



Building a policy instrument impact model for the Reef

This project will model the impact of policy instruments such as extension, grants and regulation on the adoption of improved agricultural practices for Great Barrier Reef water quality.

The Great Barrier Reef (GBR) is under threat from multiple pressures including deteriorating water quality due in part to agricultural practices. Government policy and programs seek to accelerate the adoption of land management practices which will improve water quality for the GBR.

To achieve this, governments have invested in a range of policy instruments including financial incentives such as grants, education and extension programs as well as regulation. We know each farming enterprise is unique, and land managers vary in how they respond to different instruments or programs. We also know that how one instrument is delivered can affect farmers' response to another instrument.

This research seeks to integrate our understanding of how different instruments influence land manager behaviour, and how those instruments interact. This will help governments understand how effective different instruments are likely to be and how to improve water quality programs for better outcomes.

The project — Building a policy instrument impact model for the Reef (RP225) — is funded through the Queensland Government's Reef Water Quality Program and delivered by a research team led by the Queensland University of Technology (QUT) in partnership with several universities and research organisations.



The RP225 project team includes experts in environmental law, planning and governance, psychology, sociology, economics and mathematics.

The project will build a model of how policy instruments impact land manager behaviour in the GBR. The model will be upstream of the Paddock to Reef Integrated Monitoring, Modelling and Reporting Program (P2R) that calculates the impact of land management practices on water quality.

This is an ambitious and challenging project that will establish a foundation for the ongoing development and use of a policy impact model in the GBR.

Key stages of the RP225 project include:

- assembly and synthesis of current knowledge (from theory and practice) about the impact of policy instruments
- working with policy stakeholders to identify critical questions for policy decisions and opportunities to address knowledge gaps
- building, populating and testing a model
- exploring scenarios and making recommendations about program improvement and evaluation.

The project team will work closely with policy makers so they have the best available information to inform decisions about the preferred mix of policy instruments in future GBR water quality programs.

As well as the model itself, the project will produce research reports, academic papers and fact sheets.

The project commenced in May 2020 and will conclude in September 2021.

This is one of five research projects to address the prioritised human dimension knowledge needs identified in the Reef 2050 Water Quality Research, Development and Innovation Strategy (2017-2022).

The projects will contribute to the emerging human dimension science and knowledge base to better address the social, cultural and economic factors that underpin water quality improvements in the Reef catchments.



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For more information

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