

Case Study

Implementation of Variable Rate Soil Amendments

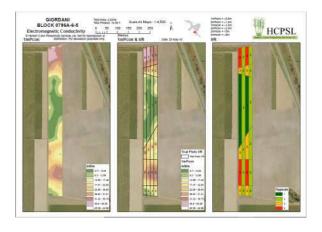


LANDHOLDER	Walter Giordani
LOCATION	Helens Hill, Yuruga and Bambaroo
CATCHMENT	Lower Herbert
RAINFALL	2673mm
PROPERTY SIZE	178ha
ON-GROUND PROVIDER	HCPSL

Project Catalyst is a grower led, sugar cane innovation and adoption project that explores, develops and validates farm management practice change to improve the enduring water quality of the Great Barrier Reef.

BROADER ADOPTION VALIDATION & GROWER SUPPORT

Founded in 2009, the project operates in the Mackay Whitsunday, Burdekin and Wet Tropic regions to deliver valued practice change outcomes and develop methods for industry adoption. Under the Broader Adoption and Grower Support program, professional on-ground service providers assist selected growers to adopt and validate appropriate change practices. Service providers continue to monitor implementation bene its and derived environmental performance improvements. Through targeted extension activities, the program seeks to accelerate the uptake and broader adoption of improved farming practices at local, regional and industry levels.











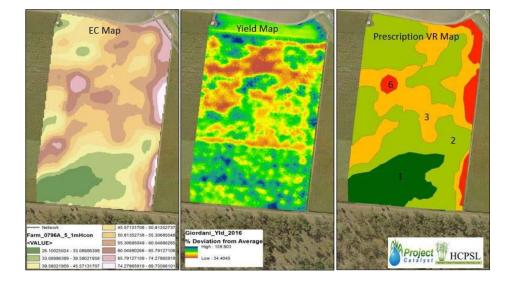




2021

•••• Goal

To improve his sodic soil issues across all blocks by applying gypsum and ash where EM mapping has indicated problems zones.



Overview

By using EM mapping and soil sampling to apply ameliorants to problem sodic zones across all farms. Walter has also implemented other farming systems like mounding and legumes in fallow where suitable.

• Action

- Walter has built himself a gypsum spreader to fit his tractor with variable rate controllers fitted to apply gypsum into zones identified by EM mapping and soil sampling
- Trials have been implemented across some farms to confirm that this farming practice is valid
- Economics have been done on cost between variable rate application of gypsum and a traditional blanket approach of gypsum. There was no statistical differences in costs of gypsum between the two methods.

Outcome

Walter has implemented this practice across a number of blocks. Study of yield data during the last ten years has shown considerable improvement in yields since adopting this farming practice.

Studies have shown that there is no statistical differences in cost of gypsum between the two methods.











