Reef protection regulations in the Great Barrier Reef regions
Sugarcane requirements
Effective from 1 December 2019

The Reef protection regulations started on 1 December 2019 and will be rolled out over the next three years.

The new regulations address land-based sources of water pollution to the Great Barrier Reef. This includes industrial and agricultural activities that release nutrients and sediment across the Cape York, Wet Tropics, Burdekin, Mackay Whitsunday, Fitzroy and Burnett Mary regions.

Why are regulations required for sugarcane production?
Rainfall, leaching and irrigation run-off can wash nutrients and sediment into waterways and coastal wetlands which flow to the Great Barrier Reef.

The minimum practice agricultural standards for sugarcane production focus on retaining nitrogen, phosphorus and sediment on-farm to minimise run-off and improve water quality.

The Queensland Government has made a commitment that the minimum practice agricultural standards will remain substantially unchanged for the next five years.

What are the requirements for sugarcane producers?
Under the new Reef protection regulations, all sugarcane producers in the Wet Tropics, Burdekin, Mackay Whitsunday, Fitzroy and Burnett Mary regions will be required to:

- keep general records from 1 December 2019
- comply with minimum practice agricultural standards as this requirement is applied to each region over the next three years
- implement a farm nitrogen and phosphorus budget as this requirement is applied to each region over the next three years from 2021
- obtain an environmental authority (permit) if commencing new or expanded cropping or horticulture activities on five hectares or more that do not meet the cropping history test in the Cape York, Wet Tropics, Burdekin, Mackay Whitsunday, Fitzroy and Burnett Mary regions from 1 June 2021 (deferred from 1 June 2020).

Why is the Cape York region excluded from most of the new requirements?
Most of the new requirements do not apply to producers in the Cape York region as the region has met its water quality targets.

However, from 1 June 2021 (deferred from 1 June 2020), any new or expanded commercial cropping and horticulture activities in the Cape York region on five hectares or more that do not meet the cropping history test will require an environmental authority (permit) before the activity or any work takes place.

What records do I need to keep?
All sugarcane producers will be required to keep general records from 1 December 2019 and then minimum standard records and farm nitrogen and phosphorus budget records as these requirements are rolled out across each region.

Records can be in any format but must be made within three business days, kept for at least six years and be available when requested by an authorised person such as a compliance officer.
Records need to be kept to demonstrate activities are being undertaken on the property in accordance with the minimum agricultural practice standards.

The government has committed to not commencing the regulation to acquire specific agricultural data from the broader agricultural sector, such as data about fertiliser and chemical use, soil testing and crop yield.

For a full description of the record keeping requirements for sugarcane producers please refer to the Agricultural ERA standard for sugarcane cultivation available at www.qld.gov.au/ReefRegulations

General records

For sugarcane producers, general records must include:

- name of the sugarcane producer (i.e. the person(s) carrying out the activity)
- name of person making the record
- company name (if applicable)
- property address/es
- postal address
- farm identification number/s (if applicable)
- a list of the lots included in all the farms within the agricultural enterprise
- records of agricultural chemicals (any pesticide, herbicide or fungicide applied to land or crops), fertiliser and mill mud/mill ash applied and specifically:
  - location of each application (e.g. farm number with block name or management zone)
  - date of each application
  - agricultural chemical (any pesticide, herbicide or fungicide applied to land or crops) and/or fertiliser product (including mill mud/mill ash) applied to each location with product name, application rate (kg/ha, L/ha or tonnes/ha for mill mud/mill ash) and for fertiliser products, the percentage of nitrogen and phosphorus.

Minimum standard records

For sugarcane producers, minimum standard records must specifically include the following with supporting primary documents (soil test reports, fertiliser contractor print-outs, fertiliser invoices etc.) as proof of the records:

1. amounts of nitrogen and phosphorus (kg/ha) for each block calculated using the Prescribed methodology for sugarcane cultivation available at www.qld.gov.au/ReefRegulations
2. method of fertiliser application
3. date of soil testing as well as the soil test report/results and a description of the location and the dominant soil type sampled
4. map of the boundaries of blocks or management zones where:
   a. soil sampling has been undertaken and
   b. where fertiliser and mill mud/mill ash has been applied
5. a soil map showing the dominant soil types covering the blocks or management zones where samples were taken.

Farm nitrogen and phosphorus budget records

For sugarcane producers, farm nitrogen and phosphorus budget records must specifically include the following with supporting primary documents (soil test reports, fertiliser contractor print-outs, fertiliser invoices etc.) as proof of the records:

1. calculated whole of farm nitrogen amount for the following harvest period (kg)
2. calculated whole of farm phosphorus amount for the following harvest period (kg)
3. annual amount of nitrogen applied to the whole of farm for the previous harvest period (kg or tonnes)
4. annual amount of phosphorus applied to the whole of farm for the previous harvest period (kg or tonnes)
5. actual yield achieved for the previous harvest period (tonnes/cane/ha)
6. historical yields (if applicable) (tonnes/cane/ha)
7. a farm map including:
   a. farm number or unique identifier/s
   b. block boundaries
   c. block identifiers
   d. area of each block (in hectares)
   e. area of whole of farm (in hectares)
   f. crop class and fallow areas
   g. identification of any physical or soil chemical constraints to yield (if they exist) for each management zones and/or blocks
8. name(s) and contact details of the appropriate person who developed and/or verified the farm nitrogen and phosphorus budget
9. date the farm nitrogen and phosphorus budget was developed and verified.

**What minimum practice agricultural standards do I need to comply with?**

To meet the minimum practice agricultural standards, sugarcane producers will need to:

- use the prescribed method to carry out soil tests and to calculate the amount of nitrogen and phosphorus that can be applied to each block each year
- apply no more than the amount calculated using the prescribed method
- no ground based broadcast fertiliser applications except in fallow when no nitrogen is applied
- have appropriate erosion and sediment control measures and ensure fallow blocks have surface cover
- prepare a farm nitrogen and phosphorus budget that:
  - uses soil test results and calculates nitrogen and phosphorus recommendations for all blocks as per prescribed method (e.g. Six Easy Steps)
  - adds together nitrogen and phosphorus rates for all blocks to work out the whole of farm amount
  - identifies constraints to yield and nutrient uptake
  - can vary nitrogen and phosphorus rates across blocks as long as the whole of farm amount is not exceeded
  - has a farm map
  - is developed and verified by an appropriately skilled/experienced person for the first time – then every five years
  - reviewed and updated annually by the grower
- an appropriate person may be, for example, an agronomist or a grower that has the skills or experience in developing nutrient budgets. Growers who have the relevant experience or qualifications through a recognised program can prepare their own budget.

For a full description of the minimum practice agricultural standards for sugarcane producers, please refer to the **Agricultural ERA standard for sugarcane cultivation** and the **Prescribed methodology for sugarcane cultivation**. You can also refer to the **Sediment and erosion control guide**, **Fertiliser application guide** and **Farm nitrogen and phosphorus budget guide** for information on how to comply. These documents are available online at [www.qld.gov.au/ReefRegulations](http://www.qld.gov.au/ReefRegulations). For information about the changes for currently regulated sugarcane growers, please refer to the Sugarcane changes factsheet available online at [www.qld.gov.au/ReefRegulations](http://www.qld.gov.au/ReefRegulations).

**What are the requirements for new or expanded cropping and horticulture activities?**

**From 1 June 2021** (deferred from 1 June 2020), new or expanded cropping and horticulture activities (including sugarcane production) in the Cape York, Wet Tropics, Burdekin, Mackay Whitsunday, Fitzroy and Burnett Mary regions on five hectares or more that does not meet the cropping history test will require an environmental authority (permit) before the activity or any work takes place.

All farms will need to meet minimum practice agricultural standards where these apply to the crop(s) being grown.

For detailed information on this requirement please refer to the Requirements for new or expanded cropping or horticulture activities factsheet available online at [www.qld.gov.au/ReefRegulations](http://www.qld.gov.au/ReefRegulations).

**What about other requirements for records about agricultural chemicals?**

You might also be required to keep records because of other legal requirements.

For example, the **Chemical Usage (Agricultural and Veterinary) Control Act 1988** requires sugarcane growers in the Wet Tropics, Burdekin and Mackay Whitsunday regions to meet prescribed conditions (including record keeping) for using, preparing, storing and possessing ametryn, atrazine, diuron, hexazinone, and tebuthiuron.


**When will the new regulations apply?**

**Record keeping**

**From 1 December 2019**, all sugarcane producers in the Wet Tropics, Burdekin, Mackay Whitsunday, Fitzroy and Burnett Mary regions will need to keep general records and then, as the minimum practice agricultural standards commence for their region, minimum standard records.
Minimum practice agricultural standards
The minimum practice agricultural standards for sugarcane producers will apply as follows:
- Wet Tropics region from 1 December 2019
- Burdekin region from 1 December 2019
- Mackay Whitsunday region from 1 December 2019
- Fitzroy region from 1 December 2022
- Burnett Mary region from 1 December 2022

Farm nitrogen and phosphorus budget
The requirement to implement a farm nitrogen and phosphorus budget for sugarcane producers will apply as follows:
- Wet Tropics region from 1 December 2021
- Burdekin region from 1 December 2021
- Mackay Whitsunday region from 1 December 2021
- Fitzroy region from 1 December 2022
- Burnett Mary region from 1 December 2022

Recognised accreditation programs and acknowledged practice change projects
The Queensland Department of Environment and Science has the ability to recognise producers who participate in programs and projects that align to, or achieve more than the regulatory standards and identify them as a lower priority for compliance inspections under the Reef protection regulations. There are two options available (a) recognised accreditation programs and (b) acknowledged practice change projects.

It is important that you refer to the Recognised accreditation programs and acknowledged practice change projects factsheet for further detailed information on these options and whether you are eligible.

The factsheet is available online at www.qld.gov.au/ReefRegulations

How will compliance work?
Compliance officers from the Department of Environment and Science will meet with producers to help them understand what is required under the minimum practice agricultural standards.

The compliance program is prioritising its efforts on the areas that represent the greatest water quality threat to the Reef. While the officers aim to work with producers to meet the requirements, the department will respond to ongoing non-compliance in accordance with its Enforcement Guidelines.

For more information, please refer to the Department of Environment and Science compliance and enforcement information at www.environment.des.qld.gov.au/management/compliance-enforcement

Where can I find more detailed information?
You can register at www.qld.gov.au/ReefRegulations to receive an information pack as well as regular updates on the regulations

What support is available for sugarcane producers?
Programs and support tools are provided by the Australian and Queensland governments and industry organisations to help sugarcane producers identify opportunities to improve farming practices.

These include the industry-developed Smartcane Best Management Practice program which is focused on improving the productivity, profitability and sustainability of farm enterprises. Please visit www.smartcane.com.au

Eligible sugarcane producers in the Wet Tropics, Burdekin, Mackay Whitsunday, Fitzroy and Burnett Mary regions can also access a one-off rebate of up to $1000 to help offset the costs of obtaining professional and agronomic advice from an Accredited Agricultural Adviser to meet the minimum practice agricultural standards through the Farming in Reef Catchments Rebate Scheme.

Information on how to find an Accredited Agricultural Adviser and apply for a rebate can be found at www.qrida.qld.gov.au/current-programs/farming-in-reef-catchments-scheme or call freecall 1800 623 946.

For more information, please refer to the Support programs and assistance for agricultural producers factsheet available online at www.qld.gov.au/ReefRegulations

Where can I find more information?
Web: www.qld.gov.au/ReefRegulations
Email: officeofthegbr@des.qld.gov.au
Telephone: 13 QGOV (13 74 68)
### When will the Reef protection regulations apply for sugarcane?

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