Creek stabilisation and regeneration

Reef Assist Magnetic Island

19 February 2024

SITE SUMMARY

Objective

To secure the creek banks, mitigating erosion and preventing valuable top soil from washing out to the Coral Sea, negatively impacting coral growth and Great Barrier Reef system.

Goals

· Identify areas of high erosion risk, then work to restoring the integrity of the creek line
· Identify and support native plant species
· Identify and remove invasive weeds
· Ensure habitat is maintained for local wildlife
· Implement organic and sustainable soil regeneration techniques

Solution

Creating a systematic approach to obtaining the above goals with little/no negative impact to the integrity of the site by methods such as:

- Rehabilitating small and manageable sections of the site at a time.
- Creating action plans that prioritise areas of high erosion risk.
- Reclaiming a 5metre buffer zone away from the top bank of the creek, this supports the integrity of the creek banks and also prevents machinery (slashers) from driving, damaging the creek edge and inhibiting natural revegetation.
- Implementing erosion control measures directly preceding any soil disturbance.
- Preparing the creeks fringe soils for successful planting prior to wet season.
- Consulting knowledgeable local resident's about plant identification and determining appropriate species for regeneration.
- Removing weeds for processing off site (at our HumiSoil pile) and ensuring that all removed organic matter is replaced with soil building materials such as Humisoil, biochar, XLR8 and loads of mulch (no bare earth).

Project Outline

The project has thus far has shown great success, both in revegetation as well as creating and maintaining habitat for local fauna.

To date on this site there has been:
939 Native plants reclaimed
8.4 Cubic metres weeds removed
256 Natives planted
246 Hours site labour