Attention irrigators: want to save money and help platypus and native fish?

Have you experienced difficulties in pumping from a creek or river? Have you seen the impact of weed build-up? Or have fish and even platypus being caught in your pumps?

There may be a solution that will save time and money, as well as improving native fish populations.

"Tens of thousands of fish could be lost to irrigation pumps across Victoria each year," North Central Catchment Management Authority Project Manager Amy Russell said.



Example of pump screens (Photo: Brett Kelly)

Amy is working on a project that is investigating the use of irrigation pump screens and the benefits to irrigators and native fish. Pump screens are designed to filter out fish and weeds that would normally get sucked up with irrigation water and end up on paddocks or clog up pumps.



Weed build up around an irrigation pump on Gunbower Creek (Photo: Nicholas Rowlands)

Many countries are already using pump screens with great success, and Cohuna company AWMA has come up with a product to fit local conditions.

"We know the pump screens work, we just need to work with the local irrigators to gain a bit more of an insight into what is actually happening with the pumps," she said.

"I have heard of irrigators getting up several times during the night to remove weed from their pumps. To think that there is a solution that will save irrigators time and money, as well as improving native fish populations is really exciting.

"I am hoping the local community can help me out by sending through any photos, stories or evidence on the impact of the pumps in the Gunbower Creek and Little Murray River," Amy said.

If you would like to be a part of the project and have any information that would be useful you can send it through to amy.russell@nccma.vic.gov.au or contact Amy on 03 5448 7124.

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NORTH CENTRAL Catchment Management Authority Connecting Rivers, Landscapes, People

Welcome to the 17th edition of the Flooding for Life community newsletter. This winter edition features updates on environmental watering, plant, bush birds, and fish surveys, and an irrigation pump screen project to help farmers, fish and platypus.

Wetlands to be filled this spring

Water is planned to be delivered to Reedy Lagoon and Black Swamp wetlands in Gunbower Forest starting in September.

Mother Nature plays a big part in determining how environmental water in Gunbower Forest is managed each year. As we all know Mother Nature can be unpredictable, that's why the North Central CMA plans for a range of scenarios when it comes to deciding when and how much water the forest's river red gums, wetlands, birds and frogs may need to stay healthy.

This year we are experiencing a dry winter, with well below average rainfall in June and July. The Bureau of Meteorology is also forecasting that rainfall over Gunbower Forest and the Murray River catchments is likely to be below average in August and September.

"Under our plans for dry conditions we are preparing to deliver environmental water to

Reedy Lagoon and Black Swamp. We will use the smaller regulators that connect Gunbower Creek to these wetlands to deliver about 4 gigalitres into these important wetlands," Gunbower Project Manager Kathryn Stanislawski said.

In previous years our monitoring has demonstrated a very positive response by wetland plants when environmental water has been delivered in spring. Delivering water during spring matches with when these wetlands would naturally receive water from the river, before river regulation. Having water in Reedy Lagoon and Black Swamp will provide an important source of water for birds, frogs, turtles and other animals that live in the forest.

The water will be delivered early in the season, before water temperature rises and European carp start to move.

"We are filling the wetland from dry so there aren't any carp in there now. Plus, by delivering in cooler weather we hope to reduce the number of carp that will enter the wetland. We anticipate that a diverse array of wetland plants will respond and that these will set seed, making sure we have a healthy wetland into the future," Kathryn said.

"As for the broader forest, we agree with many locals that the forest floodplain has had a good drink over the past few years. We are therefore not planning to turn on the Hipwell Road Channel at this time."



COMMUNITY **NEWSLETTER**

Edition 17: Winter 2017



Will Honybunout montoing remnant pools at Reedy Lagoon (Photo: Sophia Piscitelli)

Three new rare plant species found!

We had some exciting discoveries from our Gunbower vegetation annual Forest monitoring recently.

Three new plant species of conservation significance were found, including the nationally endangered winged peppercress (Lepidium monoplocoides), rare Mallee annualbluebell (Wahlenbergia tumidifructa), and the little known bundled peppercress (Lepidium fasciculatum).



Endangered winged peppercress (Photo: Kate Bennetts)

Living Murray Project Officer Sophia Piscitelli remarked that "while some of these species might not look like much, they are a great find! This is the first time we have recorded these species in Gunbower Forest, and it indicates to me that the forest is showing signs of recovering from the Millennium drought.

"We also found the highest number of rare or threatened understorey species in the box woodland communities, and in the river red gum areas since 2012."

Woodland bird surveys underway

Woodland bird surveys are underway again for the first time since 2012, as part of The Living Murray monitoring program. The surveys are done every five years or so, or after watering events, to assess changes in the number and diversity of bush birds at Gunbower Forest.

Project Officer Will Honybun said that "woodland bird numbers are declining across much broader areas of south-eastern Australia. Undertaking these surveys is important as they help us understand the contribution that Gunbower Forest makes to the local and regional population of woodland birds, especially those species that are threatened.

"We survey river red gum, black box and grey box woodland areas within the forest. This is important as different species use different habitats for foraging and nesting.

"After the combination of environmental water deliveries and natural flooding in recent years it gives us a great opportunity to investigate how woodland bird populations have fared over this time."

We look forward to sharing the results of the surveys in future newsletters.



Rare diamond firetail (Photo: Adrian Martins)

Environmental water keeping Creek fish populations healthy

The North Central Catchment Management Authority (CMA) is continuing the delivery of environmental water to Gunbower Creek. From 15 August 2017 through to 30 June 2018, we will be delivering flows of between 300 ML a day and 650 ML a day over Cohuna Weir.



The flow rate we target varies throughout the year, with a focus on providing the right flows around critical breeding times of Murray cod. For example, as the weather warms up we want a higher flow to encourage native fish movement and to support spawning activity. Flows in the creek also continue in the off-irrigation season to ensure fish have enough food and habitat to survive.

Camerons Creek a haven for little fish!

Camerons Creek has been under the spotlight these past few months to better understand the fish and water plants in the area. Camerons Creek is a waterway in Gunbower Forest not far from Torrumbarry Weir.



Camerons Creek (Photo: CSP Enviro)

A team of fish and vegetation ecologists accompanied North Central CMA staff on a recent field trip to Camerons Creek to better understand the values of the system and how environmental water and infrastructure may be used in the Camerons Creek system to protect this area of the forest.

Fish ecologist Clayton Sharpe, who has conducted a number of fish surveys in Camerons Creek said that "it is a slow-flowing waterway with large numbers of native water plants and clear water.

Neville Goulding is a member of the Gunbower Island Community Reference Group (CRG), a local dairy farmer, and former Gannawarra Shire Councillor. He kindly took the time to tell us a little about himself and his connection to the forest:

I remember being out in Gunbower Forest when I was young, sitting on the edge of the Murray with my parents catching yellow belly. Dad would throw a couple of lines in the river and that was usually lunch.

We would go out after milking at least once a week, and then on Sunday several families would go out for fishing and a barbecue lunch. One year we found a couple of witchetty grubs, so they went on the barbie for a try as well. They weren't bad at all!

This provides great habitat for a range of smallbodied fish species, including some that are rare in the southern Murray Darling Basin.

"Camerons Creek provides a different type of habitat compared to the other wetlands in Gunbower Forest. It is important that there is a variety of habitat types across the forest to ensure that there is a place for all the different types of fish," Clayton said.

The team that has been working on Camerons Creek sees real potential for it to become a breeding area for small-bodied fish that are locally extinct from the Gunbower Forest. The team is excited about the role that Camerons Creek could play in reintroducing these rare species back into the area and building up their numbers.



North Central CMA staff and ecologists at Camerons Creek

Five minutes with Neville Goulding

I joined the Gunbower CRG because I wanted to ensure that water for the environment benefited not only the environment, but also had good social and economic outcomes.

forest The extremely valuable the loca economy. I think that we need to spend money on the infrastructure required to allow tourists access to



the natural beauty, while protecting the environment which they have come to see.