

Fish, fish and more fish!

Fish monitoring is a major focus of the North Central CMA's Gunbower Forest program.

Over the past few months a team of fish ecologists has been monitoring how native and introduced fish have responded to the environmental watering event.

Monitoring has focused on how fish move on and off the floodplain and how effective the new fishways are at Hipwell Road.

North Central CMA project officer Kathryn Stanislawski said "We have seen a great response from native small bodied fish, especially Australian Smelt and Carp Gudgeons. Our monitoring has indicated that these fish bred in the thousands on the floodplain during the watering event."

An important component of the operation of the Hipwell Road Channel is the fish exit strategy, where inflows through the channel are reduced quickly, to create a sharp drop in the forest, cueing the fish to exit.

A specially designed cage is used to trap fish moving through the fish lock. Small native fish moved on mass out of the forest, using the fishlock on the Hipwell Road channel to get into Gunbower Creek.

"In a two hour sample approximately 14,000 fish moved through the fishlock including 8,000 Australian Smelt, 6,000 Carp Gudgeons, one Bony Herring, 16 Carp and one Brown Trout. It was amazing to see that fish were moving out of the forest" Kathryn said.

Carp have responded to the environmental watering as they would during a natural flood event by breeding on the floodplain. "Towards the end of the watering the number of carp moving through the fishlock started to increase significantly.

"To reduce the number of young carp moving into Gunbower Creek the fishlock was turned off during the day but turned back on at night to allow native fish to move through.



Sample of Australian Smelt caught exiting the forest in a twenty minute cycle of the Hipwell Road fishlock.

"Carp is an on-going challenge for Gunbower Forest and other sites across the Murray-Darling Basin.

"We will continue to work with our fish ecologists to determine the best way to ensure our environmental watering assists to recover our native fish populations and manage carp into the future," Kathryn said.



Claire Gaiter with her winning catch from Catch A Carp day hosted by the CMA as part of the Cohuna Festival on 2 November



Cage attached to the exit gate of the Hipwell Road fishlock used to monitor fish moving out of the forest

This newsletter is made possible by funding provided by The Living Murray initiative of the Murray-Darling Basin Authority.

This publication may be of assistance to you, but the North Central Catchment Management Authority and its employees do not guarantee that the publication is without flaw of any kind, or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on information in this publication.

The Living Murray is a joint initiative funded by the New South Wales, Victorian, South Australian, Australian Capital Territory and Commonwealth governments, coordinated by the Murray-Darling Basin Authority.



Welcome to the summer edition of the 'Flooding for Life' community newsletter.

We've been busy over recent months delivering environmental water to Gunbower Forest via the Hipwell Road infrastructure. Our monitoring indicates the forest's ecosystem is responding well to the environmental water event. Please read on to learn more...

On behalf of the team, we wish you a safe and happy Christmas.

Environmental watering concludes for 2014

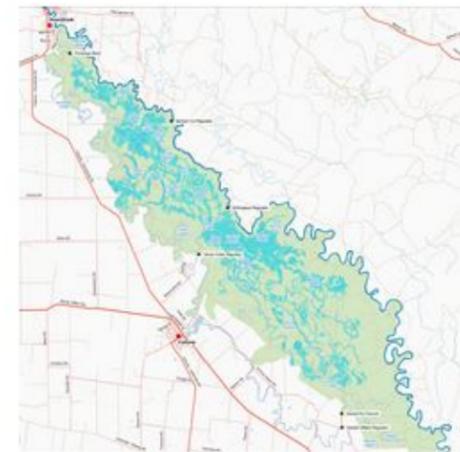
Inflows through the Hipwell Road Channel ceased in early December, signaling the end of the Gunbower Forest environmental watering.

Environmental water was delivered into the forest for over 190 days using the new regulators and channel. The event aimed to test the new structures and improve the health of the forests River Red Gums and wetlands.

A total of 98.5 gigalitres was delivered into the forest, with 45 gigalitres returning to the Murray River.

Goulburn-Murray Water Operations Manager, Ross Stanton said, "The new structures and the channel performed well throughout the event. The new fishlock at Hipwell Road is a first for the Torrumbarry Irrigation District.

"The fishlock and the other structures have been integrated into our automated management system allowing us to keep a close eye on how the event is going and also provides the CMA with regular up-to-date information."



Maximum inundation extent for the 2014 environmental watering event

Over 3,750 hectares of the forest has been flooded, comprising approximately 1,180 hectares of wetlands and approximately 2,575 hectares of River Red Gums.



Wavy Marshwort in flower, Reedy Lagoon inlet

The maximum inflow through the channel was 750ML/d. "The inflow rate is lower than we expected, however we are still very happy with the area of forest we were able to flood" said North Central CMA Gunbower Forest project manager Anna Chatfield.

Water is continuing to drain slowly from the forest through regulators on the Murray River, Shillinglaws and Barham Cut.

Water across the forest will continue to recede as it seeps into the ground and evaporates over the summer months but will remain in low spots across the forest and in the wetlands for many months to come.

Anna explains, "In some parts of the forest the water remaining may resemble the colour of 'gum leaf tea'. This water is full of macro invertebrates (water bugs) and nutrients. These macro invertebrates will be eaten by ducks and frogs and the nutrients will be taken up by aquatic plants".

CONTACT

North Central CMA
Reception
Ph: 03 5448 7124

Anna Chatfield
Gunbower Forest project manager
Email:
anna.chatfield@nccma.vic.gov.au

Amy Russell
Gunbower Forest project officer
Email:
amy.russell@nccma.vic.gov.au



Traditional owners welcome spring to Gunbower

Spring was welcomed by members of the local Aboriginal community with a family day on Saturday 25 October at Koondrook.

"Spring was a time of plenty for our ancestors" said Barapa Barapa Elder Uncle Ron Galway who opened the event with a smoking ceremony. "People would collect from the many food sources of the forest".

The day included a cruise on the Gunbower Creek aboard the new Wetlander to see the recent environmental watering. Wetlander chef Mario served a lunch of kangaroo prepared four ways.

North Central CMA project officer Robyn McKay said "the day was very successful. The kids were delighted to spot wildlife including kingfishers,

turtles and spoonbills".

The event was organised by the North Central CMA's Barapa Barapa Cultural Flows project.



Stanley Yates Ward and Tamia Rodd show off their paintings

For the budding photographers

The Flooding for Life Project is offering a prize to the first person to visit each of the recently installed Fluker Posts and email their photos to the Fluker Post Project.

We've already received several photos but would love to see many more. Fluker posts are located on Nursery Track (stop 10 of the Gunbower Drive), Reedy Lagoon (on Iron Punt Track) and stop 10 on the Red Gum Forest walk. Email your photo to: flukerpostNCCMA@gmail.com More information can also be found at the Cohuna Gateway to Gannawarra Information Centre and www.nccma.vic.gov.au.



An example of a recently received Fluker post photo and comment "We actually saw a big red bellied black snake go under the big tree on the left ..."

Five minutes with Trevor Powis

We recently caught up with Trevor Powis, Gateway to Gannawarra volunteer, and asked him why he joined the Gunbower Island Community Reference Group...

"I moved to Cohuna in 2008 and the first thing I did was to obtain a map of the Shire and buy a map to study the Gunbower Forest area"

"After several years of learning about the Torrumbarry Irrigation System, learning about the forest and volunteering at the 'Gateway' to Gannawarra Information Centre for almost three years, I felt the next area was to become a member of the Community Reference Group."

"As a member of this group we are continually informed by the North Central CMA about all the work and studies they are doing in the forest. This includes their environmental watering and key asset protection projects.

"From this information we can either give a community member/visitor a well-informed answer to a question or find out the answer and get back to them.

"This function is a very fulfilling one and very important to me. I will be looking forward to the positive outcomes of the first 'Flooding for Life' event in the forest over the next few months."

Turtles the talk of the town at Treetops

Perfect weather greeted local families who arrived at Treetops Scout Camp on the Gunbower Creek for the North Central CMA's Nocturnal Natives Night-Turtle Trek event.

The Gunbower Key Asset Protection Project coordinated the event as part of the November National Turtle Month. A key focus of the event was the identification, habitat requirements and threats to freshwater turtle species which occur in the Gunbower Forest; the Common Long-necked Turtle, Murray River Turtle and Broad-shelled Turtle

Turtles Australia President, Graham Stockfeld was the guest presenter for the evening and explained to 40 enthusiastic participants how to identify and distinguish between the three species and outlined their ecological requirements and habitat preferences.

Despite not seeing any nests during the evening creek side walk, participants were provided the opportunity to observe up close both adult and juvenile turtles and view egg fragments collected by Graham from nests that were raided by foxes. The children were especially thrilled to handle the friendly reptiles.

North Central CMA project manager, Adrian Martins

highlighted the work currently being undertaken to manage foxes during the Long-necked and Murray River turtle's peak nesting time, beginning in November. The Gunbower Forest fox baiting program will conclude on December 17 2014 before the peak holiday and visitation period begins in the region.

Threat reduction and nest protection aren't the only ways to protect the turtle populations in the region. Local communities play a vital role in turtle conservation, so if you have a smart phone, download the TurtleSAT app and start recording sightings of turtles or their nests anywhere around the country, visit www.turtlesat.org.au for more details.



One of the stars of the show, a Broad-shelled Turtle

Tracks open as water recedes

Nursery Track and **Stanton's Break** are now open as water across Gunbower Forest subsides. Access to the forest also continues to be available on the elevated areas including the River Track and Koondrook Track. It is recommended that people wanting to access the river should use Koondrook Track, Nursery Track or Stanton's Break.

DEPI and Parks Victoria rangers are regularly monitoring tracks and will progressively re-open them over the coming weeks

Although some tracks remain temporarily closed, there are still many opportunities to access and enjoy the forest, creek and river areas.

To find out more visit the public access map on DEPI's website www.depi.vic.gov.au

Information is also available by calling DEPI on 136 186 or Parks Victoria on 13 1963; contacting the Gateway to Gannawarra Centre, Cohuna.

Update to Pale Yellow Water Lily Spray Program

Chemical treatment of Pale Yellow Water Lily on Gunbower Creek will commence mid-December on small infestations located between Koondrook and Cohuna weirs.

North Central CMA project manager Adrian Martins said "In a change from last year's control program, treatment of larger infestations which occur upstream of Cohuna from March 2015."

Monitoring from last year's spray program indicates controlling these larger infestations during autumn is

equally effective as spraying in summer.

"Control of this weed requires an adaptive management approach. In talking with G-MW we have decided to change the time of year we spray the large infestations" said Adrian.

An autumn spray will help to minimize the potential impact of low dissolved oxygen levels in the water which can occur as the plants die.