

## Project 3.2.2 Cost-effective indicators and metrics for the Great Barrier Reef's human dimensions

### Project Summary

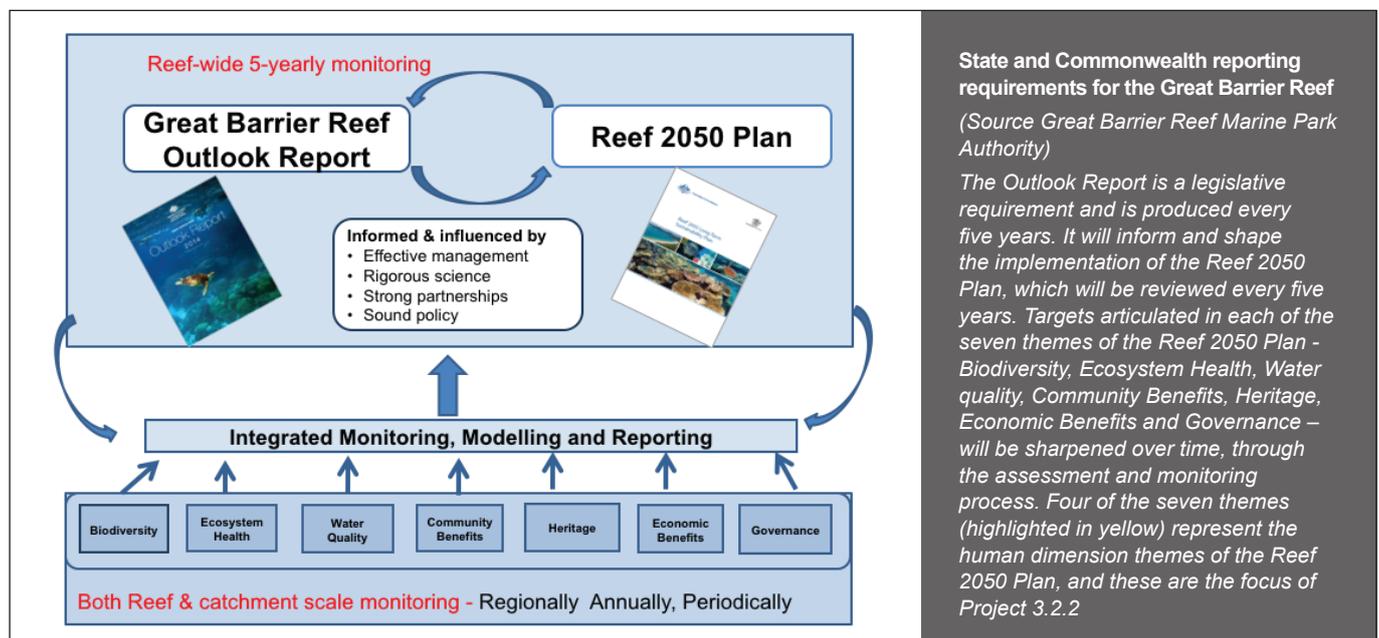
This project will develop cost-effective indicators for monitoring human dimension outcomes, objectives and targets in the Reef 2050 Long-Term Sustainability Plan (Reef 2050 Plan). The project will: (i) identify relevant indicator sets; (ii) evaluate data collection cost-effectiveness; and (iii) provide guidelines for a collaborative approach for developing grading scores to rate progress towards Reef 2050 Plan targets, objectives and outcomes. The approach will be consistent and align with the Drivers-Pressures-State-Impact-Response (DPSIR) framework adopted by the Reef Integrated Monitoring, and Reporting Program's (RIMReP) Program Design Group. The Project will add value to and ensure continuity with information collected through the Social and Economic Long-Term Monitoring Program for the Great Barrier Reef (SELTMP).

### Problem

The Reef 2050 Plan provides a framework to protect and manage the Great Barrier Reef (Reef) and its catchments. Four of its seven major themes address human dimensions. These establish objectives, targets and actions for: 1) governance, 2) heritage, 3) community and 4) economic outcomes. However, as a result of limited socio-economic research coordination, there is no agreed framework to benchmark these human dimensions to help monitor progress, refine strategies and progress action against the Reef 2050 Plan.

### How Research Addresses Problem

Elements of the Great Barrier Reef's human dimensions which demonstrate people's relationship with the Reef will be identified and assessed with respect to key social, cultural, economic and ecological outcomes for the Reef. The project will deliver an agreed set of human dimension indicators for subsequent testing and a method for benchmarking that will provide a consistent approach for governments, managers, community and industry to track key elements of the Reef system (and its catchment) against implementation of the Reef 2050 Plan.



**State and Commonwealth reporting requirements for the Great Barrier Reef**  
(Source Great Barrier Reef Marine Park Authority)

The Outlook Report is a legislative requirement and is produced every five years. It will inform and shape the implementation of the Reef 2050 Plan, which will be reviewed every five years. Targets articulated in each of the seven themes of the Reef 2050 Plan - Biodiversity, Ecosystem Health, Water quality, Community Benefits, Heritage, Economic Benefits and Governance – will be sharpened over time, through the assessment and monitoring process. Four of the seven themes (highlighted in yellow) represent the human dimension themes of the Reef 2050 Plan, and these are the focus of Project 3.2.2

## Nested reporting – temporal and spatial scales



### Reporting requirements for the Great Barrier Reef Water Quality Protection Plan Report Card

(Source: Great Barrier Reef Marine Park Authority)

The Great Barrier Reef Water Quality Protection Plan Report Card is produced annually and focuses on water quality in the catchment. Regional report cards, also produced annually, focus on water quality as well as social, economic and cultural dimensions of the Reef and catchment. Project 3.2.2 will inform the development of indicators for regional reporting on social, economic and cultural dimensions of each region. NB: Some of these report cards are still in the development phase

Project 3.2.2 will develop and trial an indicator framework and a rigorous approach for benchmarking the human dimensions of the Reef 2050 Plan, and for informing Reef-wide and regional reporting requirements. The project will identify specific data gaps and use existing data to establish indices comprised of rolled up indicators. Expert panel meetings will be held with partners, prominent local residents and other experts in a number of regional centres in the Reef's catchments. Panel members will be asked to trial and review the indicator framework, and then asked to score agreed indices using a set of pre-constructed decision rules.

Using the rules, experts will be invited to appraise the evidence in terms of objectives and targets articulated in the Reef 2050 Plan, and their relevance for regional reporting. With guidance from the RIMReP Human Dimensions Expert Group, the project team will undertake the following tasks:

- 1 Complete a desk-top review of literature and relevant data sets;
- 2 Elaborate conceptual understanding of the Great Barrier Reef system from a social science perspective ;
- 3 Design a human dimension indicator framework;
- 4 Develop and refine tools - i.e. narratives and decision rules - to guide expert panel discussion;
- 5 Convene expert panel meetings to undertake benchmarking using decision rules and narratives; and
- 6 Refine, review, reflect and recommend changes for the next iteration of the Reef 2050 Plan

### Further information

See [www.nesptropical.edu.au](http://www.nesptropical.edu.au) or contact:

#### Prof Allan Dale – JCU

T: +61 (0)418 736 422

E: [allan.dale@jcu.edu.au](mailto:allan.dale@jcu.edu.au)

#### Dr Margaret Gooch – JCU

T: +61 (0)478 138 799

E: [margaret.gooch@jcu.edu.au](mailto:margaret.gooch@jcu.edu.au)

#### Dr Nadine Marshall – CSIRO

T: +61 (0)7 4753 8537 / +61 (0)439 073 010

E: [nadine.marshall@csiro.au](mailto:nadine.marshall@csiro.au)

#### Dr Karen Vella – QUT

T: +61 (0)487 778 101

E: [karen.vella@qut.edu.au](mailto:karen.vella@qut.edu.au)



This project is supported through funding from the Australian Government's National Environmental Science Programme