

Part B—Queensland Reef Water Quality Program Investment Plan 2017–18 to 2021–22 (five-year investment plan)

Overarching action	Activity within Queensland Reef Water Quality Program	Lead agency	Funding source	2017–18 investment from additional \$90m	2017–18 annual \$35m investment	Program allocation over 5 years
Responding to the challenge: actions to progress towards targets						
Minimum practice standards						
Implement minimum practice standards for all relevant agricultural industries, which can be met either voluntarily, e.g. through industry-led best management practice (BMP) programs, or as a result of regulation.	Support to voluntary industry-led BMP programs in cane, grazing, grains, and banana industries, including continual improvement of BMP modules, benchmarking of producer's operations and accreditation to industry standard. Future support for BMP in horticultural industries is proposed.	DES	Annual \$35m		\$7,770,000	\$28,540,000
	Proposed changes to the Reef regulations of the <i>Environmental Protection Act 1994</i> .	DES	Additional	\$2,261,869		\$5,658,821
	Targeted compliance program under the <i>Environmental Protection Act 1994</i> .	DES	Annual \$35m		\$1,650,000	\$8,610,000
	Enhance integration of data and use the Water Tracking and Electronic Reporting System (WaTERS) to capture point source release monitoring and tracking data online.	DES	Additional	\$75,000		\$75,000
	Support the transition of graziers and cane and banana growers to improve practices through access to professional advice (commencing 2018–19)	DES	Additional			\$13,800,000
Culture of innovation and stewardship						
Support land managers to increase capacity to adopt improved management practices, e.g. through coordinated extension, education and awareness programs.	Extension and education					
	Boost extension resources, providing greater access for farmers to extension services to enable greater practice change in Great Barrier Reef farming communities and building long-term capacity in the advisory services.	DAF	Additional	\$1,135,000		\$6,030,000
	Including extension and education activities targeted at adoption of voluntary industry-led BMP programs.	DAF	Annual \$35m		\$3,830,000	\$21,480,000

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	Enhanced education and extension coordination through: <ul style="list-style-type: none"> • stakeholder engagement to achieve practice change; • a review of current extension and education approaches; • development of a three year program plan and implementation strategy; • and developing a framework for education and extension. Pilot an agriculture capacity building program focusing on extension training networks and interns.	DAF	Additional	\$1,000,000		\$2,120,000
	Increased use and improved function of nominated grazing extension tools for extension service providers to support the capacity of graziers to make climate responsive management decisions using decision support tools such as FORAGE and Vegmachine.	DES	Annual \$35m		\$500,000	\$2,535,000
	Project Cane Changer—a large-scale social change program in the Wet Tropics to better understand motivations and associated benefits of behaviour change to encourage cane farmers to adopt actions that will improve water quality outcomes.	DES	Additional	\$1,217,932		\$2,018,586
	Wetlands demonstration on-ground case studies, wetlands extension with clients, management of local wetlands committees, development and delivery of wetlands information and tools for landholders.	DAF	Annual \$35m		\$100,000	\$500,000
	Targeted extension approach to accelerate adoption of improved grazing management practices in priority areas in the Burnett Mary region.	DES	Additional	\$364,825		\$620,000
	Implementation of two major integrated projects (MIPs) in the Wet Tropics and Burdekin regions to pilot a range of activities with producers and the community to reduce nutrient, pesticide and sediment loads into local waterways and ultimately the Great Barrier Reef.	DES	Additional	\$10,748,914		\$31,776,042

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	DES scientific information, technical expertise and advice supports research agendas underpinning Reef 2050 Plan and the Queensland Government.	DES	Annual \$35m		\$140,000	\$710,000
Identify and address barriers to change and practice improvement uptake through programs and policy.	Economic validation of practices					
	Validating the economics of management practices that improve water quality and providing this information to landholders in decision support tools and as part of the extension program.	DAF	Annual \$35m		\$1,250,000	\$6,580,000
Trial and implement innovation in technologies for on-ground management, water treatment and monitoring.	Innovation					
	Great Barrier Reef Innovation Fund addressing agricultural management practices, water treatment systems and water quality monitoring and support to the Coral Abundance Innovation Challenge.	DES	Additional	\$1,443,934		\$4,060,862
	Implement projects to build on successful trials of on-ground management practices. DAF agricultural research and development projects in relation to grazing, sugarcane, grains, bananas and horticulture with partner organisations, including industry and universities that provide significant Reef water quality benefits through exploring new technology and practices, improved pesticide and fertiliser management, economic evaluation and incorporating improved management into farming systems.	DAF	Annual \$35m—co-contribution		\$1,110,000	\$7,200,000
	Science in the Paddock					
	Targeted projects of direct action to address water quality pollutants across all agricultural industries based on priorities through Science in the Paddock program .	DES	Annual \$35m and additional	\$424,661	\$3,851,749	\$21,467,470
	Demonstration projects to encourage improved practice uptake at a local scale.	DES	Annual \$35m		\$850,151	\$1,631,230
	Burdekin cane farmer engagement: complete nutrient management planning for cane farming (RP 161).	DES	Annual \$35m		\$798,100	\$1,656,200

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Catchment restoration						
Use and where required enhance guidelines, Traditional knowledge, and other decision support tools to design and inform interventions.	Queensland Wetlands Program. Provision of wetlands tools and WetlandInfo website. Delivery of Walking-the-Landscape whole-of-catchment management understanding.	DES	Annual \$35m		\$200,000	\$1,000,000
Trial and implement innovation in catchment repair and restoration projects to reduce sediment and nutrient delivery to the Reef.	Targeted projects of direct action through sustainable landscape management and system repair including riparian revegetation, gully repair, streambank stabilisation and coastal wetlands rehabilitation.	DNRME	Annual \$35m		\$1,659,000	\$16,460,000
	Streambank and gully remediation projects including innovative gully remediation in partnership with Greening Australia and erosion management plan and operational works on Springvale Station.	DES	Additional	\$1,533,910		\$3,417,080
	Reef Islands Project—protecting the reef’s most precious land and seascapes with a focus on islands and their adjacent waters.	DES	Additional	\$3,000,000		\$3,000,000
	Reef water quality projects in the Central Queensland region seeking to reduce nutrient, pesticide and sediment losses to waterways.	DES	Additional	\$2,000,000		\$4,000,000
Enabling delivery						
Science and knowledge						
Identify, prioritise and fill knowledge gaps through the Reef 2050 Water Quality Improvement Plan Research, Development and Innovation Strategy (RD&I).	RD&I strategy development	DES	Annual \$35m			
Integrate forms of knowledge including science, policy, management, Traditional Owner and community through regular synthesis workshops and theme-specific working groups to support consistent communication messages.	Annual synthesis workshop across science, policy and management and projects arising.	DES	Additional	\$395,586		\$815,586

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Deliver decision support tools, communication and education products tailored to specific audiences, for use in education and awareness programs.	Communication projects	DES	Additional	\$196,610		\$196,610
	Activities to improve communication and information to support large-scale change in practice, including communication tools, workshops, communication strategies and implementation plans.	DES	Additional	\$512,302		\$1,490,958
Governance						
Collaborate and coordinate between the Queensland and Australian governments, in line with the Reef 2050 Long-Term Sustainability Plan governance structures.	Secretariat support to governance groups	DES	Annual \$35m		\$550,000	\$2,750,000
Align design and management of programs.	Annual Queensland Reef Water Quality Program Investment report/plan	DES	Annual \$35m	Included in governance		
Ensure accountability of investment delivery and outcomes.	Program management	DES	Additional	\$55,500		\$55,500
Evaluating performance						
Monitor and model management practice and water quality improvements through the Paddock to Reef program.	Implementation of Paddock to Reef program					
	Great Barrier Reef ground cover mapping, Great Barrier Reef loads monitoring, riparian vegetation, wetland condition, wetlands mapping and extent.	DES	Annual \$35m		\$1,986,000	\$10,952,000
	Catchment loads modelling, gully mapping, Paddock to Reef support to regional natural resource management body components.	DNRME	Annual \$35m		\$1,650,000	\$8,510,000
	Management practice adoption reporting	DAF	Annual \$35m		\$470,000	\$2,850,000
	Monitoring, modelling, evaluation and reporting	DES	Additional	\$2,474,000		\$5,544,000
	Wetland condition monitoring and water quality monitoring and modelling	DES	Annual \$35m—co-contribution		\$1,020,000	\$5,780,000

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	Ambient water quality monitoring, high resolution satellite imagery.	DNRME	Annual \$35m—co-contribution		\$1,500,000	\$7,500,000
	Research and development improvement of water models in the Great Barrier Reef catchments through the Queensland Water Modelling Network (QWMN).	DES	Annual \$35m—co-contribution		\$300,000	\$700,000
	Collection, storage, access and enhancement of information that support catchment restoration and land management as well as monitoring, modelling and reporting of outcomes in reef catchments.	DES	Annual \$35m—co-contribution/investment		\$1,070,000	\$3,820,000
	Data management and delivery through Science and Spatial Information Management for Reef (SSIMR)	DNRME	Annual \$35m		\$165,000	\$885,000
Evaluate the effectiveness of programs, governance mechanisms, and adaptations.	Develop an evaluation framework and annually evaluate and report on performance of overall reef investment program and review governance.	DES	Annual \$35m and additional	\$150,000	\$100,000	\$1,045,070
Report progress towards targets, objectives and outcomes.	Develop and release a Great Barrier Reef water quality report card.	DES	Annual \$35m		\$360,000	\$1,890,000
Communicate regionally relevant information for management decisions and local communities.	Regional report card partnerships membership and support.	DES	Annual \$35m		\$2,120,000	\$10,600,000
Make data and information publicly available through a range of communication products.	eReefs	DES	Annual \$35m			\$750,000
	TOTAL			\$28,990,043	\$35,000,000	\$261,081,015

Departmental acronyms

DES	Queensland Department of Environment and Science
DAF	Queensland Department of Agriculture and Fisheries
DNRME	Queensland Department of Natural Resources, Mines and Energy