

Gippsland region

Water for the environment enhanced conditions in the Macalister and Thomson rivers for the native tupong fish. The Snowy River saw its largest ever environmental flow delivered – 206,000 megalitres – providing a boost in the productivity of the river and a delight to paddlers.

Water for the environment delivered to the Gippsland region in 2017-18 (megalitres)

💧 Latrobe system	11,224 ML
💧 Thomson system	18,072 ML
💧 Macalister system	15,884 ML

💧 Snowy River	206,000 ML
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Snowy River

Latrobe system

Carp are known as the 'rabbits of the river' due to their prolific breeding and the damage they do to the aquatic environment. By late April, after a hot summer, Sale Common was almost completely dry, apart from a 'big waterhole' where hundreds of carp had congregated.



To protect water quality, Parks Victoria contracted local professional fishermen who caught and removed a whopping 25 tonnes of carp! The recovered carp were then used in a fertiliser trial run by the National Carp Control Program.

Adrian Clements, Environmental Water Officer at the West Gippsland CMA, said the damage that carp do to wetlands can be devastating.

"They compete with native fish and their feeding method in sediment, called 'mumbling', destroys native plants. I was glad when the opportunity arose to provide environmental flows to Sale Common, at a time when it was mostly free of carp."

Removing the carp provided a rare opportunity to increase the environmental outcomes of environmental flows. Beginning in May 2018, West Gippsland CMA provided inflows from the Latrobe River to Sale Common via the wetland regulator. The

regulator contains a carp screen that prevents adult carp from entering the wetland. This allows wetland plants an opportunity to re-establish and grow due to less disturbance from carp.

"We know that large numbers of carp will get back into the wetland during the next flood, and small carp will grow, but by that stage, wetland plants will be better able to withstand the impact of the carp and a healthier wetland will be the result," said Adrian.

Waterway manager:
West Gippsland CMA

Storage manager:
Southern Rural Water

Site	Volume delivered in 2017-18 (ML)
Latrobe River	11,224
Heart Morass	Water was diverted into Heart Morass from the Latrobe River
Sale Common	Water was diverted into Sale Common from the Latrobe River
Dowd Morass	Water was diverted into Dowd Morass from the Latrobe River

| Above: Welcome swallows at Sale Common, by David Stork, West Gippsland CMA

Gippsland

Thomson and Macalister systems

Tupong, a little-known native fish species that spends part of its life in saltwater and part in freshwater, is benefitting from environmental flows in the Thomson and Macalister rivers.



Coordinated environmental flows were delivered to the Macalister and Thomson rivers in spring 2017 to attract juvenile tupong, as well as Australian grayling and bass, into both systems. Following the flow, scientists from the Arthur Rylah Institute recorded the highest catch rates of tupong in the Thomson River in 14 years – an improvement on the high catch rates that were also seen the year before. Environmental flows continue to improve these river systems every year.

The environmental flows were made possible, in part, due to a special management arrangement whereby passing flows were reduced to create water savings in the Thomson system.

Passing flows are low flows released from Thomson Reservoir each day, providing benefit for the environment and for irrigators along the Thomson River. An agreement between the VEWB and Southern Rural Water

allowed a reduction in passing flows in July 2017 so that the VEWB could 'bank' the water that was not released. The arrangement saved 2,500 megalitres of water for the environment that was used in a spring environmental flow to attract tupong into the Thomson River.

"The spring flow requires 3,800 megalitres of water, and so the saved passing flows provided 65 percent of the water for this event," said Stephanie Suter from West Gippsland CMA.

"This enabled us to achieve bigger and better outcomes for native fish than we normally could."



Waterway manager:
West Gippsland CMA

Storage manager:
Melbourne Water,
Southern Rural Water

Site	Volume delivered in 2017–18 (ML)
Thomson River	18,072

Waterway manager:
West Gippsland CMA

Storage manager:
Southern Rural Water

Site	Volume delivered in 2017–18 (ML)
Macalister River	15,884

Above: Macalister River, by West Gippsland CMA
Right: Thomson River, by West Gippsland CMA



Gippsland

Snowy River

The Snowy River received its largest ever volume of environmental flows, with 206,000 megalitres released to benefit the environment – and to the joy of keen paddlers!



The equivalent of 3,200 Olympic swimming pools of water was released from Lake Jindabyne during a single day in November 2017. It was one of five peak flows delivered between June and November 2017.

Wildlife and the community benefitted from the flows. McKillops Bridge became a temporary home to rafts, canoes and kayaks as paddlers keen for adventure navigated the river and its rapids downstream to where the Buchan River joins the Snowy.

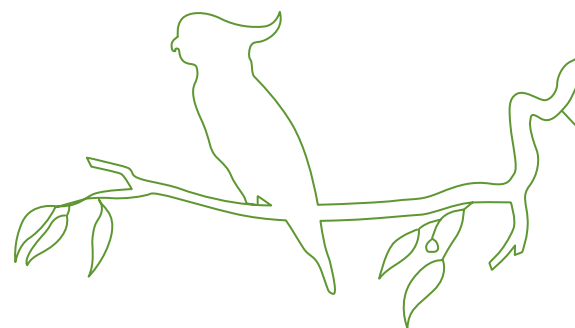
Scientists set out to determine the effect that the flow had on the productivity of the estuary of the Snowy River, hundreds of kilometres downstream of where the flows are released.

Dan Stoessel from the Arthur Rylah Institute said that the size of the environmental flow could only be considered the equivalent of a small fresh in an historical sense, but promisingly, it was associated with a minor increase in productivity, which would likely have been of benefit to animals, such as fish, higher up in the food chain.

Waterway manager:
NSW Department of Primary Industries,
East Gippsland CMA

Storage Manager:
Snowy Hydro Limited

Site	Volume delivered in 2017–18 (ML)
Snowy River	206,000



Above: Paddling on the Snowy River, by East Gippsland CMA
Right: Traditional Owners from Gunditj Mirring, Barengi Gadjin Land Council, Gunaikurnai Land and Waters Aboriginal Corporation and CMA staff, by Minna Tom



* Traditional Owners and catchment managers learning from each other

Traditional Owners and catchment managers in the West Gippsland region are working together to learn from each other about cultural values and how these relate to water for the environment.

The partnership between the Gunaikurnai Land and Waters Aboriginal Corporation (GLaWAC) and West Gippsland CMA has been ongoing for many years, and in 2017-18 they took a big step forward.

Representatives of the two organisations travelled to south-west Victoria to learn from local catchment managers and Traditional Owners – and each other – about practical ways they can work together.

The journey began in Gippsland, with a ‘water for the environment 101’ session that included information from the CMA about environmental flows and a joint discussion of how this relates to cultural values in the Latrobe, Thompson and Macalister rivers which flow through Gunaikurnai country.

After this session, CMA staff and GLaWAC representatives travelled to south-west Victoria to meet with Barengi Gadjin and Gunditj Mirring Traditional Owners and staff from Glenelg Hopkins CMA, to find

out how they have been working together through the Glenelg River Towards Cultural Flows project.

As they travelled down the Glenelg River, the Traditional Owners and catchment managers from Gippsland learnt from their western Victorian counterparts about their world leading project, and how it has been integrating Aboriginal values and traditional knowledge into environmental water planning and delivery. It has also given Traditional Owners the opportunity to develop their knowledge and capacity to participate in water management.

The CMA and GLaWAC representatives returned to Gippsland enthused about how they can achieve these goals in their river systems. This is already bearing fruit in the second half of 2018, as the Department of Environment, Land, Water and Planning is supporting GLaWAC to do an Aboriginal Waterways Assessment in the Latrobe River, its tributaries and the lower Latrobe wetlands. This is part of the Latrobe Valley Rehabilitation Strategy. This work will also inform the review of the flow recommendations for the system – a project being run by West Gippsland CMA.

