

Reef Trust Partnership

Year in Review
2022-2023



Australian Government



Great Barrier
Reef Foundation

Acknowledgement of Country

The Great Barrier Reef Foundation extends its deepest respect and recognition to all Traditional Owners of the Great Barrier Reef and its Catchments, as First Nations Peoples holding the hopes, dreams, traditions and cultures of the Reef.

More than 70 Traditional Owner groups have deep and enduring connections spanning the length of the Reef along the Queensland coastline and beyond, from the Torres Strait Islands in the north to Bundaberg in the south.

'Great Barrier Reef' artwork by Melanie Hava, Mamu Aboriginal woman, Dugulbarra and Waribarra family groups, from the Johnstone River catchment of the Wet Tropics of Far North Queensland and the adjoining Great Barrier Reef Sea Country.

Cover image: Corals on John Brewer Reef. Image credit: Matt Curnock, Ocean Image Bank

Healing Country Statement by Great Barrier Reef Traditional Custodians

Heart of the Reef – A Call for Healing

If there was ever a time for us to come together that time is now.

If there was ever a time for the voice of Traditional Custodians to be heard – this is that time.

There has been so much damage to our Country and she is struggling to recover from threats on a scale never faced before.

Country is stressed,

Country is crying.

Country is land, sea, air, stars, rocks, plants and animals – all things living and non-living. She is our spirituality. Country is Us.

*The Reef is Country.
The Reef is our Heart
and the water is the
life-blood that connects
us all.*

She is our Family. The Reef is an extension of Us and we are an extension of Her.

The Reef looks after us, feeds and protects us, and keeps us healthy.

She's the keeper of our stories, our Lore.

Without her we will suffer irreversible effects to our identity.

For millennia, Country and People were healthy.

We lived harmoniously according to our cultural Lore.

Our collective connections were strong and balanced through our songlines and interactions with each other.

We looked after Country according to our seasonal calendars and she looked after us.

Today Country is sick.

We are losing our culturally significant plants and animals and places.

For many of us, separation from Country has meant a loss in intricate connections and knowledge.

The imbalanced condition of Country is the result of the ongoing impacts of colonisation and climate change.

The seasons are changing beyond our control no matter how hard we try to help Country heal.

We are all suffering and we can't continue this way.

The world is now turning to Us, as Traditional Custodians, for our unique leadership, traditional knowledge and cultural practices.

And we call on you to listen to Us.

To learn from Us and to do it our way.

To recognise, respect and accept our LORES.

To understand that healing is about the relationship between Country and its People. That one can't heal without the other.

Country needs to hear our children running around – hear our laughter and happiness.

In some places this has been missing from our Country for many generations. This was not our choice and never will be.

We call on you to stop using the poison frameworks that have made Country and People sick.

Frameworks that fragment Country and split families.

Learn how to holistically manage Country, People.

To honour everything as one.

We recognise that healing Country means starting with ourselves.

We need to rebuild pathways of connection between ourselves and Country.

There must be presence of mob on Country.

Families and Elders must come together. Hold each other dear.

It means placing our young ones at the heart of change.

It means using our own languages that tie us to our place on Country, where we belong and who we are.

It means recognising education, justice and health are all crucial parts of healing.

It means employment and opportunities that get you close to Country, to homeland and saltwater.

It's about being honest and seeing that we can't do it all on our own.

We need to see the real threats posed by climate change and face these challenges head on.

All Australians need to come together and show the Reef the respect she deserves. To help her heal and to make us who we are all meant to be.

We call on our Saltwater brothers and sisters across the Pacific and throughout the world to join and support us.

We need everyone's feet and mouth pointing in the same direction and we need talk to be followed by action.

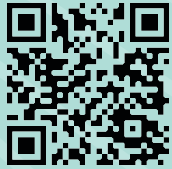
The time to save our future is now.

We need to stand up as one mob, one Country, one spirit, one voice.

And heal.



You can view the **Healing Country Statement** video here:



Message from the Co-Chairs and Managing Director

The Great Barrier Reef Foundation is proud to share the 2022-23 Year in Review for the Reef Trust Partnership.

Coral reefs are the beating heart of our oceans. They're a nursery and safe haven for a quarter of all marine life and support a billion people worldwide. Our work to protect ocean habitats, restore coral reefs and help them adapt to the impacts of climate change is vital to protecting the health of people and planet.

Recognising no one group can solve these problems alone, the Great Barrier Reef Foundation, in partnership with the Australian Government, is proud to be delivering the Reef Trust Partnership (RTP), the largest collaborative reef protection effort of its kind in the world, highlighting the impact that can be achieved when we work together.

Over the past year the RTP has continued to demonstrate its power as a convenor, funder and innovator, working with more than 560 partners to achieve the scale and pace needed to safeguard the greatest coral reef on the planet.

As at 30 June 2023, we are on track to achieve all end-of-Partnership outcomes.

This year, the RTP continued to deliver across its six priority Components: Water Quality, Crown-of-Thorns Starfish Control, Reef Restoration and Adaptation Science, Traditional Owner

Reef Protection, Community Reef Protection and Integrated Monitoring and Reporting.

Innovation remains a driving force, with a quarter of the RTP investment dedicated to unlocking and piloting new products and knowledge. Key achievements in the innovation space include new techniques to mass produce healthy baby corals, which could help restore reefs damaged by impacts of climate change; transformation of how farmers sustainably manage water resources and reduced pollution in Reef catchments; and advanced methodology for eDNA sampling offered the earliest possible warning signs of COTS outbreaks.

Also key to the RTP's success this year was our ongoing focus on participation. Of the 567 unique partners contracted within the RTP, 97% were non-government.

This level of coordinated participation across all aspects of the Reef effort is unprecedented and has been transformational in driving a new era of genuine partnership and strategic cooperation across the Reef. These critical partnerships included farmers and landholders in Reef catchments who are working to improve Reef water quality, community groups collecting critical data about Reef health, and tourism operators restoring damaged reef sites, among many others.

We have continued to deliver on our commitment to growing the \$443m investment from the government. As of 30 June 2023, we have raised \$318m, 89% of the overall target. Our impact through the Collaborative Investment Strategy has been possible thanks to our vast network of incredible partners and supporters, including like-minded corporate partners, committed donors, the wonderful project partners we work with and the volunteers who donate their time to protect and restore the Reef.

Central to all we do under the RTP is our work with Reef Traditional Owners, guided by advice from our Traditional Owner technical working groups and Traditional Owner Advisory Group.

By weaving Traditional Knowledge with western science, they're developing and applying innovative solutions to the challenges threatening coral reefs. This work is world-leading and is laying the foundations for Traditional Owners to achieve their long-term aspirations to lead conservation efforts on their Country. And the evidence clearly shows that the Traditional Knowledge and cultural practices they generously share result in better, more enduring outcomes for the Reef.

In line with the Partnership itself, this Year in Review is structured around three core pillars:

Acceleration

Recognising the Reef cannot wait and the task is urgent, we are scaling what we know and is proven, developing or adapting solutions where none exist and taking big, bold steps.

The Foundation has maintained a commitment to transparency, integrity and accountability throughout the RTP. Each dollar has been committed to maximising its impact on our Reef. Due to the quantum of public money and the community's continued interest in the grant, the Foundation's Board has committed to ensuring independent reviews into the effectiveness and outcomes of the RTP as part of its closing out activities.

The Foundation extends its sincere thanks to the Australian Government for its continued support for the Reef, with special thanks to Minister for the Environment and Water Tanya Plibersek, and Special Envoy for the Great Barrier Reef Senator Nita Green.

We extend our deepest thanks to the members of the Partnership Management Committee, the Traditional Owner Advisory Group, our Component-level working groups and cross-cutting

Collaboration

Understanding that no single group can tackle this alone, we are embedding partnerships as a founding ethos, growing the \$443m in public funds, creating local ownership of projects through co-design and co-delivery and bringing in new ideas and fresh perspectives.

co-design groups who continue to help shape the Partnership for greatest impact and best practice.

We'd also like to acknowledge and thank the Foundation's team of dedicated staff, who have continued to strive tirelessly for a better future for coral reefs, rising to each new challenge with passion and professionalism.

While delivering the Partnership's program of work, our team works closely with our partners to develop projects of impact that foster acceleration, collaboration and legacy. We are pleased to share some of the highlights of the Partnership's work in this Year in Review.

As we embark on the final years of the RTP, we will continue to collaborate with the powerhouse collective of research institutions, organisations, corporations, communities and individual supporters to accelerate action for the Reef. We remain steadfast in our resolve to create a better future for the Reef.

Thank you for your ongoing support of the Partnership.



David Thodey
David Thodey AO,
Co-chair

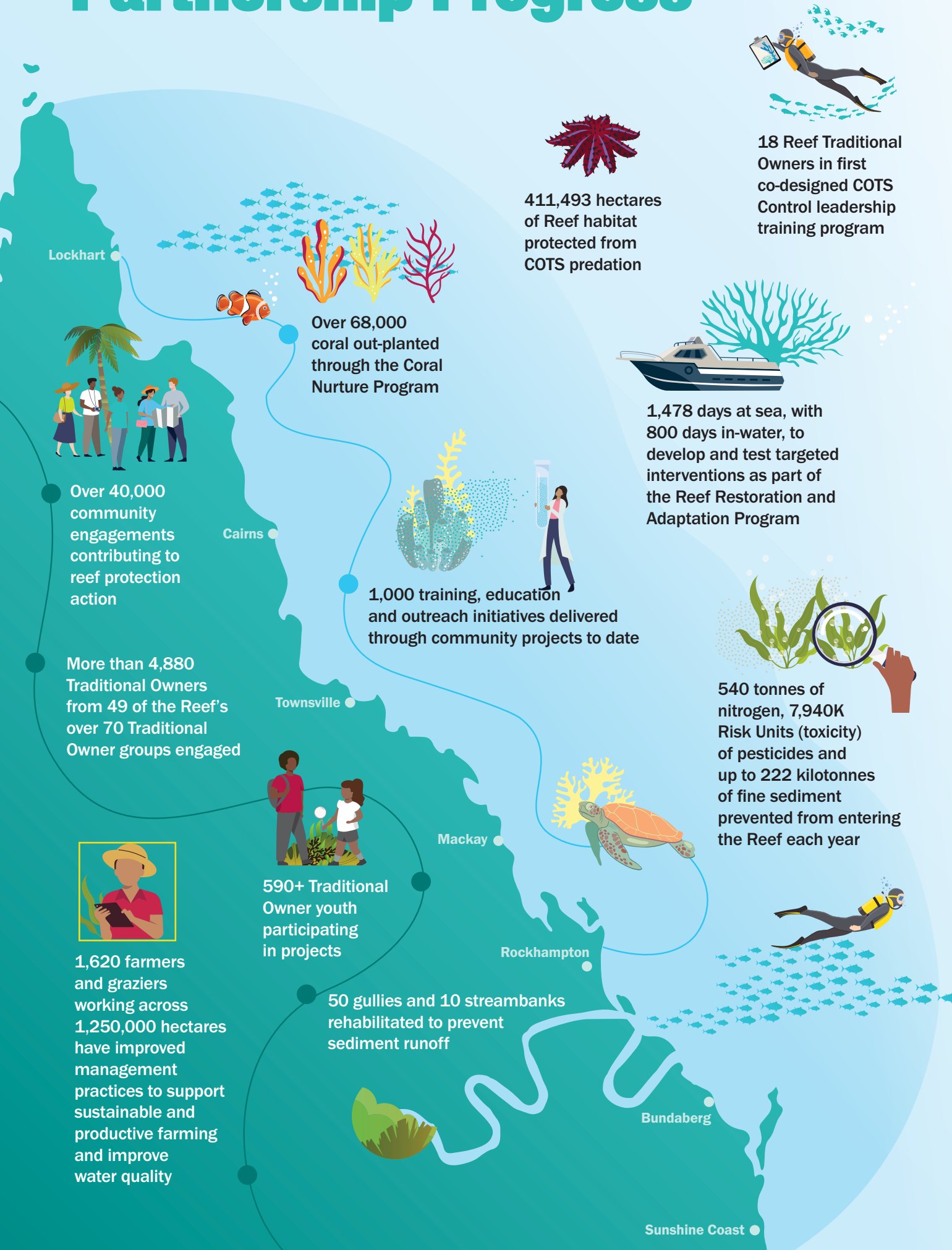


Dr Martin Parkinson
Dr Martin Parkinson AC
PSM, Co-chair

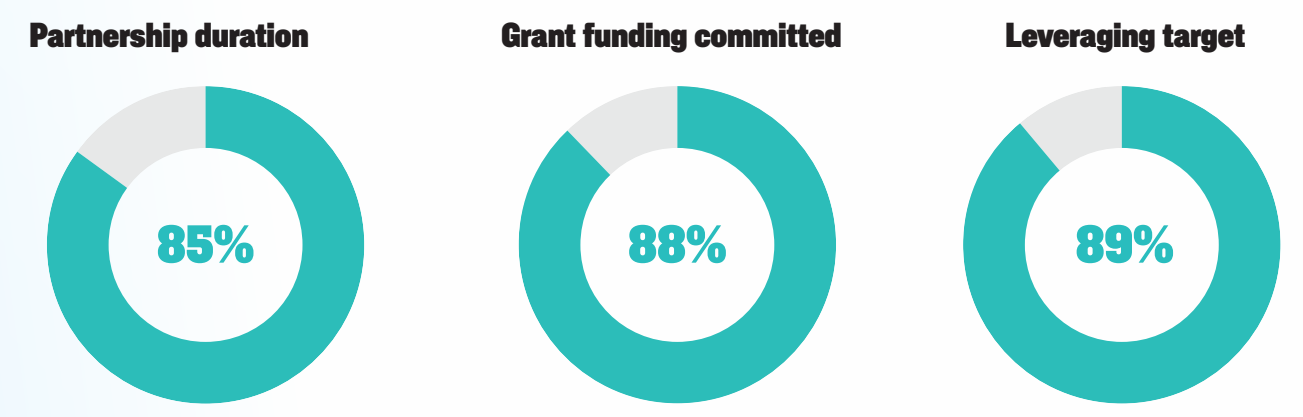


Anna Marsden
Anna Marsden, Managing
Director

Partnership Progress



The Reef Trust Partnership is a six-year¹ \$443²m partnership between the Australian Government's Reef Trust and the Great Barrier Reef Foundation and is the largest collective effort ever for the Great Barrier Reef. With 415 projects involving more than 560 partners, the Partnership is on track to deliver against all performance measures.



The Partnership continues to tackle the threats facing the Reef by:

- ✓ Delivering the world's largest Reef restoration and adaptation program, buying the Reef time to recover from the impacts of a changing climate by developing a toolkit of scalable coral restoration and adaptation activities.
- ✓ Protecting coral from predation by COTS outbreaks, with a team of more than 100 divers protecting 411,493 hectares of high-value Reef habitat, while a team of more than 90 researchers develops new and improved ways to monitor and control COTS.
- ✓ Recognising the significance of Traditional Owners' inherent rights, interests and capacity, we are working in partnership with Traditional Owners to co-design and deliver the largest ever investment in Traditional Owner-led Reef protection activities.
- ✓ Improving the quality of water flowing onto the Reef by accelerating the scale and pace of investment into proven on-ground measures to reduce pollutants across the Reef's highest priority catchments.
- ✓ Investing in on-ground, community-led local action to protect and restore the Reef, working with hundreds of community groups to accelerate effort and inform Reef management.
- ✓ Inviting investors and donors around the globe to take an active part in Reef conservation efforts by contributing to Reef Recovery 2030, the Foundation's fundraising campaign to turn the tide on coral reef decline.
- ✓ Supporting Reef decision-making by filling critical monitoring gaps, building a system to integrate Reef data and developing next generation monitoring technologies.

Figures as at 30 June 2023.

1. The IMR, COTS and RRAS activities within the RTP will conclude on 30 June 2024, marking the end of a six-year Partnership. The Water Quality, Traditional Owner and Community Reef Protection activities have been granted an extension to June 2025 and 2026 respectively.

2. In the 2022/23 FY, a total of \$5.2m was returned to the Australian Government as a result of a funding review from the incoming Government. This has reduced the total RTP funding allocation to \$438m.

Focus area overview

Transparency and accountability are key guiding principles for the Foundation in delivering the Reef Trust Partnership. The following pages are an overview of the dashboards that have been developed to track progress against end-of-Partnership outcomes. Data provided is as at 30 June 2023.

Water Quality

\$175M
committed

\$124.4M
co-invested

151
partners

127
projects



PARTNERSHIP OUTCOMES ①

PROGRESS TOWARDS RTP POLLUTANT LOAD REDUCTION TARGETS

Dissolved Inorganic Nitrogen ① **118%** (539.2t)
progress towards 457t from projects completed and underway

Pesticide ① **224%** (7,938.4K ru)
progress towards 3,537K ru from projects completed and underway

Sediment ① **48%** (221.8kt)
progress towards 464kt from projects completed and underway

EASTERN CAPE YORK WATER QUALITY PROGRAM

First example of an integrated catchment management program in Eastern Cape York

29.7% of primitive tracks assessed for erosion, and 68 erosion control actions at hotspots completed

Ambient water quality has been monitored for two years at 26 sites across 7 rivers, many of which had never been sampled before

The program has worked with 52.5% of the total land area by engaging landowners in education or on-ground projects

HOW OUTCOMES HAVE BEEN ACHIEVED

1,621 landholders have improved management of 249,401 ha of cane land to reduce nutrient and pesticide runoff

494 graziers have improved management of 1,003,716 ha of grazing land to minimize sediment loss

11,683 records of landholders attending education and awareness events for water quality improvements

50 gullies and 10 streambanks restored on 17 properties to prevent erosion

179 Traditional Owners, belonging to 24 Traditional Owner groups, have been engaged

\$11.5M invested in 22 projects trialing innovative approaches to reduce DIN and sediment, developing better planning tools, and creating innovative financing mechanisms

COTS Control

\$51M
committed

\$10.4M
co-invested

19
partners

51
projects



COTS CONTROL PROGRAM ①

Delivering targeted action to protect coral from COTS predation by surveying reefs of high economic and ecological value, culling COTS to ecologically sustainable levels for coral to recover and monitoring cull sites to ensure sustainable levels are maintained for coral.

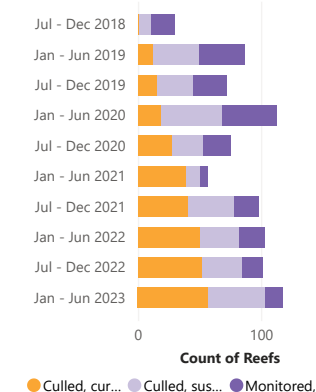
CUMULATIVE ACTIVITIES SINCE 2018

320 High-value reefs managed to protect coral

26,660 ha Reef culled to protect coral from COTS

2,220 hours Research support delivered by COTS vessel crew

HIGH-VALUE REEF STATUS OVER TIME

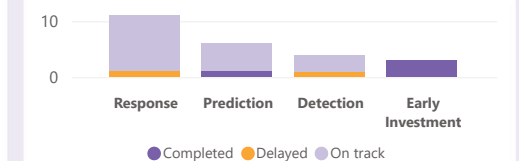


COTS CONTROL INNOVATION

11 research institutions including four core partners

92 experts engaged in multi-disciplinary research teams across institutions

24 collaborative projects delivering innovation in COTS surveillance and control



COTS FORUM

HELD ON 29-31 MARCH 2021

39 presentations across **8** sessions focused on exchange of scientific, cultural, industry and management knowledge

105 in-person attendees, plus **65** via live-stream
8 Traditional Owner groups represented

Partnership overview

\$364.8M
committed

\$318M
co-invested

567
partners

415
projects



WATER QUALITY ①

539.24 DIN(t)
221.8 Sediment (kt)

7,938.4K Pesticide Risk (ru)

\$175M Committed
151 Partners
127 Projects

RRAP ①

\$80.9M Contracted RRAP R&D activities
1,478 days at sea conducting

13 Individual subprograms
105 field trips and establishing
8 reference reefs

\$85.2M Committed
32 Partners
39 Projects

TRADITIONAL OWNERS ①

59 Grants approved
22 Governance positions for Traditional Owners

598+ Hours spent co-designing
5 Traditional Owner co-designed grant rounds

\$18.4M Committed
61 Partners
79 Projects

COTS CONTROL ①

320 High-value reefs
384,398 COTS culled

\$9.8M Innovation Program
92 Experts engaged in Innovation Program

\$51M Committed
19 Partners
51 Projects

COMMUNITY ①

74 Instances of community data being used to inform planning or management
4,123 total communication activities

41,574 Community member engagements
1,000 Community training, education and awareness initiatives

\$5.6M Committed
431 Partners
91 Projects

IMR ①

20 Critical Monitoring projects underway
441 reefs surveyed by the Great Reef Census
90 field surveys conducted across the Reef to fill critical knowledge needs
106 technical experts guiding IMR design and delivery

\$29.7M Committed
12 Partners
28 Projects

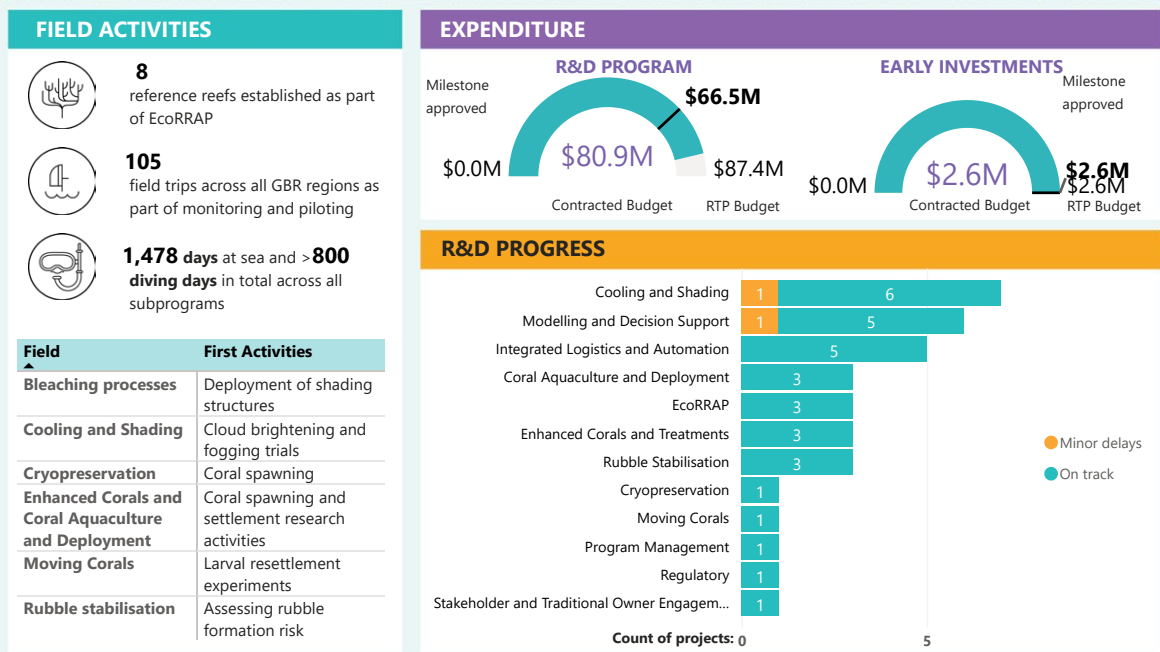
Reef Restoration and Adaptation Program

\$85.2M
committed

\$137.5M
co-invested

32
partners

39
projects



Traditional Owner Reef Protection

\$18.4M
committed

\$13.2M
co-invested

61
partners

79
projects

10M
Future Fund
commitment



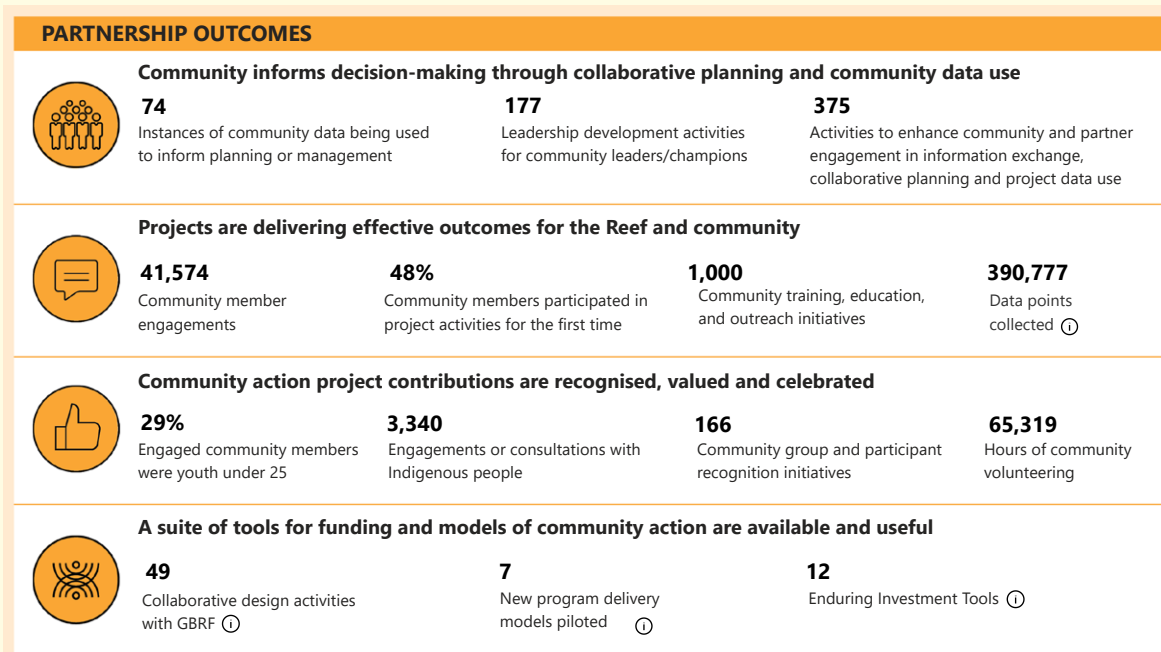
Community Reef Protection

\$5.6M
committed

\$13.6M
co-invested

431
partners

91
projects



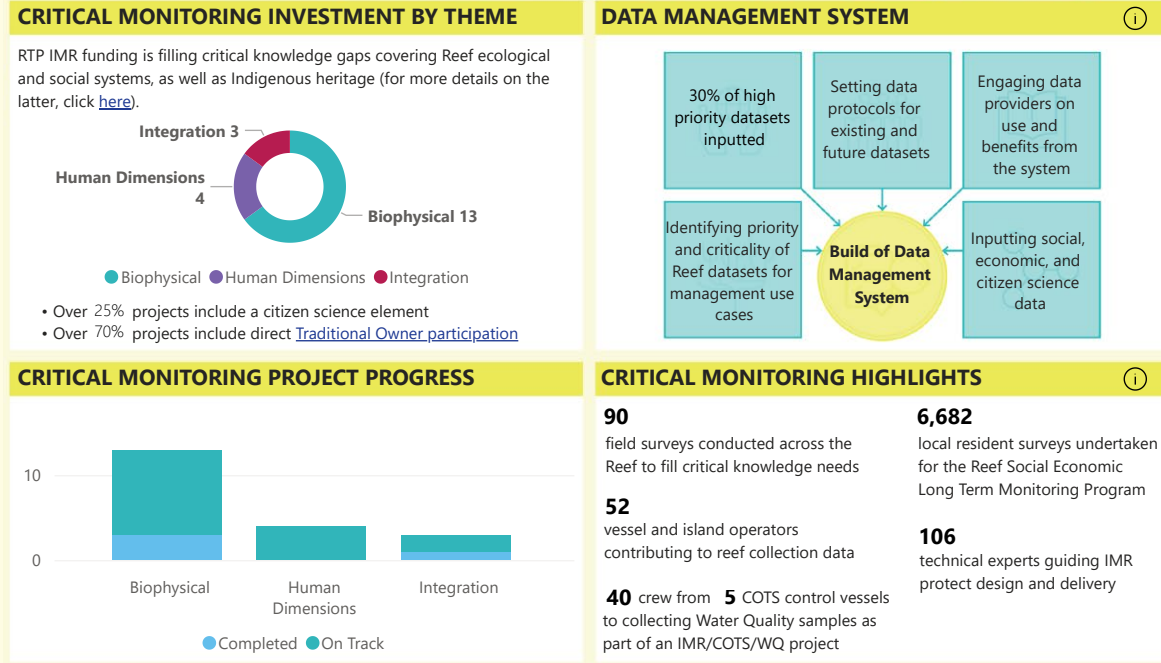
Integrated Monitoring and Reporting

\$29.7M
committed

\$17.4M
co-invested

12
partners

28
projects



CASE STUDIES:

Acceleration

Recognising the Reef cannot wait, and the task is urgent, we are scaling what we know and is proven, developing or adapting solutions where none exist and taking bold action.

Reducing global emissions is no longer enough to safeguard coral reefs. We must also accelerate our efforts to protect our ocean habitats, restore coral reefs and help them adapt to climate change. This is the decade to act and accelerate our efforts to help our Reef, and reefs around the world, resist and adapt to the impacts of climate change.

Reef Restoration and Adaptation Program

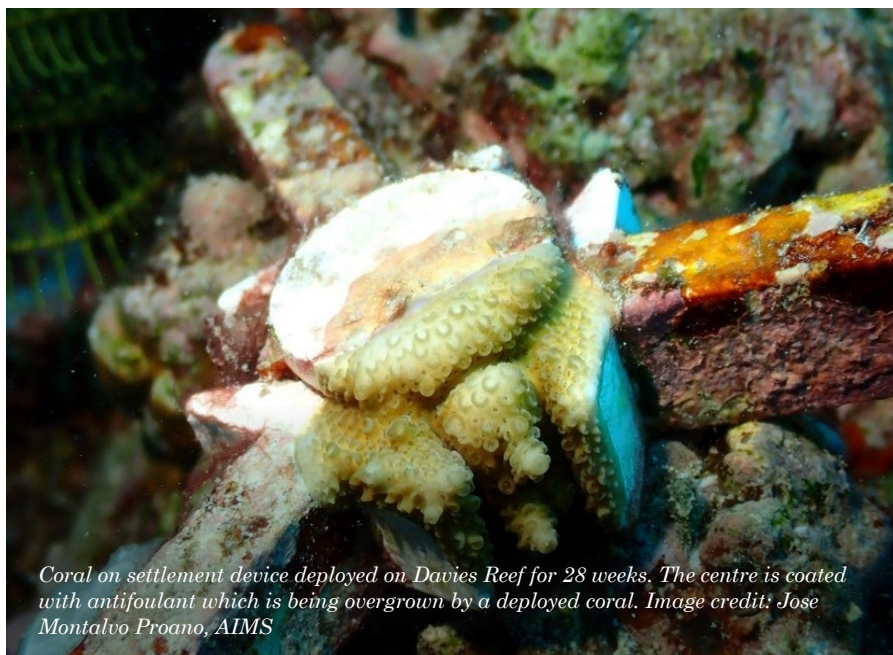
RRAP is an innovative and world-leading research and development program working to give reef managers and decision-makers a toolkit of safe, effective and acceptable interventions to help sustain the resilience of the Reef in the face of climate change, in conjunction with existing priorities of reducing greenhouse gas emissions and best-practice reef management.



Raft of Reef protection breakthroughs

New semi-automated and robotic methods developed this year now make it possible to increase the number of corals bred in aquaculture from a few thousand a year to tens of millions. This mass production and subsequent deployment of healthy baby corals could be applied at scales of thousands of square kilometres – completely transcending the current capabilities of global coral reef restoration, which are mostly done by hand on a few square metres of reef.

The program has made these game-changing engineering and scientific advances thanks to a diverse collaboration of more than 350 experts including biologists, data scientists, ecologists, engineers, geographers, mathematicians, and social scientists, working alongside Traditional Owners and passionate Reef community members. This group has now made more advances in coral reef restoration science in the past five years, than have been made in the past five decades.



Coral on settlement device deployed on Davies Reef for 28 weeks. The centre is coated with antifoulant which is being overgrown by a deployed coral. Image credit: Jose Montalvo Proano, AIMS

Nanny-cams helping care for baby corals

Robotic nanny-cams, AI coral counters and intricate 3D micro-scale digital maps have been developed as part of a suite of new imaging tools improving our reef restoration efforts.

Coral aquaculture has the potential to change the face of reef restoration efforts, helping to deliver millions of corals back into the wild and restore damaged areas of our Great Barrier Reef and coral reefs all over the world.

Now, a new prototype robotic camera system that uses AI is improving how we care for fragile day-old baby corals, previously monitored using labour-intensive manual processes. It's a game-changer for researchers who can now more accurately count and track corals produced in aquaculture. A different kind of in-water photography is also driving down the cost and labour needed to monitor and track the growth of baby corals in the wild.

Specialised photogrammetry teams in RRAP have now refined the imaging methodology so that we can efficiently map reefs, and baby corals, in high resolution micro-detail. This information is critical to deciding where, when and how we deploy new baby corals onto a system as big and complex as the Reef.



This new camera system is being trialled to automate coral spawn counting. Image credit: Dorian Tsai, QUT

CASE STUDIES:

Acceleration

Cooling and shading corals

This year, a dedicated RRAP Cooling and Shading research team has successfully trialled new methods to temporarily protect corals from light and heat stress during the hottest months of the year, known as the doldrums, when heat intensifies and trade winds drop, leading to dangerous conditions for coral bleaching.

Using seawater misters the team has created a fine fog over the water surface to shade the corals below.

Successful field trials and fogging prototypes were rolled out during Summer 2022-2023, with plumes producing a measurable reduction in incoming sunlight.

This work has not only addressed critical knowledge gaps in science and engineering, but has also paved the way for prototypes to be used at scale on the Reef during summer conditions that place corals at high risk of bleaching.



Marine Cloud Brightening Field. Image credit: Southern Cross University

Smart robotics for COTS detection

The COTS Control Innovation Program (CCIP) is improving on-ground efforts to control predatory crown-of-thorns starfish outbreaks and protect corals.

This year, the program pioneered the development of new methods for COTS surveillance and monitoring, including eDNA techniques that detect the presence of COTS DNA in the water, and smart robotics technology that scans the Reef and detects starfish using real-time artificial intelligence.

These methods are being refined by researchers from AIMS and CSIRO, working in partnership with management end-users to ensure the tools are practical and fit for purpose. In 2023-2024, these tools will continue to be developed, alongside analyses that demonstrate how this new data can be used by the COTS Control Program.

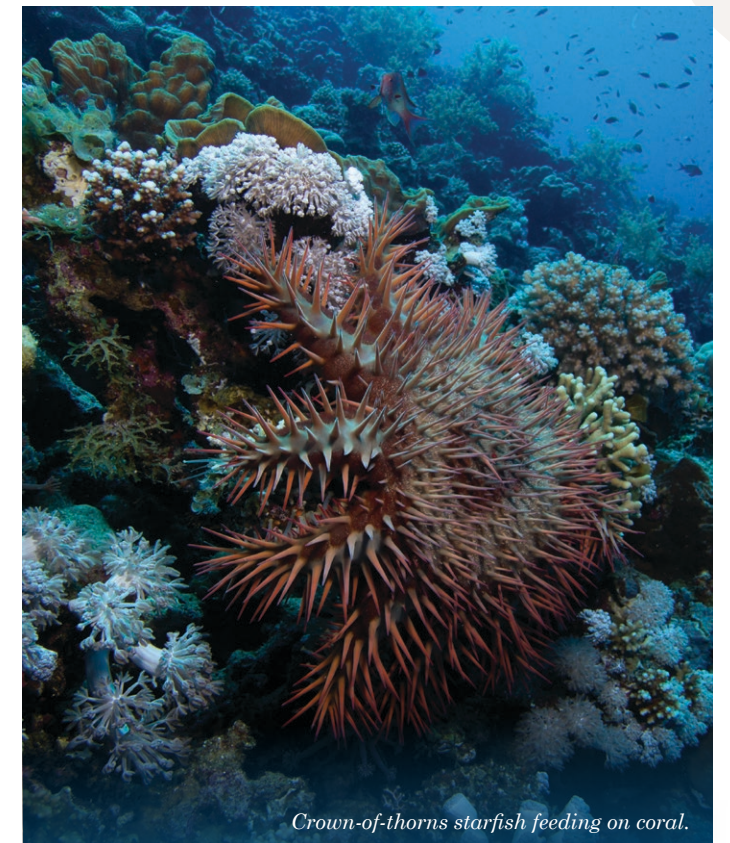


Initial field demonstration of new COTS surveillance technology. Image credit: Mary Bonin

Tiny predators targeting COTS

CCIP has discovered 29 new reef species that feed on crown-of-thorns starfish when they are young and therefore most vulnerable.

In a study led by the University of Queensland, a team conducted more than 500 aquarium trials and tested over 100 potential predators, including species of crabs, shrimp, worms, snails and small fish. Researchers identified the red decorator crab, *Schizophrys aspera*, as a voracious predator that consistently consumed more than five juvenile COTS per day and chose to eat the starfish even when it was presented with other prey options. Collaborators at AIMS developed an eDNA technique to detect the consumed starfish in the guts of the crabs and ongoing research will now assess the potential to use these crabs as an early warning indicator of developing outbreaks. These discoveries lend exciting new insight into the role of predators in managing the abundance of the coral-eating starfish and offer potential tools for outbreak management.



Crown-of-thorns starfish feeding on coral.



The red decorator crab feeding on tiny pink juvenile crown-of-thorns starfish in a laboratory experiment. Image credit: Kennedy Wolfe, UQ

CASE STUDIES:

Collaboration



Understanding that no single group can tackle the challenges the Reef faces alone, we are embedding partnerships as a founding ethos, growing the \$443m in public funds, creating local ownership of projects through co-design and co-delivery and bringing in new ideas and fresh perspectives.

Thanks to the generous contributions of our project partners, corporate Australia and individuals, we have already unlocked an additional \$318m in leveraged funding – the largest environmental fundraising campaign in Australian history.

Collaborative action for a better future

Australians have rallied behind the Great Barrier Reef, showing their support in myriad ways from the school yard to the boardroom.

Every one of our passionate supporters has generously contributed towards our shared vision of turning the tide on coral reef decline and safeguarding our precious natural wonder. As of 30 June 2023, we have raised an additional \$318m – 89% of the \$357m target.

This achievement is only possible thanks to our dedicated family of supporters. Hundreds of individual donors signed up to Plant a Coral, while more than 7,000 school kids across Australia raised \$169,000 to support the planting of coral on the Reef through Run4Fun events with our partner, Australian Fundraising. In the corporate sector, our incredible partners including Coles, Lendlease, XXXX, oOh! Media, Sankari, Qantas, YouTube, Life-Space, AECOM and the BHP Foundation continued to provide their capital and capability to help protect the Reef.

In addition to their investment in on-ground and in-water programs, each of these partners brings powerful platforms for storytelling and elevating awareness amongst their staff and customer bases about the challenges facing the Reef, the great work being done by so many people and what everyone can do to help ensure a future for coral reefs.

At the same time, everyday Australians, volunteers and supporters from around the world showed their passion on social media and at local events to help unlock critical funding for the Reef.

It is only through the collective impact of so many, that we can succeed in this critical decade for coral reefs.

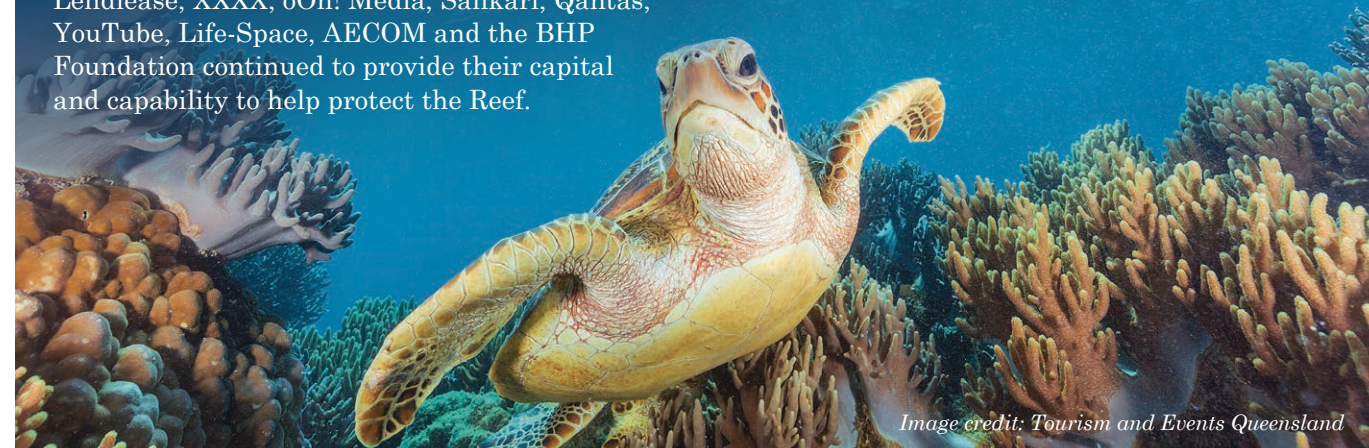


Image credit: Tourism and Events Queensland



Coralpalooza Cairns. Image credit: Shannon Myers



Coralpalooza Port Douglas Sail. Image credit: Pablo Cogollos

Coralpalooza: World-first day of global action

The Great Barrier Reef Foundation joined coral reefs around the world in the first ever international day of collaborative action to help restore key coral reef sites.

Coralpalooza™, created by Florida-based Coral Restoration Foundation™, took place in 12 countries on 10 June 2023 in honour of World Oceans Day. With our partner, the Coral Nurture Program (CNP), we contributed to this global effort by planting corals at sites in Port Douglas, Cairns and the Whitsundays.

CNP is a collaboration between marine scientists and the tourism industry to research and deliver local reef restoration on key reef sites on the Great Barrier Reef. On the day, CNP had over 45 divers out on the Reef who planted 4,000 coral fragments.

Local tourism operators and researchers from the University of Technology Sydney were out in force planting coral fragments using the innovative CoralClip® – a Queensland invention that allows corals to be planted quickly and with good survival rates.

Collaboration

New pathways for Cape York Traditional Owners

Aboriginal and Torres Strait Islanders are Australia's First peoples, who for millennia have cared for their land and sea Country, guided by traditional knowledge and customs passed down through generations.

In eastern Cape York, an innovative partnership with Traditional Owner groups has brought new skills and job opportunities to the region's Traditional Owners, while also improving water quality outcomes.

The Eastern Cape York Water Quality Program brought together a diverse group of stakeholders including scientists, land managers and Traditional Owners to address local water quality problems by reducing sediments that flow out to the Reef. Four organisations – the Cape York Water Partnership, South Cape York Catchments, South Endeavour Trust and Yuku Baja Muliku – worked to quantify the sources of sediment, demonstrate the efficacy of interventions, and develop best management practices to minimise erosion. The projects are already showing good results in the reduction of sediments reaching the Reef.

Crucially, the program has established formal relationships with Traditional Owner groups including Yuku Baja Muliku, Daarrba Land Trust, Jabalbina Yalanji Aboriginal Corporation, Cape Melville, Flinders & Howick Islands Aboriginal Corporation, Juunjuwarra Aboriginal Corporation, Gamaay, Waymburr, Ngaatha, and Gulaal.

Through these relationships, Traditional Owners have gained a diverse set of skills including water quality and ecosystem monitoring, drone operation, safe fire management, track erosion mapping and on-ground restoration work. On a personal level, they've been empowered to teach and mentor their peers, manage projects and write reports. These skills are shaping a future where groups can move from being support staff to independently leading their own projects.



Juunjuwarra Rangers, Norma Jacko and Tiara Darkan, using their training in water quality monitoring as part of the Eastern Cape York Program. Image credit: Cape York Water Partnership



Practical fire training in the Eastern Cape York Program has enabled many Traditional Owners to be accredited under the national scheme. Image credit: South Cape York Catchments

Collaboration at Moore Reef

The Cairns-Port Douglas Hub brought together a diverse group of partners to design and trial a monitoring program for a new assisted coral recovery technique.

The method uses new coral seeding devices engineered by AIMS to improve the survival of young corals when they're deployed onto the Reef.

RRAP scientists from CSIRO and AIMS taught local partners including Gunggandji Traditional Owners, GBR Biology, Reef Restoration Foundation and James Cook University's TropWATER how to deploy and monitor the devices, and deepened their understanding of coral recruitment patterns. The local partners have been monitoring the baby corals to understand how effective the devices are in rubble habitats and collecting data throughout 2023 to help inform decisions about future deployment activities.



Divers installing coral seeding devices. Image credit: Matt Curnock



The team preparing for their dive at Moore Reef. Image credit: Matt Curnock

CASE STUDIES:

Legacy

Giving the Reef outcomes that live beyond the end of the Partnership, we are growing and strengthening capacity, facilitating long-term practice change and embedding culturally safe approaches to conservation activities on land and sea Country.

Embedding Traditional Owner participation into Reef monitoring activities

The Great Barrier Reef Dolphin Monitoring Project has conducted an ambitious en-gagement program with Traditional Owner groups from north of Cairns to the top of Cape York, in a dedicated 18-month period that has seen researchers seek FPIC (Free, Prior and Informed Consent) prior to the commencement of boat-based surveys to monitor for different species of inshore dolphin.

The project, led by Southern Cross University through the IMR component, aims to address critical knowledge gaps about inshore

dolphin populations, in close collaboration with Traditional Owners. Front-loading such a significant scope of engagement with Traditional Owners was a shift from a historic model of conducting scientific data collection activities on the Reef and is an excellent example of how the RTP is facilitating one part of a much broader system change. Of the engagement efforts during the period, the majority of Traditional Owner groups (13 groups) engaged fully with the project and provided consent to conduct monitoring on Country.

Next, researchers will use monitoring and remote sensing techniques, to understand the distribution and abundance of three endangered inshore dolphin species (Australian snubfin dolphin, Australian humpback dolphin, and the Indo-Pacific bottlenose dolphin) in the northern Great Barrier Reef, as well as mapping and assessing the threats to these dolphin species across the entire Reef.



Image credit: Daniele Cagnazzi



Coral species that had their eggs and sperm used for cryopreservation. Image credit: Taronga

Culturally safe coral biobanking on sea Country

For the first time, cultural practice and procedure has been sought and followed for the transfer of living coral samples for cryopreservation, paving the way for best practice both here on the Great Barrier Reef and elsewhere.

Cryopreservation projects in RRAP involve the culturally sensitive practice of collecting and transporting cryopreserved coral to Taronga's CryoDiversity Bank on Cammeraygal Country (Sydney), to be cared for in specialised facilities until it is needed for future reef restoration initiatives and research. Culturally, the coral samples always remain a part of the Country from where they were collected, even while located and stored on another group's Country.

If cultural protocol is not followed, then the transfer of this living material will be culturally unsafe for First Nations people from both the sea Country of origin and the Country on which the material is stored. The development of these cross-cultural biobanking procedures followed discussions and collaboration between Woppaburra Traditional Owners, scientists and First Nations staff from Taronga and AIMS, the Taronga Aboriginal Advisory Group and Traditional Owner

representatives from the Sydney region where the CryoDiversity Bank is located. This first step will form the basis of culturally-safe biobanking of coral samples from Great Barrier Reef sea Countries to support reef restoration and adaptation efforts, and help to ensure that these valuable samples retain their links to Country in perpetuity.

Legacy

Irrigation innovations

Investment in water quality programs in the Burdekin region of northern Queensland helped remove barriers to agricultural innovation, transforming how farmers sustainably manage water resources and reduce pollution in Reef catchments.

Irrigated agriculture in the Burdekin is a key driver of water quality risk, due to the region's relatively dry climate and strong reliance on irrigation.

The Burdekin Irrigation Project (BIP) transitions sugarcane farmers to more efficient, automated irrigation systems and practices. This saves farming resources, time and money, while improving cane productivity and profitability. Importantly, these actions reduce farm runoff and associated pollutants, helping to improve water quality. Since its commencement in 2020, BIP has engaged with 65 sugarcane farmers across 8,000 hectares in the Burdekin region, with the project expected to prevent over 22 tonnes of DIN from flowing to the Reef.

Impacts from this project are real and meaningful, with its success leading to a million-dollar corporate partnership with XXXX. This new investment will increase the adoption of smart irrigation technology in the Burdekin region.

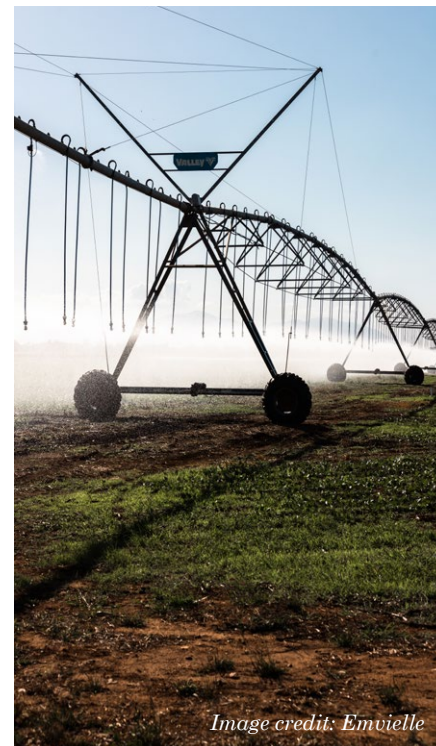


Image credit: Emvielle



Image credit: Emvielle

Traditional Owner grants improving long-term outcomes

Traditional Owner grant programs continued to facilitate a wide range of social, cultural, economic and environmental outcomes across the Reef.

These programs have unlocked existing Traditional Owner capacity, enabling further development of their capability, governance and strategic partnerships, and strengthening their ability to achieve long-term goals to care for Country and cultural heritage values.

One Traditional Owner group, Dabu Jajikal Aboriginal Corporation (DJAC) of the Bloomfield River region in far North Queensland, has embraced the opportunity to further Elders' aspirations for Country through effective governance, planning, training, on-ground management activities and the development of partnerships. Each of their four grant programs has built on the previous project – starting with planning, then moving into implementation of those plans. Importantly, each project is guided by an Elders' Advisory Committee, ensuring appropriate Traditional Owner governance over project activities. Through the delivery of these projects, DJAC have reported important growth and empowerment in their community.

Another group, Mandubarra Aboriginal Land and Sea Inc (MALASI), from the Kurrimine Beach region in Far North Queensland, has utilised its Healing Country grant to map seagrass as a strategic tool to assist in the realisation of a long-term vision for



Image credit: Dabu Jajikal Aboriginal Corporation

Traditional Owner-led sea Country management.

Sharing their southern sea Country border with the Girringun Region Traditional Use Resource Management Agreement (TUMRA), and a proposed border in the north with a TUMRA under negotiation, Mandubarra Aboriginal Land and Sea Inc (MALASI) has gathered crucial data on the state of environment within the Mandubarra TUMRA area. Rangers have upskilled in identifying and understanding dugong feeding trails, developed a baseline dataset for seagrass and corals, and mastered the use of underwater drones and AI for monitoring.



Image credit: Dabu Jajikal Aboriginal Corporation

Already in discussions with their Traditional Owner neighbours, MALASI are laying the foundations for an exciting joined-up sea Country alliance across neighbouring TUMRAs, where they hope to collaboratively restore, care for and heal Country through the sharing of resources, expertise and data.

Delivery Partners

The Reef Trust Partnership is the largest collective effort ever for the Great Barrier Reef, enabled by a leadership investment by the Australian Government.

Lead partners delivering programs or projects under the Partnership from 1 July 2022 to 30 June 2023 include:

- Adaptus Pty Ltd
- Agro Group Pty Ltd
- Alluvium Consulting Australia Pty Ltd
- Aurecon Australasia Pty Ltd
- Australian Institute of Marine Science
- Australian Seaweed Institute Pty Ltd
- Australian Trust for Conservation Volunteers
- Babel-sbf Pty Ltd
- Balkanu Cape York Development Corporation Pty Ltd
- Binthi Land Holding Group Aboriginal Corporation
- Bowen Tourism and Business
- BRIA Irrigators Ltd
- Bromley Aboriginal Corporation RNTBC
- Buda Dji Aboriginal Corporation
- Bundaberg Four Wheel Drive Club Inc
- Bundaberg Fruit & Vegetable Growers Cooperative Limited
- Bureau of Meteorology
- Burnett Catchment Care Association
- Burnett Mary Regional Group for Natural Resource Management Ltd
- Butchulla Aboriginal Corporation RNTBC
- C2O Consulting
- Cairns and Far North Environment Centre Inc
- Canegrowers Cairns Region Ltd
- Cape York Natural Resource Management Ltd
- Cape York Water Partnership Inc
- Capricornia Catchments Inc
- Carbon Link Operations Pty Ltd
- Catchment Solutions Pty Ltd
- Chantal Althea Roelofs
- Citizens of the Great Barrier Reef
- Commonwealth Scientific and Industrial Research Organisation
- Conservation Management Pty Ltd
- Cranky Curley Productions
- Create and Evaluate
- Cultivate Farms Pty Ltd
- Dabu Jajikal Aboriginal Corporation
- Darumbal Enterprises Pty Ltd
- Dawul Wurru Aboriginal Corporation
- Diane Tarte
- Digital Storytellers
- Digital Storytellers Limited
- Dirrawan Consulting Group Pty Ltd
- Djarnda Enterprises Pty Ltd
- Djunbunji Limited
- Douglas Shire Council
- Duane Fraser
- Earthwatch Institute
- Ecosure Pty Ltd
- Envigorate Consulting
- Environmental Systems Solutions Pty Ltd
- Erin Peterson Consulting
- ESRI Australia Pty Ltd
- Farmacist Pty Ltd
- Fitzroy Basin Association Inc
- FNQ NRM Ltd t/a Terrain Natural Resource Management
- Fruition Environmental Pty Ltd
- Gallagher Eshepherd Pty Ltd
- Gidarjil Development Corporation Ltd
- Giringun Aboriginal Corporation
- GP One Consulting Pty Ltd
- Great Barrier Reef Research Expeditions Inc t/a Great Barrier Reef Legacy
- Greening Australia Ltd
- Gregory Neil Oliver t/a EPM Consulting
- Griffith University
- Gulngay Kinjufle Aboriginal Corporation
- Gunggandji-Mandingalbay Yidinji Prescribed Body Corporate Aboriginal Corporation
- Herbert Cane Productivity Services Limited
- Herbert River District Cane Growers Organisation Limited
- Hope Vale Congress Aboriginal Corporation RNTBC
- Ian Phillip Prosser
- Illuminate-FNQ Ltd
- Innisfail District Cane Growers Organisation Limited
- Intellidesign Pty Ltd
- Ipima Ikaya Aboriginal Corporation RNTBC
- J.W. UDY & N.S. UDY trading as Science under Sail
- Jabalbina Yalanji Aboriginal Corporation RNTBC
- James Cook University
- Jaragun Pty Ltd
- Jarlls Pty Ltd
- JCU TropWATER
- Johnstone River Catchment Management Association Inc
- Juru Enterprises Ltd
- Keppel Coast Arts Council Incorporated
- Kevin Bruce Bowden
- Kimani Chikwendu
- Kiorion Pty Ltd
- KPMG
- Landloch
- Leo Burnett Australia
- Leon Studios Pty Ltd
- Liquaforce Pty Ltd
- Local Government Association of Queensland (LGAQ)
- Lower Burdekin Landcare Association Incorporated
- Mackay Area Productivity Services Limited
- Mackay Canegrowers Limited
- Macquarie University
- Magnetic Island Community Development Association Inc
- Magnetic Island Nature Care Association Incorporated
- Malachi Johnson
- Mandubarra Aboriginal Land and Sea Inc
- Marenray Pty Ltd
- Maria Watson-Trudgett Consultancy
- Marine Discoveries Pty Ltd ATF
- Phillips Family Trust
- Marine Seek Pty Ltd t/a Lady Musgrave Experience
- Mary River Catchment Coordination Association Inc
- Melanie Hava
- Mosaic Insights
- Mungalla Aboriginal Corporation for Business
- Murdoch University
- NCEconomics Pty Ltd
- Nick Pty Ltd t/a Nick Did This
- North Australian Indigenous Land and Sea Management Alliance
- NQ Dry Tropics Ltd
- NQ NRM Alliance Ltd t/a Corporate Nature
- OzFish Unlimited Ltd
- Phillip Laycock
- Port Douglas Daintree Tourism Ltd
- Port of Townsville Dry Tropics Partnership for Healthy Waters
- Pullman Cairns International
- QLD Cane Growers Organisation Ltd
- QLD Farmers' Federation Ltd
- QLD Government Department of Environment and Science
- QLD University of Technology
- Radiant Life Education Ltd
- Reef and Rainforest Research Centre Ltd (RRRC)
- Reef Catchments (Mackay Whitsunday Isaac) Ltd
- Reef Check Foundation Limited
- Reef Ecologic Pty Ltd
- Reef Magic Cruises Pty Ltd
- Renee Madsen t/a Create and Evaluate
- Resource Consulting Services Pty Ltd
- Rinyirru (Lakefield) Aboriginal Corporation
- Rod Connolly
- Rodney David Kerr
- Roeger Consulting Services – Traditional Owner Engagement and Scoping and Program Design
- Ryan David Turner
- Sarina Landcare Catchment Management Association Inc
- SeeSide Dialogue
- Sharks and Rays Australia Pty Ltd
- South Cape York Catchments Inc
- Southern Cross University
- Speedwell Pty Ltd
- Star Economics Pty Ltd
- Starling
- State of Queensland acting through the Department of Environment and Science
- STEM Matters
- Sugar Research Australia Ltd
- Tara-Lynn Page
- TBWA Melbourne Pty Ltd
- Terra Carbon Pty Limited
- Terrain NRM
- Terri Janke and Company Pty Ltd
- The Commonwealth of Australia acting through the Great Barrier Reef Marine Park Authority
- The Nature Conservancy Limited as the Trustee for the Nature Conservancy Australia Trust
- The Social Deck
- The Trustee for Eberhard Consulting Trust
- The Trustee for SOUTH ENDEAVOUR TRUST
- The Trustee for The O'Reilly Property Trust
- The University of Queensland
- Tim Moltmann
- Townsville City Council
- Truii Pty Ltd
- Trustee for the Dench Family Trust
- Tunuba Pty Ltd
- Turtle Care Volunteers QLD Inc
- University of Sydney
- University of Tasmania
- University of Technology Sydney
- University of the Sunshine Coast
- Verterra Ecological Engineering Pty Ltd
- Wanyurr-Majay Aboriginal Corporation RNTBC
- Wavelength Reef Cruises
- Whitsunday Catchment Landcare INC
- Whitsunday Regional Council
- Wuthathi Aboriginal Corporation RNTBC
- Yuku-Baja-Muliku Landowner & Reserves Ltd
- Yuwi Aboriginal Corporation RNTBC

Governance

Great Barrier Reef Foundation Board

- David Thodey AO, Co-chair
- Dr Martin Parkinson AC PSM, Co-chair
- Hayley Baillie, Director
- Stephen Fitzgerald AO, Director
- Dr Paul Greenfield AO, Director
- John Gunn, Director
- Cindy Hook, Director
- Grant King, Director
- Anna Marsden, Managing Director
- Dr Russell Reichelt, Director
- Steven Sargent, Director
- Phillip Strachan, Director
- Olivia Wirth, Director

Partnership Management Committee

- John Gunn
- Dr Geoff Garrett AO
- Dr Paul Greenfield AO
- Larissa Hale
- Professor Ove Hoegh-Guldberg
- Jessica Hoey
- Wendy Morris
- Elisa Nichols
- Craig Rosner-Moore (until 8 February 2022)
- Rebecca Gee
- Theresa Fyffe

Traditional Owner Advisory Group

The purpose of the TOAG is to offer strategic advice to guide the co-design and co-delivery of activities under the RTP.

- Larissa Hale (Chair)
- Malcolm Mann
- Gavin Singleton
- Manuwuri Forester

Along with the Traditional Owner Advisory Group, there are three Traditional Owner Technical Working Groups that collaborate with the Foundation to co-design Component level work programs across the Partnership:

- Healthy Water Traditional Owner Technical Working Group
- Reef Restoration and Adaptation Science + Crown-of-Thorns Traditional Owner Technical Working Group
- Integrated Monitoring and Reporting Traditional Owner Technical Working Group

Other governance arrangements

- Water Quality Working Group
- Community Reef Protection Working Group
- RRAP Board
- COTS Control Partnership Group
- COTS Control Innovation Program Steering Committee

Members of Board, PMC and TOAG as of 30 June 2023

'Great Barrier Reef' artwork by Melanie Hava, Mamu Aboriginal woman, Dugulbarra and Waribarra family groups, from the Johnstone River catchment of the Wet Tropics of Far North Queensland and the adjoining Great Barrier Reef Sea Country.

Reef Trust Partnership

Year in Review
2022-2023



Australian Government



Great Barrier
Reef Foundation