

# MALLEE CATCHMENT

# news



## Mulcra Island works nearing completion



Above: The L1 Regulator at Mulcra Island, and (above right) Community Reference Group members view the works.



**Works that will help restore better health to Mulcra Island are nearing completion, with the construction project expected to be finished by the end of the year.**

Construction began in June this year to build five environmental regulators and stop-banks to enable the flooding of up to 800 hectares of drought-stressed floodplain. All structures are on track to be finished by the end of November, with the exception of one regulator (the L5 regulator), which will have stop logs installed early in 2011.

At the conclusion of construction works, structures will be left open (i.e regulator gates will remain open) to allow water from the current high river flows and expected spills from Menindee Lakes to flow into Mulcra Island's main creek system, Potterwalkagee Creek.

In Autumn 2011, the structures will officially be commissioned using allocated environmental water, with the gates to be closed and water held on the floodplain and in the creek system for long enough to deliver environmental benefits. It is possible that Lock 8 levels may also be raised slightly at this time to push more water down Potterwalkagee Creek. The vast majority of the water used will then be returned to the Murray River.

The Mulcra Island works are part of The Living Murray program, which is implemented in the local region by the Mallee Catchment Management Authority (CMA), on behalf of the Department of Sustainability and Environment and in partnership with Parks Victoria. Construction works have been managed by SA Water.

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# High river flows benefit Nyah-Vinifera Park



Above: High river flows have delivered water to the river red gums in the Nyah-Vinifera Park. Photo: Mallee CMA.

**Drought-stressed areas of Nyah-Vinifera Park have enjoyed a much-needed drink thanks to the higher flows in the Murray River.**

With increased inflows from tributaries delivering a significant boost to levels in the Murray River, the river rose more than three metres in the Swan Hill and Nyah area, as well as other areas further downstream.

This increase meant water spilt into parts of the Nyah-Vinifera Park to water river red gums and connect the river to wetlands and creeks.

*“The high river flows provided an important connection between the Murray River and wetlands.”*

Mallee Catchment Management Authority (CMA) chief executive officer Jenny Collins said the high river flows provided an important connection between the Murray River and wetlands, which hadn't been seen since the high river flows of 2003.

“Native fish are spawning following the higher river flows and, with the water flowing into the wetlands, these wetlands will become important nurseries for these species,” she said.

“The current increase in river flows complements the 2.1 gigalitres (GL) of environmental water delivered to Parnee Malloo Creek north of Nyah since April this year, which was provided through the Victorian environmental watering program.



Above: Improvements in river red gum health in the Nyah-Vinifera Park. Photo: Mallee CMA.

“The combination of the environmental water delivery and the higher river flows means the community can expect to see some significant improvements to the health of the park in coming months, as well as a return of waterbirds and frogs.”

The higher river flows come as the Mallee CMA continues to work with Parks Victoria and the Wadi Wadi community to develop an environmental watering plan for the Nyah-Vinifera Park.

This plan will guide the delivery of environmental water to the park into the future. Parks Victoria and Wadi Wadi Indigenous stakeholders have been consulted on the development of this plan as both parties are developing a co-management arrangement of the Nyah-Vinifera Park.

A number of meetings have been held with the Mallee CMA, Parks Victoria and Wadi Wadi Indigenous stakeholders to develop the plan, with the final plan expected to be completed by the end of 2010.

# Landmark environmental watering to target black box trees



Above: Environmental water making its way to Lake Kramen, Hattah Lakes National Park. Photo: Mallee CMA.

**Three billion litres of environmental water began flowing into Lake Kramen in early October in the first environmental watering event in Victoria to target severely stressed black box trees.**

Lake Kramen is one of 12 Ramsar listed lakes in the Hattah-Kulkyne National Park. It is a known nesting site of the threatened white-bellied sea eagle and the regent parrot.

The environmental water, which comes from Victorian environmental water entitlements, will be delivered on the back of high flows in the Murray River as a result of flood waters arriving from further upstream.

The Department of Sustainability and Environment's Executive Director of Sustainable Water and Environment Dr Jane Doolan said the environmental watering event will improve the health of black box trees, which are severely stressed along the length of the River Murray.

"Recent studies have found that 92 per cent of black box trees along the Murray are stressed. Although black box are less dependent on floods than river red gums, the interval between floods is now exceeding their tolerances," Dr Doolan said.

"The drought has also caused a drop in groundwater levels, which provides an important water source for black box between floods, and we are now seeing significant declines in the health of these communities.

"Because black box trees grow higher up in the landscape than other species such as river red gums, they are generally more difficult to water without a natural flood – Lake Kramen is one of the few black box sites that we can water.

"With more environmental water available this year than ever before, we're now able to provide some relief to these severely stressed trees."

The environmental water will inundate the 100 hectare lake for the first time in more than 15 years.

"Over 18 billion litres of environmental water has been provided to other parts of the Hattah Lakes system so far this year," Dr Doolan said.

"Delivering environmental water to Lake Kramen will mean that ten of the twelve Ramsar listed Hattah Lakes will now hold water."

Dr Doolan said the Victorian environmental watering program plans for, and is adaptive to, a range of scenarios, from extremely dry to very wet.

"As conditions change the program needs to react quickly to opportunities to maximise ecological benefits," Dr Doolan said.

"While recent rainfall and flooding has temporarily restored a more natural flow pattern to many wetlands across the state, other wetlands still need assistance from the environmental watering program."

The environmental water is being delivered by the Mallee Catchment Management Authority in partnership with Parks Victoria.



Above: A Regent Parrot. Photo: Mallee CMA.

# Field day gives farmers an insight into fodder trial at Walpeup



Above: Sheep grazing on saltbush to quantify shrub performance as part of the ENRICH trial. Photo: Mallee CMA.

## Landholders got a first-hand insight into a fodder trial at Walpeup during a recent field day at the Mallee Research Station.

The fodder trial was one of a number of key draw-cards for local landholders at the field day, held on Tuesday, September 28.

The trial was set up to evaluate the suitability of perennial shrubs as alternative feed sources for grazing livestock, particularly in low rainfall areas. A total of 16 species have been grown and the site was recently grazed for the first time.

The fodder trial is part of the Enrich initiative managed by Future Farm Industries (FFI) CRC. It is funded by the Australian Government, with support from the Mallee Catchment Management Authority (CMA) and Department of Primary Industries (DPI).

Mallee CMA chair Joan Burns said the field day was a good chance for landholders to inspect the fodder trial.

"This trial started in July 2008 when 16 different species were sown" she said.

"Since then, edible biomass and nutritive value were assessed in both 2009 and 2010, and in autumn this year, the forage shrubs were grazed with pregnant merino ewes to evaluate grazing preference and determine which species sheep found desirable."

Preliminary results available from the grazing phase of the fodder trial indicate the merino ewes tended to consume more of the Creeping Saltbush (*Atriplex semibaccata*), Tree Lucerne (*Chamaecytis proliifer*), Tall Verbine (*Cullen australasicum*), Emu bush (*Eremophila glabra*), Tree Medic (*Medicago strasser*) and Mallee Saltbush (*Rhagodia preissii*) compared with more commonly

grown saltbushes such as Old Man Saltbush (*Atriplex nummularia*). However, with the exception of the Mallee Saltbush and Creeping Saltbush, the species targeted by the grazing merino ewes did not produce as much edible biomass as the Old Man Saltbush, Silver Saltbush (*Atriplex rhagodioides*) and the Swamp Saltbush (*Atriplex amnicola*).

The research is on-going and recommendations regarding suitable shrubs for the Mallee will not be made until after post grazing measurements are taken over the next 12 months, to evaluate shrub recovery after grazing.

Ms Burns said the data collected from the trial will help identify which shrubs can be used in the Mallee for a more diversified feed base for sheep.

"If the trial shows the selected perennial shrubs can be used as an alternative feed source for stock, this could help fill feed shortages in summer-autumn, improve soil health and reduce erosion," Ms Burns said.

*"Furthermore planting shrubs for fodder could also enhance biodiversity values on-farm, while providing alternative management options for marginal and unproductive land."*

More information on the Enrich field trial is available by contacting the Mallee CMA on 03 5051 4377.

# New research for Victorian Mallee farmers



Above: Mallee farmers attend a no-till field day. Photo: Mallee CMA.

**Making credible local data available to Victorian Mallee farmers is the key focus of nine research projects being delivered across the region.**

Projects are focusing on improving soil health in the dryland agricultural area, with a range of onground research and demonstration activities being conducted throughout the 2010 growing season. Support for these projects is provided through Mallee Catchment Management Authority (CMA) state and federally funded programs, in partnership with regional agency and industry groups.

Organisations engaged by the Mallee CMA to deliver the projects include Mallee Sustainable Farming, the Birchip Cropping Group, the Department of Primary Industries, Dodshun Medlin Agricultural Management, AGRIVision and Mallee Focus.

Projects underway include investigations on summer weed control strategies and implications for soil health; how barley and wheat crops respond to grazing; the forage potential of perennial shrubs in alternative grazing systems; and the impact of low input cropping on soil health.



Above: The 2010 Mallee Soil Erosion and Land Management Survey. Photo: Mallee CMA.

“For farmers to be successful in our region, they need to have access to reliable information that will help them make good decisions about both the economic and environmental sustainability of their management practices and farming systems,” Mallee CMA board chair Joan Burns said.

“The work to be conducted during 2010 builds on previous projects that have evaluated the impact of land management practices on soil erosion, soil health and crop water use, as well as the impact on farm productivity.

“Dryland farmers have the opportunity to view these projects at a range of field days being conducted throughout the year.”

A comprehensive list of the 2010 projects and relevant contacts are listed on the Mallee CMA website at [www.malleecma.vic.gov.au](http://www.malleecma.vic.gov.au)

## Catch a Carp Day postponed

**Catch a Carp Day 2010 was postponed due to the high level of the Murray River.**

Plans are now underway to hold Catch a Carp Day during March/April next year.

If you have any questions regarding the postponement or the new date please don't hesitate to contact the Mallee CMA on 5051 4377. Don't forget to keep an eye on our website so you can pre-register for the event.



# New structures for Ducksfoot Lagoon



Left: New Baggs Bridge Regulator. Photo: Mallee CMA.

Above: Aerial photo of Ducksfoot Lagoon in a drying phase. Photo: Mallee CMA.

**TWO new structures have been built to help improve the health of a popular local wetland.**

Ducksfoot Lagoon is part of Kings Billabong Park and, until recently, this wetland was permanently inundated by the Lock 11 weir pool level.

Two environmental regulators have been installed over the past few months to make it possible to manage the water flowing into the lagoon, returning natural water variations to Ducksfoot Lagoon, along with improvements to water quality, native fish habitat and a reduction in carp numbers.

The structures have been built adjacent to the existing bridges at Baggs Bridge and Jennings Bridge and will work by regulating the water flowing into Butlers Creek, which connects Ducksfoot Lagoon to the Murray River.

The construction project has been managed by the Mallee Catchment Management Authority (CMA), in partnership with Parks Victoria.

“Installing these new regulators is a great step forward in terms of protecting this beautiful area,” Mallee CMA chief executive officer Jenny Collins said.

“We’ve worked with Indigenous stakeholders, Friends of Kings Billabong, Sunraysia Bird Observers, Sunraysia Field Naturalists and local residents to make this project possible and we expect the wetland will start to show improvements in its health within months.”

*“Reintroducing variations in the water levels at Ducksfoot Lagoon and Butlers Creek will deliver an overall improvement to the health of the wetlands”*

The regulators will be operated to contain water within Ducksfoot Lagoon and the Butlers Creek system, allowing the wetland and creek to have increased water levels, to mimic a small flood. Any additional water required to increase the water level will be accessed through environmental water allocations. The regulators will also be used to exclude water and allow the creek and wetland to have a drying phase.

The regulators are made from interlocking Plastipile material, a patented recycled plastic product.

The structures also have a regulator gate and carp screen.

“Reintroducing variations in the water levels at Ducksfoot Lagoon and Butlers Creek will deliver an overall improvement to the health of the wetlands, which will be seen through increases in the numbers of native fish, waterbirds, and frogs,” Ms Collins said.

Monitoring to assess the current health of the ecosystems of the area is already underway with the help of important community groups such as the Friends of Kings Billabong, Mallee Waterwatch volunteers and Sunraysia Field Naturalists. Monitoring will continue to allow for analysis of the impact of the return to a more natural wetland cycle.

Funding for this project was provided by the Victorian Government’s Victorian Water Trust Rivers of High Environmental Return Opportunity program.

# Students help rejuvenate our riverfront



**Local school students have been applauded for rejuvenating two riparian zones as part of Mildura's much-loved riverfront.**

Mildura West Primary School students have spent more than five years working to improve the natural environment at both Rio Vista Park and at Johnson's Bend by planting trees and shrubs, installing nesting boxes and interpretative signage.

Now the student's hard work is coming to fruition – the trees and shrubs are growing well, birds are using the nesting boxes and locals and visitors alike are using these park areas to exercise, walk their dogs, fish and picnic. In addition to this, the students work at both riverfront sites contributed to Mildura West Primary School being named joint winner of the 2010 Community and Partnership Smart School of the Year at the ResourceSmart Schools Awards.

The rejuvenation works at Rio Vista Park and Johnsons Bend were funded by the Mallee Catchment Management Authority (CMA) and supported by Mildura Rural City Council.

"The work that has been done along the riverfront at Rio Vista Park and Johnson's Bend shows what great outcomes can be achieved when people work together," Mallee CMA board chair Joan Burns said.

"The Mildura West Primary School students have done a wonderful job improving these areas and I hope, as they grow older, they will be very proud to see what a difference their hard work has made to improving our riverfront."

Ms Burns said the Mallee CMA and council had complemented the work done by the students by installing a boat ramp and picnic tables at Johnson's Bend, as well as improving the turning areas and car parks. She said much of the additional rehabilitation work at both sites was conducted by Mildura West Primary School students, including revegetation, track rationalization, signage and installation of bench seats made from recycled milk bottles for walkers to enjoy the river views.

Mildura West Primary School teacher Marion Vorwerk said the school regards community partnerships as an essential part of student learning.

"Such an experience puts student learning in an authentic context and they have the opportunity to take action in their community to make a difference," she said.

Grade 6 student Maya Hodge said working to improve the two riverfront sites was rewarding.

"Everyone needs to make a mark so we have a sustainable future," she said.



# National Water Week activities at Mildura Show

**This year National Water Week was celebrated at the Mildura Show on 'schools day' Thursday 14th October.**

Mallee Catchment Management Authority (CMA) and partner agencies came together to promote National Water Week with a day of fun learning activities.

The Mallee CMA Waterwatch Trailer was a big hit with the children. After a short talk introducing them to waterbugs and why it is so important for them to be monitored, the kids got to have a go at identifying some for themselves.

Also taking part in the NWW activities were Lower Murray Water with the Pipe Game, Mildura Waste Management Group



Schools from the Mildura region enjoying activities for National Water Week. Photo: Lower Murray Water. with a Recycling Race and Murray Darling Freshwater Research Centre with the Fish Food Web.

Thank you to the Water Ambassadors from Mildura West Primary School who were there to help the younger students with the activities.

## Upcoming events

### November

- 1–2 Rotary River Health Forum
- 16 Indigenous stakeholder information day, Hattah Lakes.

### December

- 25 Christmas Day
- 26 Boxing Day

### January

- 1 New Years Day
- 26 Australia Day

## Project Partners



## High praise but no award at International Riverprize

**Despite being nominated as a finalist in both the International and National Riverprize awards this year, the Mallee CMA's submission was unfortunately unsuccessful.**

The Mallee CMA had nominated Hattah Lakes for both Riverprizes, in order to recognise the work done by many government agencies, organisations and individuals to restore the lakes system to better health. While the Hattah Lakes entry earned praise from the judges, the International prize went to the River Thames, England, and the national prize went to the Derwent River in Tasmania.



Above: Mallee CMA CEO Jenny Collins and Rivers and Wetlands Manager Peter Kelly with the trophy presented to Riverprize finalists. Photo: Mallee CMA.

### Mallee Catchment News

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