have provided significant leadership in raising concerns about the impacts of river regulation on the health of the Barmah-Millewa river red gum forests and developing strategies that recognise the importance of environmental water flows in these forests. This effort led to the development of the Barmah-Millewa Water Management Strategy in 2000.

### Policy

The Institute of Foresters of Australia advocates the provision of environmental water allocations from regulated rivers and for the management of such allocations to ensure the ongoing health and ecological functioning of riverine systems.

The IFA supports and encourages:

- Provision of water for the environment to sustain and where necessary restore ecological processes and biodiversity of water dependent ecosystems;

- Government programmes to acquire water entitlements within fully allocated catchments to enable the provision of environmental water flows;
- Development of water management strategies in management plans for riverine forests; and
- Ongoing research into the management and impacts of environmental water allocations.

The IFA considers that environmental water allocations should:

- Be recognised as vital to the ongoing health and vitality of riverine ecosystems; and
- Have equal status to water allocations for agricultural, industrial, domestic and social purposes.

### **Further Information**

Murray-Darling Basin Commission (2000). *The Barmah-Millewa Forests Water Management Plan*. Murray Darling Basin Commission Canberra ACT 28pp

Murray-Darling Basin Ministerial Council (2002). *The Living Murray: A discussion paper on restoring the health of the River Murray*.

[http://www.mdbc.gov.au/nrm/water\\_issues/environmental\\_flows](http://www.mdbc.gov.au/nrm/water_issues/environmental_flows)

<http://www.environment.gov.au/water/environmental/management/flows.html>

(Policy approved 3 June 2007)  
Institute of Foresters of Australia  
PO Box 7002, Yarralumla ACT 2600  
([www.forestry.org.au](http://www.forestry.org.au))