LOWER HERBERT WATER QUALITY PROGRAM

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The Herbert catchment makes up about 45 percent of the Wet Tropics region and discharges more than five thousand gigalitres of fresh water into the Great Barrier Reef. The lower part of the catchment is home to a proud and progressive cane farming community who is leading the way in improving profitability, productivity and sustainability in its business operations. These growers are supported by productivity service and agronomy providers, and a strong industry, who continue to seek the latest in sustainable agricultural practices and innovative farming methods.

The Lower Herbert Water Quality Program is a 3.5-year, \$16.2 million dollar program that aims to prevent 140 tonnes of dissolved inorganic nitrogen from entering the Great Barrier Reef every year. The program is coordinated by CANEGROWERS Herbert River and centres on improving land management to increase the profitability, productivity and sustainability of Lower Herbert cane farms to benefit growers and the environment.



0 20 40 80 N Kilometres



Pollutants reduce the Great Barrier Reef's ability to recover from catastrophic events such as tropical cyclones and mass coral bleaching.



Algal blooms can compete for space, affect coral metabolism, reduce coral settlement and increase susceptibility to coral disease.



Dissolved inorganic nitrogen (DIN) is a nutrient that is immediately available for uptake by plants and can cause algal blooms.



Improved nitrogen management practices can reduce DIN runoff while maintaining productivity.







Great Barrier Reef Foundation

The Lower Herbert Water Quality Program is funded by the partnership between the Australian Government's Reef Trust and the Great Barrier Reef Foundation.

WORKING WITH GROWERS

Local partners in the Lower Herbert work closely with sugarcane farmers to increase uptake of farm management practices that both improve the productivity and profitability of their farms and reduce runoff of dissolved inorganic nitrogen.

Through extension services and access to capital to implement pollutant reduction activities, growers engaged in the program can improve the health of the soil on their land and gain access to tools that aid decision-making. Simple activities such as better nutrient planning, planting mixed species cover crops and more efficiently applying mill mud can reduce costs, improve the health of the soil and make a huge impact on the quality of water flowing into local water ways and out to Reef ecosystems.

"We love the Reef and want to do everything in our power to make sure we sustain it for generations to come," said one involved canegrower.

"Getting involved in this program is showing that. If you're established in the industry, it can be valuable to check where you are at, and if you are new and want to learn more, then it is perfect for that too."

GREAT BARRIER REEF FOUNDATION'S WATER QUALITY PROGRAMS

The Lower Herbert Water Quality Program is one of 10 regional programs that work together with local organisations and landholders to make a measurable improvement in the quality of water reaching the Great Barrier Reef through targeted interventions that are beneficial to the community.

In addition to these regional programs, the Great Barrier Reef Foundation, through the Reef Trust Partnership, is investing in state-of-the-art technologies, novel financing mechanisms and crucial research to drive innovation needed in the water quality industry to achieve the targets of the Reef 2050 Long-Term Sustainability Plan. To learn more, please visit our website at **barrierreef.org**.



LOWER HERBERT PROJECTS





Project CaNE, delivered by Herbert Cane Productivity Services Limited with support from TropWATER, empowers farmers to improve farming practices that reduce dissolved inorganic nitrogen and other pollutants from entering local water ways that feed into the Great Barrier Reef. Sustainable farm practice change improves water quality while increasing productivity and profitability.

Modernising On-Farm Mill Mud Application



Agro Group aims to provide cane growers the tools and knowledge necessary to apply mill mud more accurately and efficiently to their paddocks. Applying mill mud to cane paddocks can increase yield and improve soil health. Ensuring it is applied efficiently reduces costs to the farmer and improves the quality of water flowing off the farm.

Project Catalyst

Catchment Solutions manages Project Catalyst, a long-term driver of

innovation and practice change adoption in the sugar cane industry. The project helps growers adopt agricultural practice changes to improve on-farm management practices and significantly reduce pollutant loads that impact the Great Barrier Reef.

Reef Credits



Catchment

GBRF will invest \$500,000 to purchase Reef Credits from GreenCollar in the Lower Herbert region. Landholders generate and sell Reef Credits through validated and audited dissolve inorganic nitrogen reduction activities that go above and beyond regulations. This investment will allow funding for impact to endure far beyond the initial term of investment.

Local Area Nutrient Datahub (LAND)



LiquaForce's LAND project utilises data such as crop history, land structure and soil composition to produce an optimised Six Easy Steps nutrient management plan that reduces the amount of excess nutrients flowing into local water ways. A secure and private digital storage system for farm, soil and production data for growers enables easy long-term monitoring of crop and financial performance over time.

Major Grants 🚸 Proiect



CANEGROWERS Herbert River is administering the Major Grants Project, which provides financial incentives to growers who improve water quality through practice change. Grower incentive grants will be available to any growers in the district who meet the eligibility requirements and are willing to contribute a matching cash amount.