

TOWNSVILLE

# Community Action Plan

for Rivers & Reef

This plan details the on-ground action our community wants to take to reduce urgent threats facing the Great Barrier Reef. It is a living document regularly revisited to reflect evolving priorities.

**Updated:** October 2023



Great Barrier  
Reef Foundation



dry tropics partnership  
for healthy waters



Reef Ecologic  
For a better planet

The Dry Tropics Partnership for Healthy Waters and Reef Ecologic acknowledge the Wulgurukaba and Bindal people as the Traditional Custodians of the land and sea country in which we work, and we pay our respects to their Elders, past and present.

## INTRODUCTION

# Unleashing community energy

### Waterways are the lifeblood of Townsville and the Dry Tropics

Flowing from the foothills of the Hervey and Mount Stuart ranges and through our town of almost 200,000 people, tributaries of the Ross and Black River Catchments wend their way through rich riparian ecosystems and Ramsar-listed wetlands, into Cleveland and Halifax Bays, and ultimately onto the iconic Great Barrier Reef World Heritage Area.

The people of Townsville fish, walk, swim, paddle, sail, dive, live, and work with their waterways and awareness of the critical flow-on effects of inland waterway health on the state of local coasts and Reef is growing.

The outstanding natural heritage values of the Townsville region, the city's position as an internationally renowned marine research and tourism hub, and Townsville's role as Northern Australia's largest city and the country's leading point of export for a host of mineral and agricultural exports, are all factors that combine to see Townsville well positioned to address its waterways concerns.



**“This is a red town with blue veins. Townsville is deeply connected to its rivers and reefs, and this Action Plan maps the change we want to see for our local waters.”**

**Kara-Mae Coulter-Atkins**

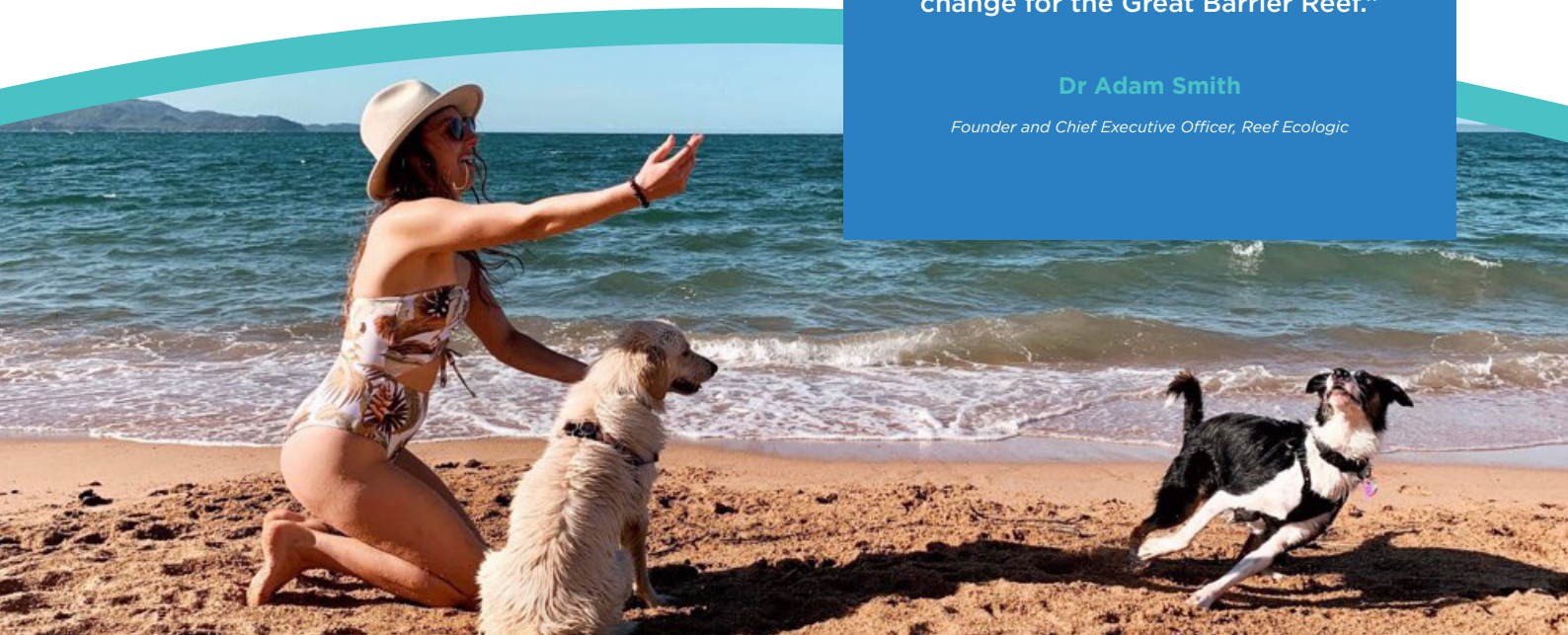
*Executive Officer, Dry Tropics Partnership for Healthy Waters*



**“Through citizen science and the harnessing of knowledge, we unlock the transformative potential of every individual in this town to be catalysts for discovery, innovation, and positive change for the Great Barrier Reef.”**

**Dr Adam Smith**

*Founder and Chief Executive Officer, Reef Ecologic*





## Local knowledge is local power

Development of the Townsville Community Action Plan brought a diversity of people together from across the Townsville region to discuss key issues and practical ideas for the local marine and coastal environment.

The community showed it is increasingly conscious of the potential collective impact it can have on local waterways and the Great Barrier Reef, and the Action Plan articulates its shared priorities and goals.

As the longest-connected peoples to Townsville's landscapes, local Traditional Owners of Land and Sea Country play a key role in stewarding the future of our regional rivers and reefs. Their engagement has been actively sought and appreciated throughout Townsville's Community Action Plan journey.

### Whose voices built the Townsville Community Action Plan?

- Community groups
- Local businesses
- Scientists and environmental specialists
- Waterways and land managers
- Students and youth groups
- Traditional Owners

**“The vision for our Community Action Plan is to unite partners across the region for more cohesive and impactful action, by building stronger connections with our youth and Traditional Owners.”**



TOWNSVILLE

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**Project  
target region**

**Townsville’s Community Action Plan** will be implemented within the reporting region of the 2023 Townsville Dry Tropics Waterways Report Card: comprising the Ross and Black freshwater basins and estuarine zones, Cleveland Bay and Halifax Bay, and the Offshore Marine Zone.

*\*A separate Magnetic Island (Yunbenun) Community Action Plan has been developed to empower community action on the Island and Townsville CAP partners will work closely with the Yunbenun community to reach our collective goals.*



## PRIORITIES

# What Townsville wants

Through a rich process of community workshops, surveys, and forums held in late 2022 and early 2023 the people of Townsville were asked what issues they wanted to see addressed for the health of the Great Barrier Reef.

### Townsville’s two priority issues are:

#### 1. The effects of stormwater runoff and erosion.




Two stressors affecting local Townsville reefs are sediment and nutrient pollution from stormwater runoff. By protecting riverbanks and coastlines from runoff, our town wants to see both land and water ecosystems benefit.

#### 2. Climate change and its local impacts on our waterways and reefs.

Townsville wants to see greenhouse gas emissions in our local atmosphere reduced, and ecosystems become more resilience to climate change. To this end our community has identified support for blue carbon projects and ecosystem restoration as paths to follow.

To tackle their two priority issues, the people of Townsville selected and mapped six potential on-ground projects for realisation as soon as possible.

6 projects for action

	
<b>Trees for schools</b>	<b>Corals for reefs</b>
	
<b>Healthier soils</b>	<b>Riparian health</b>
	
<b>Caring for Country</b>	<b>Electric transport</b>

Roadmaps for the delivery of these projects have been developed and are ready for action.

# Trees for schools

## Background

Trees are significant sequestrators of atmospheric carbon, making them an extremely important tool for mitigating the impacts of climate change.

Townsville schools are eagerly seeking climate-conscious activities to engage with and educate their students and wider community about environmental sustainability.

Traditional Owner groups in the Townsville area are experienced and equipped to facilitate all or parts of this project, and opportunities for cultural interpretation are many.

There is also momentum building for increased mangrove planting and monitoring in the region. Townsville City Council has the ability to provide locally-sourced mangrove propagules, noting that mangroves must only be planted in areas identified as requiring restoration work (such as previously cleared forests).



## KEY ACTIONS on project roadmap

- ✓ Identify areas that require tree rehabilitation, including using Department of Environment and Science mangrove data to identify target areas
- ✓ Identify and engage with local growers of trees
- ✓ Identify and engage with local community groups that specialise in tree planting
- ✓ Identify local schools and Traditional Owner groups with relevant WHS documentation
- ✓ Secure equipment and resources to access identified tree planting sites
- ✓ Deliver biodiversity training and support Traditional Owner delivery of cultural education workshops
- ✓ Support tree planting excursions, biodiversity audits, and monitoring program/site maintenance
- ✓ Analyse monitoring data to calculate carbon sequestration





## Outcomes

- Increased biodiversity, habitat, and shade
- Increased carbon sequestration, resulting in reduction of CO2 emissions
- Increased stewardship for local environment
- Increased community awareness about cultural connections to Country
- Potential for increased awareness through greater mangrove focus in Townsville Dry Tropics Waterways Report Card

## Potential partners for project delivery

Local schools (Belgian Gardens State School, Pimlico State High School, for example), Coastal Dry Tropics Landcare Incorporated (CDTLI), Townsville City Council (TCC), North Queensland Conservation Council (NQCC), Port of Townsville Limited (PoTL), Ausfield Services, MangroveWatch.

## Trees for schools

### Community values directly protected

- Air quality
- Terrestrial habitats
- Riparian zone
- Freshwater ecosystems
- Estuaries
- Mangroves



## COMMUNITY PROJECT

# Corals for reefs

### Background

Coral reefs are ecologically, structurally, recreationally, and aesthetically important ecosystems, responsible for coastal protection and habitat for 25% of all marine life. The Great Barrier Reef represents approximately 10% of the world's coral reefs.

The region targeted by the Townsville Community Action Plan is home to a diversity and abundance of coral reefs in both nearshore and offshore waters, but these reefs have declined over the past 30 years due to pressures that include pollution, sedimentation, eutrophication (nutrient pollution), and invasive species outbreaks — factors which are compounded by the greatest threat facing the broader Great Barrier Reef — climate change.

In the Townsville region, several small reef restoration projects have been completed by community, universities, and government, including seaweed removal, crown-of-thorns-starfish (COTS) removal, and coral transplantation.

There is interest in exploring opportunities for the community to support assisted coral recovery efforts, noting that corals must only be planted in areas that are identified as requiring restoration work (e.g., sites with cyclone damage or strong bleaching impacts). Reports and records of this damage could be used to identify potential sites for restoration.



### KEY ACTIONS on project roadmap

- ✓ Identify and engage with local coral scientists
- ✓ Identify and engage with local community groups
- ✓ Identify local schools and Traditional Owner groups with relevant in-water WHS documentation
- ✓ Secure equipment and resources to access identified reefs
- ✓ Deliver biodiversity training and support Traditional Owner delivery of cultural education workshops
- ✓ Support coral planting excursions and biodiversity audits







## Outcomes

- Increased coral biodiversity and reef habitat
- Increased biodiversity reporting in region
- Increased stewardship for local environment
- Increased community awareness about cultural connection to sea country

## Potential partners for project delivery

Local schools (Southern Cross Catholic College, St Patricks College, for example), North Queensland Conservation Council (NQCC), Australian Institute of Marine Science (AIMS), James Cook University (JCU), Great Barrier Reef Marine Park Authority, Reef Ecologic, Reef Check Australia, local tourism companies (e.g., Adrenaline Dive, Remote Area Dive, Pleasure Divers, AquaScene).

## Corals for reefs

### Community values directly protected

- Coral health
- Marine animals
- Marine water quality



## COMMUNITY PROJECT

# Healthier soils

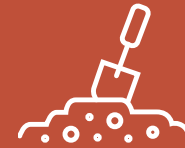
## Background

Much of Townsville's food organics and garden organic waste (FOGO) currently goes to landfill when it has the proven potential to instead enrich local soils through use in natural fertilisers.

In many Townsville households and businesses, there is a lack of knowledge of how to use organic waste resources for practical and positive outcomes – something which targeted communication can change.

A document educating Townsville about the potential value of organic waste products would promote new behaviour. From this awareness, linkages between producers and users of organic products can be developed to promote a circular economy, improve soil health, and reduce landfill.

This project aims to educate and encourage the community at a residential, small business, school, or sporting club level, to understand the value of their 'waste' in ensuring the health of their soils through natural fertiliser application. Ultimately, this will reduce nutrient runoff to local waterways.



## KEY ACTIONS on project roadmap

- ✓ Identify and engage with key stakeholders in high output and/or impact areas
- ✓ Educate the community about what healthy soil is, why it is important, and how can they achieve it
- ✓ Support schools, businesses, and community members to engage in implementation of soil 'best practices'





## Outcomes

- Growth in community understanding and appreciation of circular economies
- 'Best soil practices' are commonly used within the community
- Carbon sequestration into the soil is increased
- Townsville has biologically active, deep, and infiltrating soils

## Potential partners for project delivery

Townsville City Council (TCC), Atlas Soils, Ausfield Services, VRM Biologik, Coastal Dry Tropics Landcare Incorporated (CDTLI), NQ Dry Tropics (NQDT).

## Healthier soils

### Community values directly protected

- Terrestrial habitats
- Riparian zone
- Freshwater ecosystems
- Estuaries



## COMMUNITY PROJECT

# Riparian health

## Background

Riparian zones are the buffering environment between the land and neighbouring waterways. Stable riparian vegetation captures nutrient and sediment runoff from nearby urban areas, capturing it as it flows towards the water's edge. As urban development alongside waterways increases in Townsville, the riparian zone is at risk of vegetation removal, improper management techniques, and invasive weed establishment.

The Townsville region is a rapidly growing community. Identifying current best management practices for riparian zone maintenance (e.g., not mowing up to the water's edge) and ensuring key stakeholders within the region are aware of these practices, has potential to affect bank stability, fish habitat, and overall water quality.



## KEY ACTIONS on project roadmap

- ✓ Develop realistic, achievable targets and demonstrate the identified best vegetation management practices to key stakeholders
- ✓ Revegetation project planned and delivered
- ✓ Monitor waterway sites where best practices are adopted





## Outcomes

- Reduction in soil runoff and erosion on urban waterways
- Increased native vegetation in riparian zone
- Improved overall water quality in urban waterways
- Fish habitat restored
- Increase in the carbon storage capacity of Townsville's urban environment

## Potential partners for project delivery

OzFish Unlimited, Townsville City Council (TCC), Ausfield Services, Coastal Dry Tropics Landcare Incorporated (CDTLI), NQ Dry Tropics (NQDT), Port of Townsville Limited (PoTL).

## Riparian health

### Community values directly protected

- Terrestrial habitats
- Riparian zone
- Freshwater ecosystems
- Estuaries
- Mangroves
- Saltmarsh
- Marine water quality



## TRADITIONAL OWNERS

# Caring for Country

## Background

The 'Caring for Country' project centers on the relationships between Townsville Traditional Owners and their Country, which includes their lands, waters, plants, animals, heritage, culture, ancestors, laws, religions and more.

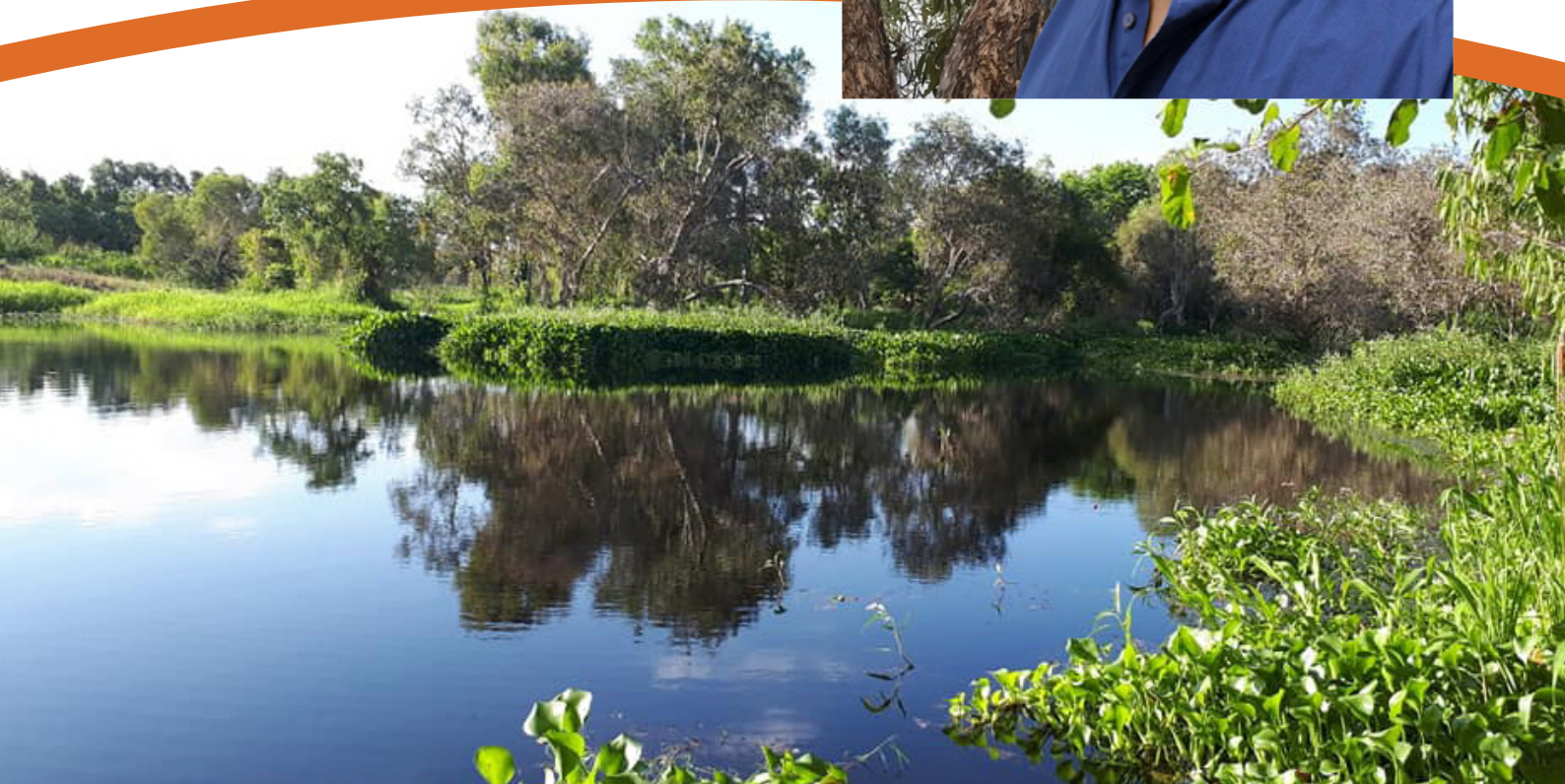
The growth in government programs supporting Indigenous land and sea management at every level in Australia reflects the synergy between caring for Country and environmental issues, and the productivity of collaborations for environmental outcomes in which Traditional Owners play a key role.

The Bohle River basin has been identified in the Townsville Dry Tropics Waterways Report Card as receiving consistently poor grades for water quality due to nutrient pollution in the area, and is an area in which a number of Traditional Owner groups already engage in restoration and cultural interpretation activities.



## KEY ACTIONS on project roadmap

- ✓ Identify opportunities for riparian restoration along the Bohle River
- ✓ Involve Traditional Owner workers in on-ground work — up to 50 potential roles have been identified
- ✓ Training, capacity building, and mentorship for Traditional Owner youth





## Outcomes

- On-ground/in-water action and community engagement undertaken
- Cultural values are protected and enhanced
- Increased knowledge of citizen science of Traditional Owners

## Potential partners for project delivery

TJ Indigenous Business Consultancy, Wulgurukaba Aboriginal Corporation, Wulgurukaba Walkabouts, North Queensland Cowboys, Jonathan Thurston Academy, Australian Rural Leadership Foundation, Australian Institute of Marine Science, Reef Ecologic, Aboriginal and Torres Strait Islanders in Marine Science (ATSIMS), Clontarf Foundation, Ausfield Services, Youth Justice, Townsville City Council (TCC).

## Caring for Country

### Community values directly protected

- Indigenous cultural heritage
- Riparian zone
- Coastal habitats
- Marine water quality
- Coral reefs



## COMMUNITY PROJECT

# Electric transport (EVs)

## Background

With fuel prices rising and the people of Townsville wanting to reduce their emissions in the face of climate change, many people and organisations would like to use EVs, yet do not have the capacity to purchase one. There are also logistical considerations around the extent and locations of EV charging stations in the Townsville region. A dedicated Townsville community EV may help facilitate a broader transition to EVs, as well as to improve local knowledge of EV infrastructure.

## Outcomes

- Reduced carbon emissions from transport
- Increased community awareness and use of EVs

## Potential partners for project delivery

Townsville City Council (TCC), North Queensland Conservation Council (NQCC), local car dealerships (e.g., Toyota, Mazda), local sporting clubs.



## KEY ACTIONS on project roadmap

- ✓ Identify current EV infrastructure in Townsville region
- ✓ Identify number of community groups and potential travel destinations
- ✓ Secure vehicles and designated distribution/recharge location
- ✓ Secure appropriate insurances
- ✓ Develop a booking system
- ✓ Calculate reduction in carbon emissions through program

## Community values directly protected

- Air quality
- Terrestrial habitat
- Coral health







## HOW WE GOT HERE

# Townsville's planning timeline

1

2022

### Townsville identified for CAP

In 2020, a Burdekin Dry Tropics Coastal Community Action Plan (CAP) was developed under the leadership of Reef Ecologic and NQ Dry Tropics. The Burdekin CAP identified four priority projects across a broad region, from Rollingstone, north of Townsville, to Bowen in the south.

As the major city within the Burdekin region, Townsville was identified in 2022 as likely to benefit from a locally focused CAP.



2

September 2022

### Townsville CAP survey

An online survey was used to identify issues of community priority within the Townsville CAP region. Members of the Townsville community of all ages and backgrounds responded to the survey, with the outcomes used to identify the two priority themes for CAP projects.



3

## November 2022 Community workshop

The outcomes identified in the CAP survey formed the basis of discussion for development of roadmaps at the Townsville CAP workshop. Several community groups and organisations within the region were represented at the workshop, and continual consultation led to the publication of five final roadmaps (see Appendices A to F).



4

## November 2022 Youth workshop

Students from around the nation reviewed the draft project roadmaps at the Youth Response Forum held at James Cook University by Pimlico State High School.

In total the Youth Response Forum engaged over 101 students from 14 different schools and 25 industry experts attended representing 14 external organisations from the Townsville region.



5

## Ongoing: Listening to Traditional Owners

Wulgurukaba Traditional Owners were engaged in the development of the Townsville CAP and provided valuable insights into the priorities for Indigenous people to care for their land and sea Country in the region. The 'Working with Wulgurukaba to Care for Country' roadmap reflects this dialogue, and aims to encourage all First Nations people in the region to engage with on-ground projects to protect cultural and natural values.



## ABOUT CAPS

# Queensland communities for the Reef

The Townsville Community Action Plan is part of the Great Barrier Reef Foundation's Community Action Plan (CAP) Program.

Six regional communities along the length of the Great Barrier Reef have created and are delivering similar CAP's turbo-charging the positive impact that community action has for the Reef and for people.

CAPs connect community aspirations with regional and reef-wide priorities to help design better ways to work together to deliver change. They seek to connect community work with existing plans and knowledge, and are focused on integrating citizen science programs, community-led on-ground activities, and broader community initiatives.

The CAP process brings together people from science, management, business, community, youth groups, and Traditional Owner partners to develop a tangible plan to strengthen and accelerate community Reef protection outcomes for regional priorities.

“The scale and urgency of action required to forge a better path for the future health of the Reef prompts new approaches for working together to make change happen.”

Great Barrier Reef Foundation



# ABOUT CAPS

## The Community Action Plan (CAP) process

The Great Barrier Reef Foundation's CAP Program is grounded in the Open Standards for the Practice of Conservation and Collective Impact theory.

## Conservation Standards

The Open Standards for the Practice of Conservation (or 'Conservation Standards') are a widely adopted set of principles and practices that bring together common concepts, approaches, and terminology for conservation project design, management, and monitoring. They involve continually cycling through the steps of assessing, planning, implementing, analysing, adapting, and sharing.

## Collective Impact

The CAP Program is also informed by Collective Impact theory, which helps to solve complex social issues through collaboration across different sectors in local communities, continually learning and adapting. Collective Impact involves having a common agenda, mutually reinforcing activities, shared measurement, and continuous communication.

As an adaptive management tool, CAPs are designed to be revisited and updated regularly and as new information becomes available.

## How will Townsville track its impact?

The 2023 Townsville Dry Tropics Waterways Report Card provides our community with an annual snapshot of the state of the region's waterways and stands as an independent reference point against which Townsville can track measurable change to its river and reef environments – including its Community Action Plan.

## Informing a bigger picture

The Dry Tropics Partnership for Healthy Waters and the CAP Program are uniquely aligned for mutual benefit. While the Partnership collates information on the health of local waterways to inform community and management action, CAP projects are well positioned to further build networks and knowledge sharing, and to help fill data gaps for future Waterways Report Cards in the Townsville region.



WHO WE ARE

# Community Action Plan Leaders

The Dry Tropics Partnership for Healthy Waters and Reef Ecologic are co-leaders of the 2023 Townsville Community Action Plan, and our teams are on-hand to see community participants set up for success.

With guidance from the Great Barrier Reef Foundation, and making reference to the frameworks of the CAP Program, as CAP Leaders our role is to serve as the backbone for collective impact in our regions, and to guide.

We are in place to support and enable our community to progress successful projects with tangible outcomes. It is also our role to support future CAP grant recipients in securing investment and partnerships to realise their project ambitions.

## Questions about Townsville's Community Action Plan can be sent to:

- Kara-Mae Coulter-Atkins, Executive Officer: [eo@drytropicshealthywaters.org](mailto:eo@drytropicshealthywaters.org)
- Adam Smith, CEO, Reef Ecologic: [adam.smith@reefecologic.org](mailto:adam.smith@reefecologic.org)



The Dry Tropics Partnership for Healthy Waters is a collaboration between community, industry, science, research, and government partners. Together we support the production of the annual Townsville Dry Tropics Waterways Report Card, keeping an independent and collective watch on the state of our local rivers, creeks, and coastal waters.

The Waterways Report Card not only educates our community about the interconnectedness of rivers and reefs, but also informs the Reef Report Card, the Reef 2050 Long-term Sustainability Plan, and the Reef 2050 Water Quality Improvement Plan. Projects of the Townsville CAP help anchor these strategic visions in local impact.



The Reef Ecologic team has over 40 years of experience creating a better planet through our people and passion.

We pride ourselves in delivering innovative and sustainable solutions for coral reef management throughout the world. We work with businesses, government, and communities to co-design solutions and help people, agencies, and organisations achieve goals and exceed expectations.

We've implemented major projects in all the coral reef regions of the world, including extensive work with coral reef managers, communities and businesses in the Great Barrier Reef, Caribbean, Pacific, Southeast Asia, Red Sea, and Indian Ocean. We are united by our love of coral reefs and a conviction that the considerations, decisions, and actions we take can make a meaningful and enduring difference to the future of coral reefs.