Environmental Watering Update

Gunbower Creek flows target Murray Cod

The iconic Murray Cod will benefit from environmental flows in Gunbower Creek over the next 12 months.

Research conducted by the North Central CMA with the assistance of specialist fish ecologists has identified flow rates that are compatible with the breeding cycle of the Murray Cod.

"Gunbower Creek contains a diverse and significant population of fish species, in particular, large-bodied fish such as Murray Cod," said North Central CMA project officer Kathryn Stanislawski.

"The large bodied fish hydrograph tells us the types of flows needed for the life stages of Murray Cod."

Ms Stanislawski said the flows will facilitate spawning and recruitment opportunities at the right time.

"During winter, and the off-irrigation season, environmental flows were delivered through Gunbower Creek at a low flow rate to maintain some connectivity between pools at a time when fish are gaining condition in preparation for the spring breeding season," she said.

"When the irrigation season starts, flows

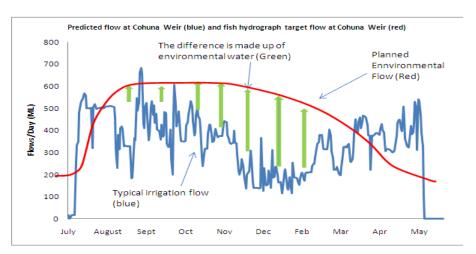
in Gunbower Creek increase to enable supply for consumptive purposes. This also provides benefits to fish, inundating spawning areas and stimulating fish movement."

Ms Stanislawski said from September, environmental water will be used to top up irrigation supply and to maintain a more stable peak flow of around 600ML/d at Cohuna Weir.

"This is specifically targeting Murray Cod, which may abandon their nests if there is extreme fluctuation in flow. The aim is to stimulate spawning, hatching and larval dispersal."

North Central CMA will be undertaking fish spawn sampling between September -November to determine the success of the

From summer, environmental flows will begin to decrease and continue through winter at a low flow rate to maintain connectivity for fish and maintain water and habitat quality.



The large bodied fish hydrograph (pictured) will help to determine flows suitable for Murray Cod in **Gunbower Creek.**

Newsletter authors: Anna Chatfield, Melanie Tranter, Amy Russell, Kathryn Stanislawski, Bambi Lees & Carl Gray This newsletter is made possible by funding provided by The Living Murray initiative of the Murray-Darling Basin Authority

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The Living Murray is a joint initiative funded by the New South Wales, Victorian, South Australian, Australian Capital Territory and Commonwealth governments















COMMUNITY NEWSLETTER

Edition 4: September 2013

Welcome to the fourth 'Flooding for Life' community newsletter!

This quarterly newsletter keeps you up-to-date with the North Central Catchment Management Authority's Flooding for Life Project at Gunbower Forest.

Newsletters are sent to households around Gunbower Forest. We hope you enjoy it!

Work on Hipwell Road Weir nears completion

A new weir in Gunbower Creek is beginning to take shape as construction nears completion.

The weir is being built as part of the Hipwell Road Channel package of works, which will enable regular flooding to be restored to Gunbower Forest.

Goulburn-Murray Water (GMW) is working in Gunbower Creek to construct the Hipwell Road Weir. Once completed, the structure will be similar to the Gunbower Weir.

"Many weeks were spent preparing the foundations for the structure, followed by the installation of sheet pile walls," said North Central CMA Gunbower Forest Project Manager, Anna Chatfield.

Ms Chatfield said a channel bypass has been created around the construction site to enable work to continue into the irrigation season.

"The gates on the new weir were installed in early September," she said.

Work has commenced on the bridge over the new channel on Island Road - with a large crane being used to drive the pylons in for the bridge foundations.

"The connection of the new channel with Spur Creek, located inside the Gunbower National Park has been completed. The water that is currently in the channel is from the natural flooding that has recently entered the forest." Ms Chatfield concluded.

Visit www.nccma.vic.gov.au information about the Hipwell Road package of works.





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New Project Update

New funding for pest management

Funding has been secured by the North Central CMA to protect plants and animals, such as platypus and turtles, in Gunbower Forest.

The project will be funded for five years through the Commonwealth Government's Caring for our Country program and will be delivered on public and private land; specifically focusing on priority wetlands and Gunbower Creek.

"The project focuses on the critical threats impacting on Gunbower Forest's ability to support and maintain its ecological character, particularly related to native habitat and vegetation condition," said North Central CMA project manager Carl Gray.

"Activities include the treatment of aquatic weeds, specifically Pale Yellow Water Lily and the treatment of other terrestrial weeds."

Another focus for the project will be on targeting pest animals including foxes and rabbits.

"Foxes predate turtle and bird nests whereas rabbits are a threat to native vegetation recruitment and invade Aboriginal Cultural Heritage sites with their warren systems," said Mr Gray.

"The project also aims to protect platypus and turtles through the retrofitting of irrigation off take pumps. This will involve working with local landholders and community members."

A working group has been created involving members of Department of Environment and Primary Industries, Goulburn-Murray Water, Parks Victoria, Gannawarra Shire, Campaspe Shire and North Central CMA.

A technical panel of experts will be created incorporating bird, fish, turtle and platypus ecologists as well as aquatic and terrestrial vegetation specialists. The panel will assist in prioritising works aims and on-ground works to achieve those aims.

A community reference group will be formed for the project with representatives from local recreational groups and private landholders.



Pale Yellow Water Lily is a target species as part of the new project.

Meet the Community Reference Group

The Gunbower Community Reference Group (CRG), consisting of 11 local landholders and community representatives meet regularly to discuss all aspects of The Flooding for Life project.

The CRG provides an important opportunity for community members and North Central CMA project staff to work collaboratively towards the implementation of the Gunbower Forest Flooding for Life project, including the design and development of project activities.

Community Reference Group members are: Christine Brooke, Paul Madden, Helen and Ian Keely, John Cleave, Dick Tresize, Ross Gordon, Stan Archard, Neville Goulding, Glen Wilson, Andrew Brown and Di Bowles.

Each edition, we meet one of the CRG members.....

Di Bowles— is a dairy farmer from nearby Meade and is a local area community representative on the CRG.

Di is appreciative of the natural beauty and amenity of Gunbower Forest.

"I don't think a lot of people in Cohuna realise what's right on their doorstep," she says.

"Just going for a Sunday drive in Gunbower Forest is like going to another place altogether."

Di recognises the benefits of the Hipwell Road construction project, for the environment but also for the wider community.

"I'm quite proud of it," she said.

"I think it's going to be really good. It can only benefit the forest and the community."

Mapping the past and present in Gunbower Forest

An innovative project, which maps historical and contemporary Aboriginal cultural sites has begun in Gunbower Forest.

The project, which is supported by the Barapa Barapa Traditional Owners, has been funded by the Indigenous Heritage Program of the Department of Sustainability, Environment, Water, Population and Communities.

North Central CMA Indigenous Facilitator, Bambi Lees said the 12-month project will comprehensively survey selected areas within Gunbower Forest to identify and map sites of cultural heritage significance. These sites could include scarred trees, burial mounds and shell middens, as well as vegetation such as edible and medicinal flora.

"Archaelogical surveys and Traditional Owner knowledge indicates that Gunbower Forest contains many archaeological sites of significance," Ms Lees said.

"However, a large proportion of the forest remains unsurveyed or inadequately surveyed leading to the potential destruction and degradation of unrecorded sites."

Ms Lees said a focus for the project is to provide cross-cultural and inter-generational learning opportunities for BarapaBarapa Traditional Owners to work and share knowledge on their Country.

"In this way Traditional Owners will be able to enhance their skills in natural resource and cultural heritage management, including learning about GPS technologies, plant identification, and recording Aboriginal archaeological sites to required standards."

"At the same time, North Central CMA staff and younger Traditional Owners will have the opportunity to learn from Elders about the Barapa Barapa heritage of Gunbower Forest."



Bambi Lees and Uncle Neville Whyman, Barapa Barapa Elder discuss the mapping project

The information gained through the project will support the North Central CMA in developing annual environmental watering priorities that reflect the social, spiritual and cultural values of the Traditional Owners of Gunbower Forest.

As the first step in the project a knowledge sharing workshop was recently held in Kerang with Barapa Barapa Elders. Elders and North Central Staff worked together to begin identifying areas in the forest that will be surveyed.

Barapa Barapa Elder, Aunty Esther Kirby said she is looking forward to sharing her knowledge about Gunbower Forest.

"This project is just a stepping stone towards a greater goal of the Barapa Barapa people and that is to be involved in cultural flows in Gunbower Forest," she said.

"The project will also help to ensure that sites of importance to us are identified and protected."

THE BIG COHUNA FESTIVAL

The Big Cohuna Festival is on again on **1-5 November**.

The North Central CMA will be holding a fishing competition and canoeing activities on 3 November as part of the festival.

The activities will be held on Gunbower Creek, Cohuna.

Look out for more information about the Cohuna Festival in your local media!