

2019 IECA Australasian Conference and Stormwater Queensland Conference Tuesday, 1st – Thursday, 3rd October 2019 | Hilton Cairns, QLD





Enhancing the ability of the agricultural landscape to remove nitrogen: lessons learnt

Dr Mark Bayley¹, Mr Damian McCann¹

¹Australian Wetlands Consulting

Biography: To be provided

Abstract:

The long term protection of the Great Barrier Reef requires a co-ordinated and multi faceted campaign across the atmosphere, ocean and land draining into the GBR.

On land, the diffuse movement of sediment, nutrients and pesticides from both the urban and agricultural catchments have been reported to impact the resilience of the reef systems themselves. While the quality of water draining from the GBR catchments has been extensively measures/modeled, the the 'problem' well defined, the solution to decreasing the sediment, nutrient and pesticide loads to the GBR in not well understood.

For the past 10 years AWC have been involved in teh developed of many farm-based strategies for intercepting nitrates and sediments - two priority pollutants for maintaining reef health - in both the wet and dry tropics.

This has been a challenging but rewarding experience collaborating with landholders and other stakeholders to develop pragmatic and workable solutions in response to different landholder needs and catchment context.

There has been a lot of learning through this period which has been invaluable in ensuring solutions are effective and sustainable in the long term. This paper will relate the technical and engagement methods employed, outcomes achieved and the mistakes made and how we hope these to assist in the future planning, design and implementation of water quality improvement projects.

Addressing the challenges facing the GBR requires a significant scaling up of efforts to improve farm and catchment-based management of water quality with input from a broad range of stakeholders practitioners. This paper is intended to assist and guide the many people required to contribute to this effort.