

Rain chasers working to answer growers' water quality questions

Cane growers in the Innisfail and Tully districts received a perfect gift in 2020 with much-needed rain arriving on Christmas morning. But for the region's water quality monitors, the downpour was exciting for different reason.

The rain event signaled what's known as the 'first flush', a critical sampling time when gathering water quality data.

The Wet Tropics Major Integrated Project (MIP) has been working with growers in the Johnstone and Tully basins for a little over three years to better understand how farming and other land uses impact water quality.

During this most recent rain event, MIP's dedicated rain chasers braved torrential conditions and crocodile-infested waters to collect over 370 samples.

The valuable data generated from these samples will be reported back to primary producers at shed meetings and extension events in the coming months.

"The Wet Tropics MIP prides itself on its grassroots approach," MIP Johnstone Basin Coordinator and CANEGROWERS Innisfail Manager **Sandra Henrich** said.

"Through this approach the project is trying to answer the top three questions local growers ask: 'How do I know it's my N?', 'Is what I'm doing making a difference?' and 'What else can I do?'"

These questions underpin everything the MIP does.

"We don't want to lose our inputs but without knowing what happens on my farm or in our local creeks, we can't fix it." With a broad range of systems and equipment used to capture the water quality data, the project is providing information about nutrient, sediment and pesticide losses for the first time.

Some of the feedback from growers during the first round of shed meetings included: "We should have had this ten years ago", and "We don't want to lose our inputs either but without actually knowing what happens on my farm or in our local creeks, we can't fix it."

Banana and pawpaw growers in Innisfail have also joined the MIP in this area.

Wet Tropics MIP sampling is undertaken at three different scales:

- Paddock monitoring which includes paddock run-off monitoring and shallow groundwater monitoring;
- Sub catchment monitoring which includes routine monitoring and event-based monitoring, in-stream continuous monitoring;
- On-the-spot nitrate monitoring and end of catchment monitoring.

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Pictured: (left) Chris and Kelly O'Kane with their daughters Grace and Bridie at their farm in East Feluga; (above) CANEGROWERS Innisfail District Extension Officer for the Wet Tropics Major Integrated Project Dalton Howden.



Rain chaser: Innisfail Canegrowers District Extension Officer for the Wet Tropics Major Integrated Project Will Darveniza gathering samples

"I wanted to see what was coming out of the rainforest and what was agricultural ... going by the data, we're doing pretty well." Third generation East Feluga cane grower **Chris O'Kane** has sampling points on his property and finds the information he gets from them beneficial in his decision making.

"About three years ago Fiona from the MIP Farm Services team approached me for some possible water monitoring sites," Chris said.

"I had some spots in mind – a little creek that comes straight out the rainforest and another spot down at the bottom of our farm. I wanted to see what was coming out of the rainforest and what was agricultural.

"I see it as a positive, because as a farmer I can actually see the results. There are some areas which I think we can improve, but going by the data, we're doing pretty well," he said.

Growers gather at regular MIP shed meetings which are designed to be a comfortable and open environments for data to be shared and discussed. "I like seeing the results, you can sit down and talk to the team, go through the results and see what is happening when we have rain events or dry times," Chris said.

Article and images supplied by the Wet Tropics Major Intergrated Project.

The Wet Tropics Major Integrated Project is funded through the Queensland Government's Reef Water Quality Program, and coordinated by Terrain in partnership with CANEGROWERS, Australian Banana Growers' Council, Local Government, community groups, traditional owners, consultants, investors and researchers.