NEWSLETTER

BBIFMAC

Issue 9 January 2021

Recent Events

For the month of January, BBIFMAC staff have been chasing their tails. The late December/early January rain kept Arwen, Dennis and Luke very busy over the Christmas and New Year period, working tirelessly to collect rainfall runoff samples for the various projects that BBIFMAC are undertaking from Bowen to Ingham.

Mackenzie came back from a sunny Christmas holiday to a big headache at the BBIFMAC office, with fridges and freezers bursting at the seams and a mountain of paperwork for all the rainfall samples.

In our first shipment of samples for 2021, over 150 water samples were sent to the laboratories in Brisbane for analysis – that must be a new record!



High rainfall volumes caused flooding at many of the creek sampling sites for the Department Environment and Science Fine Scale Water Quality Monitoring Project.

Meet the BBIFMAC team!



We would like to take this opportunity to introduce one of our great BBIFMAC team members with each newsletter. In this issue we introduce Rob Ritchie, Water Quality Officer.

Rob has worked for BBIFMAC since 2012, when he was employed to undertake the water quality sampling and maintenance activities for BBIFMAC's contract with Dept. Environment and Science (DES) for the Great Barrier Reef Catchment Load Monitoring Program.

As part of the project, Rob travels from Bowen to the Burdekin, and inland near Charters Towers to collect samples from the 8 river and creek sites being monitored.

Managing Natural Resources to ensure Social Wellbeing, Primary Production and Ecological Sustainability.

Great Barrier Reef Catchment Loads Monitoring Program

The Great Barrier Reef Catchment Loads Monitoring program (GRBCLM) is funded by the Queensland Government, and is a sub-branch of the Paddock to Reef Project.

The GBRCLM project began in 2009, and enables the annual loads of key pollutants (sediment, nutrients, and pesticides) to be estimated for each of the 35 catchments draining into the Great Barrier Reef Lagoon from the Burnett Mary region to Cape York.

BBIFMAC has been involved with the GBRCLM project since 2012, when Rob Ritchie was employed to undertake the monitoring at 8 sites within the Burdekin region, which extends from the Don and Bowen rivers in the south, to the Burdekin river, Haughton river, and Barratta Creek in the Burdekin region, and the Burdekin river at Sellheim (near Charters Towers).



A map of the Burdekin region, provided by the Queensland Government's Great Barrier Reef Catchment Loads Monitoring Program Report Summary 2017-2018, Interactive Story Map. The 8 sites that BBIFMAC monitor are circled.

Water quality monitoring stations that are located at pre-existing gauging stations have automated sampling equipment which collects a discrete sample at a pre-programmed time interval. However, not all sites have automated equipment due to budget constraints and hence many require manual sampling collection (grab sample taken at a specific point in time).

Some sites are analysed for nutrient, sediment, and pesticide concentrations, while others are analysed for pesticide concentrations only.

During the dry season when rivers experience low flow, the water samples are collected by BBIFMAC on a monthly basis, however during the wet season and high flow events, samples can be collected as frequently as every few hours to daily, as the river flow rises and falls.

The monitoring data reported by the program are used by the Department of Environment and Science



BBIFMAC staff member, Rob Ritchie collecting a manual sample from the Haughton river site as part of the Great Barrier Reef Catchment Loads Monitoring Program.

(DES) to validate the catchment water quality models to track long-term progress towards the Reef 2050 Water Quality Improvement Plan (WQIP) and 2025 water quality targets. Additionally, the data contributes to the development of the Reef Report Card, which assesses the results of all Reef 2050 WQIP actions (of which the GBRCLM Program is one) and is publicly available via the Queensland Government website.

www.reefplan.qld.gov.au/trackingprogress/paddock-to-reef/modelling-andmonitoring

The catchment loads calculated by DES are for the monitored portion of each catchment only, and as such do not represent the total load discharged into the GBR lagoon.



The above Reef Report Card 2017-2018 was released in August 2019, and summarises the results of all Reef 2050 Water Quality Improvement Plan actions.

While many landholders have improved their practices through the Paddock to Reef program, the results reflect the scale of change still required to meet the water quality targets. The Australian and Queensland Governments have invested \$614M for the project from 2017-2022, which will enable Reef 2050 WQIP activities to continue for the immediate future.

Become a BBIFMAC member! JOIN NOW FOR JUST \$20 PER YEAR.

BBIFMAC members receive:

- Free or discounted water quality tests.
- Discounted water quality monitoring equipment.

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