

# Gunbower Forest lower floodplain

## Water for the Environment

### Winter/spring 2023



## FAQs

### A special place

As an internationally important wetland, Gunbower Forest includes one of the most significant remaining areas of river red gum forest in Australia.

It is a special place for locals, Traditional Owners, and visitors and valued for its recreational, social, cultural, and environmental benefits.



Gunbower Forest is also listed under the Ramsar Convention as being an internationally important wetland, due to its ability to support critical stages of animals in their life cycles. During last year's floods, Gunbower Forest did this by providing a home for thousands of waterbirds.

Across our region, more than 40,000 waterbirds were recorded, with significant breeding occurring not only in Gunbower Forest but at a range of wetlands, lakes, and rivers.

We have an opportunity, for the first time, to deliver water for the environment to ensure the high-quality habitat in Gunbower Forest is available to help young birds survive to adulthood.

### Why can't Mother Nature take care of the forest?

Murray River regulation and a changing climate are just two examples of what's impacting our natural environment, including the Gunbower Forest floodplain.

Population growth has also resulted in an increased demand on available water, and while modernised farming practices have created productive, prosperous, and vibrant farming and urban communities, as a result the forest floodplain no longer receives enough water.

### Why does Gunbower Forest floodplain receive water for the environment?

The forest no longer floods as often, or for as long, as it used to. For example, without Murray River regulation, rainfall and streamflow records indicate last year's floods would have flowed onto the floodplain months earlier than they did.

Before regulation, water flowed onto the floodplain every one to two years, up to 7 in every 10 on average.

Over the past 20 years it has been half that, which means there is still a major deficit.

So, while last year's floods were beneficial in places, we know those benefits won't last, without follow-up flows.

Large-scale floods also flowed through Gunbower Forest in 2010-11 and 2012 and we saw how quickly their condition deteriorated without follow-up water in the following years. We don't want that to happen this time, and it doesn't need to.

## Why water this year?

We have an opportunity for the first time in Gunbower Forest to build on the significant regional waterbird breeding activity by providing a follow-up flow to some of the forest, and help juvenile birds survive to adulthood.

We have a chance to lock in the gains of last year's floods, help protect vulnerable waterbirds, and prepare the forest, particularly the iconic river redgums, for the impacts of climate change.



Despite last year's unregulated flooding, there has been little rain since December 2022. We have the opportunity to deliver much-needed water to a rapidly drying landscape.

Delivering water for the environment in winter and spring this year will help build resilience in the Gunbower Forest floodplain by enabling plants and animals to complete their lifecycles and survive in the face of a changing climate.

The plants under the red gums are suffering as they are missing the small and medium floods.

During the long periods of dry between big floods, the understory dries right back. Instead of sedges and rushes protecting the soil and providing food and habitat for all the critters, we just have leaf litter.

A healthy forest should have more than just trees in the dry times.

## When will the watering start and for how long?

Water for the environment will begin to flow through the Hipwell Road channel from mid-June to early November.

Water levels across the forest will gradually recede over late spring and summer.

## How much water will be delivered to the forest?

Under the plan, up to 74 GL will target the full environmental water footprint. The total volume delivered will depend on how much water for the environment is available once irrigation demand is met over spring.

About 40 per cent of the water put on the floodplain is expected to flow back out to the Murray River, taking with it some of the best fish food in the Basin.

## Will irrigation supplies be impacted?

Water supply to irrigators accessing Gunbower Creek is a priority and the environmental delivery will not impact this supply. The delivery of water for the environment happens once irrigation orders have been met.

## How much of the forest will be watered?

The flow is targeting about 4,500 hectares, or 23 per cent, of the Gunbower Forest lower floodplain.

## Can I still access the forest during watering?

Yes. There are plenty of accessible places to see the difference water for the environment makes across the watered section.

During the watering, some access tracks will be closed to protect the tracks and for visitor safety.

There will be many areas within the forest, along the Murray River and Gunbower Creek, for visitors to enjoy bush walking, kayaking, fishing, camping, or bird watching.



## For more information

Telephone 03 5448 7124 or visit [www.nccma.vic.gov.au](http://www.nccma.vic.gov.au)



## Where can I find information about track access during the watering?

Forest access tracks will be monitored.

Volunteers at the Gateway to Gannawarra Visitor Centre in Cohuna will know about track closures and spots to visit during the watering so forest users can plan their trip as early as possible. Or you can visit:

- DEECA  
<https://www.facebook.com/DEECALoddonMallee> or phone 136 186.
- Parks Victoria: [www.parks.vic.gov.au](http://www.parks.vic.gov.au) or call 13 19 63 for information on Gunbower National Park.
- Gateway to Gannawarra Visitor Centre: 90 King George Street, Cohuna, (03) 5456 2047

## Will the watering cause a toxic blackwater event?

Regular water for the environment deliveries helps stop the build-up of leaf litter on a floodplain.

There may be pockets of water on the floodplain that will be dark but not toxic. This carbon-rich water is full of nutrients, vital food for Australia's native fish and will make its way into the Murray River and Gunbower Creek.

Toxic blackwater is caused when leaf litter is left to build up on a floodplain or riverbank and is flushed into a waterway during the warmer months.

Hot weather helps break down the litter and chews up the oxygen in the water. Most of the water for the environment will be delivered in the cooler months of winter and spring to mitigate against the risk of toxic blackwater forming.

The 2022 floods also washed a lot of the forest's leaf litter away.

CMA staff will monitor dissolved oxygen levels in the outlets and the creek to ensure they remain healthy.

## What happens if a natural flood occurs during the watering?

Flows through the Hipwell Road Channel can be modified or halted to accommodate natural flooding. Inflows through the channel may be used in conjunction with natural inflows to the forest, to extend the duration.

## How is available water shared between users?

Water for the environment is water legally set aside for the environment and used to maintain or improve river and wetland health with as little impact as possible on forest users.

Environmental water entitlements are subject to seasonal allocations just like other users.

Environmental water holders include Victorian, Commonwealth and Living Murray entitlements.

## How are carp being managed?

There are potential operations and actions we can use to minimise carp movement and spawning activity during the operation of the Hipwell channel.

One is to minimise or stop outflows from Three Corner Hole once water temperatures reach the carp spawning threshold of 16°C.

This involves decreasing inflows through the Hipwell Rd channel early to reduce outflow volumes. This will ensure both trees and understorey vegetation benefit from the environmental water while removing a key carp movement pathway between the floodplain, Gunbower Creek and the Murray River.

We may also monitor fish movement through the Koondrook fishway. The fishway may also be closed to ensure minimal carp numbers can move onto the creek.

The Hipwell Rd channel fishlock will be closed for the watering to minimise carp movement.

We have drawn the wetlands down as far as possible in the lead up to the watering, reducing the amount of habitat available for them. This has made it easier for waterbirds to feast on carp.

By starting the watering in winter, water temperatures will be cooler, lessening the chance of significant carp breeding.

We understand there will still be some carp breeding on the floodplain. However, not to the same extent as was seen during the 2022 natural flooding.

Carp benefit much more from natural flooding events, than small, targeted environmental watering.

## For more information

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Figure 1: Map of inundation area and track closures.

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