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Committee Secretary
Health and Environment Committee
Parliament House
George Street
BRISBANE QLD 4000

By email only: hec@parliament.qld.gov.au

Dear Committee,

RE: ENVIRONMENT AND OTHER LEGISLATION (REVERSAL OF GREAT BARRIER REEF PROTECTION MEASURES) AMENDMENT BILL

We **enclose** our submission to the Health and Environment Committee in respect of the *Environment and Other Legislation (Reversal of Great Barrier Reef Protection Measures) Amendment Bill*.

We confirm that a Public Hearing for the Bill was listed in Brisbane on 11 June 2021 and that there is another Public Hearing listed in Brisbane on 3 September 2021. We note our disappointment that these hearings are scheduled during the busiest time for the sugar cane industry in the Burdekin region, being the start of the crushing operations and mid-crush where growers are ratooning cane and the change in weather increases irrigation requirements. This and the failure to schedule regional Public Hearings in Townsville and Cairns has adversely impacted grower participation in this process.

Overview

1. This submission is made by Burdekin cane growing collective, Pioneer Cane Growers Organisation Limited (PCGO) in respect of the *Environment and Other Legislation (Reversal of Great Barrier Reef Protection Measures) Amendment Bill* ("the Bill").
2. PCGO currently represents approximately 90 growers in the Burdekin region who produce on average approximately 1,300,000 tonnes of sugar cane each year.
3. In the Burdekin region:
 - a. growers produce approximately 8 million tonnes of sugar cane annually¹;
 - b. the Burdekin Mills produce approximately 1.17 million tonnes of raw sugar annually²;

¹ Wilmar for the record Burdekin Final 2019, *Wilmar*, March 2021, <https://www.wilmarsugar-anz.com/publications/563-wilmar-for-the-record-burdekin-final-2019/file>

² Ibid

- c. the sugar cane industry employs as full time equivalents, 2,326 people (30% of the FTE roles in the region)³; and
 - d. the industry supports about \$229 million dollars of regional gross value added.⁴
4. In 2009, regulations applied to the Burdekin, Wet Tropics, and Mackay Whitsunday catchments for use of four residual herbicides and fertiliser in cane and one residual herbicide on grazing land. Included in these regulations was the requirement to produce Environmental Risk Management Plans.
 5. In 2016, the Great Barrier Reef Water Science Taskforce⁵ recommended that staged regulation should be implemented throughout the reef regions to reduce nutrient and sediment pollution and contribute to meeting water quality targets for a healthy reef. Subsequently, the *2017 Scientific Consensus Statement: Land use impacts on Great Barrier Reef Water Quality and ecosystem condition*⁶ noted that poor water quality continued to be a significant issue for reef health.
 6. In 1 December 2019, the *Environmental Protection (Great Barrier Reef Protection Measures) and Other Legislation Amendment Bill 2019*, which had a primary objective “to amend the Environmental Protection Act 1994 to strengthen Great Barrier Reef protection measures to improve the quality of the water entering the Great Barrier Reef”, and subordinate legislation came in to force. The amendments to the legislation implemented the following amendments applicable to cane farming in the Burdekin:
 - a. on 1 December 2019:
 - i. the requirement to keep records of fertilisers and agricultural chemicals used on all cane farms across five Reef catchments commenced (excluding farms in eastern Cape York); and
 - ii. cane minimum practice standards and compliance audits for Wet Tropics, Burdekin, and Mackay Whitsunday catchments commenced.
 - b. on 1 June 2021, in all six reef catchments, on new cropping areas greater than five hectares, (unless preparation work commenced prior to 1 June 2021) the requirement to apply for an environmental authority (permit) and pay a fee before new or expanded commercial cropping and horticulture can commence, regardless of whether or not land has been previously cleared or is under a Property Map of Assessable Vegetation (PMAV) commenced.
 - c. Commencing 1 December 2021, the requirement for cane farm nitrogen and phosphorus budgets will commence in Wet Tropics, Burdekin, and Mackay Whitsunday catchments.

³ Queensland Economic Advocacy Solutions, The economic contribution of the Sugarcane Industry to Queensland and its regional communities. A report analysing the economic importance of the sugarcane value chain to communities across Queensland, *Canegrowers*, July 2019, https://www.bdbcane growers.com.au/wp-content/uploads/2019/11/310175_economic-contribution-of-the-sugarcane-industry-to-queensland.pdf

⁴ Ibid

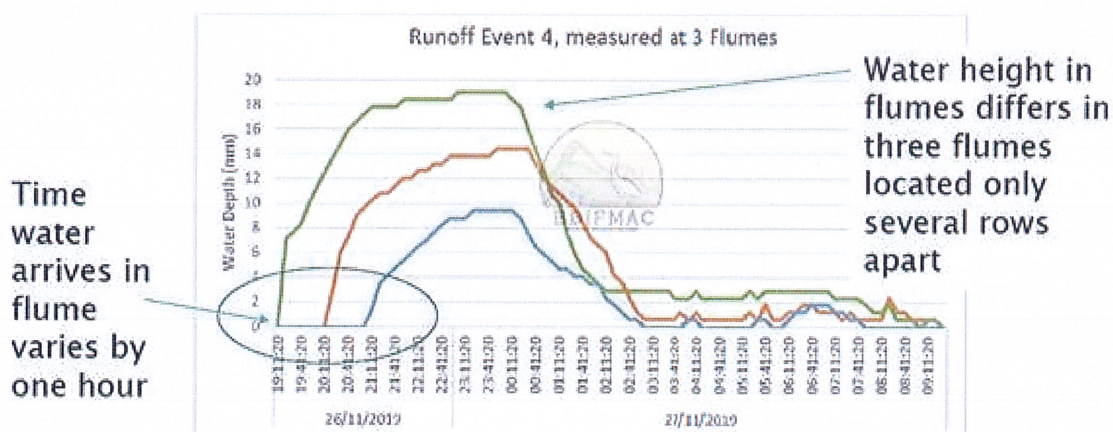
⁵ The Great Barrier Reef Water Science Taskforce, and the Office of the Great Barrier Reef, Department of Environment and Heritage Protection, Final Report-Great Barrier Reef Water Science Taskforce May 2016-Clean water for a healthy reef, *Parliament of Australia*, May 2016
file:///C:/Users/Manager/Downloads/Submission%2072%20Attachment%203%20-%20Queensland%20Department%20of%20Environment%20and%20Science.pdf

⁶ Jane Waterhouse, Britta Schaffelke, Rebecca Bartley, Rachel Eberhard, Jon Brodie, Megan Star, Peter Thorburn, John Rolfe, Mike Ronan, Bruce Taylor and Frederieke Kroon, The 2017 Scientific Consensus Statement-Land use impacts on Great Barrier Reef water quality and ecosystem condition, *Australian Government Queensland Government Reef 2050 Water Quality Improvement Plan*, <https://www.reefplan.qld.gov.au/science-and-research/the-scientific-consensus-statement>

Submissions

7. We are in support of the Bill and wish for consideration to be given to the matters set out below.
8. Instead of the increased regulation, as recommended by the Great Barrier Reef Water Science Taskforce in 2016, we are in support of identifying a “ground-up” approach to integrated sub-catchment monitoring and intervention where farmers are directly involved in identifying issues in sub-catchments through localised water quality monitoring. Two projects have recently been run in the Burdekin by Burdekin River Irrigation Area (BRIA Irrigators Project) and Sugar Research Australia (Cane to Creek). These projects have obtained positive, measurable results through better irrigation and catchment management. A noteworthy finding was the level of variance in irrigation run-off volumes. The graph below shows that the volume running off the blue treatment is less than half of that from the green treatment, yet volume of irrigation applied was the same across all treatments. Possible causes of variation are differences in soil type, slope, compaction. This suggests that the Six Easy Steps program (see further information about this program below), which does not focus on irrigation management and is based on assumptions in relation to output as a result of input may not produce the assumed outcomes.

Variation in irrigation runoff volumes



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9. Projects such as the BRIA Irrigators Project and Cane to Creek, focusing on integrated sub-catchment and localised water quality monitoring could be extended across the Burdekin Region. This would emphasise industry ownership and control of monitoring design, and delivery of locally targeted water quality data to provide confidence in on-farm decision making and practice change.

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Burdekin Bowen Integrated Floodplain Management Advisory Committee Inc, Burdekin River Irrigation Area (BRIA Irrigators Project) and Sugar Research Australia (Cane to Creek), unpublished data.

10. The adoption of the recommendation to increase regulation has included the implementation of the Prescribed Methodology for Sugar Cane Cultivation⁸ and the regulation of the nitrogen and phosphorus recommendations detailed in the Six Easy Steps program. This program, which is required to be utilised in the Burdekin was not developed in this region, is based on assumptions that reducing inputs will reduce nutrients in run-off water, assumptions in relation to phosphorus soil tests originally developed for acid soils that are potentially not relevant to the alkaline soil found in Burdekin sugar cane areas and does not consider quality of localised water in sub catchment areas.
11. Increased pressure on growers to reduce nitrogen and phosphorous application below the Six Easy Steps methodology will have the effect of making sugar cane production in the Burdekin region unprofitable. This will likely occur prior to any environmental target being achieved. More research is required to identify more effective means for integrated sub-catchment monitoring to ensure that any measures implemented through voluntary or regulatory processes will achieve outcomes while maintaining sustainability of farming and milling operations.
12. In addition to the issues identified with the development of the practices enshrined in the regulations, there are also issues that have been identified with the way information is obtained and reported through the Reef Report Cards.
13. The Reef Report Cards are built on information produced by the Paddock to Reef program which incorporates information to provide broad regional scale integrated reporting on the condition of:
 - a. Freshwater (water quality, fish and habitat and hydrology)
 - b. Estuarine (water quality, fish and habitat and hydrology)
 - c. Inshore (water quality, seagrass, coral and fish)
 - d. Offshore (water quality, coral and fish)
 - e. Community stewardship (social, economic and cultural)
 - f. Other social, economic and cultural indicators
14. Several tools have been developed to provide access to and interrogation of data generated in the Paddock to Reef program. The Paddock to Reef Project Selector (P2R Projector Tool) is a prioritisation tool which was developed to assist in assessing and prioritising funding for projects, which propose changes in agricultural management practices for the sugar cane and other industries in the Great Barrier Reef region. Each project is comprised of responses to a set of before and after practice questions and the tool is utilised to predict a change in sediment, nutrients and pesticides in runoff water due to implementation of the project. The P2R Projector Tool then generates a number which is used to rank projects, practices and farm performance in relation to water quality. This modelled output has little relevance to the actual systems because the information utilised in the Paddock to Reef Program and modelled through the P2R Projector Tool:
 - a. is based solely on a few parameters and on limited data sets;

⁸ Office of the Great Barrier Reef, Environmental Policy and Programs, Department of Environment and Science, Reef Protection Regulations Farming in Reef Catchments, Prescribed Methodology for Sugar Cane Cultivation, September 2020, https://www.qld.gov.au/__data/assets/pdf_file/0016/113146/prescribed-method-sugarcane.pdf

- b. does not recognise relevant practice changes which fall outside the limited parameters currently in the program (including better irrigation management);
- c. relies on data from accredited journals where there are other sources of data that should be investigated and peer reviewed;
- d. does not delineate between different farming practices on one farm;
- e. does not delineate between regions with different farming practices, including applying weighting to questions regarding farming practices that do not apply in the Burdekin region;
- f. does not allow for large variations which are apparent in working agricultural systems;
- g. is effected by inconsistencies with the way the data is collected; and
- h. is effected by parties obtaining data through the questionnaire having inadequate training.

In summary, the current method for capturing improvement is based on broad assumptions, is too simplistic and is not representative of the actual practices in the Burdekin. This has resulted in the data collected not being representative of the current practices and failing to appropriately identify relevant practice changes.

15. Potential environmental and economic impacts if the current regulatory and reporting system is maintained include one or more of the following:

- a. the current regulations not achieving their purpose;
- b. the Reef Report Card not accurately reflecting current status or grower practice change;
- c. environmental outcomes not being achieved;
- d. decline in sugar cane production area and accordingly a decline in sugar cane production; and
- e. destruction of the viability of the sugar cane industry in the Burdekin and closure of sugar Mills in the region.

The Bill

16. *Environment and Other Legislation (Reversal of Great Barrier Reef Protection Measures) Amendment Bill* seeks to:

- a. repeal all sections relating to an agricultural ERA standard;
- b. repeal all reference to horticulture and cultivation of any other crop in the current section 79;
- c. repeal the requirement for Agricultural ERA advice;
- d. amend liability of people who breach the Act by changing the definition of "who carries out an agricultural ERA";
- e. repeal the review of the environmental protection policy every 5 years;
- f. repeal the penalty units for breaching the Act, by way of a substantial reduction in penalty units and the removal of the differentiation between wilful conduct and otherwise;
- g. reinstates the requirement to have an Environmental Risk Management Plan when the agricultural ERA consists of sugar cane growing on more than 70ha in the Wet Tropics region, or cattle grazing on more than 2000ha in the Burdekin dry tropics catchment;
- h. repeal the Great Barrier Reef water quality offsets;

- i. establishing an independent regulator who will advise and assist the Minister when making a new ERA standard and oversee the administering of offences in relation to fertilised application;
 - j. introduce provisions for enforceable undertakings as an alternative to a financial penalty for a person in relation to a first contravention or an alleged first contravention of an offence in relation to fertiliser application;
 - k. absolve a person operating a business of responsibility if the offence in relation to fertiliser application is contravened by an employee engaged to carry out the agricultural ERA on the person's behalf where the employee does not follow instructions;
 - l. limiting the obligations to keep relevant primary documents to 2 years;
 - m. transfers the power for making an ERA standard from the chief executive to the Minister alone and inserts a requirement that the Minister consult with the independent regulator and representatives from two or more industry bodies that will be affected by the standard before it is made; and
 - n. mandates that the Minister must publish on the Department's website a copy of each new ERA standard made by the Minister and recommendation by the independent regulator for transparency.
17. In relation to item 15.h., the water quality offsets we are agreeable to the current part 5 remaining in force subject to participation remaining voluntary. Not all growers will have the area or the financial capacity to obtain offsets.
18. In relation to item 15.j., we agree with the amendments proposed to section 507 but suggest further amendment that an undertaking must be accepted for a first contravention or alleged first contravention except where the contravention is such that the alleged offender's conduct exceeds certain parameters (e.g. environmental and/or economic rectification impact). This will limit availability of this option where a substantial breach has occurred.
19. In relation to item 15.k., we do not agree that employees should be liable in relation to offences for fertiliser application. In our view, this would usurp the principles of vicarious liability and will deter people from working within the industry.
20. We support the balance of the points of repeal and amendments proposed in the Bill.

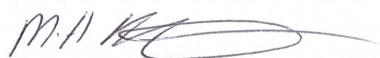
Summary

21. We support the Bill with our amendments as proposed. The issues identified above in relation to the legislated program and with data collection and modelling indicate that the current legislation may be unsuccessful in achieving its aim, farming viability will be adversely impacted and that the reporting does not accurately reflect the current status or other relevant grower practice change.
22. We are of the view that the only way to overcome these issues is to repeal the legislation and to:
- a. government with input from growers investigate and identify a "ground-up" approach to integrated sub-catchment monitoring and localised water quality monitoring;

- b. government with input from growers deliver locally targeted water quality data to provide confidence in on-farm decision making and practice change;
- c. growers to monitor change and impact and demonstrate improvement;
- d. growers continually work towards better sub-catchment monitoring and management;
- e. government to review of the Paddock to Reef modelling and reduction of the area of the zoning to ensure data collected reflects actual available practices and improvements in each modelled area.

Thank you in advance for consideration of our submissions.

Kind Regards,
Pioneer Cane Growers Organisation Ltd



Michael Roncato
Chairman of the Board