



Macquarie River: Image courtesy of Colin Gordon

# Local Government Taking Action to Protect Ecosystems

**2016/17**  
Central Tablelands Local Land Services Incentive Funding

Restoring habitat in the Macquarie River

ENVIRONMENTAL ISSUES

# Recovery of the Mac

## Bathurst Regional Council & Sofala CAS

The Sofala branch of the Central Acclimatisation Society in collaboration with Bathurst Regional Council, DPI Fisheries, Central Tablelands Local Land Services and the Environment & Waterways Alliance have partnered to implement the Recovery of the Mac project.

### Project Background

Members of the Central Acclimatisation Society have for some time been concerned with the degraded state and severely modified habitat of the Macquarie River from the start of the Macquarie at the confluence of the Fish and Campbells Rivers through the city of Bathurst and downstream.

Habitat mapping funded by Central Tablelands Local Land Services and conducted by NSW Fisheries from the junction of the Fish and Campbells Rivers in April 2016 revealed that the riparian condition in this part of the river is generally

in poor condition.

Willows are having a major impact on stream morphology, there are few native trees, no native shrub layer and refuge holes for native fish have been filled in.

### Fish Habitat Action Grants

Funding for this project was provided by NSW DPI Fisheries' Recreational Fishing Trust's "Habitat Action Grant Program".

Additional funds have been contributed by Sofala Catchment Action Society and Central Tablelands Local Land Services. In-kind funds through project management and on-ground works are being provided by Bathurst Regional Council with DPI Fisheries staff overseeing all works to ensure that they comply with best practice.

The project will see the removal of willows, revegetation with native vegetation, removal of two barriers to fish passage and the installation of large rock to create fish habitat.



### Restoring Native Vegetation

Healthy native riparian vegetation - the plants growing adjacent to a waterway - has a major impact on the overall waterway health. These plants help to stabilise stream banks, provide shading of the water and provide a source of insects as feed for native fish.



### Refuge Holes

Native fish require a range of structures and habitat features to provide habitat for refuge and breeding. The project site lacks large woody debris and large rock features that can create scour holes. Large rock will be reinstated to create habitat.

# Recovery of the Mac

## Bathurst Regional Council & Sofala CAS

It is considered that restoring river health in the upper reaches of the Macquarie River is beneficial to the health of the river system downstream.

By controlling weeds such as willow and blackberry, and replacing these weeds with a range of native species including River Sheoak and River Bottlebrush, not only is the immediate habitat improved, but the spread of seeds and propagules downstream will be of native riparian plant species rather than the weed species that currently exist.



CENTRAL ACCLIMATISATION SOCIETY INC.  
(FOUNDED 1937)

## Restoring Habitat for Native Fish

A long term outcome that this project aims to achieve is to make these upper reaches of the Macquarie River suitable for supporting native fish.

The removal of man-made fish barriers in the Macquarie River as part of this project will create an unbroken passage for fish to travel of 404km from the Bathurst Water

Filtration Plant through to Burrendong Dam.

This will allow for fish such as Murray Cod and Trout Cod to move into the upper reaches of the river. Additionally, once the river is capable of supporting healthy breeding populations of native fish it is planned that endangered Trout Cod and Macquarie Perch will be released at this project site.



## More Information

Brooke Kirkman  
Project Support Officer  
Environment & Waterways Alliance  
E brooke.kirkman@lls.nsw.gov.au  
P 02 6850 1619 M 0428 148 461

## Local Government Taking Action to Protect Ecosystems

The Central Tablelands Local Land Services incentive funding supports land managers and communities working together to build resilient communities in productive healthy landscapes.

The Local Government Taking Action to Protect Ecosystems project aims to assist Councils throughout the Central Tablelands to protect and enhance our natural environment through the delivery of projects that exhibit best management practice and innovative solutions to existing

issues.

This will be achieved by targeting funding towards Member Councils of the Environment & Waterways Alliance that can demonstrate appropriate planning, project management and community engagement skills .

## ACKNOWLEDGEMENTS

This project is provided by Central Tablelands Local Land Services through funding from the Australian Government's National Landcare Programme and Catchment Action NSW