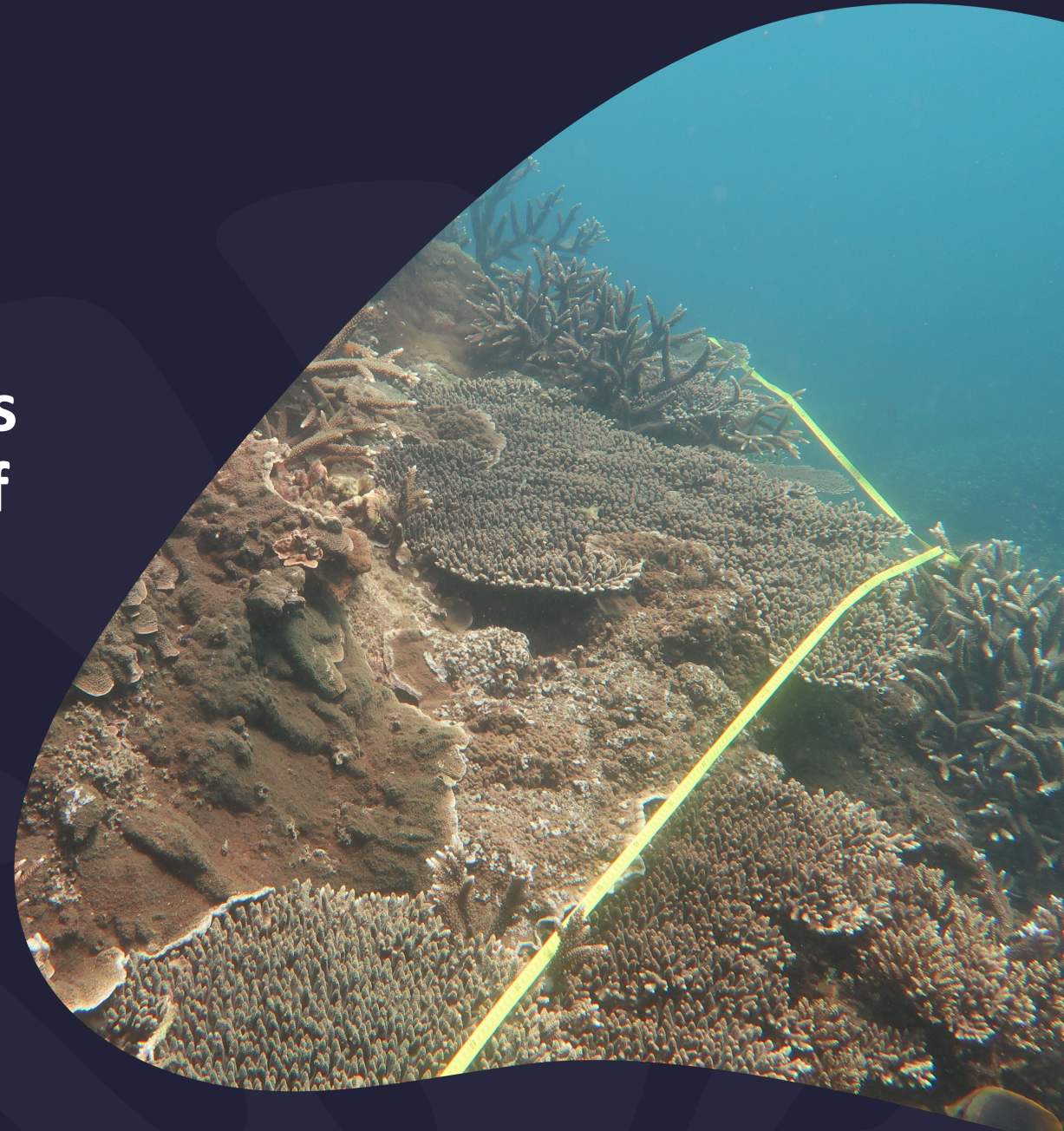


# Monitoring Water Quality and its impacts in the Great Barrier Reef World Heritage Area

**Dr Martina Prazeres & Dr Kaye Walker**

**Marine Monitoring Program**

**Great Barrier Reef Marine Park Authority, Australia**



The Reef Authority acknowledges the expertise, wisdom, and enduring connections that have informed the guardianship of the Reef for millennia. We pay our respects to the Traditional Owners as the first managers of this Land and Sea Country, and value their traditional knowledge which continues to inform the current management and stewardship of the Reef for future generations.





# **The Great Barrier Reef World Heritage Area and its catchments**



# GBRMP & WHA

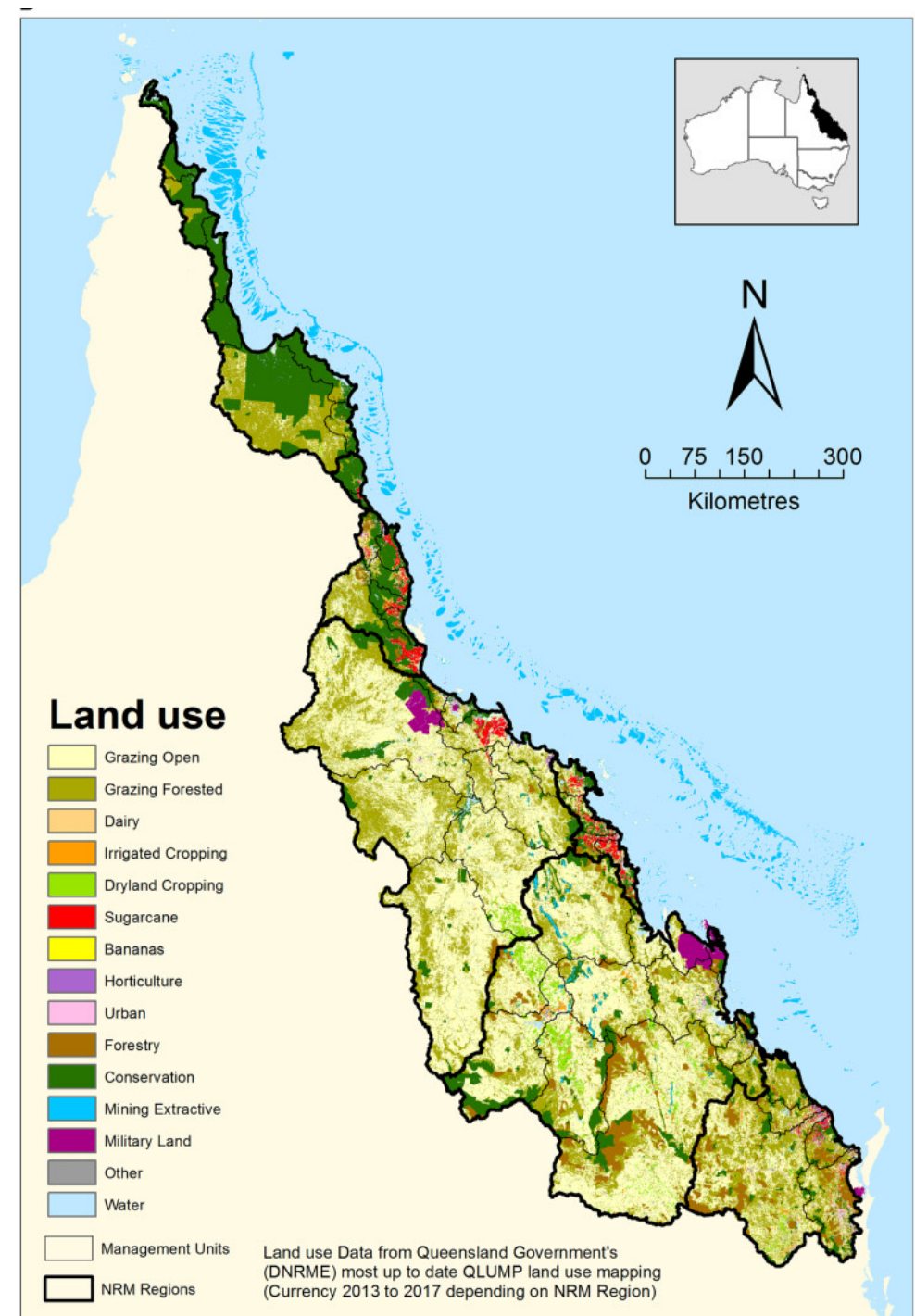
- Extends over 14 degrees of latitude
- Covers 344,400 square kilometres in areas
- Catchment area of 425,000 square kilometres



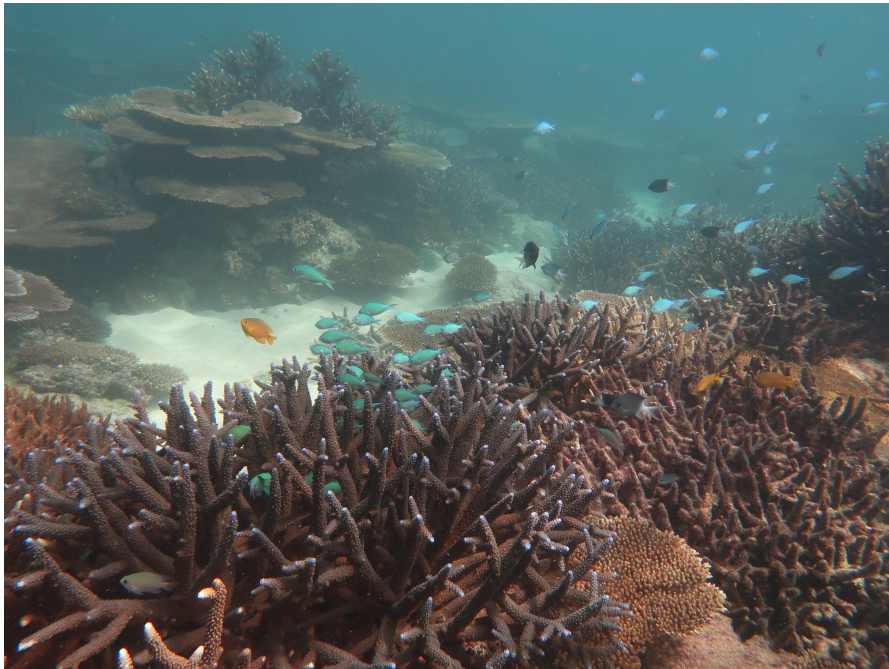
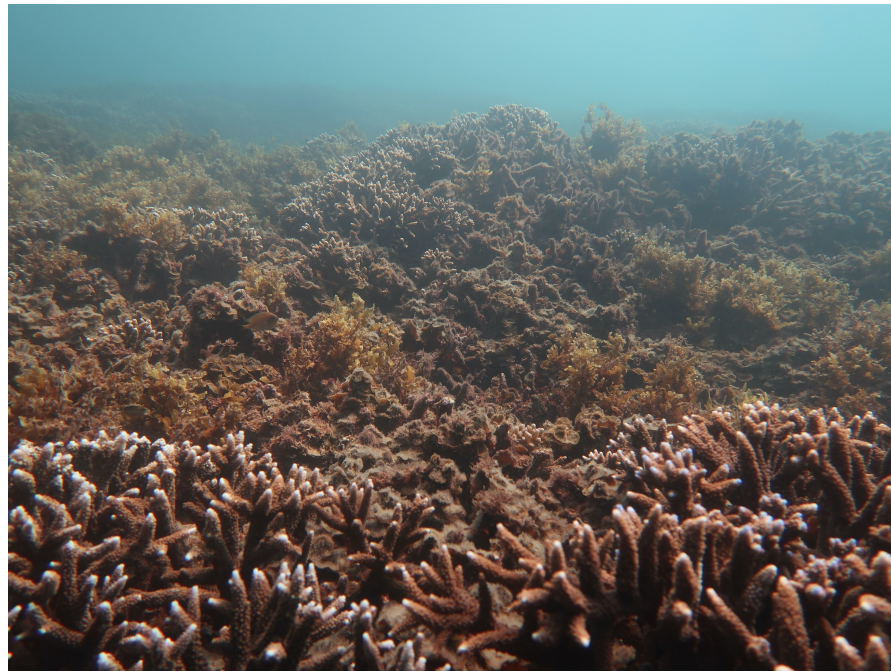


# Changes in land use

- Increased population & coastal development
- Support Queensland's primary industry
- Use of fertilisers and agricultural chemicals

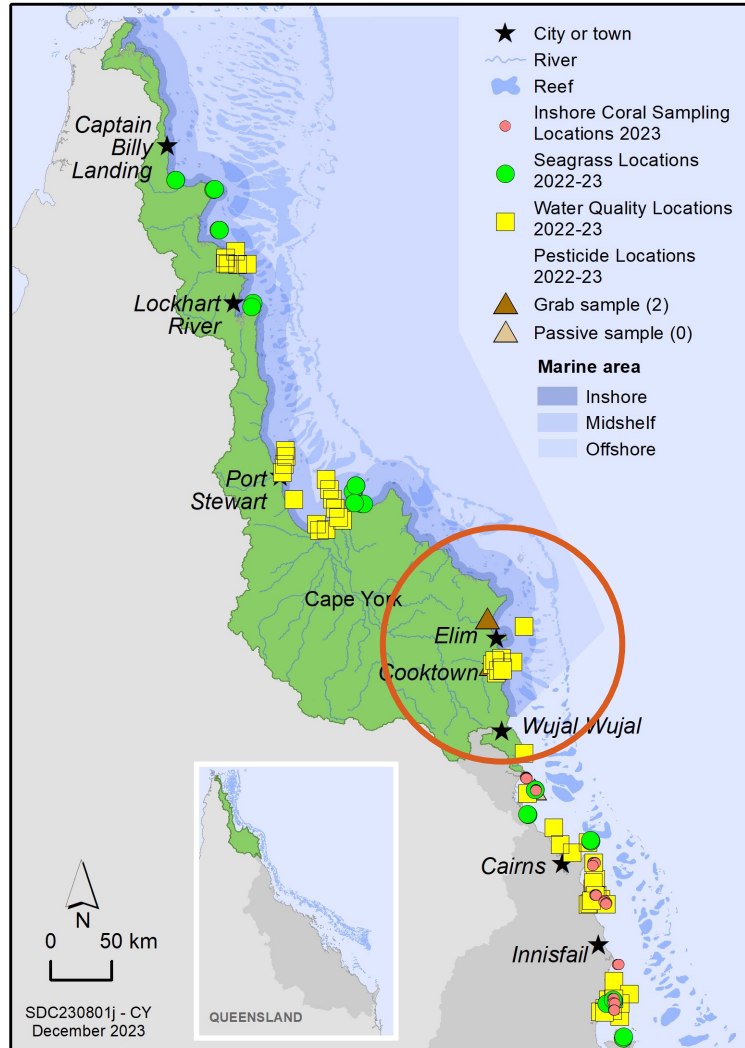




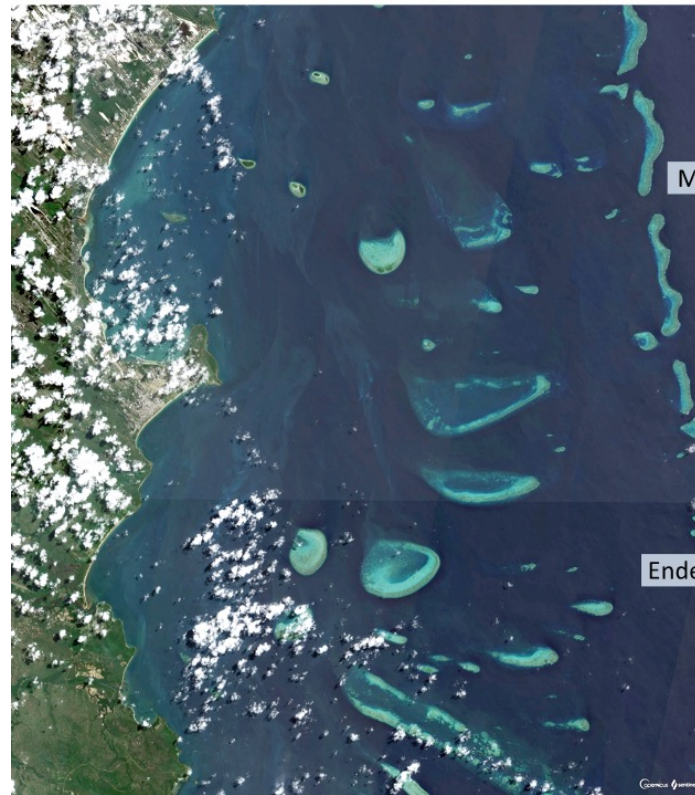




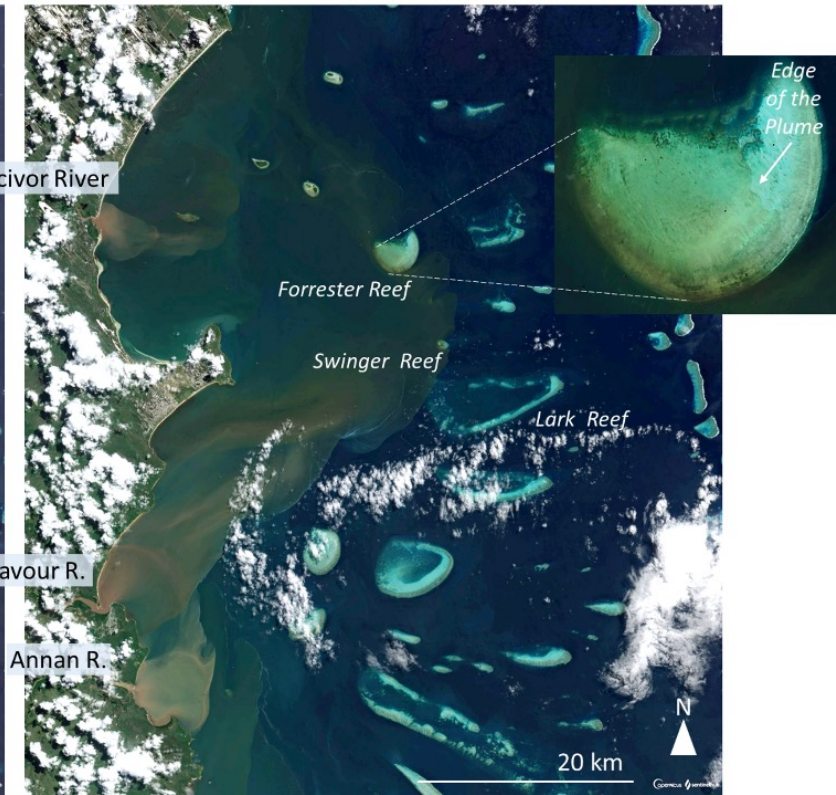
# Annan-Endeavour Rivers in Cape York



6 April 22



26 April 22





# Water Quality and why we monitor it

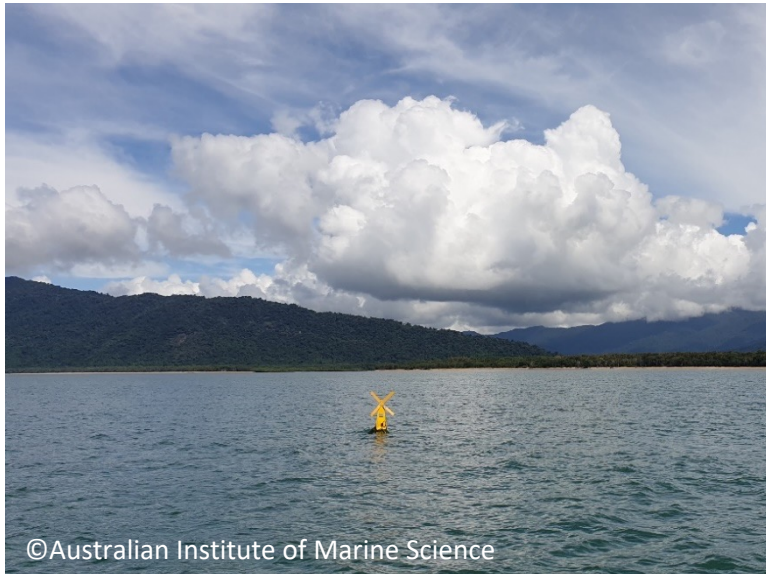
- Poor water quality is a major threat to the Reef and Reef-dependent users
- Reduces the resilience of the Reef
- Collaborative approach



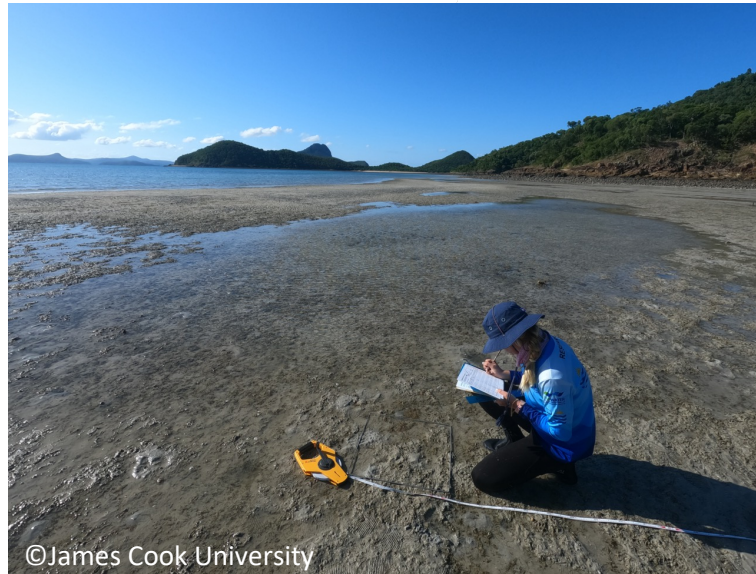
# What's the Marine Monitoring Program?

# Inshore

## Water quality



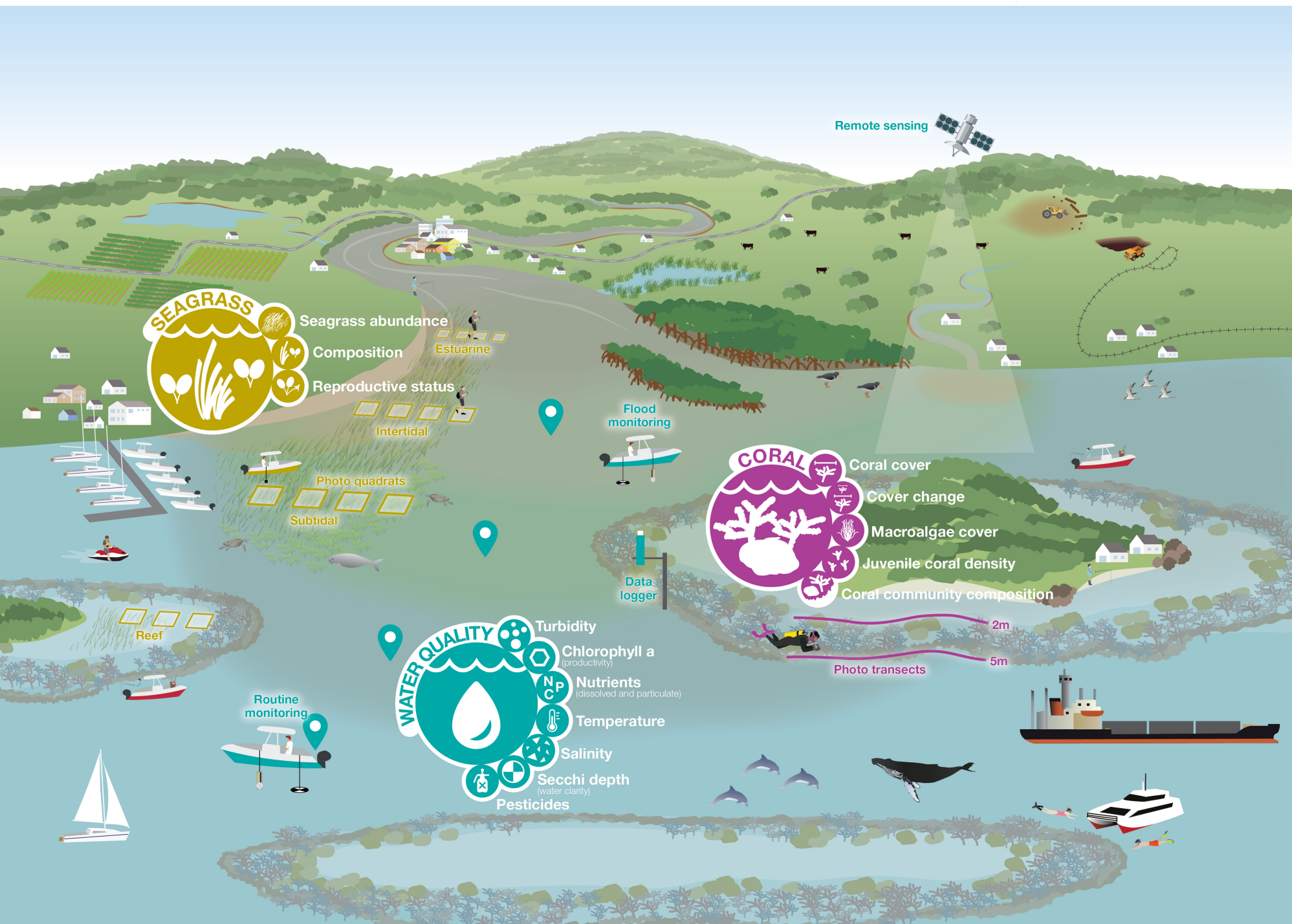
## Seagrass



## Coral

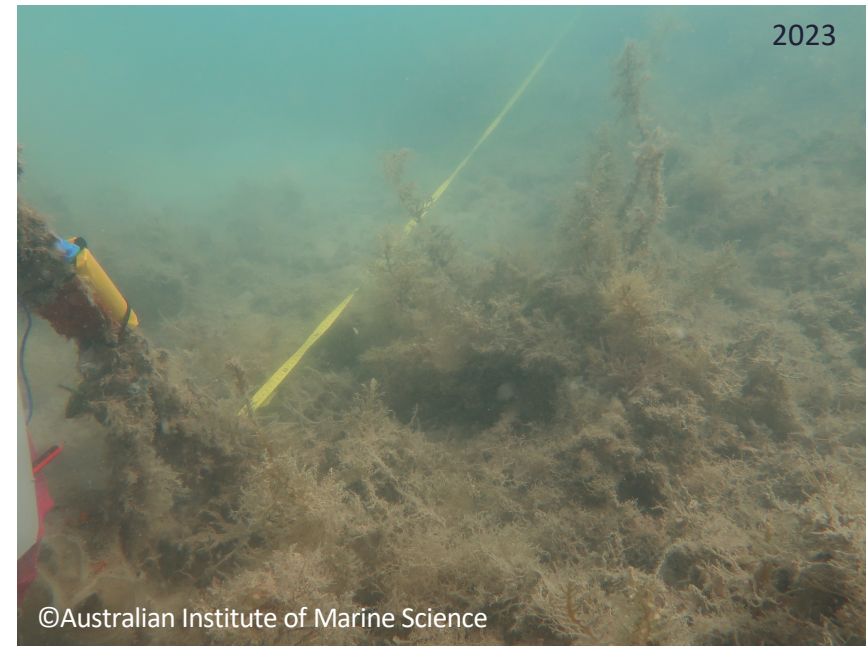
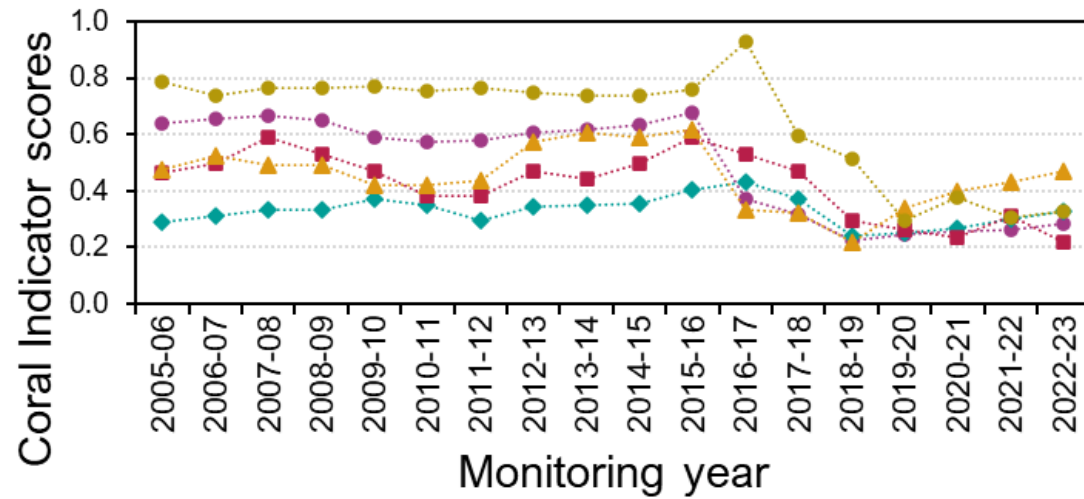
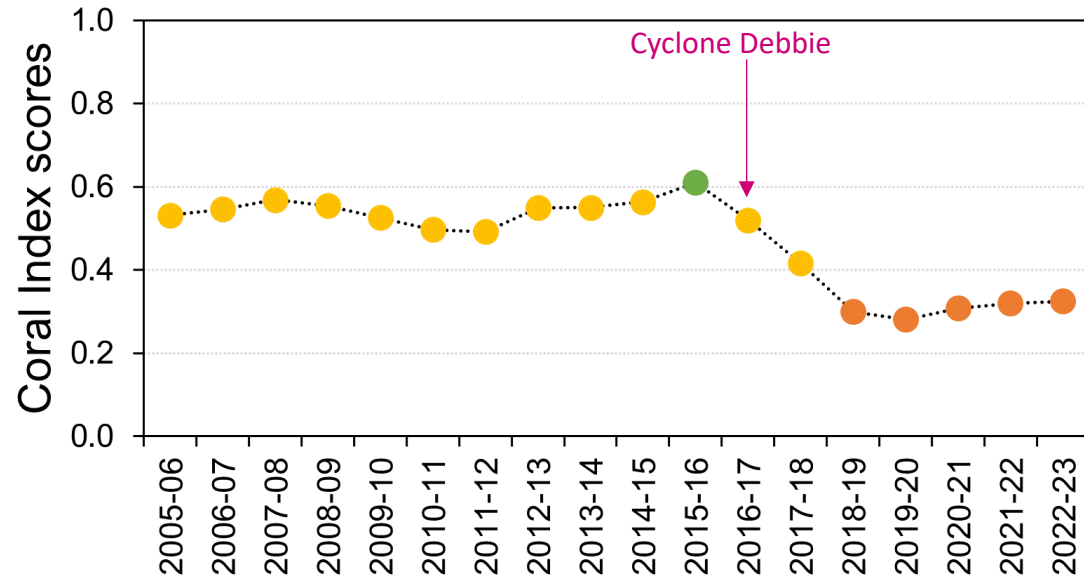






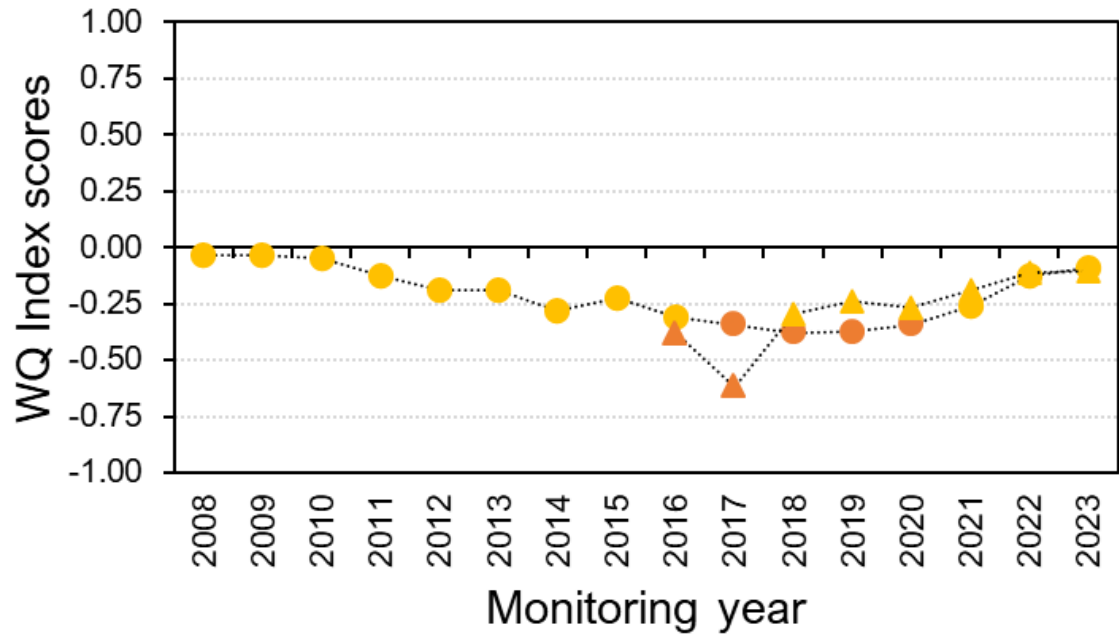
- Where the Queensland community spend most time on the Reef
- Cultural significance to First Nations peoples
- Tourism and recreational activity

# Mackay-Whitsunday



- Coral Cover
- ◆ Cover Change
- Composition
- ▲ Juvenile Coral
- Macroalgae Cover









# 2022-23 Annual Reports

Australian Government  
Great Barrier Reef  
Marine Park Authority

Reef  
Authority

## GREAT BARRIER REEF MARINE MONITORING PROGRAM

Inshore water quality monitoring  
Annual Report 2022-23




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## GREAT BARRIER REEF MARINE MONITORING PROGRAM

Inshore coral reefs monitoring  
Annual Report 2022-23



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## GREAT BARRIER REEF MARINE MONITORING PROGRAM

Inshore seagrass monitoring  
Annual Report 2022-23



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## GREAT BARRIER REEF MARINE MONITORING PROGRAM

Inshore pesticide monitoring  
Annual Report 2022-23



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## GREAT BARRIER REEF MARINE MONITORING PROGRAM

Synthesis Report 2022-23

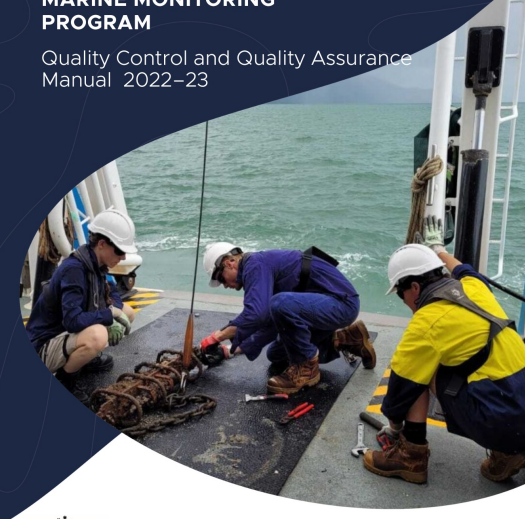


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## GREAT BARRIER REEF MARINE MONITORING PROGRAM

Quality Control and Quality Assurance  
Manual 2022-23

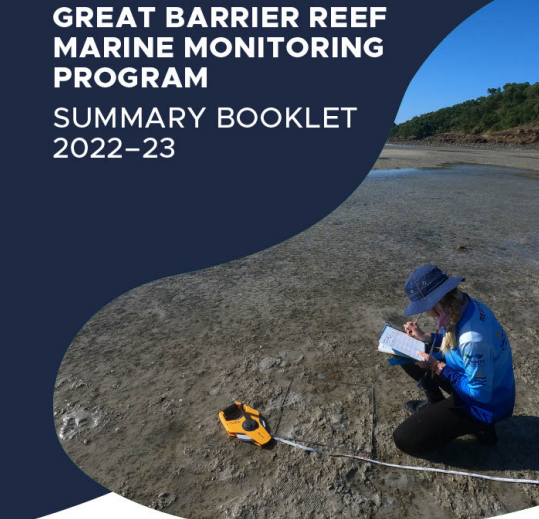


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## GREAT BARRIER REEF MARINE MONITORING PROGRAM

SUMMARY BOOKLET  
2022-23





# THANK YOU

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**REEFAUTHORITY.GOV.AU**