15 March 2019

A/Committee Secretary
Innovation, Tourism Development and Environment Committee
Parliament House
George Street
Brisbane Qld 4000
Email: itdec@parliament.qld.gov.au

RE: Environmental Protection (Great Barrier Reef Protection Measures) and Other Legislation Amendment Bill 2019

The Australian Sugar Milling Council (ASMC) is the peak industry organisation for raw sugar manufacturing in Australia. As well as owning and operating sugar mills, some ASMC members operate large sugarcane farms in all the regions subject to the proposed broadened and enhanced reef protection regulations.

ASMC thanks the Committee for the opportunity to provide input into the Committee's detailed consideration of the *Environmental Protection (Great Barrier Reef Protection Measures) and Other Legislation Amendment Bill 2019*.

ASMC has acknowledged in earlier submissions on this matter that all sugar industry stakeholders need to do more in terms of reducing the impact of farming activities on reef water quality. We believe the best way to do this is in a true partnership approach between industry, government and community stakeholders. Any measures introduced need to have a clear and positive impact on the sustainability of the stewards who manage the land and natural resources in the GBR catchments. Negatively impacting the business viability of local sugarcane growers will threaten their capacity to optimally manage their operations, and in turn significantly affect the viability of sugar milling areas. Subsequent mill closures would result in major social, environmental and economic setbacks for GBR catchment communities.

An independent report commissioned by ASMC this year identified the economic contribution of sugar manufacturing to Queensland at over $4 billion, supporting 22,657 jobs. This represents 1.2% of Queensland's Gross Regional Product and 0.9% of Queensland's total employment. (infographic attached)

We have also attached earlier ASMC submissions as follows:

21 April 2017 - **A submission by the Australian Sugar Milling Council in response to the March 2017 Queensland Government discussion paper entitled "*Enhancing regulations to ensure clean water for a healthy Great Barrier Reef and a prosperous Queensland*".**

3 November 2017 - **ASMC Response to Queensland Government Consultation Regulatory Impact Statement**

It is not our intention to re-prosecute issues raised in these earlier submissions but we do encourage the Committee to refer to the views expressed in them, particularly with regard to the DRAFT regulations and standard conditions that have been discussed with industry.

We do however raise an additional matter of high importance relative to the Head of Power included in the Bill relating to a regulation-making power for data collection. We urge the Committee to consider this matter and the information relevant to it that is raised in this submission for inclusion in its report back to the Queensland Parliament.

David Pietsch
Chief Executive Officer

Submission: Australian Sugar Milling Council (ASMC) submission to the Innovation, Tourism Development and Environment Committee consideration of the *Environmental Protection (Great Barrier Reef Protection Measures) and Other Legislation Amendment Bill 2019*

Contact: Jim Crane, Director, Industry and Government Affairs, jim.crane@asmc.com.au

The Australian Sugar Milling Council's (ASMC) views on the Queensland Government's intent to further regulate commercial cane farming operations in Barrier Reef catchments have been clear and consistent over the past two years. ASMC members accept that the sugar industry has an important role to play in achieving improved water quality around the Great Barrier Reef.

To this end, the Australian Sugar Milling Council supports an industry-led framework for sustainable production and management of natural resources in Queensland, of which sugar mill companies and sugarcane growers are large custodians.

The ASMC also supports a regulatory framework to underpin the industry-led initiatives, developed and implemented on a collaborative basis between industry and Government. This support is qualified on the basis that the management initiatives and regulatory framework must be complementary and evidence based, and balance what can be seen at times as competing objectives, to deliver positive social, economic and environmental outcomes for Queensland, and communities beyond.

It is not our intention in this submission to re-visit the detail of our earlier submissions on this matter which are attached for the Committee's consideration.

There is one matter in particular that we do raise and seek the Committee's detailed consideration. This relates to the provision for a Head of Power in the new legislation providing the Minister with the discretion to acquire data from entities within the sugarcane supply chain. Potential sources of data are described as including farmers, fertiliser sellers, agronomists, wholesalers, sugar mills and industry extension officers.

The Bill introduced into the Parliament sets out this power as follows:

Regulation-making power for particular records and returns
(1) A regulation may be made under section 580(2)(b) applying to—
(a) a record or return relating to
(i) the sale of a fertiliser product or agricultural chemical; or
(ii) the application of a fertiliser product or agricultural chemical; or
(iii) a soil test; or
(iv) a crop yield; and …

The explanatory notes accompanying the Bill refer to this as follows:

Regulation-making power for data collection
The Bill includes a regulation-making power to mandate the provision of data to assist in determining where over application of fertiliser, and therefore high rates of nutrient run-off, may be occurring.

The 2018 Queensland Audit Report, "Follow-up of Managing water quality in Great Barrier Reef catchments" highlighted the need for more industry information to support the Queensland Government to fully understand the effectiveness of the programs it funds.

The Great Barrier Reef Water Science Taskforce also recommended that in order for both industry and government to make good decisions about regulation, extension and investment programs for improved Reef water quality outcomes and to support improved on-farm nutrient management, data is needed.

ASMC members are particularly concerned that the *"Heads of Power"* as described in the Explanatory Notes is quite specific where it relates to mandating provision of data to assist in determining whether over application of fertiliser, and therefore high rates of nutrient runoff, may be occurring.

Mills do not, as a matter of course, collect information relating to the *sale of a fertiliser product or agricultural chemical; the application of a fertiliser product or agricultural chemical; or a soil test*

Mills do however have information, largely provided to them by growers that enables them to produce a farm map that sets out the dimensions and area of blocks and/or paddocks on a grower's farm. In addition to the farm map, mills collect a range of data provided by or derived from information provided by the growers.

When a grower consigns sugarcane to the mill that has been harvested from his farm, the information that makes up the consignment (either written or electronic) would typically include the Block and Paddock number from which the cane was harvested along with the variety and class (e.g. plant, 1st ratoon etc.) of the cane. When the cane arrives at the mill for crushing it is weighed as part of the payment process for sugarcane.

This data is recorded by the mill for the purposes of paying the grower for the sugarcane the mill purchases from the growers to process into raw sugar.

Prior to the crushing season starting each year in about June, the mill and each of the growers agree on an estimate for every farm that will be harvested during the season. This starting estimate is used for a variety of purposes.

In the first instance, when all of the individual farm estimates are added together this becomes the total estimated crop to be harvested from the farms for crushing in the upcoming season. This total estimate is an important piece of information to be considered in the decision making process of when to start the crushing season.

This overall farm estimate is arrived at by developing a starting estimate of the cane available to be harvested from each block/paddock on each farm. This information is recorded in what has traditionally been known as a 'field book'. With the advent of grower access to sugar milling company websites this information is available to each grower on a secure basis guarded by a unique log in and password.

Once the estimate has been completed and the crushing start date established, the next important use of the starting estimate is as a basis for the planning of the harvest for each farm. Growers typically group together to contract with a harvester to cut each of the

farms in the group. The estimate for the group is used to allocate a daily harvest requirement from the group in terms of contributing to the overall cane supply needed by the mill. This satisfies its processing requirements for the season which is to crush all of the cane harvested from all of the farms within a mill area.

Given that all of the sugarcane in a mill area can't be harvested and crushed at the same time, this allocation takes account of the fact that the value of sugarcane changes over time according to sugarcane's maturity, determined by a mix of sweetness (sugar content) and weight of the cane stalk.

As this cane is harvested throughout the crushing season (approximately 24 weeks), the amount harvested from each block/paddock is recorded in the 'field book' so that both the sugarcane harvested to date, and the sugarcane remaining to be harvested, is known to the mill, the grower, and the harvesting contractor.

Having access to this information is important for each of the parties in terms of ensuring (to the extent possible) that the progress of each harvest group is proportionate to the overall crush for the mill area, i.e. each harvesting group is effectively getting access to its proportionate share of the mills crushing capacity as the season progresses.

The other important determination that can be made by tracking this harvest progress and recording the amount harvested from each block/paddock is that when a block has been completely harvested, a determination can be made as to whether the crop is cutting in line with, above, or below the starting estimate. Any percentage movement up or down is then applied to the balance of the crop remaining to adjust the estimate. This can result in a change to the daily harvest allocation.

It is important to note that both the starting estimate, and the information relative to the harvesting progress, is recorded by the mill based on information supplied by the growers. There are many factors that contribute to the final harvested quantity of cane from a block/paddock being different to the estimate. These factors include climatic conditions, irrigation, nutrients, weed control and cane loss through the harvesting process.

A major concern ASMC has with the Head of Power is that a record relating to the 'crop yield' held by a sugar mill is likely to have a very poor relationship with the purpose for which it can be sought which is *"to assist in determining where over application of fertiliser, and therefore high rates of nutrient run-off, may be occurring".*

ASMC is aware of a report authored by Robert Crossley, commissioned in 2018 by the Department of Environment and Science through the Office of the Great Barrier Reef to assist its understanding of the industry data that is contained in records held by sugar mills and industry extension organisations. We submit that the Committee should familiarise itself with the contents of this report which outlines the nature of the data collected by industry from farm sources. Industry stakeholders, including ASMC, were briefed on the report, which concluded that there is a broad collection of data held by industry that is considered accurate for the purposes for which it is collected e.g. harvest management, productivity improvement extension, sugarcane plant breeding program etc.

ASMC contends that this data is not necessarily accurate or suitable for the purpose described in the Explanatory Notes accompanying the Legislative *regulation-making power for data collection* included in the new Bill.

To mitigate ASMC's concern, the Committee could recommend a change to the Explanatory Note by adding the word "relevant" to the note as follows:

Regulation-making power for data collection
The Bill includes a regulation-making power to mandate the provision of ***relevant*** *data to assist in determining where over application of fertiliser, and therefore high rates of nutrient run-off, may be occurring.*

The inclusion of 'relevant' in the guidance material creates a test that must be satisfied when data is being requested such that the Party requesting the data (The Minister) and the party supplying the data (farmers, fertiliser sellers, agronomists, wholesalers, sugar mills and industry extension officers) agree that it is relevant for the purpose for which it is being requested.

In general though, this issue of relevance is a concern for any of the purposes described as the reasons behind the regulation making power for data collection. While there would be no disagreement that more information could be helpful *to support the Queensland Government to fully understand the effectiveness of the programs it funds* it is clear that the level of understanding of what information could assist with this is not well developed.

While the Great Barrier Reef Water Science Taskforce (GBRWST) included in its recommendations that data was needed for improved water quality outcomes, other than the Crossley report commissioned by the Office of the Great Barrier Reef, there has been no completed research to identify the relevance of data that currently exists.

There are research programs such as the Sandy Creek Sub-catchment Water Quality Monitoring Project at Mackay and the Barratta Creek Water Quality Monitoring Project in the Burdekin currently underway that include extensive monitoring of run-off to better understand the connection between changed farming practices and water quality improvement. It is reasonable to believe these programs could lead to better understanding the nature, relevance and most importantly the source of data that the GBRWST had in mind when making its recommendations.

In summary, it is ASMC's opinion that to mandate the provision of data held by farmers, fertiliser sellers, agronomists, wholesalers, sugar mills and industry extension officers via a regulation making power is not justified on the following bases:

- the current level of understanding of the nature and relevance of any of this data is deficient; and
- it is unclear how the information/data will be used in terms of the *Information Privacy Act 2009*

Some additional matters for clarification and consideration in the Explanatory Notes

1. Policy Objectives and the reasons for them

Paragraph five under this heading on Page 1 (repeated on Page 8) states that "Despite significant government and industry investment, particularly in agriculture, voluntary approaches have failed to facilitate sufficient uptake of improved practices and at the present trajectory, the Reef water quality targets will not be met."

It is important that further clarification is provided around the use of 'sufficient'. It is reasonable for it to be made clear to industry what 'sufficient uptake' means in this context, i.e. a specific percentage or level of uptake.

2. Amendments to the *Environmental Protection Act 1994*

The fifth dot point under this heading on Page 3 states that "Good performers that utilise practices with low water quality risks are recognised and rewarded." It is important that the *'good practices'* referred to are clearly identified as is the case with clarification around the nature of the referred to *'awards'*.

3. ***Require advisers to provide advice that is not false or misleading related to an agricultural ERA standard, and keep and produce records of the advice provided.***

   The Bill requires advisers (e.g. agronomists and fertiliser sellers), when providing 'tailored advice' about agricultural ERAs, to provide advice that is not false or misleading, and keep and produce (upon request) records of the advice provided. An adviser includes any person who provides advice about carrying out an agricultural ERA as a service for reward (e.g. agronomist), or in association with another service (e.g. fertiliser distributor or agent).

The above statement from Page 5 gives rise to a question as to whether the payment of a levy to Sugar Research Australia (SRA) or a productivity service organisation constitutes a reward as described here? It needs to be clearly defined such that advice provided by SRA adoption officers and productivity service organisation employees does not need to be recorded and be available.

4. The latest science provides an unprecedented level of certainty that the main cause of poor Reef water quality is cumulative contributions from agricultural run-off in the Reef catchments, with locally significant contributions from industrial land uses.

This statement is made on page 10 of the Explanatory Notes under the Fundamental Legislative Principles heading. What is unprecedented should this Bill become law, is the adverse effect it will have on the rights and liberties of those carrying out commercial agricultural activities – cattle grazing; banana and other horticulture cultivation; and the

cultivation of other crops, including sugarcane and grains – across the Reef regions. Similarly, it could be argued that the new regulations made under this law will impose obligations retrospectively on *existing* agricultural development.

An example would be where an individual has purchased a coastal grazing property (in good faith) in the past with the intention of converting it over time into sugarcane farming and banana growing. According to the Explanatory Notes, *new cropping development will be required to apply for an environmental authority, with the activity conditioned to meet higher standards through farm design standards. New cropping will also be required to meet minimum practice standards. As with all applications for an environmental authority for ERAs under the Environmental Protection Act 1994, the administering authority has the power to refuse an application.*

THE CONTRIBUTION OF SUGAR MANUFACTURING TO QUEENSLAND

In 2017/18, the 20 raw sugar mills in Queensland spent and generated the following Gross Value Add (GVA) ($m) and employment

DIRECT

MILL STAFF WAGES

$353 million to **4,591 people**

MILL GOODS & SERVICES

$686 million to **5,551 suppliers**

CANE PAYMENTS

$1,205 million to **4,305 farm enterprises** employing **4,554 people**

FLOW-ON

$1,090 million GVA which supported an additional **8,601 jobs** in the mill supply, retail sectors etc.

$716 million GVA which supported an additional **4,911 jobs** in the farm inputs, retail sectors etc.

TOTAL

$4,050 million GVA representing **1.2%** of Queensland's 2016/17* Gross Regional Product

22,657 jobs representing **0.9%** of Queensland's total 2016/17* employment

Jobs data reported as full-time equivalent (FTE) employees

*Latest available GRP and total employment data is 2016/17

Australian Sugar Milling Council
Phone +61 7 3231 5000
asmc.com.au | @sugarcouncil.aus

Trade policy | Social licence | Advocacy | Industry revitalisation | Research strategy

AUSTRALIAN Sugar Milling COUNCIL

21 April 2017

Reef Regulations Discussion Paper Submission
The Office of the Great Barrier Reef
Department of Environment and Heritage Protection
GPO Box 2454
BRISBANE QLD 4001

By Email: officeofthegbr@ehp.qld.gov.au

RE: Reef Regulations Discussion Paper Submission

Please find attached a submission by the Australian Sugar Milling Council.

The Australian Sugar Milling Council (ASMC) is the peak industry organisation for raw sugar milling in Australia. The ASMC has six member companies and represents some 95 per cent of Australian raw sugar production. There are 24 sugar mills in Australia (21 in Qld) producing raw sugar, 80 per cent of which is exported.

The sugar industry in Queensland directly employs more than 16,000 people and contributes between $3.5 billion and $4.0 billion across the growing, milling and refining sectors to Queensland's economy every year.

The sustainability of the sugar industry is finely balanced and relies on sugar mills and the growers supplying those mills having a joint dependency; mill companies are able to maintain their factories to process the sugarcane they purchase from their growers on the basis that the growers are able to supply sufficient sugarcane to keep the sugar mill viable.

ASMC's concerns around the introduction of 'enhanced reef regulations' relates to the potential regulatory burden on the growing side of the industry negatively impacting this fine balance of industry sustainability, and an overall detrimental impact on triple bottom line considerations.

ASMC's members are very supportive of balanced measures that encourage best management practices in sugarcane farming that will result in improved water quality for the Great Barrier Reef.

Yours sincerely

Dominic V Nolan
Chief Executive Officer

ABN: 44 010 779 496 Australian Sugar Milling Council
IBM Building Level 3 / 348 Edward St Brisbane GPO Box 945 Brisbane Qld 4001 Australia
P +61 7 3231 5000 F +61 7 3229 2113 E asmc@asmc.com.au
www.asmc.com.au

A submission by the Australian Sugar Milling Council in response to the March 2017 Queensland Government discussion paper entitled "*Enhancing regulations to ensure clean water for a healthy Great Barrier Reef and a prosperous Queensland*".

The Australian Sugar Milling Council supports an industry-led framework for sustainable production and management of natural resources in Queensland, of which sugar mill companies and sugarcane growers are large custodians.

The ASMC also supports a regulatory framework to underpin the industry-led initiatives, developed and implemented on a collaborative basis between industry and Government. The management initiatives and regulatory framework must be complementary and evidence based, and balance what can be seen at times as competing objectives, to deliver positive social, economic and environmental outcomes for Queensland, and communities beyond.

A great challenge for Government in getting the 'enhancement' element right in the regulatory framework is evident in key terms in the rest of the paper's title - 'clean water', a 'healthy Great Barrier Reef' and a 'prosperous Queensland'. These terms do not include any quantification, however the regulations and targets require transparent numbers and metrics for performance assessment. The water quality targets for the Reef Protection Plan 2013 are:

- at least a 50 per cent reduction in anthropogenic end-of-catchment dissolved inorganic nitrogen loads in priority areas by 2018; and
- at least a 20 per cent reduction in anthropogenic end-of-catchment loads of sediment and particulate nutrients in priority areas by 2018.

In order for the regulatory framework to be successful, it requires broad community and stakeholder understanding and support. In particular, stakeholders impacted by the regulatory framework must be confident that the enhanced regulations and regulated activities have a clear evidence based link to the measurement of progress towards achieving 'clean water', a 'healthy Great Barrier Reef' and a 'prosperous Queensland'.

Any regulatory framework that is established for sugarcane farming with the goal of improving water quality on the Great Barrier Reef needs to be well informed and equally considerate of the impact on the sustainability of the sugar industry and the industries reliant on a 'healthy' reef because each contribute significantly to a 'prosperous Queensland'.

Much is made of the importance of a healthy reef to the economy of Queensland particularly with a large portion of Queensland's tourism industry reliant on the various reef attractions and nearby island resorts. However, the Queensland economy would be quite negatively impacted if the focus on improvement of reef water quality led to a significant reduction in the productivity and size of the State's sugar industry, and agriculture more broadly.

The Australian Sugar Milling Council, whose membership comprises the owners and operators of all sugar mills in reef catchments, is very supportive of balanced measures that encourage best management practice in sugarcane farming that will result in improved water quality for the Great Barrier Reef.

Milling council members also own and operate large farming operations in each of the reef catchments, and are recognised leaders in terms of best management practice and innovation in their approach to farming. In total, milling companies produce approximately 2.5 million tonnes of sugarcane from a total farming area of about 30,000 hectares. Approximately 60% of the area farmed by mills is Smartcane BMP accredited, and an additional 30% of the area farmed by mills is accredited to the Bonsucro international sustainability standard.

ASMC members have taken a leadership approach in terms of their farming operations with a view to influencing and encouraging adoption of these farming practices by the broader community of growers in their respective milling regions. A recent example of this is the announcement of a partnership between MSF Sugar, its North Queensland growers and the Australian Government with $4.5 million of funding from the Government's *Reef Trust* over five years. The funding for MSF's *Project Uplift Farming Systems*' Initiative will be supplemented by an estimated $12.8 million co-investment by MSF Sugar and growers.

The project is an industry-led initiative with an aim to improve on-farm nutrient management practices, and therefore improve the quality of water entering the Reef lagoon. Over the next 5 years, MSF Sugar will establish 36 farming groups who will be assisted in the transition from existing practices to new, more efficient farming systems that lead to Smartcane BMP accreditation at 'above industry standard'. The new approach is based on the SRA Farming System which uses legume crop rotation, green cane trash blanketing, minimum tillage and controlled traffic to minimise soil compaction and reduce farm water runoff.

It is essential that the Queensland Government's regulatory approach does not remove the incentive for similar industry initiatives to develop in other regions. If the major focus of the regulatory approach is to reduce inputs to achieve catchment pollutant targets, industry viability and sustainability will be threatened. Sugar milling is a high fixed cost business that relies on a certain annual throughput of sugarcane to be sustainable. While it might be feasible for an individual sugarcane farming operation to reduce inputs and thereby production, the summary impact at mill area level could be that a mill's cane supply may fall below sustainable levels and bring the viability of a mill into question. This would have a far reaching and disastrous impact from an economic, social and environmental perspective.

Minimum standards – agriculture

There is a particular example in the discussion paper that is highlighted to suggest that sustainable practices can boost productivity and profitability. The example refers to the RP20 nutrient trials conducted in the Burdekin area. The results from those trials to date have been both promising and compelling, however the discussion around the results of the trial and their applicability to other regions must be undertaken with care and consideration of all the factors contributing to the trial results.

On Page 11 of the discussion paper this example states "To date, the trials show farms are more profitable when adopting the industry standard SIX EASY STEPS™ and good farming practices."

The sentences that follow this statement are of concern: "For example, if a grower applies 40-50 kilograms of nitrogen per hectare over and above SIX EASY STEPS™ industry standard (which is a common occurrence) their net revenue would be $70-$130 less per

hectare, depending on the crop cycle. For farms on lower productivity soils, following the SIX EASY STEPS™ standard could represent a 10 - 15 per cent cost saving."

There are two equally important components to achieving the greater profitability referred to in the example – the adoption of SIX EASY STEPS™ and good farming practices. The example provided then ignores the "good farming practices" element of the increase in profitability, suggesting that the "better" results will be achieved simply through a change in the amount of fertiliser applied. This fails to positively address both economic and environmental objectives.

The other risk related to using the RP20 trials as the proving ground for reducing fertiliser application rates is that the Burdekin region has perhaps the least variable climatic conditions of all sugarcane production areas, with access to sufficient water from irrigation to be able to (in most years) almost completely control the growth of the sugarcane crop. In regions such as the Wet Tropics of North Queensland, farmers must be more diligent in terms of making the best use of the opportunities presented to them by the weather conditions, including timing and rate of application of inputs to their crops. There are four questions asked on Page 11 of the discussion paper and brief comments are provided on each as follows:

Suggestions for minimum practice – minimum practice standards should continue to be well informed by research and measured against triple bottom line sustainability.

Length of time industry should be given to meet new minimum standards – consideration of a reasonable and practical timeframe for the minimum standards to be met would be best undertaken after there was a better understanding by stakeholders of the detailed enhanced regulatory framework.

What data should be collected? – Individual enterprises should be collecting the data they need to make the best possible decisions for their business and to record success / changes over time. Data collection, management, and ownership is subject to a comprehensive review, and is a key consideration for productivity and management purposes.

How best can records be collected? – If Government identifies a need to access to some of the collected data, the reporting framework that is developed must provide useful information and feedback to the individual enterprises. Milling companies are willing to work with Government in the development of this framework.

Recognising good performers
It is encouraging that the Government is committed to recognising the good performance of those producers already adopting and improving their farming practices to minimise nutrient and sediment run-off.

The discussion paper makes it clear that producers accredited against a recognised Best Management Practice (BMP) program (or equivalent program) will be deemed as demonstrating compliance with the minimum practice regulatory standards. ASMC considers it is important that both the Smartcane BMP program and the international Bonsucro sustainability standard are recognised as programs that demonstrate compliance for the sugar industry. There also needs to be a process for benchmarking future accreditation systems that are developed.

The paper suggests that the Government will recognise and reward the efforts of producers to become BMP accredited by continuing to support BMP programs and providing legal recognition. The paper raises two further questions relating to this.

Incentives or assistance to encourage compliance with minimum practice standards – Government support for BMP adoption programs has been crucial in their uptake by producers and must continue. ASMC supports public recognition of producers who become accredited through official signage on farm boundaries and a publicly available register of accredited producers.
Rewards for good performance – To best incentivise the continuous improvement element of BMP programs, ASMC suggests that Government consider going further than providing greater access to government grant schemes by establishing cash incentives for producers who achieve stretch targets in terms of farm practices linked to minimising run-off of nutrients and sediment.

Catchment load limits
The establishment of catchment pollution load limits for each catchment poses the greatest risk for Government and industry in this exercise. This includes credibility risk, performance risk, and risk of significant negative impacts at a social, economic and environmental level.

There will need to be high levels of transparency and understanding around the methodology used to establish the limits, and even greater transparency around the links between various farm practices and their impact on pollution loads in catchments. ASMC supports the increased monitoring, discussed on P13 of the discussion paper.

The regulation around the expansion or intensification of agriculture will need to be carefully crafted such that it does not create a bureaucratic 'road block' to best practice agriculture or to undermine the Queensland Government's acknowledgement of agriculture as a foundation in building the State's biofuture. ASMC supports the Queensland Government working with industry to carefully define what constitutes new or expanded agriculture.

Some of the current 'expansion' of sugarcane farming is using inspiring, innovative technology to optimise irrigation, fertiliser use, and ultimately crop production. This leading-edge work needs to be encouraged, but it is not clear in the document how this type of 'expansion' would be treated under the offset regulation.

Streambank buffering is a concept that needs to be approached with great caution. In many cases, cropping can provide the most suitable measure to prevent erosion and to filter any run-off to streams. Any consideration of introducing a standard distance setback from streams has been previously demonstrated to be flawed, impractical, and unworkable. The introduction of such a requirement, particularly in the Wet Tropics, could effectively shut down the sugar industry, with significant negative environmental outcomes, as well as disastrous economy wide impacts, and social dislocation for regional communities that rely on the sugar industry for jobs and business activity.

When such a buffer was considered in the 2009 iteration of reef regulations, it was estimated that a 20 metre buffer along water courses in the Innisfail/Babinda region of Far North Queensland would see 23 percent of existing farming area forced out of production.

Water quality offsets

The concept of offsets needing to be identified or funded to enable any horizontal growth for the sugar industry is concerning for all sugar millers and for many growers. Most sugar mills are losing sugarcane area to urban and other land uses, and are expanding production in other areas to maintain viable scale, rather than as a growth strategy in itself. Evidence of this is the fact that most sugar milling companies have for some time been offering financial incentives to existing or new growers to bring additional land into production.

It is unclear in the discussion paper, how 'expansion' with innovative practices would be managed with regard to requiring offsets. At the very minimum, a viable supply area for a mill should be identified, and up until that area of production is reached, any expansion of sugarcane growing in the region should be exempted from having to identify an offset or make a predetermined financial contribution to fund strategic pollution reduction works across the reef catchments as the discussion paper suggests. It is assumed that these expansions would be at or above best practice.

Of additional concern is the proposal in the discussion paper that the implementation of a water quality offsets framework should start with a pollution reduction scheme for nitrogen. The concern here is that if the reduction scheme contains an element of simply paying farmers to use less nitrogen, and if the payment is sufficiently attractive to be considered a subsidy by growers to offset any loss of productivity at the farm level, the combined impact of this at a mill area level could also quickly lead to a loss of economic scale for the milling business. Consideration also needs to be given as to the international trade policy implications of such an approach.

Adding to this concern is the fact that when the sugar industry expanded over the years to maintain a viable cane supply for mills, it has tended to move onto soils that can grow a commercial crop of sugarcane, but may not be suitable for most other crops. These areas have now become part of the 'core' cane supply for many mills. If N rates are reduced out of synch with productivity potential, then it is likely that these areas will suffer yield decline and become unviable as cane farms (or for any other use for that matter). So once we have a significant decay in 'core' tonnes a sugar mill becomes unviable and shuts down. This in turn renders most or all remaining sugarcane production in the area stranded, and creates major land stewardship and associated environmental problems, as well as obvious negative social and economic impacts.

Conclusion

Members of the Australian Sugar Milling Council are supportive of a regulatory framework that is complementary of industry-led initiatives such as Smartcane BMP and Bonsucro, and that balance triple bottom line outcomes. The Australian Sugar Milling Council fully accepts that all sugar industry stakeholders need to do more in terms of reducing the impact of farming activities on reef water quality, and that the best way to do this is in partnership with governments.

It is particularly important that the entire industry supply chain continues to be consulted as the regulations are developed to ensure that there are no perverse outcomes as a result. The initial discussion paper does raise some significant concerns, with potential major adverse triple bottom line impacts if not addressed as the framework develops.

It is also important that, as the regulations are developed, recognition is given to the diverse nature of the different farming regions across the industry. For example, a regulatory measure that might be appropriate for the Wet Tropics will not be appropriate for the Burdekin or Southern regions of the industry, just as a measure that might be appropriate for the Central region around Mackay may not suit any other sugarcane growing region.

Measures resulting in a reduction of applied nitrogen below SIX EASY STEPS™ rates without impacting profit and yield should be supported. An example of how this could be achieved would be through prioritising the development of a trait in the industry's plant breeding program that targets better nitrogen use efficiency in future varieties of sugarcane used for commercial production. Another example would be the achievement of a successful commercialisation of some of the new farming technologies currently being trialled in the industry.

AUSTRALIAN Sugar Milling COUNCIL

3 November 2017

Reef regulations RIS Submission
The Office of the Great Barrier Reef
Department of Environment and Heritage Protection
GPO Box 2454
Brisbane, QLD, 4001

officeofthegbr@ehp.qld.gov.au

RE: Broadening and enhancing reef protection regulations – Consultation Regulatory Impact Statement

The Australian Sugar Milling Council (ASMC*) is the peak industry organisation for raw sugar milling in Australia. As well as owning and operating sugar mills, ASMC members operate large sugarcane farms in all the regions subject to the proposed broadened and enhanced reef protection regulations.

The ASMC thanks the Government for the opportunity to respond to the Regulatory Impact Statement consultation document, released in September 2017 (see attached).

ASMC members are supportive of balanced measures that can be proved to deliver measurable improvements in water quality for the Great Barrier Reef (GBR). We believe a key mechanism for our sector is to promote and encourage 'best management practices' in sugarcane farming.

ASMC has acknowledged in its earlier submissions that all sugar industry stakeholders need to do more in terms of reducing the impact of farming activities on reef water quality. We believe the best way to do this is in a true partnership approach with Government and community stakeholders

Also as previously stated, any measures introduced need to have a clear and positive impact on the sustainability of the stewards who manage the land and natural resources in the GBR catchments. Negatively impacting the business viability of local growers will threaten their capacity to manage their operations and will significantly affect the viability of sugar milling areas. Mill closures would result in major environmental and economic setbacks for GBR catchments.

ASMC believes the current process has been far superior to that which heralded the 2009 reef protection regulations. However, we are concerned that elements have been rushed and not fully assessed in terms of practicality and scientific rigour.

We urge Government to consider the matters raised in this response before proceeding to develop legislation enacting the proposed measures.

Yours sincerely

Dominic V Nolan
Chief Executive Officer

Note*: ASMC represents some 95 per cent of Australian raw sugar production. There are 24 sugar mills in Australia (21 in Queensland), owned by eight companies. The sugar mills produce raw sugar, 80 per cent of which is directly exported. The sugar industry has a long history of production in regional areas, and contributes to the social and economic wealth of many regional centres. The sugar industry contributes in the order of $4 billion to the Queensland economy annually across growing milling and refining activities.

ABN: 44 010 779 496 Australian Sugar Milling Council
IBM Building Level 3 / 348 Edward St Brisbane GPO Box 945 Brisbane Qld 4001 Australia
P +61 7 3231 5000 F +61 7 3229 2113 E asmc@asmc.com.au
www.asmc.com.au

Executive Summary

1. **Reliance on Alluvium Report**
   The ASMC is concerned to see the apparent emphasis and reliance placed on the report commissioned by the Department of Environment and Heritage Protection 'Costs of achieving the water quality targets for the GBR' – (Alluvium Report 2016).

   The Alluvium report included many caveats. References to *farm profit relative to the total farm gross margin* were clearly underpinned with a message of 'approach with caution.'

   We believe the RIS has been rushed. The Alluvium report did not assess or include a number of cane growing areas and the Government appears to have disregarded the caveats. The RIS justifies the proposed introduction of regulations on the basis of only the upside farm profit benefits estimated by Alluvium.

2. **Focus on Nitrogen reductions as key measure**
   The cost/benefit analysis appears to be heavily focussed on reduced use of Nitrogen fertilisers. In our opinion, the RIS values the water quality benefits but appears to ignore the cost implications on grower viability through reduced farmed area or reduced yields. It also fails to take into consideration the effect on allied industries including mills, irrigation companies and local small businesses. We would encourage more emphasis on the social, economic and environmental implications of the proposed measures.

3. **Cap on yields**
   The proposed enhanced regulations and minimum standards for Nitrogen use seem to be requiring land deemed as 'low producing' to cut fertiliser rates. In general, such marginal land already has higher amelioration requirements and lower potential yields. The resulting 'cap' on yields will likely result in these areas going out of production, creating the potential for a significant drop in cane supply to a local sugar mill between 20% and 40%. Such an occurrence would seriously affect the viability of local mills.

4. **Load limits**
   The RIS discussed load limits and provides details for the 35 river basin water quality targets expressed as the percentage load reductions required by 2025, using a 2013 baseline.

   The RIS goes on to claim that the targets have been developed using a list of the 'latest science'.

   Unfortunately, the list fails to include any scientifically established link between changed farm practices (including changes in the level of nutrients applied) and a specific measure of improved water quality. ASMC restates it's support for regulations that have a measurable and positive impact on reef water quality.

5. **Not one size fits all – need to consider local geographic and climatic conditions/limitations**
   Growing sugarcane in the Wet Tropics requires a very different approach to growing the crop in the Burdekin Dry Tropics or in the Burnett Mary region.

   It is vital that the new regulatory overlay, particularly with regard to minimum standards, pays due regard to the diverse nature of cane growing districts. Key is how this variation and diversity manifests in the practical implementation and performance of best practice.

   ASMC calls on the Government to recognise the fundamental flaws in a 'one law for all' approach. To achieve the required level of understanding and support from all affected stakeholders, recognition of local variations must be front and centre of any new regulations.

6. **Absence of evidence of a link between land use and improved water quality**
   ASMC members are committed to partner with Government to achieve ongoing improvements to reef water quality. We encourage Government to seek out opportunities to acknowledge the contribution agricultural industries have already made to improve water quality on the reef. This would provide a boost and deliver positive outcomes for all stakeholders in the GBR catchments.

Introduction and background

The Consultation Regulatory Impact Statement (RIS) states:

"The Queensland Government believes that the benefits of the regulatory package justify the costs and generates the greatest net benefit to the community compared to the option of maintaining the current approach".

An immediate and critical concern is the apparent emphasis and reliance placed by those advising the Government on the Alluvium 2016 report commissioned by the Department of Environment and Heritage Protection *'Costs of achieving the water quality targets for the GBR'*.

The following is reproduced from the RIS and discusses the assumptions that surely must underpin the key statement of Government in the RIS as referenced above:

"A5.3 Increased profitability and non-financial barriers to change

As seen in Table 20 there are expected to be increased profits to sugarcane businesses who operate at a B level rather than a C level. Assuming that all businesses would have otherwise only operated at a C level (which is not known, but does represent the most common practices in the industry), the gain is $54 million a year across all catchments. For an average business this represents a profit of between $7,844 (Burdekin) and $49,000 (Burnett Mary). Alluvium caution that the change in farm profit is, in many cases, so small relative to the total farm gross margin, that the impact of the change in the management practice will be difficult to identify.

It is important to understand that not all producers are guaranteed to make these profits. Financial outcome will vary based on climate, markets and differences between a property's business structure, as well as its biophysical characteristics.

The option of gaining a farm profit by moving to B standards currently exists for sugarcane growers. However, most have not made the shift, which indicates a range of financial and non-financial barriers exist. It is possible that the profit is not as large as modelled. The information about the financial benefits may not be clear or believable to individual landholders. Necessary skills or knowledge about the shift may not exist. Some landholders may have difficulties accessing the necessary capital to initiate change, and may not be well placed financially to bear the cost of the changes until positive returns are expected after several years. This is supported by the 29% of sugarcane growers in an ABARES survey in 2015 who noted that cash flow was the biggest barrier to adopting research and development outcomes for their business (Valle and Martin 2015).

Individual risk preferences are likely to be important in the decision to adopt or not adopt practices (Rolfe and Gregg 2015). Risks include concerns about the trialability, complexity and flexibility of practices, as well as risks associated with markets, climate in the near and long term, and social and industry factors.

There are also likely to be transaction costs associated with the change to the new standards that have not been captured in these costs. In particular, the time and effort involved in learning about new systems and implementing them could be significant.

Pannell et al. (2014) concluded that non-financial barriers could be as high as the profit gain for land management change for graziers in the Burnett Mary. The existence of large non-profit barriers can help explain low adoption in other sectors too, such as sugarcane.

These barriers to change are likely to exist for all agricultural industries in the Great Barrier Reef. These factors all mean that although the change to B standard will be regulated, there are likely to be costs that haven't been captured in this Regulatory Impact Statement. Landholders may also need support with the shift."

Reliance on Alluvium report questionable

The Alluvium report's authors are clearly sending a message of 'approach with caution' when relying on the numbers in the report. The Government appears to have disregarded this clear message and justified the proposed introduction of regulations on the basis of the value of benefits estimated by Alluvium.

As can be seen clearly in the above extract from the RIS, the Alluvium report has many caveats. Our concern is that the RIS has been rushed, several areas were not assessed or included and, that many growers would not be able to adopt the suggested practices. Somewhere, from the Alluvium report to this RIS, the caveats have been largely disregarded and all potential upside benefits appear to be regarded as achievable.

As stated in earlier submissions, our members are supportive of balanced measures that encourage best management practices in sugarcane farming and result in improved water quality for the Great Barrier Reef.

However, it is critical that any measures introduced have clear, positive impacts on the sustainability of the reef and support the ongoing viability of the stewards who manage the land and natural resources in the GBR catchments. Negatively impacting the business viability of natural resource managers will threaten their capacity to sustainably manage their operation. In a worst case, the impact of whole mill areas losing viability would be a major environmental setback for GBR catchments.

Reduced N

The cost/benefit analysis appears to be focussed on "reduced N". It values the water quality benefits based on the Deloitte valuation of the reef and appears to not recognise any cost impacts to grower viability (through reduced farmed area or reduced yields) or of subordinate industries that support growers like mills, irrigation companies and local communities. There appears to be little recognition of the "triple bottom line" impact.

The Government has referenced the funded Burdekin nitrogen trial RP20 and the funded nutrient management planning project RP 161 as evidence of farmers being able to achieve gains *"of up to $50,000 in profitability"* (RP20) and *"savings when accompanied by good farm management"* (RP 161).

ASMC commented on the risks of relying too heavily on the RP 20 trial in our earlier submission in April this year. We stated that "the results from those trials to date have been both promising and compelling, however the discussion around the results of the trial and their applicability to other regions must be undertaken with care and consideration of all the factors contributing to the trial results". What is missing from the final analysis is the cost and role of the *"high value agronomist support"* in achieving such outcomes.

Again as we warned in our April 2017 submission, "the other risk related to using the RP20 trials as the proving ground for reducing fertiliser application rates is that the Burdekin region has perhaps the least variable climatic conditions of all sugarcane production areas, with access to sufficient water from irrigation to be able to (in most years) almost completely control the growth of the sugarcane crop. In regions such as the Wet Tropics of North Queensland, farmers must be more diligent in terms of making the best use of the opportunities presented to them by the weather conditions, including timing and rate of application of inputs to their crops."

As a general principle, minimum practice standards should continue to be well informed by comprehensive research and measured against triple bottom line sustainability.

Cap on Yields

Expansion of the Queensland sugar industry onto new land through the 1980's and 1990's occurred predominantly on more marginal land with a higher percentage of sodic soils. These soils typically exhibit lower levels of nutrient mineralisation and higher levels of denitrification making them more reliant on synthetic nitrogen and phosphorous resulting in lower nitrogen utilisation figures.

Under the proposed enhanced regulations and minimum standards for Nitrogen use, should these soils be deemed "low producing" and have their fertiliser rates cut (as is the inferred intent of Stage 2) the result is most likely reduced yields. These are already expensive soils to farm due to their ameliorant requirements and lower potential yields. A resulting 'cap' on yields will likely result in these areas going out of production creating

the potential for a significant drop in cane supply to a number of sugar mills in the order of between 20% and 40%. Such an occurrence would create serious viability issues for any mills affected in this way.

In the next section, we will comment on the Government's preferred Option 2. However, ASMC would like Government to consider in particular that;

- Growing sugarcane in the Wet Tropics where the annual rainfall can range from 3,500mm to 5,500mm requires a very different approach to growing the crop in the Burdekin Dry Tropics or in the Burnett Mary region where the average annual rainfall is in the order of 900mm to 1000mm.

In light of this, it is vital that the development of any new regulatory overlay, particularly with regard to minimum standards, requires better recognition and understanding of the diverse nature of the different regions in which the sugar industry is located. Key is how this variation manifests in the practical impact and performance of best practice.

Desirable farming practices in one region may be quite different to those in another region simply as a result of the different climate zones and weather conditions along the Queensland coast where the sugar industry is located. The Government must recognise that in pursuing regulation of agriculture it cannot possibly rely on the mould of 'one law for all' and achieve the required level of understanding and support from all impacted stakeholders.

Government's choice of Option 2

The Government has indicated that its preferred option (2) is to enhance and broaden reef protection legislation.

The summary of Option 2 as set out in the RIS is as follows:

- *Set nutrient and sediment **pollution load limits** for each of the 35 river basins that flow to the Great Barrier Reef lagoon in order to target responses for managing risks to water quality.*
- *Expand the definition of an agricultural ERA so that **minimum practice standards** apply to key industries across the reef catchments.*
- *Remove the Environmental Risk Management Plan provisions.*
- *Require fertiliser **re-sellers to keep and produce records** on request, of nutrient application advice provided to their clients to improve nutrient management outcomes.*
- *Establish a **water quality offset framework** as a measure to manage water quality impacts for new, expanded or intensified agricultural and prescribed and resource ERAs in the context of the new catchment pollution load limits.*

Catchment pollution load limits

The RIS provides information describing how the load limits in all 35 reef catchments have been set at a river basin scale. The 35 river basin water quality targets are expressed as percentage load reductions required by 2025, from a 2013 baseline.

The RIS claims that the targets have been developed using the latest science involving a combination of:

- *The eReefs biogeochemical model which tracks nutrients and sediments in the marine environment and connects the impact of these pollutants to water clarity and indicators of ecosystem health.*
- *Paddock to Reef catchment modelling for the 35 river basins in the Great Barrier Reef region under the Paddock to Reef Integrated Monitoring, Modelling and Reporting Program*
- *Other expert scientific knowledge to estimate the load reductions required to meet the Great Barrier Reef Marine Park Authority (GBRMPA) water quality guidelines for reef ecosystem protection.*

Unfortunately what is missing from this list is any scientifically established link between changed farm practices (including changes in the level of nutrients applied) and a specific measure of improved water quality.

It is vitally important that sugarcane farmers are provided with confidence that changes being sought under the minimum practice standards can be measured and assessed in terms of positive impact on reef water quality.

ASMC has acknowledged previously that all sugar industry stakeholders need to do more in terms of reducing the impact of farming activities on the reef water quality. We believe the best way to do this is in a true partnership approach with Government and community stakeholders.

While the Office of the Great Barrier Reef has established stakeholder advisory groups to provide input to enhanced reef protection measures, it continues to fall short of the required level of partnership approach.

Earlier expressed concerns by ASMC (June 2017 submission on consultation paper) that the catchment load limits and the proposed associated offsets framework could effectively lead to a 'cap' on growth and potentially a decline in the sugar industry over time appear to have gone unheeded. There is a real risk that declining profitability and viability in the sugar industry would be a negative outcome for the sustainability of the GBR resulting from poorer stewardship of the land in the catchments where sugarcane farming is abandoned.

Such an outcome is in conflict with the Government's goal of Queensland "leading Australia's biofutures revolution." Agriculture and particularly sugarcane has been seen as a foundation and economic driver to build this biofuture for the State.

Industry stakeholders remain cautious about the use of load limits in the regulatory framework; it is essential that there is a high level of transparency and understanding around the methodology used to establish the catchment load limits, and even greater transparency around the links between improved farm practices and their impact on pollution loads. If this level of transparency can be delivered, there is scope for agricultural industries to be better recognised for their role in contributing to the improvement of water quality on the reef. This would be a major positive outcome for all stakeholders in the GBR catchments.

Agricultural activities

Defining agricultural ERAs

ASMC is generally in agreement with the distinctions that have been made in terms of the existing, new, expansion and intensified agricultural ERAs. It is reassuring that crop rotation or crop sequencing will not be captured as new or intensified ERAs. ASMC remains concerned however that while the RIS estimates the costs of regulating new, expanding or intensifying agricultural ERAs, no further light has been shed on the finer detail of the definitions of expanding or intensifying in terms of sugarcane farming.

The Government's previous consultation paper suggested an approach of using the average farm size of the four agricultural activities proposed for regulation, namely sugarcane, bananas, horticulture and grain to define an area that would be treated as expansion – this was estimated at 30 hectares. ASMC believes that a more acceptable and sustainable approach to this would be to use the average size of the particular commodity farm size which in the case of sugarcane farms would be 100 hectares.

The matter of 'intensification' being described as *'a change in type of agricultural ERA, which involves an increase in the amount of fertiliser or water used'* has already been raised by ASMC as needing further consideration and broader definition. As ASMC submitted in June, 'an increase in the amount of fertiliser applied' is too "blunt" – there needs to be some additional consideration for how it is applied and when it is applied in determining whether it should define a 'new Agricultural activity'; and 'an increase in the amount of water used for irrigation' is also too "blunt" e.g. if the amount of irrigation water applied to an existing activity is increased as a result of the operator having had part of their farm laser levelled (thereby reducing the risk of runoff), then this should not be a trigger for it to be regarded as a new agricultural activity.

As an observation, without this finer definition, the assessed impacts in the RIS should be regarded with some caution.

Establish and improve minimum standards

While the principles behind the proposed regulations, with regard to eliminating unacceptable practices that have a high risk to water quality, would be generally acceptable to industry stakeholders, ASMC is concerned that the claimed costs and benefits of some of the minimum standards identified lack credibility and detail.

For example, section 3.2.2.2 states *"the cost of minimising sediment release to receiving waters cannot be estimated as it is not known precisely which activities will be required on various properties"*. Examples such as this are unfortunate reminders of the 'rush to regulation' that occurred during the first iteration of reef regulations in 2009. The clear lack of science to inform some of the introduced regulatory measures cast a credibility shadow over the entire regulatory package.

ASMC would suggest that the other element *"not known precisely"* is the impact any of the utilised practices would have on improving water quality. Given that the intent of establishing and improving minimum practice standards is to contribute to the achievement of catchment load limits which have been set very *"precisely"*, the large

number of unknowns in terms of the actual improvement contribution of the range of minimum standards erode confidence on the part of land managers. They are the people who incur the cost of implementation of the changed practices that actually lead to measureable, improved water quality outcomes.

Industry stakeholders remain cautious about the use of load limits in the regulatory framework; it is essential that there is a high level of transparency and understanding around the methodology used to establish the catchment load limits, and even greater transparency around the links between improved farm practices and their impact on pollution loads. If this level of transparency can be delivered, there is scope for agricultural industries to be better recognised for their role in contributing to the improvement of water quality on the reef. This would be a major positive outcome for all stakeholders in the GBR catchments.

Earlier in this submission, ASMC has expressed concern over the concept of one set of minimum standards being applied across multiple regions with vastly different climatic conditions, soil types and farming practices. ASMC has also expressed a view that our members are supportive of balanced measures that encourage best management practices in sugarcane farming that will result in improved water quality for the Great Barrier Reef.

To achieve this balance, the Government must examine how its minimum standards approach can be more flexible so as to provide for the different climatic and geographical landscapes that prevail across the reef regions.

Section 3.2.2.3 discusses additional requirements for expansion areas, intensification and new agricultural ERAs. ASMC members are finding it difficult to see how any potential expansion of the industry won't be economically stifled by a water quality offset framework being established to deal with the impacts of new or expanded development in the context of catchment load limits.

Without identifying some way to trade catchment load surplus's the industry would appear to be locked into a 'static state' industry unless we can identify genetic improvement in our cane varieties or improvements in nitrogen use that will enhance the sugarcane plant's nitrogen use efficiency and thus produce better yields providing for a vertical expansion of the industry.

ASMC is not aware of any specific research going on in this space that will deliver results in the near future. At best, a specific selection-driven variety through the industry's plant breeding program would be a minimum of ten years away. The Government should be aware however that the sugar industry has not been idle in terms of research investment in plant breeding in the recent past. In addition to an annual plant breeding program investment approaching $10 million, the industry has invested upwards of an additional $15 million over the past nine years as part of a joint venture with Dupont to look for a step change in variety improvement with the use of bio-technology. Unfortunately, while this investment in bio-technology research to achieve accelerated genetic gain and other environmentally beneficial trait characteristics has been undertaken, it is becoming more apparent by the day that the global appetite for crops or products manufactured from them, with any biotechnology-driven modification, is in rapid decline.

Pathways for complying with minimum practice standards

ASMC has already stated its support for a regulatory overlay balanced with an industry driven best management practice approach. We therefore agree in principle with the two-pathway approach proposed by Government.

The RIS identifies in a number of instances that the cost of changing farm practices to achieve some of the minimum standards will be a constraint. ASMC had suggested in our response to the April discussion paper that the Government should consider rewards for good performance as follows:

"**Rewards for good performance** – To best incentivise the continuous improvement element of BMP programs, ASMC suggests that Government consider going further than providing greater access to government grant schemes by establishing cash incentives for producers who achieve stretch targets in terms of farm practices linked to minimising run-off of nutrients and sediment".

It is disappointing that such an option had not been considered in terms of the cost/benefit analysis developed during this RIS process. Without having undertaken any detailed work on the likely outcome, it is our considered view that an approach of this nature would compare favourably in terms of the likely benefit. It would go some way to neutralise the identified financial constraint to uptake of changed practices by land managers.

Record keeping requirements for fertiliser resellers

ASMC has no particular issues with this proposed element of the regulations. That said, if these records can be used as evidence as part of compliance activities, it is highly likely that the interaction between the land manager and the reseller would become a more detailed and lengthy process. That would undoubtedly add significantly more to the annual cost than the very precise $49,809 stated in the RIS.

Establish a water quality offsets framework

ASMC notes that the Government has identified that the development of the water quality offsets policy will be undertaken in consultation with stakeholders. ASMC members have serious concerns as to how such a framework could be applied to water quality improvement.

The more cynical view would be that the establishment of such a framework to apply to new, expanding or intensifying, agricultural, prescribed and resource ERAs would be no more than a revenue raising charge-for-entry to undertake agricultural activities in reef catchments.

However, ASMC will look forward to participating in consultation with the Government to ensure that a future offsets policy could be applied practically to water quality.