Rapid Evaluation of Management Effectiveness in Marine Protected Areas of Mesoamerica.

1.1   Organisation

MBRS Mesoamerican Barrier Reef System Project; a World Bank, CCAD and Global Environment Facility Project. PROARCA/APM, Protected Areas and Environmentally Sound Products components of the Regional Environmental Program for Central America, a USAID, CCAD and The Nature Conservancy project.

1.2   Primary references

Corrales L (2004c) 'Manual for the Rapid Evaluation of Management Effectiveness in Marine Protected Areas of Mesoamerica.' PROARCA/APM, USAID, TNC, Guatemala City, Guatemala.

Corrales L (2004b) 'Manual para la Evaluación Rápida de la Efectividad de Manejo en Áreas Protegidas Marinas de Mesoamérica.' PROARCA/APM, USAID, TNC, Guatemala City, Guatemala.

1.3   Brief description of methodology

The methodology consists of a scorecard which measures indicators covering each element of the WCPA Framework . It is designed to be a rapid tool. It also includes a framework for measuring outcomes, including ecological integrity, and this is a values-based section which could be applied in depth if resources and/or information is available.

In addition to the core indicators, a set of additional recommended indicators is included. Indicators are rated on their ease of collection, so that assessors are better able to estimate which indicators they are able to include.

1.4   Purposes

✓ **to improve management (adaptive management**)

1.5   Objectives and application

The methodology is aimed to assist with adaptive management of marine protected areas.
'The purpose of this tool is to help marine-coastal protected area managers to determine the state of their administrative management. It is a short instrument which has the objective of making a rapid revision of the state of management effectiveness and makes it possible to improve protected area conservation and management.' (Corrales, 2004c, p.5)

1.6   Origins

This instrument was developed on the basis of the recommendations and conclusions of the technicians' workshop on monitoring and evaluation of the National Systems of Protected Areas of Mexico, Belize, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica and Panama, held in Guatemala City in February 2004, using as the basis the document "Recommendations of Methodologies for Management Effectiveness Monitoring of Marine Protected Areas for Central America" originally proposed by PROARCA and developed and adopted by the countries in the Central American region, and the proposal "Management

Methodology Description

Effectiveness Measurement in Marine Protected Areas" of the WWF, IUCN, WCPA and NOAA.

According to Staub and Hatziolos (2004), the methodology was based on the Marine Park Score Card, methodologies of PROARCA and on the WCPA-Marine/WWF Management effectiveness Guidelines, and tailored to the field needs in the area..

1.7 How the methodology is implemented

The manual does not provide advice on implementing the system in the field.

1.8 Elements and indicators

All elements in the WCPA framework are measured, but are arranged according to major headings of socioeconomic, governance, and biophysical. Overall scores for each of these dimensions are calculated.

Indicators for the MesoAmerican MPA methodology

Field	WCPA element	Indicator
Socioeconomic	context	Employment depending on marine resources
		Practices and intensity of local use of marine resources
		State of service infrastructure
		Identification of stakeholders
	process	Distribution of formal knowledge to the community
		Stakeholder participation
	impacts	Practices and intensity of local use of marine resources
		Employment in activities related to marine resources
		Local actors leading MPA management
		Stakeholder group participation
Socioeconomic - recommended	context	Identification of conflicts and resolution mechanisms
		Perception and appraisal of marine resources based on local culture
		Quality of life
	process	Level of users' knowledge about human impacts on natural resources
		Users' understanding of regulations and standards
		Maintenance of sustainable use of natural, cultural and archeological resources based on traditional use
	impacts	Local perception of the state of marine resources
		International, national and local appraisal of non use
		Economic income related to products and services from the MPA
		Quality of life
		Added value of products and services from the MPA
		Condition of historical-cultural-archeological sites
Governance	Context	Legal status
		Demarcation of limits
		Legal and administrative instruments which

Protected Areas Management Effectiveness Information Module

Methodology Description

		establish MPA regulations
		Identification of threats
	Planning	Compliance with area objectives
		Area management personnel
		Management Plan
		Operational Plan
		Environmental education program
		Communication program
		Long term funding plan
		Monitoring and evaluation program
		Control and surveillance program
	Inputs	Research program
		Budget
		Infrastructure
		Equipment
		Signs and/or labels
		Necessary personnel
		Trained personnel
		Volunteer program
	Process	Maintenance of infrastructure and equipment
		Mechanisms for registering illegal actions
	Results	Level of personnel satisfaction
		Implementation of the management plan
		Mechanism for obtaining income
	Impact	Level of social participation
Governance - recommended	context	Integration of the MPA within a broader management framework for coastal zones
		Systematization of information
		Local, national and international acknowledgement
	Planning	Mechanisms for stakeholder group participation in the management process
		Promotion of institutional coordination mechanisms
	Process Process	Enforcement of the law
		Level of information dissemination for furthering the compliance of actors involved
	Results	Level of satisfaction of MPA stakeholder groups
	Impacts	Level of conflicts over the use of resources
		Illegal behavior of users
		Recognition of the value of the areas
Biophysical	Impact	Climate
		Temperature
		Salinity
		Turbidity
		Inorganic dissolved nitrogen
		Coverage of hard corals
		Coverage of macroalgae
		Size and mortality of coral
		Abundance of focal fish species
		Density of seagrass shoots
		Density of mangrove stalks and pneumatophores
		Ecological attributes as listed for particular area

1.9   Scoring and analysis

Each indicator has five choices of responses , rated from one (no progress/ very little progress/ poor condition) to five (ideal condition).

For each of the evaluation elements in the protected area management cycle, the protected area receives a final score which corresponds to the points obtained in each question, and this can be expressed as a percentage of the potential points. If add additional indicators proposed in annex 1 are used, potential additional points are added to the corresponding element.

Download the MesoAmerican MPA methodology