



SLATERS CREEK STORMWATER WETLAND

Protecting a sensitive waterway from stormwater using high-density wetlands



Slaters Creek Wetland: from concept design to construction

CLIENT

Lismore City Council

PROJECT SUMMARY

Slaters Creek is an ephemeral waterway dominated by rural land uses in its upper reaches and urban land uses surrounding the lower section. Lismore City Council sought a solution to mitigate the impact of polluted stormwater flows from Slaters Creek into Wilsons River. The creek system is characterised by a narrow riparian zone dominated by woody weeds and pasture grasses.



Construction – September 2013



Planting – October 2013



Full dense plant cover – March 2014

BACKGROUND

The Water and Carbon Group designed and constructed a high-density treatment wetland system and provided operational support to the project. The system was designed to:

- Improve water quality in Slaters Creek through treatment and reduction of pollutant loads;
- Enhance local ecology by improving in-stream and riparian habitats;
- Be designed with the local community and land holders to facilitate enhancement and custodianship of the wetlands and the Slaters Creek catchment;
- Be cost-effective and as low maintenance as possible;
- Not result in a significant increase in flood volumes;
- Employ locally indigenous species, and address issues such as safety and the risk of mosquitoes and cane toads; and
- Enhance local amenity and facilitate educational opportunities on stormwater issues.

OUTCOMES

The system achieved dense full plant coverage within 6 months. The faster dense plant coverage is achieved, the quicker water quality results are achieved and the less likely weed and pest pressures are to occur which reduces maintenance costs.

The achievement of rapid plant establishment is testament to WCG's ability to manage construction processes in response to dynamic wetland ecosystem processes