



# Case Study

## Implementation of EM Mapping, Sodic Soil Management and Fallow Cropping Systems



<b>LANDHOLDER</b>	Anthony Castorina
<b>LOCATION</b>	Macknade, Sunnybank and Bambaroo
<b>CATCHMENT</b>	Lower Herbert
<b>RAINFALL</b>	3023mm
<b>PROPERTY SIZE</b>	550ha
<b>ON-GROUND PROVIDER</b>	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 benefits 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.



Great Barrier Reef Foundation



●●●● Goal

To implement new farming systems involving EM mapping and variable rate applications to better manage sodic soil issues within Anthony's farms. To implement fallow crops during fallow periods and trials involving improvement of soil structure.



●●●● Overview

By EM mapping than applying variable rates of ameliorants to his problem blocks Anthony is hoping to achieve overall yield improvements to his cane.

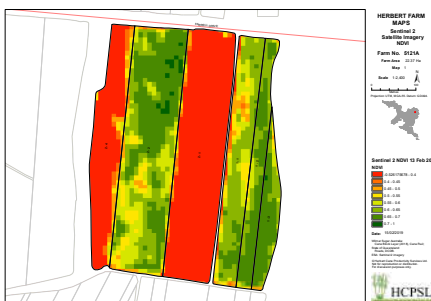
By starting to implement fallow crops into his fallow blocks Anthony is hoping to improve soil health and yield for his subsequence cane crop.

●●●● Action

- EM maps have been made in preparation for variable rate amendments to be applied.
- Traditional legumes has been planted at the Macknade farms fallow blocks.
- Trials have been taking place to test soil structure improvement products.

●●●● Outcome

- Most of the Bambaroo farms have been EM mapped.
- Started planting beans this season at Macknade farms.
- Trials assessing products that are said to improve soil structure will continue.



Great Barrier Reef Foundation

