The Use of Protected Area Management Effectiveness (PAME) Monitoring Through Visualization

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Conservation goals depend on effective management. Management effectiveness (ME) surveys have been completed. No coordination or repository of ME information. Results are less understood at the scale of the protected area (PA) network.
Coral Reef Health Report Cards

Coral Health Index Maps (using existing survey data)

Coral Reef Report Cards

All Accessible on an easy to understand online platform

http://www.caribnode.org/
Coral Reef Assessment Tool

Coral Reef Health

Indicators

- Reef Health Index (RHI)
  - Marine Managed Areas
  - Coral Cover
  - Flittering Macrolede
  - Heritilious Fish
  - Commercial Fish

Coral Reef Report Card

Management Effectiveness

- Implementation
- Sustainability

Socioeconomic

- Management Indicators assess the economic and social aspects of fisheries and the interaction with the pursuit of sustainability.

CaribNode

Decision Support Data System
IMETT Visualization
193 countries agreed to “effectively and equitably” manage 10% of coastal and marine areas by 2020.

But the efficacy and equity of many MPAs remain uncertain.

Key management process indicators were identified from empirically supported governance and management theories.
Indicator Categories

- Legally gazette
- Appropriate MPA regulations in place
- Implementing management plans
- Acceptable budget capacity
- Clearly defined boundaries
- Monitoring informs management activities
- Adequate staff capacity
- Inclusive decision-making
- Share/non-state management
Data Extraction

- Key questions from
  - The Management Effectiveness Tracking Tool (METT)
  - The World Bank MPA Score Card
  - The NOAA Coral Reef Conservation Program’s (CRCP) MPA Management Assessment Checklist.
- A thresholds (adequate/inadequate) defined effective management
Next Steps

- What aspects of management effectiveness should be visualized?
  - Elements of the Management Cycle (IMETT) vs.
  - Management Process Indicators (Gill et. al.) vs.
  - A combination

- What is the best way to visualize the data?
  - Spider graphs vs.
  - Color-coded threshold vs.
  - Something else

- Structure database
- Extract and populate with currently available
- Review graphics and maps
Thank you!