



# Case Study

## Mixed Fallow Legumes and Use of Bio-solids to Improve Soil Health



<b>LANDHOLDER</b>	Lyle Glenwright
<b>LOCATION</b>	Lannercost
<b>CATCHMENT</b>	Lower Herbert
<b>RAINFALL</b>	1763mm
<b>PROPERTY SIZE</b>	191ha
<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 improve overall farm soil health
- To have mixed fallow legumes planted on all fallow blocks.
- To utilize the use of bio-solids as an organic source of nutrients



●●●● Overview

Lyle hopes to improve soil health and aims for sustainable farming for the future. By using mixed legumes in fallow he will be able to reduce his nutrient rates, reduce erosion and weed pressure.

By using bio-solids as an organic source of nutrients Lyle will be able to once again reduce his chemical fertilizer rates.

●●●● Action

- Have bio-solids lab tested for nutrient analysis.
- Reduce chemical fertilizer rates
- Plant legume fallow crops into fallow land
- Improve overall soil health and carbon

●●●● Outcome

- Lyle has tested the bio-solids. These tests allowed Lyle and Jarrod (agronomist) to analysis how much bio-solids to apply and how much Lyle would be able to reduce his N & P rates.
- Bio-solids were a good source of zinc and copper, supplying enough of the micro-nutrients to supplement deficiencies.
- Fallow crops have been planted into fallow ground.
- Lyle has found the best method for success is a combinations of both bio-solids and mixed legumes on his fallow blocks.

