

Slacks Creek Restoration Project (SCRCP)

Planning Urban Restoration Projects to Deliver Ecological Assets for Communities



Griffith University - Logan: Environmental Arboretum & Riparian Restoration



Flood event impacting Slacks Creek adjoining the Arboretum, March 2017

Project Description

- The Water and Carbon Group have designed, implemented and established the 9.5+ hectare arboretum on the Logan Campus which adjoins Slacks Creek. The Campus is used by 2,500 students and is home to a number of community events.
- The Water and Carbon Group developed the environmental arboretum concept and have worked with Logan City Council, Griffith University and other stakeholders to develop a draft masterplan. The masterplan vision is for the arboretum to become a recreational destination for the Logan region.
- The contemporary arboretum now includes numerous local vegetation communities from open forests to riparian rainforest with approximately 20,000 plants already implemented. The focus of the Arboretum was to create a regional and cultural collection of key tree species that have Indigenous and European significance. This living collection also includes rare and threatened species that now form a valuable conservation resource for the Logan region.
- The inception of this restoration project to become an Arboretum has now created a land-based asset with ecological, educational, amenity and passive recreational benefits.

Project Summary

Slacks Creek traverses through a highly modified landscape. The riparian restoration project was initiated to increase both terrestrial and hydrological connectivity in the creek corridor. The Slacks Creek Restoration Project (SCRCP) was funded by the Australian Government and delivered by Logan City Council (LCC) through partnerships with The Water and Carbon Group (WCG), CSIRO and Griffith University. The project commenced in 2013 and concluded in June 2018. Several degraded sites identified for restoration were

nominated to achieve additional outcomes such as providing assets for the broader community. The planning phase then became critical to the design of restoration projects to deliver these ecological and community assets. The two sub-projects presented are the Griffith University – Environmental Arboretum and the Shailer Pioneer Park Stormwater Wetland. Currently 61,000+ plants have been incorporated into the restoration sites with further plantings to be implemented through community participation.

Creating Community Value

The planning and successful delivery of these sub-projects have engaged the community and stakeholders, whom are now supporting the ongoing restoration of these key sites. In early 2018 the Slacks Creek Catchment Restoration Group, a not-for-profit community environment group, was established to coordinate ongoing community participation and to maintain momentum for restoration beyond the project's primary funding. The successful and ongoing outcomes of SCRCP highlight the importance of designing

and delivering urban restoration projects that identify and integrate a diversity of values for the benefit of local communities. Planning, partnerships and stakeholder engagement have been integral to the success of the project and to fostering connections within the diverse communities of Logan City.

Shailer Pioneer Park: Wetland & Riparian Restoration



Landscape and wetland establishment, February 2017

Project Description

- Shailer Pioneer Park is the only urban park servicing the local area. The Water and Carbon Group planned the project to create a high value community asset that would improve water quality and biodiversity.
- The Water and Carbon Group designed and constructed a high-density treatment wetland system in 2014 and provided operational support to Logan City Council while undertaking maintenance activities on the site. Approximately 25,000 plants were integrated into the wetland system and adjoining riparian zone.
- The stormwater wetland and riparian restoration has improved the water quality entering Slacks Creek through treatment and reduction of pollutant loads. Local ecology has been enhanced by improving in-stream habitats and increasing riparian habitat. The project now provides a naturalised stormwater wetland which complements the existing recreation and amenity values of Shailer Pioneer Park.
- The project highlights the Water and Carbon Group's expertise and capability to design, build and maintain ecological infrastructure projects. In 2016 the Shailer Pioneer Park wetland project received a Highly Commended Award at the Premier's Sustainability Awards.

Griffith University: Progress and Planning Images



Post-planting, November 2014



Stock establishment, late January 2015



Arboretum establishment and access tracks, July 2018



Arboretum entrance and establishment, July 2018



Arboretum concept plan developed with key stakeholders

Shailer Pioneer Park: Progress and Planning Images



Wetland construction, September 2014



Wetland planting, December 2014



Macrophyte establishment adjoining the boardwalk, March 2015



Landscape establishment, August 2017



Wetland design developed with key stakeholders

Project Team
 Dan Cole - Water and Carbon Group
 Sam Colbran - Logan City Council
 Brendan Cranney - Water and Carbon Group
 Bruce Duguay - Water and Carbon Group
 Matt Fredriksen - Water and Carbon Group
 Anna Markula - Logan City Council

Rob McKenzie - Water and Carbon Group
 Paul Patterson - Water and Carbon Group
 Jai Sigley - Water and Carbon Group
 Greg Siepen - Ecological Consultant

Additional Information
 Company Website
www.waterandcarbon.com.au
 Ecological Case Studies
www.waterandcarbon.com.au/project-category/ecological-services/
 Shailer Pioneer Park Construction
 Timelapse
www.youtube.com/watch?v=119797365

Enquiries
 Project Ecologist - Dan Cole
 Email: d.cole@waterandcarbon.com.au
 THE WATER AND CARBON GROUP
 LEVEL 4, 127 CREEK STREET
 BRISBANE CITY, 4000, QLD
 PH: 07 3211 9997

