REEF CATCHMENTS

MACKAY WHITSUNDAY ISAAC LIMITED

ANNUAL REPORT

2014-15

ENHANCING NATURAL RESOURCES FOR A SUSTAINABLE COMMUNITY

www.reefcatchments.com.au

REEF CATCHMENTS

Reef Catchments is a not-for-profit company delivering natural resource management in partnership with the community to preserve and manage the Mackay Whitsunday Isaac region and its natural assets for current and future generations.

A healthy environment is the basis for a healthy region, a place where ecosystems are in good condition, the community is cohesive and the economy provides jobs and a reasonable standard of living. A healthy environment is made up of well-managed natural resources.

Reef Catchments' role is to facilitate on-ground change and work for long-term solutions to protect the natural resources of Mackay Whitsunday Isaac, while also recording and reporting to all stakeholders on natural resource condition and improvement.

Reef Catchments works in close collaboration with the community, local council, state and federal government agencies as well as the private sector.

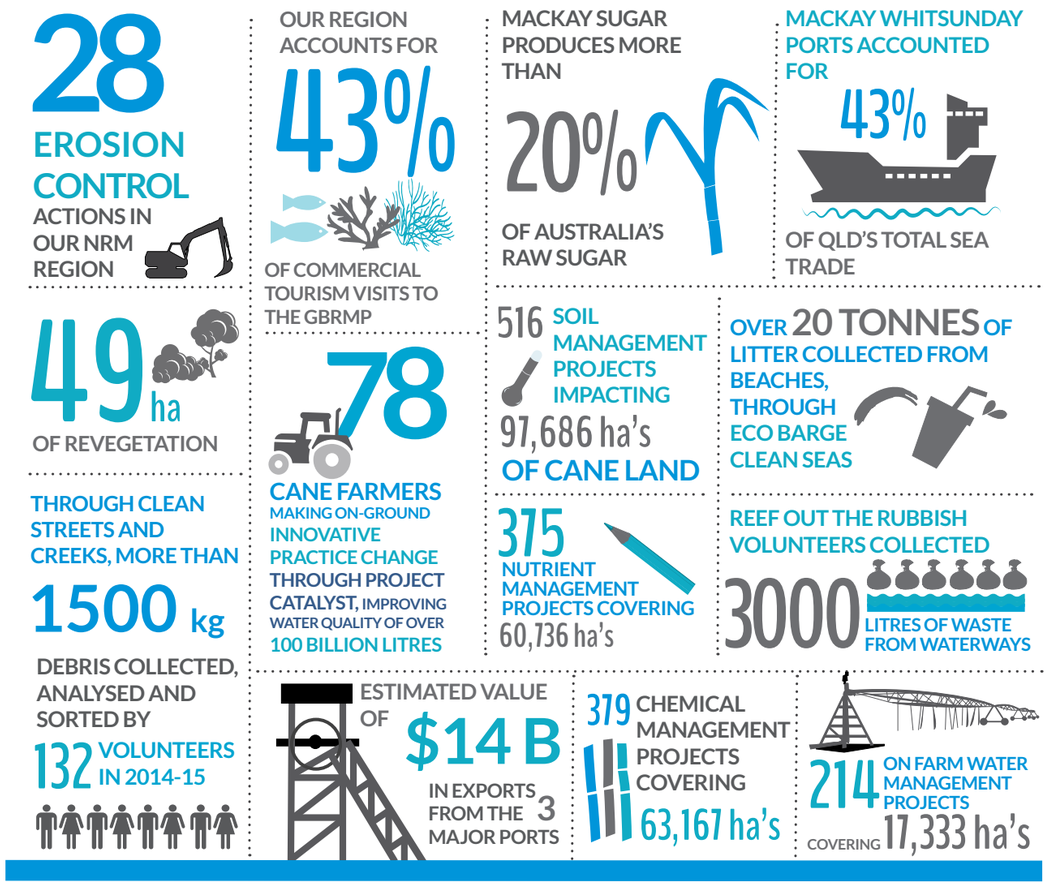
We seek to improve community knowledge of natural resource issues along with improving community capacity to deal with these issues, backed by a strong commitment to innovation and efficient service delivery.

REEF CATCHMENTS

ANNUAL REPORT 2014-15

REEF CATCHMENTS MACKAY WHITSUNDAY ISAAC **LIMITED**

Contents



The company has had another successful year both in terms of on-ground works and financially. I take this opportunity to thank our many partners and supporters for their continued commitment to important Natural Resource Management (NRM) initiatives and outcomes in the Mackay Whitsunday Isaac region.

Chairs' Welcome

It is with much pleasure that I again present the Chairman's report to the annual general meeting of Reef Catchments (Mackay Whitsunday Isaac) Limited.

The company has had another successful year both in terms of on-ground works and financially. I take this opportunity to thank our many partners and supporters for their continued commitment to the strategic direction of Reef Catchments and as a result, the ongoing progression of valuable Natural Resource Management (NRM) works and improved environmental outcomes in the Mackay Whitsunday Isaac region.

No company is successful without the hard work and support of its staff and I would like to take this opportunity on behalf of the Board and Directors to thank the staff of Reef Catchments for their dedication, commitment and energy over the past year.

In particular I would like to recognise Robert Cocco, Reef Catchments CEO, for his support and counsel over the last twelve months, alongside Corporate Services Manager, Sally Young – thank you Sally, you have put in a very productive first 12 months and your efforts have been noted and appreciated.

The company recruited a new Operations Manager during the year and I take this opportunity to welcome on board Katrina Dent. Thank you for your efforts so far and I wish you well in your endeavours over the next year.

The next 12 months looks promising for Reef Catchments with a budget of approximately $12M and commitments from our partners and supporters to continue the great work being done in and across the region.

On a personal note, this will be my last Annual General Meeting – after more than a decade of involvement as Chair and board member both of Reef Catchments and the preceding Mackay Whitsunday NRM Group, I will retire as Chairman effective of the 30th June 2016.

I have had many years of satisfaction and seen great progress in the company during the time I have been involved. I have been delighted with the many projects Reef Catchments has undertaken within our region, the value I have seen in terms of improving and protecting our natural resources, and the ability of the company to make a real and tangible difference in its community.

I thank the members of Reef Catchments for giving me the opportunity to serve this wonderful organisation.

I wish the company and it supporters all the best in the future.

Royce Bishop

Chairman

Chief Executive Officer **Report**

I welcome our members, partners, investors and collaborators to the 2014-15 Reef Catchments (Mackay Whitsunday Isaac) Limited Annual Report.

This has been a year of significant change concerning Natural Resource Management (NRM) programs and challenges for Reef Catchments. While change is often hard to deal with, it does offer ability for Reef Catchments, in concert with its members, stakeholders, partners, and the community to review what we are collectively doing and to undertake continuous improvement and adapt to challenges and emerging issues.

What does not change is Reef Catchments' role and responsibility to coordinate, integrate, and align effort to sustainably manage natural resources at the landscape level. Continued NRM pressures aligned to landscape modification from development and growth demonstrates the important role that Reef Catchments and our partners and collaborators play. Our focus is very much toward a balance of social, economic, environmental and cultural actions and outcomes and an understanding that our region's success in meeting sustainability aspirations is based on securing solutions to complex issues in partnership with others.

Reef Catchments supports sustainability outcomes via global, national, state, and local dealings with stakeholders. This 'line of sight' operational focus from local to global is recognition that our region and its community are highly connected with the world via commodity markets and social values. We are seeing markets (food, fibre and energy) becoming increasingly focused toward how we use resources such as land and water, and how human actions and solutions can reduce impact on biological systems while supporting vibrant communities (Corporate Social Responsibility).

Reef Catchments' role and responsibility is to work with regional stakeholders to explore additional value for our products and services and to show how this additional value can benefit natural resource rehabilitation and conservation. To this end our success is aligned to our ability to mobilise on-ground natural resource management effort, investment, and outcomes that are able to enhance regional community viability and prosperity via creating a value proposition for internal and external stakeholders.

The 2014-15-year saw substantial changes in public natural resources program focus and investment support for the region. New programs became operational (National Landcare Programme, Reef 2050, Reef Trust, and Reef Plan) while other initiatives saw an active reprioritisation of investment focus. The outcome from these changes saw a 24 percent reduction of public investment toward natural resource management in the region as compared to the previous financial year.

In response to a decrease in public investment, Reef Catchments undertook a full review of its strategies, operations and project delivery arrangements. The review was able to identify opportunities for better service provision, higher private investment (lower public investment) and lower operating overheads. The result being a more effective and efficient Reef Catchments Group. We are continuing to implement the new delivery arrangements and will evaluate the success or otherwise over the new financial year.

MY THANKS

I would like to thank the Chairman and Board of Reef Catchments for their support and guidance over 2014-15. Each of our directors devotes a significant proportion of their time and energy to Reef Catchments and its operations.

I also wish to thank the staff of Reef Catchments both past and present. Our services and functions are complex and often produce many challenges, which the staff are required to deal with on a daily basis. Despite these challenges the staff of Reef Catchments continue to excel in delivering natural resources solutions with the support of our members, investors, partners, and collaborators.

I would like to acknowledge our members, partners, collaborators, and investors without whom Reef Catchments could not operate. A special mention must go to the Australian and Queensland governments for their ongoing financial support of regional NRM arrangements. It is via this direct investment support that Reef Catchments is able to leverage additional investment and community support for improved catchment management. We look forward to ongoing investment commitment to our region for NRM services of focus.

Lastly I must also thank our regional community. Through the efforts of individuals, groups, and organisations, our community, with the help of Reef Catchments, has been able to make a positive difference to the region's sustainability. In doing so we protect, maintain and improve our irreplaceable natural environment and assets for future generations to enjoy and benefit from, as we are lucky enough to do.

Rob Cocco

CEO

Our focus is very much toward a balance of social, economic, environmental and cultural actions and outcomes and an understanding that our region's success in meeting sustainability aspirations is based on securing solutions to complex issues in partnership with others.

Manager's **Report**

Structure (new faces and new teams) Operations

Reef Catchments is committed to internal operational efficiencies. A review of Reef Catchments program operations was undertaken during 2014-15 and the results are currently being realised. To better represent the natural resource management landscape of the Mackay Whitsunday Isaac region, three teams were formed, the Inland and Sustainable Agriculture team, Water and Waterways team, and Coasts and Biodiversity team.

Within these new teams are a number of new faces including my own, Katrina Dent, as Operations Manager. The recruitment of new staff members enables Reef Catchments to improve efficiencies, to provide effective project delivery and to deliver on the organisation's goal to coordinate, integrate and align effort to sustainably manage natural resources at the landscape level. It is difficult to see staff members leave an organisation, but the new staff bring new ideas, and experiences for the task ahead.

Launch of the NRM plan

The Mackay Whitsunday Isaac Natural Resource Management (MWI NRM) plan was released in early February 2015. This plan was developed by Reef Catchments in collaboration with a multitude of stakeholders, including the Mackay, Whitsunday and Isaac local governments, industry bodies, and Traditional Owners. The collaborative process involved extensive consultation over an 18 month period.

The Plan represents the views and aspirations of the MWI community and assists in setting the framework and direction for future on-ground NRM activities that address the community's priorities. The Plan helps set direction for everyone involved in managing our natural resources, allowing all to continue to enjoy the benefits that these resources provide.

The NRM Plan sets a regional context by considering environmental, social, economic and political factors, while also identifying what the community would like to see the region look like in the future. To achieve this, a series of goals, outcomes and management actions are proposed.

The funding arrangements under the new National Landcare Programme (NLP) are focused on on-ground activities for local landscape that reflect the policy direction of the MWI NRM plan.

Caring for Our country

The Caring for Our Country NRM program commenced wrapping up in 2013-14 and was finalised in 2014-15. This program targeted innovation, capacity building, developing and promoting best management practices, addressing key threats to the region's biodiversity values, key threats on coastal biodiversity values and capacity building, and engagement with Indigenous people.

KEY ACHIEVEMENTS FOR 2014-15:

- **A hugely successful soil health symposium, covering sugarcane, grazing and horticulture, held in Mackay in 2015, that was attended by 100 landholders and agronomists.**
- **More than 100 graziers per year have been directly engaged in learning about new and improved management practices via their attendance at the Regional Grazing Forums.**
- **Multiple project partners have made both cash and in-kind contributions to the delivery outputs of the coastal program, improving the overall return on investment figures.**
- **Economic investment in local community groups and contractors to achieve activities in the coastal sub-project.**
- **A coordinated management approach between Reef Catchments, rural fire brigades, and landholders resulted in a cost effective, risk adverse, environmentally sound outcome for weed management (i.e. strategic burning and follow-up herbicide application dramatically reduced the quantity of herbicides required).**
- **The island sub-project has provided three meaningful engagement opportunities for Traditional Owners to reconnect with country, garner Traditional Ecological Knowledge, guide island management and conservation visits, and contribute to island conservation activities.**
- **Traditional Use of Marine Resource Agreement (TUMRA) development and general Traditional Owner Reference Group (TORG) business has improved delivery during the later stages of this program (this work is delivered in conjunction with the Great Barrier Reef Marine Park Authority).**

National Landcare Programme

The Australian Government National Landcare Programme (NLP) commenced in 2014-15. The key focus of this programme is to deliver against the strategic objectives of farmers and fishers to adopt better practices, engage and participate with the community, and restoration and rehabilitation of the environment.
The programme will also:

- **Improve the condition of habitat for species and ecological communities of Matters of National Environmental Significance (MNES) in the plains and ranges landscape.**
- **Address key threats on biodiversity values at the landscape level, in addition to specific threats acting on species and ecosystems identified by existing recovery plans, conservation advices, and threat abatement plans.**
- **Aim to increase the number of Indigenous people participating in and / or managing natural resource management initiatives.**
- **Support sustainable production within the regional industries of cane, grazing, horticulture, fisheries, and forestry.**
- **Facilitate an increase in improved land management and innovative practices.**

The ongoing implementation of this programme has a major emphasis on community engagement, Indigenous participation, capacity building and performance. One way of achieving this is through diverse stakeholders including Landcare and community groups, Traditional Owners, local councils, and landholders, having the opportunity to access NLP funding. The funding is designed to support important planning activity and on-ground works.

The programme seeks to put local people and groups at the heart of regional natural resource management, working in their own landscapes to address unique local priorities. It will deliver on the Australian Government priority to fund projects that protect, conserve and rehabilitate Australia's MNES, whilst also promoting sustainable agricultural production.

State programs

Reef Catchments Limited engaged local Landcare groups to assist in meeting targets and deliverables for state programs for pest and weed management, as well as monitoring identified wetlands in the Plane Creek and Keeley's areas. The financial and in-kind support provided to Landcare groups enables them to be highly involved in on-ground works, and to play a significant role in providing technical knowledge for these programs.

Grants

Under the Reef Programme Water Quality grants, approximately $1,400,000 was invested for landholders to improve farm management practices.

Stakeholders / engagement / partners

Reef Catchments' vision is to work collaboratively with the community to improve the condition of natural resources. To do this Reef Catchments partners with a range of stakeholders within and outside the region to progress on-ground actions, to enhance community interactions, provide a cost benefit to Reef Catchments operations, and build capacity and knowledge on sustainability within industries and the community.

Reef Catchments would not be able to deliver on its programs without the input, drive and dedication of its stakeholders. Reef Catchments looks forward to continuing to work with stakeholders and partners on delivering existing programs and identifying gaps in systems, and developing and implementing new programs for natural resource management outcomes.

Moving forward

A lesson from a number of programs is that there is a real need for better communication with landholders about the finer details of various trials. Landholders are excited to trial new things, however, they aren't researchers, they are time poor, and have a business to run, making it hard to communicate results and have the trial develop into a demonstration site. Reef Catchments will continue to work with industry and with the community to identify appropriate and relevant communication techniques to share success stories, changes in management practices, and innovation.

The 2015-16 financial year sees the conclusion of a number of Australian and Queensland government programs. During this period, Reef Catchments will review the success and learnings from these programs and identify improvements or linkages to identify new programs for the coming years.

The Australian and Queensland governments have a strong focus on improving water quality and the management of the Great Barrier Reef. Reef Catchments will continue to work with government and key stakeholders to identify and coordinate actions and adaptive responses to contribute to the protection and management of the Reef's long-term future.

Katrina Dent

OPERATIONS MANAGER

Reef Catchments will work with the Australian and Queensland governments and key stakeholders to identify and coordinate actions and adaptive responses for the protection and management of the Reef.

Corporate Shared Services **Manager Report**

During the financial year from July 2014 to June 2015 the Reef Catchments Corporate Services (CSS) team has continued to offer outstanding support to the operations of both tand Catchment Solutions Pty Limited. It has been my pleasure to lead the team through this period.

Supporting such a diverse and busy range of activities over different locations for two entities presents a significant workload and complexity. I commend the team on their dedication to the task at hand and the professionalism they have shown on a daily basis.

In the bookkeeping and accounting area we have dedicated a substantial amount of time and effort into housekeeping and improvement activity to ensure the most effective and efficient systems are in place. The improved timeliness and effectiveness of reports to management and the respective Boards has been well received. I am grateful to the team members involved for their support in these endeavours.
A number of important events have been held during the year by the Reef Catchments group, for example, the Grazing Forum, Members Field Day, and the Project Catalyst Forum. The corporate support provided by the team to those events in communications, procurement, logistics and administration are of the highest quality, as anyone who has attended these events can attest.

Continuous improvement is an important team goal noticeably supported by all team members and we do not rest on our laurels. During the coming year the focus areas will be: supporting the trial of a new field data capture application, ongoing enhancements to the two company websites, implementation of a budgeting/ reporting software application to further improve financial reporting, a comprehensive review of policy and procedure, implementation of systems to assist in improvement in the flow of corporate shared documents and the implementation of a new telephone system to assist in improved connectivity.

More recently the team has grown, in response to the growing support needs of the group, with the appointment of an additional part-time administrator, Linda Moffatt, a dedicated WHS and quality assurance officer, Peter McBride, and a part-time website administrator, Diana Kupke. Peter's appointment highlights the priority placed on the safety of employees by the management and directors of both organisations in the Reef Catchments group. We welcome Linda, Diana and Peter to our team.

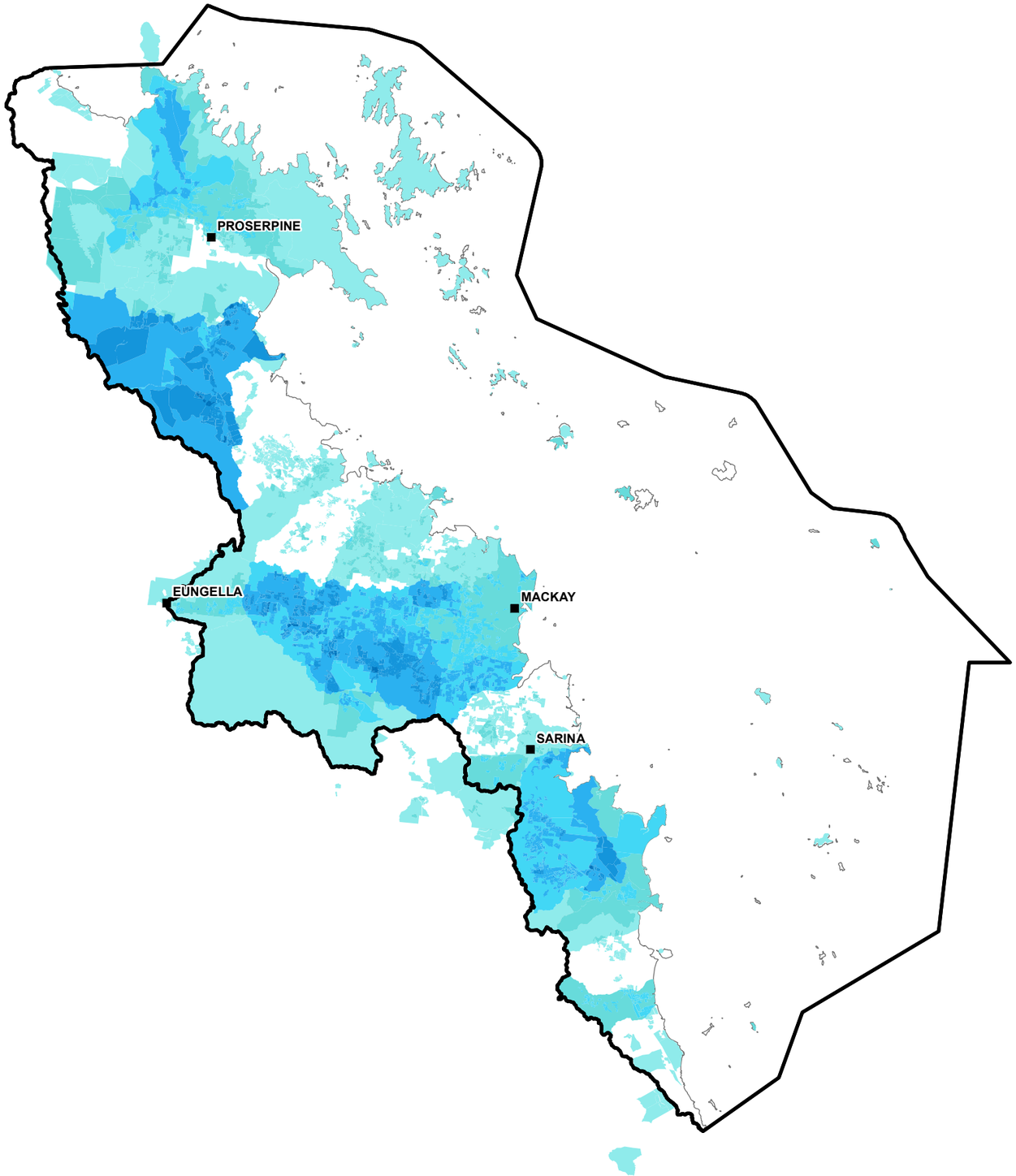
I thank each and every member of the Corporate Shared Services team for their support and diligence in the 2015 financial year. Thank you also to all staff, directors, members and suppliers with whom we have worked over the past year. We look forward to the challenges of supporting another busy and successful year ahead for the Reef Catchments Group.

Sally Young

CORPORATE SHARED SERVICES MANAGER

I thank each and every member of the Corporate Shared Services team for their support and diligence in the 2015 financial year.

REEF CATCHMENTS CORPORATE SHARED SERVICES TEAM
Back, from left: Rachel Clancy, Jaime Newborn, Debbie Legge, Peter McBride, Joanne Gibbs, Sally Joy, Linda Moffatt.
Front, from left: Rochelle Gordon, Sally Young (Corporate Shared Services Manager), Diana Kupke and Simone White.



Regional **Impact Map**

Reef Catchments has a strong presence in the overall Mackay Whitsunday Isaac NRM region and community, with projects covering over 800,000 hectares from a subcatchment to landholder level.

The Regional Impact map (opposite page) depicts all significant projects undertaken in the Mackay and Whitsunday region since 2008, providing an overview of the geographic footprint and reach of Reef Catchments. Shaded areas indicate zones where activity has occurred at a high to very high level, encompassing multiple projects. These areas of impact also reflect the prioritised and targeted approach which exerts NRM effort to where it is most needed and effective in the region.

PROJECTS REPRESENTED INCLUDE:

- Coastal including beach zones, mainland and islands
- Grazing
- Paddock to Reef research and monitoring
- Pest and weed management
- Reef Programme projects (formerly Reef Rescue) including farm, chemical, nutrient, soil & water projects
- Systems and landscape repair
- Water quality improvement

CLIMATE **PLANNING**

CLIMATE

The NRM Planning for Climate Change project is focused on the development of a Climate Sustainability Plan. The goals of the plan are to capture strategies and actions from regional stakeholders to move to a more sustainable future in a changing climate. Identification of opportunities for carbon sequestration that also provide connectivity for biodiversity and improved landscape resilience will be identified. The development of the Plan will be in partnership with the regions' stakeholders and will incorporate a range of change drivers.

With thanks to this program's valued 2014-15 partners and contributors.

Traditional Owners, Australian Government, Queensland Government, Great Barrier Reef Marine Park Authority, Mackay Conservation Group, Canegrowers, Sugar Productivity Services, Landcare (Whitsunday, Pioneer, Sarina), Mackay Sugar, Wilmar, Birdlife Mackay, Mackay Tourism, Turtlewatch, Local government (Mackay, Isaac, Whitsunday), Agforce, Anglo Coal, James Cook University, CSIRO.

NRM PLANNING FOR CLIMATE CHANGE

The program commenced in June 2013 with funding provided by the Australian Government and is due for completion in May 2016.

PROGRAM REPORT 2014-15

The climate projections report (released February 2015) provided the opportunity to commence sector-specific engagement with regional stakeholders to explain changing climate forecasts, and to investigate and discuss potential impacts on the environment, communities and industries. This engagement has allowed for important insight to be gained around the diverse views of regional stakeholders on economic, social, cultural and environmental sustainability in a changing climate. Work that has been undertaken in this program was presented at two national conferences - the National Climate Change Adaptation Research Facility (NCCARF) biannual conference, and the Ecological Society of Australia (ESA) conference in September 2014.

This year also saw the development of climate projections for 2030, 2050 and 2070, using an online tool developed by CSIRO/ BOM. Projections were prepared for different climatic zones in the Mackay Whitsunday Isaac (MWI) NRM region, for the areas of Mackay, Proserpine, and Eungella. However confidence by climate scientists in these projections are moderate as the direction of rainfall change for northern Australia is unclear. Nonetheless, there is very high confidence around ongoing increases in temperature, number of hot days, and extreme events which are already impacting on sustainability for the region. This information was presented in a multi-stakeholder workshop in June 2015. Significantly, the workshop provided a platform for diverse regional stakeholders to collaborate to develop actions, priorities, and timeframes that they consider important for sustainability in a changing climate.

MOVING FORWARD

A number of activities are planned to complete the project including sector-specific consultation to refine strategies, actions, timeframes, and responsibilities. A biodiversity workshop will be conducted with the intent of engaging regional stakeholders to spatially identify important areas for biodiversity, increased connectivity, and increased resilience in the local landscape. A draft Climate Sustainability Plan will be released for consultation early in 2016, with the final Plan to be delivered to the Australian Government in May 2016.

A number of activities are planned to complete the project including sector specific consultation to refine strategies, actions, timeframes, and responsibilities. A draft Climate Sustainability Plan will be released for consultation in the first half of 2016.

Funding acknowledgement: **This project is a Reef Catchments (Mackay Whitsunday Isaac) initiative, through funding from the Australian Government.**

ENGAGING THE COMMUNITY ON CLIMATE

A stakeholder event was held in June 2015 to progress previous workshops focused on climate change and future sustainability for the MWI NRM region. Participants included three levels of government (local, state, and federal) alongside conservation, Traditional Owner, agriculture, education, recreational fishing, and community groups.

The day began with acknowledgement of previous workshops and actions/strategies that had already been developed. This was necessary for those participants who had not been involved in the process previously to ensure moving forward in further development of new priority collaborative strategies and actions.

An update on the new climate projections released by CSIRO/ BOM was provided with additional information on what these projections may mean for communities, industries, and biodiversity.

Participants then chose issues to further develop actions and priorities on specific themes that included:

- Traditional Owner roles in planning/management – valuing and respecting Cultural Heritage.
- Biodiversity, connectivity across the landscape – marine and the marine terrestrial interface and monitoring.
- Protection of arable land for agriculture.
- Value-adding from industry by-products and industry innovation.

Information collected from regional stakeholders will form the basis of a Climate Sustainability Plan which will be released for comment early next year.

An ongoing outcome from all workshops has been improved understanding of the issues relevant to a changing climate faced by different stakeholders, as well as agreement on priorities for moving to a more sustainable future for the region.

WATER QUALITY **IMPROVEMENT PLAN (WQIP)**

The original Mackay Whitsunday Water Quality Improvement Plan (WQIP) was developed in 2008. In 2014 the updated WQIP was developed and a draft was released. The purpose was to update the original document with further information and data. Specifically, more information was developed and included on ecosystem health and corresponding targets. A significant consultation component was involved in the update and diverse stakeholder collaboration has been an integral part of the process.

With thanks to this program's valued 2014-15 partners and contributors.

The WQIP update included the input of the Urban Think Tank, the Ecosystem Think Tank, the regional working groups for the agricultural sector, as well as consultation with community and government stakeholders. The comments and contributions from all those who took part in the consultation have made the WQIP a more useful and meaningful plan for the future.

The original WQIP covered the implementation period of 2008-2014. The update of the WQIP began in 2014, and was finalised in late 2015, following a period of public consultation. The updated WQIP prioritises activities to be implemented for the 2014-2021 period, and includes water quality and ecosystem health targets for 2021, as well as objectives for 2050.

PROGRAM REPORT 2014-15

During the period from July 2014 to July 2015 the bulk of the WQIP update was undertaken. Current (as of 2014) water quality and ecosystem health was assessed and compared to the targets for 2014 set in the previous WQIP. The current condition assessments also led to the development of water quality and ecosystem health targets to be met by 2021. The majority of the 2050 objectives remain the same.

During the updating process, multiple meetings were held with the Urban Think Tank, the Ecosystem Think Tank and the regional working groups for their input and review.

The draft 2014 WQIP update was provided to the Australian Government Department of Environment in December 2014 for review. The draft WQIP was then further updated and refined, before being released for public consultation in June and July 2015.

All submissions received on the WQIP were tracked to be addressed. As of July 2015, the submissions were still being analysed, and responded to, with the final WQIP to be released late 2015.

Significantly, the release of the WQIP update has included:

The introduction of new ecosystem health assessments and the development of targets.

The update of water quality current condition and targets for 2021.

Ongoing consultation with Think Tanks, regional working groups, and the public.

The WQIP main report is accompanied by:

- **Eight (8) Receiving Waters reports.**
- **Thirty-three (33) individual Catchment Management Area Reports for each of the region's subcatchments.**

MOVING FORWARD

The WQIP, once finalised, will be the major tool in the prioritisation of activities within the region. Distribution will include a functional online web-book, providing a platform to incorporate updated elements of the WQIP during the 2014-2021 period as new data becomes available.

The 2014-2021 Mackay Whitsunday Water Quality Improvement Plan (WQIP) aims to ensure water quality is suitable for human uses and aquatic ecosystem protection. This plan builds upon the 2008 WQIP and describes management interventions for rehabilitation of priority habitats and reduction of pollutant loads from diffuse and point sources. If resourced and implemented, this plan will improve the water quality and ecological health of the waterways, estuaries, wetlands, and the Great Barrier Reef lagoon within the Mackay Whitsunday region. The WQIP, once finalised, will be the major tool in the prioritisation of activities within the region.

Funding acknowledgement: **This project is a Reef Catchments (Mackay Whitsunday Isaac) initiative, through funding from the Australian Government.**

Water Quality Improvement Plan

Mackay | Whitsunday | Isaac

2014 - 2021

REEF CATCHMENTS

Australian Government

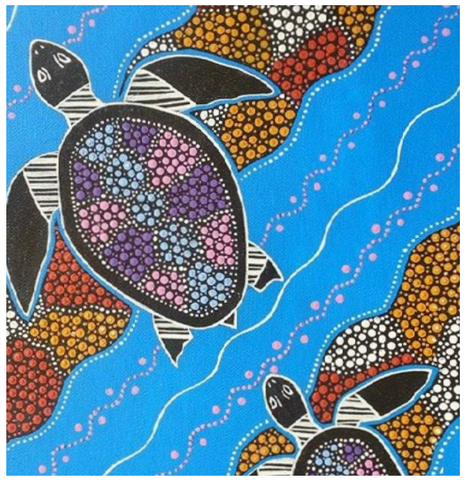
INLAND and BIODIVERSITY

INLAND AND SUSTAINABLE AGRICULTURE

The Inland sub-project, run by Reef Catchments, is a multi-species and ecosystem recovery project in the plains and ranges landscape of the Mackay Whitsunday Isaac (MWI) region. Recovery will be accomplished through a range of diverse landscape level activities that aim to address key threats on biodiversity values, in addition to specific threats acting on species and ecosystems identified by existing recovery plans, conservation advices, and threat abatements plans.

With thanks to this program's valued 2014-15 partners and contributors.

Local landholders, local governments, Queensland Department of National Parks, Sport and Racing, Rural Fire Service Queensland (RFSQ), Carmila Rural Fire Brigade.



This program commenced September 2013 and was completed June 2015.

PROGRAM REPORT 2014-15

Enhancing Indigenous people's capacity for natural resource management.
The 2014-15 activities were aimed at embedding good structure and governance arrangements around the Traditional Owner Reference Group (TORG), developing a project for Traditional Owners to run cultural awareness days in schools, reviewing the NRM Plan, and progressing a Traditional Use of Marine Resources Agreements (TUMRA) for the region. In October 2014 members of the Koinjmal, Yuwi-bara, Ngaro, and Gia groups and Reef Catchments staff convened at Central Queensland University for a TORG meeting. This provided a valuable forum for Traditional Owners to discuss their concerns about cultural awareness and perceptions within the broader community about local Traditional Owner groups, the connection of young people to their Indigenous heritage or their country, and the capacity and desire of groups like the TORG to address these concerns.

Conserving and protecting species and ecosystems.
Illegal fires pose a significant threat to biodiversity and personal property. Locally, government owned land north of Kuttabul was exposed to this. Reef Catchments provided advice and collaboration for a fire application at this site. The resulting controlled fire provided significant hazard reduction outcomes, with the additional environmental benefit of more than 7,000 ha of lantana removal.

Collaborative baiting program for pest animals.
Feral pigs compete with, and prey on, a wide range of plant and animal species, and contribute to the degradation of ecological function particularly in grasslands and drainage lines through rooting and wallowing. Disturbance of the soil and vegetation can affect ecosystem processes, contribute to weed spread, and affect water quality.

A baiting program was implemented in collaboration with the Department of National Parks, targeting areas that contained primarily rainforests, vine thickets, eucalyptus forests and woodlands on hill slopes. Rainforests contain the highest percentage of threatened plants and threatened frog species within the region, and provide habitat for many other threatened and native species. This year the control was primarily aimed at core habitat areas for the Eungella dayfrog (*Taudactylus eungellensis*) and Eungella tinkerfrog (*Taudactylus liemi*) as well as many threatened plant species found in the rainforests of the uplands.

The area baited under this project significantly expanded the area of control to the south of previous target areas covering areas in, and adjacent to, Cathu and Macartney State Forests which include both private and public lands.

The area covered by funding from this project was 25,566 ha. To monitor the impact of the baiting program, four camera traps were installed in strategic locations of Eungella dayfrog and Eungella tinkerfrog habitat, which were known to be damaged by pigs. The traps were activated one month prior to and one month post baiting. Results of the baiting showed a 36 percent reduction in pig activity in those areas. In addition, the pigs displayed a behavioural change and were no longer active during the day. This change could be a reaction to the baiting or the presence of the helicopter distributing baits, which possibly disturbed the pigs normal behaviour.

12 kilometre fire break.
A fire break was negotiated with landholders and government departments to protect 2,171 ha at Mount Blackwood. Fire sensitive species within the break perimeter include the Mt Blackwood Holly, Black Ironbox *(Eucalyptus raveretiana*), *Neisosperma kilneri*, and *Omphalea celat*a. The area also provides habitat for the Northern quoll and Black-throated finch. Establishing the break prevents high intensity fire impacting these species and their habitat. The site was monitored throughout the wet season and burning of adjacent fire adapted areas will occur once conditions allow. This activity was coordinated by Reef Catchments and implemented by Rural Fire Service Queensland (Mount Blackwood) and landholders.

MOVING FORWARD

The program is now completed. Valuable learnings and outcomes from this program can now be built on and applied to future projects and proposals for regional NRM works.

Funding acknowledgement: **This project is a Reef Catchments (Mackay Whitsunday Isaac) initiative, through funding from the Australian Government.**

PROGRAM HIGHLIGHTS

- More than 2,171 ha of threatened species habitat and threatened ecological communities have been protected and maintained.
- Two collaborative pest baiting programs have occurred covering a total of area 215,912 ha.
- 7,098 ha of lantana was controlled using fire.
- Development of biodiversity priority area mapping for the MWI NRM region.

A fire break was negotiated with land holders and government departments, and protects 2,171 ha above Mt Blackwood. Fire sensitive species within the break perimeter include the Mt Blackwood Holly, Black Ironbox (*Eucalyptus raveretiana*), *Neisosperma kilneri*, and *Omphalea celata*. The area also provides habitat for the Northern quoll and Black-throated finch.

MACKAY-WHITSUNDAY **HEALTHY RIVERS TO REEF PARTNERSHIP**

WATER AND WATERWAYS

The condition of our waterways and the Great Barrier Reef has been declining in recent decades, influenced by a wide range of short and long-term pressures. Governments, industries and communities are committed to working together to address these pressures and improve the future health of our region's valuable water resources. The Mackay-Whitsunday Healthy Rivers to Reef Partnership brings together Partnership representatives to focus on the health of five regional basins and adjacent coastal marine areas of the Great Barrier Reef. The Partnership supports the development of an annual Mackay-Whitsunday waterway health report card, based on rigorous independent science and straightforward public reporting, providing the community with the information needed to make informed decisions around waterway health and management.

With thanks to this program's valued 2014-15 partners. The Partnership currently consists of 28 member organisations, listed below.

The Mackay-Whitsunday Healthy Rivers to Reef Partnership launched October 2014. The Partnership brings together 28 diverse stakeholders to focus on the health of the region's major waterways, taking a whole-of-catchment approach that encompasses basins, rivers, estuaries and adjacent coastal marine areas of the Great Barrier Reef. The Partnership supports the development of an annual Mackay-Whitsunday waterway health report card to provide results on environmental and community social values of waterways, as well as stewardship by industry.

The Partnership will launch the first Mackay Whitsunday Healthy Rivers to Reef Partnership Pilot Report Card in October 2015. The report card provides insight into regional strengths and key areas of concern in the context of waterway health, highlighting the need for more action to be taken and identifying where management activity should be prioritised.

The region covers a large area from Home Hill in the north to Flaggy Rock Creek in the south, and includes the freshwater and marine environment (to the eastern boundary of the Great Barrier Reef Marine Park). The five basins are the Don, Proserpine, Pioneer, O'Connell and Plane basins.

PROGRAM REPORT 2014-15

The design of the pilot report card program was developed between October 2014 and July 2015. The Partnership's vision and objectives were developed, followed by report card objectives. The Partnership conducted a thorough assessment of existing monitoring programs in the region, which included determining which programs were responsible to collect relevant information. Considerations included current regional drivers and pressures, the resulting impacts, and identification of what should be assessed. The assessment of existing programs included the frequency of data collection, currency and the likelihood of continuing. The Partnership is committed to ensuring the nesting and alignment of the report card with other catchment and Reef monitoring and management activities. These include the Reef 2050 Long-Term Sustainability Plan, the Great Barrier Reef Marine Park Authority (GBRMPA) Reef Outlook Report and associated integrated monitoring and other reporting programs such as Paddock to Reef.

Indicators used were chosen based on whether:

They were clearly linked to a report card objective.

They could easily be used to provide a report card score.

Other programs and report cards had used this indicator (for the purposes of consistency between programs).

MOVING FORWARD

The release of the pilot report card will represent the first time a Partnership in the region has brought together wide-ranging sectors for a collaborative approach to data analysis. The pilot report card will highlight any key gaps in activity, data and knowledge that require action moving forward. The report is a first step and will provide an important baseline for the community and regulators to track progress over time and respond appropriately in areas where improvements are most needed.

By doing more with the information from existing monitoring programs, redundancies and gaps can be identified to provide better information to the community in an effective way. The report card will be an important tool in the prioritisation of activities that maximise regional waterway improvements and reduce negative water quality impacts on the Great Barrier Reef moving forward.

PARTNERSHIP MEMBERS 2015:

- Central Queensland University
- Conservation Volunteers Australia
- CSIRO
- Dalrymple Bay Coal Terminal
- Great Barrier Reef Marine Park Authority
- Growcom
- Isaac Regional Council
- CANEGROWERS Mackay
- Mackay Conservation Group
- Mackay Recreational Fishers Alliance
- Mackay Regional Council
- Mackay Sugar
- Mackay Tourism Limited
- North Queensland Bulk Ports Corporation Ltd
- NQ Dry Tropics Ltd
- Pioneer Catchment & Landcare Inc
- Queensland Farmers' Federation
- Queensland Resources Council Ltd
- Reef Catchments Limited
- Regional Development Australia
- Resource Industry Network
- Sarina Landcare Catchment Management Association Inc
- State of Queensland acting through the Department of Environment and Heritage Protection
- Whitsunday Catchment Landcare Ltd
- Whitsunday Charter Boat Industry Association
- Whitsunday Regional Council
- Whitsunday Regional Organisation of Councils
- Whitsundays Marketing and Development Ltd

Funding acknowledgement: **This project is supported via the contributions of Mackay-Whitsunday Healthy Rivers to Reef Partners.**

HEALTHY RIVERS TO REEF PARTNERSHIP
MACKAY-WHITSUNDAY

Healthy rivers and Reef contributing to a prosperous and iconic region where people visit, live, work and play.

LAUNCH OF FIRST PILOT REPORT CARD FOR MACKAY-WHITSUNDAY WATERWAY HEALTH

The Healthy Rivers to Reef Partnership pilot report card was launched in October 2015.

Through the pilot report card, the community will be provided with ongoing, relevant information necessary to secure a strong future and the long-term health of the Mackay- Whitsunday waterways and the adjacent area of the Great Barrier Reef.

The Healthy Rivers to Reef Partnership represents the first collaboration of diverse sectors focused specifically on waterway health in the Mackay-Whitsunday area, consisting of 28 organisations working together to share leading and transparent independent science.

From government, mining and ports, to agriculture, fisheries, tourism, Traditional Owners and environmental and NRM groups - the Partnership brings together organisations and information from a wide range of sectors for a collaborative approach to assessing waterway health and identifying management priorities.

Collectively, the group has access to regional data and information representing over $4M of investment in monitoring and research programs.

This approach ensures insight into whole-of-catchment waterway health, from basin to estuary and out to the marine environment and adjacent Great Barrier Reef.

With diverse organisations coming to one table, it is also testament to a high level of commitment to waterway health from the wider Mackay-Whitsunday region.

Still in the early phases, the pilot report card will clearly highlight missing links in water quality monitoring and research, while also identifying regional strengths and key areas of concern.

For more information visit:
www.healthyriverstoreef.org.au

TRADITIONAL OWNER ENGAGEMENT

TRADITIONAL OWNERS

The Indigenous sub-project, run by Reef Catchments, is a capacity building project that facilitates Traditional Owner involvement in natural resource and cultural heritage management activities in the Mackay Whitsunday Isaac region. Through the Traditional Owner Reference Group (TORG), facilitated by Reef Catchments, Traditional Owners are able to engage with key stakeholders such as regional councils, Queensland government, industry groups, and education institutions, providing advice in support of an all-encompassing and inclusive decision-making process.

With thanks to this program's valued 2014-15 partners and contributors.

Reef Catchments acknowledges and thanks the Traditional Owners of the Mackay Whitsunday region: Gia, Koinjmal, Ngaro and Yuwi-bara. Stakeholders involved in TORG projects in 2014-15 also include GBRMPA, CSIRO, NPSR, Tropical Indigenous Ethnobotany Centre (TIEC).

> This program aims to enhance Indigenous people's capacity to undertake and be a part of Natural Resource Management (NRM) initiatives in the Mackay Whitsunday Isaac (MWI) region by engaging Traditional Owners (TOs) to exchange knowledge and be actively involved in the decision-making process around the management of Sea-Country and terrestrial landscapes with traditional and cultural significance. As well as supporting TOs to participate in the planning and delivery of NRM investment, Traditional Ecological Knowledge is applied and documented as culturally appropriate in delivering NRM outcomes.

Ongoing Indigenous engagement aims to ensure TO opinions, beliefs and values are represented when key sites that consider cultural as well as environmental and economic benefits are identified and prioritised for rehabilitation activities.

PROGRAM REPORT 2014-15

Reef Catchments, in collaboration with the Traditional Owners of the region, created a Traditional Owner Reference Group (TORG) for the MWI region in March 2014. Reef Catchments supports this group to increase the capacity and involvement of TOs in diverse NRM activities and issues. The TORG has revisited the TO engagement protocols and promoted these through the region's stakeholders. The MWI TORG is now represented on the Local Marine Advisory Committee and the Mackay-Whitsunday Healthy Rivers to Reef Partnership.

Through consultation, the TORG was strongly involved in the development of the new MWI Natural Resource Management Plan 2014-2024, which launched formally February 2015. This formalised a process for similar activities in a Community Engagement Strategy moving forward, helping ensure the TORG remain a key part of the formal consultation process for major projects and investment in NRM across the region. The TORG has also provided the region's TOs with a platform to be involved in work being done in the areas of climate adaptation and mitigation planning.

The capacity of TOs to access and deliver significant funding has been limited, however it is increasing as the TORG becomes more effective and influential. Currently, investment through most Reef Catchments projects includes a significant proportion of delivery through Landcare, land managers, and industry groups.

The development of Reef Catchments' Looking After Local Landscapes (small grants) program under National Landcare Programme (NLP) funding will increase the accessibility of funding to all community groups including TOs.

MOVING FORWARD

Regional NRM organisations have a central role in supporting Indigenous people and organisations to participate in the delivery of NRM and to contribute to wider economic and social benefits.

This project is underpinned by engagement of both TOs independently, and facilitating engagement of stakeholder groups by TOs.

As a result of this project, Indigenous people will have increased capacity to take part in natural resource management planning and activities. In addition, cultural heritage information and priorities will be integrated to benefit NRM and biodiversity conservation decisions in this area. This will assist Indigenous people to plan and deliver NLP investment, by including cultural values in prioritisation frameworks.

Stakeholders will be encouraged to acknowledge Indigenous Ecological Knowledge, important cultural locations and species, and the values and aspirations of local TO groups as a result of the project activities. TORG meetings will continue to seek opportunities to build capacity and share cultural heritage values to increase awareness of Indigenous values amongst the wider community and other Indigenous people, including Torres Strait Islanders. Representation of TOs on committees, boards and advisory groups will ensure that cultural values are incorporated in NRM activities and that on-ground activities consider the restoration and protection of culturally significant sites.

> *Funding acknowledgement:* **This project is a Reef Catchments (Mackay Whitsunday Isaac) initiative, through funding from the Australian Government.**

As a result of this project, Traditional Owners should feel their perspectives and culture are valued and respected, and that their people are included in NRM through genuine relationships and a meaningful process of engagement.

PROJECT HIGHLIGHTS

JUL 2014: TORG representatives presented at the Ecological Society of Australian and National Climate Change Adaptation Research.

OCT 2014: TOs were invited to participate in the ReefBlitz Citizen Science event.

OCT 2014: TORG was held. Topics included:

- Redevelopment of the Terms of Reference for the TORG.
- Strengthened membership protocols and governance arrangements in preparation for Traditional Use of Marine Resources Agreement (TUMRA) development.
- Refinement and confirmation of the vision, goals, and outcomes of the NRM plan sections relevant to TOs.
- Development and refinment of a plan to deliver TO aspirations, goals and cultural protocols to the younger generation through school presentations.

TORG meetings will continue to seek opportunities to build capacity and share cultural heritage to increase awareness of Indigenous values amongst the wider community.

NOV 2014: Hay Point Connecting to Country field excursion.

FEB 2015: TORG was held. Topics included:

- Development of TORG logo.
- TUMRA progressed with GBRMPA and Local Marine Advisory Committee.
- TO involvement in the planning process of the Water Quality Improvement Plan (WQIP) and the Mackay-Whitsunday Healthy Rivers to Reef Partnership.
- Assignment of signatories for the NRM Plan launch from each of the Mackay Whitsunday region's TO groups (Yuwi-bara, Gia, Ngaro and Koinjmal).

COASTS AND **COMMUNITIES**

COASTS AND BIODIVERSITY

The Coasts and Communities program works in partnership with key land managers and coastal communities to deliver strategic coastal management initiatives. Program activities focus on public coastal land management and endeavour to build resilience in natural coastal systems which are increasingly under pressure from development, climate change, population growth, and recreational use.

With thanks to this program's valued 2014-15 partners and contributors.
Queensland Parks and Wildlife Service, Department of Transport and Main Roads, Department of Environment and Heritage Protection, North Queensland Bulk Ports, Great Barrier Reef Marine Park Authority, Mackay Regional Council, Isaac Regional Council, Whitsunday Regional Council, Pioneer Catchment and Landcare Group, Whitsunday Catchment Landcare, Sarina Landcare Catchment Management Association, Birdlife Mackay, Mackay & District Turtle Watch Association, Eco Barge, Wild Mob.

A central component of the Coasts and Communities program is the development of site-specific beach management plans. These plans are developed through a collaborative effort between Reef Catchments and a number of stakeholders, primarily land managers, environmental groups, and the local community. The management plans identify threats to each beach and propose conservation management activities required to ensure the maintenance and improvement of natural recreational values along the coast. Each management activity is then prioritised for implementation using the best available data and local expert knowledge.

The focus of Reef Catchments on-ground funding for the Coastal program during 2014-15 has been on activities which enhance biodiversity and protect matters of national environmental significance in the coastal zone, and to repair coastal ecosystems in urban catchments.

Reef Catchments has been working collaboratively with Mackay Regional Council since 2009 to deliver the Coasts and Communities program. The past year has seen Reef Catchments extending efforts to the Isaac and Whitsunday regions, working with the respective regional councils to deliver the Coasts and Communities program.

PROGRAM REPORT 2014-15

In 2014-15, management activities have occurred across 13 beaches in the Mackay Whitsunday Isaac region through Coastal Caring for Our Country and National Landcare Programme (NLP) funding. Activities have included:

More than 1015 ha of weed control to remove invasive species in endangered coastal ecosystems.

Revegetation using 7700 native plants to replace weed species, assist dune stabilisation, enable natural regeneration, and provide additional habitat for native wildlife.

More than 2 km of coastal fencing across the Mackay region to protect coastal ecosystems and formalise access points.

More than 1800 kg of rubbish has been removed from beaches and coastal reserves. The majority of these activities have occurred across 19 beaches in the Mackay Regional Council area. Mackay Regional Council staff, local contractors, community groups, and community volunteers have all contributed to the delivery of these activities, with support from the Mackay Regional Council Natural Environment Levy and Reef Catchments through the Australian Government. Monitoring of these sites is ongoing to enable continued review and improvement of program activities.

Work with Whitsunday Landcare on Whitsunday Council beaches and work with Sarina Landcare on the Isaac Council beaches has also contributed to the program's strong achievements. Collaborations with the Whitsunday and Isaac councils are anticipated to grow in the coming year, assuring collective efforts towards sustainable coastal management across the region are streamlined.

As the name suggests, community education and engagement is a fundamental component of the Coasts and Communities program. The Coastcare volunteer program in the Mackay region provides meaningful engagement opportunities for local residents to learn about and contribute to coastal management initiatives at their local beaches. The Coastcare model will be adopted in the coming year for the Isaac and Whitsunday coasts, providing communities across the region with the opportunity to increase capacity to contribute to coastal conservation initiatives.

During the past year, 21 Coastcare activities were held across 7 beaches, with 316 volunteers contributing 521 hours to improving the condition of their coast. A suite of themed field days and presentations, radio interviews, social media, and media releases completes the package of coastal community education and engagement activities in the region.

During 2014-15, the coastal program worked with 15 organisations to deliver an integrated program of coastal management to mobilise resources and to build capacity for resilient and healthy coastal ecosystems into the future.

MOVING FORWARD

Moving forward, this program aims to:

- **Instigate development of coastal management guidelines for the Whitsunday and Isaac regions.**

Coastal management plans identify the key conservation and management issues in the coastal zone and help guide future management decisions and activities for coastal land. Conservation and other management issues considered include: native vegetation and vegetation zonation, public access, wildlife, cultural heritage erosion, climate change, non-native vegetation and waste dumping.

- **Expand the Coastcare program across the broader region to encompass Isaac and Whitsunday Council coastal areas.**

Funding acknowledgement: **This project is a Reef Catchments (Mackay Whitsunday Isaac) initiative, through co-funding from the Mackay Regional Council and the Australian Government. Local governments (Mackay, Whitsunday and Isaac) also contribute significant in-kind support to this program.**

FAR BEACH NORTH (QUOTA PARK REVEGETATION)

Significant weed control and revegetation works have been undertaken at Quota Park (Mackay) with more than 3500 native plants over some 2.5 ha.

Revegetation of the area has reinstated coastal vegetation, buffered the terrestrial environment from storm tides and wind, and reduced mowing costs (presently $20,000 per year).

In addition, a 120 metre fence has been installed to define the southern boundary of the revegetation area and to direct pedestrian access to the beach, helping minimise impact on sand dunes.

ISLANDS **AND MARINE**

COASTS AND BIODIVERSITY

Through collaborations with island land managers and other organisations, the Island Program aims to deliver on-ground activities which improve the condition of ecosystems in line with conservation prioritisation frameworks. With a focus on community engagement, the Island Program concurrently works to raise awareness and understanding of the value of the unique island ecosystems in the region, and promotes the significance of works to preserve valuable and iconic marine assets.

With thanks to this program's valued 2014-15 partners and contributors.

Wild Mob, Eco Barge , Queensland Trust for Nature, Queensland Parks and Wildlife Service, Great Barrier Reef Marine Park Authority.

The Mackay Whitsunday Isaac region contains 145 islands - almost 25 percent of all continental islands along the Queensland coast. All but 18 of these islands are protected as national parks.

Island communities support a disproportionately large amount of biodiversity for their small land area relative to the mainland. Across Australia, almost one-third of all threatened species are protected by islands.

The isolation of islands, in addition to their ecological value, ensures ongoing works and the maintenance of conservation actions remain viable in the long-term.

Through ongoing management of the Island Program, Reef Catchments contributes to protecting and enhancing island ecology whilst continuing to raise the profile of islands as meaningful contributors to conservation, social, and economic sustainability.

Island Program activities are funded by the Australian Government and delivered in partnership with multiple stakeholders including Wild Mob, Eco Barge, Queensland Trust for Nature and the Great Barrier Reef Marine Park Authority.

PROGRAM REPORT 2014-15

During 2014-15, the Island Program supported conservation works on more than six islands including Brampton, Penrith, South Percy, Middle Percy, Goldsmith, and Avoid islands.

Key outcomes include:

Over 33 ha of weed control targeting invasive species has been undertaken by Wild Mob volunteers as part of their conservation expedition program, working to protect island ecosystems and allow for recruitment of native vegetation.

57 volunteers have contributed their time over the past year, working with Wild Mob and Eco Barge to remove 1.67 tonnes of marine debris from over 160 ha of the region's coastline and islands.

These programs play an important role in enhancing the capacity of individuals to protect the region's iconic and diverse islands and marine life, while fostering a positive sense of community.

During 2014-15, the Island Program supported conservation works on more than six islands including Brampton, Penrith, South Percy, Middle Percy, Goldsmith, and Avoid islands.

MOVING FORWARD

Reef Catchments is collaborating with partner organisations to develop an island prioritisation methodology which will enable streamlined and targeted on-ground works which offer the maximum ecological benefits.

Ongoing research into conservation planning initiatives for islands continues, with effective methodologies discovered through research or collaboration with our partners, to be adapted and implemented as appropriate to ensure maximum return for resource investment.

The Island Program will continue to focus on protecting and restoring island ecosystems, raising the profile of islands as biodiversity hotspots, and working in partnership with multiple stakeholders in the coming year.

Island Arks Symposium

Preparations are now well underway for the fourth Island Arks Symposium to be held on Norfolk Island early in 2016.

As momentum towards island management continues to build, the symposium offers a forum for the formation and ongoing development of partnerships. The symposium is a unique opportunity for those working in the island conservation space to collaborate, brainstorm, strategise, and work together towards the long-term sustainability of Australia's unique islands and the industries they support.

Funding acknowledgement: **This project is a Reef Catchments (Mackay Whitsunday Isaac) initiative, through funding from the Australian Government.**

STUDENTS OF THE SEA | MARINE CLASSROOM PROGRAM

The Marine Classrooms Program is a partnership project of Reef Catchments and Wild Mob that aims to reconnect students in the greater Mackay region with the coast and marine environment.

The philosophy of the program is that science should be taught by experience, allowing local students the opportunity to learn on the Great Barrier Reef itself - the best marine classroom in the world.

Wild Mob and Reef Catchments have developed the program to deliver an education experience that cannot be compared to any other. Students visit their local beach to learn about coastal conservation, in addition to a four day field trip on Brampton Island where they learn about coastal conservation, marine ecology and sustainability from qualified scientists. During their time exploring both land and sea, students develop a functional understanding of, and a first-hand appreciation for, the coast and marine environment.

The activities offered by the Mackay Marine Classroom have been developed to align with senior studies including science, marine science, biology, earth science and geography syllabuses. In this way the program remains relevant and is able to engage students from multiple disciplines.

MACKAY MARINE CLASSROOMS 2014-2015

81 students and 10 staff from four schools in the local Mackay region participated in the project.

Over 5 ha of beach scrub in Western Bay was restored and maintained by students through progressive trips throughout the year, with significant natural recruitment occurring as a result of the student's efforts.

Students removed more than 250 kg of marine debris from Brampton Island, Sarina Beach and Harbour Beach. This data was recorded and uploaded on to the Tangora Blue database.

TILAPIA
STOP THE SPREAD

WATER AND WATERWAYS

The exotic fish tilapia are listed in the world's 100 worst invasive species and represent a critical threat to Australia's native aquatic biodiversity. The spread of tilapia in Queensland, including to Mackay in 2014, has seen several catchments adopt strategies and activities as part of a wider 'Stop the Spread' program, which aims to reduce current tilapia numbers and limit the spread to wider catchment areas. A major component of this project is community engagement, education and awareness raising, as unidentified tilapia are often moved and distributed by members of the public. Other activities have included removal (via electrofishing) and monitoring of predator (barramundi) diets, with stomach flushing to evaluate the effectiveness of predatory control.

With thanks to this program's valued 2014-15 partners and contributors.

This project relies on excellent community engagement and support and is an outstanding example of successful collaboration with diverse stakeholders, notably: community, local businesses (fishing and tackle outlets), recreational fishing groups (Mackay Recreational Fishers Alliance Inc), Fish stocking associations (Mackay Area Fish Stocking Association), environmental groups, regional NRM groups, regional councils, Queensland government, Australian government, Fisheries Queensland.

PREVENTING THE SPREAD OF TILAPIA IN SOUTHERN GREAT BARRIER REEF CATCHMENTS

Long-term outcomes of this project aim to limit the spread, and, where possible, to manage incursions of the invasive fish tilapia. This species has the potential to significantly diminish the ecological values of waterways and catchments of the southern Great Barrier Reef and the upper Murray-Darling Basin.

Prevention, control, or eradication of new infestations of tilapia will protect and enhance existing native vegetation and the condition of native fish communities in areas adjacent to the Great Barrier Reef. It will also build capacity for waterways and wetland habitat to improve the quality of run-off into the Great Barrier Reef.

Effective management of tilapia will also build and maintain more resilient native fish and invertebrate communities in the face of climatic uncertainty.

The project will establish the primary vectors or conditions for the spread and transport of tilapia, and will address these issues through on-ground intervention, capacity building, and education.

Control or eradication of new incursions, and preventing the spread of tilapia from established populations will not only manage the impact on biodiversity of native fish and invertebrates, but will also reduce their impact on native aquatic macrophytes and wetland habitats, with the aim of improving water quality.

PROGRAM REPORT 2014-15

Program activities in the 2014-15 period include:

- Detection sampling at priority sites to determine distribution of tilapia around confirmed incursion sites in the upper Fitzroy and lower Pioneer catchments. Post-intervention sampling (including predator dietary analysis and general fish community analysis) at sites where on-ground interventions have been implemented.
- Targeted education plan, including sourcing any locally relevant extension material. An education plan for each workshop/field day location has been determined in consultation with regional partners.
- Community awareness and education to increase public understanding of the threat of tilapia in native aquatic ecosystems. Target audiences for priority community engagement have also been identified as part of strategic project planning. Target audience identification is based on previous foundation activities such as locations where tilapia have been found, priority sampling sites and potential vectors, locations of intervention sites, and community groups and stakeholders with high potential / relevance for involvement (for example, recreational fishing groups and local councils).
- Removal via electrofishing and monitoring of predator (barramundi) diets, with stomach flushing to evaluate the effectiveness of predatory control.
- In conjunction with project partners and stakeholders, priority habitat improvement sites have been identified to reduce the impact of established tilapia populations.
- In conjunction with project partners, 'Stop the Spread' information signage has been installed at strategic locations, based on current tilapia incursion sites.

Funding acknowledgement: **This project has been funded by the Australian Government for Reef Catchments to implement over a three year period from July 2013 to June 2016.**







MOVING FORWARD

Program activities planned for this project ahead include:

- **Completion of post-intervention sampling** (following wet season) for predator dietary analysis and general fish community analysis.
- **Improvement of instream habitat in the** Gooseponds wetland complex in Mackay. Habitat improvements will be achieved through the installation of a series of engineered 'log hotels' designed to increase habitat complexity for native fish and build resilience to reduce the impact of the recent incursion of tilapia.
- **Improvement of instream habitat and** water quality conditions of Grosvenor Creek. Weed control will be achieved through the combination of herbicide application and biological control.
- **Improvement of instream habitat in Moores** Creek, Rockhampton. Habitat improvements will be achieved through rehabilitation of a degraded section of creek to increase resource availability for native fish, building resilience to reduce the impact of the recent incursion of the noxious pest fish tilapia.
- **Delivery of an education package to engage** the community to prevent further tilapia incursions. This resource will include invasive pest management and control options for landholders, infrastructure managers and industry in the southern GBR region.

PROGRAM MILESTONES 2014-15

GOOSEPONDS PREDATOR CONTROL TRIAL - DIETARY ANALYSIS. Monitoring of the predator control trial in the Gooseponds Lagoons complex continued throughout 2014-15. Sampling was undertaken on a monthly basis, during daylight and evening hours. Gut flushing was used to collect dietary composition data of predatory fish, with gut contents processed to determine prey taxa. A single tilapia specimen was identified from gut content samples.

GENERAL FISH COMMUNITIES. The native fish assemblages present within the Gooseponds were typical of the communities that occur within each of the habitat types sampled. There was no discernible difference in community composition at sites with similar habitat types regardless of tilapia presence. The greatest variability in community composition appeared to be driven by variations in habitat types and condition between the sites. Juvenile tilapia were captured from two locations during the sampling. Although present in low abundance, the occurrence of juvenile fish provides evidence that tilapia are continuing to breed and suggests the population has become established.

UPPER FITZROY. Tilapia populations were identified from 3 locations within Grosvenor Creek using electrofishing and netting techniques, eDNA identified the presence of tilapia at an additional five locations in Grosvenor Creek and Isaac River. The presence of tilapia DNA in Isaac River provides evidence that the species is more widely distributed than previously understood.

LOWER PIONEER. Tilapia populations were identified from two locations within the Gooseponds using electrofishing techniques, eDNA identified the presence of tilapia at an additional three locations in the adjacent McCready Creek system. The presence of tilapia DNA in McCready Creek provides evidence that the species is more widely distributed than previously understood.

SIGNAGE. In conjunction with project partners, 16 tilapia information signs have been installed at strategic locations throughout the project area. Placement of the signs was determined during project planning meetings held in March. Locations were based primarily on the presence of tilapia incursions and prominent exposure to the public.

REGIONAL **LANDCARE FACILITATOR**

Regional Landcare Facilitator

INLAND AND SUSTAINABLE AGRICULTURE

Reef Catchments supports and is involved in the new Regional Landcare Facilitator Programme. Regional Landcare Facilitators make up a national network which involves facilitators in each of Australia's 56 natural resource management regions. They work to support Landcare and production groups to adopt sustainable farm and land management practices and to protect Australia's landscape.

With thanks to this program's valued 2014-15 partners and contributors.

Pioneer Catchment Landcare, Whitsunday Catchment Landcare, Queensland Department of Agriculture and Fisheries, Australian Forest Growers, Agricultural producers.

The new programme commenced under Caring for our Country in July 2014 and has rolled over into the Australian Government's National Landcare Programme (NLP).

PROGRAM REPORT 2014-15

The programme has facilitated the horticulture and forestry working groups to develop draft ABCD sustainability frameworks for horticulture and forestry, both plantation and native. These working groups are comprised of community and industry members.

The programme has also delivered capacity building activities for the region's agricultural producers that have included:

A soil health symposium that was attended by around 100 agricultural producers and service providers.

A workshop on holistic management for graziers.

Sponsoring local graziers to participate in a tour to the Atherton Tablelands that included participation in a Joel Salatin workshop.

Two workshops, (Mackay and Proserpine), on seasonal forecasting tools for the sugar industry.

Delivery of the annual sustainable grazing forum.

Soil health is one of the biggest challenges facing the region's agricultural producers and the Regional Landcare Facilitator programme has enabled delivery of an annual soil symposium to provide information from leading soils and land management experts. Keynote speakers at the symposium in December 2014 were Rodger Savory (Savory Grassland Management), Kym Kruse (RegenAG) and Christopher Cameron (Soil Health Manager, Jurgens Produce). Local sugarcane growers and Nuffield Scholars Simon Mattsson and Joe Muscat also presented their research and findings related to soil heath, from supported trials on their own properties near Mackay.

MOVING FORWARD

Moving forward, this program aims to:
The programme will continue to facilitate working groups and refinement of agricultural ABCD sustainability frameworks. Additional capacity building activities will be delivered that will be targeted to the needs of the region's agricultural producers under advice from the working groups and the Innovative Grazing Network.

The 2015 annual Sustainable Grazing forum attracted more than 120 participants who travelled from up to 200 km to attend. Graziers at the event managed more than 50,000 ha of land. A wide range of issues were covered on the day, including biosecurity updates, foundations of a breeder herd, managing climate variability, soil health, economic implications of adopting improved grazing management practices and new pasture varieties for the region.

Information was well received and was relevant to the needs of industry, focused on opportunity, and highlighting areas where efficiencies can be gained. As this annual event is focused specifically on graziers in the MWI NRM region, it provides one of the only local opportunities for networking amongst grazing industry representatives, professionals, service providers, and other graziers.

Funding acknowledgement: **This project is a Reef Catchments (Mackay Whitsunday Isaac) initiative, through funding from the Australian Government.**

URBAN SYSTEM REPAIR

WATER AND WATERWAYS

The urban system repair program seeks to identify, prioritise and implement management actions that will improve urban water quality, and protect and enhance native vegetation and biodiversity across waterways, wetlands (constructed and natural), estuarine and coastal environments. In partnership with regional councils, state departments, Landcare and the community, Reef Catchments is undertaking a variety of projects across the Mackay Whitsunday Isaac region.

With thanks to this program's valued 2014-15 partners and contributors.
Mackay Regional Council, Whitsunday Regional Council, Isaac Regional Council, Queensland Parks and Wildlife Service, Department of Transport and Main Roads, North Queensland Bulk Ports, Landcare Groups (all), Eco Barge, Department of Environment and Heritage Protection, Great Barrier Reef Marine Park Authority.

Project activities are being delivered through a combination of contractors, partnerships with coastal land managers, and community volunteers. Diverse project works include: public access management for water quality and habitat management, erosion control for water quality and sediment reduction, flow management for fish passage and waterhole persistence, bed and bank management for waterhole persistence and aquatic habitat enhancement, and riparian restoration (weed control and revegetation) for connectivity and bank stability. Concurrent to on-ground works, this program targets education, knowledge sharing, and capacity building for community groups, land managers, local government, industry and other stakeholders. Education and engagement aims to build stakeholder commitment and ownership to long-term project maintenance and is delivered through a suite of resources and activities including: field events, workshops, fact sheets, e-newsletters, and online/website. The project began in July 2013 and has been running for two years.

PROGRAM REPORT 2014-15

Lagoons Creek rehabilitation (Mackay)

- Modification of the Lower Lagoons catchment and its associated waterways has resulted in sediment deposition, exotic weed proliferation and, subsequently, fragmentation of the creek into sections of discontinuous waterway. Loss of instream connectivity impacts aquatic species migration. A three-ridge rock ramp fishway was selected as the most appropriate design for the site as a means to facilitate fish passage as it ensures the successful transition of a range of fish size classes over various flow regimes. Instream complexity (small drops between ridges, riffles and refuge areas) are critical to facilitate migration of important commercial, recreational and indigenous fish species (e.g. barramundi and tarpon) to upstream freshwater wetland and waterway nursery habitats. This project is a showcase of a highly successful collaboration between Reef Catchments and Mackay Regional Council.

- Two erosion control measures installed in lower Lagoons Creek aim to mitigate the cumulative impacts of increased urban development and agricultural farming practices (i.e. vegetation clearing, channelisation and straightening). Natural round boulders rocks were installed within the creek bed and bank in a rip rap rock wall arrangement to further prevent the erosive nature of the increased stream flow. Rocks were keyed into position to provide structural integrity (reduce erosion, stabilise bank, provide habitat, increase aquatic connectivity increase roughness and reduce velocities), with the later introduction of large woody debris to provide structural complexity.

Gross pollutant traps (Whitsundays)

- Three gross pollutant traps were installed within the Cannonvale Botanic Gardens precinct (Whitsundays). This project is a joint partnership between Reef Catchments and the Whitsunday Regional Council. The traps have been designed to stop rubbish and heavy metals contained in runoff entering Pioneer Bay at Cannonvale Beach, and will reduce the gross pollutant load entering the Great Barrier Reef Marine Park. Significantly, the three traps will reduce gross pollutants by an estimated 93 percent.

Feral cat management

- In collaboration with Mackay Regional Council, Department of National Parks, Sport and Recreation, and North Queensland Bulk Ports, Reef Catchments commissioned a feral cat monitoring study over 250 ha of coastal reserve within Slade Point.

Urban Think Tanks

- Two Urban Think Tanks were attended by regional councils (Mackay, Whitsunday and Isaac), government agencies, industry, NRM groups and other key stakeholders. This collaboration provides an effective forum to discuss regional urban water quality and native habitat priorities. The urban ABCD framework was developed by the Urban Think Tank as a means to promote the adoption of improved urban management practices.

MOVING FORWARD

Rehabilitation of Little McCreadys Creek

This creek was chosen as suitable for developing and showcasing best practice methods for improving stormwater quality, rehabilitating waterways, enhancing aquatic habitat and improving ecological corridors in line with Mackay Regional Council's stormwater management.

Funding acknowledgement: **This project is a Reef Catchments (Mackay Whitsunday Isaac) initiative, through co-funding from the Australian Government and partnerships with Mackay Regional Council, Whitsunday Regional Council and North Queensland Bulk Ports Corporation.**

PROGRAM HIGHLIGHTS

1,495 ha of aquatic habitat improvement works were conducted including the installation of three litter traps and one rock ridge fish way.

Two erosion control measures were completed at lower Lagoons Creek.

Management of feral cats occurred within 250 ha of Slade Point Reserve, Keeley's Road Wetland, Keeley's Wetland Walkabout and adjacent North Queensland Bulk Ports land.

Two Urban Think Tanks were held between regional councils, government agencies and Reef Catchments during the year.

The Urban ABCD Framework was developed by the Urban Think Tank as a means to promote the adoption of improved urban management practices within the region.

Completion of Stage 1 of Lower Lagoons Creek rehabilitation has seen the construction of fishways in a high priority urban subcatchment, with good evidence of fish migration in the early stages. Stage 2 will involve the installation of additional fish rock ramps and sediment ponds connecting the existing Mackay Royal Botanical Garden to the downstream environment. Works are scheduled to occur throughout summer 2015-16, with revegetation to follow post wet season.

Reef Catchments coordinates the Clean Streets and Creeks Program in partnership with Eco Barge. This important community-based prevention program aims to reduce the threat of marine debris on marine life and the surrounding environment by removing land-based litter on the streets, creeks and foreshore areas of Airlie Beach. Twelve urban hot spot gross pollutant clean-ups were held. The project also seeks to raise awareness of the impacts of urban litter and stormwater on reef water quality, and provides a point of data collection on key locations and types of litter to feed into future decisions around installation of litter interception infrastructure. This year over 1,500 kg of debris was collected, sorted and analysed by 132 volunteers.

REEF PROGRAMME **SYSTEM REPAIR**

WATER AND WATERWAYS

Reef Catchments runs four major System Repair programs throughout the region, focused on improving ecosystem health and water quality. The System Repair programs, funded by the Australian Government, include projects based in the O'Connell basin, the Pioneer basin, the Plane Creek basin (Rocky Dam Creek), and in urban areas across the region. Eligible activities are conducted in partnership with landholders, and include erosion control, habitat restoration and ecosystem improvement actions.

With thanks to this program's valued 2014-15 partners and contributors.

All activities carried out through the System Repair projects are conducted in partnership with landholders, local governments, and other regional stakeholders.

PROGRAM REPORT 2014-15

Major riparian rehabilitation projects have been conducted on private and public land during the past 12 months. In the O'Connell and Plane Creek basins, a region-wide bank stability assessment was carried out, which identified the sites which are losing the most sediment. Based on this, two major streambank stabilisation projects were completed in the O'Connell River and Rocky Dam Creek. Several other erosion control and stormwater management activities were funded through this program this year.

Over 20 ha of wetlands and riparian forests were revegetated across the three projects (not including Urban). Trees planted were local-provenance natives grown in four local nurseries. A further 30 ha of existing native vegetation was improved, through weed control, infill planting, and fencing out of cattle.

This year saw the completion of the Mackay Whitsunday Fish Barrier Prioritisation Report, which was a detailed assessment of all the barriers to fish passage in the region. Three of those barriers were removed this year, through the construction of fish passages in partnership with local landholders.

The constructed wetland systems on Bakers Creek and at Racecourse Mill had their second stages of development, and both sites are looking incredible now with healthy revegetation, improved aquatic habitat, and stabilised banks. At Bakers Creek, monitoring shows water quality improvement due to activities undertaken, even at this early stage in the establishment of the wetland plants.

Grazing management and pest control activities are also carried out under the System Repair projects, and many of the region's graziers attended the Grazing Forum in May, where experts in land management, including erosion control, gave free advice.

MOVING FORWARD

The three rural System Repair projects will continue delivering water quality and ecosystem health improvement activities for another year, with monitoring being conducted to demonstrate the effectiveness of the management actions undertaken.

PROGRAM HIGHLIGHTS

- 20 ha of wetlands and riparian forest revegetated.
- 30 ha of existing vegetation enhanced through weed control and infill planting.
- 3 barriers to fish passage removed.
- 12 erosion control activities including three major bank stabilisation projects.
- Pest mapping across the region.
- Pest management activities, including cat's claw creeper control over 20 ha, in and around Reliance Creek National Park and in riparian forest at Bakers Creek.
- 8 on-farm stormwater management systems.
- 20 new landholders engaged in NRM activities designed to improve water quality and ecosystem health.
- All the barriers to fish passage in the region mapped, assessed, and prioritised, with 3973 potential fish barriers identified across the region.

Funding acknowledgement: **This project is a Reef Catchments (Mackay Whitsunday Isaac) initiative, through funding from the Australian Government Reef Programme.**

WETLAND RESTORATION: RACECOURSE MILL

Mackay Sugar and Reef Catchments have joined forces to help restore a heavily degraded wetland on Horse and Jockey Road, near Mackay Sugar's Racecourse Mill.

Activities are focused on improving water quality, the aquatic ecosystem and biodiversity.

The reinstatement of a functioning wetland will allow for a natural system that is able to more effectively remove pollutants from regional waterways.

To date, major works on site include revegetation of 5,000 trees and shrubs (comprising 30 different endemic species).

"Improved quality of land and water delivers benefits for everyone in the immediate area. Activities on the site will improve the quality of water flowing to the Mackay Regional Botanic Gardens locally, as well as more widely to the Pioneer River Estuary and the Great Barrier Reef," Reef Catchments project coordinator Peter Muller said.

"The wetland will strengthen the natural landscape of the Mackay region and build resilience to support multiple uses for the long-term future."

Mackay Sugar's Health, Safety and Environment Manager Carissa Mansfield said Mackay Sugar was extremely proud to partner with Reef Catchments on this project.

"This project benefits the environment, our Racecourse Mill operations and provides the community a picturesque viewpoint along Horse and Jockey Road.

"This joint partnership is testament of our commitment towards environmental sustainability."

The project provides multiple benefits and Mackay Sugar will also be able to access cleaner water and a larger water storage area for the mill.

PEST **MANAGEMENT**

WATER AND WATERWAYS

Reef Catchments collaborates with diverse stakeholders across the region to manage and control priority pests, including feral pigs and invasive weed species. Reef Catchments coordinates several pest management projects in the region. Some of these are regional priority pest projects funded through the Queensland Government's strategic pest management program, while other pest management projects support regional initiatives, or are funded by the Australian Government.

With thanks to this program's valued 2014-15 partners and contributors.

All Reef Catchments' pest management work is overseen by the Mackay Regional Pest Management Group made up of around 20 regional stakeholders. The three local governments have a large input into pest management in the region, and work is done in close collaboration with the three Landcare groups for project delivery: Pioneer Catchment and Landcare Group, Sarina Landcare Catchment Management Association, and Whitsunday Catchment Landcare.

PROGRAM REPORT 2014-15

Surveying, mapping, and control activities continued on the region's priority pests - rubber vine, pond apple, *Mimosa pigra*, feral pigs, giant rat's tail grass (GRT), and itch grass. The majority of the activities were carried out by the three Landcare groups, with assistance by local government officers and the oversight of the Mackay Regional Pest Management Group (MRPMG). New infestations of rubber vine and pond apple were located and treatment actions started.

Feral pig control activities are coordinated by the Landcare groups across the region. Activities include lending traps to landholders, aerial baiting, ground baiting, and aerial shooting. All were successful in treating more areas and encouraging more landholders to be involved than in the previous year.

A pig trapping trial was carried out in the Pioneer Valley, where a contractor was hired to distribute bait, to monitor and maintain the traps, and to shoot the pigs that were trapped. This trial will be expanded in the surrounding area over the coming year, with the assistance of Mackay Area Productivity Services (MAPS). MAPS employ agricultural scientists who work with cane growers on their cane yield each year, and have calculated that feral pigs caused approximately $7 million worth of damage in the Mackay area alone, making this an important issue for the region's economy.

In addition to the priority pest projects, annual priority pest mapping is being undertaken by the Landcare groups, in consultation with members of the MRPMG. This is funded by the Australian Government's system repair programs, which also fund approximately 40 ha of weed control activities per year between the four projects, as well as several thousand hectares of additional feral pig control. Pest management under System Repair is able to target the common agricultural weeds that affect riparian habitat, such as guinea grass, elephant grass, lantana, and castor oil plants.

MOVING FORWARD

Priority pest activities will continue for another year. After June 2016, new priority pests may be the focus of future programs. To assist with determining the priorities, Pioneer Catchment and Landcare Group has been engaged to review the Regional Pest Management Strategy, in consultation with the MRPMG. This will help establish future pest management directions. Two new projects involving control of Cats Claw Creeper have recently been established. Cats Claw Creeper is a major environmental weed that can overwhelm forests.

PROGRAM HIGHLIGHTS

- Continuation and expansion of the successful feral pig control programs, as well as the beginning of the new Pioneer Valley program.
- New areas of rubber vine infestation identified and mapping and control activities started.
- New pond apple infestation identified and controlled in the Whitsundays, and Reliance Creek pond apple control area maintained.
- Progress made with annual priority pest mapping by trialling the use of new software (Fulcrum) which has great potential for many NRM applications.

Funding acknowledgement: **This project is a Reef Catchments (Mackay Whitsunday Isaac) initiative, through funding from the Queensland and Australian Governments.**

REEF PROGRAMME
CANE AND GRAZING

INLAND AND SUSTAINABLE AGRICULTURE

The Australian Government Reef Programme (formerly Reef Rescue) is delivered to landholders in the Mackay Whitsunday Isaac region to support improvements in farm management that will have benefits for water quality flowing to the Great Barrier Reef, while also improving on-farm efficiencies.

With thanks to this program's valued 2014-15 partners and contributors.

Landholders in the Mackay Whitsunday Isaac region, Australian Government and local Precision Planning Consultants (agricultural extension support providers), including: Farmacist, Mackay Area Productivity Services, Plane Creek Productivity Services Limited, Proserpine Sugar Services.

PROGRAM REPORT 2014-15

Cane

With the second year of the new Reef Programme now completed, the achievements of the programme are evident. Currently there are 239 farmers actively engaged in the planning component of the cane programme, supported by Reef Catchments in the MWI region to receive one-on-one extension services, including the development of yearly nutrient and chemical plans. These plans are well received by growers who are also able to now take advantage of the soil mapping and extra soil tests provided through the small grants scheme.

To date, improved nutrient and chemical planning that promotes the update of sustainable farming practices has covered 45,689 hectares or 27 percent of the cane farming land in the Mackay Whitsunday Isaac catchments.

Through the small and major grants programme, over $1,225,000 has been invested into the region with a further $1,374,000 invested by farmers. Critically, this level of investment from growers (farmers are more than matching government investment, contributing $1.12 for every $1 of government funding), is proof sugarcane growers in the region are committed to both the programme and its goals, including improved water quality and reduced agricultural runoff to the Great Barrier Reef. Such an uptake also provides strong benefits and a much needed boost to the local community, with goods and services being purchased from local farming equipment distributors.

The final year of the Reef Programme will see some small changes to try and capitalise on the success of the extension being provided to the cane farmers. These changes will be seen in irrigation major grants, with one-on-one training provided (for example, on the correct use of irrigation systems and how to find further irrigation efficiencies on-farm). The programme will also offer 2-3 moisture probes with every irrigation project so that irrigation can be applied based on crop requirements.

Grazing

The Grazing programme has grown rapidly in popularity and uptake in the MWI region. Recent interest has been so strong that there is now a waiting list of over 40 graziers from the region registered to be involved with future activities. In the 2014-2015 financial year, 18 graziers came through the programme covering 12,056 ha and completing a total of 26 on-ground works.

Of the on-ground works approximately 20 km of fencing was built to help grazing management and improve water quality through the reduction of sediment being exported to waterways and ultimately the Great Barrier Reef. Grazing extension officers also revisited last year's grazing landholders (2013-14) to assess past projects. These visits showed the works undertaken, particularly fencing, revegetation and gully remediation had been successful, with obvious changes in the stability of the landscape and vegetation regrowth. The grazing program continues to support improved management practices through riparian fencing, appropriate stocking rates and rotation, revegetation of riparian zones, pasture spelling and remediation of gullies.

> The level of investment from growers is proof of farmers' commitment to the programme and its outcomes for water quality. Farmers are more than matching government investment, contributing $1.12 for every $1 of government funding.

Funding acknowledgement: **This project is a Reef Catchments (Mackay Whitsunday Isaac) initiative, through funding from the Australian Government Reef Programme.**

REEF PROGRAMME SUMMARY 2014-15

CANE

- **$1,225,066** water quality grant investment
- **239 farmers** involved in the planning programme
  - 180 continuing from 2013-14
  - 59 new from 2014-15
- **$1,374,000** landholder contribution

FUNDING BREAKDOWN

- **59** Small grants (chemical equipment upgrades) - **$177,000**
- **59** Nutrient Small Grants (soil mapping and soil tests) - **$361,106**

74 FARMERS, 85 MAJOR PROJECTS - $686,960

- Chemical Management, **23** projects - **$151,620**
- Nutrient Management, **23** projects - **$206,309**
- Soil Management, **15** projects - **$79,025**
- Irrigation Management, **24** projects - **$250,007**

GRAZING

- **$172,196** water quality grant investment
- **18 graziers** involved in **26** projects
- **$ 337,760** landholder contribution

AREA COVERED BY PROGRAMME

- 2013-14 – **3,193 ha**
- 2014-15 – **12,056 ha**

FUNDING BREAKDOWN

- Pasture Management **12** projects - **$77,127**
- Riparian management **11** projects - **$92,969**

SUSTAINABLE **AGRICULTURE**

INLAND AND SUSTAINABLE AGRICULTURE

Reef Catchments has a strong involvement with sustainable agriculture which includes a number of working groups and the development of ABCD frameworks. The project provides the technical support required to develop, promote, and report on the uptake of the proven four-tiered ABCD management practice frameworks across five industries in the Mackay Whitsunday Isaac region: sugarcane, grazing, horticulture, fisheries and forestry. These guides will map the pathway from D and C Class (degrading and common practice) to B Class (industry endorsed best management practice) up to A Class (aspirational or innovative practice).

With thanks to this program's valued 2014-15 partners and contributors.

Farmacist, Department of Agriculture and Fisheries QLD, Bayer Crop Science, GrowCom, Wilmar, Mackay Area Productivity Services, Mackay Sugar, CANEGROWERS Mackay, Plane Creek Productivity Services, Sugar Research Australia, CANEGROWERS Proserpine, Australasian Fish Passage Services, Whitsunday Coast Barramundi, Great Barrier Reef Marine Park Authority, Mackay Reef Fish, Debbie's Seafood, Mackay Recreational Fishers Alliance, Mackay Regional Council, Catchment Solutions, Sarina Landcare Catchment, Management Association, Blomfield Environmental, Landholders, Nuffield Scholar program.

Partnerships with the local sugarcane, grazing, horticulture, forestry and fisheries industries have resulted in the development of Best Management Practice (BMP) frameworks to help industry members adopt sustainable farming and environment practices. The program commenced in January 2014.

PROGRAM REPORT 2014-15

There has been significant progress in the sustainable agriculture program during the last year. Key areas relating to industry best practice have been identified for improvement through the regional working groups. All industries involved in the program have made positive progress against planned activities and outcomes in relation to industry specific BMP frameworks. BMPs have been actively promoted and communicated to rural landholders through forums, workshops, media releases, case studies, demonstration sites and field days.

Sugarcane: Soil health BMP trials currently provide important information to help farmers understand the value of increasing soil organic carbon to improve farm productivity while reducing production inputs that can impact on water quality. Landholders are also evaluating the benefits of sustainable farming practices promoted through BMP demonstration trials, workshops and farm planning.

Grazing: The grazing working group has used its existing ABCD BMP framework to assess project proposals during this reporting period. The existing framework has also been reviewed and updated in relation to climate variability, but still requires further assessment by the regional working group to determine which other components need to be updated. Demonstration trials have promoted the benefits of a keyline and flail mulcher on soil health and trials are also underway to evaluate best practice methods for controlling Giant rat's tail grass.

Horticulture: The horticulture regional working group has updated their ABCD best practice framework. The regional working group has evaluated existing BMP and innovation trials to determine which trials represent the best value for the sustainable agriculture program. The working group has decided to evaluate the use of on-farm biofertisilers applied to a mango farm with further trials planned on another two farms. This may supply an alternative solution to conventional nutrient management programs that can impact on water quality, affecting the Great Barrier Reef lagoon.

Forestry: The forestry regional working group has used their existing ABCD best practice framework to approve and develop BMP demonstration trials. A number of trials have been established including a hardwood farm forestry observation trial on a property at Bloomsbury on the O'Connell River. The trial has been designed to evaluate six hardwood species each considered to be among the best performers in the region on poor quality soils.

Fisheries: The fisheries program is moving in a positive direction with a reinvigorated working group, which has provided leadership to develop a much needed fisheries ABCD framework. The working group will draft and complete industry ABCD frameworks during the next year.

MOVING FORWARD

Reef Catchments will continue to work with the sugarcane, grazing, horticulture, forestry, and fisheries regional working groups in the Mackay, Whitsunday, Isaac region to help them provide leadership for industry development. This will be achieved by promoting the adoption and continued development of industry BMP frameworks, workshops, field days, demonstration trials, forums and technical workshops.

New demonstration trials will also be developed and implemented through the horticulture and fisheries regional working group.

Funding acknowledgement: **This project is a Reef Catchments (Mackay Whitsunday Isaac) initiative, through funding from the Australian Government.**

PROGRAM HIGHLIGHTS

- Meaningful engagement with landholders.
- Development of BMP trials.
- Development of Regional Working Groups.
- Development of ABCD Frameworks.
- Facilitation of BMP field days and workshops for landholders.
- Providing assistance to landholders to engage with and learn about sustainable agriculture.
- Development of key strategic relationships with industry.
- Keyline and flail mulcher demonstrations in grazing.
- Variety evaluations on poor soils in forestry.
- Soil health demonstration trials in sugarcane and horticulture.
- Grazing forum attracting 120+ graziers.
- Soil health symposium and workshops attracting more then 240 sugarcane and horticulture landholders.

PADDOCK **TO REEF**

WATER AND WATERWAYS

Reef Catchments runs the Paddock to Reef Integrated Monitoring, Modelling and Reporting Programme which measures and reports on the quality of reef water. Information provided through the program, which specifically reports on the Reef Water Quality Protection Plan's goal and targets, allows stakeholders to improve the effectiveness of on-ground actions which aim to improve the water quality of the Great Barrier Reef.

With thanks to this program's valued 2014-15 partners and contributors.

Australian Government, Queensland Government, NRM organisations, peak industry bodies, research groups, environment and community groups.

PROGRAM REPORT 2014-15

Reef Catchments has continued to provide the management practice adoption data collected through the delivery of the Australian Government Reef Programme during 2014-15. Management practice adoption is assessed against the Water Quality Risk Framework. This dataset provides the basis for modelling improvements in water quality for sugarcane and grazing in the Mackay Whitsunday Isaac region reported under Reef Plan and the Reef Programme.

Under the Paddock to Reef program Reef Catchments provides a dataset on the application of fertiliser and pesticide on sugarcane farms in the region. This dataset is aggregated up to a subcatchment scale and provides context to management practice adoption and the water quality monitoring data collected. Reef Catchments relies on strong partnerships to be able to provide this data from a range of stakeholders throughout the region.

During the past year Reef Catchments has continued to progress wetland assessments in our region. In partnership with the Department of Science, Information Technology and Innovation (DSITI), wetlands in the Mackay Whitsunday region are to be assessed over the coming years to monitor wetland functions and value. This is being undertaken in all reef catchments to monitor wetlands in the Great Barrier Reef catchments.

In an effort to greater understand sediment and nutrient losses from grazing properties Reef Catchments is working with landholders and industry to develop a tool to highlight to graziers the loss of sediment linked to differing land management practices. Rainfall simulation is the first step to identify losses resulting from different practices. Rainfall simulation will be undertaken on A, B, C and D class land conditions for both native and improved pastures to assess losses. Additional simulation will also be undertaken on improved pasture creeping grass in order to compare both creeping and stooling pastures. The report from this will enable better understanding of losses from grazing properties in coastal grazing systems and will add to the current knowledge of erosion mitigation.

MOVING FORWARD

- Provision of the dataset will highlight the effectiveness of the extension.
- Monitoring of wetlands identified by DSITI for inclusion in the Reef Plans Wetlands outcomes.
- Rainfall simulation to create a series of landholder tools to be able to directly compare management practices and resulting losses of sediment, nutrients and pesticides.

PROGRAM HIGHLIGHTS

- Each year Reef Catchments provides a dataset on the adoption of improved management practices for Grazing and Sugarcane land use. **For the 2014-15 year, Reef Catchments provided data on over 45,000 ha of sugarcane and 1,100 ha of grazing land** which was improved through management practice adoption to **provide direct water quality benefits to the Reef.**
- **Provision of dataset for the application of fertiliser and pesticide on sugarcane properties** from a range of stakeholders in an aggregated format for each subcatchment. This information is used as additional evidence to support **management practice adoption data** and the water quality modelling.
- **Monitoring of wetlands for the pilot study** enables DSITI to develop a refined wetland assessment to contribute to Reef Plan. The revised assessments will be undertaken in the 2015-16 year on two Mackay Whitsunday wetlands to contribute to the overall GBR wetland assessment.
- Greater understanding of sediment and nutrient loss through **rainfall simulation** on a grazing property under different land conditions to **develop a management tool for sediment loss** for the region's graziers.

Funding acknowledgement: **This project is a Reef Catchments (Mackay Whitsunday Isaac) initiative, jointly funded through the Australian and Queensland Governments.**

ABOUT PADDOCK TO REEF

The Paddock to Reef Integrated Monitoring, Modelling and Reporting Program is a reef wide program that measures and reports on the success of the Australian Government Reef Programme (formerly Reef Rescue) and progress towards the Reef Plan goals and targets to reduce pollutants entering the Great Barrier Reef lagoon.

Paddock to Reef uses water quality monitoring and modelling tools across paddock, catchment and marine scales to measure and report on improvements in agricultural runoff entering the Great Barrier Reef catchments.

Monitoring is used to record changes in water quality and to validate the water quality benefits of best practice farming and grazing systems.

Modelling forecasts changes by predicting the level of water quality improvement based on reported levels of best management practice adoption across the Great Barrier Reef region.

End-of-catchment monitoring measures nutrients, pesticides and sediment loads at a catchment scale to inform seasonal discharge and validate catchment modelling.

GAME **CHANGER** **AND** PROJECT CATALYST

INLAND AND SUSTAINABLE AGRICULTURE

The Game Changer and Project Catalyst sugar innovation programs bring together around 140 sugarcane farmers from Australia's most productive sugar growing regions. The Game Changer program is a part of the Australia Government Reef Programme and facilitates on-farm demonstrations and trials of practices with the potential to cut pollutant loads to the Great Barrier Reef. The program actively seeks to more widely extend the uptake and adoption of agricultural innovation validated through Project Catalyst. Growers are supported to implement improved operations on a farm block, gaining greater understanding of practice change in a practical sense, while also learning more about best possible economic efficiencies. The Coca-Cola Foundation, the Australian Government, Bayer and Syngenta are among a wide group of stakeholders supporting Project Catalyst. Combined, these two programs drive true innovation by working with growers to modify farm management for positive water quality and economic outcomes.

With thanks to this program's valued 2014-15 partners and contributors.
Landholders, The Coca Cola Foundation, WWF-Australia, Bayer CropScience, Syngenta, Case IH, Netafim, Wilmar, Suncorp, Inkerman Lime & Gypsum, Farmacist, Catchment Solutions, QDAFF, Reef Catchments, NQ Dry Tropics and Terrain NRM, with support from the Australian Government.

PROGRAM REPORT 2014-15

Game Changer trials have been implemented during 2014-15 across the three NRM regions of Reef Catchments (Mackay Whitsunday Isaac), North Queensland Dry Tropics, and Terrain Wet Tropics. There are currently 67 trials in progress.

The growers and their support networks are using the sugarcane ABCD best practice framework as the guideline for trials. The aim is to change C and D farm practices (poor or potentially degrading and common practices) into A and B (industry endorsed best management to aspirational and innovative practices), with a legacy after the project is completed. Participating landholders are receiving agronomic advice and planning support to assist them to improve not only the trial sites but also their overall farm management. Improving the agronomy reduces variations across trial sites which is expected to improve the statistical comparison between treatments. If the landholder is happy with the results, it is anticipated this planning support will result in spreading the trialled activity across each farm. Through group extension activities it is also anticipated, once the trials have proven to be economically and environmentally successful, that other growers will adopt the practices following the leadership of the project's growers.

Promotion of the project has been undertaken at conferences, forums and field days, media (print, radio and television) and via social media channels. The grower network has been strengthened and communication between growers of other regions is common.

The 67 established trials have a range of investigations. These include:

1/ Variable rate nutrient application guided by soil mapping within a paddock to determine changes in soil types. This will increase fertiliser use efficiency (including nitrogen) and is expected to lead to reduced nutrient runoff into waterways, without affecting crop yield. In some cases crop yield may increase.

2/ Using soil mapping, residual herbicides such as diuron are applied at a variable rate across a paddock according to soil texture. This approach capitalises on natural benefits of soil type - for example, light soil could use as little as one third the rate of herbicides required for heavier soils. The default practice of using high application rates of residual herbicides per hectare results in the surplus running off into waterways. The objective of these series of trials is to demonstrate that varying the application rate of residual herbicides, using soil maps, demonstrates a reduced rate of herbicide per hectare and less runoff. This reduction in rate of fertiliser and herbicide application will result in lower costs over the long-term, and more efficient use of nutrients and chemicals. In order to achieve this, the landholder will need to have soil mapping completed to guide the use of variable rate application. This is something currently being supported and funded under the Reef Programme free of charge for participating growers.

3/ Using controlled release fertiliser it is expected that an increase in nitrogen use efficiency will be demonstrated, allowing less nitrogen per hectare to be applied for the same average yield. It is also expected that improved consumption of nitrogen will translate into a higher yield using the same current rates of nitrogen application. The benefit to the environment will be less nitrogen runoff.

4/ A series of trials investigating the variation of fertiliser rates when using soil ameliorants, accounting for their nutrient content and speed of nutrient release. Recycled organic and mill filter press products such as mill mud, mill ash and compost will be used. Trials are expected to demonstrate and quantify the benefits of soil ameliorant placement and associated reduction of fertiliser input. The environmental benefit will be less nutrient runoff, particularly nitrogen.

5/ A series of trials investigating and demonstrating potential soil health improvement using different strategies of crop husbandry.

6/ Variable rate nutrient application due to block yield potential guided by age of the crop ratoon. Sugarcane is a perennial crop. A crop cycle is defined by the time between the replanting of sugarcane. Crop cycles can commonly vary from 3 years to 10 years. This series of trials aims to demonstrate that reducing fertiliser inputs as the crop ages in years will not alter the yield outcome. It is expected if adopted that this will reduce fertiliser cost and reduce runoff of nutrients, particularly nitrogen.

Funding acknowledgement: **This project is a Reef Catchments (Mackay Whitsunday Isaac) initiative, through funding from diverse stakeholders outlined in partners and contributors above.**

7/ Investigation of low cost alternative irrigation. Sites have been established with drip systems installed under the ground, expected to demonstrate improved water and nutrient use efficiency.

8/ Investigation into the benefit of irrigation telemetry and automation. It is expected to demonstrate the agronomic and economic advantage of using automated decision support for irrigation scheduling.

These types of trials are topical especially those involving various forms of nitrogen. Sugar Research Australia and Incitec Pivot, with their rural retail outlets agronomists, have set up similar trials. This can only be positive for awareness and uptake of improved nitrogen use practices. In regard to nitrogen, the message is spreading throughout industry that to reduce the volume entering the Great Barrier Reef, volume used per hectare is not as important as timing, placement and the form of the nitrogen.

PROJECT CATALYST GROWERS FORUM 2015

Sugar farmers are showcasing serious action to reduce the impact of agriculture on the Great Barrier Reef.

More than 170 sugar growers and industry representatives gathered in Townsville in March 2015 for the annual Project Catalyst Growers forum to discuss and drive innovation.

Project Catalyst is a leading program stimulating major change amongst Queensland cane farmers.

The three-day event presented industry issues of national and international interest, as well as an overview of current trials being conducted across the state.

Mr Steven Miles, Queensland Minister for Environment and Heritage Protection, National Parks and the Great Barrier Reef, joined the event for the formal forum dinner where he met with forward-thinking cane farmers.

Mr Robert Cocco, Reef Catchments CEO said the primary purpose of Project Catalyst was to reduce the environmental footprint of sugarcane on freshwater systems and the Great Barrier Reef.

"We do this by supporting a network of innovative farmers to fast-track the adoption of cutting edge management practices."

Project Catalyst is a pioneering partnership between sugar producers and major supporters – The Coca Cola Foundation, WWF-Australia, Bayer, Syngenta, Catchment Solutions and NRM Groups (Reef Catchments, NQ Dry Tropics and Terrain NRM).

To date, more than 75 cane farmers involved in Project Catalyst farm trials have helped improve runoff and drainage water quality of more than 100 billion litres across 20,345 ha of land – an amount equivalent to the water it would take to fill 40,000 Olympic sized swimming pools.

PUBLIC **FUND**

CORPORATE

The Reef Catchments' Public Fund aims to empower our regional community to develop natural resource management initiatives in the Mackay Whitsunday Isaac region. Community interest groups, schools and other not-for-profit organisations have been able to apply for grants of up to $2500 to implement environmental projects that enhance the health and condition of our region's natural resources.

With thanks to this program's valued 2014-15 partners and contributors.

Reef Catchments Public Fund is a Reef Catchments initiative, supported by the Reef Catchments Limited Board and Directors. Thanks to this year's project partners, Pioneer Catchment Landcare and the Marian Working Group.

PROGRAM REPORT 2014-15

The 2014-15 year saw the following community projects completed using grants from the Reef Catchments Public Fund.

Pest Management in Reliance Creek Palm Vine Forest

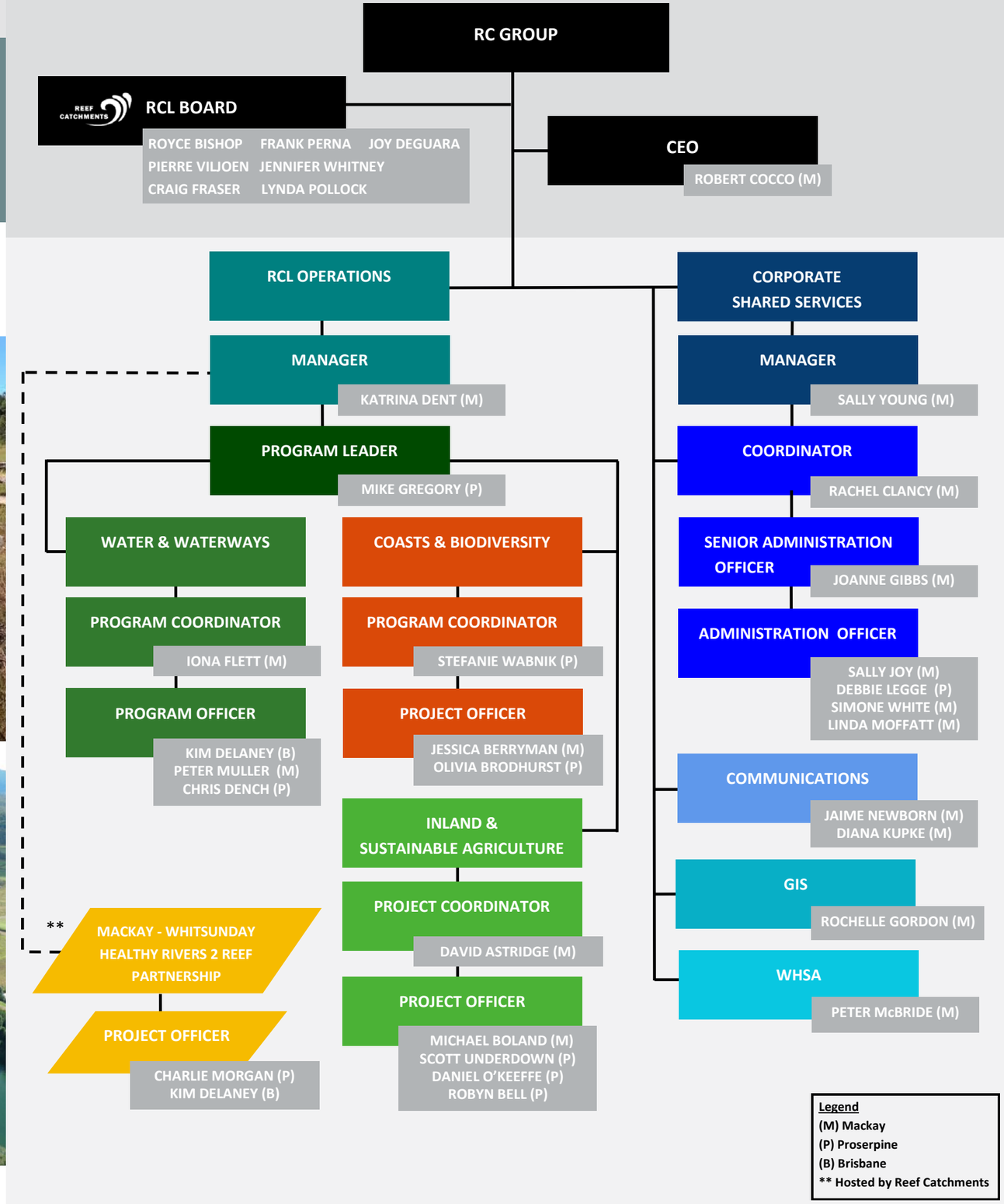
Pioneer Catchment Landcare was funded to undertake ongoing management of Cats Claw Creeper (*Macfedyena unguis-cati*) to build on work being done with funding from the Australian Government Biodiversity Fund. The invasion of Cats Claw Creeper, and of Hymenachne (*Hymenachne amplexicaulis*), which are both Weeds of National Significance, has threatened the future of this important ecosystem but work has been undertaken to protect the forest canopy. Work has been extended beyond the boundary of the national park and regrowth has been treated. In cooperation with neighbouring landholders, revegetation has been undertaken to fill holes in the forest canopy.

Marian Working Group

The Reef Catchments grant has supported the Marian Community Working Group and Pioneer Catchment Landcare to manage weeds in revegetation sites along the Pioneer River. The main site chosen is in the vicinity of Edward Lloyd Park near Marian and the work has been undertaken to better protect the river bank and water quality, as well as to provide visual amenity for the community and visitors to the park. Funding from Reef Catchments was used to improve vegetation on the river bank, to maintain stability of the river bank and thereby to contribute to improved water quality. A pest contractor has been employed to manage regrowth of Guinea Grass (*Megathyrsus maximus var maximus*), Leucanea (*Leucaena leucacephala*), and other woody weeds.

Funding acknowledgement: **This project is a Reef Catchments (Mackay Whitsunday Isaac) initiative, supported by the Reef Catchments Board through the Reef Catchments Limited Public Trust.**

REEF CATCHMENTS GROUP **ORGANISATIONAL CHART**



[MEET THE **TEAM**]

MEET| Our Staff

**** Staff represented are current Reef Catchments Limited staff as at July 2015.**

CORPORATE SERVICES

The Corporate Services team are an integral part of Reef Catchments operations. Projects include administration, communications and media, finance, policy and procedure development, governance, workplace health and safety and legal services. The people behind Reef Catchments Corporate Services are:












EXECUTIVE

1 **Rob Cocco,** Chief Executive Officer
2 **Sally Young,** Corporate and Business Services Manager

STAFF

3 **Debbie Legge,** Administration - Proserpine
4 **Diana Kupke,** Communications Support
5 **Jaime Newborn,** Communications and Media Officer
6 **Joanne Gibbs,** Senior Administration Officer/WH&S Coordinator
7 **Linda Moffatt,** Administration - Mackay
8 **Peter McBride,** WHS & Quality Assurance Officer
9 **Rachel Clancy,** Finance Officer/ Business & Admin Coordinator
10 **Rochelle Gordon,** GIS and Knowledge Management Officer
11 **Sally Joy,** Administration - Mackay
12 **Simone White,** Administration - Mackay

PROJECT AND FIELD (OPERATIONS)

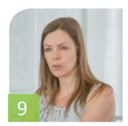
The project and field operations team works to improve natural resource management in the Mackay Whitsunday Isaac region and beyond. Projects cover diverse areas, including coasts, islands and marine, biodiversity, urban and rural system repair, sustainable agriculture, climate, pest management, strategic NRM planning, water and healthy waterways, and Traditional Owners.















MANAGEMENT

1 **Katrina Dent,** Operations Manager
2 **Mike Gregory,** Program Leader

STAFF (PROJECT OFFICERS) AND COORDINATORS

3 **Amanda Bland,** Land and Water Coordinator - Grazing
4 **Chris Dench,** Project Officer - Sustainable Agriculture
5 **Daniel O'Keeffe,** Project Officer - Sustainable Agriculture
6 **David Astridge,** Coordinator - Inland and Sustainable Agriculture
7 **Iona Flett,** Coordinator - Water and Waterways
8 **Jessica Berryman,** Project Officer - Coasts
9 **Kim Delaney,** Mackay Whitsunday Report Card Coordinator & Water Quality Project Support
10 **Michael Boland,** Project Officer - Grazing
11 **Olivia Brodhurst,** Project Officer - Coasts & Biodiversity
12 **Peter Muller,** Project Officer - Sustainable Agriculture & Riparian Systems
13 **Robyn Bell,** Coordinator - Climate & Landscape Systems and Regional Landcare Facilitator
14 **Scott Underdown,** Project Officer - Data Management Systems
15 **Stefanie Wabnik,** Coordinator - Coasts and Biodiversity

[MEET THE **BOARD**]

MEET| Our Board

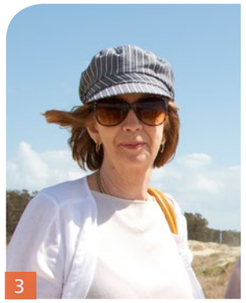
The Reef Catchments (Mackay Whitsunday Isaac) Limited ("Reef Catchments") Board of Directors consists of representatives from business and community backgrounds. Each member has a strong commitment to the sustainable management of our regions natural resources.

The Board of Directors is made up of an independent Chair, Royce Bishop, and four sector Directors representing Agriculture, Local Government, Community and Business in the Mackay Whitsunday Isaac region.

Current sector Directors are Frank Perna (Agriculture), Jennifer Whitney (Local Government), Pierre Viljoen (Community) and Joy Deguara (Business). Independent Directors are Craig Fraser and Lynda Pollock.

The Board's continued commitment to the strategic direction of Reef Catchments sees the organisation well positioned to identify and make the most of new opportunities and to be able to progress valuable Natural Resource Management (NRM) works and improved environmental outcomes in the Mackay Whitsunday Isaac region, during a period of significant change and challenge around NRM funding and programs.



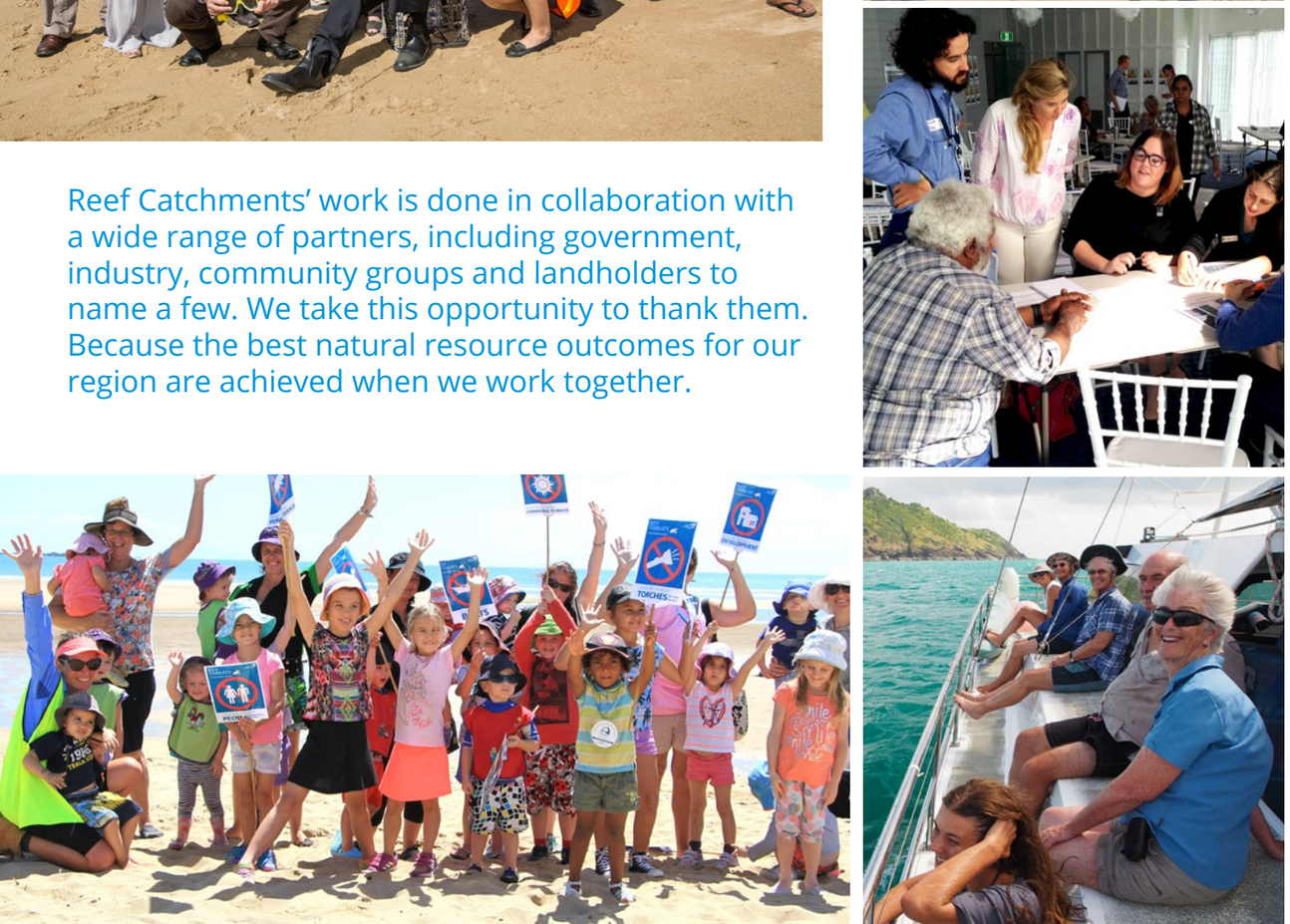



CURRENT BOARD MEMBERS

1. **Royce Bishop,** Chair
2. **Frank Perna,** Agriculture Director
3. **Joy Deguara,** Business Director
4. **Dr Pierre Viljoen,** Community Director
5. **Jennifer Whitney,** Local Government Director
6. **Craig Fraser,** Independent Director
7. **Lynda Pollock,** Independent Director


"I have had many years of satisfaction and seen great progress in the company during the time I have been involved. I have been delighted with the many projects Reef Catchments has undertaken within our region, the value I have seen in terms of improving and protecting our natural resources, and the ability of the company to make a real and tangible difference in its community."

- Royce Bishop, Chair



Reef Catchments' work is done in collaboration with a wide range of partners, including government, industry, community groups and landholders to name a few. We take this opportunity to thank them. Because the best natural resource outcomes for our region are achieved when we work together.

[WITH **THANKS**]

TO OUR VALUED MEMBERS AND STAKEHOLDERS

- 3P Concepts
- Agforce - Mackay
- AgForce Proserpine
- Allan McLean
- AngloCoal
- ANZ Bank
- Australian Cane Farmers Association
- Australian Forest Growers
- Australian Government
- Bank of Queensland
- Bayer CropScience
- BMA
- Burnett Mary Regional Group
- CANEGROWERS Australia
- CANEGROWERS Mackay
- CANEGROWERS Proserpine
- Cape York Natural Resource Management Ltd
- Cape York Sustainable Futures
- Central Queensland Forestry Association
- Condamine Alliance
- Conservation Volunteers Australia
- CQUniversity
- CSIRO
- Desert Channels Queensland
- Eco Barge Clean Seas Inc
- Farmacist
- Fitzroy Basin Association
- Gia Traditional Owners
- Great Barrier Reef Marine Park Authority (GBRMPA)
- Growcom
- GW Industrial
- IESA Pty Ltd
- Independent Agricultural Resources Pty Ltd
- Irene Champion
- Isaac Regional Council
- James Cook University
- JCU - Austalian Centre for Tropical Freshwater Research
- Joe Pappalardo
- Koinjmal Traditional Owners
- Landcare Australia
- M Group Tyre & Mechanical
- Mackay & District Turtle Watch Association (MDTWA)
- Mackay Area Fish Stocking Association (MAFSA)
- Mackay Area Productivity Services (MAPS)
- Mackay Chamber of Commerce
- Mackay Conservation Group
- Mackay Recreational Fisheries Alliance
- Mackay Regional Council
- Mackay Sand and Gravel
- Mackay Sugar
- Mackay Tourism Limited
- Mackay/Whitsunday Bird Observation & Conservation Australia
- Moorvale Earthoving Pty Ltd
- National Bank
- Natural Environment Advisory Committee
- Netafim
- Ngaro Traditional Owners
- North Queensland Bulk Ports
- Northern Gulf Resource Management Group
- NQ Dry Tropics
- O'Connell Catchment Precision Services Pty Ltd (OCPS)
- Pioneer Catchment & Landcare Inc
- Plane Creek Productivity Services
- Qld Regional NRM Groups Collective
- Queensland Farmers Federation
- Queensland Government
- Queensland Government Department of Agriculture and Fisheries
- Queensland Government Department of Environment and Heritage Protection
- Queensland Government Department of National Parks, Sport and Racing
- Queensland Government Department of Natural Resources and Mines
- Queensland Government Department of Infrastructure, Local Government and Planning
- Queensland Government Department of Science, Information Technology and Innovation
- Queensland Murray-Darling Committee
- Queensland Water and Land Carers
- RDA Mackay Isaac Whitsunday
- REDC
- Reef Trust (Australian Government)
- Regional Development Australia
- Resource Industry Network
- Rural Fire Service Queensland (RFSQ)
- Sarina Landcare CatchmentManagement Association
- SEQ Catchments
- Society for Growing Australian Plants - Mackay Branch
- Soutern Gulf Catchments
- South West NRM Ltd
- State Council River Improvement Trust
- Sue Buzer
- Sugar Productivity Services
- Sugar Research Australia
- Sugar Service Proserpine
- Syngenta Australia
- Terrain NRM
- The Coca-Cola Foundation
- Torres Strait Regional Authority
- Wayne Sommerfeld
- Whitsunday Catchment Landcare
- Whitsunday Charter Boat Industry Association
- Whitsunday Marketing and Development
- Whitsunday Regional Council
- Wild Mob
- Wilmar Sugar Pty Ltd
- WIRI
- WWF - Australia
- Yuwi-bara Traditional Owners

PHOTO AND ARTWORK CREDITS:
With thanks and appreciation to: Staff of Reef Catchments Limited, Eco Barge, Mackay Sugar, Wild Mob, Whitsunday Marketing and Development, Department of Environment, Fiona Hollingworth Photography, WWF Australia, Ngaro / Gia Traditional Owner Nicky-Bidju Pryor.

Enhancing Natural Resources
for a sustainable community.

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REEF CATCHMENTS

Australian Government

Queensland Government