

Flood Recovery Works Update

North Central CMA Region



NORTH CENTRAL
Catchment Management Authority
Connecting Rivers, Landscapes, People

June 2012

Key achievements

- The Natural Disaster Relief and Recovery Arrangements program (NDRRA) has made significant progress. The high priority actions of replacing damaged riparian fencing and re-establishing vegetation to protect the region's waterways will be complete just 12 months on from the funding announcement.
- The Flood Recovery Employment Program (FREP) which provided regional employment opportunities post floods, while also increasing the cost efficiency of NDRRA eligible fencing repairs, will conclude on 30 June 2012.
- The levee repair program, which repaired 197 levee breaches as identified by landholders on the Loddon River floodplain, will finish on 30 June 2012.

Flood Management Plans

- The North Central CMA in partnership with local government and the community is currently developing Flood and Drainage Management Plans for **Charlton, Clunes, Carisbrook, Donald** and **Rochester** as well as the **Bendigo** Urban Flood Study.
- Three of the community's preferred mitigation options for Clunes are being investigated. A third community meeting is planned for July. The Plan is on schedule for delivery in July 2012.
- A second community meeting was held in Carisbrook in May. The Plan is on schedule for delivery in November 2012.
- Future meetings are planned for Donald and Rochester in late July to seek community feedback on the flood modelling results and potential mitigation options.
- Mapping of Bendigo Creek and its major tributaries is expected to be completed by the end of July with the remainder of the catchment due for completion in August 2012. The City of Greater Bendigo have confirmed an extension to the project area to undertake flood mapping for Strathfieldsaye and Maiden Gully.

Fencing repairs

- The majority of previously North Central CMA funded fencing, damaged by the floods has been repaired through the NDRRA program. The remaining 33 sites will be completed by September 2012.

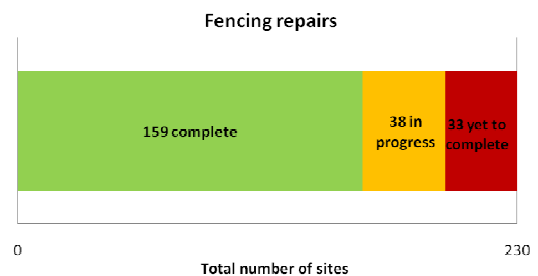


Figure 1: Progress with 230 fencing repair sites



Figure 2: Flood damaged fencing, Shelbourne



Figure 3: Replaced fencing (after works)

Erosion control repairs

- The roll out of the \$3.46M NDRRA funded erosion control repair program is underway. To date 27 of 164 flood damaged erosion control structures have been repaired.
- Phase one of the project has focused on engineering and redesigning structures to be more resilient and working with contractors to enable quality repairs to be completed.
- Phase two will see the remaining 137 structures designed and built by May 2013.
- Landholders have welcomed this assistance:

'Many thanks for the visit and work you did at Dunluce on Friday - we greatly appreciate your time, advice, skills and commitment to the job to be done.' (Dianne Mullins, Dunluce)

- Fencing and revegetation of sites is critical to the long-term resilience of stabilisation efforts, is also funded through NDRRA and will follow the completion of earthworks.

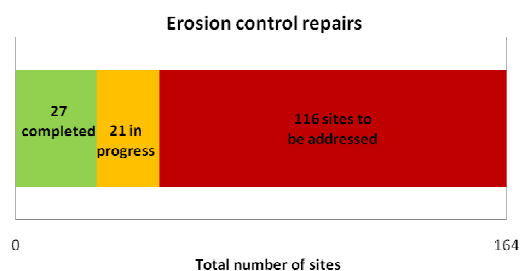


Figure 4: Progress with 164 erosion control repair sites

Revegetation replacement

- Site preparation has commenced on 61 properties for the revegetation of 305,000 plants between July and September 2012 which will replace previous North Central CMA plantings destroyed by floodwaters along waterways throughout the region.
- Using locally collected seed, the plants are currently growing at five nurseries and will be planted by several contractors and Conservation Volunteer Australia crews.

Quambatook Weir replacement

- Quambatook Weir was built in 1976 by the Avoca River Improvement Trust and became an asset of the North Central CMA when the Authority was established in 1997.
- NDRRA funding was secured to replace the flood damaged weir with the key aims to:
 - minimise risk to public safety
 - limit on-going management costs
 - manage the risk of flooding
 - maintain community and environmental values associated with the weir pool.

- Negotiations are currently underway with Gannawarra Shire regarding the long-term management of the weir to provide ongoing value to the Quambatook community.

Drainage maintenance

- On behalf of the North Central CMA, Goulburn-Murray Water (G-MW) has completed the pre-works design surveys of Seven Months and Calivil creeks and the Western Depression which form part of the Bullock Creek Improvement Trust regional drains ahead of any required NDRRA-funded repair works.

Flood Recovery Employment Program (FREP)

- The \$2.76M North Central CMA FREP officially concluded on 30 June 2012.
- The program provided employment opportunities for 64 individuals resulting in:
 - 114km of fencing
 - 853ha of weed control
 - 138ha of rabbit control
 - 31,000 tubestock planted
 - Other activities including flood debris removal and minor infrastructure construction.
- To celebrate achievements of the program and to recognise the participants/stakeholders involved 80 people, including Minister for Water and Agriculture Peter Walsh and State Treasurer Kim Wells attended the launch of the program's showcase DVD 'Life after the Floods'. To view the DVD go to:
http://www.youtube.com/watch?v=mq_ziU6RH_OQ&feature=youtu.be
- The fencing expertise of the crews greatly assisted the repair of previously North Central CMA funded fences. This assistance has offset the full cost of repairs, allowing other eligible landholders to receive assistance through the NDRRA program that were unknown at the time of bid approval in September 2011.



Figure 5: Minister Walsh and Treasurer Wells at the FREP celebration with participants and North Central CMA Board Chair David Clark, Project Manager Adrian Martins and CEO Damian Wells.

Pental Island levee repair

- A 3.3km section of flood damaged levee on Pental Island will be repaired to current standards in consultation with relevant land managers.
- Final design and planning permits (including native vegetation offsets) are currently being discussed with Swan Hill Rural City Council, Department of Sustainability and Environment (DSE), Parks Victoria and the landowners.

Lake Boga floodway repair

- A two-kilometre section of flood damaged levee that forms the Lake Boga floodway between the Little Murray River and Lake Boga was repaired in June.
- The Victorian Government funded repairs were completed with the support of the Swan Hill Rural City Council, DSE, G-MW and local landholders.



Figure 6: Lake Boga floodway requiring repair post floods (August 2011)



Figure 7: Repaired Lake Boga floodway (June 2012)

Levee breach repairs

- As a result of the 2010–2011 floods in Victoria, a number of levees in north central Victoria were breached or otherwise damaged. A number of these levees, which are located both on Crown and privately-owned land, are of unknown origin and ownership; however they contribute to the protection of public assets.

- Under the direction of the Minister for Water and DSE, the North Central CMA has undertaken emergency and strategic levee repair works since February 2011.
- Following a call for damaged levees in local media, almost 200 levee breaches were identified by landholders on the lower Loddon floodplain and have been repaired.

Levee assessment project

- A Victorian Government funded project to survey and assess the condition of 300kms of significant levees primarily along the River Murray from Echuca to Tyntynder will commence in July 2012.
- The project, awarded to Water Technology by public tender, will involve detailed field surveys to plot long and cross sections of levees, capture geo-referenced photos and identify points of weakness and height.
- Landholder notification of field surveyors accessing levees by quad bikes will occur by letter drop and in local newspapers.
- The outcomes will enable the North Central CMA to provide the VIC SES and the community with better information during a flood and will assist the DSE in the decision making process about long-term management of levees.
- The levee assessment project will be completed by December 2012.

Natural Disaster Environmental Recovery Program

- The Australian Government's *Caring for our Country* (CfoC) initiative has supported six individuals and two Landcare groups to undertake environmental flood recovery projects via a grants process since January 2012.
- Through to project completion in September 2012, the program will also support other CfoC funded projects in the region, including:
 - *Connecting Country* - gorse, willow and blackberry control at several properties along Barkers Creek identified through the development of voluntary Gorse Management Plans.
 - *Northern Plains Conservation Project* – 5.2km of rabbit harbor removal along a channel near Sandhill Lake, northeast of Quambatook.
 - *Enhancing values of Gunbower Ramsar site* – willow control along Gunbower Creek.