

STRENGTHENED STREAM BANKS

will protect soil and water

A Cassowary Valley cane farmer is hoping that a new rock wall will help his creek banks hold up in flood events and prevent productive land being washed away.

Richard Padovan is shoring up eroding stream banks as part of a landscape remediation project funded by the Queensland Government's Natural Resources Investment Program.

Terrain NRM's Vanessa Drysdale said a 30m rock wall on Richard's farm is part of a larger project that includes work on cane and cattle properties in the Cassowary and Saltwater sub-catchments in the Mossman district.

"You've only got so much top soil, and once you lose it, you've got nothing left to grow stuff on. That's why we're doing our best to keep it where it's meant to be."

"We're planting and extending 17 hectares of vegetation along waterways," Vanessa said. "We're also using engineered constructions like rock walls to increase the ability of streambanks to withstand high water flow events.

"Trees do a great job at holding banks together, but of course they take time to establish, which is why we use a combination of 'hard' works and plantings."

Richard has welcomed the work on his farm after experiencing severe flood damage in late 2018 and early 2019.

"It was the worst erosion I've seen since I've been here. It was like a raging torrent and just took everything with it," he said.

"No farmer wants to see that happen. You've only got so much top soil, and once you lose it, you've got nothing left to grow stuff on. That's why we're doing our best to keep it where it's meant to be.

"Trees just make sense. You can see the difference – where there's trees still along the creek bank there's been no real damage in flood events."

Terrain is coordinating the project and working with Mossman Agricultural Services, CANEGROWERS Mossman, and the Douglas Shire Council to deliver on ground work.

Vanessa said that landholders are involved every step of the way.

"They've got a livelihood to make on these properties and it's been shown time and again that the best results come from combining the best available science with expert local knowledge," she said.

Local contractors were engaged to construct a 'rock toe' at Richard's erosion site - it's a short rock wall that armours the lower section of a bank.

Rock walls are used when a streambank is highly eroded and the riparian

vegetation has been severely impacted, or is non-existent. Without intervention, the bank would continue to erode, impacting vegetation either side and also washing productive soil away.

Rock walls are designed to complement a creek's natural features, meaning they curve and slope the way a creek naturally would.

Vanessa said that eventually the new vegetation would take over.

"The rock will be unrecognisable and look like a seamless section of well-vegetated creek bank. We're expecting to see increased biodiversity thanks to the increased habitat, and of course cleaner, clearer water flowing out to the Great Barrier Reef."

Richard has applauded the changes he's seen on his land.

"I'm really happy that Terrain has come on board to work through our erosion challenges together. The problem's better tackled together," he said.

"I'm impressed with the results so far, and how smooth a process it's been. I think it goes to show that when you get all parties genuinely talking and working together, then you end up with a lot better job," he said. ■

Supplied by Terrain NRM

Pictured: Richard Padovan and Vanessa Drysdale at a Cassowary Valley remediation site.

Sections of the Padovan's creek bank were heavily eroded during flood events in late-2018 and early-2019, washing away soil and exposing tree roots.

