

Queensland
**REEF WATER
QUALITY**
Program



Investment Plan
2023–2024

Acknowledgement

We acknowledge the continuing management and custodianship of Country across the Great Barrier Reef Region by its Traditional Owners whose rich cultures, heritage values, enduring connections and shared efforts continue to protect land, sea and sky Country for future generations. We pay our respect to their Elders, past, present, and emerging.

We recognise the continuous living culture of Aboriginal and Torres Strait Islander peoples – their diverse languages, customs and traditions, knowledges, and systems – and the deep relationship and responsibility to Country as integral to their identity and culture.

We thank Traditional Owners for their enduring stewardship and protection of the Great Barrier Reef for thousands of generations – and for their ongoing guidance and partnership in the shared efforts to protect the Great Barrier Reef.

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Introduction

Protecting the environment, including the iconic Great Barrier Reef (Reef), is a Queensland Government priority. Improving the quality of the water flowing from the land to the Reef is critical for building the resilience of the Reef and will give it the best chance to recover from current and future climate change impacts. That is why the Queensland Government has allocated \$289.6 million to continuing the Queensland Reef Water Quality Program (the Program) to 2025-2026. The Program is the Queensland Government's key response to addressing water quality impacts affecting the Reef. It funds a range of water quality improvement projects working with industry, agricultural producers, communities and Traditional Owners.

The Office of the Great Barrier Reef and World Heritage (OGBR&WH) within the Department of Environment and Science (DES) is responsible for overseeing the Program, working across DES and with the Department of Agriculture and Fisheries (DAF) and the Department of Resources (DoR).

The Program delivers activities as part of implementing the joint Queensland and Australian governments' Reef 2050 Water Quality Improvement Plan (Reef 2050 WQIP) which supports the water quality theme of the Reef 2050 Long-Term Sustainability Plan (Reef 2050 Plan). The Reef 2050 WQIP addresses all land-based sources of water pollution including run-off from agricultural, urban, industrial and public lands. The Reef 2050 WQIP also includes objectives and targets that are monitored and reported against through the Paddock to Reef Integrated Monitoring, Modelling and Reporting Program and Reef Water Quality Report Cards.

The Program will help in the delivery of the Queensland and Australian governments' commitments to the United Nations Educational, Scientific and Cultural Organization (UNESCO) and World Heritage Centre. This includes the acceleration of progress towards the Reef 2050 WQIP targets and objectives through a program of sediment, nutrient and pesticide reduction using regulation, incentives, and accelerated landscape restoration programs.

Purpose of the Annual Investment Plan

The Queensland Reef Water Quality Program Annual Investment Plan (the Plan) outlines the Program objectives, planned investment, project activities and deliverables for the financial year 2023 to 2024. The Plan also briefly details governance processes that will ensure transparent, efficient and effective Program delivery. All annual investment plans and reports are made publicly available and support the accountability of the Program.

Program Objectives

During the period 2021-2022 to 2025-2026, the Program is designed to accelerate progress towards the Reef 2050 WQIP targets by:

- Improving land management through voluntary and regulatory approaches
- Restoring resilient and functional landscapes, with a particular focus on gullies and streambanks to drive progress towards the sediment targets
- Building regional capacity to support regional economies.
- Delivering, supporting and translating best available science and knowledge.

The Program’s goal and objectives are shown below.

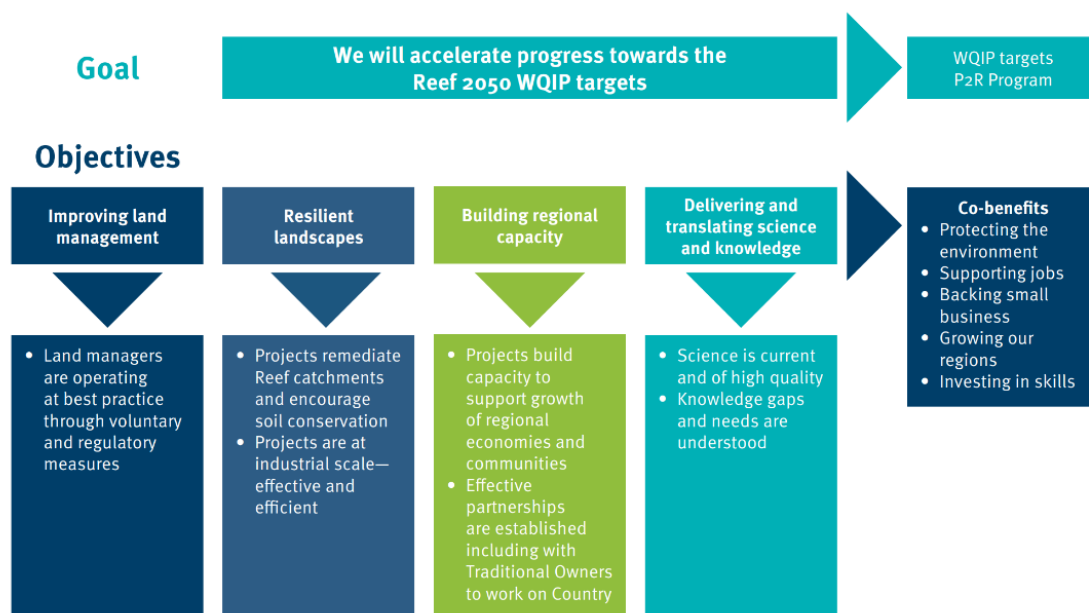


Figure 1: Program Goal and Objectives

Funding

The total investment for the five-year period of the Queensland Reef Water Quality Program 2021-22 to 2025-26 is \$289.6 million, comprised of:

- \$270.1 million allocated to the program from the Queensland 2021-2022 budget
- \$10 million allocated to the Reef Credits Scheme
- \$9.5 million balance remaining from the discontinued Farming in Reef Catchments Rebate Scheme. reallocated to continue supporting farmers

Program funding is used to leverage additional funds from other organisations, including the Australian Government and private investors. It is also acknowledged that partners across industry, not-for-profit organisations, research organisations, Australian and local governments, landholders, Traditional Owners, and private organisations also co-invest and provide in-kind contributions.

Oversight, Accountability and Coordination

The OGBR&WH within the Department of Environment and Science (DES) provides oversight and co-ordination of the Program on behalf of the Minister for the Environment and the Great Barrier Reef. Activities within the Program are implemented by the Queensland departments of Environment and Science (DES), Agriculture and Fisheries (DAF) and Resources. Some activities are delivered by external providers with oversight by the relevant department.

The OGBR&WH works closely with other relevant Queensland Government departments, the Australian Government, local government, community organisations, peak bodies, industry, Traditional Owners and private organisations through various partnerships, advisory panels, expert panels and committees that contribute to implementing Reef-related initiatives.

The Program is implemented using an adaptive management approach - actions are regularly monitored and reported to evaluate how well they are working. For the first time, a whole-of-program monitoring, evaluation, reporting and improvement (MERI) plan has been developed to support ongoing evaluation of the Program. The Program MERI is over and above the individual MERI plans produced for each project and will enable the quantification of success through a range of environmental, economic and social targets.

The Program is governed through the Queensland Reef Water Quality Program Steering Committee. Consisting of senior executives from all Queensland Government agency delivery partners, the Steering Committee will provide strategic oversight of the Program to ensure that it meets its objectives and to collaboratively resolve issues.

The governance arrangements for the Program are shown in Figure 2.

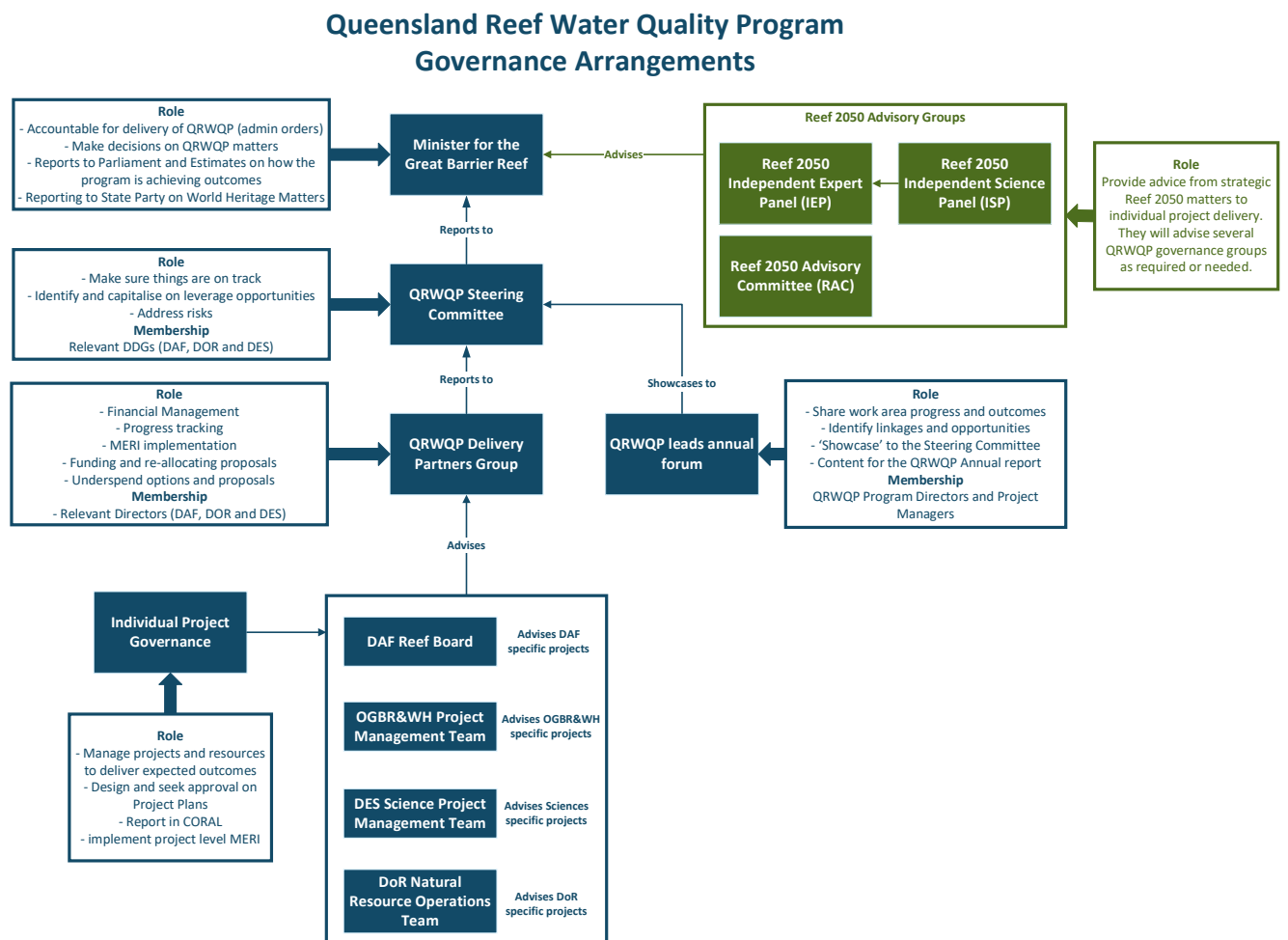


Figure 2: Queensland Reef Water Quality Program Governance Arrangements

Program Work Areas

To ensure a continued cohesive and coordinated delivery effort with structured governance arrangements, all sub-programs and individual projects will be delivered under one of six work areas and the Improving threatened species in the Great Barrier Reef World Heritage Area program of work:

1. Supporting the agricultural industry
2. Restoring functional landscapes including soil health
3. Urban and point source innovation program
4. Foundational science and translation
5. Robust governance
6. Paddock to Reef program and report cards

Outcomes will be monitored and reported on and form part of a continuous improvement approach for these work areas. Linkages across work areas have been identified to maximise efficiencies, and leverage opportunities and learnings.

These work areas are also aligned to the Reef 2050 WQIP implementation work areas shown in Figure 3.

QRWQP Work Areas	Reef 2050 WQIP Implementation Areas						
	A - Responding to the challenge: Actions to progress towards targets			B - Enabling delivery			
	A1: Minimum practice standards apply	A2: Culture of innovation & stewardship	A3: Catchment restoration	B1: Applying the best available science & knowledge	B2: Coordinating & prioritising investment	B3: Governance - decision making & accountability	B4: Evaluating performance
Supporting the agricultural industry	✓	✓		✓			
Restoring functional landscapes (inc. soil health)		✓	✓	✓	✓		
Urban point source and innovation program		✓		✓			
Foundational science and translation				✓			
Robust governance					✓	✓	✓
Paddock to Reef Program and report cards		✓		✓		✓	✓

Figure 3: Alignment of the QRWQP work areas with the Reef 2050 Water Quality Improvement Plan Implementation work areas

Planned Investment for 2023-2024

The annual planned investment for each QRWQP work area and their sub-programs is detailed in **Table 1: Planned Investment and Sub-Program Deliverables for 2023 to 2024**. This table also describes the deliverables for each work area/sub-program and how these deliverables support the Reef 2050 WQIP activities.

Conclusion

The Queensland Government is committed to continuing efforts to restore, protect and build the resilience of the iconic Great Barrier Reef. Improving Reef water quality remains a key priority with the Queensland Reef Water Quality Program delivering a wide range of measures to address that priority. It invests in on-ground water quality improvement projects with a strong focus on innovation and supports landholders to make long-term practice change.

Table 1: Planned Investment and Sub-Program Deliverables for 2023 to 2024

Reef 2050 WQIP Activity	QRWQP Work Area Sub-Program	Project Name	Project Lead Agency	23-24 Planned Deliverables	Total
Supporting the agricultural industry					
A1: Minimum practice standards apply	Banana Incentive Program	Banana Incentive Program	DES OGBR&WH	Commence contract for Phase 3. This contract will continue extension services and funding incentives. Round 1 of the Phase 3 Banana BMP Best Practice Fund will close with projects to be contracted by the Australian Banana Growers Council. This round will focus on sediment management practice change projects in readiness for the wet season.	\$487,000
	Best Management Practice (BMP)	Banana BMP	DES OGBR&WH	Commence contract for Phase 3. This contract will continue extension services and funding incentives. Planned project deliverables will include the development of foundational documents and support for growers to meet targets to assist with benchmarking and accreditation.	\$572,800
		Hort360 BMP	DES OGBR&WH	Commence project scoping and planning. This project will deliver foundational documents including plans for grower engagement and extension, a communications plan, data capture systems and reporting procedures, MERI and governance.	\$873,450
		Smart Cane BMP	DES OGBR&WH	CANEGROWERS will engage extensively with growers and grower advisers in the Wet Tropics, Burdekin, Mackay –Whitsunday , and Burnett Mary regions to increase cane land under accreditation by 8% and re-accredit nearly 350 businesses. The project will also support and report on growers' practice improvement for water quality outcomes and provide information on the changes in industry to growers, industry, and other stakeholders. The project will also explore greenhouse gas emission changes in relations to practice change.	\$1,200,000
		BMP Improvement	DES OGBR&WH	This program will support industry Best Management Practice improvement and adoption of improved practices with the industry in 2023-2024.	\$745,177
	Economic Evaluation and Prioritisation Program	Economic Evaluation and Prioritisation	DAF	Economists will continue to work across the multiple Reef projects to support and develop decision support tools and undertake economic analyses that identify barriers to adoption of best practice and support policy development.	\$1,333,683
	Embedding Grains Practice in Reef Catchments	Embedding Grains Practice in Reef Catchments	DAF	DAF will continue to roll out the extension program - working with grains producers in priority catchments (Herbert, Burdekin, Mackay Whitsunday, Fitzroy and Burnett Mary) to embed improved production practices by combining proven extension processes with targeted on-farm demonstrations, informed by a combination of the latest science, and provision of agronomy and AgTech solutions, to reduce sediment and associated nutrient and pesticide losses.	\$831,000
	Enhanced Managing Pesticide Risks in Great Barrier Reef (GBR) Catchments	Enhanced Managing Pesticide Risks in GBR Catchments	DAF	Assessment and reviews will commence within identified high risk catchments. Continue communications and engagement with target resellers, productivity services, industry bodies and the broader primary producer community.	\$891,000
	Grazing Resilience and	GRASS - BMRG	DES OGBR&WH	GRASS activities to be delivered in the Burnett Mary region includes extension services, development of 22 Action Plans for Land Management (APLM's) and 15 financial assistance	\$536,103

Reef 2050 WQIP Activity	QRWQP Work Area Sub-Program	Project Name	Project Lead Agency	23-24 Planned Deliverables	Total
	Sustainable Solutions (GRASS)			incentives. This aims to support graziers with APLMs to adopt improved practices and implement on-ground works to improve degraded land.	
		GRASS - FBA	DES OGBR&WH	GRASS activities to be delivered in the Fitzroy region includes extension services, development of 45 Action Plans for Land Management (APLM's) and 24 financial assistance incentives. This aims to support graziers with APLMs to adopt improved practices and implement on-ground works to improve degraded land.	\$919,503
		GRASS - NQDT	DES OGBR&WH	GRASS activities to be delivered in the Burdekin region includes extension services, development of 22 Action Plans for Land Management (APLMs) and 24 financial assistance incentives. This aims to support graziers with APLMs to adopt improved practices and implement on-ground works to improve degraded land.	\$720,203
		GRASS - Grazing Support	DES OGBR&WH	Commence project scoping and planning.	\$508,803
		GRASS DAF	DAF	GRASS activities to be delivered in Burdekin, Fitzroy and Burnett Mary includes extension services and the development of 48 Action Plans for Land Management (APLMs) to encourage improved practices and implement on-ground works to improve degraded land.	\$658,287
		GRASS - Evaluation	DES OGBR&WH	Design and initiate the mid-term independent evaluation of the GRASS program.	\$134,503
	Reef Compliance and Regulation Program	Reef Compliance and Regulation - ERA13A extension	DES ESR	Continue to deliver the Reef protection regulations with an expanded compliance program, to support the uptake of minimum practice standards in sugarcane, banana and grazing agricultural areas.	\$6,316,653
	Reef Regulatory Statutory Review	Reef Regulatory Statutory Review	DES OGBR&WH	Undertake consultation with producers and peak industry, conservation, and natural resource management groups to understand the experiences with implementation of the regulations, including any issues encountered and potential solutions. A report will document and analyse the feedback, including key themes.	\$150,600
	Practice change, on ground programs supporting adoption and regulatory transition	Practice change, on-ground programs - Market Calls (Cane)	DES OGBR&WH	Commence the assessment phase of the open market call for cane, with projects to be contracted in early 2024.	\$3,444,332
		Practice change, on-ground programs - Market Calls (Grazing)	DES OGBR&WH	Commence the assessment phase of the open market call for grazing, with projects to be contracted in early 2024.	\$2,245,457
		Practice change, on-ground programs - Market Calls (Hort and Banana)	DES OGBR&WH	Commence the assessment phase of the open market call for horticulture and banana, with projects to be contracted in early 2024.	\$1,330,082
	A2: Culture of innovation and stewardship	Advancing Coastal Farming Systems	Advancing Coastal Farming Systems	DAF	Continue to roll out the extension program to all Queensland cane growing districts. This includes a major focus on using demonstration sites to show benefits of amelioration strategies to improve soil health and overcome soil constraints including legume rotations, reduced tillage, and ameliorant (e.g., lime/gypsum) application. The program will also focus on increasing nutrient use efficiency with continued engagement around pesticide management including demonstrations of best practice application equipment settings.

Reef 2050 WQIP Activity	QRWQP Work Area Sub-Program	Project Name	Project Lead Agency	23-24 Planned Deliverables	Total	
	Agriculture Water Treatment Innovation & Extension	Agriculture Water Treatment Innovation & Extension	DAF	Provide opportunities for industry engagement and sharing of science. Treatment systems to be installed and monitoring program established.	\$132,667	
	Farmers For The Future	Farmers for the future - RP164	DES OGBR&WH	Home Hill State School will continue to use the school farm plot with excursions to local farms, agricultural and environmental facilities to educate students on environmental impacts and best practice relating to agriculture.	\$10,000	
	Graduate Work Placement Program	Graduate Work Placement Program - Agriculture and environmental monitoring	DES OGBR&WH	The Queensland Farmers Federation Agricultural Extension Work Placement will engage with the first cohort of trainees to commence their 15-month work placement with host organisations in Reef regions in early 2024.	\$800,000	
	Integrated Communications, Engagement and Capacity Building	Communication and Engagement		DAF	Continue to undertake activities to implement and manage integrated communications.	\$232,500
		Enhanced Extension		DAF	Continue to build capacity of skilled extension workforce and networks as well as farmers in Reef regions through supporting the development of farmer led peer-to-peer learning and support networks as well as deliver targeted training and development for public and private extension services to strengthen technical and practice change extension skills.	\$1,554,000
	Grazing Extension	Grazing Extension Support Project		DAF	This project will work with Queensland beef producers to deliver improved grazing land management practices as a cost-effective way of achieving sediment reduction targets for the Great Barrier Reef. Using a range of extension processes that enable change, the project assists beef producers to adopt best practices to enhance enterprise productivity and profitability, while contributing to meeting Reef 2050 WQIP targets.	\$1,635,000
B1: Applying the best available science and knowledge	Banana Nutrient Trials	Banana Nutrient Trials	DAF	Trial plant crop will be established with a monitoring program and economic assessment will commence. Design aspects in addition to the fertiliser rate trial will be completed and established.	\$930,891	
	Fine Scale Water Quality Monitoring Program	Fine Scale Water Quality Monitoring	DES Sciences	Finalise Monitoring, Evaluation, Reporting and Improvement (MERI) and communications plans. Continue collection of water quality data and provision of data into the 1622 App. Engage with, and upskill, contractors to undertake monitoring.	\$688,149	
		Fine Scale Water Quality Monitoring - Project Call	DES OGBR&WH	Undertake market call to contract suppliers to provide locally relevant and timely water quality data in priority areas of the Great Barrier Reef catchment.	\$1,278,149	
	Grazing Land Management Support	Land Condition Program	DAF	DES Scientists will develop and produce annual satellite-derived land condition (SLC) spatial layers for the Fitzroy, Burdekin and Burnett Mary natural resource management regions to help enable the remote assessment of land condition and productivity, for the Land Condition Program.	\$423,000	
	Horticulture R&D	Horticulture R&D: addressing the Knowledge Gaps	DAF	Continue research in intensive horticultural production systems to produce reliable scientific data to improve sustainable efficiency of these systems. Work will focus on vegetable crops in Bowen, Ayr and Bundaberg and tree crops in Bundaberg and Mareeba, focusing on nutrient, pesticide, sediment and irrigation management practices.	\$682,636	

Reef 2050 WQIP Activity	QRWQP Work Area Sub-Program	Project Name	Project Lead Agency	23-24 Planned Deliverables	Total
	Improving Knowledge and Research for Horticulture and Cropping Activities	Improving Knowledge and Research for Horticulture and Cropping Activities	DES Sciences	Continue to gather physiologic, phenologic and agronomic information to parameterise, for the first time, 14 horticulture crops in the APSIM Next Gen model.	\$150,000
	Soil Mapping and Modelling for Reef Land Use Decision Support Tools	Soil mapping and modelling for reef land use decision support tools	DES Sciences	Continue to collect soils data to aid the development of decision support tools. Additional soils data will be collected during March to June 2024. There is a planned expansion of the attributes considered in the tools to align with broader land suitability concepts.	\$110,000
	Grazing Land Management Support	Science to Support Climate Smart Grazing Land Management	DES Sciences	Develop and deliver new and improved products and information that assists stakeholders to manage the risks associated with Queensland's variable and drought-prone climate. This project is co-delivered with DAF.	\$700,000
Urban and Point Source Innovation Program					
A1: Minimum practice standards apply	Erosion and Sediment Control and Urban Stormwater Management Capacity Building	Erosion and Sediment Control and Urban Stormwater Management Capacity Building	DES OGBR&WH	Determination of project scope and planning of initial deliverables.	\$300,000
	Point Source Evaluation and Stewardship Delivery	Point Source Evaluation and Stewardship Delivery Project	DES Sciences	Complete research and deliver reports regarding management practices associated with the pond aquaculture industry and on-site sewage systems in relation to water quality flowing to the Great Barrier Reef. In addition, complete and deliver a report defining leading practice operation for sewage treatment plants in the Great Barrier Reef catchment.	\$150,000
A2: Culture of innovation and stewardship	Great Barrier Reef Technology and Innovation Fund	Great Barrier Reef Technology and Innovation Fund	DES OGBR&WH	Commence program.	\$3,000,000
B2/B3: Governance, decision making and prioritisation	Governance Initiative	Program Planning and Development	DES OGBR&WH	Ongoing program management, review and implementation of governance activities, with a continuous improvement and partnership focus.	\$136,015
Restoring functional landscapes including soil health					
	Ecomarkets	Ecomarkets	DES OGBR&WH	Enhance the support services for the Reef Credit Scheme to help establish the market.	\$51,772

Reef 2050 WQIP Activity	QRWQP Work Area Sub-Program	Project Name	Project Lead Agency	23-24 Planned Deliverables	Total
A2: Culture of innovation and stewardship		Ecomarkets Future Funds	DES OGBR&WH	Finalise the Ecomarkets Future Fund.	\$1,000,000
	Major Integrated Projects (MIPs)	Major Integrated Projects (MIPs) - Burdekin	DES OGBR&WH	Co-design and delivery of an implementation plan in collaboration with the Landholders Driving Change panel.	\$1,137,811
		Major Integrated Projects (MIPs) - Wet Tropics	DES OGBR&WH	Continue local scale water quality monitoring and paddock demonstration sites, as well as reporting on completed catchment repair sites monitoring in the Tully and Johnstone catchments.	\$887,811
	Place based integrated projects	Place based integrated projects	DES OGBR&WH	Stage One will facilitate collaboration, discussion, project ideation, and innovation among stakeholders to explore opportunities to improve Reef water quality and deliver other co-benefits, in one or more Reef sub-catchments. It is expected that Stage One will support project ideation toward future Reef Place-Based Integrated Projects.	\$2,316,842
		Place based integrated projects - Atherton	DES OGBR&WH	Co-design Phase One gathering an in-depth understanding of the local context, undertaking qualitative interviews, analysis, and developing an Implementation Plan for Phases 2 to 4. Commencement of Phase Two to deliver a regenerative horticulture grants program in the Atherton Tablelands.	\$796,842
	Reef Credits	Reef Credits	DES OGBR&WH	Support delivery of the \$10 million Reef Credit Fund.	\$2,536,683
A3: Catchment restoration	Alluvial Gully Remediation Techniques	Demonstrating Alluvial Gully Remediation Techniques in the Upper Burdekin Spyglass Research Station - RP310	DAF	Finalise the baseline assessment of the alluvial gully complex for remediation design planning. Design decisions will be guided by a Technical Advisory Group and graziers. Commence on-ground works in mid-2024.	\$498,121
	Gully and Streambank Remediation Program	Gully and Streambank Remediation - Burdekin	DES OGBR&WH	Complete remediation engineering designs for site and on-ground works to commence mid-2024.	\$965,121
		Gully and Streambank Remediation - Fitzroy	DES OGBR&WH	Complete remediation engineering designs for site and on-ground works to commence mid-2024.	\$699,465
		Gully and Streambank Remediation - Wet Tropics	DES OGBR&WH	Complete remediation engineering designs for site and on-ground works to commence mid-2024.	\$451,392
	Landscape Repair Program	Landscape Repair Program	DES OGBR&WH	Capture priority LiDAR data and develop the implementation plan for on-ground projects.	\$3,465,000
	Queensland River Management Framework	Queensland River Management Framework	DES Sciences	Release the Queensland River Classification Scheme (QRCS) on the Queensland Government's Wetland Info website. The QRCS will be applied to develop a sediment threat typology that can be applied to Great Barrier Reef catchments to support management and decision-making.	\$200,000
	Reef Assist	Reef Assist - Burdekin 2.4	DES OGBR&WH	This project will target the Black-Ross basin's priority sub-catchments by undertaking gully and streambank erosion remediation, collection/grow-out of critical native pasture grasses, building soil health and infiltration capacity with on- and near-site resources. It aims to incorporate First Nations knowledge to combat the legacy of poor land management practices and collaborate with developers; building systems to implement low-cost, effective erosion and sediment	\$727,728

Reef 2050 WQIP Activity	QRWQP Work Area Sub-Program	Project Name	Project Lead Agency	23-24 Planned Deliverables	Total
				control strategies, tackling challenges of peri-urban development in regional Great Barrier Reef catchments.	
		Reef Assist - Burdekin 2.7	DES OGBR&WH	This project will directly improve water quality in priority Burdekin sub-catchments through sediment reduction activities, including installing erosion control structures, targeted weed management, and revegetation. Three Big Rivers have cultural guidance from Birriah Aboriginal Corporation, Bindal, and Wulgurukaba Traditional Owner groups to record cultural knowledge, including land and waterway management.	\$508,278
		Reef Assist - Burnett Mary 2.12	DES OGBR&WH	Undertake on-Country restoration by a team of First Nations rangers including 18.7 hectares of riparian and wetland restoration at the iconic Mon Repos Conservation Park.	\$877,728
		Reef Assist - Cape York 2.1	DES OGBR&WH	Remediate gully erosion features on Normanby and Melsonby stations in Cape York. Project staff and an additional 40 First Nations people from nearby Hope Vale will gain valuable Level 1 Machine Operator accreditation, which can be used to repair roads in the Cape.	\$496,028
		Reef Assist - Wet Tropics 2.11	DES OGBR&WH	This project aims to improve water quality flowing from degraded farmland into the Daintree River, providing riverbank stabilisation and filtration. A substantial rainforest corridor 630 metres long and 30 metres deep will be established, providing habitat for marsupials such as the Bennet's Tree Climbing Kangaroo, Spotted Quoll and Southern Cassowary, among other species.	\$359,878
		Reef Assist - Wet Tropics 2.2	DES OGBR&WH	This project will revegetate a five-hectare natural wetland and provide staff with invaluable experience restoring wetland function in a 34 hectare constructed wetland system. Participants will gain a competitive edge in future employment through leadership training, transferable skills set, experience in leading edge nature-based solutions to water quality improvement, and exposure to a range of potential future employers through participation in the high-profile constructed wetland system.	\$329,428
		Reef Assist - Wet Tropics 2.3	DES OGBR&WH	This project will repair and revegetate up-to 7.9 hectares of wetlands and cane drainage systems in the Mulgrave catchment to deliver improved Reef water quality., with co-benefits achieved for threatened species habitat, riparian corridors, control of listed weeds, and carbon storage. Native seed collection and propagation will be undertaken to supply the project, as well as develop capacity for future nursery services.	\$255,228
		Reef Assist - Wet Tropics 2.8	DES OGBR&WH	This project will revegetate degraded upper Atherton Tablelands (Barron River and Johnstone River) landscapes to improve water quality flowing into the GBR lagoon, employ young local Indigenous and non-Indigenous job seekers and train them for the future within the environmental and rural sectors. Seed collection, plant propagation and revegetation activities will reconnect vital corridors for endangered species in the Wet Tropics.	\$366,878
		Reef Assist - Wet Tropics 2.9	DES OGBR&WH	This project will restore several creeks and riverbanks at priority sites in the Johnstone River catchment, leading to the reduction of sediment loads and nutrients, including 4 hectares of riparian revegetation on sites in the Johnstone River catchment which includes preparation and planting. Works will also extend corridors and habitats for wildlife (including endangered species – Southern Cassowary) and will include propagation of over 100,000 native trees for current and future projects.	\$405,728

Reef 2050 WQIP Activity	QRWQP Work Area Sub-Program	Project Name	Project Lead Agency	23-24 Planned Deliverables	Total
		Reef Assist- Mackay Whitsunday 2.5	DES OGBR&WH	This project aims to improve water quality in the Mackay Whitsunday and Isaac (MWI) region by reducing sediment loss to the Reef, undertaking a range of minor and major land management activities to halt sediment run-off through improving and enhancing natural riparian habitat condition, including gully and streambank remediation and riparian revegetation at over 28 sites. The project will support the development of a Healthy Country Plan for Koinjmal Country to empower the Koinjmal people to express a vision for the future, identify their Country's critical assets and threats and how they wish to address them.	\$727,728
		Reef Assist - Fitzroy 2.6	DES OGBR&WH	This project will stabilise a range of eroding gullies and streambanks that have been identified across Woorabinda Aboriginal Council Land to reduce sediment flowing to the Great Barrier Reef; improve soil health and land and ecosystem condition. Traditional Owner engagement and empowerment will be a central part of the project, providing employment opportunities and training on best practice erosion remediation, workplace health and safety and project supervision skills.	\$375,228
	Wetlands in GBR Catchments Management Strategy	Wetlands in the GBR Catchments Management Strategy Implementation	DES Wetlands	Continue to implement the Strategy.	\$440,000
		Wetlands in the GBR Catchments Management Strategy Implementation - Mapping	DES Sciences	Continue to implement the strategy with a focus on mapping wetlands in the Great Barrier Reef catchment regions and the assessment of freshwater values in the Wide Bay-Burnett and Fitzroy catchments through the Aquatic Conservation Assessments.	\$510,000
	Foundational science and translation				
B1: Applying the best available science and knowledge	Improved Reef Communication and Science	Improved Reef Communication and Science	DES OGBR&WH	Continue to provide ongoing website updates, media stories, social media posts, face-to-face engagement at events, e-newsletter, communication collateral and an advertising campaign.	\$706,032
B4: Evaluating performance	Digital Transformation in Water Quality Monitoring	Digital Transformation in Water Quality Monitoring	DES Sciences	Completion of the Water Quality Data portal and enhancements of the data-receival platform.	\$224,000
	Land Use Mapping Update	Land Use Mapping Update - Reef Catchments	DES Sciences	Land use mapping enhancements for Reef catchments.	\$100,000
	Reef Science Partnership Program (RSPP)	Reef Science Partnership Program (RSPP) - Reef Regulations and Compliance Support	DES OGBR&WH	Continuation of the implementation of the program with various regulation and compliance outcomes.	\$65,335
Robust governance					

Reef 2050 WQIP Activity	QRWQP Work Area Sub-Program	Project Name	Project Lead Agency	23-24 Planned Deliverables	Total
B2/B3: Governance, decision making and prioritisation	Governance Initiative	Program Implementation	DES OGBR&WH	Undertake program governance, assurance, business process and systems integration, efficiency improvement, risk, and quality management.	\$249,000
		Program Planning and Development	DES OGBR&WH	Commencement and ongoing program management, review, and implementation of the QRWQP Five Year Investment Plan.	\$837,000
		Reef Program Implementation - DAF	DAF	Commencement and ongoing program management, review, and implementation of the QRWQP Five Year Investment Plan.	\$523,000
		Reef Program Implementation - DoR	DoR	Commencement and ongoing program management, review, and implementation of the QRWQP Five Year Investment Plan.	\$161,000
		Reef Program Implementation - Science	DES Sciences	Commencement and ongoing program management, review, and implementation of the QRWQP Five Year Investment Plan.	\$150,000
	Program Systems Support	Data Systems	DES OGBR&WH	Continued management, maintenance and review of the Program CORAL database and other data information systems.	\$781,967
	Reef 2050	Reef 2050 Policy Development - WQIP Review	DES OGBR&WH	Continue the review process in preparation for release of review Reef 2050 WQIP in mid-2025. Actions may include undertaking a review workshop with all stakeholders.	\$210,527
		Reef 2050 Secretariat	DES OGBR&WH	Five Independent Science Panel meetings are scheduled to be held during the 2023-2024 financial year.	\$241,527
		Reef 2050 Traditional Owner engagement and governance	DES OGBR&WH	Support the operation of the independent Reef Traditional Owner Taskforce.	\$819,935
Paddock to Reef Program and Report Cards					
A2: Culture of innovation and stewardship	Traditional Owners Water Quality Monitoring	TO Water Quality Monitoring 1.1	DES OGBR&WH	Traditional Owners will complete two rounds of water quality monitoring of southern Great Barrier Reef waters.	\$150,000
		TO Water Quality Monitoring 1.3	DES OGBR&WH	Initial concept scoping with project planning to commence late in the year.	\$270,000
B4: Evaluating performance	Paddock to Reef program	Data Management and Delivery SSIMR	DoR	Finalise stakeholder consultation and develop a plan to replace the Data Recording Tool for Science (DARTS) and Science Knowledge and Information Provision (SKIP) systems. Build a functional proof of concept of the replacement systems to demonstrate the functional capabilities. Undertake user testing on non-production proof of concept and proceed to production environment if the concept is proven to be successful.	\$402,058
		Enhanced Pesticide Monitoring Program	DES Sciences	Continue the revision of the pesticide risk matrix through the University of Queensland partnership.	\$231,058
		GBR Catchment Loads Monitoring Program	DES Sciences	Continue to monitor events and ambient concentrations of sediment (Total Suspended Solids), nutrients (nitrogen and phosphorus analytes) and pesticides in catchments. Calculate sediment and nutrient loads (annual and daily) and the Pesticide Risk Metric. Provide concentrations and loads data to calibrate and validate the Source Catchment models that are used to assess progress towards the Reef 2050 WQIP water quality targets. Release the annual GBR Catchment Loads Monitoring Program Story Maps. Maintain water quality monitoring equipment and stream gauging and measurement of cross-sectional variability.	\$4,454,231

Reef 2050 WQIP Activity	QRWQP Work Area Sub-Program	Project Name	Project Lead Agency	23-24 Planned Deliverables	Total
		GBR Catchment Modelling	DoR	Deliver GBR Water Quality Target Setting simulations to eReefs. Finalise baseline model for Reef Water Quality Report Card 2023 in preparation for scenario runs to assess water quality targets. Undertake external review of Catchment and Paddock Modelling programs.	\$1,497,116
		GBR Ground Cover Monitoring	DES Sciences	Continue to deliver ground cover data and information for incorporation into the Reef Water Quality Report Cards.	\$331,058
		GBR Report Card	DES OGBR&WH	Finalise the development for release of the 2023 and 2024, and 2025 and 2026 Great Barrier Reef Water Quality Report Card.	\$121,116
		GBR Wetland Condition Monitoring	DES Sciences	Continue to deliver wetland condition monitoring data and undertake assessments to inform the Reef Water Quality Report Card and assess progress towards the Reef 2050 objective of improved wetland condition. Develop and apply model-based power analysis methods to Cape York region.	\$988,173
		GBR Wetland Mapping and Extent	DES Sciences	Continue to deliver wetland mapping and assess the extent of wetlands in the GBR catchments to assess progress towards the Reef 2050 WQIP target 'no loss of the extent of natural wetlands'.	\$101,058
		Gully and Streambank Mapping	DoR	Undertake a revision of gully mapping of high and moderate priority catchments. Finalise the development of a streambank mapping methodology.	\$387,116
		Human Dimensions	DES OGBR&WH	Release of the 2021 and 2022 Reef Water Quality Report Card containing social monitoring survey results and highlights.	\$151,058
		Management Practice Adoption Reporting	DAF	Upgrade the P2R Projector incorporating new Gully and Streambank Toolbox functions and investor dashboard functionality.	\$1,020,058
		Paddock to Reef Program 5-year review and design update	DES OGBR&WH	Commence a major review of the Paddock to Reef program for continuous improvement.	\$221,058
		Reef 2050 WQIP monitoring and Evaluation Support Tools	DES OGBR&WH	Continue to support and host the Interactive Reef Water Quality Report Card, Reefonomics and Paddock to Reef Data Portal.	\$171,058
		Regional NRM Co-ordination and Support	DES OGBR&WH	Deliver Paddock to Reef regional communication events with a focus on communicating and disseminating key messages from the 2022 Scientific Consensus Statement. Continue production of communication products, regional training workshops and collection of pesticide data from cane, grains, and bananas.	\$511,058
		Riparian Vegetation Monitoring	DES Sciences	Continue to deliver riparian vegetation data and information as an input to the Reef Water Quality Report Card.	\$91,058
		Operational application of eReefs model	DES Sciences	Continue to enhance the scientific bases and integration of GBR terrestrial and marine water quality modelling.	\$191,058
	Regional Report Cards	Regional Report Card Partnerships	DES OGBR&WH	Continue to build an understanding of the health of local waterways in the Great Barrier Reef catchment for the development of an annual regional report card that outlines the condition of waterways in their region and support the stewardship magazine.	\$1,416,763
		Regional Report Cards - Monitoring	DES Sciences	Continue to collect and make available monthly water quality monitoring and fish sampling data about stream and estuary health to support regional report cards.	\$510,000

Reef 2050 WQIP Activity	QRWQP Work Area Sub-Program	Project Name	Project Lead Agency	23-24 Planned Deliverables	Total
Improving threatened species in the GBR World Heritage Area					
B2/B3: Governance, decision making and prioritisation	Improving Threatened Species in the GBR World Heritage Area	Improving Threatened Species in the GBR World Heritage Area	DES Threatened Species	Three grants to be issued and commencement of works for the following projects: <ul style="list-style-type: none"> • Cape York Natural Resource Management (CYNRM) and the Western Cape Turtle Threat Abatement Alliance (WCTTAA) • Burnett Mary Regional Group (BMRG) for Natural Resource Management • Aak Puul Ngantam (APN) Southern Wik Turtle Protection 	\$1,000,000
Grand Total					\$78,832,537