Coral Reef Conservation Fund 2014 - Submit Final Programatic Report (New Metrics)
Grantee Organization: Marine Applied Research, LLC
Project Title: Management and Stewardship for Coral Reefs in the Caribbean (Grenada, St. Vincent)

Project Period	10/01/2014 - 9/30/2015
Project Location Description (from Proposal)	Grenada, St. Vincent, Eastern Caribbean
Project Summary (from Proposal)	Build on a subset of projects implemented under the two-year Australia-Caribbean Coral Reef Collaboration and focus on monitoring, management planning and community and stakeholder engagement. Project will develop a monitoring program for Grenada and deploy stewardship programs in St. Vincent and the Grenadines.
Summary of Accomplishments	The goals of this project included increasing capacity for timely and targeted social and ecological monitoring and building stewardship in local communities. The project focus areas were Grenada and St. Vincent and the Grenadines. Managers from these countries took part in a capacity building program on resilience-based coral reef monitoring and management in Australia in June of 2015. The project team then supported managers from these countries in developing monitoring plans and establishing and maintaining stewardship programs. The major project output is a Reef Managers Guide to Fostering Community Stewardship; the first in what will be a series of these guides, which are professionally designed downloadable PDF documents. The Guide will be jointly released by NFWF in collaboration with IUCN, GBRMPA, NOAA CRCP, and TNC and have global impact with respect to helping reef managers establish stewardship programs.
Lessons Learned	The 'Lessons learned' under this project are fairly generic in that they relate to commonalities such as developing major publications always takes longer than you think it will. For that reason, we do not have a long list of lessons learned to share here. However, our Reef Managers Guide to Fostering Community Stewardship presents our experience and views on establishing and maintaining stewardship programs, which includes strategies all coral reef conservation organisations can use or adapt. We break down establishing stewardship programs into four major steps and present guidance on tasks and activities (and a proposed sequence) for meeting these steps (e.g. 1) Getting Started, 2) Involving Stakeholders, 3) Plan the program, and 4) Implement).

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Activities and Outcomes

Funding Strategy	**Capacity, Outreach, Incentives**
Activity / Outcome	Coral - Building institutional capacity - # FTE with sufficient training
Required	Recommended
Description	Enter the number of staff or full-time equivalents with sufficient training and skills engaged in conservation activities

# FTE with sufficient training - Current	0
# FTE with sufficient training - Grant Completion	10

Notes

Funding Strategy	**Capacity, Outreach, Incentives**
Activity / Outcome	Coral - Outreach/ Education/ Technical Assistance - # people reached
Required	Recommended
Description	Enter the number of people reached by outreach, training, or technical assistance activities

# people reached - Current	0
# people reached - Grant Completion	10

Notes

Funding Strategy	**Planning, Research, Monitoring**
Activity / Outcome	Coral - Tool development for decision-making - # tools developed
Required	Recommended
Description	Enter the number of tools developed

# tools developed - Current	0.00
# tools developed - Grant Completion	1.00

Notes

Funding Strategy	**Planning, Research, Monitoring**
Activity / Outcome	Coral - Management or Governance Planning - # plans developed
Required	Recommended
Description	Enter the number of plans developed that had input from multiple stakeholders

# plans developed - Current	0
# plans developed - Grant Completion	2

Notes

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Show Map Below

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The following pages contain the uploaded documents, in the order shown below, as provided by the grantee:

Upload Type	File Name	Uploaded By	Uploaded Date
Final Report Narrative - Marine	NFWF 43432_Science for Mgmt in Eastern Caribbean_Final Report.doc	Maynard, Jeffrey	12/28/2015
Photos - Jpeg	Rep Photo 1_Carib managers working in Australian schools.jpg	Maynard, Jeffrey	12/28/2015
Photos - Jpeg	Rep Photo 2_Roland Baldeo at school event in Australia.jpg	Maynard, Jeffrey	12/28/2015
Photos - Jpeg	Rep Photo 4_Project PI Paul Marshall helping post Reef Guardians signage.jpg	Maynard, Jeffrey	12/28/2015
Photos - Jpeg	Rep Photo 3_Carib managers helping with reef education in schools.jpg	Maynard, Jeffrey	12/28/2015

The following uploads do not have the same headers and footers as the previous sections of this document in order to preserve the integrity of the actual files uploaded.

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Final Programmatic Report Narrative

Science for management and stewardship: addressing priority needs for MPA management in the Eastern Caribbean

Organization: Marine Applied Research Center of Wilmington, NC
Principal Investigators: Dr. Jeffrey Maynard* and Dr. Paul Marshall
*8826 Ramsbury Way, Wilmington, NC 28409. P: +1 (910) 616-1096; E: maynardmarine@gmail.com

1. Summary of Accomplishments

In four to five sentences, provide a brief summary of the project's key accomplishments and outcomes that were observed or measured. This can be duplicative to the summary provided in the reporting 'field' or you can provide more detail here.

The goals of this project included increasing capacity for timely and targeted social and ecological monitoring and building stewardship in local communities. The project focus areas were Grenada and St. Vincent and the Grenadines. Managers from these countries took part in a capacity building program on resilience-based coral reef monitoring and management in Australia in June of 2015. The project team then supported managers from these countries in developing monitoring plans and establishing and maintaining stewardship programs. The major project output is a *Reef Managers Guide to Fostering Community Stewardship*; the first in what will be a series of these guides, which are professionally designed downloadable PDF documents. The *Guide* will be jointly released by NFWF in collaboration with IUCN, GBRMPA, NOAA CRCP, and TNC and have global impact with respect to helping reef managers establish stewardship programs.

2. Project Activities & Outcomes

Activities

- Describe the primary activities conducted during this grant and explain any discrepancies between the activities conducted from those that were proposed.

This project had two primary goals. These are listed below, followed by bullet point descriptions of the primary activities.

Goal 1: ***Timely and targeted monitoring: better information for better decisions***

- A senior manager from both Grenada and St. Vincent and the Grenadines took part in a *Coral Reef Management for Sustainable Development* capacity-building program we led in NE Australia in June of 2015. Key topics relevant to monitoring included in the ~3-week program were: science for management, integrated coastal zone management, incident response, environmental impact assessment, and communication.

- A key objective of the training experience for the National MPA Coordinator for Grenada, Mr. Roland Baldeo, was to meet with scientists and managers involved in coral reef monitoring to explore the relevance and adaptability of coral reef monitoring systems used in the Great Barrier Reef. Mr. Baldeo also visited community members and tourism businesses involved in monitoring on the GBR, and was trained in the field use of a citizen science monitoring protocol.

- Through a series of meetings and workshops, we identified that the GBR Eye on the Reef monitoring program would provide the basis for designing a monitoring system to address priority needs in Grenada. Ongoing work in Grenada centres on the development of a monitoring program that will be robust enough to support management decisions but simple enough for deployment by marine park

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rangers and coastal communities. These monitoring programs will have a strong citizen science component.

- Mr. Baldeo and his colleagues are producing a draft protocol and manual to support a pilot citizen science monitoring project in Grenada. This activity takes the place of the *Monitoring Multitool* we referred to in our initial proposal in our objectives (d) and (e) under this Goal. The final iteration of the *Multitool* produced is not specifically tailored for the priority needs of Grenada or for the citizen science monitoring program Mr. Baldeo and his colleagues are most interested in. Adapting the Eye on the Reef monitoring program will better serve needs in Grenada and is a change in our manager partner's approach rather than a change in our scope of work.

- In the final months of this project, the Ministry of Agriculture, Forestry and Fisheries in Grenada received a 7-figure grant from German aid organisations and the World Bank. These funds are currently enabling our manager partners in Grenada to roll out and sustain social and ecological monitoring plans. Training that managers from Grenada received from our group has and will continue to help Grenada managers to develop and implement their plans.

Goal 2: ***Reef Guardians: building stewardship in local communities***

- Key topics relevant to stewardship programs included in the ~3-week capacity building program we led in June of 2015 include: marine reserves, stewardship, climate change, reef resilience, strategic planning and policy, team engagement skills, dealing with sectoral, cultural and regional differences, and communication.

- A key objective of the training experience for National Protected Areas Superintendent for St Vincent and the Grenadines (SVG), Mr. Andrew Lockhart, was to hear from leading experts involved in design and implementation of reef stewardship programs in the Great Barrier Reef. The Reef Guardians program has been a great success in the GBR, and Mr. Lockhart had the chance to spend a day at a Reef Guardian school. This experience provided the chance to speak with the principal, teachers and students, and to explore the relevance of the program to SVG.

- The training program also enabled Mr. Lockhart to hear about the pilot Reef Guardians program in Grenada from Mr. Baldeo. Consequently, Mr. Lockhart learned about the ingredients for successful adaptation of the Reef Guardian concept from Australia to the Caribbean.

- We have developed a *Reef Managers Guide to Fostering Community Stewardship*, in collaboration with managers from Australia, the Pacific and the eastern Caribbean, as well as staff from GBRMPA, IUCN, NOAA CRCP and TNC. From the back page of the Guide (which we have uploaded in near-final-draft form to NFWF).

  > *The Reef Manager's Guide series aims to ensure that coral reef managers, wherever they work, have access to the latest information, ideas and guidance to help them tackle the most important challenges of the day. Written by experts at the frontiers of coral reef management, policy and applied research, the Guides draw on real-world experience to make knowledge accessible and actionable by practitioners, policy makers and community leaders. Covering the most important issues, including climate change, community stewardship, assessing resilience, scenarios and adaptive management, the Reef Manager's Guide series empowers managers to improve the outlook for coral reefs and the millions of people who depend upon them.*

  And, from the Guide introduction:

  > *This guide has been written to inspire and empower reef managers and community leaders to develop*

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reef stewardship programs. Stewardship is a way of empowering local communities to take a more active role in sustaining the natural resources on which they depend. Stewardship programs create a framework for greater participation and more organised allocation of resources, resulting in stronger alignment between community activities and government (or NGO) initiatives and, ultimately, better outcomes for coral reefs and communities. We hope that by enabling more formal stewardship programs this guide can inspire a community of practice that will accelerate learning and contribute to the global movement toward people-powered conservation of coral reefs.

Also from the introduction, to describe the importance of stewardship programs in coral reef conservation:

Importantly, stewardship programs give reef managers additional strategies that can complement existing management. Engagement with non-user communities (such as farmers) can enable managers to influence behaviours of people responsible for upstream pressures on coral reefs (such as agricultural pollution). Stewardship can also enable much greater responsiveness in reef management. Communities involved in stewardship (especially where it includes community-based monitoring) are more likely to detect and predict the consequences of their activities, and take voluntary action to avoid or reduce impacts. Voluntary responses by the community are likely to be more rapid, less costly and more effective than top-down management responses that often rely on regulatory mechanisms. Examples of responsive action through stewardship include voluntary moratoriums on commercial fishing aimed at reducing pressure on corals during periods of environmental stress.

- The *Reef Managers Guide to Fostering Community Stewardship* (referred to as 'the Guide' from here) shares our efforts in establishing stewardship programs in the eastern Caribbean and Australia. Roughly three months before this project finished, we realized that our needing to prepare a guide for St. Vincent and the Grenadines gave us the impetus to create a guide that could be used in all coral reef areas. We arranged in-kind support from GBRMPA, IUCN and TNC and put together a team of authors and contributing authors that worked on the Guide on and off for 6 months, under the coordination of project PI Drs. Marshall and Maynard. The final Guide is a professionally designed 76-page PDF illustrated document with the following structure (from TOC on page v):

INTRODUCTION 1

ABOUT THIS GUIDE 7

PART A: A FRAMEWORK FOR STEWARDSHIP 13

1. The logic behind stewardship recognition programs 13
2. Design considerations: building blocks of a program 14
3. Inputs: program support 22
4. Stewardship capacity: attitudes, knowledge and skills 23
5. Indicators of success 24
6. From theory to practice 25

PART B: STEP-BY-STEP GUIDE 27

1. Getting started 28
2. Involving stakeholders 36
3. Plan the program 42
4. Program implementation 52

PART C: REFERENCES AND ADDITIONAL RESOURCES 59

- At time of writing this final project report, the Stewardship Guide is complete but still roughly 60 days

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away from formal public release (see Dissemination section).

Outcomes

- Describe progress towards achieving the project outcomes as proposed and briefly explain any discrepancies between your results compared to what was anticipated.
- Provide any further information (such as unexpected outcomes) important for understanding project activities and outcome results.

Goal 1 Outcome (from our proposal): Increased biophysical and socio-economic monitoring capacity in Moliniere/Beausejour and Sandy Island/Oyster Bed MPAs

- This outcome has been achieved in that managers of these MPAs have participated in capacity building trainings we led, and are building the concepts of resilience and vulnerability into social and ecological monitoring plans.
- We anticipated investing more effort in helping with social and ecological monitoring planning in the late stages of the project than ended up being the case. Large grants to Grenada that were made mid-way through the project meant that our team could have greater impact under this project in the eastern Caribbean and globally through helping reef managers develop stewardship programs (our Goal 2).

Goal 2 Outcome (from our proposal): Increased capacity in the areas of stakeholder engagement, partnerships/coordination, resilience to climate change and outreach and education capacity in South Coast MC and Tobago Cays MP.

- This outcome has been achieved through our development of the *Reef Managers Guide to Fostering Community Stewardship*, which was developed with input from managers of the above-listed marine conservation areas. Managers in these areas are following the guidance we provided and that they helped us formalize for other managers in the *Guide.*
- Our view is that we achieved far more towards this outcome than we thought would be possible when the project started. Rather than producing a Guide for fostering stewardship in St Vincent and the Grenadines, we have created a Guide coral reef managers everywhere can use.
- Further, this Guide is the first in a Reef Managers Guide series of professionally-designed downloadable PDFs that we are developing under collaborations with GBRMPA, IUCN, UNEP, NOAA CRCP and TNC. We feel stewardship is the logical place for a series of Reef Managers Guides to start – conservation requires people and respecting and empowering people-powered conservation can enhance management in developing and developed countries.

3. Lessons Learned

Describe the key lessons learned from this project, such as the least and most effective conservation practi**c**es or notable aspects of the project's methods, monitoring, or results. How could other conservation organizations adapt similar strategies to build upon some of these key lessons about what worked best and what did not?

The 'Lessons learned' under this project are fairly generic in that they relate to commonalities such as *developing major publications always takes longer than you think it will.* For that reason, we do not have a long list of lessons learned to share here. However, our *Reef Managers Guide to Fostering Community Stewardship* presents our experience and views on establishing and maintaining stewardship programs, which includes strategies all coral reef conservation organisations can use or adapt. We break down establishing stewardship programs into four major steps and present guidance on tasks and activities (and a proposed sequence) for meeting these steps (e.g. 1) Getting Started, 2) Involving Stakeholders, 3) Plan the program, and 4) Implement).

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4. Dissemination
Briefly identify any dissemination of project results and/or lessons learned to external audiences, such as the public or other conservation organizations. Specifically outline any management uptake and/or actions resulting from the project and describe the direct impacts of any capacity building activities.

Direct impacts of our capacity building and training efforts include increased effort in Grenada and St. Vincent and the Grenadines to include resilience and vulnerability to climate change in social and ecological monitoring. Further, managers of these countries have established or are establishing stewardship programs following guidance presented within our *Reef Managers Guide to Fostering Community Stewardship.*

Formal public release of *Reef Managers Guide to Fostering Community Stewardship*:

The guide will be released jointly across three ocean basins: the Caribbean, Pacific and Indian Ocean regions. IUCN, the Great Barrier Reef Marine Park Authority, NOAA, Reef Ecologic and Symbioseas will jointly release the guide through local events and joint media statements. ***The anticipated release date will be circa March 1, 2016***. Additional media statements will be released to local media in Grenada, Belize, Jamaica, St Vincent and the Grenadines and the Maldives. Ongoing distribution and promotion will be achieved through the Reef Resilience Network (TNC/NOAA CRCP), GBRMPA and IUCN.

5. Project Documents
Include in your final programmatic report, via the Uploads section of this task, the following:

- 2-10 representative photos from the project. Photos need to have a minimum resolution of 300 dpi. For each uploaded photo, provide a photo credit and brief description below;
- Report publications, Power Point (or other) presentations, GIS data, brochures, videos, outreach tools, press releases, media coverage;
- Any project deliverables per the terms of your grant agreement.

POSTING OF FINAL REPORT: *This report and attached project documents may be shared by the Foundation and any Funding Source for the Project via their respective websites. In the event that the Recipient intends to claim that its final report or project documents contains material that does not have to be posted on such websites because it is protected from disclosure by statutory or regulatory provisions, the Recipient shall clearly mark all such potentially protected materials as "PROTECTED" and provide an explanation and complete citation to the statutory or regulatory source for such protection.*

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