Monitoring Update

Forest Water Depth Loggers Installed

Two water depth loggers have recently been installed in Gunbower Forest. The loggers are linked to the internet, allowing instant access to water depth information.

The loggers will help the North Central CMA gain a better understanding of water levels across Gunbower Forest during natural flooding events. In particular the information will be used to learn more about how changing water levels influence the breeding behavior of colonial waterbirds, such as Egrets. Ibis and Cormorants.

"Falling water levels under colonies of breeding birds is known to cause adult birds to abandon nests which may contain eggs or young chicks. It is thought that the falling water levels and drying out of wetlands in the forest is a signal to the birds that food resources are running out," said CMA Project Manager Anna Chatfield.

The loggers have been installed in a known colonial waterbird breeding area; Little Gunbower Wetland Complex and in Green Swamp.

Since the major flooding of Gunbower Forest in 2010/11 the forest has received further natural inflows in the spring of 2011 and in the winter and spring of 2012 from rises in the Murray River.

This has created ideal conditions for colonial waterbirds to again breed in the spring and summer

"This spring and summer we will be in the forest monitoring the breeding birds and using the water level loggers to determine if environmental water is needed to allow waterbirds to successfully fledge their young this year" said Anna.

Funding for the water depth loggers was provided by The Living Murray Initiative.



Water Depth logger installed in Little **Gunbower Wetland Complex** (Photo courtesy of Rohan Oliver)



Great egret chicks in Gunbower Forest January 2012 (Photo courtesy of Anna Chatfield)

Upcoming event: Cohuna Festival (Austoberfest) Saturday 3 November 2012

Visit the Gunbower Forest 'Flooding for Life' information tent to meet the team who work on the project and learn more about what they get up to in the forest! The 'Flooding for Life' information tent will be located at the main Austoberfest site in Garden Park.

Newsletter authors: Anna Chatfield, Melanie Tranter and Britt Gregory

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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 coordinated by the Murray-Darling Basin Authority















COMMUNITY **NEWSLETTER**

Edition 1 November 2012

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

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

Newsletters will be sent to households around Gunbower Forest We hope you enjoy it!

\$13.5 Million Milestone Success

approved a \$13.5 million package of works for the construction of the Hipwell Road Channel.

This represents a major milestone in the Gunbower Forest Flooding for Life Project which has been investigating the most efficient and effective way to deliver large volumes of environmental water to the forest for the past

The package of works involves the following engineering structures:

- · Hipwell Road Channel a one kilometre channel near Hipwell Road connecting **Gunbower Creek to Gunbower Forest**
- Island Road Bridge a bridge where Cohuna Island Road crosses the Hipwell **Road Channel**
- Offtake Regulator and fish lock a regulator that controls flows entering the new channel and forest.

The Murray-Darling Basin Authority (MDBA) has • Hipwell Road Weir and fishway – a new weir in Gunbower Creek will be operated to enable maximum inflow rates of 1,650 ML/day to be achieved.

> Goulburn-Murray Water (G-MW) will manage the construction works.

> According to Greg Watkins, G-MW Construction Manager, small construction tasks will commence late this year, with the major construction activity commencing in early 2013. The Offtake Regulator and channel will be constructed first, followed by the bridge and weir in Gunbower Creek. Construction is expected to be completed by late 2013.

For updates on construction visit the North Central CMA website

www.nccma.vic.gov.au



Artist's impression of the Hipwell Road Channel Package of Works

Environmental Watering Update

Flows for Gunbower Creek

Environmental water has been flowing through Gunbower Creek since July this year.

An allocation of environmental water was reserved for the creek from a combination of entitlements held by The Living Murray and Commonwealth Environmental Water Holder.

"The aim of the environmental water is to provide better conditions for native fish in the creek," said North Central CMA Manager, Melanie Tranter.

"Under normal operations, Goulburn-Murray Water drains Gunbower Creek once the irrigation season ends. This helps to check the growth of the invasive water lily by exposing it to frost, but disrupts the life cycle of native fish that rely on winter flows."

"This year after the creek was drained and a few frosts had hit the water lily we began delivering water to the creek to assist native fish prepare for spawning in spring."

"Juvenile fish do not carry a lot of body reserves during winter so it is really important that a food supply is maintained or they will starve. The adult fish eat the smaller fish to survive and draw on their own reserves. however the loss of condition affects their ability to spawn in the subsequent spring. It's really the same principle as making sure a cow is in good condition before breeding," said Melanie.

A further 5 GL of The Living Murray environmental water has been reserved for use in Gunbower Forest this spring and summer. The water will be used to provide connectivity between Gunbower Creek and the River Murray and to provide top-up flows if required to maintain a bird breeding event.



Gunbower Creek below Cohuna Weir, 26 September 2012 (Photo courtesy of Melanie Tranter)

Keeping Bridal Creeper Under Control

The North Central CMA's Ramsar Wetlands Enhancement Project team has been working towards protecting and enhancing the ecological values of the Gunbower Forest over the past three years.

The North Central CMA staff work closely with the forest's land managers, Parks Victoria and Department of Sustainability and Environment (DSE), to set priorities for pest plant and animal control within the forest.

Carl Gray, North Central CMA Project Manager said "Bridal Creeper has become an increasingly common weed in Gunbower Forest and is a high priority for us this year. Seeds of bridal creeper are spread by birds and also by vehicles so we see large infestations along popular tracks in the forest. Once it gets established Bridal Creeper has a smothering effect on just about anything in its path and prevents native plant regeneration."

The best time to spray the weed is in winter or early spring when the plant is flowering so over the last few months the work crews have been targeting the weed. Bridal creeper is listed as a Weed of National Significance.

The North Central CMA staff work closely with the forest's land managers, Parks victoria and Department of Sustainability

So far this year, the project team has treated around 250 ha of Bridal Creeper along Gunbower Creek and in Gunbower Forest.



Bridal Creeper infestation in Gunbower Forest (Photo courtesy of Carl Gray)

Over Three Thousand 'Flooding for Life' books

Over 3,200 copies of the coffee table book 'Gunbower Forest - Flooding for Life' have been circulated throughout the Cohuna, Leitchville, Koondrook and Gunbower areas.

The book has provided a way for the North Central CMA to share the knowledge that has been gained over the past 12 years through beautiful photographs taken by CMA staff and by others that also work in and enjoy the forest.

Copies of the book have also been available to visitors at the Gateway to Gannawarra Centre in Cohuna.

Colleen Shay, Tourism and Gateway coordinator says "The book has been extremely popular with locals and tourists. People are amazed by the pictures and information in the book and they always comment on how beautiful it is. School children are also drawn to the book and so it is also a great educational tool."

Limited copies of the book are still available. Contact the North Central CMA or the Gateway to Gannawarra Centre for a copy.





Partnering with Yorta Yorta Nations Aboriginal Corporation

The North Central CMA Indigenous Facilitator, Bambi Lees, has been working closely with Yorta Yorta Nations, Goulburn-Murray Water and archeologists from SKM to develop a Cultural Heritage Management Plan (CHMP).

Bambi said "The CHMP is a legal requirement for construction of the environmental water delivery structures at Hipwell Road. We work with Yorta Yorta to survey the construction footprint and develop management recommendations that will protect cultural heritage during construction. The plan also sets out what all the parties must do if cultural heritage is found during construction."

A team of Yorta Yorta cultural heritage monitors was involved in the week long survey of the Hipwell Road area. During the survey the team checked all trees for cultural scars, and examined the ground for any mounds, shell deposits, hearths, artefact scatters and burials.

"A total of nine scar trees were recorded through the survey, including coolamon, canoe and shield scars," said Bambi.

Prior to construction at Hipwell Road commencing Yorta Yorta monitors will be assisting G-MW with cultural heritage inductions for construction workers. Monitors will be on site to implement the cultural heritage protection works during construction which have been agreed to in the CHMP.



Yorta Yorta representative Simon Nicholson and SKM archeologist Jeff Hill recording a scar tree near Hipwell Road (Photo courtesy of SKM).



Scar tree recorded during cultural heritage surveys at Hipwell Road (Photo courtesy of SKM)