Presentation of Key Findings

• Overview of Survey and Interviews
• Ecosystems Threats and Management Priorities
• MEPA Trust Priorities
• Recap of Key Findings
Research Purpose

• Determine key ecosystem threats and management priorities and identify potential goals and guidelines for MEPA Trust

• Methods
  o **Online surveys:** Identify threats, needs, priority protected areas, as well as MEPA Trust goals, priorities, and funding criteria and guidelines
  o **Telephone interviews:** Discuss online survey, threats, needs, and priorities, as well as rationale for MEPA Trust goals and priorities and funding criteria and guidelines
  o **Key document review:** Inform key threats and conservation and management priorities, review governing and grant-making documents
Document Review Methods and Analysis

• Protocol: Conducted rapid review of each document for key information relevant to document review objectives.

• Analysis: Coded information by key themes related to ecosystem and biodiversity threats; priority geographies, ecosystems, species, protected areas, and species; and management and conservation priorities and needs

• 16 documents reviewed, plus additional best practices literature
Survey Methods and Analysis

• 20-30 minute online survey distributed through SurveyMonkey
• Sent to 59 key stakeholders; received 25 responses (42%)
• Quantitative and qualitative analyses of informant responses
Interview Methods and Analysis

• Conducted 5 interviews with key informants
• Validated online survey findings and discussed survey topics in greater depth
• Qualitative analysis of informant responses to gather quotes and examples
Presentation of Key Findings

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Current Ecological Conditions – Survey

Key Findings:

• Ecosystems ranked between “unhealthy” and healthy.”

• Coral reefs considered least healthy, seagrass considered most healthy.

Source: Online Survey
Current Ecological Conditions – Interviews and Survey

Informant Quotes from Interviews and Survey:

- “Coral Reefs throughout Antigua are in a very degraded, algal-dominated state, with very few examples of life.”

- “Seagrass beds have been more resilient to climate change, and have not been as greatly affected by anthropogenic events.”

- “Mangroves have suffered from poor development practices.”

- “The message is not getting out about the importance of wetlands. A lot of wetlands are used for dumping debris.”

Source: Online Survey, Interviews
Ecosystem and Biodiversity Threats

Tops Threats and Pressures to Marine Ecosystems and Biodiversity – Document Review

- Tourism and recreation
- Pollution, sedimentation, erosion
- Coastal development
- Unsustainable fishing practices
- Other unsustainable resource use
- Habitat loss
- Invasive species
- Lack of capacity
- Natural disasters
- Climate change
- Other

Source: Document Review

Percent Documents (n=10)
Threats and Pressures to Marine Ecosystems – Survey

- Development and transformation of coastal areas
- Climate change
- Poor management of marine ecosystems
- Overfishing
- Pollution
- Invasive species
- Recreational use and tourism
- Other

Informant Quotes from Interviews:

- “Quite often, we make recommendations for mitigation based on threats, only to find that developments are pushed ahead, disregarding impact assessments or recommendations.”
- “Coastal development has led to the transformation of ecosystems. We have lost coastal wetlands, and beaches have been impacted by erosion.”
Protected Area Management Effectiveness - Survey

Management Effectiveness Rating

5 – Very effective
4 – Effective
3 – Moderately effective
2 – Ineffective
1 – Very ineffective
I don’t know

Informant Quotes from Interviews:

❖ “I ranked management effectiveness in the medium range due to lack of resources... with lack of enforcement, education might help increase management effectiveness.”

❖ “We realize that we have a long way to go. We have at least one [protected] area that has a good track record, but others may not.”

Source: Online Survey, Interviews

Creating sustainable solutions
Ecosystem Threats and Management Priorities

Protected Area Management Priorities and Needs – Document Review

Management Priorities and Needs

1. Management and operational capacity
2. Livelihoods and sustainable use
3. Strong policy and legal framework
4. Strong management plan
5. Planning and mitigation of tourism/recreation
6. Sustainable funding/financing
7. Social capital and partnership
8. Outreach and education
9. Monitoring, evaluation, learning
10. Research and data collection
11. Disaster planning
12. Enforcement capacity
13. Other

Source: Document Review

Source: Blue Earth Consultants
Creating sustainable solutions
Protected Area Management Needs – Survey

Informant Quotes from Interviews:

❖ **Sustainable financing**: “Financing… would do greatly in terms of allowing these institutions to implement management strategies and priorities.”

❖ **Enforcement**: *Enforcement is important, but with lack of enforcement, education might help increase management effectiveness.*

Source: Online Survey, Interviews
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MEPA Trust Priorities – Survey

**Informant Quote from Interview:**

“The trust will have to provide comprehensive management capabilities in all areas, particularly empowering fishers and the community groups and engaging in massive public education and awareness through unified, multi-stakeholder campaigns throughout the island.”

Source: Online Survey, Interviews
MEPA Trust Priorities

MEPA Trust Criteria – Survey

Informant Quotes from Interviews:

- “Species in Barbuda are not just important for that site, but for the region and for the rest of the world.”

- “If you are trying to encourage a conservation ethic among stakeholders, a healthier area that is protected will recover faster and can inspire stakeholders and encourage greater participation.”

Source: Online Survey, Interviews
## Priority Protected Areas – Survey

<table>
<thead>
<tr>
<th>Protected Area Name</th>
<th>% Ranked High Priority</th>
<th>Prioritization (High, Medium, Low)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northeast Marine Management Area</td>
<td>95%</td>
<td><img src="chart1.png" alt="Pie Chart" /></td>
</tr>
<tr>
<td>Codrington Lagoon National Park</td>
<td>73%</td>
<td><img src="chart2.png" alt="Pie Chart" /></td>
</tr>
<tr>
<td>Cades Bay Marine Reserve</td>
<td>68%</td>
<td><img src="chart3.png" alt="Pie Chart" /></td>
</tr>
<tr>
<td>Walling’s Forest Reserve</td>
<td>61%</td>
<td><img src="chart4.png" alt="Pie Chart" /></td>
</tr>
<tr>
<td>Nelson’s Dockyard National Park</td>
<td>50%</td>
<td><img src="chart5.png" alt="Pie Chart" /></td>
</tr>
<tr>
<td>Greencastle National Park</td>
<td>47%</td>
<td><img src="chart6.png" alt="Pie Chart" /></td>
</tr>
<tr>
<td>Palaster Sanctuary</td>
<td>44%</td>
<td><img src="chart7.png" alt="Pie Chart" /></td>
</tr>
</tbody>
</table>

Key:  = High priority,  = Medium priority,  = Low priority

n=22

Source: Online Survey
## Priority Protected Areas, Continued – Survey

<table>
<thead>
<tr>
<th>Protected Area Name</th>
<th>% Ranked High Priority</th>
<th>Prioritization (High, Medium, Low)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mt. Obama Proposed National Park</td>
<td>43%</td>
<td></td>
</tr>
<tr>
<td>Low Bay Sanctuary</td>
<td>37%</td>
<td></td>
</tr>
<tr>
<td>Diamond Reef and Salt Fish Tail Restricted Area</td>
<td>35%</td>
<td></td>
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<tr>
<td>Goat Island Flash Sanctuary</td>
<td>35%</td>
<td></td>
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<tr>
<td>Fort Barrington National Park</td>
<td>32%</td>
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<tr>
<td>Two Foot Bay Sanctuary</td>
<td>28%</td>
<td></td>
</tr>
<tr>
<td>Devil’s Bridge National Park</td>
<td>28%</td>
<td></td>
</tr>
<tr>
<td>Goat Point Sanctuary</td>
<td>24%</td>
<td></td>
</tr>
</tbody>
</table>

Key: blue = High priority, orange = Medium priority, gray = Low priority  
n=22  
Source: Online Survey
MEPA Trust Goals and Core Values – Interviews

Goals
• Building political will, social capital, stakeholder engagement, and coordination
• Implementing and improving management of protected areas
• Providing sustainable funding
• Supporting monitoring and enforcement
• Supporting sustainable livelihoods
• Protecting biodiversity and ecosystems

Core Values
• Inclusivity and collaboration
• Transparency and integrity
• Conservation and sustainability

Source: Interviews
Recap of Key Findings

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Recap – Ecosystem Threats

• Development and transformation of coastal areas was the top threat identified through the online survey.

• This threat is linked with tourism and recreational use as well as pollution, sedimentation, and erosion.

• Other top threats included poor management of marine ecosystems and unsustainable fishing practices.
Recap – MEPA Trust Priorities

• Top priorities for the MEPA Trust identified through the online survey were strengthening leadership and executive management and increasing education and awareness with regards to protected areas.

• NEMMA and Codrington Lagoon were top ranked protected areas in the online survey.

• Informants focused on a range of goals, including building political will and social capital, as well as supporting monitoring and enforcement of protected areas.
Thank you