

# Taking Action

# LLCI015-026

## Recreating Wootton's Forest

### Karuah & Great Lakes Landcare



### Rapid restoration of forest ecology

#### The issue

Wootton, similar to a lot of the Great Lakes area, was very heavily forested prior to colonisation, but a booming historical timber industry hungry for red cedar and white beech, and subsequent clearing for agriculture saw widespread heavy clearing and the effective extinction of Wootton's former white beech rainforest ecosystems. Old growth is limited to the more inaccessible areas. Landholders now face issues with soil degradation and erosion on fragile coastal soils, with resultant water quality problems. Meanwhile wildlife habitat has become fragmented and degraded, with a loss of biodiversity in the landscape.



#### The solution

Craig Tate, a long time Wootton resident with a lot experience in forestry, has been applying an ecological forestry approach to protecting, restoring and recreating forest ecosystems on his property and around the locality. With assistance of small grants from Hunter Local Land Services and its predecessor, Hunter Central Rivers CMA, and from Midcoast Water, Craig has protected riparian areas on his property with projects in 2010 and 2011, and has since been gradually planting the run-down paddock near his house with a diverse mix of indigenous trees. The aim is to mimic nature with a planted forest ecosystem, in the long term hoping to recreate rainforest conditions.



#### The impact

Craig has observed a rapid improvement in water quality in the dam fed by the paddock with tree plantings, with greatly decreased turbidity and increased dissolved oxygen. The trees have achieved near perfect survival rates and grown rapidly. A diversity of native birds and mammals have already been spotted frequenting the newly planted forest. A warmer microclimate has been created near the house, allowing subtropical plants like bananas to thrive. Owners of nearby properties have been inspired to implement tree planting projects and have been using the planning approach and preparation and planting techniques that Craig has demonstrated to be very effective for the Wootton area.

#### Learnings

Good preparation pays off. Roo proof fencing has removed the necessity for tree guards and thus proved very economical. Preparation with herbicide to remove vigorous grass competition is essential. Yeomans ploughing to increase water infiltration and reduce runoff is invaluable. Perfectly on-contour cultivation can result in water logging with Wootton's high rainfall, but a 2.5% grade has proved ideal - trees have not required irrigation after initial watering in, and cultivated areas have withstood recent extreme rain events without showing evidence of erosion. Fungal soil inoculants work wonders for rapid conversion from biologically depleted paddock soils.

### Key facts

- 7000 trees planted on 12ha across 4 Wootton properties.
- A further 17,000 trees on a further 28ha will soon be planted across the 4 properties.
- 3 of the 4 properties have connectivity with the Coolongolook River.

### Project Partners



The Local Landcare Coordinator Initiative Program that enables the promotion of these case studies on the Gateway, is funded by the NSW Government and is supported through the partnership of Local Land Services and Landcare NSW

