

Market-based water recovery

The Living Murray program was established in 2002 in response to evidence that the health of the River Murray system was 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.

Permanent, cost-effective recovery of water for the environment is an important step forward in the process of returning the River Murray to a healthy working river.

Achieving water recovery

The Murray-Darling Basin Ministerial Council has decided that an initial 500 GL² of water will be recovered for The Living Murray. This water is to be recovered through a range of proposals. These include infrastructure-based projects, on-farm projects, urban projects, and market-based measures.

Initially, water recovery focused on improving infrastructure. Information on infrastructure projects that contribute to The Living Murray water recovery targets is provided in the *Infrastructure improvements to recover water* fact sheet.

However, it is now apparent that infrastructure project costs are considerably higher than purchasing water from the market. Consequently, the focus of water recovery has expanded to include a broader range of projects, including on-farm efficiency projects and market-based measures in order to meet targets.

This fact sheet covers some of the current market-based measures being considered. More detail can be found in the MDBC report *Issues and options in applying market based measures in the Living Murray First Step* available at:
www.thelivingmurray.mdbc.gov.au/reports



Water recovery helps preserve vital wetland habitat.

Photo: MDBC

Market-based measures

Market-based measures seek to buy water for the environment from current users. There are several types of market-based measures being considered through The Living Murray, including purchase of entitlement, leasebacks, covenants, and options arrangements. A brief description of each of these follows.

Purchase of entitlement

This is the most straightforward market measure and involves purchasing water access entitlements, possibly through a tender. Because entitlements and trade rules already exist, this alternative means that water could be recovered relatively quickly within the context of agreed safeguards.

Leaseback

Leaseback is the purchasing of an entitlement and the 'leasing' of some of the water allocation to other parties. The purchaser owns the leasehold rather than the water access entitlement. For The Living Murray, leasebacks can be developed in two ways:

- environmental leasebacks: where a purchaser buys entitlements on behalf of the government and leases some of the available water to irrigators
- irrigator leasebacks: where irrigators lease some of the available water under their entitlements to buyers who in turn would use the water for environmental purposes.

If the lease was sufficiently long, for example 99 years, the arrangement could be viewed as providing permanent water for environmental purposes.

Covenants

One way to ensure a permanent transfer of water for environmental use is by purchasing an entitlement and placing a covenant or 'condition' on the entitlement. This effectively creates a new entitlement with different water access conditions, and may make a certain amount of water permanently available for the environment.

However, the conditions make covenants a more complex measure to implement than the purchase of entitlements or leaseback measures.

Options arrangements

Options are contractual arrangements between parties that nominate who has the right to water under certain conditions or triggers. Here, the environment is a consumer of water. Unlike a covenant, when a trigger is met, the environment need not necessarily call on and use the water.

There are two types of options: 'call' and 'put'. For 'call' options, the environment buys the right to call on some water, e.g. when the allocation exceeds a threshold. For 'put' options, the environment purchases an entitlement and sells the right to call to consumers. Options represent new market measures and need development before they can be used effectively.

Advantages

Advantages of market-based measures relative to other approaches to water recovery include:

- greater choice and flexibility for irrigators and environmental managers
- water recovery may be achieved at lower cost and faster
- incentives for innovation and efficiency improvement.

Issues being considered

Market-based measures can produce efficiencies in the agricultural sector. However, there may be a perception that the water is being taken from agricultural users, with a negative effect on rural communities. However, there are many changes occurring in rural communities, for example, farmers buying neighbouring properties and a reduction of populations in some areas.

Safeguards already in place would help minimise impacts on irrigation regions. These include the requirement for water purchases for environmental purposes to be made in accordance with existing and future rules for interstate water trade. There is also the rule that the state in which a market measure is proposed must be agreeable to its implementation.

Market-based measures projects

NSW has a water recovery package (Water Recovery Package A) ready for implementation. This involves acquiring parts of water entitlements under varying conditions, and will recover 9 GL at a cost of \$8.9 million.

The Australian, South Australian and NSW governments are currently developing other market-based measure projects in conjunction with potential partners.

Feasibility assessments

The following projects are at the feasibility assessment stage. The outcomes from this stage will determine whether they are worth implementing.

- *Development of On-Farm Incentives and Voluntary Buy-Back Options for Water Recovery* (NSW) involves consultation with irrigator groups and is intended to build on existing research and consider the best mix of market-based measures to serve the environment and its communities
- *Market-based measures for South Australia* will investigate the potential for water recovery from voluntary buy-backs, targeted purchases, options and lease arrangements
- *Investment Triggers for Improved Water Use Efficiency* (SA) will investigate the triggers that lead irrigators to invest in water efficiency measures on-farm.

Implementation

The following water recovery projects are currently being implemented.

- The Australian Government is running a *Water Through Efficiency* tender. Details are available from <http://www.daff.gov.au/watertender>
- South Australia is contributing 13 gigalitres of water previously held on various government water licences to The Living Murray
- NSW has recently completed a call for water tenders in the Murrumbidgee, NSW Murray and Lower Darling catchments. Irrigators holding general security, high security, conveyance and stock access licences were eligible to tender.

A water recovery progress report is available on www.thelivingmurray.mdbc.gov.au

Other fact sheets in this series

- Our unique icon sites
- Protecting and improving the icon sites
- Communities and The Living Murray
- Infrastructure improvements to recover water
- Construction and other activities
- Local government and The Living Murray.

December 2006

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.

² One gigalitre (GL) of water is equal to one billion litres, or approximately the same volume of water as 1000 Olympic-size swimming pools. One megalitre (ML) is equal to one million litres. 1000 megalitres amount to a gigalitre.

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