

Outline for

Protected Areas Management Planning

Level One: Community-based protected area management organizations

and

Level Two: Conservation organizations / Non-governmental organizations



Contents

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Introduction

This document provides the Management Plan Outline developed under the National Protected Areas Policy and System Plan and the Forest Department of the Ministry of Natural Resources and the Environment, to be adopted for the terrestrial and marine protected areas system of Belize, under the mandates of the Forest and Fisheries Departments.

The National Management Plan Framework lays out the format required by the Forest and Fisheries Departments, to assist management planning bodies in developing plans for protected areas in Belize. Preparation of management plans can take place at one of two levels, dependant on the capacity of the organization:

- Level One:** Community-based protected area management organizations
- Level Two:** Conservation organizations / Non-governmental organizations

A manual has been developed for each of these two levels, to guide the management organization through the planning process. (Guidelines for Developing a Management Plan – Level One; Guidelines for Developing a Management Plan – Level Two).

The outline is first presented in its simplest form (Section A – page 4), then expanded, providing a checklist of the information that should be included within each section (Section B – page 6). This document is to be used in conjunction with the relevant manual (either Level One or Level Two, dependant on the capacity of the management organization), and provides further guidance, information, and examples to facilitate the planning process. Forest Department / Fisheries Department will advise on the appropriate level to be used for the management capacity of the management organization (Level One or Level Two).

Layout

Protected Areas Data Sheet - All management plans are required to be submitted with a completed Protected Areas Data Sheet (page 3).

Section A: National Management Plan Outline – The management plan outline at its simplest (page 4)

Section B: Protected Area Management Plan Content – The management plan is broken down into sub-sections, and recommendations are given on what should be included (page 6).

| Protected Area Data Sheet | | |
|---|------------------|--------------------|
| Date | | |
| Name of Protected Area | | |
| Location of Protected Area | | |
| Date of establishment | | |
| Size of Protected Area | Acres: _____ | (Hectares: _____) |
| Land Tenure | | |
| Management Authority | | |
| Affiliations / Partnerships with other organizations | | |
| Number of Staff | Permanent: _____ | Temporary: _____ |
| Annual Budget (Bz\$) for management of protected area | | |
| Designation (Belize or IUCN category, World Heritage Site, RAMSAR etc.) | | |
| Reasons for Designation | | |
| Brief Details of Past Funding | | |
| Brief Details of Present Funding | | |
| Brief Details of Future Funding | | |
| List the two primary protected area objectives | | |
| | | |
| | | |
| List the top two most important threats to the protected area (and indicate why these were chosen) | | |
| | | |
| | | |
| List the top two critical management activities | | |
| | | |
| | | |

**Name/s of assessors and people consulted:
Contact details:**

Adapted from 'Reporting Progress in Protected Areas – A Site-level Management Effectiveness Tracking Tool' World Bank / WWF Alliance for Forest Conservation and Sustainable Use. This form is part of the review process for evaluating success of management plans.

A. Belize National Management Plan Outline

National Management Plan Outline for Terrestrial Protected Areas

| | <i>Maximum no. pages</i> |
|---|--------------------------|
| <i>Executive Summary</i> | <i>2 pages</i> |
| Contents | 2 pages |
| List of Tables and Graphs | 2 pages |
| Acknowledgments | ½ page |
| | |
| 1. Introduction | 2 pages |
| 1.1 Background and Context | |
| 1.2 Purpose and Scope of Plan | |
| | |
| 2. Current Status | 15 pages |
| 2.1 Location | |
| 2.2 Regional Context | |
| 2.3 National Context | |
| 2.3.1 Legal and Policy Framework | |
| 2.3.2 Land Tenure | |
| 2.3.3 Evaluation of Protected Area | |
| 2.3.4 Socio-Economic Context | |
| 2.4 Physical Environment of Management Area | |
| 2.4.1 Climate | |
| 2.4.2 Geology | |
| 2.4.3 Soils | |
| 2.4.4 Hydrology | |
| 2.5 Biodiversity of Management Area | |
| 2.5.1 Ecosystems | |
| 2.5.2 Flora | |
| 2.5.3 Fauna | |
| 2.5.4 Past and Present Research | |
| 2.6 Cultural and Socio-Economic Values of Management Area | |
| 2.6.1 Community and Stakeholder Use | |
| 2.6.2 Archaeological Sites | |
| 2.6.3 Recreation and Tourism Use | |
| 2.6.4 Other Economic Use | |
| 2.6.5 Education Use | |
| | |
| 3. Analysis of Conservation Targets and Threats | 16 pages |
| 3.1 Conservation Targets | |
| 3.1.1 Identification of Conservation Targets | |
| 3.1.2 Assessment of Conservation Target Viability | |
| 3.2 Threats to Biodiversity | |
| 3.3 Strategies to Reduce Threats | |
| 3.4 Monitoring of Success of Conservation Strategies | |

continued overleaf

National Management Plan Outline for Terrestrial Protected Areas - continued

4. Management Planning

50 pages

- 4.1 Management and Organizational Background
- 4.2 Review of Previous Management
- 4.3 Management Goal
- 4.4 Management Strategies
 - 4.4.1 Management Constraints and Limitations
 - 4.4.2 Management Zones
 - 4.4.3 Limits of Acceptable Change
- 4.5 Management Programmes and Objectives
 - 4.5.1 Natural Resource Management Programme
 - 4.5.2 Research and Monitoring Programme
 - 4.5.3 Community Participation Programme
 - 4.5.4 Public Use Programme
 - 4.5.5 Infrastructure Management Programme
 - 4.5.6 Administrative Programme
 - 4.5.7 Management Policies
- 4.6 Management Actions
- 4.7 Monitoring and Review
- 4.8 Timeline
- 4.9 Financing

Glossary
References
Appendices

For Marine Protected Areas, substitute the following layout for 2.4 Physical Environment of Management Area

- 2.4 Physical Environment of Management Area
 - 2.4.1 Climate
 - 2.4.2 Geology
 - 2.4.3 Bathymetry
 - 2.4.4 Tides and Water Movement
 - 2.4.5 Water Parameters



B. Protected Area Management Plan Content

This section gives the detail, contents and instructions for completion of the outline presented in the National Management Plan Outline, in combination with the “*Guidelines for Developing a Management Plan*”

Executive Summary

No. pages: 2 to 3

This should give a very concise overview of your management plan a summary of the most significant points throughout the management plan.

Contents

No. pages: 1 to 2

- List the layout of the document with the relevant page numbers

Tables and Graphs

No. pages: 1 to 2

- List the tables, maps, photographs, diagrams, figures and graphs within the document, with the relevant page numbers

Acknowledgements

No. pages: ¼ - ½

- List those people who have given information or assistance during the management planning process

1. Introduction

1. Introduction

No. of pages: 1 to 2

Briefly cover the following:

1.1 Background and Context

- General location and size of protected area
- Protected area type / IUCN management category
- Historical background of protected area – purpose for which protected area was established
- Background of organization that manages protected area – and identify the Government authority and legislation under which the management plan is being developed

1.2 Purpose and Scope of Plan

- Overall view of how the protected area should be managed
- Description of how the management plan has been formulated, including steps taken to ensure community/stakeholder participation
- Purpose and scope of plan, including no. of years for implementation
- Government authority to which the management plan is to be submitted for approval
- Summary of goals

2. Current Status

No. pages: 15

2.1 Location

- The location of the protected area within Belize (provide UTM co-ordinates and map)
- The size of the protected area, site definition and boundaries
- Indicate how the protected area is accessed – main roads, entrance points
- Briefly describe the main fixed assets – buildings, trails etc.
- List the communities that lie adjacent to the protected area

2.2 Regional Context

- Describe regional importance of biodiversity
- Describe in what ways the management of the protected area can assist towards meeting Belize's commitments under international conventions (eg. RAMSAR, World Heritage Sites, Convention on Biological Diversity)
- Describe in what ways the management of the protected area can assist towards meeting Belize's commitments under regional agreements (eg. Meso-American Biological Corridors)

2.3 National Context

2.3.1 Legal and Policy Framework

- Summarize site status (national protected area, private protected area, etc.)
- Summarize history of establishment of the protected (or proposed) area
- Outline how the protected area fits within the national park categories and the National Protected Areas Policy and System Plan?
- Outline how the protected area fits within other national planning strategies – for example, national biological corridors, Special Development Areas, Biodiversity Action Plan.
- Summarize any legal agreements that exist relevant to the protected area (co-management agreements, Memoranda of Understanding, easements etc.)

2.3.2 Land Tenure

- Summarize land tenure status

2.3.3 Evaluation of Protected Area

- Summarize the national importance of the protected area
- Describe the local importance of the protected area
- Outline the way(s) in which the protected area enhances the protection of international and national species of concern
- Describe how local communities benefit from the presence of the protected area
- Summarize environmental goods and services provided by the protected area – both locally and nationally

2.3.4 Socio-Economic Context

- What is the socio-economic context, at local and national levels?
- Identify those communities that lie adjacent to the protected area and/or are affected by the protected area
- Identify other stakeholders – people who can assist or hinder the development of the protected area (local and national politicians, ministries, journalists etc.), people who benefit from or are negatively impacted by the protected area
- Include a basic Stakeholder Analysis - The simplest stakeholder analysis is to list all stakeholders and detail in which ways they affect or are affected by the protected area (+ positive effect; - negative effect).

2.4 Physical Environment of Management Area

Protected areas within Belize normally fall in to one of two categories – terrestrial or marine. Follow the category format that is relevant to the management area (either A. if the management area is terrestrial, or B., if it is marine). If the management area contains both terrestrial and marine components a combination of both A. and B. can be used.

A. Terrestrial Protected Areas

2.4.1 Climate

- Describe the climate of the area
 - Annual Rainfall
 - Annual Temperature
 - Humidity
 - Tropical Storm Events

2.4.2 Geology

- Describe the underlying geology of the area

2.4.3 Soils

- Describe the soils of the area

2.4.4 Hydrology

- Describe the hydrology of the area
 - Describe which watersheds the protected area protects or lies within
 - Drainage patterns – describe river / stream systems, lagoons, cenotes or other water bodies located within the protected area

B. Marine Protected Areas

2.4.1 Climate

- Describe the climate of the area
 - Annual Rainfall
 - Annual Temperature
 - Humidity
 - Tropical Storm Events

2.4.2 Geology

- Describe the underlying geology of the area

2.4.3 Bathymetry

- Describe the water depth and sea floor topography

2.4.4 Tides and Water Movement

- Describe the tides and water movements of the area

2.4.5 Water Parameters

- Describe the water parameters:**
 - salinity
 - pH
 - temperature
 - turbidity

2.5. Biodiversity of Management Area

2.5.1 Ecosystems

- List ecosystems identified within the protected area and give estimated areas
- Provide a map of the ecosystems identified within the protected area
- Briefly discuss conservation significance of these ecosystems within the national context
- Highlight any ecosystems identified as conservation targets within the conservation planning process
- In the appendices, provide:
 - Description of each ecosystem
 - Area of each ecosystem
 - Dominant species and main physical components
 - Importance of ecosystem within protected area, as a percentage of total ecosystem within Belize, and regionally

2.5.2 Flora

- Summarize data from plant species surveys
- Highlight species of concern, and species of commercial or cultural value
- Highlight any species identified as conservation targets within the management plan
- (Include a species list in the appendices)

2.5.3 Fauna

- Summarize data from species surveys
- Highlight species of concern, and species of commercial or cultural value for the following vertebrate groups:
 - Mammals
 - Birds
 - Reptiles and Amphibians
 - Fish
- Highlight any species identified as conservation targets within the management plan
- Include species lists in the appendices

2.5.4 Past and Present Research

- Summarize any past and present research within the protected area
- Summarize research significance of area

2.6 Cultural and Socio-Economic Values of Management Area

2.6.1 Community and Stakeholder Use

- Describe and map past and present traditional use within the protected area
- Describe present community use of the area
- Describe other stakeholder use of the area
- Highlight areas of management concern

2.6.2 Archaeological Sites

- Describe and map archaeological sites within the protected area (if feasible)
- Describe the significance of the archaeological site(s) within the context of the protected area
- Give a brief history of site discovery and development
- Indicate the national significance of the archaeological site(s)
- Highlight areas of management concern

2.6.3 Tourism and Recreation Use

- Describe and map past, present and potential tourism use within the protected area
- Summarize the number and type of tourists visiting the area, the activities they do, and the main stakeholder groups who benefit
- Describe recreation opportunities for adjacent communities
- Highlight areas of management concern

2.6.4 Other Economic Use

- Describe and map other past, present and potential economic use within the protected area
- Highlight areas of management concern

2.6.5 Education Use

- Describe and map past, present and potential education use within the protected area
- Discuss the level of education use – the education programme target audience, the number of schools that visits, the scale of the education programme, education and interpretation facilities
- Highlight areas of management concern

3. Conservation Planning

This conservation planning section looks at the species and ecosystems of concern, at the threats that impact them, and the strategies that can be used within the management of the area to abate these threats.

Conservation planning can be undertaken at two levels, depending on the capacity of the organization involved in the preparation of the management plan. Both levels follow the same basic layout. Assistance with conservation planning is available in the accompanying Level One and Level Two manuals.

3.1 Conservation Targets

3.1.1 Identification of Conservation Targets

- Identify the conservation targets - the ecological systems, communities or species chosen to be the focus of conservation planning efforts within the protected area.
- Justify why the targets were selected.
- Describe where the targets are distributed within the protected area (map, where practical, most important conservation elements), and note if their locations differ at different times of year.

3.1.2 Assessment of Conservation Target Viability

- Assess the viability of each of the conservation targets
- Also decide on a goal for each conservation target over the time scale of the management plan – for example, this may be:
 - To increase the target's abundance
 - To maintain the target at its current state
 - To prevent further impact on the conservation target

3.2 Threats to Biodiversity

- Identification and assessment of direct and indirect threats to conservation targets and biodiversity in general
- Assessment of threat area, severity and urgency
- Identification of sources of threats and major stakeholders who influence these threats
- Prioritize threats in terms of their impacts on biodiversity within the protected area

3.3 Strategies to Reduce Threats

- Summarize strategies developed towards threat abatement

3.4 Monitoring of Success of Conservation Strategies

- Summarize the indicators to be used in monitoring the success of these strategies
- Describe how the success of strategies will be monitored

4. Management Planning

No. pages: 50

4.1 Management and Organizational Background

- Describe the local management body, legal basis, the date of establishment and the institutional objective. Justify reasons for interests in management
- Give a brief summary of other co-signatories or partners on management agreements involved in the protected area, and any formal arrangements and/or agreements
- Summarize the respective responsibilities and co-coordinating mechanisms of co-management agencies (where applicable)
- Describe the organizational capacity of the management body: the human resources available. The staff structure, role, levels of skill, and organization constraints.

4.2 Review Previous Management

In most cases, there will have been previous management activities, whether through an operational plan, a management plan, or informal implementation. Where a protected area has not yet been established, this section may not be relevant.

- Summarize the measures of success used to review the previous management / implementation of the previous management plan
- Describe the strengths and weaknesses of each of the management programmes in the previous management / management plan
- Demonstrate past stakeholder involvement and equitable sharing of opportunities through the previous management / management plan

4.3 Management Goals

- Outline the organization's management goals

4.4 Management Strategies

- Summarize management strategies to be used to assist in the implementation of the management plan (tools being used such as management zones, management programmes etc.)
- Summarize mechanisms to ensure community participation and equitable spread of opportunities

4.4.1 Management Constraints and Limitations

- Summarize any management constraints and limitations
- Identify risks and assumptions in development of management plan

4.4.2 Management Zones

- Define each zone and the activities permitted/prohibited within each zone
- Include a map showing the zones within the protected area
- Justify any changes in zonation that will occur within the time scale of the management plan
- Include buffer zone areas where relevant

4.4.3 Limits of Acceptable Change

- Describe the process used to develop the 'limits of acceptable change' outline
- Summarize the outcomes of the 'limits of acceptable change' planning
- Include the full 'limits of acceptable change' in the appendices

4.5 Management Programmes and Objectives

Management programmes are a means of grouping management objectives within related areas – for example, objectives related to natural resource management, or to public use. The strength of the combined programmes is greater than the sum of the individual programmes, as each supports the others over space and time, with areas of overlap that strengthen the overall management of the protected area.

Six Management Programmes are identified under this framework:

- A. Natural Resource Management Programme**
- B. Research and Monitoring Programme**
- C. Community Participation Programme**
- D. Public Use Programme**
- E. Infrastructure Management Programme**
- F. Administrative Programme**

A seventh programme, Archaeological Site Management Programme, would need to be added for protected areas declared to protect archaeological structures, under the Institute of Archaeology. For the majority of protected areas, however, this can be included within the Natural Resource Management Programme.

4.5.1 Natural Resource Management Programme

Dealing with direct management of the wildlife and the environment, such as delineating boundaries, enforcing no-hunting regulations and watershed protection

- State objectives of Natural Resource Management Programme
- Develop specific management actions to meet the overall management objective
- Outline how the outcomes from the 'Limits of Acceptable Change' will be implemented within the different Management Zones of the protected area
- Priority areas highlighted for management activities

4.5.2 Research and Monitoring Programme

Management of research activities permissible within the protected area, and of the monitoring activities associated with the conservation planning and evaluation processes

- Objectives of Research and Monitoring Programme
- Specific management actions to meet the overall management objectives
- Priority areas of research

4.5.3 Community Participation Programme

Activities developed to encourage community participation in the management area and equitable sharing of opportunities

- Objectives of Community Participation Programme
- Specific management actions to meet the overall management objective
- Priority Areas

4.5.4 Public Use Programme

Visitor management activities, education, recreation and visitor monitoring all fall under the Public Use Programme, as does illegal and illegal use by local stakeholders

- Objectives of Public Use Programme
- Specific management actions to meet the overall management objective
- Priority Areas

4.5.5 Infrastructure Management Programme

The Infrastructure Management Programme covers activities such as the maintenance of present infrastructure (buildings, roads etc.), future infrastructure, and equipment

- Objectives of Infrastructure Programme
- Specific management actions to meet the overall management objective
- Priority Areas identified

4.5.6 Administrative Programme

This programme contains activities such as staff recruitment, employment, training and management. Also covers concessions and marketing. It should also include a sub-programme for financial sustainability

- Objectives of Administrative Programme
- Specific management actions to meet the management objectives
- Priority Areas

4.5.7 Management Policies

This section should outline any management policies in the following areas. For example:

- Enforcement Policy
- Health and Safety Policy
- Public Liability Policy
- Disaster Preparedness Policy
- Research Policy
- Community Participation Policy
- Public Use Policy

4.6 Management Actions

- Specify management actions for each management programme for at least the first two years, including budget

4.7 Evaluation and Review

- Summarize the way in which evaluation of the success of implementation of the management plan will be applied
- Include a copy of the evaluation programme (including indicators to be used) as an appendix
- Summarize the way in which the management plan will be reviewed

4.8 Timeline

- Include a development schedule, showing when each activity will be implemented

4.9 Financing

- Describe how management of the area is to be financed.
- Give details as to where the finance is being sourced.
- Summarize the present basic annual running costs.
- Summarize the funding priorities for the management period

Glossary

References

Appendices