

Case Study

Improved Nutrient Management Planning



LANDHOLDER	Phil Campagnolo
LOCATION	Mourilyan
CATCHMENT	Johnstone
RAINFALL	3283mm
PROPERTY SIZE	77.6ha
ON-GROUND PROVIDER	CANEGROWERS Innisfail

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.



Planting Demonstration Block



Plant cane 7months after planting.





Great Barrier Reef Foundation





2020

•••• Goal

To develop a whole of farm nutrient management plan with a specific focus on improving phosphorous management across farm.



The aim of this project is to develop a Whole of Farm Nutrient Management Plan with Phil that takes into account all aspects of nutrient management not just focusing on individual nutrients.

The process takes into account all relevant agronomic data as well as grower knowledge and experience when producing the plan.



Cutting Plant source



Young Plant Cane

• Action

Phil's approach to nutrient management and his farm history were discussed at length to gather information including other crops he has grown, previous applications of mill mud or ash, liming and productivity. This information was used to determine the best way to improve nutrient management across his whole farm.

By reviewing Phil's existing soil test results and soil maps we were able to assess his current and historic soil nutrient status. A single nutrient management zone was identified across his farm with 130kg/ha N, 0kg/ha P and 120kg/ha K required for ratoon crops.

Following these reviews, a whole farm nutrient management plan was produced. Phil has routinely applied 10kg/ha P at planting, SIX EASY STEPS nutrient management guidelines recommend 0kg/ha P for his farm. As a result of these discussions, a paired demonstration was established where half the block was planted with a fertiliser that supplied 10kg/ha P and the other half was planted with a fertiliser that supplied 0kg/ha P.

Outcome

Results will not be known until the block has been harvested. However to date there is no visible difference in crop growth.









