

CASE STUDY

May 2025

Streambank remediation and Koinmerburra Healthy Country Plan through the Reef Assist program 2.0

The Reef Assist 2.0 Mackay Whitsunday Streambank Stewardship Program addressed the pressing issue of sedimentation and erosion affecting the waterways on private properties within the Mackay and Whitsunday region. This program restored streambanks and riparian zones by mitigating erosion through engineered designs or weed control/native plant revegetation, improved water quality by reducing sediment loss, and supported three local landcare groups (Pioneer Catchment, Sarina Landcare Catchment Management Association and Whitsunday Catchment) through funding employment and training opportunities.

Objectives:

1. **Streambank Remediation:** To restore and stabilise streambanks across the Mackay and Whitsunday regions.
2. **Sediment Reduction:** To mitigate erosion and prevent sediment from entering the waterways and impacting the Great Barrier Reef.
3. **Employment Support:** To provide funding and job opportunities for local landcare groups.
4. **Development of the Koinmerburra Healthy Country Plan:** To facilitate the completion of the Koinmerburra Healthy Country Plan.

KEY OUTCOMES

- An estimated **1,135 tonnes** of fine sediment stopped from entering the O'Connell River each year
- Planting of over **15,000 plants** across **0.24 ha** of waterways
- Supporting employment (casual and part-time) of 33 people, through more than 10 local companies in the region
- Assisted **22 landowners** to mitigate erosion and sediment loss on their properties
- Completion of the **Koinmerburra Healthy Country Plan**
- Increased biodiversity and support for the local economy
- Stabilisation of local waterways and reduced erosion
- **60+ species** of invasive weeds targeted by Landcare groups
- **16,000+ hours** of onground streambank remediation work by Landcare groups



The Mackay Whitsunday Streambank Stewardship Program is funded through the Queensland Government's \$33.5 million Reef Assist program under the Queensland Reef Water Quality Program and delivered by Reef Catchments.



Queensland Government





Reef Catchments completed streambank and gully remediation works at three sites located within the O’Connell River catchment, to improve and build resilience within local riverine systems. The remediation process involved the implementation of engineered solutions (installation of physical structures that slow/direct water flow and catch sediment such as pile fields, rock groynes and large woody debris (LWD) structures), planting of 15,000 plants across 0.24 hectares and supporting employment for over 10 local companies. The project is expected to prevent 1,135 tonnes of fine sediment from entering the ocean every year, thereby supporting the health of the Great Barrier Reef.

The three Landcare groups completed weed control and revegetation works at 22 different properties, assisting 22 landowners to mitigate erosion of waterways on their properties. Stabilising these waterways ultimately reduces sediment loss and improves water quality as well as enhances habitat and biodiversity, benefiting local flora and fauna. It also enhances the landscape’s capability to mitigate against the impacts of extreme weather events that are experienced often in our region.

The program also supported the Koinmerburra Aboriginal Corporation to develop the Koinjmal Peoples Healthy Country Plan. This plan articulates the Koinjmal vision for the future of their Country, the critical assets and threats, and strategies to protect/ address them. This plan is a foundational document, designed to provide meaningful and enduring support for the current and future activities of the Koinmerburra Aboriginal Corporation.

Marissa Deshong, Chair of Koinmerburra Aboriginal Corporation stated, “The process of developing our Healthy Country Plan enabled us to cut through all the competing demands for our attention and to take time to focus on our Country, the assets and threats and what we can do to protect and preserve it. We will use this plan to inform and direct our future activities based on our priorities, as we continue to work to protect and preserve our cultural heritage and enhance environmental stewardship for this important area of the Central QLD coast.”

Reef Catchments Senior Project Officer, Emma Jones, summarises the project by stating “The Reef Assist 2.0 project provides a multifaceted approach to remediation with the three project components working simultaneously to support First Nations people, local employment and improve water quality entering the Great Barrier Reef.”



Figure 1 - Reef Catchments’ Glassons site erosion extent before works.



Figure 2 - Glassons site bank batter during works, installing physical structures that slow/direct water flow and catch sediment



Figure 3 - Glassons site completed works following instillation of structures and planting of vegetation to further stabilise the streambank.

Impact

The project is expected to reduce sediment loss in the Mackay Whitsunday region by mitigating erosion and improving water quality, supporting the health of the Great Barrier Reef. The successful implementation of the Reef Assist program 2.0 highlights the power of collaborative and culturally inclusive approaches to environmental stewardship. These initiatives have not only addressed critical environmental issues but also provided significant benefits to the local community. Based on its success, the program has received funding to continue for another 12 months - providing ongoing employment for the Landcare groups as maintenance work continues on the established streambank remediation sites.

The combined efforts of Reef Catchments, local Landcare groups, and the Koinmerburra Aboriginal Corporation demonstrate the effectiveness of integrated conservation strategies and community engagement, setting a strong foundation for future initiatives to protect our natural resources.

The Queensland Government's \$33.5 million Reef Assist program is funded under the Queensland Reef Water Quality Program and delivers priority environmental projects and regional jobs for Queenslanders in the Great Barrier Reef catchment.

The Reef Catchments Mackay Whitsunday Streambank Stewardship Program was one of 11 regional Queensland projects that received funding as part of the Queensland Government's 2022 injection of an additional \$20 million into the Reef Assist program for Reef Assist 2.0. The Mackay Whitsunday Streambank Stewardship Program initially received \$2 million in funding to build on the success of erosion remediation works delivered under the initial Reef Assist program which ran between 2020 and 2022. The program was granted an additional \$1.1 million to expand and strengthen the outcomes already delivered.



Figure 4 - Pioneer Catchment Landcare Group revegetation and Reef Assist site



Figure 5 - Sarina Landcare Catchment Management Association maintenance of revegetation at Reef Assist site.

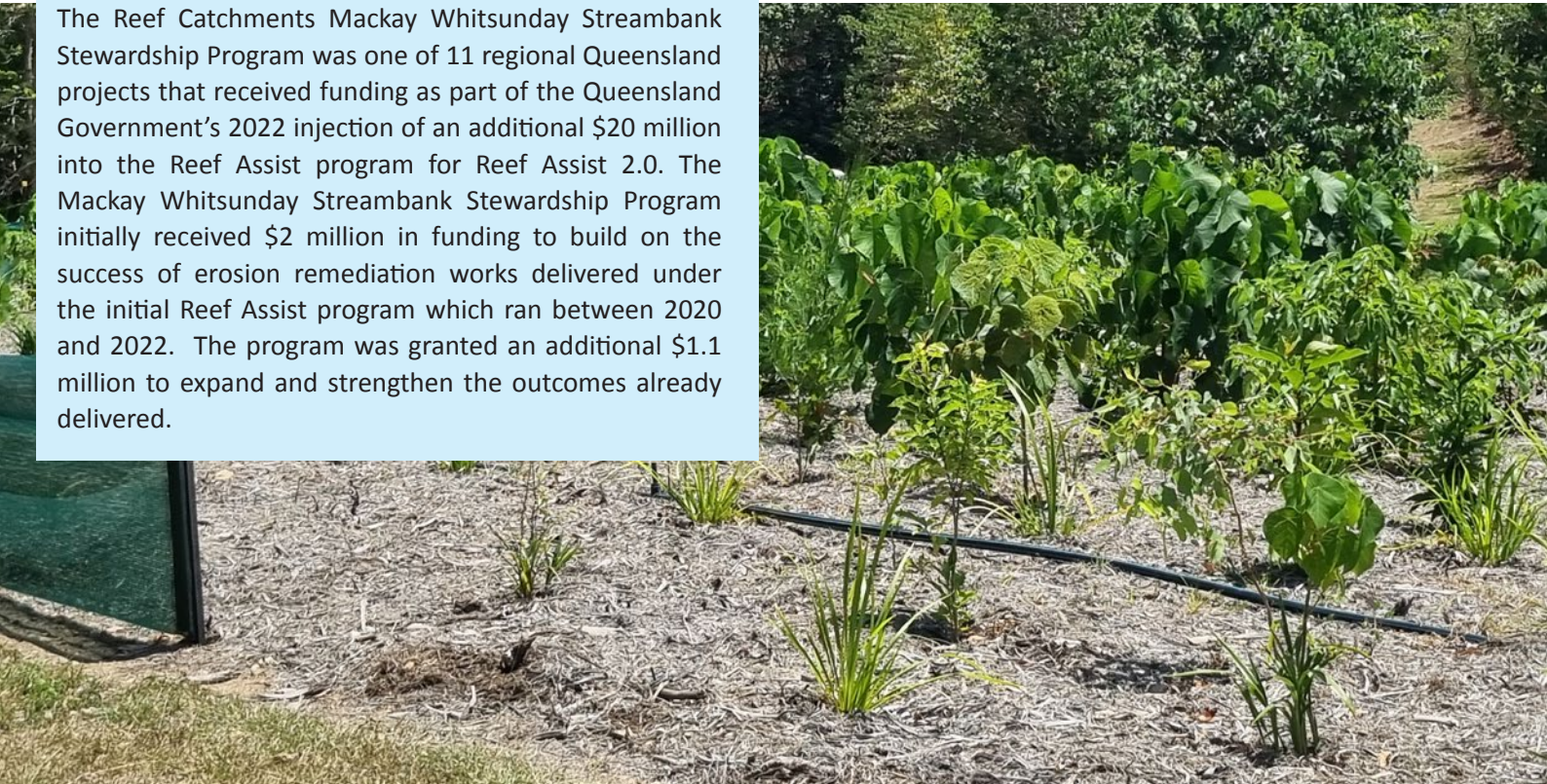


Figure 6 - Whitsunday Catchment Landcare Reef Assist site after planting.

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