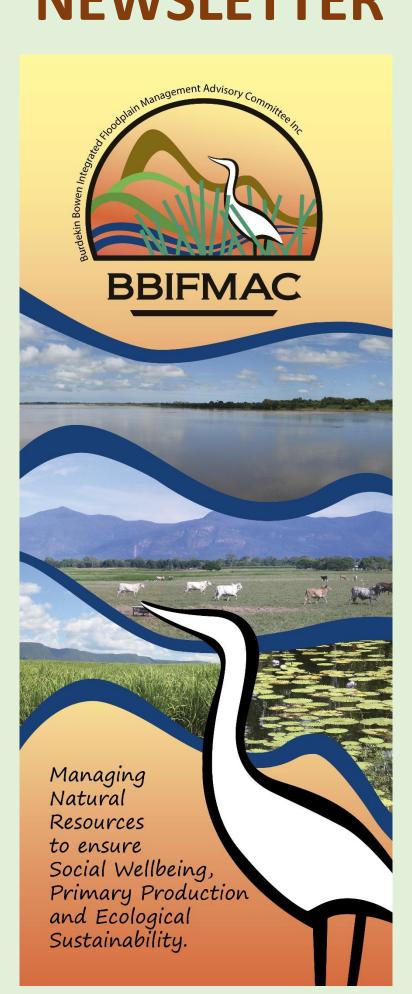
# **NEWSLETTER**



### **Recent & Upcoming Events**

BBIFMAC staff recently undertook the annual quality assurance training for our ongoing involvement with the Department of Environment and Science's (DES) Catchment Load Monitoring program. The training was provided by Rohan Wallace, Senior Scientist, Water Quality and Investigations at DES. The full day of training consisted of both theory and practical sessions to refresh our skills for proper water sampling technique in accordance with Australian standards.



BBIFMAC staff member, Luke Buono practicing the manual sampling technique as part of the annual quality assurance training for the DES Catchment Load Monitoring Program.

#### **BBIFMAC AGM**

BBIFMAC invites you to our Annual General Meeting, Tuesday 1<sup>st</sup> December, 10am-12noon at the Burdekin PCYC, corner MacMillan street and Little Drysdale street, Ayr.

Tim Hunt, General Manager, Rabobank (Food and Agribusiness division) will be presenting on the impact of COVID on agricultural markets globally and the outlook for Australia and North Queensland. Morning tea and lunch will be provided. RSVP is essential due to COVID restrictions.

RSVP to <u>secretary@bbifmac.org.au</u> or phone 0429 708 408

#### Meet the BBIFMAC team!



We would like to take this opportunity to thank Keeley, our Assistant Project Officer, who has been undertaking workplace experience with BBIFMAC since July, as part of her Masters of Science at JCU.

Keeley is a great helping hand, and has learnt a lot about water quality sampling though working closely with our BBIFMAC Project Officers. Next week is Keeley's last week of placement with us. Keeley, thank you for your hard work, and we wish you the best of luck in your future endeavours.

# Fine Scale Water Quality Monitoring for the Burdekin District











For years, farmers and industry stakeholders have been calling for the number of water quality monitoring sites in the Burdekin to be increased, as the current number of monitoring sites and the data sourced from these is not a sufficient representation of the entire Burdekin district.

One of the ongoing projects that BBIFMAC is involved with is the Bluespot Monitoring Project, a joint collaboration between Intellidesign, Telstra, Department of Environment & Science (DES), and Department of Natural Resources, Mines and Energy (DNRME). BBIFMAC received funding from DES to undertake the equipment installations, monitoring and maintenance of the 43 Bluespot sites in the Burdekin area.

The project is a 'Proof of Concept' which aims to establish the effectiveness of installing sensors in bores & creeks, using the new Telstra Internet of Things (IOT) network to provide a real time insight into measurements of water height, sediment and conductivity.





The solar head unit which powers the sensor and transmits real-time data for the Bluespot project is mounted beside the creek (left). The sensor is mounted to a galvanised steel frame and placed in the water (right).

A new project to expand the real-time water quality monitoring network in North Qld is also underway, with equipment to be installed in up to 20 locations in the Burdekin and 20 locations in the Herbert region. This project will monitor nitrate-nitrogen and suspended sediment concentrations in irrigation drains and natural water-ways using in-situ sensors. Funding has been allocated to the Qld Government's Water Quality Investigations team for the fine scale water quality and BBIFMAC has been contracted to assist with the project.

Various stakeholders recently met with Dr Ryan Turner, Principle Scientist, Water Quality, DES, to help identify suitable locations for the monitoring equipment. Dr Ryan Turner advised that approximately 60 sites have been nominated which will be narrowed down through further consultation and feedback to the 20 sites for which they have received funding.

It is important to note that sensors will monitor water quality on a sub-catchment level only and individual farms will not be identifiable.



Arwen Rickert and Luke Buono of BBIFMAC attended a meeting with Dr Ryan Turner, DES, and relevant stakeholders to plan for the new fine scale water quality monitoring project.



Terri Buono from DAF, Luke Buono from BBIFMAC, and Dr Ryan Turner from DES, with the water quality monitoring sensor which will be installed at 20 sites across the region.

The monitoring will provide valuable data for agricultural communities, landholders, industry, extension staff, and the wider community through the ability to access local, real-time water quality results,

BBIFMAC will conduct the installation and maintenance of the equipment for the sites within the Burdekin and Herbert districts. BBIFMAC technical officer Luke Buono will be the key contact for the project. The equipment is due to be installed prior to the 2020-2021 wet season.

This project, and the expansion of the water quality monitoring network supports the call for transparency of data, and recognises the importance of open access to this information. The real-time data from the monitored sites will be made publicly available via platforms such as the CSIRO 1622™ WQ app.

## 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.

Please be aware that the BBIFMAC office phone number is still not operational since we moved premises.

Contact Arwen on 0417 429 586, or Julie on 0429 708 408



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