# NGANGADHA GARRAGU BILAGANGLANGGU: LOOK AFTER THE LAND AND THE RIVER

### **OVERVIEW** of the project

The Little Burning Mountain Aboriginal Corporation restored approximately 2km of the Bogan River, its banks and the surrounding area. The restored area is part of a former travelling stock route that is now managed by Little Burning Mountain Aboriginal Corporation. The area is adjacent to the old Bulgandramine Aboriginal mission near Peak Hill and is believed to be an Aboriginal burial site and is therefore a significant historic link for the local Aboriginal community.

The use of this area as a travelling stock route resulted in erosion of the riverbanks, sedimentation of the stream and weed invasion. River bank erosion had also led to trees collapsing into the river and a build up of debris, obstructing fish passage and water flow. This project has successfully created a fish friendly environment and has reduced stream bank erosion.



Removing African Box Thorn

#### how the project was carried out

This project was carried out in three stages. The initial stage involved fencing the area to protect culturally significant sites and to prevent the area being used as a travelling stock route. The river was cleared of debris, by sawing the trees into manageable sizes for subsequent removal. A few larger logs were retained and placed parallel to the river banks to provide aquatic habitat for native fish and frogs. Silt was also excavated from the site, to reinstate filled in waterholes, this work was carried out under supervision from the Central West Catchment Management Authority to ensure the



Debris that restricts water flow and fish passage

course of the river was not altered. The removed silt was placed on eroded areas of the river banks and planted out with local riparian species to stabilise the area.

Following the fencing and clearing of the site, weed eradication was undertaken by physical removal of individual plants. The main weeds

that were removed from the site were Bathurst burr, African box thorn and galvanised burr (this is an Australian native that occurs in central and western NSW, Queensland, Northern Territory and South Australia. It is considered a noxious weed in NSW, so growth and spread must be controlled).

The final stage involved the collection of seed and propagation of local plant species by school students. The propagated plants were used to revegetate the river banks and surrounding area. The planting was delayed until rainfall occurred, at which time 1000 plants were installed.

#### **OUTCOMES** now and in the future

The debris in the Bogan River was creating weir like structures, that were reducing flow and acting as barriers to fish passage, preventing the critical migration of native fish species. The major outcome from this project has been the removal of this debris from

the river, which has resulted in natural flow regimes returning to the river and fish passage being restored. Since the completion of the project, the traditional owners have restocked the area with native fish species, including Golden Perch and Murray Cod. By eliminating stock access to the site and rehabilitating the eroded banks, this project has successfully reduced the amount of sediment entering the waterway.

Primary weeding has reduced the level of weed infestation of galvanised burr, Bathurst burr and African box thorn to a level that can now be controlled by routine management. The Aboriginal community are committed to continuing with the weed eradication program on their monthly visits to the site.

## benefits, challenges & lessons learned

The main benefit of this project is that the rehabilitated site has provided a focal point for the area's indigenous community residents to meet and reconnect with their culture and heritage. The site has also been used by the Central West Catchment Management Authority and Charles Sturt University as a demonstration site to showcase the rehabilitation works on the Bogan River and to educate non-indigenous residents and students on how to rehabilitate sites along rivers.

This was the first project of this nature to be carried out by this group and they have gained invaluable experience and knowledge about the environment, which they intend to use to further improve future environmental projects, including weed control and management of bank erosion along other sections of the Bogan River.

The main lesson learnt was that planting should only occur when weather conditions are suitable. The initial plantings for this project failed due to drought conditions in the area, which resulted in the decision to delay further planting until rain occurred so plant survival rates could be increased.



