

# RIPARIAN SCORECARD



## What is a riparian zone?

The term 'riparian zone' refers to land which adjoins, or directly influences, a body of water. This includes land immediately alongside rivers and small creeks, including the stream bank itself, gullies which sometimes run with surface water, the margins of lakes or dams, wetlands and river floodplains.

## Riparian zones and their role in floods and tropical cyclones:

Mackay and Whitsundays is expected to be impacted by climate change with more intense rainfall events, more intense and frequent tropical cyclone events and rising sea levels. The riparian zone plays a critical role in protecting our region during flooding and tropical cyclones by:

- regulating flow of runoff into waterways
- regulating flow of waterways
- reducing sediment input and water quality impacts
- stabilising adjacent land, farmland and habitats from land loss both in the long term and in extreme weather events

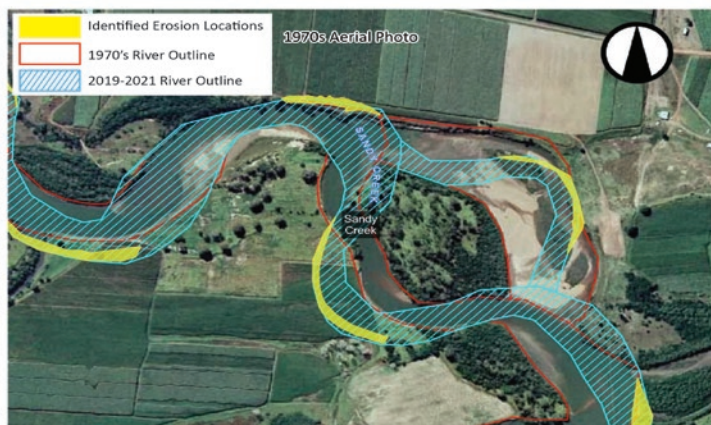


Image 1: 1970's aerial image demonstrating changes to the water course over time.

Image 1 shows an aerial photo of a section of Sandy creek in the 1970's with no riparian zone and an adjacent sugarcane block. The blue indicates today's waterway line, and demonstrates the extent of rapid farmland lost when there is no riparian zone to slow the erosive processes.

More information can be found in our Reef Catchments-Riparian Connectivity and Buffering Capability fact sheet: <https://reefcatchments.com.au/files/2023/09/WW6041-PAC-fact-sheet-Riparian-Management-Web-Sept2023.pdf>

## How does my riparian zone score?

This quick and simple scorecard tool has been designed to assist landholders in the Reef Catchment's region to evaluate the health of their riparian zones and identify areas which require management intervention.

SCORE	DESCRIPTION
GREEN	Good condition. Riparian features functioning well with little changes required
YELLOW	Moderate condition with targeted improvements to be made for improved functionality.
RED	Poor condition. Significant changes required to improve riparian function.

Complete the scorecard below to gain an insight into the health of your riparian zone. Once you have made your assessment, use the information provided to help target which features to improve your riparian zone. By taking these steps you will enable the riparian zone to better protect your farmland and improve waterway health.





## Riparian Scorecard

### Vegetative Buffer Zone



#### GREEN

Vegetated area >10m from top of bank, wide enough to enable natural regeneration and bank stability.

Vegetation is continuously connected all along the waterway.

Vegetated areas are structurally diverse and include grasses, shrubs and trees, which are necessary for supporting bank stability.



#### YELLOW

Vegetation area <10m wide from top of bank.

Some vegetation gaps along the bank (<100m apart).

Vegetated areas host more than one vegetative structure type eg. grasses and trees.



#### RED

Little to no vegetation along the bank.

Significant gaps between vegetative cover lacking regeneration of connectivity of habitat for bank stability.

Only single vegetation structure type present eg. grass.

### Native vs. Exotic Vegetation



#### GREEN

Vigorous native vegetation in riparian zone with little to no exotic vegetation or invasive weed species.



#### YELLOW

A mix of native and non-native species in the riparian zone. There are small manageable outbreaks of invasive weed species present.



#### RED

Little to no natives in the riparian zone.

Vegetation is dominated by invasive weed species.



## Erosion



### GREEN

No obvious areas of erosion along the bank.

The bank is stable and has been able to withstand flow events with little to no impacts to bank integrity.



### YELLOW

Small sections of minor erosion along the bank.

Majority of the bank is stable with some signs of erosion damage due to large flow events and lack of vegetation cover. The site is able to withstand low flow events without resulting in further erosion.



### RED

Significant erosion damage along the bank, usually appearing in large mass fail sections.

The bank is unstable and actively eroding. Erosion has occurred and continues to occur with flow events.

## Livestock / Pest Damage

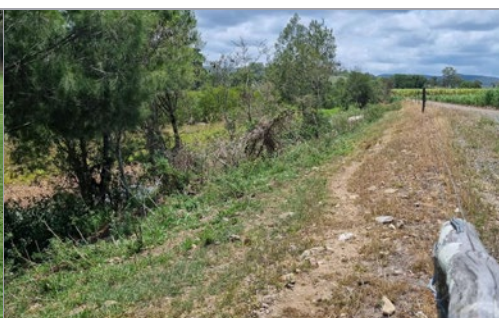


### GREEN

**GREEN:**  
Very little to no signs of livestock and pest animal damage to the riparian zone.

The riparian zone is fully fenced off from livestock and off-stream watering points are installed.

Active riparian management is a consistent part of the property's grazing land management practices.



### YELLOW

Some indication of minor damage from livestock and pest animal tracks along the bank and within the riparian zone.

The riparian zone is partially fenced with some areas accessible to livestock for watering purposes.

Riparian management is considered in the property's grazing land management practices.



### RED

Significant damage to the streambank and riparian zone caused by trampling and tracks of livestock and pest animals.

Livestock have full access to the riparian zone and water course and there is no pest or stock fencing and off-stream watering points in place.

Riparian management is not a consideration in the property's grazing land management practices.

## Overall Riparian Score:

Record your score "RED", "YELLOW" or "GREEN" for each feature into the Table below:

	Vegetative Buffer Zone	Native Vegetation / Exotic	Erosion	Livestock and Pest Damage
Site Assessment				

Review the scores above to assist in understanding the condition of the features in your riparian zone. When looking at rehabilitation or maintenance activities, prioritise key management options to address poor condition areas and focus on what is actually achievable and manageable. It may be the case that your riparian zone is in good condition for two or three features but needs focus to improve other features.

Your riparian zone may have a lot of Red features, but don't be overwhelmed. Here are some tips assist you:

- **Focus:** focus on the key driver of the disturbance as this is likely to improve outcomes across all other streambank components e.g. by setting up livestock exclusion fencing, it will likely lead to self-healing and natural regeneration improving other feature scores over time.
- **Start small:** start in small steps and take on small manageable scale sections. It is suggested that addressing yellow scoring areas may be most effective as you can address smaller areas and make a meaningful improvement. Even a small daily action can make a difference e.g. regularly maintaining fence lines for weeds is an effective way to also reduce encroachment into the riparian zone.
- **Monitor:** you can apply this scorecard at varying points in time e.g. Check managed sections after 6 months to see what worked, what could be done better and any areas that need maintaining.
- **Review:** some sections of the riparian zone may require different approaches. Rather than tackling all at once, look at fitting it into your farm management program.

## Where to from here?

Based on the features you choose to target for riparian rehabilitation works, choose the appropriate resources listed below to read. They offer some useful links on local information and options to maintain and improve the condition of each riparian feature which will help to improve the condition score.

### Vegetation Buffer Zone:

For graziers in the local region, The ABCD Management Practice Framework for Grazing provides practices that improve riparian buffer zones.



[Click or scan](#)

Reef Catchments- Riparian Revegetation Fact sheet.



[Click or scan](#)



For cane growers in the local region, The ABCD Practice Management Framework for sugarcane provides practices that improve riparian buffer zones.

[Click or scan](#)



Reef Catchments- Riparian Connectivity and Buffering Capability Fact sheet.

[Click or scan](#)



## Native and Exotic Vegetation:

Plants of the Mackay Whitsunday region.



[Click or scan](#)



DAF Invasive Plants and Animals

[Click or scan](#)

Weeds of the Mackay Whitsunday Region, can be purchased online.



[Click or scan](#)



Native Plants in the Mackay Whitsunday region.

[Click or scan](#)

Lantana Fire Management Guidelines:



[Click or scan](#)

## Livestock and Pest Damage

For graziers in the local region, The ABCD Management Practice Framework for Grazing provides practices that improve riparian zones.



[Click or scan](#)



Pest exclusion and Riparian Fencing.

[Click or scan](#)

PAC Fact sheet- Fencing Selection and Maintaining Integrity.



[Click or scan](#)



NRIP Case Study: The Benefits of Riparian Fencing

[Click or scan](#)

## Erosion

The Reef Trust Gully and Streambank Toolbox is a technical guide for gully and stream bank erosion control programs in the Great Barrier Reef Catchments.



[Click or scan](#)

Geoff Titmarsh - Erosion Processes- 2021 Sustainable Grazing Forum.



[Click or scan](#)

If you need more help about how to better manage your riparian zone, the Mackay Whitsundays Riparian Management Handbook (available on the Reef Catchments web site) provides locally relevant information to support riparian management.

You can also contact the Reef Catchments team for more information and guidance.



Australian Government

This fact sheet has been developed by Reef Catchments through funding received from the Australian Government.

May 2024



[www.reefcatchments.com](http://www.reefcatchments.com)