

Reef Trust Partnership

Bowen, Broken & Bogie Water Quality Program

Monitoring & Evaluation Plan

Water Quality Program

31 October 2023



Great Barrier
Reef Foundation



Purpose

The purpose of this Monitoring and Evaluation plan (M&E plan) is to describe the framework to monitor and evaluate the Bowen, Broken & Bogie (BBB) Water Quality Program against its objectives under the Reef Trust Partnership and contractual requirements.

This plan covers the program logic, the evaluation questions that will be answered, the data that will be collected and reported, and how this will help continuous improvement of the project/s.

Further information about the details of the program, such as detailed descriptions of each of the activity areas and projects that contribute to the program outcomes can be found in the BBB Water Quality Program Plan.

Description of the Program

The BBB Water Quality Program aims to improve the quality of water flowing from the Bowen, Broken and Bogie (BBB) catchments. A total of \$25.9 million has been allocated under the RTP to this program. These include:

- \$5 million 'Accelerated Grazing Support in the BBB' granted to NQ Dry Tropics (December 2020 to June 2024)
- \$1.7 million 'BBB Gully Remediation' granted to Greening Australia (December 2020 to June 2023)
- \$18 million 'Landholders Driving Change' granted to NQ Dry Tropics (August 2021 to June 2025)

This program builds on the Queensland Government's five-year investment in the Burdekin Major Integrated Project, known as *Landholders Driving Change (LDC)*. The LDC project was designed using a participatory grassroots model and looked to explore and test the efficacy of a strategic integrated program aimed at directing interventions and management effort at a catchment scale.

In developing this program, targeted community engagement occurred to ensure alignment, where possible, with the intent of the LDC project. NQ Dry Tropics workshopped investment strategies and outcomes, seeking community feedback to shape the final program design. A panel of technical experts were also engaged to assess cost-effectiveness outcomes and ensure they were in line with current market drivers. The result of this process determined the relative investment ratios and operational budget for the program which can be found in the RTP Bowen, Broken & Bogie Water Quality Program Plan.

This program comprises of a number of projects relevant to the achievement of a reduction of 105,100 tonnes per year at a total cost effectiveness rate of \$235 per tonne of fine sediment entering the Great Barrier Reef (GBR) from the BBB.

The BBB Water Quality Program Logic proposes that the water quality outcomes will be achieved on-ground by '*implementing activities that restore landscape*' and '*implementing activities that support practice change*'.

The specific relationship between these activities and the programs projects are as follows.

Implementing activities that restore landscape:

The key activities proposed to restore the BBB landscape and mitigate fine sediment losses into the GBR include delivering grazing land management support, along with strategically targeting high yielding gully networks for remediation and influencing non-grazing stakeholder groups to adopt management practices that limit their contribution to the overall sediment loads.

Grazing Land Management Project

The target activities for grazing land management (GLM) project are those that will achieve the largest practice change area with the greatest number of stepped management changes in the Paddock to Reef questions, with significant co-investment from graziers that lead to sustainable sediment loss reduction.

Noting that due to the close relationship between the development and exacerbation of gullies and poor GLM practices, both the Type 1 gully remediation and landscape rehydration activities will be included as part of the Grazing Land Management projects.

Landscape Remediation Project

Remediating Type 3 gullies is acknowledged as the highest cost delivery option within this program; however, this work provides immediate sediment savings. These erosion sources vary depending on site-specific characteristics and therefore, treatment options will need to be tailored to specific situations.

Influencing Other Land Managers Project

This project will focus primarily on two critical organisations as regional examples for demonstrations and training – Whitsunday Regional Council and NQ Gas. These organisations have been selected because of their capacity for greater direct and ongoing water quality improvement.

Implementing activities that support practice change

To improve land management practices and stewardship within the BBB area, a number of activities will be incorporated into the program design. These activities will be centred on providing education and capacity building activities for landholders, and direct support for improved land management and stewardship leading to enduring land management change.

- Landholder Stewardship:

To better facilitate practice change, successful uptake of information, and applied learning, engagement will be more focused on meeting individual needs of engaged landholders by arranging peer to peer training and identifying opportunities for on-line training modules.

Regular key community events will be held to holistically capture the ethos of grazing land management, and the mechanisms that support it. Where there are opportunities for demonstration sites and networking, we will also seek to ensure they continue to be facilitated for the community.

- Traditional Owner Engagement:

To demonstrate the program's commitment to working with Traditional Owners to deliver culturally appropriate work that promotes reconciliation, staff cultural awareness training and Traditional Owner engagement best practices will be incorporated into program activities, including the development of culturally appropriate awareness raising activities to build trust and communication lines between program stakeholders.

Program Logic

The following diagrams depict the alignment pathway between the GBRF Water Quality Logic and the Bowen, Broken & Bogie Water Quality Program logic. The colour coding is consistent for easy reference to the foundational activities, projects, influencing activities, intermediate and end of partnership outcomes. The program logic diagram, indicators, KEQ and monitoring and data collection plan are contained in Figure 1.

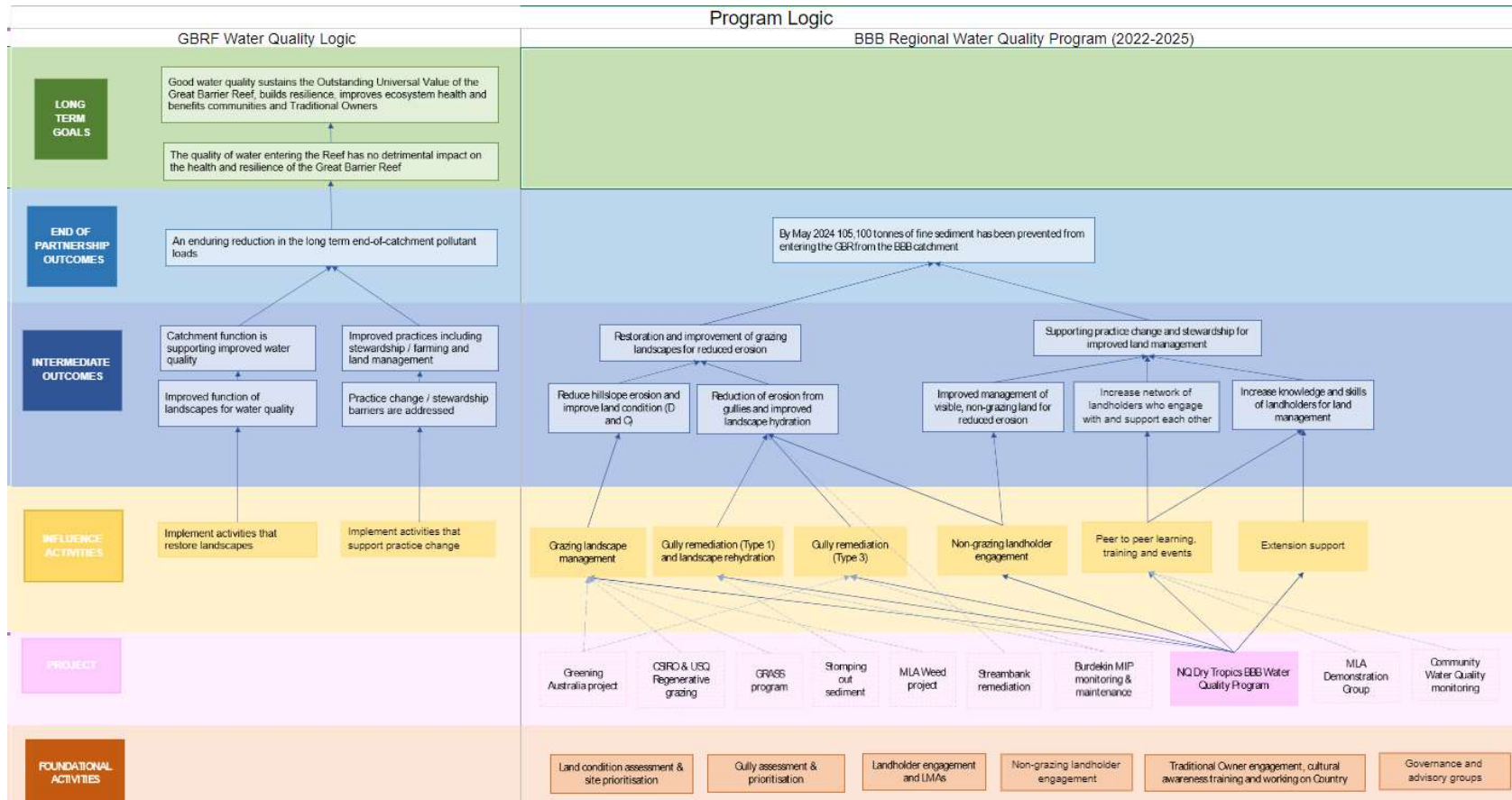


Figure 1 Bowen, Broken & Bogie Water Quality Program logic.

Key Evaluation Questions

Key evaluation questions (KEQs) for the BBB Water Quality program are summarised in the table below. The indicators (GBRF and additional) that will be used to answer the KEQ are provided in the Excel file.

Table 1 Key Evaluation Questions (KEQs)

KEQ No.	Key Evaluation Question
Improved catchment function pathway and land management pathway	
1	To what extent have activities led to improved water quality outcomes?
Sub question 1.1	To what extent have the function landscapes been improved?
Sub question 1.2	To what extent have restoration and management practice change activities led to improved water quality outcomes?
Sub question 1.3	To what extent are the outcomes expected to endure beyond the life of the program and what evidence is there to say this?
2	To what extent are the outcomes expected to endure beyond the life of the program and what evidence is there to say this?
3	What social factors influence agricultural management practice adoption and how do they change over the course of the project?
4	To what extent have practice change barriers been addressed and overcome?
5	To what extent are farming management practices being improved?
6	To what extent have landholders engaged with and contributed to water quality improvement projects?
General interest to RTP	
10	If in addition to the RTP outcomes there were other outcomes to the project/program, to what extent have these outcomes been met?
11	What unintended outcomes (positive and negative) have resulted from the program/project?
12	To what extent has this program led to strengthening the reach and capacity of delivery agents required to continue to support improvements to water quality in the catchment?
13	What are the findings and lessons from local biophysical monitoring?
14	How effective were the communications? Did they achieve their purpose? <i>[This is evaluated as part of the comms plan, not the M&E plan]</i>
15	What was the cost-effectiveness of this program?

Monitoring and data collection plan

The monitoring and data collection plan is provided in the Excel file. Indicators from the GBRF monitoring and data collection plan that align with the outcomes of the program have been selected. Additional indicators that will be collected as part of the program have also been included. Together these indicators will ensure that the outcomes will be able to be demonstrated, Key Evaluation Questions answered, and additional contextual information provided.

Reporting and continuous improvement

Reporting needs

The primary audiences for reporting under this plan are:

- 1) NQ Dry Tropics, to adaptively manage and improve the project.
- 2) Landholders Driving Change Project Panel for input, review and transparency.
- 3) GBRF as the program funding body to manage and evaluate the program in the context of the water quality outcomes.

Reporting plan

Table 3 Bowen, Broken & Bogie Water Quality Program reporting plan

Report type	Due date or frequency	Audience	Contents	Format	Purpose
Progress six-monthly reports	Deliverables due 31st March Report due 30th April Deliverables due 30th September Report due 31st October	GBRF	M&E indicators	Progress reports GBRF data system	For GBRF to monitor progress. Performance based management (approve payments). Adaptively manage the project and optimise delivery
Final evaluation	End of project by 30th June 2025	GBRF	Measure against the KEQs Lessons and recommendations	Final report GBRF data system	Communicate outcomes and learnings Improve future project delivery

Note: Assumption that P2R reporting occurs within the GBRF system and reporting mentioned within table