

Western region

After a relatively wet spring in 2016, climate conditions in the Western region of Victoria returned to dry for 2017-18. Water for the environment was critical for providing habitat and food for native fish and animals such as platypus and waterbirds. It also boosted events in local townships, including fishing competitions along the Wimmera River at Horsham, Dimboola and Jeparit, and the annual Johnny Mullagh cricket match at Harrow on the Glenelg River.

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

💧 Glenelg system	11,000 ML
💧 Wimmera system	16,347 ML
💧 Wimmera-Mallee wetlands	292 ML



Glenelg system

In the Grampians-Gariwerd National Park, water for the environment was introduced to an ecologically important section of the upper Glenelg River for the first time ever, with benefits tipped to flow to plants and animals.



Bryce Morden, Water Resources Manager at Glenelg Hopkins CMA, said results were pleasing and would help inform future management of environmental flows.

“We wanted to test whether water could be moved from Moora Moora Reservoir, built in the 1930s, back to the river, with a view to enhance water quality, habitat and conditions for plants and animals downstream,” he said.

“Following the event, we now know these old diversion channels and structures can be used to deliver small amounts of water for the environment should we need to do so in the future.”

The management agency of Grampians National Park, Parks Victoria, was pleased with the success of the event. Ranger Team Leader, Mike Stevens, said improved river flows would have broad benefits.

“Reinstating environmental flows to the upper Glenelg River improves the condition of the entire floodplain, a

system that provides critical habitat not just for aquatic species such as fish and yabbies but also endangered animals like the long-nosed potoroo, southern brown bandicoot and heath mouse,” he said.

Waterway manager:
Glenelg Hopkins CMA

Storage manager:
Grampians Wimmera Mallee Water

Site	Volume delivered in 2017–18 (ML)
Glenelg River	11,000

*** Glenelg River:** *The Glenelg River, known as ‘Bochara,’ in the Dhawurd Wurrung language, features in creation stories from the south-west Victoria region and is a traditional boundary between the Gunditjmara, Boandik and Jadawadjali people.*

Source: Glenelg Hopkins CMA

Western

Wimmera system

A small and fragile platypus population in western Victoria is re-establishing itself in new areas of the Wimmera River system.

Water samples from the MacKenzie River, downstream of the Grampians-Gariwerd National Park, have returned strong platypus environmental DNA (eDNA) signals in areas where researchers haven't recorded the elusive mammals since the Millennium Drought.

The eDNA findings picked up genetic material such as platypus skin cells in the water and confirmed community sightings on the national database platypusSPOT. They also followed the discovery of an adult male in the MacKenzie River at Zumsteins during trapping surveys in the national park in April 2018, which the community has named Pete.

Wimmera CMA chief executive David Brennan says environmental flows play an important role in maintaining platypus habitat, particularly in dry times.

"Environmental flows are critical for the lower section of the MacKenzie River beyond the Grampians National Park during dry conditions. This discovery indicates the river system is providing sufficient food and the high-quality habitat needed to sustain this platypus population."

Wildlife ecologist Josh Griffiths first trialled eDNA testing for platypus in the Wimmera in 2015, and analyses water samples for cellular traces of



platypus and other species as part of ongoing monitoring to measure waterway condition and outcomes from environmental flows.

"The eDNA test is highly sensitive and is a much more efficient method for discovering platypus. It's noticeable every time I come here that the quality of habitat in the river is improving, which is allowing this platypus population to expand downstream."

Waterway manager:
Wimmera CMA

Storage manager:
Grampians Wimmera Mallee Water

Site	Volume delivered in 2017-18 (ML)
Wimmera River	8,641
MacKenzie River and Burnt Creek	6,403
Lower Mount William Creek	1,303

Above: Josh Griffiths and John Pye undertaking platypus surveys at the MacKenzie River, by Wimmera CMA

Wimmera-Mallee wetlands

Eagle-eyed residents are honing their birdwatching and bird photography skills with a Wimmera-Mallee wetlands project.

The community monitoring program for north-east Wimmera and southern Mallee wetlands is monitoring bird activity at wetlands which receive water for the environment from the Wimmera-Mallee Pipeline.

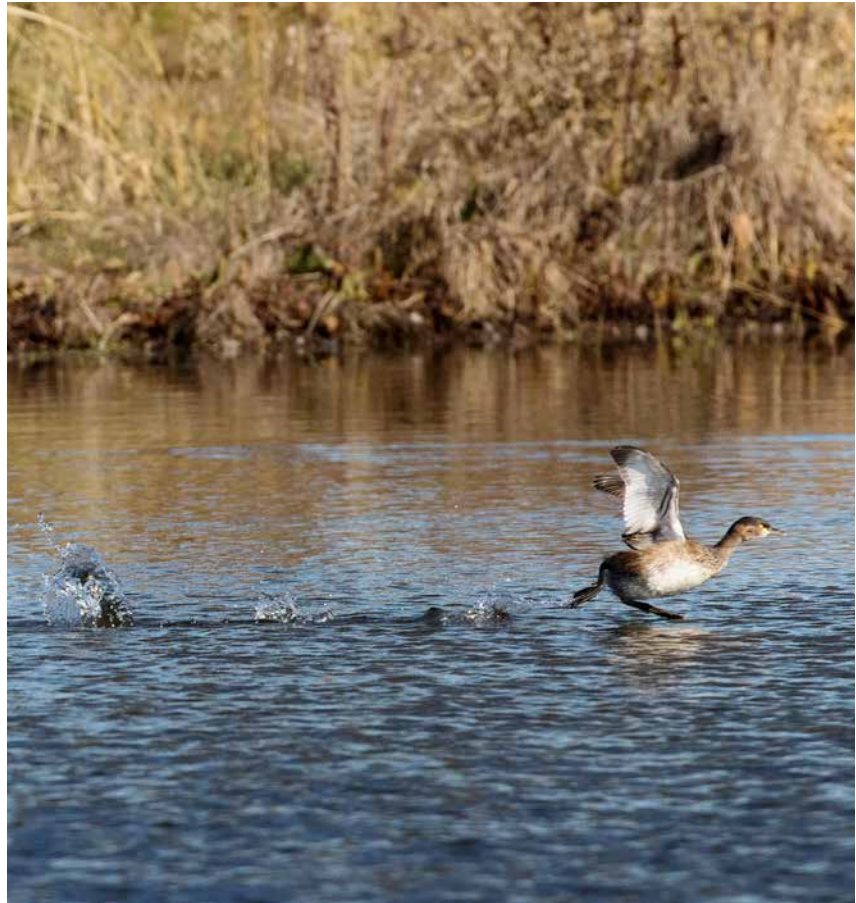
In response to environmental watering, the community has reported an influx of Australasian grebes, white-necked herons and Pacific black ducks.

Wimmera CMA chief executive David Brennan said since the pipeline project was completed, wetlands in the north-east Wimmera have become vitally important for providing surface water in areas where channel-fed dams used to proliferate.

“The response from birds, frogs and plants to regular environmental watering has been significant. Observation from community members are helping us greatly with long-term planning for environmental water.”

Waterway manager:
Wimmera, North Central and Mallee CMAs

Storage manager:
Grampians Wimmera Mallee Water



Site	Volume delivered in 2017-18 (ML)
Wimmera -Mallee wetlands (various sites)	292

| Above: Australasian grebe at Crow Swamp, by Jenny Stephens

community highlights

* River connects communities

Angling and football identity Rex Hunt, who is a regular visitor to Wimmera waterways, said “Just like country footy and netball clubs, the Wimmera River connects communities and towns, helps them prosper and makes them great places to visit and live.”

A study into the value of water for the environment revealed the Wimmera River contributed \$4.75 million to the economy in 2017, with fishing competitions providing major boosts – events which directly benefit from water for the environment.

The study found that Horsham Fishing Competition on the Labour Day long weekend and

Jeparit’s Easter fishing event result in significant expenditure and reports of increased sales by many businesses.

Brett Ireland, from the Jeparit Angling Club, said environmental flows mean the river, and their town, survives.

“The Jeparit Fishing Comp is vital to our town and businesses. The

flows enable us to host a successful event, and the town gets quite busy and everyone benefits.”

Wimmera angler Chris Spence said the region sees some great benefits for the anglers and overall health of the river as a result of water for the environment.

“We’ve seen firsthand what these environmental flows do when timed right. They’re an absolute bonus to anglers. It keeps the water moving, keeps the river free of salt and, when flows are on, we see a spark in activity as anglers can explore more water,” he said.



Left: Michael and Tanner Stasinowsky at the 2018 Horsham Fishing Competition, by Paul Carracher, The Weekly Advertiser. Top right: eDNA collection at Glenelg River with Budj Bim rangers, by Glenelg Hopkins CMA. Bottom right: Platypus monitoring, by Glenelg Hopkins CMA.

* Searching for platypus using eDNA

Budj Bim rangers, a wildlife ecologist and Glenelg Hopkins CMA have undertaken detective work trawling for traces of environmental DNA (eDNA) along the Glenelg River in pursuit of an elusive character – the iconic platypus.

While there had been reports from locals that platypus thrive in the Glenelg River, scientific surveys to confirm the number and distribution of the species had never been done.

Monitoring teams collected water samples from the river between Connewirricoo near Harrow and Rocklands Reservoir in search of traces of the platypus. Scientists analyse the samples for cellular traces of platypus DNA left in the environment through shed genetic material like hair, skin or faeces.

Results from this inaugural survey for the Glenelg River will help to ascertain the whereabouts of platypus, delivering a better understanding of its distribution.

Glenelg Hopkins CMA's Debbie Dalziel said objectives of the platypus monitoring project were two-fold.

"We want to develop a better understanding of platypus distribution in the Glenelg, while also providing opportunities for Aboriginal rangers, CMA staff and scientists to come together and share knowledge of platypus



requirements, monitoring techniques and environmental management skills.

"Ultimately, this project gives project participants and the wider community an understanding of the benefits of a healthy river system, including the contribution of environmental flows from Rocklands Reservoir."

