

Case Study

Recording Irrigation Data via a Smart Phone App



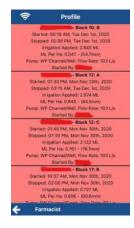
LANDHOLDER	Ken and Jeff Linton
LOCATION	Burdekin
CATCHMENT	Burdekin
RAINFALL	984mm
PROPERTY SIZE	175ha
ON-GROUND PROVIDER	Farmacist-Burdekin

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 set a grower's farm in a smart phone app to assist them in collecting irrigation record data. To support the grower in reducing nitrogen and phosphorous rates in late cut ratoons due to the reduced yield potential.



Overview

The Farmacist Irrigation Record App has been trialled on a number of different farms and used to record irrigation data over a season. The growers who have used the app have found it easy to use and appreciate the "start, stop" function for creating irrigations. This suggests that the app can be installed on other growers' phones.

Growers need to have base line irrigation data in order to benchmark To set themselves and identify where they may be able to improve their practices. Using the app to record irrigation data can help growers develop this baseline. From there, they can identify where they may be using too much or not enough water and adjust their practices.



Action

The Farmacist Irrigation Record App has been installed on both Ken and Jeff's phones and set up to reflect their current irrigation management zones and sets. The areas of their blocks and sets have been calculated using spatial data - this takes the error out of calculating the area of sets on oddly shaped blocks!

Farmacist has also measured the flow rate of some of Ken and Jeff's pumps using an ultrasonic flow meter to ensure that the flow rates being used to calculate irrigation volumes are accurate. Where the flow meter couldn't be used, a bucket and stopwatch was conducted to estimate the pump flow rate.

Outcome

Over the last year, the growers have been recording their irrigation data on parts of the farm - it is difficult on some paddocks to determine an accurate flow rate. Where they have been collecting records, the irrigation volumes are looking







