Great Barrier Reef Foundation

Community Reef Stewardship Desktop Audit Report

Stage II

21 September 2020

The Great Barrier Reef Foundation and project consultant extend their deepest respect and recognition to all Traditional Owners of the Great Barrier Reef and acknowledge their interests, rights, responsibilities and obligations as First Nations Peoples holding the hopes, dreams, traditions and cultures of the Reef.

We also acknowledge the interests and concerns of the broader local, regional and global community about the future health of the Great Barrier Reef and the important role of citizens world-wide as stewards in protecting and caring for the Reef.

This report should be cited as: Great Barrier Reef Foundation (2020). Community Reef Stewardship Desktop Audit Report – Stage II

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Executive Summary

This audit represents the second stage of a phased approach to documenting collective Great Barrier Reef stewardship effort. Building on the outcomes of an earlier pilot audit it provides a richer picture and deeper understanding of the Great Barrier Reef stewardship landscape and its characteristics.

The audit is being conducted as part of the Australian Government's Reef Trust Partnership which is investing $10 million over five years to improve broader community engagement in the protection of the Great Barrier Reef World Heritage Area.

The Great Barrier Reef Foundation (GBRF) is using this investment to deliver on four key investment areas: strengthening and accelerating on-ground stewardship action; connecting community with decision making; building understanding unity and hope; and fostering more enduring partnerships and funding arrangements.

Outcomes from the audit will be used to assess where current stewardship efforts are focused, identify gaps in capacity, and leverage points for future investment. It will also serve as a platform to showcase the depth and breadth of stewardship actions underway and the many organisations and individuals working to deliver positive outcomes for the Reef.

Audit design

This audit incorporates key learnings from the design of an initial desktop audit[1] (stage one) and uses a modified framework to systematically document a wide range of community stewardship activities. It includes the 40 programs audited in stage one and an additional 65 programs and projects.

The stage one audit intentionally focused on capturing information on the larger stewardship programs and partnerships operating across the Reef landscape. Stage two documented a broader range of stewardship entities and activities. It included the work of citizen scientists, recreational fishers, local governments, education organisations, natural resource management bodies and volunteer programs in addition to international institutions, government agencies, environmental not-for-profits, industry groups and individuals.

Key amendments to the auditing method included:

- new categories for describing organisations to enable the relationships between organisations holding different roles to be more clearly identified and explored; and
- the mapping of activities to the 'Driver-Pressure-Impact-State-Response' model to improve alignment with Reef 2050 reporting and a conceptual framework on stewardship currently being developed by the Great Barrier Reef Marine Park Authority and James Cook University.

These modifications were designed to provide a better system-level understanding of the role of stewardship in reducing threats and improving the condition of the Reef's values.

[1] Great Barrier Reef Foundation, 2020. Community Reef Stewardship Desktop Audit Report - Stage I

Audit findings

Great Barrier Reef stewardship is a diverse force championed by a range of individuals, charities and not-for-profits, businesses and government agencies.

The range of stewardship actions audited reflect the many drivers of change, threats to the Reef and rich diversity of values treasured by communities. Actions include local on-ground projects, education and awareness activities, advocacy and outreach programs, knowledge sharing practices, research partnerships and technological advancements.

Partnerships, collaborations and networks are a defining feature of the stewardship landscape and the programs and projects audited represent the 'tip of the iceberg' in terms of collective stewardship effort. Many programs are layered and include multiple partners and/or delivery organisations undertaking multiple stewardship projects.

The majority of stewardship program and projects audited operate at local and regional levels, however approximately 20% of entities were found to operate across national and international scales.

Although the audit did not collect data on motivations, it was apparent from online program descriptions that actions appeared to be underpinned by a strong ethic of care, a responsibility to future generations and a commitment to sustainable use.

The audit highlighted the many different roles organisations play in supporting stewardship actions. This included organisations responsible for setting or influencing policy, program funders, program coordinators and those delivering on-ground actions.

Tracing connections between entities holding different roles show that it is not only 'top-down' government and peak-body organisations, but grass-roots actions that are drivers of system change. The audit identifies numerous examples of individuals or small organisations driving practice changes and policy reforms.

Where efforts are focused

The modification of purpose and activity categories to align with the Driver-Pressure-State-Impact-Response model provided a clearer understanding of where current stewardship efforts are being focused from a systems perspective. The stewardship audit found entities were involved in delivering a variety of on-ground activities with approximately:

- 25% delivering actions targeting threat reduction, such as litter and source reduction activities;
- 25% targeting improvements to the condition of values, such as waterway improvements or Reef restoration activities;
- 15% undertaking pro-active steps to adapt to changes in the environment, such as coral adaptation projects at economically valuable Reef locations and the work of local governments to plan and manage climate risks;
- 30% are implementing practice changes to improve sustainability, including ecotourism operators, recreational fishers, local businesses and community groups; and
- 40% are undertaking actions designed to improve knowledge for decision making, such as citizen science programs.

Many entities were involved delivering multiple on-ground activities. For example, undertaking activities to reduce threats and delivering citizen science programs; or, undertaking activities to reduce threats and improve the condition of values and delivering behavioural change programs.

Similarly, over 90% of entities were classified as delivering activities aimed at improving the community's capacity to steward. This included actions to improve skills, education, knowledge, systems, networks and leadership opportunities. Over 40% of entities were delivering activities designed to influence policies and decision-making processes. Influencing people's motivations was either a direct or indirect aim of all programs and projects audited.

The stage one audit observed that while most entities clearly outlined their vision, purpose and activities only a limited number reported directly on outcomes. This report outlines a process designed to better connect purpose- and activity-driven processes with outcomes and to improve alignment and reporting of actions with Great Barrier Reef Outlook and Reef 2050 frameworks.

Funding and partnership models

New categories for describing organisations provided a clearer picture of stewardship funding and partnership models and reinforce calls for improved business models to support the sustainability and impact of our stewards. The stewardship audit found that of the 105 programs and projects examined:

- 35% were run by not-for-profits, with the majority holding charity status. These entities are largely funded by, and reliant on, grants, sponsors, memberships or donations; and
- 36% were funded directly by government or were majority government funded programs or partnerships.

Next steps

Audit findings provide not only a platform to showcase work, but the basis for discussions on how GBRF and others can best support stewardship organisations to achieve outcomes and build stewardship capacity within our communities. This includes using audit outcomes to:

- undertake more detailed analysis and evaluation of current and alternate business models to inform more strategic approaches to resourcing and partnering, and piloting of these approaches with Reef stewards; and
- developing a 'Great Barrier Reef Stewardship Tool Kit' to improve program design, evaluation and impact. This could include tailored program design and monitoring and evaluation templates for different categories of stewardship activities (for example, on ground actions, building capacity, influencing motivations) and reporting templates aligned with Great Barrier Reef and global reporting frameworks.

Additionally, the stage one report identified news media and visitor information sites to be among the biggest contributors to search results for the term 'Great Barrier Reef Stewardship.' Exploring the potentially significant role of these online platforms as a communication tool for promoting community stewardship awareness and action is recommended.

1. Introduction

1.1 Purpose

The purpose of this desk-top audit is to:

- refine and apply the structured framework developed in the pilot audit (stage one) for documenting and assessing community Reef stewardship efforts across the Great Barrier Reef;
- update information on the initial 40 programs audited during the first stage to align with the refined framework;
- undertake a desktop audit of an additional 60 relevant programs/projects identified as part of the first stage of the audit;
- map alignment of stewardship activities with the Driver, Pressure, Impact, State, Response (DPSIR) framework and Reef Trust Partnership Community Reef Protection activities; and
- document key findings, building on the outcomes from the stage one audit report.

1.2 Scope

The scope of community activities to be covered under the stage two audit remains the same as that of stage one. Namely:

- programs that directly engage community members in learning about and/or undertaking actions to protect the Great Barrier Reef and associated coastal and catchment areas. This includes activities labelled as stewardship, education, protection, conservation and behaviour change; and
- programs that were active as of 2019. Where relevant, significant programs undertaken during the 2010-2019 were included to provide broader context.

Out-of-scope audit activities are:

- Traditional Owner Reef protection programs and activities unless they directly engage the broader community;
- landholder and practice change stewardship programs associated with catchment water quality improvements; and
- industry stewardship programs and activities unless they directly engage community.

In defining the project's scope, the foundational role of Traditional Owners as custodians of the Reef, together with the contributions of water quality improvement and industry stewardship programs to protecting and caring for the Reef were recognised. These areas are the focus of other complementary programs[2] and the efforts of 'in-scope' community stewardship activities should be viewed in this broader context.

[2] Reef Trust Partnership Annual Work Plan 2020-2021: https://www.barrierreef.org/uploads/RTP-Annual-Work-Plan-2020-2021-FINAL.pdf

1.3 Background and context

The Community Reef Stewardship Desktop Audit Report – Stage I (June 2020) provides background on the Reef Trust Partnership, the Partnership's Community Reef Protection Component and its supporting Monitoring and Evaluation (M&E) Plan. It also outlines the process for developing and testing the initial audit framework and recommendations for the next phase of data collection.

This audit retains the underpinning design elements which informed the development of the pilot framework (See **Appendix 1**). These were drawn from:

- the Great Barrier Reef Foundation Great Barrier Reef Landscape Audit (2018);
- Bennett et al's (2018) analytical framework for environmental stewardship (the Bennett Framework);
- GBRF's Annual Work Plan with its outline of one-year and five-year activities; and GBRF's M&E plan for assessing performance under the Reef Trust Partnership; and
- collaborative meetings between GBRF, the Great Barrier Reef Marine Park Authority (GBRMPA) and James Cook University (JCU) officers and researchers.

2. The Modified Framework

A number of modifications were made to the stage one audit framework. These were based on:

- findings from the initial desktop audit to improve consistency and efficiency in data collection and alignment with Reef 2050 reporting frameworks;
- emerging work and feedback from the GBRMPA and JCU on stewardship categories and definitions for application in management and research; and
- meetings between the consultant and GBRF officers to refine categories as the stage two audit progressed.

A description of modifications is provided below. The final set of categories used in the stage two audit are highlighted in bold.

2.1 Foundational framework

The Bennett Framework (see **Figure 1**) continued to provide the foundational structure to the audit.

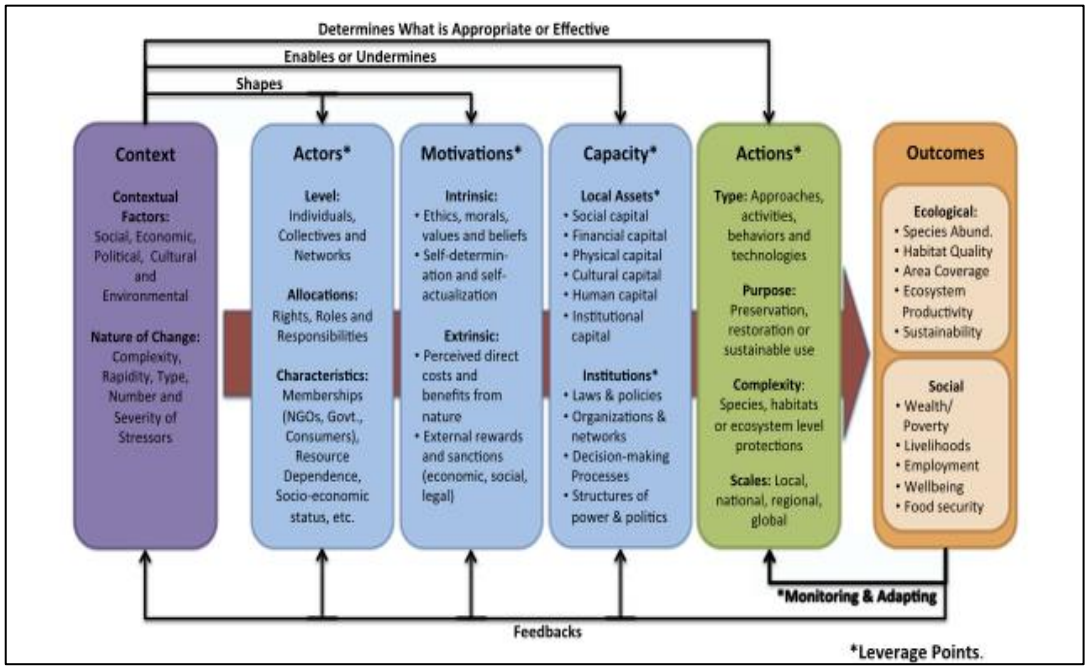

Figure 1: Analytical Framework for the elements of local environmental stewardship. Source: Bennett et. al. 2018

Modifications were made to the following elements:

- entity (or 'actors') descriptors were modified to better reflect the GBR context and categories (see Section 2.2);
- 'motivations' (intrinsic and extrinsic) were incorporated into a single category 'influencing motivations' (see Section 2.4.1);
- 'capacity' categories were modified with the initial seven categories (local assets – social, financial, physical, cultural, human and institutional capital; and "institutions" - laws, policies, decision-making processes) amended to five categories (see Section 2.4.1);

- 'actions' - purpose and activity descriptions were retained together with the scale at which programs/projects were operating. Category codes were modified as to improve alignment with international and Great Barrier Reef environmental frameworks (see Section 2.4.1); and
- 'outcome' categories (ecological and social) were not included. The stage two framework has been adapted to provide direct line of sight with the delivery of outcomes under the Reef 2050 Plan and Reef Trust Partnership including: a reduction in key threats (i.e. drivers, pressures and impacts); improved protection of attributes/values (i.e. state); and, improved management of the Great Barrier Reef World Heritage Area and adjacent catchment (see Section 2.4.1).

2.2 Entity descriptors

Stewardship entity descriptors were modified to provide a greater understanding of the characteristics of organisations/individuals delivering Great Barrier Reef stewardship actions.

The following categories were adopted:

- **entity name** – the name of the organisation, individual or host of partnership/collaboration/ network;
- **entity type** – a description of the type of organisation (for example, government, industry, not-for-profit, individual);
- **stewardship role** – this category was introduced to differentiate primarily between program funders and program/project delivery organisations, noting some entities hold dual roles. It also identifies organisations whose role is to set or influence policy direction. An additional fourth category, program coordination/delivery, was introduced during the audit to account for situations where an entity was responsible for the coordination and facilitation aspects of program delivery but not responsible for funding or delivering on ground actions;
- **program/project name/description** – the name of the stewardship program or project, a short description and link to the entity's webpage. Where available, the high-level description was taken directly from the entity's website;
- **program/project classification** – to describe the model for program/project delivery (for example, networking platform, collaboration, partnership, membership-based) and 'type' of program (for example, conservation, sustainable use, education, citizen science); and
- **characteristics** – to record additional information, including for example, rights, roles and responsibilities of organisations or resource dependence.

Appendix 2 provides a full list of entity descriptors.

2. 3 Purpose and activity descriptions

Stage one purpose and activity descriptions were retained as follows:

- **purpose "as stated"** – based on wording taken from the entity's website. Where available, text was taken verbatim from the organisation's stated mission, goals or objectives. In some instances, no mission or purpose was stated and, in these instances, 'taglines' or similar were included to convey the intent of the program/project; and
- **activity description** – a summary of the entity's activities taken directly from their website or summarised from available information.

2.4 Categorisation of purpose and activities in line with analytical frameworks and GBRF activities

Key elements of the Bennett Framework for environmental stewardship were retained, however, modifications were made to improve alignment with components of the DPSIR model and emerging components of a Great Barrier Reef Stewardship Conceptual Framework.

A matrix of definitions and categories was developed to maximise alignment across models (see **Appendix 3**) and guide category refinement. These are described below.

2.4.1 Alignment with the DPSIR framework, Reef 2050 and Outlook Reporting

To better understand stewardship efforts from a systems perspective, programs/projects were mapped to different components of the Driver-Pressure-Impact-State-Response model (see **Figure 1**).

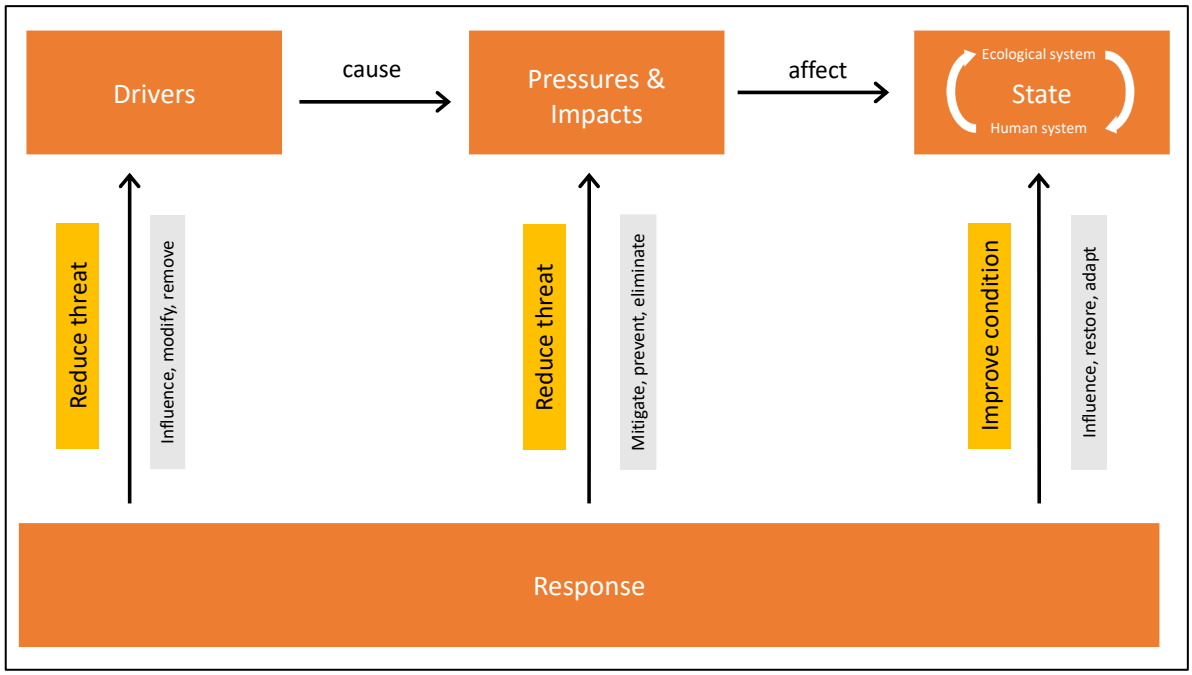

Figure 2: DPSIR Framework: Stewardship actions were mapped to the Driver-Pressure-Impact-State-Response framework to provide a system-level understanding of how stewardship actions are reducing threats and improving the condition of values. Source: Adapted from Reef 2050 Integrated Monitoring and Reporting Program Strategy and Millennium Ecosystem Assessment

This provided a systematic basis for identifying if actions focused on threat reduction or improving the condition of values.

In this model:

- '**D**rivers' refer to the climate change, governance systems, technological developments, societal attitudes, population and economic growth;
- '**P**ressures' and **I**mpacts refer to stressors on the ecological system and impacts on the human system. For simplicity they have been grouped, and together with drivers, are collectively referred to as 'threats'; and
- '**S**tate' refers to the values and attributes which make up the Great Barrier Reef's highly interconnected ecological/human system. It includes the natural, cultural, social and economic components of the Great Barrier Reef landscape.

Stewardship actions or '**R**esponses**'** were categorised as:

- **on-ground action – reducing threats** – actions to reduce the effect of a driver (influence/modify/remove), pressure or impact (mitigate/prevent/eliminate);
- **on-ground action – improving condition** – actions to improve the state of a value/attribute (influence, restore, adapt) in response to changes in the environment;
- **on-ground action – adaptation** - pro-active measures to address or reduce a threat or improve the state of a value/attribute in response to predicted changes in the environment;
- **on-ground action – changing behaviours/practices** - to reduce threats or improve state of values;
- **increasing capacity – technological capacity, financial resources, management/institutional capacity** and/or **community capacity** (human, social, cultural, physical institutional) - to improve governance systems and empower communities to take action; and/or
- **influencing motivations** (awareness, advocacy, campaigns, engagement, leadership, participatory experiences) – taking action to influence ethics, values attitudes, behaviours, practices, social norms, governance reduce threats (drivers/pressures/impacts) and improve state (ecological and human system).

This approach also provides direct line of sight to Great Barrier Reef Outlook and Reef 2050 reporting. It enables:

- the type of driver and/or pressure/impact being targeted to be categorised using the lists of drivers of change, pressures and impacts used in Great Barrier Reef Outlook reporting and Reef 2050 Net Benefit and Cumulative Impact Management policies (see **Appendix 4**); and
- the state of the value/attribute being targeted to be categorised using the lists of drivers of change, pressures and impacts used in Great Barrier Reef Outlook reporting and Reef 2050 Net Benefit and Cumulative Impact Management policies (see **Appendix 5**).

2.4.2 Alignment with Great Barrier Reef Stewardship Conceptual Framework

In parallel to the stage one audit, officers from GBRMPA and JCU were working to better define stewardship in Great Barrier Reef with the aim to better understand and evaluate how it contributes to desired social and ecological outcomes for the Reef.

Although a work in progress, authors of this work identified three broad components to stewardship defining it as "an ethic and a practice of responsibility for a resource" with 'capacity' being the third dimension joining the ethic (motivation) and practice (action) of responsibility (see **Figure 3**). They also proposed a conceptual framework for stewardship effort in the Great Barrier Reef (see **Figure 4**).

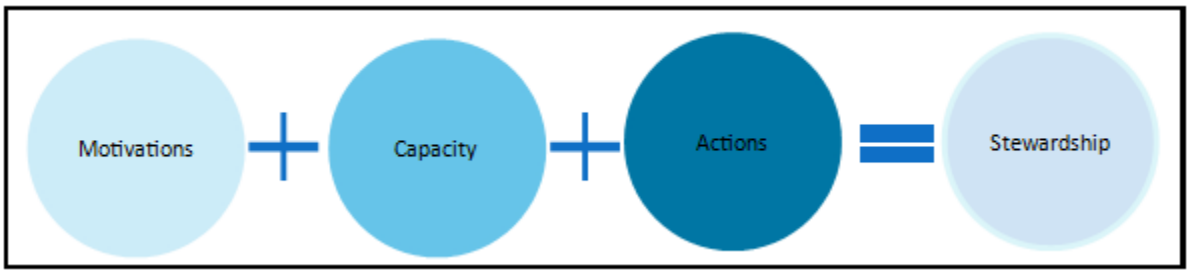

Figure 3: Stewardship is an ethic and practice of responsibility joined by capacity. Source: Dyer et al., 2020

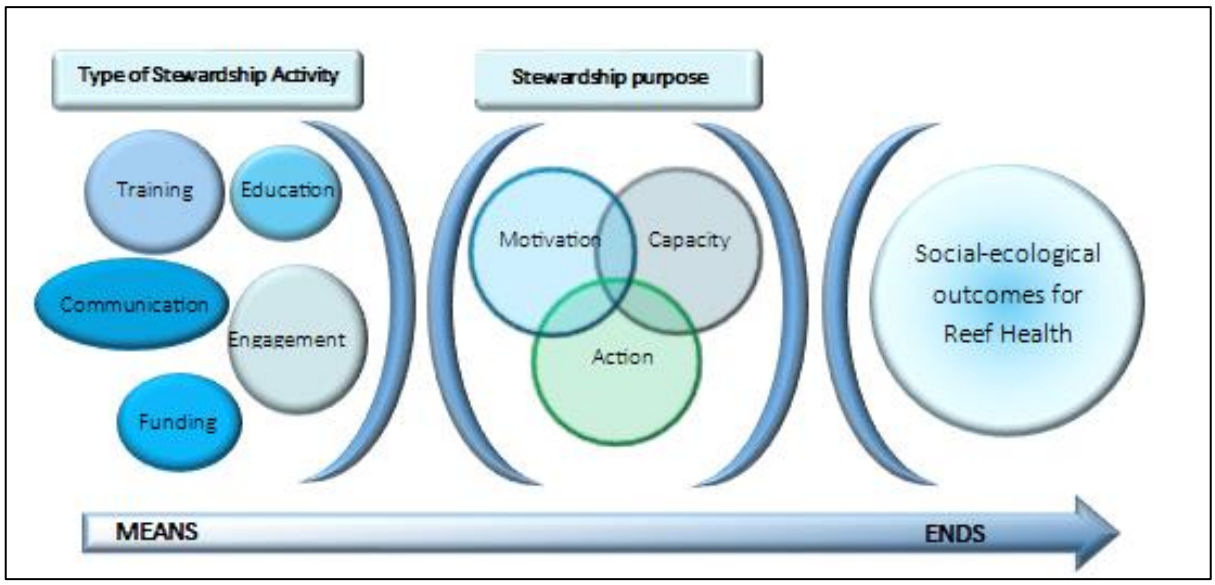

Figure 4:A conceptual framework for stewardship efforts in the Great Barrier Reef. Source Dyer et al., 2020

Elements from this conceptual framework were included in the matrix of definitions and categories developed to maximise alignment across analytical frameworks (see **Appendix 3**) and informed the modification of categories used in the stage two audit framework.

2.5 Alignment with GBRF Community Reef Protection Partnership Activities

2.5.1 Mapping to Partnership activities

Programs/projects were coded against the following GBRF's Community Protection Annual Work Plan Partnership activity streams: **citizen science; local reef restoration; local action projects; integrated decision making; national reef protection challenge; communicate case studies and stories of hope; support enduring investment and partnership models; empower community heroes.**

2.5.2 Mapping to M&E activity pathways and M&E outcomes

Programs/projects were not coded against GBRF Community Protection M&E Plan activity pathways and outcomes (End-of-Partnership and Intermediate) as they were in stage one audit.

Mapping to M&E pathways in stage one proved valuable as a means to 'test' the logic between GBRF's Community Reef Protection's pathway steps using real projects. The majority of stewardship programs and projects in the audit were found to contribute to multiple M&E activity pathways and outcomes, reflecting the highly inter-related nature of pathway activities and the different components that make up stewardship. Mapping also helped to more clearly define the intent of outcomes and some steps in impact pathways.

Mapping to M&E outcomes in stage one was challenging as most programs and projects in the audit were 'purpose driven' and 'activity focused' and a degree of interpretation was required to map actions to GBRF outcomes. Additionally, GBRF's investment is focused on four key areas and the fact that an activity didn't map to a GBRF outcome did not mean that it wasn't delivering a positive impact for the Reef or Reef communities. It is important to highlight this point to avoid misinterpretation of data.

Given these findings, it was decided that the stage one objective of mapping programs to M&E activity pathways and outcomes was met and there was limited value in mapping an additional 60 programs/projects. Instead effort was redirected to look at how activities could be coded to broader Great Barrier Reef analytical frameworks (DPSIR, Bennett Framework, GBR Conceptual Framework for Stewardship) and mapped to GBRF's Annual Work Plan activities (see Section 4).

2.6 Scale

The four scale categories used in the stage one audit to describe programs/projects area of operation or 'reach' were retained in the stage two framework. Scale categories are: **local; regional** (Reef-wide or catchment level)**; national; and/or global.**

2.7 Number of participants and contacts

Similarly, categories from stage one relating to a number of program/project participants and contact information were retained for stage two. Categories are:

- **Number of participants** – information on program participants including, but not limited to, volunteers, partners, members, participating organisations, digital media followers.
- **Contacts** – the name (where available) of a contact person, email and/or phone details for follow-up communication.

An overview of the stage two framework is provided in **Figure 5.**

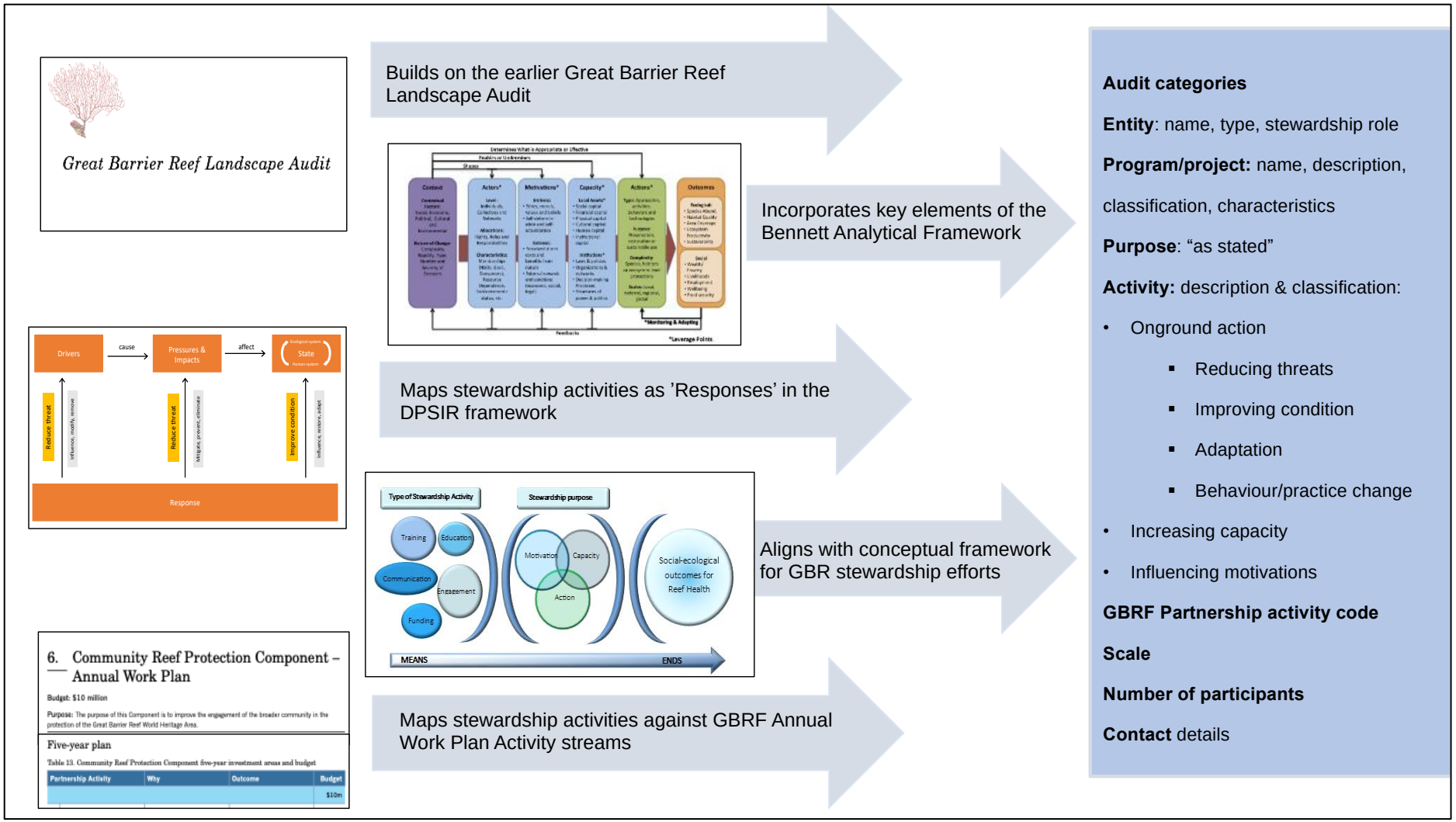

Figure 5: The Stage II audit framework

3. The Audit

3.1 Identifying stewardship activities

An agreed list of 100 stewardship programs/projects was used in the stage two audit (see **Stage II Audit Spreadsheet**).

These included the 40 stewardship programs/projects in the stage one audit and an additional 60 programs/projects identified during stage one. The process for identifying projects/programs is described in the following text box.

A series of key term searches were conducted using internet search engines DuckDuckGo and Google. Key terms used were:

- 'Great Barrier Reef Stewardship'
- 'Great Barrier Reef community action'
- 'Great Barrier Reef Education'
- 'Great Barrier Reef Leadership Stewardship'
- 'Great Barrier Reef Leadership Community'

The term 'Great Barrier Reef Champions' was also searched but no additional programs or projects were identified.

A list of search results with links to webpages were then recorded on an excel worksheet.

Search findings were cross-referenced with GBRF's earlier Great Barrier Reef Landscape Audit and updated Education Audit to identify any key gaps.

Additional projects were identified during the course of the audit, typically when viewing lists of program partners or collaborators on projects.

3.2 Populating the audit spreadsheet

Data was collected for each of the identified stewardship programs/projects with the aim of populating as many of the audit categories as possible with publicly available information.

Some of the larger programs were broken into two components (rows) to ensure the different characteristics of program funders and program delivery organisations were captured in the audit.

Audit findings were recorded in the **Stage II Audit Spreadsheet**.

4. Key findings

This section highlights key findings from the stage two audit. It builds on, and where relevant, incorporates findings from the stage one audit to provide an up-to-date summary of combined findings.

4.1 Applying the modified framework

4.1.1 Cohesive and systematic

The Bennett Framework continued to provide the foundational structure for the audit and the basis for a cohesive and systematic approach to data collection.

Some elements of the framework were modified to better reflect stewardship in a Great Barrier Reef context. This included new categories to describe entities (or 'actors') and the move away from describing outcomes as 'ecological' or 'social' to provide a platform for outcome reporting consistent with the Great Barrier Reef Outlook and Reef 2050 reporting.

Other elements were modified to streamline data collection and/or improve alignment with the DPSIR framework and emerging Great Barrier Reef stewardship models. For example, categories on motivations (intrinsic and extrinsic) were grouped under the category 'influencing motivations,' and some of the 'capacity' categories were combined. These amendments improved alignment of categories across analytical models and made data collection faster and less reliant on assumptions - which was a key consideration given the limited nature of publicly available information for former motivation and capacity categories.

Notwithstanding benefits outlined, it is recommended should a follow-up survey be conducted, the Bennett Framework 'motivation' and 'capacity' categories be revisited and used to inform survey questions. Limitations associated with the public availability of data would not apply and as highlighted in the stage one report:

- Inclusion of the six "local asset" categories (social, cultural, financial, physical, human and institutional capital) and institutional capacity category, enable gaps, weaknesses and barriers (at program, project and institutional levels) to be clearly identified together with the key enablers of stewardship success. From an investment and impact perspective, including these categories provides valuable guidance on key leverage points for interventions and information on where future efforts (big and small) may best be focussed.

- Including categories relating to 'motivations' provides useful insights into what is driving organisations' and individuals' choices and behaviours. Understanding these drivers helps to ensure the design of programs align with people's values, address barriers and encourage participation which, in turn, are more likely to result in the delivery of enduring outcomes. Identifying motivations also minimises the risk of interventions resulting in perverse outcomes. For example, Bennett et al (2018) highlight how extrinsic incentives (for example financial incentives) can "crowd out" people with strong intrinsic (value based) motivations for stewardship are present. As such, collecting data on motivations can be crucial for informing cost benefit analyses of stewardship investment options.

Both of these features make the audit framework an effective planning tool in addition to servicing monitoring and evaluation needs.

4.1.2 Improved alignment with Great Barrier Reef and systems-based approaches

Modifying the audit framework to align with the DPSIR framework and emerging Great Barrier Reef stewardship conceptual models improves the utility of data collected consistent with approaches being applied by Great Barrier Reef management agencies and researchers.

It enables stewardship effort to be analysed in the context of cause-and-effect relationships. For example, is stewardship effort targeting drivers of system change or focused on reducing pressures and impacts, or working to improve the state of values?

Importantly, it enables stewardship effort to be examined from a systems perspective and, as noted above, enables outcome reporting consistent with Great Barrier Reef Outlook Report and Reef 2050 policies for cumulative impact management and delivery of net benefits to the environment.

4.2 Stewardship in the Great Barrier Reef

The stage two audit provides a richer picture and deeper understanding of the Great Barrier Reef stewardship landscape and its characteristics.

The stage one audit targeted a cross-section of stewardship interests to test the application of the audit framework. It was, however, intentionally biased to capturing information on the larger stewardship programs and partnerships (such as the Reef Guardian program, Reef Trust Partnership, Healthy Waterway Partnerships) operating across the Reef landscape.

Stage two documented a broader range of stewardship entities and activities. It included the work of citizen scientists, recreational fishers, local governments, education organisations, natural resource management bodies and volunteer programs in addition to international institutions, government agencies, environmental not-for-profits, industry groups and individuals.

The range of stewardship actions identified continued to reflect the many drivers of change, threats to the Reef and rich diversity of values treasured by communities. Actions included local on-ground projects, education and awareness activities, advocacy and outreach programs, knowledge sharing practices, research partnerships and technological advancements. Programs and projects were found to operate primarily at local and regional levels but also across national and international scales.

Although categories on motivation were not included in stage two it was apparent that, similar to stage one findings, actions appeared to be underpinned by a strong ethic of care, a responsibility to future generations and a commitment to sustainable use.

And while the intent of this report is not to provide an in-depth analysis of Great Barrier Reef stewardship, the audit itself provides a platform for this analysis to occur.

A summary of Great Barrier Reef stewardship characteristics, drawn from an overview of data collected for entities and programs/projects, is provided below.

4.3 Who are our stewards?

4.3.1 Entities audited

The stage two audit set out to examine 100 stewardship programs/projects. In total 105 programs/projects were included. Five programs were broken into two components (rows) to enable the different characteristics of program funders and delivery organisations to be recorded. This resulted in a total sample size of 110 entities.

4.3.2 Stewardship is a diverse force

Entities include:

- Individuals such as Pablo Cogollos, film maker and advocate for ocean conservation and Dr Emma Camp, United Nations Young Leader on a quest to save the world's coral reefs;
- Small charity's such as Eco Barge Clean Seas, medium charities such as the Reef Restoration Foundation and Great Barrier Reef Legacy, and large charities such as Conservation Volunteers Australia and the Australian Conservation Foundation;
- NGO's and not-for-profits of varying sizes including the World Wildlife Fund, Conservation Councils, recreational fishing clubs, education and volunteer organisations;
- Partnerships between scientists, industry, conservation, Traditional Owners, Reef managers and community groups working together to deliver a range of programs; and
- Government agencies delivering and/or funding large stewardship programs such Reef Guardians, Landcare and regional NRM bodies and smaller grant rounds.

4.3.3 Our stewards hold many and varied roles

The stage one audit highlighted the Reef's complex funding and multiple partnership arrangements and the need for particular attention to be given to relationships between funders, program managers, program partners and project delivery organisations. Although all play a role in the delivery of stewardship actions, their purpose, motivations for stewardship, capacity to take action, target audiences, scale and reach often vary. The stage two audit introduced an additional dimension – entities whose role is to set or influence policy direction.

Identifying the characteristics of program funders, program coordinator/delivery and project delivery organisations continued to provide a clearer picture and richer understanding of Great Barrier Reef stewardship. It also provided useful insights into the relationships, or linkages between, different entities.

The inclusion of the 'stewardship role' category highlighted the importance of the different roles of entities in supporting stewardship actions. For example, it enables the identification of linkages between:

- **entities responsible for 'setting or influencing policy direction'** such as UNESCO's World Heritage Convention, GBRMPA's Blueprint for Resilience, the Queensland Government's GBR Water Quality Taskforce Report, and the Australian and Queensland governments' Reef 2050 Plan and Reef 2050 Water Quality Improvement Plan, and how these influence →
- **entities responsible for 'funding' and/or 'coordinating' programs** such as GBRF's Reef Trust Partnership, GBRMPA's Reef Guardian programs, and how these translate to →
- **entities responsible for on ground action** such as citizen science groups (for example, Redmap, CoralWatch, Reef Check) and local marine advisory committee networks (local councils, Landcare groups, education centres) delivering on ground actions to improve knowledge for decision making, reduce threats and improve the condition of values.

Similarly, bottom-up approaches can be identified with linkages between entities delivering on-ground actions such as: the 'Last Straw on the Great Barrier Reef' campaign and Tangaroa Blue's Australian Marine Debris Initiative, and how they have influenced business practices and government policy settings on the use of plastics. Further analysis of these relationships together with the development of case studies to highlight connections is recommended.

4.3.4 Size does not always equate to impact

Small entities are achieving big results. For example:

- Nicole Nash's Last Straw Campaign has over 370 businesses registered as plastic free venues.
- Eco Barge Clean Seas has over 900 volunteers and removed over 200,000 kilograms of marine debris from the Whitsunday region; and
- CAREfish has been instrumental in achieving Queensland's current net-free zones.

4.3.5 Entities in this audit are just the tip of the iceberg

Many stewardship programs and projects are layered. An examination of entity's supporting partners and/or delivery organisations reveals the depth and breadth of stewardship efforts focussed on safeguarding the Great Barrier Reef. Key examples include:

- GBRMPA's Reef Guardian Council program which includes 18 councils each with multiple programs and projects and collectively invests around $230 million per annum on activities that directly benefit the Reef;
- GBRMPA's Reef Guardian Schools' program which includes 280 schools and over 100,000 students participating in multiple projects along the length of the Reef;
- The Joint Field Management Program (Aust. and Qld govt.) which includes a network of over 500 trained marine animal stranding volunteers including community groups, Indigenous rangers and individuals; and
- Landcare Australia which has thousands of volunteers participating in Coastcare, Junior Landcare, Dunecare and Rivercare groups.

The current audit encompasses a diverse range of programs and projects, however future audits should consider further 'unpacking' these programs. Any estimate of collective Great Barrier Reef stewardship effort needs to be made in the context of these findings.

4.3.6 Funding characteristics

A key purpose of the audit is to provide a platform for examining different funding and partnership models and to look at options to foster long-term organisational sustainability, impact and investment.

The need for more sustainable funding models is immediately evident from the audit with over two thirds of the programs and projects examined reliant on government funding, grants, memberships and/or donations.

Of the 105 programs and projects:

- 36% were funded directly by government or were majority government funded programs or partnerships;
- 35% were run by not-for-profits, with the majority holding charity status. These entities are largely funded by, and reliant on, grants, sponsors, memberships or donations;
- 17% were delivered by reef-related businesses (primarily tourism and fishing sectors), or for-profit companies; and
- 11% were delivered by a mix of research institutes, associations, individuals or networks.

Examples of stewardship efforts funded through private sector revenue streams include Small World Journeys (educational adventure company) and the 4Ocean movement (a business enterprise with 'a mission to end the ocean plastic crisis'). These companies are using a percentage of their profits to fund not-for-profits (such as the Cairns Turtle Rescue Centre) and to deliver on ground actions (marine debris reduction).

4.3.7 The role of media outlets and online resources

Internet searches carried out in the stage one audit revealed a significant amount of online Reef stewardship information is being produced by media outlets, tourism agencies and organisations linked to environmental interests.

News media and visitor information sites were among the biggest contributors to search results for the term 'Great Barrier Reef Stewardship'. Search results were not limited to Queensland sites but spread over a range of national and international publishers. These ranged from online newspapers, travel and nature enthusiast magazines, to encyclopaedias like Wikipedia, atlases, science journals and education resources.

The stage one report highlighted the significance of these online platforms as a communication tool for promoting community stewardship awareness and action.

Although media outlets were not included in the stage two audit, the recommendation to explore the potential for media, tourism, educational, encyclopaedic and other internet platforms to contribute to GBRF's Community Reef Protection's outcomes still holds.

4.4 Stewardship actions

Stewardship actions are diverse. They come in all shapes and forms ranging from grass-root actions to global campaigns. They reflect the interests and concerns of the local, national and global community about the need for action to safeguard not only the Great Barrier Reef but our global environment. Actions included:

- Flag-ship programs such as the GBRMPA's Reef Guardian Schools program which has been operating since 2003, the Councils program operating since 2007, and the more recent Fishers program. These programs target youth, local residents (the Councils program covers a population of one million people) and Reef-dependent industries with an aim to foster stewardship and showcase environmentally sustainable practices.

- Onground projects to reduce threats or improve the condition of values. These include programs to prevent and/or remove marine debris from the environment such as Tangaroa Blue's ReefClean and Eco Barge Clean Seas, the Last Straw and the 4Ocean movement; native habitat revegetation and waterway restoration projects by Landcare, Conservation Volunteers Australia, schools and conservation groups; projects to showcase and improve energy efficiency and reduce greenhouse emissions including Reef HQ and many local government initiatives; and interventions to help the Reef and communities resist, adapt to and recover from the impacts of climate change, such as the Reef Restoration and Adaption Program and the Coral Nurture Program.

- Citizen science programs in a myriad of forms. These include umbrella organisations like the Reef Citizen Science Alliance, innovative programs like Redmap, virtual diver, Ausmap, InfoFish and Eye on the Reef, grass-roots programs such as Port Curtis Harbour Watch and programs that form part of a global network such as CoralWatch, Seagrass-Watch and MangroveWatch.

- Education programs designed to empower youth through outdoor learning, connecting with country, leadership, interactive games, videos and resources, and participatory learning. These include education centres such as Holloways Beach and Keppel Island Environmental Education Centres, aquariums, Small World Journeys, Whitsunday Discovery Tours, Project Dragonfly, LovetheReef app, ABC Education and teacher associations such as Australian Association for Environmental Education.

- Awareness raising programs and events designed to influence ethics, values and attitudes including Citizens of the Great Barrier Reef, SeaWeek, National Science Week and the Great Barrier Festival, together with advocacy campaigns by Non-Government Organisations such as Australian Marine Conservation Society, World Wildlife Fund and Conservation Councils on climate change, ocean plastics, sustainable seafood and threatened species.

- Programs to direct or influence policy settings, including UNESCO's World Heritage Convention, the Australian and Queensland Government's Reef 2050 Plan, GBRMPA's Blueprint for Resilience and the Australian Academy of Science's Position Statement on the Great Barrier Reef.

4.4.1 Intent and type of actions

Modification of purpose and activity categories in stage two enabled actions to be classified in line with different components of the Bennett Framework for environmental stewardship, the DPSIR framework to understand cause-and-effect relationships and an emerging conceptual model for Great Barrier Reef stewardship.

This approach enabled the intent and type of actions to be classified into broad categories and the coding of stewardship programs and projects against categories (see **Table 1**).

Activity type	Intent	Action sub-type	No. entities
On-ground action	To reduce threats	Influence, modify, remove - actions to reduce the effect of a driver, or Mitigate, prevent, eliminate actions to reduce a pressure or impact	26
On-ground action	To improve condition	Influence, restore, adapt - actions to improve the state of a value/attribute (ecological and human system) in response to changes in the environment	25
On-ground action	To proactively adapt	Pro-active measures to address a reduce a threat or improve the state of the ecological/human system in response to predicted changes in the environment	16
On-ground action	To change a behaviour or practices	Influence behaviours and practices, social norms and governance, to reduce a threat or improve the state of the ecological/human system	32
On-ground action	To improve knowledge	Research and monitoring, including citizen science to improve the capacity to steward	42
Increase capacity	To improve technologies	Technological development to improve capacity to steward	8
Increase capacity	To improve management/ institutional capacity	Influence governance systems (laws, policies, decision-making processes) to improve the capacity to steward	49
Increase capacity	To improve financial capital	Improve financial stability to increase the capacity to steward	17
Increase capacity	To improve community capacity	Improve human (educational, skills, knowledge, leadership), social (informal and formal relationships) cultural (connections to place, traditions, customs and practices), physical (infrastructure) and institutional (organisation-level governance) to increase the capacity to steward	102
Influencing motivations	To motivate positive action	Influence ethics, values and attitudes to generate action to reduce threats (drivers/pressures/ impacts) and the improve state of the ecological/human system	110

Table 1: Categories of stewardship action: Derived from the Bennett Framework for environmental stewardship, DPSIR framework and an emerging model of Great Barrier Reef Stewardship

i. Delivering on-ground actions

The classification of actions revealed that most entities are undertaking multiple combinations of activities. Approximately:

- 25% are delivering onground actions targeting threat reduction;
- 25% are targeting improvements to the condition of values;
- 15% are taking pro-active measures to adapt to changes in the environment;
- 30% are implementing practice changes, and
- 40% are undertaking actions designed to improve knowledge for decision making.

ii. Increasing capacity to steward

Not surprisingly, over 90% of entities were also classified as delivering actions aimed at improving the community's capacity to steward. This included actions to improve skills, education, knowledge, systems, networks and leadership opportunities. Over 40% of entities were delivering activities designed to influence policies and decision-making processes – with the aim to improve institutional and systems-level decision making processes. Approximately 15% of entities were involved in increasing financial capacity – mostly through program funding or project grants; and about 7% were involved in activities focused on improving technologies to deliver stewardship actions.

iii. Influencing motivations

Influencing people's motivations (ethics, values or attitudes) was either a direct or indirect aim of all programs and project in the audit.

4.4.2 Scale and reach of activities

Local	**Regional** (Reef-wide or catchment level)	**National**	**Global**
84	68	21	20

Table 2: The scale at which entities are operating

The scale at which stewardship entities are operating, and the reach of their programs are varied and largely reflect the scale of threats to the Great Barrier Reef (see **Table 2**). Many entities are operating at multiple scales. Three quarters (75%) of entities are focused on local action and 60% on Reef-wide or catchment-level actions. Approximately 20% of entities are operating at national and international scales.

4.4.3 Impact

i. Measures of participation

As highlighted in the stage one audit, a range of measures for participation were recorded. These included: number of volunteer hours; number of individual participants; number of partners; number of participating

organisations; number of countries; number of digital media followers; number of cafes, resorts, businesses and vessels.

Where available, information on outputs or outcomes was also recorded. Outputs included measures such as number of surveys conducted, educational resources produced, stewardship programs supported and level of investment. Examples of outcomes included number of trees planted or volume of rubbish removed.

A challenge when assessing collective effort, particularly over time, is the identification of comparable participation measures that reflect the diversity of stewardship activities and their different levels of participation. Additionally, there was only limited public information available on measures of participation, outputs and outcomes for most of the programs/projects audited. This is an area that should be targeted in any follow-up communications with entities and/or through survey methods.

ii. Purpose- and activity-driven vs outcome focus

The majority of programs and projects in the stage one audit reported on activities to achieve goals (i.e. purpose-driven) with only a few programs reporting on outcomes (for example, volume of rubbish removed). Many programs provided measures of participation and these form useful indicators of impact, particularly in relation to increasing capacity (for example, education programs) and influencing motivations (for example participatory learning). It does however present a challenge when evaluating performance against the delivery of outcomes against Reef-related reporting frameworks.

The modified framework provides an opportunity to link purpose- and activity-driven programs and projects with outcomes and improve not only monitoring and evaluation processes but also program design to become more outcome focussed.

The framework classifies activities into broad purposes and activity streams as follows:

- actions to reduce threats;
- actions to improve state;
- actions to improve capacity to steward (local assets and systems-level decision making); and/or
- actions to influence motivations.

These categories provide direct line of sight with expected outcomes under the Reef Trust Partnership to manage key threats (reduce threats), protect attributes (improve state) and improve management (improve capacity to steward, and influence motivations). These in turn link to Reef 2050 Plan outcomes and Great Barrier Reef Outlook Reporting on drivers, threats (pressures and impacts), condition (state) and management effectiveness.

Although not part of the stage two scope, the audit spreadsheet has been designed to enable inclusion of data and coding against outcomes. Next to each activity column is a column (currently hidden) to record threats and/or values are being targeted. Threats refer to drivers, pressures and impacts taken from Outlook Reporting (see **Appendix 4**) and values relate to the state or condition of the ecological and human system (see **Appendix 5**).

This approach lends itself to tracking specific outcomes – in terms reductions in threats and improvements in the state of the environment, in addition to improvements in management attributable to stewardship actions.

4.5 Alignment with Community Reef Protection Partnership Annual Work Plan and M&E Plan

4.5.1 GBRF Community Reef Protection Annual Work Plan activities

Programs and projects were mapped to Reef Trust Partnership Community Reef Protection activities (see **Appendix 6**) to look for areas of alignment. The intent of this mapping is to enable GBRF to:

- evaluate its contributions towards achieving Community Reef Protection outcomes in the context of activities being undertaken by fellow stewardship partners;
- identify organisations and individuals who are working on similar projects, opening the door for collaborations and partnerships including opportunities for sharing knowledge and lessons learned;
- look for linkages and opportunities to value-add to programs across different activity streams;
- minimise any potential for duplication of effort; and
- showcase collective community efforts.

Results show there are a number of organisations either: directly engaged in one or multiple Partnership activities; involved in similar types activities; or, for activities such as the National Reef Protection Challenge, have the potential to be valuable participants or partners in activity delivery (see **Table 3**).

Partnership activity	Number of entities undertaking programs/projects in these, or similar activity areas
Citizen Science	49
Local Reef Restoration	12
Local Action Project	66
Integrated Decision Making	47
National Reef Protection Challenge	88
Communicate case studies & stories of hope	93
Investment & Partnership Models	97
Empower community heroes	85

Table 3: Mapping stewardship programs and projects to Reef Trust Partnership community reef protection activities: Sample size: 110 entities

4.5.2 GBRF Community Reef Protection M&E Plan

As noted in Section 2.5.2 a decision was made not to continue with mapping stewardship activities against GBRF's M&E activity pathways and outcomes (see **Appendix 7**).

While the stage one audit process was useful in helping to more clearly define the intent of M&E Plan outcomes and steps in impact pathways, given the lack of outcome reporting in audited programs it was decided to adopt an alternate approach. This involved mapping purpose and activity categories of audited programs against intermediate and end-of-Partnership outcomes (see **Table 4**).

Stewardship purpose/activity		On-ground action					Increase capacity				Influence
		Reduce Threat	Improve State	Adapt*	B/P* Change	R&M	Tech*	Mgt*	Fin*	Comm*	Motiv*
M&E Plan End-of-Partnership Outcomes	EoP1: Dynamic suite of tools for enduring funding and partnerships for community action are available								●	●	
	EoP2: Community action is more recognised, valued and celebrated for the range of benefits provided to support Reef resilience									●	●
	EoP3: Community action is delivering more effective outcomes for the Reef and community	●	●	●	●	●	●	●	●	●	●
	EoP4: More targeted local action that aligns with strategic needs	●	●	●	●	●				●	
	EoP5: Shared knowledge & decision making enhances governance & delivery models					●		●		●	
M&E Plan Intermediate Outcomes	Int1: More strategic approaches to resourcing & partnership for community action are piloted and scaled							●	●	●	
	Int2: Maintain capacity & participation for local community action						●	●	●	●	
	Int3: More people are informed, inspired & empowered to take part in collective action to build resilience of the Reef					●		●		●	●
	Int4: Planning and outcomes are more 'owned' & relevant							●		●	●

Table 4: Alignment of audit purpose and activity categories with GBRF Community Reef Protection M&E Plan outcomes

*Adapt – Adaptation; B/P - Behaviour/Practice; R&M – Research & Monitoring, including citizen science; Tech – Technological development; Mgt - Management; Fin – Financial resources; Comm – Community; Mot – Motivations (Ethics, Values and Attitudes)

The approach of mapping purpose and activity categories of audited programs to GBRF Community Reef Protection component intermediate and end-of-Partnership outcomes indicates:

- Increasing community capacity (educational, skills, knowledge, leadership, relationships and networks, connections to place, infrastructure, organisation-level governance) are likely to contribute to all intermediate and end-of-Partnership outcomes;
- Increasing financial capacity together with community capacity directly align with the delivery of end-of-Partnership outcome EoP1: Dynamic suite of tools for enduring funding and partnerships for community action are available; and
- Influencing motivations (ethics, values and attitudes) most directly aligns with intermediate outcome Int3: More people are informed, inspired & empowered to take part in collective action to build resilience of the Reef and end-of-Partnership outcome EoP2: Community action is more recognised, valued and celebrated for the range of benefits provided to support Reef resilience.

All categories of actions aim to deliver more effective outcomes for the Reef and the community (EoP3) and on-ground actions are also likely to contribute to end-of-Partnership EoP4: More targeted local action that aligns with strategic needs. However, it is not possible to determine the degree to which actions contribute to "more effective outcomes" or "align with strategic needs" without a measure of current effort or an evaluation of program and project outcomes. It is hoped that this audit provides a platform for such future evaluations to occur.

The matrix may also assist in providing a more holistic approach to outcome delivery. For example, developing enduring or sustainable funding models requires not only investment in developing financial models but investment in community capacity such as, skills, training and organisation-level governance to achieve positive outcomes.

4.6 Next steps

The purpose of the stage two desktop audit was to build on findings from the initial audit and use the modified framework to audit 100 programs. The resulting audit spreadsheet and this report of preliminary findings provide a sound platform for more detailed and systems-level analysis of the characteristics of Great Barrier Reef, the entities delivering actions and the nature of programs and projects.

4.6.1 The audit process - ongoing adaptation and continuous improvement

The stage one report highlighted the complexities involved with auditing Great Barrier Reef stewardship activities. However, by adopting a staged and collaborative approach the pathway to documenting not only collective effort but developing a meaningful planning, program design and evaluation tool for stewardship has become clearer.

There is always the potential to continue to refine categories. For example, there is the potential to include the 'improving capacity - technological development' category in the community capacity and/or the management capacity categories and modify definitions accordingly. Similarly, there is the potential to include the 'improve capacity - financial resources' category within community capacity. In this instance categories were split to reflect the current focus and desire to identify and develop more innovative

approaches and sustainable financing models to support stewardship. Splitting and combining categories is always a challenge and there is often no right or wrong. It is appropriate that categories continue to be adapted, however, it is important to ensure that all categories are clearly defined to ensure consistency in coding.

A limitation with the current audit was that one person undertook all the coding of programs and projects against categories. Even with clear category definitions there is always the opportunity for differences in opinion, interpretation and potential bias when determining if a program or projects should be mapped against a specific category. A simple method to improve the rigour of categorising programs and projects would be for a panel of three people to undertake coding. Although this sounds onerous, with the spreadsheet already set up and the entities purpose and activity descriptions included, it is quite a fast exercise.

Additionally, the time allocated to audit each program/project was intentionally brief as the next phase of the stewardship audit is likely to involve direct communication with stakeholders and a follow-up 'Great Barrier Reef Stewardship' survey. In some instances, only limited information was readily accessible on an entity's website and while additional research or direct contact with the organisation or individual would have assisted with addressing gaps or clarifying/confirming interpretations of data this was not within the scope of this audit's stage. Follow-up communication with stakeholders will further improve the rigour of data collected, particularly for participation and outcome categories. It also provides an opportunity for more structured approaches to gather information on 'motivations' and 'capacity' in line with the Bennett Framework.

As highlighted in the stage one report, it will be critical to highlight the benefits of collecting stewardship data, including its use to guide interventions and strengthen stewardship outcomes, to encourage strong participation by stakeholders in any surveys or follow-up communications. Confidentiality provisions (in addition to Privacy Act rules and regulations) regarding the use of disaggregated data will also be critical particularly when gathering information relating to capacity categories.

4.6.2 A stepping-stone to achieving GBRF Community Reef Protection outcomes

The audit represents a key stepping-stone to achieving multiple GBRF Community Reef Protection's outcomes. Information gathered through the audit will help ensure investment is targeted to areas that will:

i. Maintain and enhance capacity and participation for local community action

As highlighted in Section 4.1.1 re-inclusion of local and institutional capacity categories from the Bennett Framework in the planned follow-up survey will provide valuable guidance on key gaps and leverage points for building capacity. Inclusion of categories relating to 'motivations' will help ensure the design of programs align with people's values and encourage participation in stewardship actions.

The audit process itself sheds light on opportunities to increase community capacity in stewardship program design, evaluation and impact. In particular, the incorporation of the DPSIR framework provides the basis for connecting purpose- and activity-driven processes with outcomes and to improve alignment with Reef 2050 reporting.

A potential next step could include development of a 'Great Barrier Reef Stewardship Tool Kit' based on the findings of this audit. This could include tailored program design and monitoring and evaluation templates for different categories of stewardship activities such as, onground actions, building capacity, influencing attitudes, and reporting templates aligned with Great Barrier Reef Outlook, Reef 2050 reporting.

ii. Achieve more strategic approaches to resourcing and partnering for community action and enduring funding and partnerships

The current reliance of stewardship organisations on short-term grants and funding programs creates organisational uncertainty, results in limited resources being directed to seeking and applying for grants and makes it hard to attract and retain people in dedicated stewardship roles. This audit provides a platform for undertaking more detailed analysis and evaluation of current and alternate business models to inform more strategic approaches to resourcing and partnering, and piloting of these approaches with Reef stewards.

iii. Ensure community action is more recognised, valued and celebrated for the range of benefits provided to support Reef resilience

Findings from this report shed light on the characteristics of the Great Barrier Reef stewardship community and their remarkable work. This information provides the basis for developing a range of communication products to showcase and celebrate the important contributions of our stewards to building the resilience of the Reef and our communities.

Acknowledgements

Collaboration between GBRF, management agencies and researchers continued to remain a defining feature of the audit process.

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- Michelle Dyer and Stephanie Hernandez (GBRMPA)
- Maxine Newlands (JCU)
- Jenn Loder (GBRF) and Laura Dunstan (GBRF)

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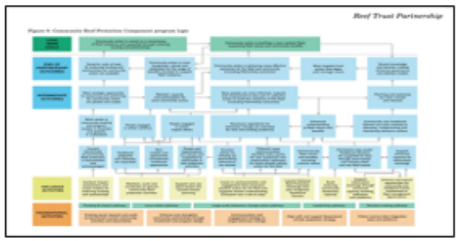
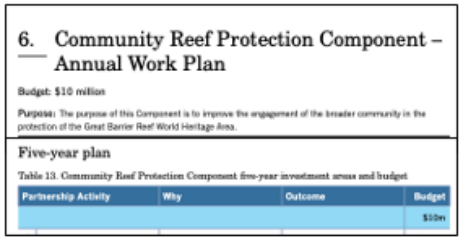
Appendix 1 – Design of the Stage 1 Audit Framework





Builds on the earlier Great Barrier Reef Landscape Audit

Group ID
Purpose
- Descriptor
- Code

Activities
- Descriptor

Location
Target Audience
Reach
Scale
 # Participants
Contacts

Incorporates key elements of the Bennett Analytical Framework

Actors
- Level
- Allocation
- Characteristics

Motivations
- Intrinsic
- Extrinsic

Capacity
- Social capital
- Financial capital
- Physical capital
- Cultural capital
- Human capital
- Institutional capital

Actions
- Descriptor

Outcomes
- Ecological
- Social

Maps stewardship activities against M&E pathways and end-of-Partnership outcomes

Activity Pathways
- Funding & impact
- Local action
- Large-scale behavioural change
- Leadership
- Decision making

Outcomes
- End-of-Partnership
- Intermediate

Maps stewardship activities against Annual Work Plan Activity streams

Activity Code

Appendix 2 – Entity descriptors

Categories	Description/category type	
Entity name	Name of organisation/group/individual/host. For example, Great Barrier Reef Marine Park Authority, Reef Ecologic, Earthwatch. Includes a link to the entity's website for the specified stewardship program/project.	
Entity Type	Government: Govt – Aust; Govt – Qld; Govt - local	
	Natural Resource Management (NRM)	
	Industry: Ind – tourism; Ind – fishing commercial: Ind - other	
	University/Research Institute: Uni; Uni-research institute; Academy	
	Education organisation: Edu – school; Edu centre; Edu other	
	Private company/business	
	Association	
	Community: community group; community – rec' fishing sector	
	Religious organisation	
	Partnership/collaboration	
	Umbrella organisation, including peak body/association or alliance of organisations	
	Individual	
	International body: Int body (for example, – UNESCO, ICRI, IUCN)	
	NGO - organisations addressing larger and more wide- spread issues. e.g. WWF, ACF	Operational – project based Campaigning – influence political system Membership based Charitable status – Y/N
	NFP - typically smaller (but not always) e.g. GBRF, Citizens of the GBR, GBR Legacy. Sometimes referred to as "Non-Profit"	Charitable status – Y/N (large, medium, small) Social enterprise – uses income to fulfil a mission to improve society environmentally, socially or culturally
Stewardship role	Funder	
	Program/project delivery	
	Setting/influencing policy direction	
	Other	
Program/Project Name/Description	Name of the stewardship program/project and/or a short description. For example, Reef Guardian Councils, Reef Guardian Schools. Where available the high-level description was taken directly from the entity's website.	
Program/Project Classification	Networking platform	
	Partnership: Regional partnerships; Partnership program; collaboration	
	Industry certification program	
	Membership based program	
	Volunteer program	
	Grant program	
	Project driven/based	
	Campaign/advocacy program	
	Research/science	
	Movement	
	Event	

Additional Descriptor	Conservation
	Sustainable use
	Education
	Citizen science
	Place-based
	Policy and governance
	Technical advice
Characteristics	Describes information including, but not limited to, reef dependence, rights and responsibilities, principles and values

Appendix 3 – Matrix of purpose and activity descriptors used to refine audit categories

	From Bennett definition of stewardship*	GBRMPA stewardship purpose category	Purpose	Activity		GBRF Activity Stream	Environmental /Social Outcomes
Local on-ground actions to protect, care for or responsibly use the environment to reduce threats or improve condition of value	Protect and care action	On-ground action	**Protection**	On-ground – threat reduction	Refer list of drivers, pressures, impacts	Local action project	Refer list of drivers and pressures (Attachment 3) Includes climate change, water quality, marine debris etc (IF ACHIEVED)
	Protect and care action	On-ground action	**Protection**	On-ground – improve condition of values Note - Potential for a third category or Protect – with the onground activity being **Adapt**	Refer list of values Includes species, habitats, heritage and community benefits	Local action project Local reef restoration project	Refer list of values (Attachment 2) Includes species, habitats, heritage and community benefits (IF ACHIEVED)
	Responsible use action	On-ground action	**Sustainable use practices** – avoid, mitigate, offset, adapt	On ground – minimise impacts through practice change (PCIM)	Link to threats being reduced and improvements in state	Local action project	Refer net benefit lists
Improving levels of capacity to	Level of capacity	Increase capacity (institutional)	**Management capacity** - improve decision making systems	Improve policy and governance systems	Policy (P), Governance (G), Advocacy (A), Other (O)	Integrated decision making	Improved governance systems

	From Bennett definition of stewardship*	GBRMPA stewardship purpose category	Purpose	Activity		GBRF Activity Stream	Environmental /Social Outcomes
	Level of capacity	Increase capacity (institutional)	**Management capacity** – improve knowledge for decision making	On-ground monitoring and research	Refer lists of drivers, pressures, values above to link	Citizen science	Improved understanding
	Level of capacity	Increase capacity (Physical)	**Technological capacity** – improve technologies	Technological development	Unique descriptor		Improved capacity to achieve (refer lists)
	Level of capacity	Increase capacity (Financial)	**Community capacity** - improve financial capacity	Capacity building – financial resourcing	-	Investment and partnership models	Improved capacity to achieve (refer lists)
	Level of capacity	Increase capacity (Human)	**Community capacity** - improve individual or community knowledge and skills	Capacity building – Education knowledge, training leadership	Knowledge, skills	Empower community heroes	Improved capacity to achieve (refer lists)
Influencing motivations	Motivations (intrinsic &/ or extrinsic)	Influence motivations (ethics, values or attitudes)	**Awareness raising**	Communication Communication & engagement Advocacy Campaigns	If tailored to a specific threat/value refer lists above	Communicate case studies & stories of hope Awareness raising, including communication and engagement	Improved understanding, appreciation and/or connection with the Reef Improved capacity to achieve (refer lists)
	Motivations	Influence motivations (ethics, values or attitudes)	**Behavioural change** Note: Can be combined with protection (i.e. threat reduction or improving condition of	Behavioural change program Note: Must be underpinned by Theory of Change - with clear cause and	Unique descriptor aligned to above lists where possible	National Reef Protection Challenge	Improved capacity to achieve (refer lists)

	From Bennett definition of stewardship*	GBRMPA stewardship purpose category	Purpose	Activity		GBRF Activity Stream	Environmental /Social Outcomes
			values or adaptation purpose/activity codes where there is evidence of implementation)	effect logic steps (e.g. source reduction program)			

*Bennett et al defines local environmental stewardship as the actions taken by individuals, groups or networks of actors with various motivations and levels of capacity to protect, care for or responsibly use the environment in pursuit of environmental and/or social outcomes …

Note may also include social capital – any of these activities may contribute to building informal and formal relationships to support stewardship and cultural capital – where processes/projects include maintaining connections to place, traditional, knowledge and practices central to a group's identify and that support stewardship (from Bennett et al).

Appendix 4 – List of Drivers, Pressures and Impacts: 'Threats'

Refer Reef 2050 Net Benefit Policy, Attachment 3: Drivers of change, pressures and impacts on the Great Barrier Reef

See pp 21-22 link below:
http://elibrary.gbrmpa.gov.au/jspui/bitstream/11017/3388/9/Reef-2050-net-benefit-policy.pdf

Appendix 5 – List of Values and Attributes: 'State'

Refer Reef 2050 Net Benefit Policy, **Attachment 2**: Values, attributes and processes that underpin matters of national environmental significance relevant to the Great Barrier Reef

See pp 17-20 link below:
http://elibrary.gbrmpa.gov.au/jspui/bitstream/11017/3388/9/Reef-2050-net-benefit-policy.pdf

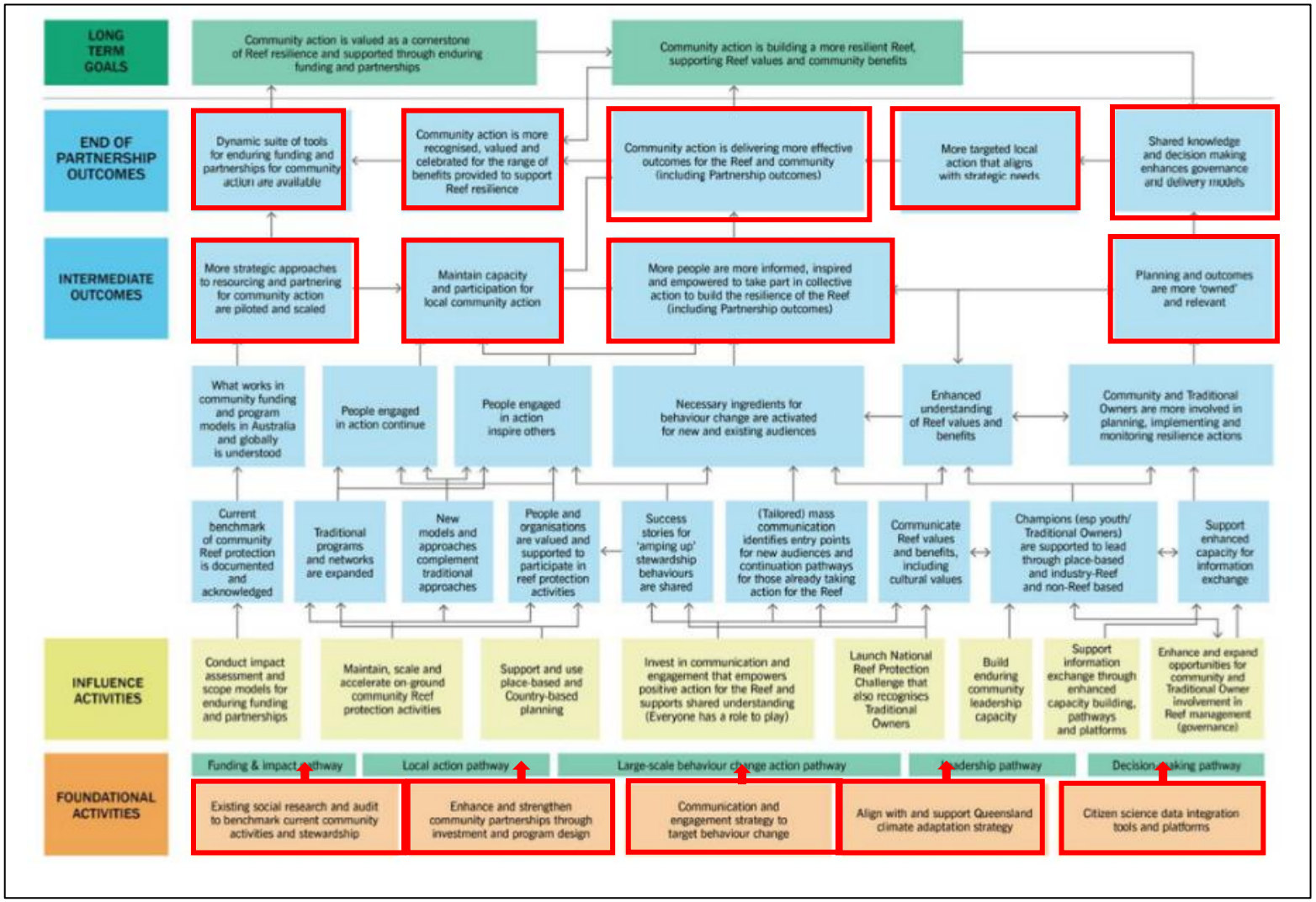
Appendix 6 - Community Reef Protection Activity Streams

Partnership Activity/Activity Code	Why	Outcome
Citizen science: Support strategic and collaborative citizen science data collection, reporting and application	Citizen science can address priority data needs for science, management and community, as well as provide a platform for effective partnerships and place-based approaches that align with the broader Reef 2050 Plan. Yet while citizen science is gaining momentum, there is much greater potential for data from programs to inform management and offer greater community benefits.	A framework for strategic citizen science projects will: • enhance how community informs, and is informed by, local/regional decision-making • increase community understanding about Reef health • boost community benefits and partnerships, and enhance efficacy in Reef stewardship.
Local Reef restoration: Support development and implementation of local Reef restoration demonstration sites	Reef restoration has been identified as an important emerging priority for the Reef. There is high interest from the community to support this work	A series of Reef restoration demonstration sites will be identified and piloted with Reef community partners (particularly tourism, Traditional Owners and community groups). Best-practice local- scale restoration methods will be shared and refined – including improved measures of success spanning environmental, social, economic and cultural indicators.
Local action projects: Support collaborative community projects to address local Reef threats using strategic, place-based approaches	GBRMPA's Local Marine Advisory Committees already provide a platform to directly connect community with decision-making and offer a network for scalable approaches to implement regional Reef Blueprint priorities. Providing support for inclusive project planning can further activate and empower this network of dedicated community members.	Projects will increase ownership, knowledge-sharing and collaboration to deliver local actions on priority Reef threats, and wider benefits across Reef communities. Projects will trial and embed frameworks for collective action and enhance engagement (including youth) in this Reef-wide community advisory network.
Integrated decision-making: Facilitate pathways and platforms to foster knowledge exchange and develop regional Community Action Plans for Reef protection projects	Effective integration of top-down and bottom-up approaches can help to deliver key management priorities as well as recognise and foster the important role of community action. Promoting exchanges to clarify understanding and opportunity will help to drive more effective local-scale actions and integration with broader Reef and catchment- wide management approaches. This will build on RIMReP and other strategic frameworks.	Community Action Plans will provide inclusive, integrated and adaptive frameworks for Community Reef protection efforts that deliver against key Reef management priorities. Duplication of efforts will be decreased. New/strengthened partnerships will be formed between community groups and managers/policy-makers. Community will have greater ownership of plans and outcomes.
National Reef Protection Challenge:	Australians are proud of the Reef and feel a sense of responsibility to protect it,	The first national-scale Reef protection challenge will:

Develop and implement a collaborative initiative to support targeted behaviour change to protect the Reef.	but many do not feel optimistic about its future. Despite the demonstrated interest in stewardship actions, many people feel they do not have the necessary knowledge and skills to reduce impacts they have on the Reef (Marshall et al 2017). This initiative will foster wide-scale participation in a Reef protection challenge to deliver measurable behaviour change outcomes to address key threats at multiple scales – personal, local, and nationwide.	• Build positive attitudes, intention and participation in targeted behaviours that reduce Reef threats • Build hope for the future of Reef resilience through collective action • Build partnerships and efficacy across community networks such as tourism, councils, education, community groups, local business.
Communicate case studies and stories of hope	Capturing and sharing community-driven solutions from a range of people and projects has been identified as a key need to celebrate success and inspire increased engagement.	Partnership communication and mass communication will support a knowledge sharing network. Communicating positive outcomes will demonstrate progress, acknowledge the work of individuals and community organisations and motivate others to get involved.
Support enduring investment and partnership models: Enhance community Reef protection models to foster long-term organisational sustainability, impact and investment	While extensive work is taking place across communities, there is no comprehensive benchmark that documents community stewardship effort and impact across the Reef and its catchments. Addressing the challenge of small, inconsistent grant-based funding for community Reef protection activities has been identified as a key barrier to achieving more efficient and enduring outcomes.	A dynamic suite of tools to inform Community Reef protection partnerships and investment models will be developed and made available. A stewardship audit and impact assessment will create a baseline for celebrating current work, showcasing greater potential, and measuring changes in stewardship actions delivered with partners through the Reef Trust Partnership.
Empower community heroes: Identify and deliver key capacity building needs for individuals & organisations to amplify partnerships and leadership	Addressing shared challenges and areas for growth can boost how the community can contribute to Reef protection. The following areas have been identified: cultural capacity building to foster greater partnership opportunities with Traditional Owners, enhanced monitoring and evaluation skills to document community project impact and empowering youth leadership.	Capacity building initiatives will strengthen individual, organisational and sector-wide capacity to support place- based, sector-based and youth empowerment activities with the goal to enhance community stewardship outcomes.

Source: Reef Trust Partnership Annual Work Plan 2019-2020

Appendix 7 - Community Reef Protection M&E Plan



Impact pathways and outcomes shown in red. Source Reef Trust Partnership Monitoring and Evaluation Plan, 2019