



Australian Government

REEF TRUST



Reef Trust

INVESTMENT
STRATEGY
PHASE III

December 2015

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MINISTER'S FOREWORD

The Australian Government is committed to the sustainable and long-term management of the Great Barrier Reef.

Together with the Queensland Government we are ensuring the protection of the outstanding universal value and rich biodiversity in the world's most iconic reef. This remains a strong focus for both governments.

The *Reef 2050 Plan* is governments' key contribution to this commitment. The Australian Government's Reef Trust is an important initiative under the Plan and focuses on priority areas including improvements to water quality, restoration of coastal habitats and protection of threatened and migratory species, including dugongs and turtles.

The Reef Trust is underpinned by the best available science and our collective experiences in delivering the significant existing conservation efforts across this 348,000km² natural wonder that is the Great Barrier Reef World Heritage Area. This knowledge base has been reinforced by the establishment of an Independent Expert Panel chaired by the Commonwealth Chief Scientist, Professor Ian Chubb. The Independent Expert Panel has been set up to provide advice to government on Reef Trust investment priorities.

Since 2014, the Reef Trust has delivered a range of projects to improve nitrogen use efficiency on sugar cane farms and reduce sediment runoff in priority grazing landscapes. The Reef Trust has invested in the targeted culling of the Crown-of-Thorns Starfish on high value tourism reefs as well as a number of projects to reduce threats to dugongs and turtle species including injury, illness, marine debris and illegal hunting and poaching.

I am pleased to continue this crucial work to address the biggest threats to the Reef. This strategy aligns with and builds upon existing investments in the Reef. Through this strategy, the Australian Government will provide \$56 million over four years towards improved management practices for sugarcane farmers, reduced erosion in grazing lands and improved water quality in grains, dairy and horticulture industries. These three key actions focus squarely on reducing key pollutants – sediment, nutrients and pesticides - to strive towards our ambitious targets for improved water quality entering the Reef lagoon.

I am also delighted to announce the first project to be funded with co-investment from the Australian Government and the private sector through the Reef Trust. The Reef Trust and Greening Australia will partner together to deliver a project for the restoration and repair of priority wetlands and coastal ecosystems along the Great Barrier Reef. The Australian Government will provide up to \$2 million in funding for this project, matching dollar-for-dollar funds to be raised by Greening Australia and its partners. This innovative project is the first, exciting step towards further collaboration with the private and philanthropic sectors to enhance and continue our investment in combating the highest priority threats to the Reef.

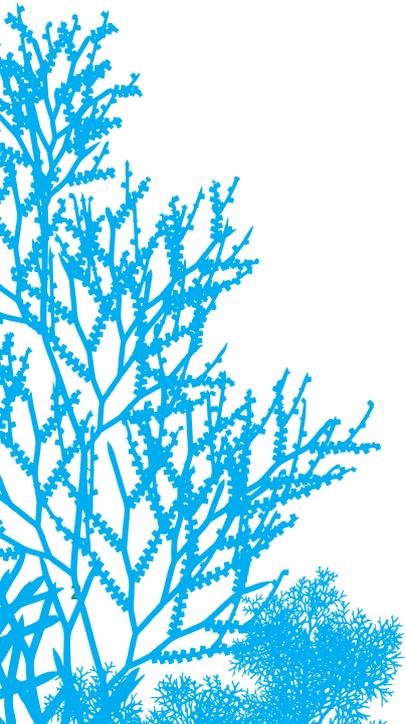
The Reef is not just a national treasure; it is an amazing and ecologically diverse environment recognised globally for its outstanding universal value. I look forward to strengthening existing partnerships and working with new partners to continue to protect and conserve the extraordinary diversity of plant and animal life that the Great Barrier Reef has to offer.



The Hon Greg Hunt MP
Australia Government
Minister for the Environment

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PART 1: BACKGROUND AND CONTEXT

The Reef 2050 Plan is the Australian and Queensland Government's overarching framework for protecting and managing the Great Barrier Reef from 2015 to 2050.

The Reef Trust is one of the key mechanisms assisting in the delivery of the *Reef 2050 Plan*, and focuses on known critical areas for investment – improving water quality and coastal habitat along the Great Barrier Reef, controlling the current outbreak of crown-of-thorns starfish, and protecting threatened and migratory species, particularly dugong and turtles.

The Reef Trust's objective is to:

provide cost effective, strategic investment which goes above and beyond existing programmes to address key threats to the Great Barrier Reef and catchments for the long-term protection and conservation of the outstanding universal value of the Great Barrier Reef.

This phase of *investment* builds on two previous phases of investment through the Reef Trust. It announces a third phase of actions that will contribute to the long-term sustainable management of the Great Barrier Reef World Heritage Area and the Reef catchments.

To date the Australian and Queensland governments have invested significantly in encouraging landholders to adopt best management practices and improve the quality of water entering the Reef catchment. Through its Reef Programme the Australian Government supports a number of initiatives and activities aimed at improving water quality. The Queensland Government supports a broad range of water quality initiatives including the roll out of Best Management Practice programmes.

Reef Trust investment complements and aligns with the extensive efforts across government, natural resource management organisations and industry to deliver cost effective and strategic on-ground change. It will continue to build on collaborative efforts by the Australian and Queensland governments to achieve targets for land management and water quality improvement outlined in the *Reef Water Quality Protection Plan 2013* and the *Reef 2050 Plan*. The Queensland Government has established a taskforce dedicated to providing advice on how to meet these water quality targets by 2025 and a final report is due by May 2016.

1.1 Current Reef Trust Investment

The Reef Trust was established in June 2014, with the release of the *Reef Trust Investment Strategy - Initiative Design and Phase 1 Investment*. A second phase of investments was announced in July 2015. Details and the current status of projects being delivered through Phase I and II investments are provided below.

Reef Trust Tenders – Wet Tropics and Burdekin

The Reef Trust is delivering competitive tenders in the Wet Tropics and Burdekin natural resource management regions. These projects provide financial incentives to participating sugar cane farmers to undertake activities that improve nitrogen use efficiency and reduce fertiliser runoff entering the reef lagoon. The *2013 Scientific Consensus Statement on Water Quality in the Great Barrier Reef* identifies the Wet Tropics and Burdekin regions as contributing the largest amounts of dissolved inorganic nitrogen to the reef lagoon, a majority of which is from cane lands. Farm management activities contracted under the Wet Tropics' competitive tender commenced in April 2015. The Burdekin competitive tender will open from late 2015 for farmers to submit their tender to participate in the project.

Grazing in the Fitzroy and Burdekin Regions

The Fitzroy and Burdekin catchments are identified in the *2013 Scientific Consensus Statement on Water Quality in the Great Barrier Reef* as having the highest relative risk of degraded water quality from sediment runoff. This Phase I project builds on existing work to improve water quality in the Great Barrier Reef through engaging graziers in the Fitzroy and Burdekin catchments. The project provides graziers with tailored training and mentoring in business management and best management practices to enhance their business productivity and profitability as well as minimise sediment runoff into the Reef.

Gully Erosion Control

The Reef Trust Gully Erosion Control Programme is a targeted competitive grants programme to reduce sediment run-off in priority grazing landscapes where gully erosion is extensive, active and delivering high rates of sediment to the coast. The successful delivery partners will use a combination of cost-effective gully remediation techniques tailored to each priority area and work with relevant partners to produce sediment reductions for the Great Barrier Reef. CSIRO Land and Coasts has been engaged as the technical partner for this programme to ensure the latest scientific information is incorporated and to assist delivery partners with best practice implementation. It is anticipated that successful applicants will be announced in December 2015 – January 2016.

Crown-of-thorns starfish (COTS) control

Crown-of-thorns starfish (COTS) outbreaks are amongst the most significant threats facing the Reef, with an outbreak currently underway. The Reef Trust COTS control project supports marine park tourism operators to protect high value tourism reef sites through the targeted culling of adult COTS. This project is delivered in partnership with the Great Barrier Reef Marine Park Authority, the Reef and Rainforest Research Centre and the Association of Marine Park Tourism Operators. This project also provides monitoring and surveillance to improve knowledge of aggregation behaviours, and further the development of a COTS integrated pest management project to more effectively target control activities.

Protecting Dugongs and Turtles

The Dugong and Turtle Protection Plan is delivering four Reef Trust investments that address some of the greatest threats faced by dugongs and turtle species, such as hunting and poaching, marine debris, and illness and injury. The Australian Crime Commission has commenced an investigation into illegal hunting and trade of dugong and turtle meat. A project to address harmful marine debris is also underway. This project organises collaborative clean up events across the Reef and fosters litter-conscious behaviours and awareness of the impacts of debris and other pollution on these iconic species. The Cairns and Fitzroy Island Turtle Rehabilitation Centre will increase its capacity to rehabilitate sick and injured turtles by building capacity in visitors, volunteers, and Indigenous groups to participate in the care of turtles, and improving and upgrading centre facilities and infrastructure. The Specialised Indigenous Ranger Programme strengthens the compliance and enforcement powers of Indigenous rangers in Far North Queensland and the Torres Strait. This programme also increases the skills and capacity of up to 20 Indigenous rangers through the provision of compliance training.

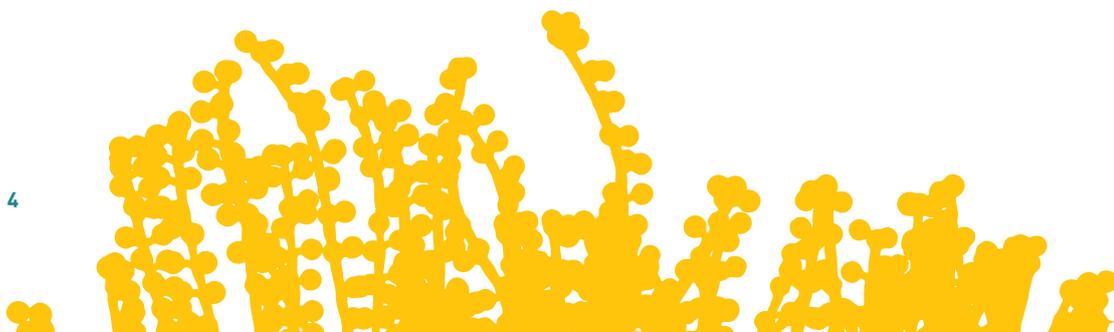
1.2 The role of science

Phase III Reef Trust investments have been informed by the recently established Independent Expert Panel chaired by the Commonwealth Chief Scientist. Panel members represent a broad cross-section of scientific expertise in areas relevant to managing key threats to the Great Barrier Reef.

The Panel provides independent scientific advice to the Australian and Queensland Governments, including advice on the implementation of the Reef 2050 Plan, Reef Water Quality Protection Plan and the Reef Trust.

The Great Barrier Reef Water Science Taskforce has also been established to provide the Queensland Government with the best possible advice on prioritisation of investment to achieve its ambitious water quality targets. The key objective of the taskforce is to ensure clean water flows from rivers to the sea to protect the Great Barrier Reef for future generations. Membership of the Independent Expert Panel and the Water Science Taskforce are overlapping, assisting with ongoing collaboration between governments.

Reef Trust investment is also guided by world-class biodiversity and climate science coming out of programmes such as the Queensland Government's Reef Water Quality Science Program and the National Environmental Science Programme (NESP).





Feather star GBRMPA

Considerable work has been undertaken to determine high priority catchments and high priority pollutants to target investment towards specific areas of the catchment where significant reductions in key pollutants can be made. This research is amongst several mechanisms that directly inform the locality and regions where Reef Trust investments are implemented.

Australian and Queensland Government investment in Reef research and monitoring including the Reef Plan Paddock to Reef Integrated Monitoring, Modelling and Reporting Programme and the Reef Water Quality Science Program has helped to improve the knowledge base across a range of reef issues over the past five years. Building the most recent science and research into Reef Trust decisions ensures each phase of investment targets the highest priority threats to the Reef.

The Great Barrier Reef Foundation's eReefs project uses the latest technologies to collate data and new integrated modelling to produce powerful visualisation, communication and reporting tools for the Great Barrier Reef. It draws on the expertise of the Great Barrier Reef Foundation, Bureau of Meteorology, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australian Institute of Marine Science and Queensland Government. The project will help provide a better understanding of the link between management actions at the catchment level and water quality and the health of the marine environment.

The Australian Government has also provided funding for the development of six regional Water Quality Improvement Plans that will, for the first time, give coverage of the entire Great Barrier Reef catchment. Information from these plans will continue to inform Reef Trust investment at a regional level. They will also help identify the main issues impacting waterways and the marine environment from land-based activities in each region, and prioritise management actions to meet water quality objectives and targets.

The Reef Trust has drawn heavily on information on current and potential threats, and the current status of Reef values provided in the *Great Barrier Reef Outlook Report 2014*. These five yearly reports are prepared by the Great Barrier Reef Marine Park Authority and provide a regular, reliable and scientifically based means of assessing overall performance of all measures to protect and manage the Reef.



PART 2: INVESTMENT

2.1 Phase III Investment

Delivering collaborative investments

The Reef Trust allows for the joint development and delivery of projects by the Australian and Queensland Governments. In this third phase of investment we will work to deliver investments in an integrated manner with the Queensland Government, building on existing activities and integrating with planned initiatives across priority regions and industries. This will include building greater alignment and collaboration with the Queensland Government cane and grazing best management practice (BMP) programmes to deliver investment to reduce nutrient and pesticide losses from cane farming and erosion control in grazing landscapes.

Investment to be provided through the third phase of the Reef Trust is outlined in further detail below. Timeframes for funding of phase III projects and projects announced under previous phases of the Reef Trust are outlined in Figure 3.

Focus on water quality

Declining water quality, influenced by land management in the catchments adjacent to the Great Barrier Reef, is one of the most significant threats to the long-term health and resilience of the Reef. The greatest water quality risks to the Reef come from nitrogen and fine sediment discharge (2013 Scientific Consensus Statement). At its inaugural meeting in August 2015, the Reef 2050 Plan Independent Expert Panel endorsed an approach to the development of investment for Phase III and Phase IV of the Reef Trust with a primary focus on improving water quality.

At its second meeting in October 2015, the Panel endorsed a programme of investment to be delivered through this third phase of investment to address Reef Trust Outcome 1: *improve the quality of water entering the Great Barrier Reef from broad-scale land use to increase the health and resilience of the Great Barrier Reef*. In Phase IV of investment through the Reef Trust, the Australian and Queensland Governments will collaborate further to test new approaches and identify further innovative, cost effective programmes to address the key threats to the Reef, including sediment and nutrient runoff.

PHASE III INVESTMENT: \$58 MILLION



Reef Trust Phase III Investment: \$56 million (2015-16 to 2018-19)

Supporting cane farmers to move beyond industry best practice

Nutrients, from fertiliser, and pesticides used in the sugarcane industry are key threats to the quality of water entering the Reef lagoon. Losses of nutrients are linked to algal blooms, macro-algal overgrowth of corals and seagrasses, and increased frequency of crown-of-thorns starfish outbreaks. Pesticides may also reduce the resilience of coastal ecosystems to other stressors. Helping farmers reduce losses of fertiliser, pesticide and topsoil will improve farm sustainability, productivity and profitability.

Funding will support cane farmers to move to, and in some cases, beyond industry best practice for nutrient, irrigation, pesticide and soil management. A range of validated improved management practices and decision support tools are available to reduce nutrient and pesticide losses, as well as practices to prevent off-farm movement of topsoil and improve water use efficiency.

Funding will support the delivery of expert advice, assistance and training to farmers to develop and implement farm risk assessments and action plans. In some instances, financial incentives tailored to individual business needs may be provided for high priority actions.

Reducing erosion losses from rangelands grazing

Grazing lands comprise 75 per cent of the Reef catchment. Very low ground cover and erosion features such as gullies and unstable river channels in grazing landscapes contribute disproportionately high loads of fine sediment and associated nutrients entering the Reef lagoon. Fine sediment discharge reduces the light available to seagrass and inshore coral reefs. Seagrass loss severely impacts marine turtle and dugong populations (2013 Scientific Consensus Statement).

Funding will provide one-on-one training and support to graziers to implement the highest priority actions identified through the farm planning process, with a focus on improving herd management, forage budgeting, setting and adaptively managing stocking rates and improving ground cover. Financial support will also be provided to eligible graziers to implement specific on-ground projects such as protection and remediation of erosion hotspots.

Maintaining water quality improvement momentum in grains, dairy and horticulture

The grains, dairy and horticulture industries are a lower overall investment priority from a water quality perspective compared to the cane and grazing industries in the Reef catchment, but can have high nutrient, sediment and pesticide loss rates per hectare. The Reef Trust will therefore provide an appropriate level of funding to support these industries to continue to reduce these losses using a highly targeted and collaborative approach.

Funding will provide training and support to land managers in the grains, dairy and horticulture industries in the Reef catchment, including for delivery of soil and nutrient management plans. Financial support will also be provided to landowners for very high priority, cost effective, proven water quality improvement practices such as improved nutrient use and irrigation efficiency, and minimising stock access to waterways.

Investment for innovative practices

A proportion of funding across all industries will support land managers to develop the next generation of improved land management practices. Innovative practices eligible for funding may include farmer trials and/or validation of highly innovative land management practices which have water quality and productivity benefits. Funding may also be provided to programme delivery partners to trial innovative communication or engagement techniques.

Programme Delivery

A competitive grant process will be used to identify and select one or more delivery partners to deliver the programme at regional and/or industry-wide scales. Required services for delivery of the programme will be defined within Reef Trust Phase III Investment Guidelines. These guidelines will be used to assess all applications and will be available on the Reef Trust website shortly.

Innovative funding for coastal habitats

The Reef Trust is trialling innovative approaches to funding conservation projects for the Reef. At its meeting in October 2015, the Reef 2050 Plan Independent Expert Panel endorsed a co-investment pilot project to address Reef Trust Outcome 2: *Improve the health and resilience of coastal habitats.*

In this third phase of investment, the Reef Trust is pleased to join with Greening Australia in partnership with BirdLife Australia, Conservation Volunteers Australia and WetlandCare Australia to deliver a pilot project for coastal habitat and wetland rehabilitation.

Reef Trust Phase III Investment: \$2 million + \$2 million co-investment

Coastal habitat and wetland rehabilitation (2015-16 to 2018-19)

Coastal habitats, including wetlands, floodplains and saltmarshes are vital to the health of the Great Barrier Reef. They provide connectivity between freshwater and marine habitats and also play a role in slowing overland water flow and trapping sediments and nutrients (Great Barrier Reef Outlook Report 2014).

Under this pilot programme, the Australian Government will match, dollar-for-dollar, private funds raised by Greening Australia and its partners up to \$2 million.

This pilot programme will provide wetland and coastal habitat restoration at priority locations in collaboration with landholders and experts in natural resource management along the Great Barrier Reef coast. Restoration of these sites will enhance nutrient assimilation and sediment trapping and assist to re-establish ecosystem function and improve connectivity for at least 200 hectares of wetlands and coastal ecosystems.

This pilot will also inform the most cost effective solutions for repair of Great Barrier Reef wetlands and coastal ecosystems and explore a new approach to diversifying funding for conservation projects for the Reef. Collaborators in this pilot will also include the Queensland Government, the Great Barrier Reef Marine Park Authority, natural resource management groups across the Reef catchment, and scientists.



Deep Red Feather star, GBRMPA

Figure 1: Australian Government phased investment against Reef Trust outcomes addressing highest threats to the Great Barrier Reef World Heritage Area and catchments (as identified in the Great Barrier Reef Outlook Report 2014)

	2013-14	2014-15	2015-16
Previous Reef Investment	Water Quality Grants (\$61,100,000)		
	Water Quality Partnerships (\$3,000,000)		
	Systems Repair & Urban Grants (\$23,500,000)		
	Water Quality Improvement Plans (\$4,450,000)		  
	Crown of Thorns Starfish Control (\$5,100,000)		
	Research and Monitoring (\$21,000,000)		
	Land & Sea Country Partnerships Programme (\$10,000,000)		
Reef Trust - Phase I Investment	Reef Trust Tender - Wet Tropics (\$4,545,000)		
	A-class grazing practices - Burdekin & Fitzroy (\$3,000,000)		
	COTS control (\$2,000,000)		
	Australian Crime Commission investigation into illegal killing and poaching (\$2,000,000)		
	Specialised Indigenous Ranger Programme (\$2,000,000)		
	Cairns & Fitzroy Island Turtle Rehabilitation Centre (\$300,000)		
	Marine Debris Clean up (\$700,000)		
Reef Trust - Phase II Investment	Gully erosion control		
	Reverse Tender - Burdekin & Fitzroy		
	Crown-of-thorns-starfish control		
Reef Trust - Phase III Investment			

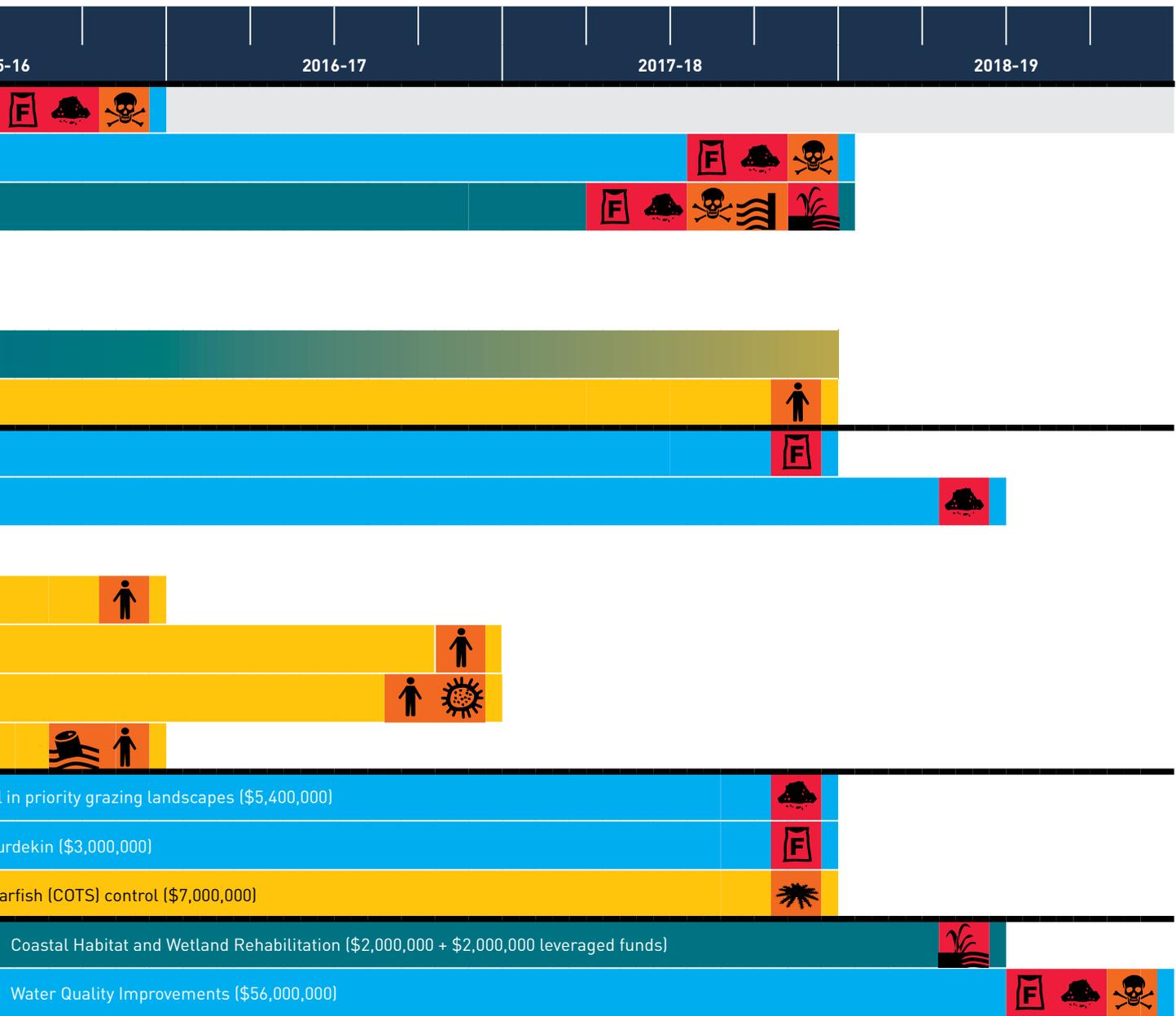
KEY

REEF TRUST OUTCOMES AND INVESTMENT

WATER QUALITY	\$147,495,000
COASTAL HABITATS	\$32,500,000
SPECIES PROTECTION	\$36,100,000

RISK RATING—THREATS

VERY HIGH	HIGH
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SYMBOLS

 NUTRIENT RUN-OFF

 HUMAN IMPACTS

 OUTBREAK COTS

 SEDIMENT RUN-OFF

 ARTIFICIAL BARRIER FLOW

 COASTAL HABITATS

 PESTICIDE RUN-OFF

 OUTBREAK DISEASE

 MARINE DEBRIS



Sea anemone and clownfish, GBRMPA

2.2 Principles of investment

The principles of investment outlined in the *Reef Trust Investment Strategy - Initiative Design and Phase 1 Investment* continue to underpin the identification, prioritisation and coordination of Reef Trust investments.

Investments are based on the best available science and consider opportunities to build on existing efforts by governments, natural resource management organisations and industry. Investments are designed to direct funding in a targeted and strategic way to deliver against the Reef Trust outcomes:

Outcome 1: Improve the quality of water entering the Great Barrier Reef from broad-scale land use to increase the health and resilience of the Great Barrier Reef.

Outcome 2: Improve the health and resilience of coastal habitats.

Outcome 3: Improve and protect marine biodiversity, including the reduction of crown-of-thorns starfish and protection of listed threatened and migratory species, such as dugongs and turtles.

Reef Trust funds may also be derived from the pooling of offset funds for actions that have a significant residual impact on matters of national and state environmental significance.

Outcome 4: Any new development maintains or improves the condition of matters of national and state environmental significance through the strategic delivery of offsets through the Reef Trust.

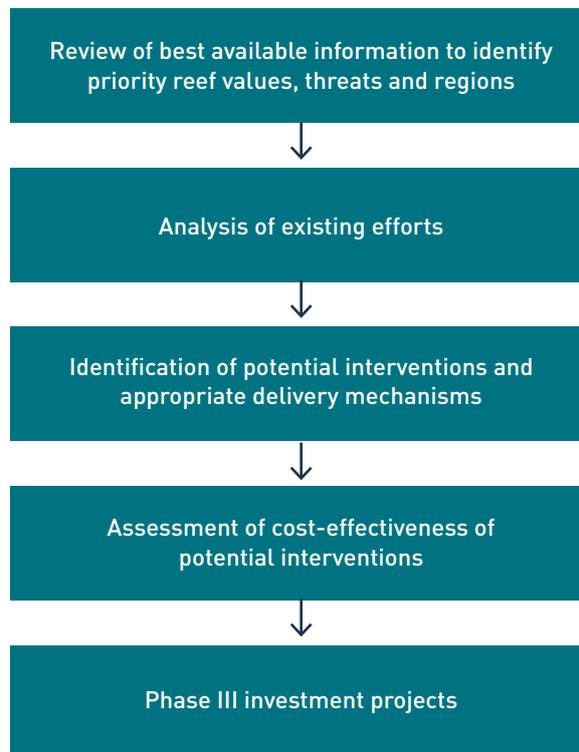
2.3 Approach to the Identification of Phase III Investments

Phase III investments are underpinned by a rigorous process that considers priority threats to be addressed, priority assets to be protected and the most cost-effective and relevant actions that will provide a lasting environmental benefit. Project themes arising from this process were widely distributed to relevant experts and key stakeholders, and revised in response to the feedback received.

In August 2015 the Independent Expert Panel endorsed the approach for developing the next two Phases of Reef Trust investment. This approach has a primary focus on improving water quality, including through the two priority themes of reducing nutrient runoff from intensive agriculture and reducing sediment runoff from erosion hotspots across the Reef catchment. These themes continue to be the highest priorities identified by scientists.

The process to identify Phase III Investments is summarised in Figure 2 and described in further detail below.

Figure 2: Approach for the identification of Phase III Investment.



Review of best available information - priority reef values, threats and regions

The significant work undertaken by the Great Barrier Reef Marine Park Authority and scientists to produce the *Great Barrier Reef Outlook Report 2014* provides an essential assessment of the current health, pressures, and likely future state of the Reef. Likewise, information from the Great Barrier Reef Marine Park Authority's strategic assessment of the Great Barrier Reef World Heritage Area and the Queensland Government's strategic assessment of the adjacent coastal zone provide an understanding of the connectivity of the terrestrial and marine environments and how natural and heritage values can be protected into the future. Further, the *Scientific Consensus Statement on Water Quality in the Great Barrier Reef 2013* and the *Reef Water Quality Protection Plan 2013 Prioritisation project report* have also informed the process to identify priority threats, regions and industries, and the design of potential interventions. Final design and implementation of projects will be further guided by regional water quality improvement plans and other relevant scientific reports.

Analysis of existing efforts

To ensure investments are additional and complementary to existing efforts, analysis of previous and current investment has been undertaken to understand whether the identified threats to natural values are already being addressed. This analysis considered a range of programmes, such as Reef Programme, initial Reef Trust investments, the Queensland Government's Reef Water Quality Program and Queensland Natural Resource Management program, as well as recent Australian Government initiatives such as Green Army and 20 Million Trees.

Consideration was also given to acknowledging where the responsibility, sometimes set through legislation, for addressing threats or protecting natural values rests with other programmes, agencies, industry bodies, or community groups, and where actions are being delivered to address threats.

Figure 3: Summary of threats arising from factors influencing the Region's values and associated scale risk level as identified in the Great Barrier Reef Outlook Report 2014.

	Threat	Risk		Timing	Influencing factors			
		Ecosystem	Heritage values		Climate change	Coastal development	Land-based run-off	Direct use
Region-wide	Altered weather patterns	High	High	Now	●			
	Sea temperature increase	High	High	Now	●			
	Ocean acidification	High	High	10+	●			
	Sea level rise	High	High	10+	●			
	Modifying coastal habitats	High	High	Now		●		
	Nutrient run-off	High	High	Now			●	
	Sediment run-off	High	High	Now			●	
	Outbreak of crown-of-thorns starfish	High	High	Now			●	
	Illegal fishing and poaching	High	High	Now				●
	Incidental catch of species of conservation concern	High	High	Now				●
	Barriers to flow	Medium	Medium	Now		●		
	Marine debris	Medium	Medium	Now			●	●
	Incompatible uses	Low	Medium	Now				●
	Discarded catch	Medium	Medium	Now				●
	Extraction of predators	Medium	Medium	Now				●
	Extraction of particle feeders	Low	Low	Now				●
	Altered ocean currents	Low	Low	10+	●			
	Local or regional	Pesticide run-off	Medium	Medium	Now			●
Disposal of dredge material		Medium	Medium	Now		●		●
Extraction from spawning aggregations		Medium	Medium	Now				●
Outbreak of disease		Medium	Medium	Now				Cumulative effect of many factors
Outbreak of other species		Low	Low	Now				Cumulative effect of many factors
Terrestrial discharge		Low	Low	Now			●	
Acid sulphate soils		Low	Low	Now		●	●	
Artificial light		Low	Low	Now		●		●
Damage to reef structure		Low	Low	Now				●
Damage to seafloor		Low	Low	Now				●
Dredging		Low	Low	Now		●		●
Exotic species		Low	Low	Now			●	●
Extraction of herbivores		Low	Low	Now				●
Grounding large vessel		Low	Low	Now				●
Illegal activities — other		Low	Low	Now				●
Noise pollution		Low	Low	Now		●		●
Spill — large chemical		Low	Low	Now				●
Spill — large oil		Low	Low	Now				●
Vessel strike	Low	Low	Now				●	
Vessel waste discharge	Low	Low	Now				●	
Wildlife disturbance	Low	Low	Now				●	
Grounding small vessel	Low	Low	Now				●	
Spill — small	Low	Low	Now				●	
Atmospheric pollution	Low	Low	Now		●		●	

Identification of projects

Each of the proposed projects for investment through Phase III of the Reef Trust was developed and assessed in light of the Reef Trust outcomes and principles for investment. In developing these projects, advice was drawn from key stakeholders and experts to identify actions that would provide lasting environmental benefits and have a high likelihood of adoption across the relevant industries. The projects that were designed through this iterative process were endorsed by the Independent Expert Panel members at their second meeting in October 2015.

The highest priority water quality threats to the Reef remain nitrogen discharge from intensive agriculture and fine sediment and associated particulate nutrients from the erosion of gullies, river channels and hill slopes on agricultural land. Historical land modification and increasing coastal development are the primary pressures on the health and resilience of coastal ecosystems along the Reef.

Detailed scientific prioritisation information is available to assist with the spatial and management practice targeting of investments to address these high priority threats, including regional Water Quality Improvement Plans and the results of the Reef Plan Paddock to Reef Integrated Monitoring, Modelling and Reporting ('Paddock to Reef') Programme.

Assessment of Cost-Effectiveness

Using advice from the recently formed Independent Expert Panel, the Phase III project scoping process identified potential projects to increase the efficiency and effectiveness of investments and maximise progress towards achieving the Reef Trust outcomes and targets.

In addition to focusing on key water quality threats to the Reef, Phase III projects are also focused on the most cost effective management actions to address these threats. Information on cost effectiveness, both in terms of specific management actions and delivery mechanisms, as well as essential supporting actions such as farm planning, training and extension has been built up over the course of eight years of large-scale on-ground programme delivery through Reef Rescue, Reef Programme and Reef Trust. Projects have been designed based on actions that can be monitored, modelled and reported through the existing 'Paddock to Reef' programme.

Projects for investment through this third phase have been considered in conjunction with other activities occurring, or in the final stage of planning, throughout the Reef catchment to ensure effective coordination of effort and to maximise cost effectiveness.

Working Collaboratively

The Australian and Queensland Governments continue to work closely together to ensure their respective investments are coordinated and complementary. The Independent Expert Panel and the Queensland Government Water Science Taskforce provide advice on the alignment of investments, assisted by the overlapping membership of the two groups.

Flexibility and collaboration by both governments will be enhanced as both the Australian and Queensland Governments continue working to develop successive projects and deliver these in a staged approach. With this collaborative approach, the development of future projects will continue be informed by the successes and learnings of previous projects delivered by both governments to improve the health and resilience of the Great Barrier Reef.

2.4 Offsets

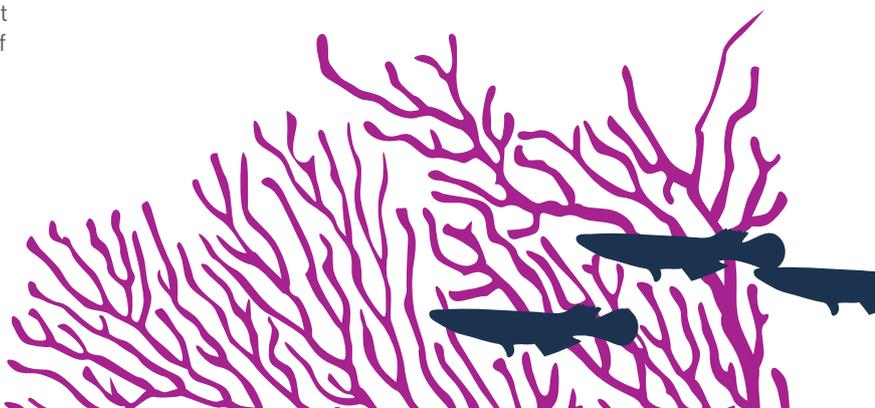
Environmental offsets are a regulatory tool used to compensate for the residual adverse significant impacts of an action on the environment, once all feasible avoidance and mitigation measures have been applied. Offsets are designed to achieve long-term environmental outcomes, while providing a degree of flexibility for approval holders to achieve the required environmental outcome.

The Reef Trust provides a mechanism for approval holders to address offset requirements for actions in the Great Barrier Reef World Heritage Area. Through the Reef Trust, offset funding can be pooled and delivered strategically, to provide greater environmental benefit for the impacted protected matters.

Guidance for future proponents on the requirements for providing an offset contribution to the Reef Trust and the method used to calculate the size of the required offset is currently under development.

The Reef Trust offset approach is intended to align with and complement the *EPBC Act Environmental Offsets Policy*, along with the outcomes agreed in the *Reef 2050 Plan* including the Net Environmental Benefit Policy and Great Barrier Reef World Heritage Area Offsets Guidelines currently being developed by the Great Barrier Reef Marine Reef Authority.

Finalised guidance material and associated resources will be available on the Reef Trust website by mid 2016.



Incorporating Existing Offsets

The Reef Trust is working with several existing approval holders whose conditions of approval require a financial contribution to a reef programme, such as the Australian and Queensland Governments' joint Field Management Program, or to support an offset strategy which must align with the broader strategies and programmes of the Great Barrier Reef, such as the *Reef 2050 Plan* and the Reef Trust.

Qld Environmental Offsets

Queensland offsets can be provided through the Reef Trust where they meet the requirements of the *Queensland Environmental Offsets Framework*. Under this framework, offsets may also be delivered as a Direct Benefit Management Plan (DBMP) or implementing actions of an approved DBMP.

A DBMP is a packaged investment that outlines priority actions to address threats to, and provide substantial benefits for, particular prescribed environmental matters. Substantial benefits are achieved by providing landscape-scale benefits for those matters, or if the matter is localised, improved outcomes compared to a traditional land-based offset.

A DBMP can also include measures that improve knowledge, understanding and management of these matters - leading to improved conservation outcomes for the impacted matter. The Australian and Queensland Governments continue to work towards developing projects which could be delivered through this mechanism.

Further details on the Queensland Environmental offsets framework is available at www.qld.gov.au/environment/pollution/management/offsets/

2.5 Private and philanthropic investment opportunities

The Australian and Queensland Governments have a long history of investing significant resources in protecting and managing the Reef. This investment is projected to total more than \$2 billion over the next decade. In addition, the Reef is also supported by considerable injection of funds from local government and the community, as well as growing support from private and philanthropic organisations.

Growing interest from the private and non-government sectors in the financing of Reef projects indicates a potential to diversify sources of investment. Intrinsic to its design, the Reef Trust is able to consolidate investment from a wide range of sources to deliver the greatest outcome from the Reef for every dollar spent.

We are now seeking to complement existing Reef investment and are providing prospective investors with new opportunities to support the delivery of conservation and protection projects through the Reef Trust.

Reef Trust: Partnerships for the Reef, to be released shortly, sits alongside this investment strategy. It provides information and opportunities to organisations and investors interested in supporting priority projects in the Reef. It includes a suite of potential projects for private sector investment and delivery. It also presents a series of high level project themes for further design and development in collaboration with interested parties and future partners.

Reef Trust: Partnerships for the Reef will be available on the Department's website www.environment.gov.au/marine/gbr/reef-trust.

2.6 Potential mechanisms for future investments

The Reef Trust presents a great opportunity to explore alternative funding mechanisms. This is a new and exciting space and provides the chance to work outside traditional disbursement methods (such as grants), as well as look at ways to maximise results for each dollar invested.

The Reef Trust has commenced use of alternative mechanisms including a competitive tender (or reverse auction) as used for the delivery of its recent *Reef Trust Tender – Wet Tropics* project. The competitive nature of the process made it a more cost effective option for achieving environmental outcomes compared to traditional grant processes.

The Reef Trust is working with experts from the philanthropic and investment sectors to develop further options for the use of innovative financial mechanisms for investment through the Reef Trust. These options may include green bonds, impact investment and private equity investments which are new to the environment sector in Australia.

The use of private and philanthropic funds for government-led conservation projects is an area of continual development and we welcome ideas that support the delivery of Reef Trust outcomes in the Great Barrier Reef World Heritage Area and the Reef catchments.

PART 3: GOVERNANCE

3.1 Governance arrangements

The Reef Trust is delivered by the Australian Government in collaboration with the Queensland Government. Governance and administrative arrangements are in place to ensure all Reef Trust funds are effectively managed and directed towards priority on-ground actions. These arrangements leverage and complement the broader governance structure and processes for the *Reef 2050 Plan* and sit alongside arrangements for the *Reef Water Quality Protection Plan 2013*.

Independent expert advice on Reef Trust funding priorities is provided by the Reef 2050 Independent Expert Panel, chaired by the Commonwealth Chief Scientist Ian Chubb. The Panel consists of eminent experts from a number of scientific fields and considers and advises on priorities and projects for the Reef Trust. This will maximise the progress made towards achieving *Reef 2050 Plan* targets for the protection and conservation of the Great Barrier Reef.

The Reef 2050 Advisory Committee is also utilised by the Reef Trust to facilitate engagement with the broader community and industry. The Advisory Committee, consisting of senior representatives from key industry and community bodies, provides strategic advice on the implementation of the Reef 2050 Plan, including the Reef Trust.

Oversight and advice on the delivery of the Reef Trust is provided by the Reef Trust Joint Steering Committee, which comprises of senior representatives from the Australian and Queensland Government. The Committee is responsible for overseeing administration of Reef Trust, development of investment strategies and delivery and implementation of Reef Trust projects. In addition, the Committee advises on emerging issues and projects for potential investment, and helps ensure complementarities and collaboration in activities undertaken by the Australian and Queensland Governments on the Reef.

3.2 Monitoring and reporting

Monitoring and reporting enables the Reef Trust to meet its obligations to report by outcomes, account for the use of public funds and enable continuous project and programme improvement.

The impacts of Reef Trust investments are monitored, where appropriate, through the Australian and Queensland Government funded Paddock-to-Reef programme. The annual Great Barrier Reef Report Card produced through this programme provides an assessment of the current state and trends in water quality entering the reef as well as an overview of marine condition including for seagrasses and corals.

Performance of on-ground activities in contributing to the targets set in the *Reef 2050 Plan* is reported every six months through the online monitoring, evaluation, reporting and improvement tool (MERIT). An overview of the Reef Trusts progress and achievements by project is available at <https://fieldcapture.ala.org.au>

The Australian and Queensland Governments' international obligations in respect to the Great Barrier Reef world heritage status are monitored and reported on through the Reef Integrated Monitoring and Reporting Program. This program is managed through the Great Barrier Reef Marine Park Authority and informs the Great Barrier Reef Outlook Report.

3.3 Community involvement

Consultation on the Reef Trust and investment options has involved discussions with key interest groups such as natural resource management organisations, industry organisations, environmental non-government organisations, research institutions, as well as academic organisations such as AIMS, CSIRO, James Cook University, and the University of Queensland.

Adaptive management for the Reef Trust is underpinned by engagement and continual review of the effectiveness of past and current investment. Future investment through the Reef Trust will continue to engage a broad range of stakeholders, identifying and capturing expert and local knowledge and understanding the significant body of work undertaken to date in the Great Barrier Reef.

If you have information that could critically inform investment through the Reef Trust, we are interested in hearing from you. Please send suggestions and input for concepts that align with the outcomes of the Reef Trust to reef2050@environment.gov.au

An aerial photograph of a coral reef system. The water is a deep blue, transitioning to a lighter turquoise near the reef. The reef itself is a complex, textured surface of various shades of brown, tan, and green, interspersed with deeper blue channels. The sky is a vibrant blue with a few scattered white clouds. The text is overlaid on the upper left portion of the image.

**PHASE III
INVESTMENT:
\$58 MILLION**



Bowl Reef, GBRMPA