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Property Rights Australia

Property Rights Australia Submission into Environmental and Other Legislation (Reversal of Great Barrier Reef Protection Measures) Amendment Bill 2021

Property Rights Australia (PRA) was formed in 2003 to protect the property rights of those unfairly targeted by the *Vegetation Management Act 1999*. We are a non-profit organisation of primary producers and small businesspeople mostly from rural and regional Queensland who are concerned about continuing encroachments on the rights of private property owners. The organisation was formed to seek recognition and protection of the rights of private property owners in the development, introduction and administration of policies and legislation relating to the management of land, water and other natural resources. Set up in South West Queensland, PRA's membership now extends across most states and multiple major rural industries. PRA is not affiliated with any political party.

Katter Party and Fines

Property Rights Australia (PRA) supports and congratulates the determination of The Katter Australia Party to put this legislation forward in order to reduce the maximum fines available for breaches of the relevant code. Attempts to justify the size of the available fines by using the turnover of the largest companies are not acceptable as they are not representative of the vast majority of businesses.

One of the early RIS documents had huge yearly costs for livestock producers, (PRA's largest agricultural cohort), and a comment that not all of them would be able to afford the capital works required and that there would be consolidation. In other words, some would go broke.

CHAIRMAN - Joanne Rea || **Vice Chairman** – Jim Willmott || **TREASURER** – Shay Dougall

SECRETARY – Dixie Nott

BOARD MEMBERS - Jim Willmott, Dale Stiller

No Impact study was done about economic effects, effects on local communities, loss of employment, closure of processing facilities, financial hardship, loss of services or effects on mental health.

Mental health is of huge importance in rural Australia. There is no letup in the multiple pressures which are serially and concurrently applied to this community. It is pressure which has given us the highest male suicide rate in the Western World with no sign of easing. The Reef Regulations add an extra degree of pressure which is not suffered by other agricultural areas.

Costs of compliance were always going to be high. The level of fines was never signalled until the draft legislation and they are unaffordable by the majority of family businesses. This lack of transparency and preparedness was also reflected in the fact that the environmental standards were not even available to the opposition on the day of the parliamentary debate. That is recorded in Hansard. Also not signalled was that the participation figures for voluntary programs would be manipulated to minimise the numbers. If you really want to get an industry offside, that is the way to do it.

In agriculture, more than most other industries, level of turnover is not indicative of profitability. Primary producers are price takers and have no way that they can pass on increases in costs. It is also a reality that our industries have few large players. Most are family-owned businesses, not large developers or mining companies. They do not have fat in the system for large fines levelled by legislation which many of us regard as impossible to comply with.

An entirely different perspective seems to be taken with mining companies and the ability of ocean currents to disperse and dilute their waste material with permission to dispose of toxic materials at times of high flow readily given and fines for breaches having been no more than a slap on the wrist with a wet lettuce. Similarly, an arsenic factory near Gladstone has the same conditions with low fines generally having been applied for breaches.

Enforceable Undertaking

The inclusion of an enforceable undertaking has merit. However, the terms must be spelt out, consistent and publicly available. That must include when the undertaking comes to an end and the obligation is at an end. It must not be used to weaponise the department against farmers.

Consultation

We have been told that consultation was carried out over four years (since 2016 according to the department in the public hearing) prior to the legislation being introduced. Organisations were certainly aware of the ability to make submissions.

For the general landowner, targeted consultation was undertaken, and most others were unaware of such consultation or what information was presented. Information given was from the Department and was what should now be considered a crude version of the science of sedimentation. What would now be considered enormous amounts of sediment, tonnes per hectare per year were assumed to be making their way into the river systems, even in very dry parts of the catchment and in dry years. More recent research shows sediment comes mostly from beds and banks of water courses and erodible gullies, not sheet erosion (Dr. Andrew

Brooks). The amount of sediment that is actually trapped in river mouths has historically been underestimated (Dr. Allison Jones).

Participants were often asked if legislation should be enacted based on science which has now been shown to be inaccurate and the loaded premise that damage was being done to the Great Barrier Reef. These participants had no opportunity for extra outside research and rebuttal.

It is not acceptable for anyone to be expected to agree or disagree with legislation without the draft set out before them with details of expectations and punishments for non-performance.

It is obvious now, and has always been obvious to some, that the state of the science is not good enough to put whole industries securely worth billions of dollars per year, at risk. Various global crises from financial crises, terrorist activity and pandemics show just how fragile most industry and service industries are. Agriculture is one of the few that continues to contribute. It should not be destroyed.

Our group spent a whole week in a booth at Beef Expo. Knowledge about the minutiae of Reef Regulation was minimal with almost no-one knowing about the commercial cropping codes and the limit to how much hay can be grown by a livestock producer for own use but not sold. It is nothing less than being a good neighbour to sell it next door in an emergency or drought. Many believed that they were not in a Barrier Reef catchment even though they were.

There has been a serious breakdown in communication somewhere.

Farming is essentially an opportunistic activity with decisions to grow crops often based on a multitude of factors including season, price, availability of equipment and markets. Outside the huge, dedicated cropping areas, it is often a last minute decision to take advantage of all these things coming together and does not allow for the necessary EA process.

Transparency and Representation

The great Disappointment of the Senate Inquiry Senate Inquiry into Identification of leading practices in ensuring evidence-based regulation of farm practices that impact water quality outcomes in the Great Barrier Reef was that after two days of hearings with many scientists being witnesses, landowners had learnt almost nothing new from the institutions about the science which is being used against them.

Institutional witness after witness espoused a common litany.

We have faith in the Scientific Consensus Statement.

It was put together by 45 scientists from 1200 peer reviewed papers.

The modelling was based on estimates and assumptions. All those scientists can't be wrong.

We have faith in the peer review process.

The farmers were all laggards, a claim which we believe to be fraudulent.

Not respect at all was paid to the good intentions of the agricultural community, their curiosity and hunger for knowledge and more in-depth information about why they were being targeted.

The case for agriculture to be given equal access to boards, committees and policy advisory committees

[This legislation has been based on misrepresentation from start to finish.](#) For years Qld farmers have been defamed and demonised by activist groups supposedly based on science.

At the Senate Inquiry into Reef Regs WWF's Richard Leck proudly told the Senators of all the Barrier Reef committees that they and the Australian Marine conservation Society sat on. They were also pleased that they advised both state and federal governments on policy.¹

While WWF was telling the whole world that sedimentation had increased since European settlement and that farmers were responsible, farmers were being told there was no baseline, it was all based on estimates, assumptions and modelling. That there was no baseline was a position backed up by the late Dr. Jon Brodie and some of the independent scientists at the Senate Inquiry.

The same group and its cohorts have from time to time come up with a "map" purporting to show detections of various chemicals, the implication being that they are farm chemicals. No dates or concentrations have ever been given so the question remains, were they below a safe level, were they all in the same three months or the same year, or were they of minor detections over a long timeframe? Were they all commonly used farm chemicals or were some mining chemicals or boating chemicals?

Once again, many of the independent scientists have observed that levels of pesticide in the ocean are of no consequence.

Organisations like WWF have spent decades making extravagant claims about agricultural practices and their detrimental effect on the reef.

WWF in a web page about why reef regs are critical to reduce polluted runoff and ensure the survival of the reef quotes, 'The Australian Institute of Marine Science's Long-Term Monitoring Program has been surveying the Reef for more than 30 years, and [on 11 July AIMS reported](#) "*widespread coral declines on a spatial scale which is unparalleled in the history of LTMP surveys*".²

How can they make such a claim in support of regulation against farmers and farm runoff when the CEO of AIMS, Dr. Paul Hardisty, has said "I've mentioned a couple of times before, in terms of this inquiry the coral growth rates of *Porites*, which you're talking about, we have never connected with anything to do with farm run-off." This position was also stated by AIMS colleague, Dr. Britta Scheffelke,³ "There are periods of time when calcification has reduced, and we have been able to link that with marine heatwaves and coral bleaching. So, this is not something that has anything, as far as we know at the moment, to do with water quality, and that's why in the most recent consensus statement, [2019?] which was an update of the state of knowledge, it was not specifically mentioned."

It seems clear that a lot of access to data by environmental groups, which was not freely available, introduced numerous opportunities for publicity, fundraising, spin and cherry picking. Meanwhile, farmers were hearing nothing but the spin.

¹ Senate Inquiry into Identification of leading practices in ensuring evidence-based regulation of farm practices that impact water quality outcomes in the Great Barrier Reef

https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Rural_and_Regional_Affairs_and_Transport/GreatBarrierReef

² <https://www.wwf.org.au/news/news/2019/wwf-regs-critical-to-reef-s-survival#gs.4z1s9b>

³ <https://parlinfo.aph.gov.au/parlInfo/search/display/display.w3p;db=COMMITTEES;id=committees%2Fcommsen%2F73e1a608-213d-4d87-a217-b386317ca61c%2F0001;query=id%3A%22committees%2Fcommsen%2F73e1a608-213d-4d87-a217-b386317ca61c%2F0000%22>

Key Issues

- Modelling on which judgments on water quality is based is biased. Some farmers in particular catchments have been left wondering why they still get a fail on water quality when a vast majority do their Best Management Practices schemes and have spent years and many collective millions on improved practices.
- Water modelling can be based on a sample multiplied by total annual flow multiplied by total hectares under agriculture. The implication is that there will never be a modelled improvement without reducing the hectares under agriculture.
- There should be full, transparent and accessible disclosure of the science on which it was to be based, the full assumptions on which the modelling was based, including error rates or confidence intervals.
- The time for that lack of inclusiveness and lack of transparency that has been suffered uniquely by the rural community, is over.
- Agriculture should have had a nominated representative from every affected industry, sitting on the same bodies that have conservation organisations on them, and other relevant groups with an ability to report back to their parent organisations and other farmer groups.

The agricultural community does not wish to be brushed off with “consensus statements” or synthesised data. Again, and again at the inquiry into Reef Regs Senators were told by institutional scientists that they believed in the Consensus Statement and that was the end of it. No detail.

It is no longer about activist scientists, or scientists chasing grant money or paying homage to activist environmental groups.

It is now about serious legislation with serious fines and the impacts on many families and communities.

More (Un-synthesised) Research

Unlike most of the institutional scientists, many of the independent scientists had a good and clear presentation of their observations and research over many years.

After observing that we had moved further and further from anything resembling a reef much less The Great Barrier Reef without proof of damage by agriculture, we were told that it was not really about just the coral but the entire ecosystem.

We would like to present some brief observations about other parts of the ecosystem.

At the Senate Inquiry into Reef Regulation many of the independent scientist observed that there was an implicit assumption that there was something wrong with the water quality of the reef ecosystem. Included were Dr. Piers Larcombe, Dr. Peter Ridd and Dr. Walter Starck.

Dr. Larcombe made the very insightful comment that, “If you are looking at the GBR system when you're looking at salt flats, mangroves, shallow subtidal seagrass beds, coral reefs and all the thousands and thousands of square kilometres of habitat between the reef, you need to understand that the sediment controls where those habitats are and how they function. The big gap I see in the three key reports that I think

the Senate and the government are making decisions on is they don't deal with any of those geoscientific aspects sufficiently well.”⁴

The importance of the sediment is reiterated by independent scientist Dr. Allison Jones. On her web page⁵ Dr. Jones informs us that, “Mangroves thrive on the sediment and nutrients that floods deliver to estuaries and mudflats, and can even travel on the flood plume to colonise new areas.”

Fishermen know that after a flood the fecundity of most fish and crustacean species rises exponentially but I have never seen any of this expressed in the Consensus Statement.

AIMS report 2019

Historical records of terrestrial sediment and flood plume inputs to the Whitsunday Island region from coral skeletons: 1861-2017

In 2019 AIMS did a further examination of historical porites core samples plus some new ones, in the Whitsundays, an area relatively close to shore and close to the Pioneer River which is surrounded by sugar cane and grazing and the Fitzroy River which has significant area of grazing with cropping upstream. “This technical report is the milestone report submitted to CSIRO for the Department of the Environment and Energy as part of the project “Scoping study to address poor water quality in the Whitsunday Region”. The AIMS contribution in this report seeks to provide indicative long-term records of sediment and freshwater flood plume transport patterns within the Mackay-Whitsunday Island region. The analysis provides evidence that freshwater flood plumes from the Pioneer and Fitzroy Rivers are reliably recorded as luminescent lines in coral cores of massive *Porites* colonies and the cores collected during this project span a time period from 1853-2017. This study will explore geochemical tracers (Ba/Ca, Y/Ca and Mn/Ca) of terrestrial sediment inputs to the region to determine, on decadal to century time-scales, if the recent decade of declining water clarity is significantly different than in the past.”⁶

The project was to investigate the reports by tourist operators who had observed a decline in water clarity in the Whitsundays since about 2007. All but one of the areas studied was relatively close to the coast.

“The dated coral luminescence records, combined with targeted geochemical proxies for terrestrial sediment transport, provides a long-term perspective on whether recent water quality declines in the Whitsunday region are significantly different than in previous decades. The core from South Molle Island revealed the strongest correlation with river flow patterns both in terms of luminescent freshwater inputs and associated cycles in Ba/Ca concentration within the coral skeleton. Temporal patterns in Ba/Ca terrestrial inputs to South Molle Island reflect the decadal patterns in river flow with significant increases in Ba/Ca during periods of higher flow.”

“The time-period from 1992-2006 represents the driest era in the instrumental record with 11 of the 15 years falling below median river flow, which is also captured in the SMI01_81 Ba/Ca signal. Concentrations of Ba:Ca within the coral skeleton are positively correlated with river flow (Figure 5b) and increased during periods of

⁴<https://parlinfo.aph.gov.au/parlInfo/search/display/display.w3p;db=COMMITTEES;id=committees%2Fcommsen%2F282d32be-544f-4ae5-b681-6e2822465b54%2F0004;query=id%3A%22committees%2Fcommsen%2F282d32be-544f-4ae5-b681-6e2822465b54%2F0000%22>

⁵ <https://keppels.com.au/keppel-reefs/flooding/>

⁶ Coral luminescence records freshwater impacts from the Fitzroy River Basin

Cantin NE, Wu Y, Fallon S and Lough JM (2019) Historical records of terrestrial sediment and flood plume inputs to the Whitsunday Island region from coral skeletons: 1861-2017. Australian Institute of Marine Science, Townsville, Qld. (30pp).

high river flow in the years 2007-2011, but the observed Ba/Ca ratios during this recent decade are not higher than any of the previous major flood events throughout the 20th century.⁷”

Note: The Ba/Ca levels are a proxy of the level of sedimentation.

1.2.1 KEY FINDINGS

1. “*Porites* cores from South Molle Island and Shaw Island consistently capture annual flood plumes as luminescent lines and positive anomalies in skeletal Ba/Ca ratios, which are positively correlated with major river flow events through time from the Pioneer and Fitzroy Rivers.
2. Geochemical signals of Ba/Ca within the skeletons of long-lived *Porites* corals at South Molle Island provide strong signals of river flow and possible associated increase in sediment inputs to the region that correlate with decadal variations in drought and flood phases. The Ba/Ca ratios indicate, significant inputs of new terrestrial material only during major flood years (eg. 2007-2011, 2017, 1991, 1974).
3. The recent period of concern, from 2007-2017, represents a wet phase which follows the driest two decades (1992-2006) over the period examined, 1853-2017.
4. Ba/Ca ratios within the coral skeleton at South Molle Island, which is influenced by river flow events, from 2007-2017 have not increased compared to past flooding events dating back to 1861. Recent observations of high turbidity and concerns of degrading water quality are likely the result of increased flood plume inputs during this time period, not dramatic changes to sediment transport into the region
5. Ba/Ca time series at South Molle Island is the only positively correlated location within the region with both luminescence and river flows
6. Ba/Ca concentrations from 1956-2017 at Scawfell Island indicate that a significant change in terrestrial Ba to this location from 2011-2015 has occurred with maximum annual skeletal Ba/Ca concentrations during this recent decade
7. Unlike the Ba/Ca ratios, Y and Mn/Ca, which have also been used as terrestrial sediment proxies previously, are not correlated with flood events at any of the study sites, which likely suggests that these terrestrial proxies have desorbed out of the seawater prior to reaching the corals throughout the Whitsunday Islands

⁷ Ibid. p7

8. Complex hydrodynamics throughout the Whitsunday Islands indicate that all of the sites except South Molle Island, appear to be influenced more strongly by marine resuspension events than direct flood plume inputs”

This report appears to not support the idea of increased sedimentation caused by agriculture as is vigorously asserted by WWF.

We respectfully ask the committee to take note of points 3,4, and 8 in the above findings.

With regard to sedimentation, Dr. Andrew Brooks has completely turned the idea of where the major erosion and sedimentation occurs on its head.

“We have effectively re-written the story on where people thought sediment was coming from in the Normanby Basin, which potentially has implications for the rest of the Great Barrier Reef,” Dr Brooks said. The key reason for this is that instead of relying on desktop modelling, which is what the previous understanding was largely based on, we have expended huge effort in going out and actually measuring these processes in the catchment and then building a new model based on these data,” he said.’

Sediment sources

“The evidence suggests that rather than all of the slopes across the catchment contributing the sediment, it is instead highly concentrated in certain parts of the landscape. The primary culprits are river bank and gully and erosion – particularly from within certain parts of the floodplain and the river margins.’

He also stresses we must know the historical rate before we can apportion yields to present land management. He is very much not alone in this sentiment.

*

Dr. Allison Jones is an independent scientist working in Keppel Bay

“Keppel Bay reefs are shaped by the influence of floods from the Fitzroy Basin catchment. Pesticides, whilst having the potential to impact marine organisms, are not found at levels high enough to affect corals during floods (when they are at their highest level). But more importantly, it is fresh water that kills corals and other marine life in Keppel Bay during a major flood event. The effects of pesticides are irrelevant. There have been no studies of pesticide impacts to corals in the environment that can directly link pesticide levels to coral health declines.

In Keppel Bay, the existing body of evidence points to sediment impacts to coral reefs as occurring largely from re-suspension of sediment from geological erosion processes. Keppel Bay corals are well adapted to these conditions having evolved in response to them.

In relation to grazing practise in the Fitzroy Region, Keppel Bay coral reefs are well adapted to sediment re-suspension. Sediment in Keppel Bay is increasing and anthropogenic sources are contributing but at a much smaller scale to those natural processes that have occurred over millennia. I am unaware of studies identifying sediment from anthropogenic sources versus re-suspension and natural erosion processes that have been occurring for millions of years.”

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The reefs' development at a time of adversity is one of the reasons that the Keppel region has such a diverse range of corals, such as acroporids, faviids, gorgonians and other soft corals which have evolved to:

- tolerate sediments
- regrow rapidly after floods
- survive, and even use, pulses of nutrients
- compete with turf algae, seaweeds and other macroalgae.⁸

Regards

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⁸ <https://keppels.com.au/keppels/keppel-bay-today/>