

TOOLOOM CREEK RIPARIAN RESTORATION, MULI ABORIGINAL COMMUNITY, WOODENBONG

overview of the project

Within Tooloom Creek, the invasive weed, privet was degrading riparian vegetation and causing channel instability, widening, sedimentation and a loss of in-stream habitat that once supported the endangered Clarence River Eastern Freshwater Cod. This project restored the degraded riparian vegetation and prevented downstream infestation of a protected Aboriginal Place by controlling weeds on 14.4 hectares of riparian zone and planting 5,000 seedlings. A method of weed control called mosaic burning was successfully trialled, which assisted with regeneration of *Eucalyptus dunnii*, where previous techniques had been unsuccessful.

This project also formed a partnership with the Northern Rivers Catchment Management Authority (NRCMA) and EnviTE NSW enabling seven Aborigines from the local Muli Muli Community to work on the project and complete training in Certificate 1 in Conservation and Land Management. This further developed their skills in project management, chemical use, chainsaw use and first aid which have assisted them in gaining further paid work in bush regeneration.



Highly visible site near
Clarence Way

how the project was carried out

This project was developed and carried out by the Upper Clarence Combined Landcare on land managed by the Muli Muli Land Council. The site chosen for restoration was highly visible and highly degraded by privet which covered an area over 20 metres from the riverbank and grew to an average height of three metres.

To ensure their safety and protection, all workers completed an Occupational Health and Safety induction and site induction, establishing reporting mechanisms and receiving training in all the necessary tools and chemicals used. They then set up survey plots and photo points to evaluate the effectiveness of their weed treatment and natural regeneration throughout the project.



Muli Muli Work Team with a
Landcare facilitator

Once familiar with the weeds and plants on the site, workers carried out weed control in pairs, often with one person operating a chainsaw and one person carrying out poisoning. The mosaic burning was trialled, supplementing the weed control and using the dead privet as fuel. Mosaic burning involves applying planned fire at varying intensities, scales and times on the site to create patches of burnt and unburnt areas. By burning the dead privet, weeds and weed seeds in the area were destroyed and the seed bed reduced. This provided the previously quiescent eucalypts in the area with much less competition for resources and the right balance of nutrients to grow. Ground litter on the site also provided shelter and mulch for the areas which were then replanted with seedlings of local species.

outcomes now and in the future

The project has successfully transformed a highly degraded site into an attractive community of healthy, native vegetation and demonstrated to the community what can be achieved on these highly degraded sites. On completion of the project there were no weeds and no re-sprouting of weeds.

The project also addressed community concerns about skills development, training and employment. After completing their training, the local Muli workers formed their own independent contract regeneration business with the support from the Githabul Nation Aboriginal Corporation and EnviTE, and went on to undertake contract work in National Parks and State Forests.

benefits, challenges & lessons learned

Initially, cut and paint techniques were used to control the weeds, followed by seedling sprays. However, this method covered the emerging weed seedlings with dead wood and provided them with protection from the sprays. To overcome this challenge, the bush regeneration team adapted their technique to spray seedlings one month before cutting and painting woody weeds. This has since been adopted by the Upper Clarence Combined Landcare group as a standard methodology.

Whilst mosaic burning is commonly used in NSW State Forests to control weeds, use of this technique in riparian areas is rare. This land management technique has successfully restored eucalypts to areas where there were previously none. By having patches of burnt and unburnt material, ecological diversity is enhanced through different fire age-classes and habitats within a treated area.