Gunbower Forest gets a good drink

Forest has been given a drink with water for the said. environment.

"This year's watering is part of a long-term strategy to restore the health of the forest, within the restrictions of allocations and current infrastructure and capacity, and help build resilience for future dry years while water is availahle" North Central Catchment Management Authority (CMA) Project Delivery Executive Manager Tim Shanahan said.

Mr Shanahan said river regulation had altered the frequency of water going into the forest, particularly during dry years. Parts of the forest have been inundated only eight times in the past 22 years, and only a relatively small proportion of the forest can be watered with our infrastructure.

"Interestingly, if all the regulating structures in streams were removed, Gunbower Forest would have received water in seven of the 10 years of the recent Millennium Drought, despite the dry," he said.

Mr Shanahan said returning any waterway or wetland in any modified system back to 'natural flows' is impossible.

"The aim of water for the environment is to deliver water in a way that protects and repairs the remaining ecosystems, build resilience for

This winter, about 3,000 hectares of Gunbower future dry years, and to do it efficiently," he

"A lot of people don't realise that the water coming into Gunbower Forest is actually water that has been used for healthy river flows down the Campaspe and Goulburn rivers.

"From the rivers upstream, the water then passes through Gunbower Forest filling up its wetlands. The water that exits the forest continues its journey down the Murray River. It may be used again multiple times by the environment as it travels downstream, in the river channel itself and at other floodplain sites such as the Lindsay, Mulcra and Wallpolla Islands, the Lower Lakes and eventually the Coorong."

Mr Shanahan said Gunbower Forest is also a tourist hotspot, providing economic benefits for the region's towns and businesses.

"A healthy environment underpins healthy communities," he said. "Tourism in the region is worth \$503 million, up \$100 million since the drought, and Gunbower Forest is a key part of that.

"We are working hard to preserve the forest for the future social and economic benefit of our children and grandchildren."



Reedy Lagoon before and after receiving water for the environment this winter (photo: North Central CMA)

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The North Central Catchment Manaaement Authority acknowledges Aboriginal Traditional Owners within the region, their rich culture and iritual connection to Country. We also recoanise and acknowledge the contribution

and interest of Aboriginal people and organisations in land and natural resource management

Flooding for Life



NORTH CENTRAL Catchment Management Authority

Connecting Rivers, Landscapes, People

Welcome to the 21st edition of the Flooding for Life community newsletter. This edition features Barapa Barapa canoe-making, the Cohuna Channel fish screen, Gunbower Creek carbon trial and update on the delivery of water for the envionment to Gunbower Forest.



After watering Gunbower Forest this winter it will come alive as the weather warms up, and there are lots of ways to get out and enjoy it! Reedy Lagoon is a favourite spot that provides habitat for many waterbirds species, so bring your camera and keep an eye out for courting behaviour as birds begin their breeding activities.

By water, kayaking or canoeing is a great way to experience Gunbower Forest and Creek. It can be quite tricky to navigate the forest and there is patchy mobile reception, so if you are planning a trip it is recommended that you contact the Cohuna Visitor Centre or tour operators for more information.

If you're planning on camping in the forest, all camping areas remain open along the lower Gunbower Creek with access via Koondrook Track. You can reach the Murray River camping areas via River Track from Koondrook or Breretons Road. River Track is currently closed near Milverton Bend and McClure Bend, but brief detours with a four-weel drive will put you back on the main track.

The peak period for forest activity is fast approaching so we hope you are able to get out and see things unfold. If you see something interesting and would like to share it, please tag North Central CMA on Facebook and Twitter so we can spread the special event!



COMMUNITY **NEWSLETTER**

Edition 21: Winter 2018

Where can you see the water work it's magic?

Gunbower Forest by kayak during environmental watering this winter (photo: Murray River Tours)

Feeding the fishes

When leaves, bark and grass on the forest floor are flooded, carbon and nutrients leach into the water in the same way tea leaches from tea leaves. This 'gum leaf tea' can stimulate fish breeding and food production in our wetlands and waterways. Return of this water is an important component of water for the environment at Gunbower Forest.

During July and August, a trial project was undertaken to return small volumes of floodwater from Gunbower Forest into Gunbower Creek, and investigate how this benefits the food chain.



Forest water entering Gunbower Creek (photo: NCCMA)

To do this, the Yarran Creek regulator was opened for short periods, creating a connection which allowed water to flow from the forest to the creek. Water samples were taken and will be tested to measure the amount of carbon and nutrients returned from the forest to the creek.

This project will improve our ability to manage future connection flows for the benefit of the fish in Gunbower Creek, while maintaining water quality – particularly dissolved oxygen levels – within a safe range.

During the trial, we continuously monitored water quality and dissolved oxygen levels remained high in the creek.



Processing water samples from the creek (photo: NCCMA)

Flooding for Life

Cohuna irrigation screen

Australia's first Irrigation Diversion Screen was recently been installed on the Cohuna Channel!



Screen cone being lowered into the creek (Photo: NCCMA)

"Irrigation channels are a one-way-trip for native fish," Native Fish Recovery Program Project Manager Nicole Bullen said. "When fish become stuck in channels they have no passage to return to natural waterways and are lost from the breeding population. Eggs and larvae passively drift into channels, too. Irrigation channels offer relatively poor habitat and fish are exposed to high levels of predation, particularly when channels are drawn down over winter."



Screen located infront of Cohuna Channel (Photo: NCCMA)

The screen consists of a series of four 4.2-metre diameter stainless steel cones which span the channel entrance. A log boom in front of the screens diverts buoyant fish eggs and larvae away from the channel entrance and downstream into Gunbower Creek. Each cone is self-cleaning, with a hydraulic motor powering rotating wire brushes that clean aquatic plant fragments and other debris that may otherwise build up and blind the screen, so that water can be reliably delivered to irrigators.

"Over the coming months, we will be monitoring the effectiveness of the screens in preventing fish movement into the channel."

Bringing Barapa culture to life at Gunbower

Scar trees were once common in Gunbower Forest, evidence of a cultural practice spanning tens of thousands of years. Large sections of bark were expertly removed from towering gum trees and used to make containers or canoes.

However, with forestry practices taking out many of these majestic trees and the many challenges to Traditional Owners practising their culture, scar trees have become a thing of the past.

That was until last month when the success of a very special project was celebrated.



Preparing a traditional bark canoe (photo: Adrian Martins)

The Barapa Water for Country project is partnership project between the North Central Catchment Management Authority (CMA) and Barapa Barapa Traditional Owners.

Gateway Centre display

The Gateway to Gannawarra Visitors Centre in Cohuna will be home to a new display featuring Gunbower Forest these spring school holidays. The interactive display will showcase some of the fascinating aspects of this year's watering event, including a variety of wetland plants and examples of how these are used by the Barapa Barapa Traditional Owners of Gunbower Forest to make beautiful and practical items. There is something on show for all ages, so pop into the Gateway Centre these school holidays (22 September to 7 October) to have a look. "The project supports Barapa custodians' capacity to take part in decision making about water management, and recognises and integrates their rights, needs, priorities and values in water management," North Central CMA Project Officer Patrick Fagan said.

"To celebrate the success of the project we gained a permit to make a traditional bark canoe, involving the Barapa community to continue practicing culture on Country and create a scar tree that will tell a story for future generations," Mr Fagan said.

"To be able to support the Barapa Barapa people in practicing their culture like this is significant, and it is historical."



Barapa scar tree at Gunbower Forest (photo: Adrian Martins)

Look out for turtles on our roads!

With the weather warmng up, freshwater turtles are now on the move. Sadly, many get hit by cars while they're crossing roads, and this is one factor contributing to their decline. If you come across a turtle, please move it safely to the side and enter your sighting in the **TurtleSAT** app or at <u>www.turtlesat.org.au</u>. This website assists researchers in better understanding turtle populations and protecting them.

