

# Strengthening SIOBMPA Management Decision Making Process and Putting Adaptive Management in Practice



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### Disclaimer

This report was prepared as an activity under the MPA Governance Project implemented by the Centre for Resource Management and Environmental Studies (CERMES) under award NA11NOS4820012 from the NOS International Program Office (IPO), U.S. Department of Commerce. The statements, findings, conclusions, and recommendations are those of the author(s) and do not necessarily reflect the views of the NOS International Program Office (IPO) or the U.S. Department of Commerce.

## Introduction

The Sandy Island/Oyster Bed Marine Protected Area (SIOBMPA) comprises an area of 787 hectares on the southwest coast of Carriacou. Beginning on the Northern end, the protected area encompasses the mangroves of Lauriston Pt. in Hillsborough Bay, the shoreline through L'Esterre Bay, Pt. Cistern, and the north end of Tyrrel Bay including its mangrove system. The SIOBMPA also extends out into the sea and encompasses Sandy Island, Mabouya Island, and the Sister Rocks. The area within the SIOBMPA has extensive reef development, mangroves and seagrass beds. Most of the fishers in area rely 100% on fishing as their major source of income. They use a variety of techniques such as hand lining, spearfishing with or without scuba, traps, sinking palang/bottom, long lining and fish pots. From the time of MPA declaration, not many fishers had managed to source alternative livelihood.

Despite the importance in implementing and maintaining SIOBMPA, there has been little consideration on the effects of MPA on the adjacent communities. SIOBMPA faces limited acceptance and support by adjacent communities. This can be attributed to a number of reasons but a reduction of alternative fishing grounds or opportunities for fishermen has been very obvious.

The Nature Conservancy developed the management plan for the Sandy Island/Oyster Bed Marine Protected Area (SIOBMPA). The MPA zoning plan is not fully understood, accepted or supported by the fishermen's and there has been little consideration made earlier to conduct participatory consultations to address the concerns and issues. The SIOBMPA management board members had been aware of the local fishermen concerns but did not have strategies and resources to address it until the fishermen brought the issues to public attention as well as the Ministry of Carriacou and Petit Martinique Affairs. In early February some fishermen's from the adjacent MPA community started placing anti-SIOBMPA signboards at various locations within the MPA and in the capital of Hillsborough. They wrote petitions against the support of the MPA and got other fishermen to support the protest. Prior to this there has been a publication in the sailing newspaper "Compass" that the SIOBMPA local communities perceive that the benefits of the MPA are only for the tourism industry and foreigners rather than the local community.

Under the Centre of Resource Management and Environment Studies (CERMES) MPA governance project SIOBMPA has organized and carried out stakeholder consultations. During the planning of the second activity it was noted there is a need for greater in-depth consultations with the fishermen to strategize a way forward for collective voices of the fishermen to be addressed at the board level. Furthermore, these issues indicated action is needed to work with the board to revisit priority strategic approaches in the MPA

management plan and identify the root causes of the above issues and develop action plans in relation to on going MPA, acceptance, user and compliance issues.

## Objectives

- For MPA managers and planners to directly engage with fishermen's in a participatory consultation process to address the above issues.
- Allow fishermen's from adjacent MPA communities to address their perception, attitude, and issues relating SIOBMPA in a collective forum.
- Gather understanding from the fishermen's on the possibilities of alternative livelihood options and gauge their level of understanding and awareness of the MPA rules, purpose and boundaries.
- Develop a form of collective approach from the fishermen to solicit their input in the MPA management.

## Method

A subcommittee of the SIOBMPA Co-Management Board including wardens and the project participants met with the MPA Coordinator and the MPA governance project manager for in April 2012 to strategize an approach to conduct consultation meeting with fishermen. The activity involved coordination of activities between the SIOBMPA board members, wardens and the MPA coordinator.

The fishermen consultation was held on 18th of April /2012 in L'Esterre community. The SIOBMPA board and the Ministry of Carriacou and Petit Martinique Affairs were informed about the meeting and the results of the meeting.

To prepare fishermen's to participate in the meeting, a two-day site visit to the communities adjacent to the MPA was made by the MPA governance project manager and members of the board together with the wardens.

Site visits involved having dialogue with fishermen's on SIOBMPA issues and their livelihood concerns. These dialogues took place privately or opportunistically at either fishing landing sites, while fishers were repairing their nets, fishermen homes and social gathering places. During these sessions fishermen's were informed about the upcoming meeting and its purpose. The meeting announcement was also sent via radio. The fishermen were requested to come to the meeting to raise their livelihood concerns to the MPA team .The

chair of SIOBMPA Co-Management Board and the MPA Coordinator also joined this process on the second day.

An independent facilitator was contracted to moderate the meeting. The board Chairman presented the purpose of the meeting. The MPA Coordinator presented a power point presentation on Grenada's national MPA activities and future plans (Appendix 3). The facilitator then led the meeting to allow fishermen to express their views and concerns. SIOBMPA staff and board members provided clarifications and explanations as warranted.

## Results

Issues raised by the fishermen's	Solutions addressed by the fishermen's
<p><b>Livelihoods</b></p> <ul style="list-style-type: none"> <li>Reduction of alternative fishing grounds or opportunities for fishermen. Fishermen have to change fishing gears, size of boats and engine. This change requires money and fishers need support to bring such changes.</li> </ul> <p><b>MPA zoning</b></p> <ul style="list-style-type: none"> <li>The MPA zoning is not clear to many fishermen. Extensive requests have been made for the need to revisit the MPA boundary and beach seining zones in the MPA. Continual beach seining is been observed taking place all over the MPA.</li> <li>In the MPA, the zone for yacht anchoring is not beneficial to local fishing communities at all, since they are all located at Sandy Island where local boats and yachties find it had to commute at night for social events and potential business incentives for local fishing communities.</li> </ul> <p><b>Tradition and Scientific Knowledge.</b></p> <ul style="list-style-type: none"> <li>Fishermen have traditional knowledge of their fishing grounds and fish seasons. However, hey do need scientific information on various species of fish, their life cycle and sizes. As this information will help them understand better when to catch and what size is sustainable for certain species.</li> </ul> <p><b>Pollution Problems</b></p> <ul style="list-style-type: none"> <li>Fishers raise their concern with old grounded ships in mangrove areas and their impact on the coast and the possibility that the oil spill could have come from that source.</li> </ul> <p><b>Community Buy in and engagement in the MPA</b></p> <ul style="list-style-type: none"> <li>Fishermen understand the long-term benefits of the MPA but they need immediate solutions to deal with livelihoods. Not only do the fishermen have to be interested in the MPA but also the entire community should have a buy in with the mission of the MPA. There should be equal perceived benefit for locals, yachties, recreational divers and international community.</li> </ul>	<ul style="list-style-type: none"> <li>Could a sculpture park at the SIOBMPA withstand SIOB regular sea surges?</li> <li>Can the fishermen be compensated, looking at example from the MPA in St. Lucia</li> </ul> <p><b>Collective action.</b></p> <p>The facilitator strongly suggested that the fishermen would need to be organised to bring their collective voice and action to the government and the board in order to bring change. Fishermen agreed the way forward is to organize themselves.</p> <p>It was agreed that 6 persons would form the group through volunteering or nomination. A group was selected.</p> <ol style="list-style-type: none"> <li>Gladwin Simon 443 6342</li> <li>Joe Adams 419 6286</li> <li>Yoland Placid 443 6777</li> <li>Joshua Clement 443 6734 -536 6058</li> <li>Jaral McNiel</li> <li>Christopher Bartholomew 537 9110</li> </ol>

## Discussion

The consultation was very well attended with forty-three ( 43) participants attending, twenty-four (24) of whom were fishermen. This was the first consultation held with fishermen in at least five years. This was a stepping-stone in ensuring the future support of fishermen's towards SIOBMPA.

The fishermen welcomed the opportunity to converse with the representatives from SIOBMPA and the Fisheries Division. Many misconceptions and issues mentioned in the introduction were cleared with clear communication of intent and objectives of the MPA.

The fishermen presented the following issues, which they now face as a direct result of the MPA:

- Greater investment finances/resources are required to fish outside the boundaries of the MPA due to an increase in the distance to other fishing grounds and in gear. Longer lines are now required to set pots at greater depths outside of the park.
- The need to outfit fishing vessels with bigger engines to fish further offshore.

The fishermen also raised concern over the presence of a freighter, which has run aground in the mangrove, and their fear of the impact a potential oil spill would have on the park.

One community leader, who is also a recreational fisherman, remarked that the fishermen needs to be honest and realize that they should support the park to protect fish stock and their livelihoods as he and they all have noticed a significant decline in the size of fish and disappearance of certain species of fish over the past years.

A core group of fishermen was formed to meet with the SIOBMPA Board to work on developing and implementing projects and provide guidance on initiatives, which would benefit the communities.

The consultation was a success and the feedback from fishermen was overwhelmingly positive. There clearly is a need for greater engagement of fishermen in the management of the MPA as they are one of the most important stakeholders in the park.

The board was updated on the fishermen consultation meetings results. A press release was made on the success of the meeting (Appendix 3).

## Key learning

- It was important to meet with fishermen's in their setting and conduct informal dialogue with them as part of the community for the prep work of the meeting. This brought common ground for consultations.
- The consultation process emphasized the importance of acquiring strong support from local MPA communities' and local stakeholders in the continuous support of the management of the MPA.
- The MPA managers and planners realized that by understanding the knowledge of fishermen perceptions towards MPAs, the information gathered was essential in constructing solutions for alternative livelihoods.
- It is critical to maintain open lines of communication with fishermen at all phases of MPA management decision-making process to avoid misconceptions about the MPA. The SIOBMPA Co-Management Board, through the fisher's representative and the newly formed core fishers group should provide regular updates to fishermen.
- Local community buy in and acceptance for SIOBMPA greatly defines the effectiveness of MPA.

## Appendixes

### Appendix 1. Fishers Consultation Notes

Meeting with Fishermen and members of the L'Esterre Community  
at Gus Adams Club on Wed April 18, 2012

**Program:** MPA Governance Project 2011-2012.

**Facilitators:** CERMES, GMPA program, SIOBMPA Co-Management Board.

**Objectives:**

- To update fishermen on MPA plans
- To hear their concerns
- To learn management issues related to the Park
- To set up a working committee

**Meeting Chairman/facilitator:** Cosmos Bristol –community member.

Meeting Started at 6:30 with slide presentation 'MASA fish never done.'

**Attendance:**

1.	Albert Mitchell	Fisherman	L'Esterre
2.	Jody Placid	MPA Warden	
3.	Anique Coy	MPA Warden	
4.	Brian Whyte	SIOBMPA Secretary	
5.	Gladwin Simon	Fisherman	Hillsborough
6.	David Jaffier	Fisherman	Hillsborough
7.	Roland Baldeo	MPA Coordinator	
8.	Jeff Placid	Fisherman	L'Esterre
9.	Davon Baker	MPA Chairman	
10.	Cosmos Bristol	Community Member	L'Esterre
11.	Stalin Samerson	Community Member	L'Esterre
12.	Bryan Prince	MPA warden	
13.	Henry Stiell	Part-time fisherman	L'Esterre
14.	Cecil Joseph	Fisherman	L'Esterre
15.	Bernadine Lendore	School Teacher	L'Esterre
16.	Devous Joseph	Fisherman	L'Esterre
17.	Chistorpher Bartholomew	Fisherman	L'Esterre
18.	Godwin Roberts	Taxi operator	Hillsborough
19.	Clemencia Alexander	Community Member	L'Esterre
20.	Crispin Mitchell	Community Member	Lauriston
21.	Luther Rennie	MPA Treasurer	
22.	Farrih Joseph	Fisherman	L'Esterre
23.	Jaral Mc Niel	Fisherman	L'Esterre
24.	Augustus Adams	Club proprietor	L'Esterre
25.	Yoland Placid	School Teacher	L'Esterre

26. Sonnel Allert	Fisherman	L'Esterre
27. Allan Clement	Fisherman	L'Esterre
28. Joshua Clement	Fisherman	L'Esterre
29. Herbert Placid	Fisherman	L'Esterre
30. Matthew Allert	Fisherman	Lesterre
31. Thomas Joseph	Fisherman	L'Esterre
32. Godfrey Calliste	Fisherman	L'Esterre
33. Joe Adams	Fisherman	L'Esterre
34. Herbert Edmund	Fisherman	L'Esterre
35. Unida Edmund	Community Member	L'Esterre
36. Bernard Joseph	Fisherman	L'Esterre
37. Earla Adams	Community Member	L'Esterre
38. Samuel Jones	Fisherman	L'Esterre
39. Angelo Joseph	Fisherman	L'Esterre
40. Jilma Clement	Fisherwoman	L'Esterre
41. Louise Joseph	Community member	L'Esterre
42. Nac Alexis	Fisherman	Hermitage
43. Rawle Paterson	Journalist	Belvedere

- 1) Chairman- Cosmos Bristol welcomed all present and expressed thanks for accepting the invitation.
- 2) Mr. Davon Baker, Chairman-SIOBMPA stated that this meeting was long in coming and gave welcoming remarks. He stated that fisherman in general supported the project. He encouraged all to participate and express their concerns.
- 3) Mr. Baldeo gave the feature presentation:
  - Show slides on Sandy Island coral reef system
  - Slides on the Oyster Beds. Explained the importance of mangrove.
  - Slides on examples of MPA conservation system re Belize and St. Lucia.
  - Slides on all MPAs in Grenada and future MPAs.
  - Slides on MBMPA and the introduction of the sculptor park
  - The impact of MPAs to the local economy.
- 4) **Questions & Concerns:**
  - Mr. Herbert Placid: Could a sculpture park at the SIOBMPA withstand our regular sea surges?
  - Albert Mitchell: To protect Sandy Island we have to stop the yachts from destroying the reef and spear fishing. Referring to the slide presentation, he queried whether the Government of Grenada is prepared to implement a program to compensate fisherman like what had been done in the MPA in St. Lucia.
  - Bernard Joseph: What alternatives (*forms of livelihood are there*) for the fisherman? I support the Park and know the benefits from my travels. But locals are not benefiting now.
  - Devous Joseph: We need a helping hand. What can you give us?
  - Albert Mitchell: We cannot set fish pot. We need to go out further. So we need a help to make stronger fish pot and more rope.
  - Jilma Clement: I need help to get a bigger engine. Because I have to go further out. Also, I need a locator device on my engine.
  - Christopher Bartholomew: Fisherman need education on various species of fish so we will know how to catch them and when to catch them.
  - Jilma Clement: Concern with oil-spill and drifting towards MPA.
  - Joe Adams: Concern with freighter aground in Mangrove area and its impact on the coast and the possibility that the oil spill could have come from that source.

- Albert Mitchell: Boundary marker for the MPA needs light or some kind of illuminator. He collided with a marker en route from Hillsborough on a night trip.
- Christopher Bartholomew: Not only the fishermen have to be interested in the Park but the entire community. They too should benefit.
- Thomas: I am concern with the needs of fisherman before the community. I need the help now.
- Augustus Adams: It has been reported by certain fisherman that the Dive shops moved the markers and widens the boundary.
- Jilma Clement: Dive operators harass fishermen. An incident occurred with her son while he was trawling in an area in the Park zone for trawling.
- Christopher Bartholomew: Need to revisit the Park boundary and fishing zones.
- Henry Stiell: He observed the depletion of fish stock. Certain types of fishes have extinct. Sizes caught are much smaller. So it does not take a rocket scientist or even without the slides for us to know that we have to protect.

## 5. Conclusion:

Mr. Baldeo stated that the way forward will be to set up a core group that can meet with the Board.

It was agreed that 6 persons will form the group by way of volunteering or nominating.

- |                             |                    |
|-----------------------------|--------------------|
| 7) Gladwin Simon            | 443 6342           |
| 8) Joe Adams                | 419 6286           |
| 9) Yoland Placid            | 443 6777           |
| 10) Joshua Clement          | 443 6734 -536 6058 |
| 11) Jaral McNiel            |                    |
| 12) Christopher Bartholomew | 537 9110           |

Chairman thanked all for coming and invited all to share some refreshments.

Meeting ended at 8:20pm

## **Appendix 2. Press Release**

### **BETTER UNDERSTANDING BY FISHERMEN OF MARINE PARK**

Fishermen in the L'Esterre and Harvey-Vale communities in particular are today breathing a fresh air of relief after grasping the true significance of the facility which has enormous wide ranging future benefits for the island, including the fishermen themselves.

The deep knowledge of the designated area which encompasses the world renowned sand Island and the endangered true Oysters was a main herd for the fishermen from several parts of the island including the Communities of Harvey-Vale and L'Esterre.

Many were of the view that the protected area which came into effect in 2010 had several impacted on their lives as they were now forced to seek further grounds for their catch.

This new dispensation found some resistance among some of the fisher folks who had many unanswered questions.

However on Wednesday night the core of the fishing industry from the affected communities came armed with questions and suggestions to present to a knowledgeable team from the Sandy island and Marine Oyster bed park.

Among the presenters were MPA National Coordinator, Roland Baldeo and Chairman for the SIOBMPA Devon Baker and Brian Whyte Secretary for the stakeholders' Board.

It was conducted by the Sandy Island Oyster bed marine park protected area, Ministry of Fisheries and the ministry of Agriculture.

The team detailed the reason for the protected area and why the area has been debarred from fishing.

Baldeo said that the exercise was highly successful and praised the fishermen for their frank and genuine discourse throughout the proceedings.

"We have been managing for the past two years we now have a greater appreciation as to their concerns and what they would like for us to work together for the way forward in the interest of all concerned", said Baldeo.

He pointed out that they only regret was the failure to have conducted similar consultations much earlier.

"This marine protected area is very significant towards the longevity of the fishing industry as a nursery area and the tourism product from the marine way of life", added Baldeo.

Baker who is an environmentalist on the committee, said that when one considers the significance of fishing to the entire island makes it imperative for such importance consultations with those who are directly involved.

He added that he felt the meeting was successful and was pleased with the open expression of the participants.

Several of the fisher folks admitted that the meeting was able to paint a clearer picture of the importance of the area and the need for them to refrain from doing their fishing expedition in the designated zone.

The exercise also saw the formation of a five-member committee among the various types of fishing who will be the link between the Management of the Park and the fishermen.

***Appendix 3. Power point presentation***

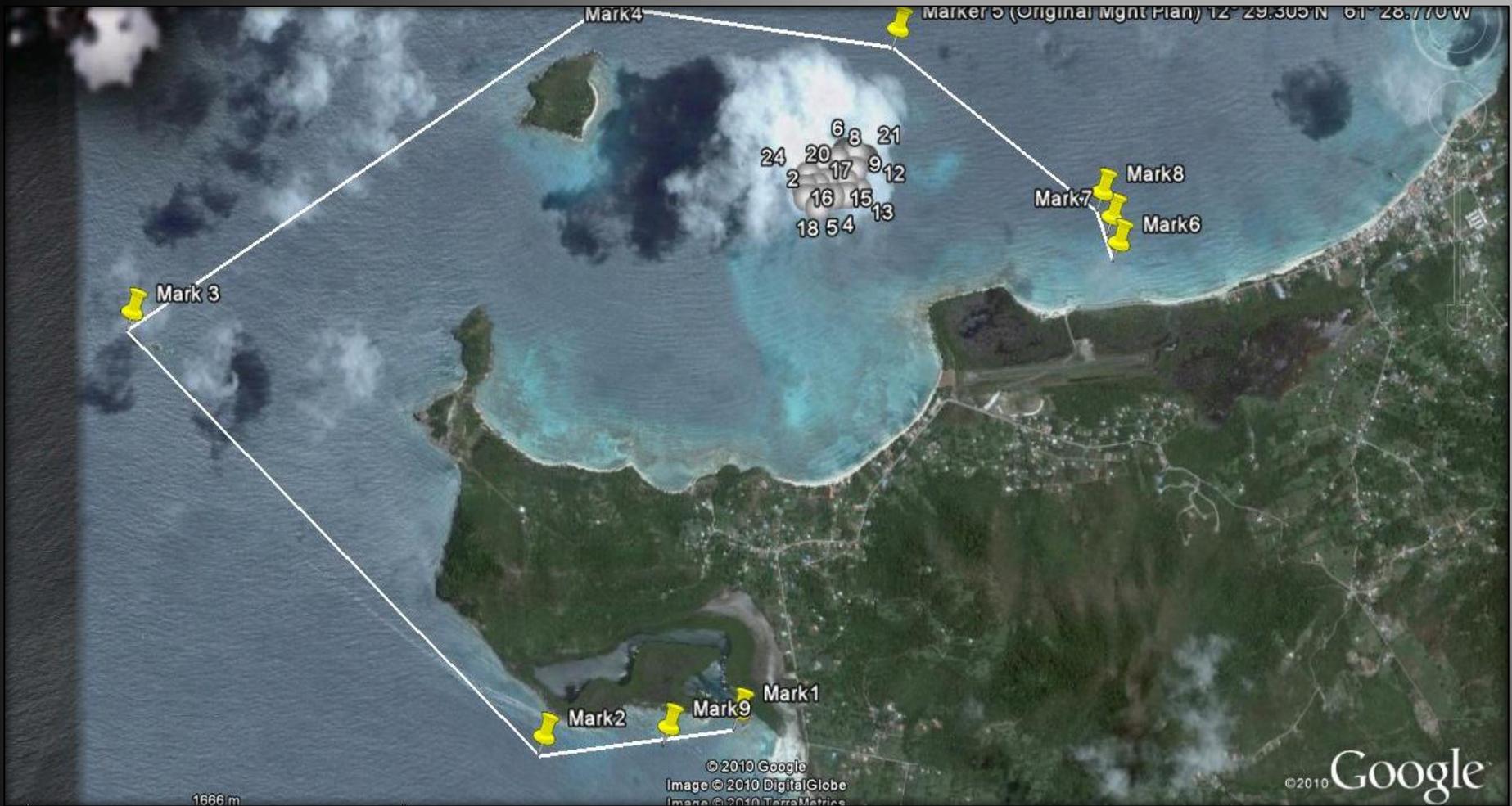
(Separate)

# Adaptive capacity for MPA Governance in the Eastern Caribbean

Follow-up Activity: Jan & Feb, 2012

## SIOBMPA Report

By Brian Whyte



SIOBMPA >>

MPA Boundary

Theme:

Developing a user base application

Title:

Strengthening MPA Management Decision  
Making Process

## Description of work done:

- Worked with relevant stakeholders re dive-shops, Water Taxi Association in collecting MPA visitation and user data.
  - Developed data-sheets as per data collection, processing and management of all users of the Park.
- 

## Collected data as per the following users:

Users:	Activity	Delegated to:	Objective
Vessels	Authorize Moorings Anchoring	Wardens	Eliminate treats to sea-grass beds and coral reef.
Divers	Authorize Diving Marine source	Dive Shops	Eliminate violation of Fisheries regulation. Increase livelihoods.
Sandy Is	Snorkeling & picnics	Water-Taxi	To eliminate over-visitation and inappropriate boating operation.
Oyster beds	Sightseeing	Wardens	Mangrove and habitat conservation.
All Users On Paradise & Lauriston Beaches		Wardens	Conserving shore line, mangrove & other beach vegetation as well as eliminating sand mining.
Fishers	Authorize fishing Unregulated fishing	Wardens	To eliminate destructive fishing practices and increase fish bio-mass

# Introduction

The purpose for conducting the activity:

- ❖ Monitoring uses of the Park
  - ❖ How stakeholders can be enlisted to provide monitoring support.
  - ❖ Users of Sandy Island Is for recreation and snorkeling.
  - ❖ Compliance with fishing regulations within the park.
  - ❖ Unregulated activities within the Oyster Bed Careenage.
  - ❖ Recreation and other activities on beaches
- 

# Users of The Park



# Fishermen»»

Bait Fishing



## Divers >>

Three Dive shops using 6 Dive sites



## Meeting with Fishermen >>

Paradise Beach



Visiting the Oyster Bed >>



## Yachting >>

Sandy Island is a great Yacht stop

# Methodology

- ❖ Created 6 data-collecting sheets
    - Fishing Activity
    - Visit to The Oyster Bed
    - Yachting
    - Recreation
    - Snorkeling
    - Diving
- 

# Methodology continue

- ❖ Other activity observed, but did not collect data on it:
  - Industrial transportation

# Methodology continue

- ▶ Conducted interviews (one-on-one) with three dive shops. Succeeded in enlisting their support to collect and process data as well as submitting sheet at the end of the week.
  - ▶ Also, conducted interview with several water taxi operators. Three water-taxi personnel were employed to collect data. Compliance was satisfactory and sheets were submitted at the end of the period.
- 

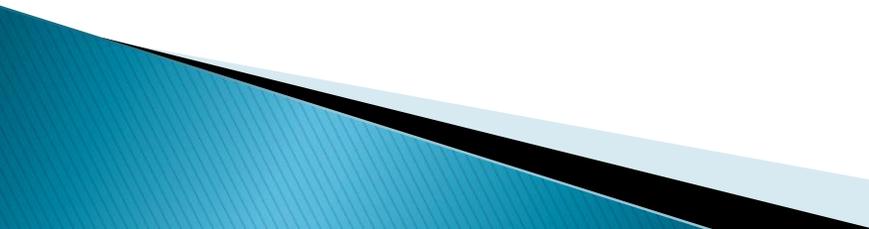
# Methodology continue

- ▶ MPA wardens collected data re:
  - Yachting
  - Recreation
  - Fishing
  - Visit to Oyster Bed

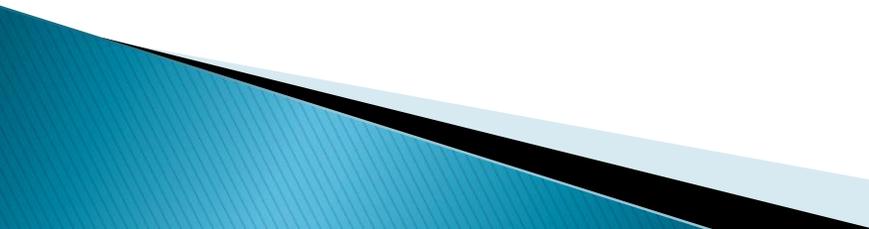
# Results

- ❖ Two weeks of data were collected
  - ❖ It was then summarized on a single sheet
  - ❖ It is included as appendix on an Excel sheet
  - ❖ Met with fishermen in MPA–Sat 18<sup>th</sup> Feb
  - ❖ Agree to meet and discuss/plan every Sat
- 

# Discussion/Observation

- ▶ Inability to meet with Water Taxi association as scheduled.
  - ▶ Association needs revitalizing. Majority of members interviewed stated that they stop go to meetings.
  - ▶ Did not meeting with divers as a unit. Busy schedule was given as the primary reason.
  - ▶ Evaluation meeting that was scheduled for Feb 16 at 4:00pm. Only two stakeholders attended. Reschedule for the next day was also unsuccessful. Carnival activities were considered the primary reasons.
- 

# Lessons Learnt

- ❖ Value of Collaboration and openness re Dive shops, water-taxi, fishermen
  - ❖ Learning -by-doing: Found a better way to meet with fishermen
  - ❖ Community use of resource- willingness to implement
  - ❖ Building Resilience -willingness to protect eco-system as first response to climate change.
  - ❖ Adaptive management to meet on terms with fishermen.
- 

# References

- ▶ Management Plan p 74-objectivities 7&9.
  - ▶ Management Plan p75 -objectives 10-13.
  - ▶ CERMES Governance project document
  - ▶ CERMES Governance Project Flyer.
  - ▶ NOAA Coral Reef Conservation Program(CRCP)-  
International Strategy 2010-2015
- 