

CASE STUDY

PREPARING AUSTRALIAN COMMUNITIES (PAC): NATURE-BASED SOLUTIONS TO BUILD REGIONAL RESILIENCE

PAC - LEAVING A LEGACY

The PAC project aimed to improve the long-term resilience of the local community to natural hazards, including floods and tropical cyclones, through the delivery of preparedness, awareness and risk reduction activities.

BACKGROUND

In recent years, the Mackay Whitsunday region has faced several climate-driven events, causing widespread damage to natural and built assets. Areas with healthy riparian zones fared better, acting as natural buffers to floodwaters, while those without suffered greater erosion and required more recovery investment.

This project targeted increased community resilience to future floods and cyclones by strengthening natural buffers that mitigate disaster impacts.

The project focussed on three areas:

- Conducting a regional streambank resilience study for locating at-risk environmental areas
- Raising awareness and building capacity through education and community consultation
- Supporting riparian fencing and implementing best management practices to improve system resilience.



ACHIEVEMENTS IN A SNAPSHOT:



PLANNING

Neilly Group report: Mackay Whitsunday Regional Erosion identification, prioritisation and remediation study

- 591 streambank sites identified that have active streambank erosion
- The data from this report will support future projects to target prone areas



AWARENESS

- *The Mackay Whitsundays Isaac Riparian Management Handbook*: created specifically for the local region
- Community Engagement around riparian management through 5 workshops
- Factsheets available to local landholders for riparian management

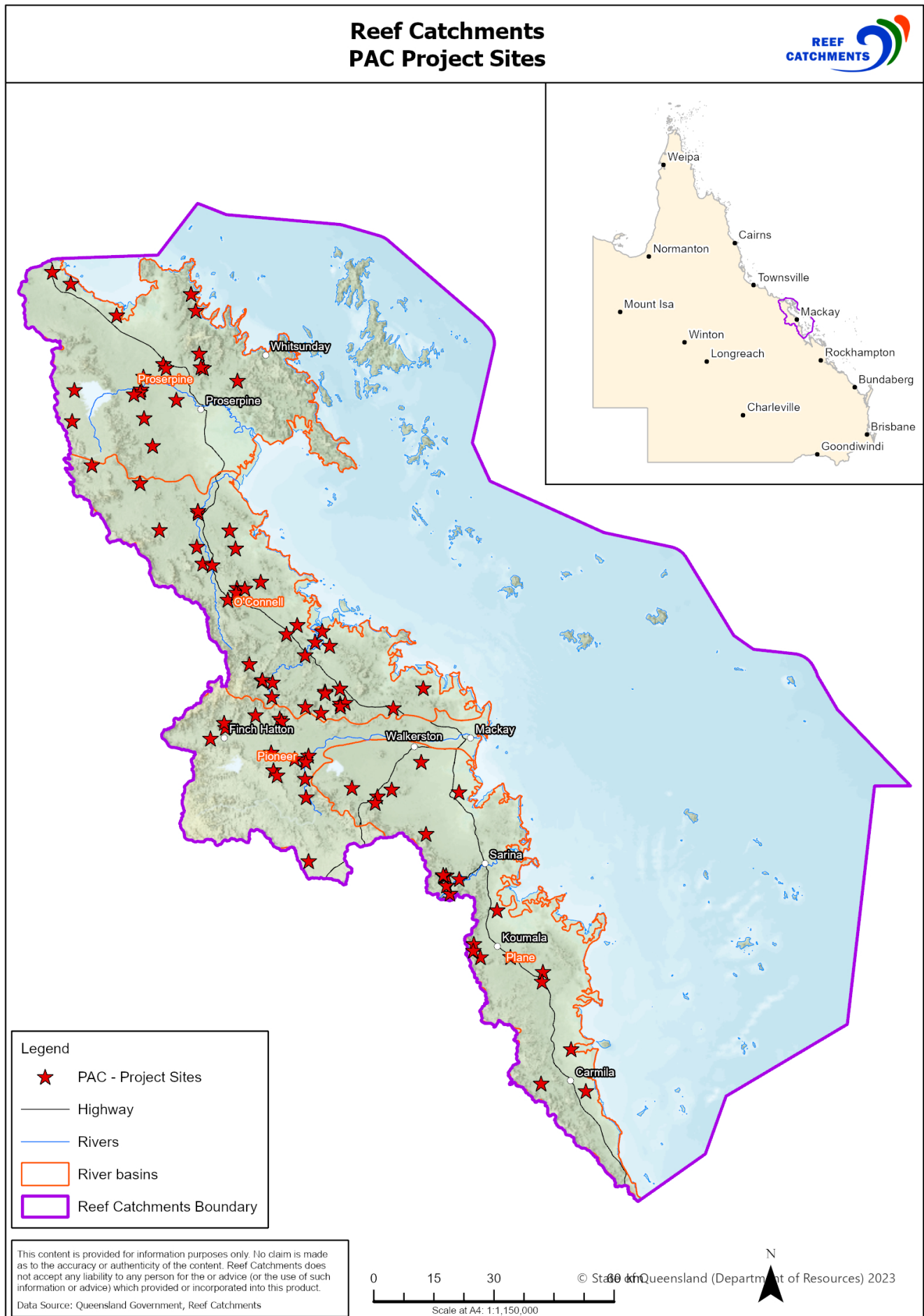


RIPARIAN FENCING GRANTS

- 144 Landholders engaged
- 91 Landholders contracted
- Fencing target: 150km
- Fencing achieved: 229km (52% over target)
- 177 Water Points installed for cattle
- Approximately 152km of streambank protected
- Approximately 458ha of riparian land improved



FENCES INSTALLED THROUGHOUT THE REEF CATCHMENT AREA:



LEGACY OF THE PAC PROJECT

Workshops Attendance and Impact

Over 142 local community members and landholders have participated in workshops that focused on soil carbon, feral pig control, weed management and fluvial geomorphology of waterways in the local area. Local stakeholders were also invited to collaborate in the planning and development of the **Mackay Whitsunday Isaac Riparian Handbook**. This initiative brought together the community to improve awareness and knowledge of best practice riparian management within the MWI Region, leaving a lasting impact on land management approaches.

Bringing local people together has generated new relationships among landholders to share advice in relation to riparian land management. They have also shared knowledge around issues as well as expressed their unique viewpoints on the values of riparian land. The community engagement also captured other local natural resource topics and areas where they would like further support and information in the future.

Educational Package

Participating landholders and people engaged throughout the project were given a package of local information resource material including Factsheets, weed identification books, erosion books, pasture standards as well as best practice management guides. This has provided people with tailored educational and self-learning resources so landholders are equipped with essential management knowledge for ongoing sustainability.

Riparian Land Management Handbook

The **Mackay Whitsunday Isaac Riparian Management Handbook** was developed utilising local knowledge to offer landholders and other interested individuals a deeper level of understanding of local riparian land. Topics, such as riparian values, key threats, and relevant legislation are detailed on a local level. It also gives landholders the steps to create strategies to improve their own riparian land. This resource is available online and hardcopies for landholders can have on readily on-hand to implement their own riparian management program for years to come.

Regional Scale Erosion Analysis

The streambank study completed proactive identification of erosion sites and management pathways to protect adjacent lands and improve water quality. This effective erosion management aims to fortify the region against future natural disasters and supports local community resilience.

Fencing and Waterpoints Grants

Fencing grants have empowered landholders to implement farm practices that protect riparian areas and promote natural regeneration. By enabling local landholders to install purpose-built fencing infrastructure, it helps to ensure better resilience against extreme weather events to ultimately strengthen the local landscape.

Additionally, the grants have supported the installation of appropriate watering points for cattle, facilitating the creation of exclusion zones and promoting better grazing management of adjacent grazing land. This financial initiative has made a significant, lasting impact across the region on supporting long-term resilience across our waterways.



Australian Government
National Recovery and
Resilience Agency

This fact sheet has been developed by Reef Catchments and received funding from the Australian Government.

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LEGACY OF THE PAC PROJECT

“We have already experienced notable improvements within the first year of completing our first riparian fencing project. Sediment control and erosion have shown major recovery both within and outside the riparian creek fencing zone. The fencing in addition to the planned stock water points has proven to be a viable and successful solution to future health and productivity and will in no doubt produce tangible benefits for the foreseeable future.”

- Adam Bowman

“Reef Catchments funding makes guardianship easier. Landowners know what is best for the environment but due to the financial restraints it isn't always possible.”

- Steward Borg

“Fencing off creeks also protect cattle from hazardous parts of the creeks and scrub.”

- Chris Schells

“This project is 100% worth doing, Reef Catchments are easy to deal with and it's a good kick start to making our family farming business venture more resilient.”

- Mark Scriha



USEFUL RESOURCES



The Mackay Whitsundays Isaac Riparian Management Handbook.



Mackay Whitsunday regional erosion identification, prioritisation and remediation study.

FACT SHEETS



Soil Conservation and Erosion Control.



Pest Exclusion and Riparian Fencing.



Riparian Connectivity and Buffering Capability.



Fencing Selection and Maintaining Integrity.



Riparian Scorecard.

CLOSING OUT

By combining landholder projects, education and awareness and linking a regional resilience study, the PAC project has created a healthier, more resilient landscape capable of withstanding future extreme events.

The PAC project helped to foster a more sustainable and resilient environment across the Mackay Whitsunday region for generations to come.

CONTACT US

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