



Australian Government



The Living Murray

FACT SHEET: ENVIRONMENTAL WATERING 2008–09

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.

THE LIVING MURRAY

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 (MDBA).

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.

2008–09 ENVIRONMENTAL WATERING

In 2008–09, The Living Murray experienced a significant increase in the number and volume of entitlements available to the program. However, inflows into the River Murray were the third–lowest on record. These low inflows resulted in low annual water allocations, with 13.06 GL being allocated to The Living Murray entitlements. As a significant proportion of The Living Murray allocation only became available at the end of the year, this proportion was carried over to 2009–10 in accordance with state carryover rules.

The Environmental Watering Group, comprised of partner government agencies and MDBA staff, prioritised potential watering actions in accordance with The Living Murray Annual Watering Plan 2008–09. Watering actions were identified using the criteria for an extreme dry climate scenario:

- provide refuges to allow recolonisation following drought
- avoid the critical loss of threatened species
- avoid irretrievable damage or catastrophic events.

During 2008–09, the agreed priorities resulted in 6.45 GL of environmental water being delivered to icon sites listed in Figure 1 below.

ECOLOGICAL OUTCOMES

These watering actions aimed to provide the following benefits to icon sites:

- Barmah–Millewa Forest — This watering replenished and reconnected the last remaining freshwater pools in Gulf Creek. These pools provide critical refuge for turtles and native

Figure 1: Water delivery to TLM Icon Sites.

Icon Site	Specific watering site(s)	Volume (GL)	Timing
Barmah–Millewa Forest	Gulf Creek in Barmah Forest	0.30	November 2008
Gunbower–Koondrook–Perricoota Forest	Pollacks Swamp in Perricoota Forest	1.00*	May 2009
Hattah Lakes	Lake Lockie and Lake Little Hattah	1.00*	May–June 2009
Chowilla Floodplain and Lindsay–Wallpolla Islands	Lindsay–Wallpolla Islands	2.00*	May–June 2009
	Critical drought refuges at Chowilla	2.144	December 2008–January 2009 and April–May 2009
Lower Lakes, Coorong and Murray Mouth	Turveys Drain and Boggy Creek	0.007	May–June 2009
Total		6.451	

* State and Commonwealth environmental watering programs also delivered water to these sites.



Environmental watering at Lake Littra.



(Photos: Erin Lenon SAMDB NRM Board)

fish, including the southern pygmy perch. The watering was successful in reconnecting the pools and improving the water quality of the creek. Murray cod, golden perch, Australian smelt and carp gudgeons are now active in the creek. Wetland vegetation responded strongly, and the white-bellied sea eagle and superb parrot were observed in the watered area.

- **Koondrook–Perricoota Forest** — Pollacks Swamp is an important breeding place for waterbirds within the forest. The aim of this watering was to encourage the growth of rushes and reeds for future bird-breeding habitat. The rushes and reeds responded well to the watering. These responses were part of an overall improvement in the environmental health of the area, including waterbird habitat. Several black ducks with chicks were observed during monitoring.
- **Hattah Lakes** — This watering was a joint action with the Commonwealth and Victorian governments. The lakes were watered to avoid the irretrievable loss of iconic river red gums and provide a drought refuge for various species. As a result of the watering, the river red gums fringing the lakes developed extensive new tip growth throughout the canopy, indicating an improvement in health. Monitoring results indicate that the watering has provided an effective drought refuge for waterbirds (30 recorded species) and frogs.
- **Lindsay–Wallpolla** — This joint action with the Commonwealth and Victorian governments provided water to highly stressed river red gums and aimed to maintain drought refuges for birds, frogs and tortoises. Monitoring results

show that 25 waterbird species inhabited the aquatic drought refuges, including a breeding event for over 10 species. Growling grass frogs were recorded, which is believed to be the first recording of the species at this site. River red gums had extensive new tip growth, indicating improving health.

- **Chowilla Floodplain** — Twelve sites within the floodplain received water to maintain the benefits of previous waterings and to prevent the loss of vegetation, including river red gums. Monitoring results indicate that river red gums, lignum and understorey vegetation have all shown an improvement in health. The water also provided drought refuge for waterbirds, and breeding opportunities for frogs. Other fauna benefitted from this water owing to improvements in overall habitat quality across the watering sites.
- **Lower Lakes** — This small but important watering focused on maintaining drought habitat for threatened native fish species, such as the Murray hardyhead and southern pygmy perch. Hardyhead have since been identified at Boggy Creek. Adult populations of both hardyhead and southern pygmy perch have also been detected at Turveys Drain.

FURTHER INFORMATION

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



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