



Connecting Burdekin Cane Farmers To Their Local Wetlands

THIS NQ Dry Tropics project worked with a group of Lower Burdekin cane farmers adjacent to Horseshoe Lagoon, Giru, and Lilliesmere Lagoon, Ayr.

They received water monitoring to help them identify efficiencies and determine whether practice changes successfully prevented water and nutrients leaving their farms.

Project partner Burdekin Bowen Integrated Floodplain Management Advisory Committee (BBIFMAC) delivered the water monitoring and provided additional support to analyse the results.

This helped the farmers make better informed management decisions.

The project also raised awareness about the connectivity between cane farming, wetlands and the Great Barrier Reef.

Farmers learned more about why wetlands were important, and how nitrogen runoff reduced water quality and contributed to weed growth.

Participating farmers met scientists from JCU's TropWATER and the Australian Institute of Marine Science, and attended farm demonstrations on automated irrigation and mill mud application.

They also received posters depicting the life cycle of the barramundi, and the journey of nutrients from the farm to the reef.



Lisa Pulman from NQ Dry Tropics and Dennis Stubbs from BBIFMAC.

Improving irrigation and nutrient efficiency is good for productivity, profitability, and wetlands

‘Participating in projects and trials is how you learn and improve. Be willing to have a try.’



PAUL VILLIS, Lilliesmere Lagoon

What did you monitor?

Legume fallow, reduced N rate resulting from dunder and mill mud.

Will you continue the practice?

Yes, we will on the whole farm as the monitoring proved the water quality outcomes.

‘The project gave me more confidence in my practices. Make use of organisations like NQ Dry Tropics and BBIFMAC, they're excellent at what they do.’



FRANK MUGICA, Lilliesmere Lagoon

What did you monitor?

Buried banded mill mud, also split timing fertiliser application.

Will you continue the practice?

Yes, on the whole farm, now that I know the water quality outcomes are good.

‘The data was very helpful and the results were better than anticipated.’



RUSSELL LAIDLAW, Lilliesmere Lagoon

What did you monitor?

Slow release fertiliser on first ratoon, and zero till on second ratoon.

Will you continue the practice?

Yes, we will implement these practices on the whole farm, where suitable.

‘The project increased my interest to try new things. Data is the key, and every little bit counts.’



PAT CREMIN, Lilliesmere Lagoon

What did you monitor?

Split timing N application.

Will you continue the practice?

No, I will not implement it as it didn't suit the characteristics of my farm.

‘Having data and proof that what we are doing isn't having a detrimental downstream effect is a good feeling.’



SERGE SARTORI, Lilliesmere Lagoon

What did you monitor?

Split timing N application combined with new products such as granulated urea.

Will you continue the practice?

Yes, we will be using the split application method all the time now.

‘Just give it a go and trust the extension staff.’



GERARD TUFFIN, Lilliesmere Lagoon

What did you monitor?

Conventional till vs Green Cane Trash Blanket.

Will you continue the practice?

I will consider using it on other parts of the farm, but it depends on the upcoming harvest results.

‘It's good to know more about your practices, and having the data to back your practices up is important.’



JASON RES, Lilliesmere Lagoon

What did you monitor?

Stool split behind the harvester, minimum till, and added pulverised lime to improve soil condition..

Will you continue the practice?

Yes, I will use the method where it suits, depending on soil, seasons and crop cycle.

‘If you can't measure it, you can't manage it.’



DAVID RUSSELL, Lilliesmere Lagoon

What did you monitor?

Split timing N application, legume fallow, GPS bed forming and zero till.

Will you continue the practice?

Yes, I will continue these new practices.

‘I'd recommend to other farmers to join projects and try new stuff. Having another set of eyes helps to find gains.’



STEVE PILLA, Horseshoe Lagoon

What did you monitor?

Reduced N dunder rate.

Will you continue the practice?

No, unfortunately the dunder didn't produce the results we wanted so we won't be implementing it further. It was good to find out though.

‘Joining projects and doing trials, there is nothing to lose and plenty to gain.’



ANDREW CROSS, Horseshoe Lagoon

What did you monitor?

Volume of runoff on part of the farm and a gypsum trial.

Will you continue the practice?

Yes, we will most likely apply gypsum to the whole farm where required. And we installed a recycle pit to capture and reuse the runoff from that part of the farm.

‘You have to be willing to participate. Everyone's got to do their bit.’



GAVIN WRIGHT, Horseshoe Lagoon

What did you monitor?

An agronomist-recommended N rate.

Will you continue the practice?

Yes, I will continue to work on improving my N rate efficiency.

‘I wouldn't have known about my N losses without the project. Monitoring allows you to see your results and then you can improve them.’



GARY STOCKHAM, Horseshoe Lagoon

What did you monitor?

I had the runoff from my standard practices monitored to find out if there were any areas I could make efficiencies.

Will you continue the practice?

I plan on trialling a different fertiliser and am keen to get the water quality results monitored.



Burdekin cane farmers watch a demonstration of banding mill mud



Project officers Lisa Pulman from NQ Dry Tropics and Dennis Stubbs from BBIFMAC



Dennis Stubbs sets up water monitoring equipment



Dr Christine Buelow and Dr Nathan Waltham from TropWATER conducting electrofishing surveys



WHO ARE WE?

We are a community-based, not-for-profit organisation that supports people in the Burdekin Dry Tropics of North Queensland to sustainably manage natural resources including soil, water and biodiversity. These resources underpin our regional economy and our way of life.

HOW DO WE HELP PROTECT WETLANDS?

Our Waterways, Wetlands and Coasts team works with landholders, industry, government and community groups to manage priority wetlands. We promote the benefits of restoration and revegetation, and help farmers better understand how changing land management practices can improve water quality downstream.

FOR MORE INFORMATION

NQDRYTROPICS.COM.AU

info@nqdrytropics.com.au

PH: (07) 4799 3500

FX: (07) 4799 3593

 @NQDRYTROPICSNRM

 @NQDRYTROPICS

12 WILLS STREET,
TOWNSVILLE 4810



This project was delivered by NQ Dry Tropics and funded by the Queensland Government Reef Water Quality Program.