

Case study: An Innovative Solution to Measuring and Revaluing Griffith's Roadside Reserves

COUNCIL NAME

Griffith City Council

WEB ADDRESS

griffith.nsw.gov.au

SIZE

1,639.9 square
kilometres

POPULATION

25,641

Overview

Prior to undertaking their Council Roadside Reserves grant project, Griffith City Council had limited knowledge of the roadside vegetation within their LGA. To address this, council proposed undertaking a comprehensive survey of all 1,348kms of roadside reserves, detailing the vegetation communities and their condition. This survey data was then used to inform the development of Griffith's Roadside Vegetation Management Plan (RVMP), a Roadside Reserves Vegetation Management Guide and a tablet platform. These resources were then used to deliver training across council departments to ensure that council operations in and along the roadside reserves do not have a detrimental impact on protected or threatened species or endangered ecological communities.

Background

The Griffith LGA has historically been substantially developed as prime irrigated agricultural land and consequently criss-crossed with an intensive network of roads, many of which have limited roadside reserve vegetation. Managing these areas was problematic as Council had limited knowledge of remaining roadside vegetation and what condition it was in. Council were keen to address this issue and through a successful grant application were able to undertake roadside reserve assessments, develop a number of documents and embed roadside reserve management into their Integrated Planning and Reporting (IP&R) system.

Prior to undertaking the works, Council identified the following key limitations to be addressed:

- The incomplete and dated vegetation map layer for the Griffith LGA
- The lack of recent comprehensive documents pertaining to roadside vegetation management within the Griffith LGA
- No active recognition or management of High, Medium or Low Conservation Value roadside reserves
- No linkage between roadside reserve management and the IP&R framework within Council.

Implementation

As part of the implementation of this project Council undertook the following key activities:

- Used a data driven approach to increase knowledge of the spatial and ecological integrity of their roadside vegetation
- Undertook a full literature review and digitisation of hard data
- Undertook roadside field surveys (1000km's +) including desktop components to build a database
- Prepared a GIS layer identifying the conservation value of all roadside reserves across the LGA. Reserves were classified as High, Medium or Low Conservation Value. The mapping also included the presence of Endangered Ecological Communities (EECs)
- Integrated strategic management of roadside vegetation into key plans, policies and procedures
- Produced a RVMP, including a prioritised list of roads for rehabilitation
- Compiled biodiversity mapping from all available data informing a register of natural assets
- Prepared a Roadside Reserves Policy, REF's and Standard Operating Procedures



- Prepared a “Field Guide” including basic field identification of vegetation communities and condition, best practice work guidelines and basic work site checklists
- Developed state of the art resources and training for all staff to ensure ongoing best practice works and management
- Developed an electronic medium including a tablet platform with GPS, built-in workflows, images and user information that systematically guides the user through logical steps to evaluate admissible actions to any selected work type within a roadside reserve. (This task was undertaken in recognition of the importance of having project product outputs readily available and accessible to Council’s road crew supervisors and road crew staff on a tablet platform in ‘real time’ and ‘in field’.)
- Conducted RVMP workshops for Council staff, supervisors, engineers, planners and road crew staff.

The innovation in this project undoubtedly arises from the conversion and utilisation of the scored GIS data layer into a Roadside Reserves Tablet Platform allowing ready in field geo-located access to all mapped roadside reserves showing High, Medium and Low Conservation Value vegetation communities along with the identification of EEC’s.

Outcomes

The most significant achievement has been the transition from an organisation with an incomplete, coarse and dated GIS vegetation data layer and an assortment of dated local roadside reserve manuals and reports, to an organisation which now has a complete and contemporary suite of product outputs ‘fit’ for Council to now manage roadside reserves responsibly and at best practice standards into the future.

The development of the roadside reserves tablet platform has seen significant enquiry and interest throughout Council, for its inherent capabilities to deliver a broad range of detailed and complex activities and actions important to councils’ day to day operations, delivery and reporting.

Key Learnings

Much of the Griffith LGA is ‘criss-crossed’ with an intensive network of sealed and unsealed roads many of which have limited roadside reserve vegetation. However, it has been noted by the projects surveying ecologists that, of the relatively limited vegetation that does exist, it is of very high conservation value. This has been an important and significant learning from the project.

In addition, Council has realised its ‘in-house’ capabilities to develop a powerful roadside reserves tablet platform, identifying location and enabling users to be systematically guided to evaluate admissible actions to any selected work type within a roadside reserve.

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This project was the 2019 winner of the Roadside Environmental Management Award at the LGNSW Excellence in the Environment Awards