

Environmentally relevant activity (ERA) standard for Commercial cropping and horticulture in the Great Barrier Reef catchment (prescribed ERA 13A) – Version X

This Environmentally Relevant Activity (ERA) standard has been created in accordance with section 318 of the *Environmental Protection Act 1994*. This ERA standard provides the eligibility criteria and standard conditions for an **environmental authority** which authorises the carrying out of **commercial cropping and horticulture in the Great Barrier Reef catchment (prescribed ERA 13A)**.

When this document applies

This document applies when a condition of an environmental authority states the conditions of approval for the environmental authority are the eligibility criteria and standard conditions contained within the document titled Environmentally relevant activity (ERA) standard for commercial cropping and horticulture in the **Great Barrier Reef catchment (prescribed ERA 13A) – Version X**.

A person must also comply with any **agricultural ERA standard** applicable to the **activity** being carried out. For example, if the person is carrying out:

- sugarcane cultivation, the person must also comply with the agricultural ERA standard for sugarcane cultivation;
- banana cultivation, the person must also comply with the agricultural ERA standard for banana cultivation.

General information

What are eligibility criteria?

Eligibility criteria are constraints set to ensure environmental risks associated with the operation of the ERA are able to be managed by the standard conditions. Eligibility criteria set out the circumstances in which a standard or variation application for an environmental authority can be made.

What are standard conditions?

Standard conditions, including the relevant terms and definitions, are the minimum operating requirements an environmental authority holder must comply with.

When is a standard application required?

If an applicant can meet the eligibility criteria and comply with the standard conditions, then they can make a standard application. To make a standard application, applicants are required to submit a completed standard application form for prescribed ERA 13A. The form can be obtained from www.qld.gov.au (search for ESR/2020/XXXX), or by emailing palm@des.qld.gov.au or phoning 1300 130 372 (and selecting option 4).

When is a variation application required?

If an applicant can meet all of the eligibility criteria but needs to vary one or more of the standard conditions to suit their operational needs, then they can make a variation application. To make a variation application, applicants are required to submit a completed variation application form for prescribed ERA 13A. The form can be obtained from www.qld.gov.au (search for ESR/2020/XXXX), or by emailing palm@des.qld.gov.au or phoning 1300 130 372 (and selecting option 4).

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When is a site-specific application required?

Applicants for an activity that does not meet the eligibility criteria must make a site-specific application. To make a site-specific application, applicants are required to submit a completed site-specific application form for prescribed ERA 13A. The form can be obtained from www.qld.gov.au (search for ESR/2020/XXXX), or by emailing palm@des.qld.gov.au or phoning 1300 130 372 (and selecting option 4).

When is an amendment application required?

If the holder of an environmental authority needs to amend a standard condition in the issued environmental authority, then the holder must submit a completed amendment application form for prescribed ERA 13A (ESR/2020/XXXX). The form can be obtained from www.qld.gov.au (search for ESR/2020/XXXX), or by emailing palm@des.qld.gov.au or phoning 1300 130 372 (and selecting option 4).

Definitions

Common terms used in this document are bolded the first time they appear and are defined in the terms and definition table.

Eligibility criteria

- a) The commercial cropping and horticulture will be undertaken on no more than 100 hectares of land in a particular river basin; or
- b) The commercial cropping and horticulture is banana cultivation that is being relocated due to the presence of Panama disease tropical race 4 on other land for which a Notice has been issued under the Biosecurity Act 2014 (Qld).

Standard conditions

General
SC1: All reasonable steps must be taken to ensure the activity complies with the eligibility criteria.
SC2: The activity must not be undertaken within at least five (5) metres of the defining bank of a natural waterway .
SC3: Prior to 1 November each calendar year a waterway buffer must be implemented and maintained between the defining bank of all downslope waterways and the edge of any adjacent cropping or fallow areas, such that it minimises sediment run-off.
Surface-water run-off, erosion and sediment control
SC4: Prior to commencing the planting of crops for the activity and when preparatory work for the activity is in progress, measures must be designed and implemented to avoid and mitigate soil loss and surface water run-off to receiving waters .
SC5: Where an agricultural ERA standard is not in effect for the cropping or horticulture, after commencing the activity, erosion and sediment control measures must be maintained to avoid and mitigate soil loss and surface water run-off to receiving waters.
Irrigation
SC6: Measures that avoid and mitigate the loss of irrigation water to natural waterways must be implemented and maintained.
Record keeping
SC7: Plan(s) of the activity area must be kept showing: <ul style="list-style-type: none"> a) The cadastral lot(s) boundaries; and b) The activity area(s) within the cadastral lot(s) boundaries; and c) Irrigation and drainage areas; and d) Natural waterways; and e) Receiving waters; and f) Downslope waterways; and a) Waterway buffers.
SC8: The plan(s) required by condition SC7 must be updated periodically so that the plan(s) is current as at 1 November each year.
SC9: The plan(s) required by condition SC7 must be provided to the administering authority on request within the timeframe stipulated by the administering authority in the request.

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Terms and definitions

Term	Definition
Activity	Means the environmentally relevant activity (ERA) which this environmental authority is issued for, which is commercial cropping and horticulture.
Activity area	Means the area(s) of land in the river basin(s) in the Great Barrier Reef catchment where the ERA is being carried out.
Agricultural ERA standard	Means an agricultural ERA standard created in accordance with section 318 and 768 of the <i>Environmental Protection Act 1994</i> for the purposes of section 81 of the Act.
Average Return Interval	Means the average period, in years, between the occurrence of an event of a specified magnitude and an equal or greater magnitude event. Design rainfalls and intensity-frequency-duration (IFD) information for a location can be downloaded from http://www.bom.gov.au/water/designRainfalls/revise-ifd/ .
Avoid and mitigate	Means that in the first instance, any loss of irrigation water, sediment and nutrients from the activity area(s) to receiving waters be avoided. Any loss of irrigation water, sediment and nutrients from the activity area(s) must be mitigated as much as possible including to both lessen the force or intensity of the flow of water as much as possible and to lessen sediment and nutrient loads as much as possible.
Commercial cropping and horticulture	As defined in Schedule 2, Part 2A, Section 13A of the Environmental Protection Regulation 2019.
Constructed wetland	Means a constructed treatment system designed to mimic the water treatment processes of natural wetlands to remove sediment and nutrients from surface water run-off. Could also be referred to as a treatment wetland.
Contour bank	Means a constructed earth embankment, incorporating a channel on the upslope side, typically traversing a slope on, or close to, the contour to control and/or prevent the erosion of that slope. Also referred to as graded banks, terraces, or bunds.
Defining bank	<p>Means the bank that confines seasonal flows, but which may be inundated by flooding from time to time, and can be either:</p> <ul style="list-style-type: none"> • the bank that confines the water before the point of flooding, or • where there is no bank, the seasonal high water line which represents the point of flooding, or • where a crop is grown on a terrace between the defining bank and the centre of the natural watercourse or downslope waterway, the defining bank will also be the point on the terrace that confines the water before the point of flooding of that terrace. <p>This definition refers to one side of the natural watercourse or downslope waterway and may apply differently on different sections of the natural watercourse or downslope waterway.</p>
Diversion bank	Means a structure used to direct surface water runoff or irrigation water around and away from areas where soil is susceptible to erosion (such as cultivated paddocks) to areas where it can safely be disposed of, such as stable watercourses, natural depressions or water storages.
Downslope waterway	For the purposes of this environmental authority, means any natural watercourse or artificial structures or features, including a farm drain or artificial channel, storm water channel, storm water drain or roadside gutter,

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Term	Definition
	<p>that receives surface water from the activity area and which may reasonably be expected to drain to a natural waterway.</p> <p>Any drainage structures as defined in the terms and definitions of this environmental authority are not considered to be downslope waterways.</p> <p>Any structures or features that do not receive surface water from the activity area or do not direct water to a natural waterway are not considered to be downslope waterways.</p>
Drainage structures	<p>Means structures designed, implemented and maintained to reduce soil loss or surface water run-off or the loss of irrigation water, and may include a:</p> <ol style="list-style-type: none"> 1. Vegetated spoon drain; or 2. Contour bank; or 3. Diversion bank; or 4. Sediment trap; or 5. Recycle pit; or 6. Constructed wetland; or 7. Another measure which meets this intent
Environmental authority	As defined in Schedule 4 to the Environmental Protection Act 1994.
Environmentally relevant activity	As defined in s18 of the Environmental Protection Act 1994.
Fallow	<p>For banana cultivation, means an area of land that is typically used to grow bananas, that is left without that crop for a period of at least 6 months.</p> <p>For sugarcane cultivation, means an area of land that is typically used to grow sugarcane, and that is left with either grass/weedy cover, green manure or a leguminous crop (i.e. crop or ground cover with low or no nitrogen demand) for a period of at least six (6) months.</p> <p>For cropping and horticulture other than banana or sugarcane cultivation, means an area of land that is typically used to grow a crop or crops that is left without that crop or crops for any period of time.</p>
Great Barrier Reef catchment	<p>As defined in Chapter 4A of the <i>Environmental Protection Act 1994</i>:</p> <p>‘The Great Barrier Reef catchment is the area shown on a map prescribed by regulation as the Great Barrier Reef catchment.’ The area is shown on the Great Barrier Reef catchment and river basins map, accessible from www.qld.gov.au/ReefRegulations.</p>
Measures	<p>Means actions or procedures planned and implemented to avoid and mitigate the loss of soil or surface water run-off to receiving waters, or irrigation water to natural waterways.</p> <p>For erosion and sediment control measures in conditions SC4 and SC5, measures include:</p> <ul style="list-style-type: none"> • designing, implementing and maintaining drainage structures to avoid and mitigate soil loss and surface water run-off to receiving waters; and • designing and maintaining the cropped area (for the activity) to reduce the velocity of surface water run-off and avoid and mitigate soil loss and surface water run off to receiving waters.

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Term	Definition
	<p>For measures to avoid and mitigate the loss of irrigation water in condition SC6, measures include:</p> <ul style="list-style-type: none"> • matching the amount of irrigation water applied to the water requirement of the soil and crop, so any excess water not needed by the crop and available to be lost to natural waterways is avoided and mitigated; and • designing, implementing and maintaining the activity area to avoid and mitigate the loss of irrigation water to natural waterways; and • designing, implementing and maintaining drainage structures to avoid and mitigate the loss of irrigation water to natural waterways.
Natural waterway	For the purposes of this environmental authority, means all or any part of a natural waterway (including bed and bank), including a creek, river, stream, lake, lagoon, swamp, wetland, spring, non-tidal or tidal waters (including the sea) that drain to the Great Barrier Reef.
Nutrients	For the purpose of this ERA Standard means dissolved inorganic nitrogen.
Preparatory work	<p>As defined in Schedule 2, Part 2A, Section 13A of the Environmental Protection Regulation 2019:</p> <p><i>'preparatory work, for an activity, means work, other than building work, plumbing work or drainage work, carried out to prepare land for the activity, including, for example—</i></p> <p>(a) excavating or filling the land; or</p> <p>(b) clearing or destroying vegetation on the land; or</p> <p>(c) ploughing the land, or otherwise preparing soil on the land for planting; or</p> <p>(d) other work in, on, over or under the land that materially affects the land or its use.'</p>
Prescribed ERA 13A	As defined in Schedule 2, Part 2A, Section 13A of the Environmental Protection Regulation 2019.
Receiving waters	Means any <i>waters</i> into which the activity area drains. <i>Waters</i> has the same meaning as in the <i>Environmental Protection Act 1994</i> and includes all or any part of a creek, river, stream, lake, lagoon, swamp, wetland, spring, unconfined surface water, unconfined water in natural or artificial waterways, bed and bank of any waters, non-tidal or tidal waters (including the sea), and underground water. For the purposes of this environmental authority, receiving waters also includes structures or features which may reasonably be expected to drain to <i>waters</i> including a farm drain or channel, storm water channel, storm water drain or roadside gutter.
Recycle pit	Means a retention basin designed to capture irrigation water loss for re-use on the farm.
Seasonal high water line	Means a zone that represents the usual peak seasonal flow level, identifiable by deposition, debris or characteristic vegetation zonation.
Sediment trap	Means a basin that removes sediment, debris and litter from run-off water by allowing it to settle out and be left behind when the water moves.
Surface water	As defined in Schedule 2 of the Environmental Protection (Water and Wetland Biodiversity) Policy 2019: "means waters other than ground waters."
Vegetated cover	Means living, attached non-woody vegetation (e.g. grasses).
Vegetated spoon drains	Means shallow, open, vegetated channels between crop rows or blocks/paddocks primarily designed for conveying water along a drainage pathway.

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Term	Definition
Waterway buffer	Means a strip of retained or planted vegetation of a minimum of (5) five metres in width and has at least 80% vegetated cover in between the cropping (or fallow) area (of the activity) and a downslope waterway. The waterway buffer must not consist, in whole or in part, of the crop or crops being produced as part of the activity.

Version history

Version	Date	Description of changes
February 2020 Draft	25/02/2020	
December 2020 Draft	08/12/2020	Rewording of explanatory information pages 1 and 2, rewording of eligibility criteria, rewording of standard conditions and related definitions.

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Appendix 1: Obligations under Queensland law

This appendix is not intended to provide a comprehensive list of all obligations under Queensland law. It provides some general information, predominately about requirements under the *Environmental Protection Act 1994*, and person(s) carrying out an ERA, including a prescribed ERA, are encouraged to familiarise themselves with all requirements related to their specific activity.

An environmental authority issued to meet this ERA standard, including standard conditions, applies to all persons carrying out an activity that is subject to this ERA standard. It applies to persons carrying out the activity on land that they own or on land the person has arranged to use for the activity. It also applies to persons that are employed or otherwise engaged to carry out the activity.

Record keeping

The person carrying out this ERA must make and keep records about the matters prescribed in the standard conditions. An Authorised Person has the power under section 466 of the *Environmental Protection Act 1994* to request the production of these records for inspection. It is an offence under section 477 of the *Environmental Protection Act 1994* for a person to not comply with a request to produce documents.

Compliance and enforcement of environmental authorities

Failure to comply with any of the conditions of the environmental authority is an offence under the *Environmental Protection Act 1994* and penalties apply. Provisions under the *State Penalties Enforcement Regulation 2014* allow for a penalty infringement notice to be given for this offence.

General environmental duty

Section 319 of the *Environmental Protection Act 1994* states that any person who carries out an activity that causes or is likely to cause environmental harm must comply with the general environmental duty. This means that we are all responsible for the actions we take that affect the environment. We must not carry out any activity that causes, or is likely to cause, environmental harm unless we take all reasonable and practicable measures to prevent or minimise the harm. To decide what meets your general environmental duty, you need to consider:

- (a) the nature of the harm or potential harm;
- (b) the sensitivity of the receiving environment;
- (c) the current state of technical knowledge for the activity;
- (d) the likelihood of successful application of the different measures to prevent or minimise environmental harm that might be taken; and
- (e) the financial implications of the different measures as they would relate to the type of activity.

It is not an offence not to comply with the general environmental duty. However, maintaining your general environmental duty is a defence against the following:

- (a) an act that causes serious or material environmental harm or an environmental nuisance;
- (b) an act that contravenes a noise standard; and
- (c) a deposit of a contaminant, or release of stormwater run-off, mentioned in section 440ZG.

More information is available on the Queensland Government website <https://www.business.qld.gov.au>.

Duty to notify

Section 320A of the *Environmental Protection Act 1994* explains the duty to notify. The duty to notify applies to all persons and requires a person or company to give notice where serious or material environmental harm is caused or threatened. Notice must be given of the event, its nature and the circumstances in which the event happened. Notification can be verbal, written or by public notice depending on who is notifying and being notified.

The duty to notify arises where:

- a person carries out activities or becomes aware of an act of another person arising from, or connected to, those activities that causes or threatens serious or material environmental harm
- while carrying out activities a person becomes aware of the happening of one or both of the following events:
 - the activity negatively affects (or is reasonably likely to negatively affect) the water quality of an aquifer;
 - the activity has caused the unauthorised connection of two or more aquifers;
- the owner or occupier of contaminated land or an auditor performing an auditor's function (as defined in section 568(b) of the *Environmental Protection Act 1994*) becomes aware of:
 - the happening of an event involving a hazardous contaminant on the contaminated land; or
 - a change in the condition of the contaminated land; or
 - a notifiable activity having been carried out, or being carried out, on the contaminated land;that is causing, or is reasonably likely to cause, serious or material environmental harm.

For more information on the duty to notify requirements refer to the guideline 'Duty to notify of environmental harm' (ESR/2016/2271) – available at www.qld.gov.au.

Some relevant offences under the Environmental Protection Act 1994

Causing serious or material environmental harm (sections 437 and 438)

Material environmental harm is when the harm is not trivial or negligible in nature. Serious environmental harm is harm that is irreversible, of a high impact or widespread, or that is caused to an area of high conservation value or special significance.

Serious or material environmental harm excludes environmental nuisance.

Causing environmental nuisance (section 440)

Environmental nuisance is unreasonable interference with an environmental value caused by aerosols, fumes, light, noise, odour, particles or smoke. It may also include an unhealthy, offensive or unsightly condition because of contamination.

Depositing a prescribed water contaminant in waters (section 440ZG)

Prescribed water contaminants include a wide variety of contaminants listed in schedule 10 of the Environmental Protection Regulation 2019.

It is your responsibility to ensure that prescribed water contaminants are not left in a place where they may or do enter a waterway, the ocean or a stormwater drain. This includes making sure that stormwater falling on or running across your site does not leave the site contaminated. Where stormwater contamination occurs you must ensure that it is treated to remove contaminants. You should also consider where and how you store material used in your processes onsite to reduce the chance of water contamination.

Placing a contaminant where environmental harm or nuisance may be caused (section 443)

A person must not cause or allow a contaminant to be placed in a position where it could reasonably be expected to cause serious or material environmental harm or environmental nuisance.

Responsibilities under other legislation

An ERA pursuant to the *Environmental Protection Act 1994* does not remove the need to obtain any additional approval for the activity that might be required by other state and/or Commonwealth legislation. Other legislation for which a permit may be required includes, but is not limited to:

- *Aboriginal Cultural Heritage Act 2003*
- *Chemical Usage (Agricultural and Veterinary) Control Act 1988*
- *Fisheries Act 1994*
- *Forestry Act 1959*
- *Nature Conservation Act 1992*
- *Petroleum and Gas (Production and Safety) Act 2004 / Petroleum Act 1923*
- *Queensland Heritage Act 1992*
- *Planning Act 2016*
- *Soil Conservation Act 1986*
- *Waste Reduction and Recycling Regulation 2011*
- *Water Supply (Safety and Reliability) Act 2008*
- *Water Act 2000*
- *Work Health and Safety Act 2011, Work Health and Safety Regulation 2011 and Work Health and Safety (Codes of Practice) Notice 2011*
- *Vegetation Management Act 1999*

Additional obligations may be applicable including, but not limited to:

- Safe Work Australia Code of Practice on How to Safely Remove Asbestos 2011 or the Safe Work Australia Code of Practice on How to Manage and Control Asbestos in the Workplace 2011 or any subsequent versions
- Australian Dangerous Goods Code
- Australian and New Zealand Environment and Conservation Council (ANZECC) Polychlorinated Biphenyls Management Plan Revised Edition – April 2003.

Persons are advised to check with all relevant statutory authorities and comply with all relevant legislation.