



Northern Region Sustainable Water Strategy

Fact Sheet 8

Protecting the environment

Northern Victoria's rivers and wetlands attract thousands of visitors each year, including anglers, tourists and people seeking to enjoy the environmental attractions of the region.

Many areas are unique to the region, such as the magnificent river red gum forests that rely on flood events to survive, the Lindsay and Walpolla Islands, which are habitat for the threatened regent parrot, Hattah Lakes which provides a home for hundreds of thousands of birds including endangered species and Barmah-Millewa Forest, the largest river red gum forest in the world.

Many river systems in the north are in poor condition, reeling from the impacts of 12 years of low rainfall and streamflows. They are also struggling to cope with the amount of water extracted each year for consumptive use.

The Victorian Government has many initiatives to improve river health in the north. These include targeted environmental watering, the Northern Victoria Irrigation Renewal Project will ultimately give forty per cent of all water saved from irrigation modernisation to the environment and the Living Murray Initiative. The Strategy builds on these existing commitments, with the aim of increasing environmental flows by about 400 billion litres a year.

Key actions to safeguard our future

- identify water recovery targets to guide the Commonwealth's \$3.1 billion buyback program (see fact sheet 3)
- establish a Victorian Environmental Water Holder to coordinate and prioritise the delivery of environmental water across the region
- identify the need for structural works to improve environmental benefits and reduce the need for environmental water recovery

- improve the efficiency of environmental water use by introducing innovative carryover arrangements and through the reuse of return flows, complementary works and consumptive water being used en route
- establish clear processes for adapting the way we manage rivers and wetlands, including environmental water use, to suit seasonal conditions in a given year
- develop a reasoned and transparent process to change environmental objectives if necessary while ensuring this is not done prematurely.

To water the Lindsay Island floodplain requires 1,000 billion litres of environmental water, but with \$43 million worth of structural works, this could be done with only 92 billion litres – a reduction of more than 90 per cent.

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The Strategy introduces a staged, seasonally adaptive approach to protect our environment from drought – similar to urban water restrictions. In drought years, the focus will be on key refuges, where conditions are suitable for a particular species to survive until conditions improve and population numbers can increase to more sustainable levels. In wetter years, the focus may be on providing overbank flows to floodplain wetlands, and vegetation so that newly-established plants will naturally receive plenty of water.

The Victorian Government will continue to manage adaptively and will use community consultation as the basis for our environmental management objectives, coupled with best-practice science to get the best value from environmental water.

What happens if we do nothing - a future with less water

Without intervention, river and wetland health will worsen with climate change, with potential reductions in environmental flows of up to 84 per cent in some catchments.

Table 8.1 - Guiding annual decisions about rivers and wetlands

	Drought	Dry	Average	Wet to very wet
Short term ecological objectives	Priority sites have avoided irreversible losses and have capacity for recovery	Priority river reaches and wetlands have maintained their basic functions	The ecological health of priority river reaches and wetlands has been maintained or improved	The health and resilience of priority river reaches and wetlands has been improved
Annual Management objectives	<ul style="list-style-type: none"> Avoid critical loss Maintain key refuges Avoid catastrophic events 	<ul style="list-style-type: none"> maintain river functioning with reduced reproductive capacity Maintain key functions of high priority wetlands Manage within dry-spell tolerances 	Improve ecological health and resilience	<ul style="list-style-type: none"> Maximise recruitment opportunities for key river and wetland species Minimise impacts of flooding on human communities Restore key floodplain linkages

Under all climate change scenarios water for the environment would be reduced much more than for consumptive users, because most environmental water comes from unregulated flows, reservoir spills and water above diversion limits (caps). If there is less rainfall and inflows, reservoirs hold less water, capture a greater proportion of inflows and will spill less often.

- a significant decline in native fish population, including some listed as threatened or endangered such as Murray cod
- the degradation and potential loss of internationally recognised Ramsar-listed wetlands, including the Kerang Lakes.

If we do nothing, the impact could mean:

- the disappearance of most areas of river red gum forest, including the River Murray icon sites such as Barmah Forest, Hattah Lakes and Gunbower Forest
- a likely end to large colonial bird breeding events (such as egrets), many of which are protected under international agreements