

### MALDIVES NATIONAL MANAGEMENT PLAN GUIDANCE FOR PROTECTED & CONSERVED AREAS

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Ministry of Climate Change, Environment and Energy





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### PREFACE

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The Maldives, a country consisting 99% of marine area is nestled in the middle of the Indian Ocean.

With over a thousand islands dispersed across an area 822km long and 130km wide, the country has historically relied heavily on its vast marine resources.

The tourism and fisheries sectors, largest contributors to the economy, are directly dependent on the health of marine ecosystems.

Since the 1990s, the Maldives has demonstrated a strong commitment to protecting and conserving its natural systems.

The initial formal protection of environmentally significant areas was driven by the need to preserve popular dive sites. This led to the protection of 15 dive sites in 1995 and an additional 10 sites in 1999.

Since then, the number of protected areas has increased to 91, encompassing 62894.55ha of diverse range of ecosystems.

The country is a signatory under the Convention on Biological Diversity (CBD), working towards achieving the KunmingMontreal Global Biodiversity Framework goals. Out of the 23 targets, Target 3 of the framework is related to conservation of biodiversity and ecosystem functions and services.

It states that 30% of terrestrial, inland water, coastal and marine areas should be under effective conservation and management by 2030. Effective protection and management of key environmental habitats are crucial to contribute to the success of the framework.

In 2021, the Government of Maldives established a partnership with the UK Government led Ocean Country Partnership Programme (OCPP), delivered under the UK Blue Planet Fund, to explore opportunities to support effective management of the Maldivian marine environment.

A key focus of this partnership is to provide demand-led technical assistance to support the Maldives Marine Protected Area (MPA) network.

During the first year of the OCPP, Protected Area Management Effectiveness (PAME) assessments were undertaken for three different types of Protected and Conserved Areas (PCA) in the Maldives<sup>1</sup>. The assessments highlighted key successes and recommendations to help improve the management of each site.

### Recommendations were similar for all three sites and included:

- 1. The development of SMART (Specific, Measurable, Attainable, Relevant and Time Based) Management Plans
- 2. The development of Research and Monitoring Plans that are linked to the PCA Management Plan aims and objectives
- 3. Improved stakeholder engagement in PCA management
- 4. Improved awareness raising and communication around designated PCAs
- 5. Resource mobilization and exploration of new technology to support management and enforcement of PCAs

To facilitate these recommendations, the Ministry, in collaboration with OCPP, has developed this national Management Plan guidance document to support the effective management of MPAs and other effective area-based conservation measures (OECMs) across the Maldives.

This document provides practical guidance on developing SMART (specific, measurable, attainable, relevant and time-bound) Management Plans that are site specific whist also allowing for a consistent national approach to Management Plan content.

The guidance focuses on MPAs and other effective area-based conservation Measures (OECMs) but can be used by all Protected and Conserved Area (PCA) managers to inform the development of their Management Plans.



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### 1. FOREWORD



**THORIQ IBRAHIM** Minister for Climate Change, Environment and Energy

"The Maldives, situated in the heart of the Indian Ocean consists of over 1000 coral islands stretching to a chain of approximately 822km.

Being a nation comprised of 99% ocean, our reliance on the ocean and its resources is one that roots from generations ago." For decades, we have reaped benefits from our marine ecosystems, for food, income and sustenance of our livelihoods.

Our two largest sectors, contributing to the economy of the country, tourism and fisheries, are directly reliant on thriving marine ecosystems.

This more than ever, highlights the urgency and need to effectively manage our vital marine resources. Efforts to protect our vital marine resources, have made remarkable progress.

With the protection of 93 protected areas, spanning approximately 63400 hectares, the government of Maldives is currently working on expanding the biosphere reserve network to additional atolls in the future.

For years, despite the protection of ecologically significant areas on paper, majority of the protected areas have remained unmanaged.

With the launching of the Maldives National Framework for Management of Protected & Conserved Areas (PCAs) of the Maldives (2024-2029) and Maldives National Management Plan Guidance for Protected and Conserved Areas (PCAs), we aim to: 1) Outline the main goals and principles for effectively managing the network of PCAs in the Maldives and

2) Assist PCA managers develop site-specific Management Plans while ensuring a consistent national approach.

These vital documents developed to meet our commitments under the 30 by 30 target, serves as a crucial guide for the effective management of the network of Protected and Conserved Areas (PCAs) across the Maldives by setting national context for Protected and Conserved Areas (PCAs) and highlighting national management goals and priorities to offer comprehensive guidance on management principles and tools.

On behalf of the Ministry, I would like to express my sincere gratitude to the UK Government led Ocean Country Partnership Programme (OCPP), delivered under the UK Blue Planet Fund, for their unwavering support in exploring opportunities to support effective management of the Marine Protected Areas (MPAs) of the Maldives. We are hopeful that this initiative will pave way for effective management of our Marine Protected Areas (MPAs), not just in paper, but practically, to sustain our ocean resources for generations to come.

# ACRONYMS

IUCN	International Union for Conservation of Nature	
MPA	Marine Protected Area	
MCCEE	Ministry of Climate Change, Environment and Energy	
METT-4	Management Effectiveness Tracking Tool (version 4)	
МОТ	MOT Ministry of Tourism	
OCPP Ocean Country Partnership Programme		
OECM	OECM Other Effective Area-Based Conservation Measure	
PAME	PAME Protected Area Management Effectiveness	
PCA	PCA Protected and Conserved Area	
RFMO	RFM0 Regional Fisheries Management Organisations	
SMART	SMART Specific, Measurable, Attainable, Relevant, Time-bound	

## 3. INTRODUCTION

This document provides practical guidance on developing SMART (specific, measurable, attainable, relevant and time-bound) Management Plans for marine protected areas (MPAs) and other effective area-based measures (OECMs) (here after referred to as Protected and Conserved Areas (PCAs) in the Maldives.

It aims to assist PCA managers in creating site specific Management Plans whilst also ensuring a consistent national approach.

Section 2 introduces the purpose and format of a Management Plan for PCAs in Maldives; Section 3 outlines considerations and actions to take prior to developing a Management Plan; and Section 4 runs through the essential elements of a Management Plan, provides brief explanations of concepts, and signposts to further resources to help PCA managers develop their Management Plan content.

To view the Government of Maldives' overarching management priorities, principles and goals for PCAs please refer to the Maldives National Framework for Management of Protected and Conserved Areas 2024-2029.



PHOTO BY: FUVAHMULAH BIOSPHERE RESERVE

# **3.1** – What is aManagement Plan?

A Management Plan is a tool to guide managers, resource users and other interested parties on how a PCA should be managed today and in the future.

The function of a Management Plan should be to provide sufficient information to answer some essential questions:

- WHY IS THE SITE IMPORTANT? Information on the ecology and biodiversity of the site as well as its cultural and socio-economic values
- WHAT DO WE WANT TO ACHIEVE? Management objectives for the site
- WHAT NEEDS TO BE DONE? Strategies and actions to reduce threats to the site's values, including how the PCA can be sustainably financed.

### WHO IS INVOLVED?

Information on all the governing legislation and policies, as well as the key organisations and stakeholders who may be involved in decisionmaking

• HOW WILL WE KNOW IF WE ARE SUCCEEDING?

Identification of monitoring programmes and mechanisms for evaluating progress and adapting future management as required.

A Management Plan should be a long-term management strategy (reviewed and updated at regular intervals) that provides a clear explanation of the overall goals and objectives of the site, with a focus on conservation of the site's natural values, as well as its social and economic importance (IUCN & World Commission on Protected Areas, 2016<sup>2</sup>).

It should present strategies and actions to achieve these goals, identify opportunities for important public and stakeholder engagement, outline indicators that can be monitored and evaluated for effectiveness as well as provide the basis for costing management activities and justifying the necessary budget (Day et al., 2015<sup>3</sup>).

# 2 – Management Plan Format

Each PCA is unique, and its Management Plan must be designed specifically to address its management needs.

As a result, there is no single ideal model for a Management Plan and the format adopted will depend upon the legislation establishing the site, the size of the site, the category of the protected area, the levels of human activities that need managing, and the capacity and resources of the management organisation.

The style and content of a Management Plan can have a large influence on whether it is supported and understood by users, including the public, and whether it effectively communicates the values of the site and the proposed management actions.

 <sup>&</sup>lt;sup>2</sup> IUCN and World Commission on Protected Areas (WCPA) (2017). IUCN green list of protected and conserved areas: standard, version 1.1. Gland, Switzerland
 <sup>3</sup> Day, J. C., et al. (2015). "Marine protected area management." Protected area governance and management: 609-650
 <sup>4</sup> Thomas, L. and J. Middleton (2003). Guidelines for management planning of protected areas, IUCN Gland, Switzerland/Cambridge, England.

### A Management Plan should be (Thomas and Middleton 2003<sup>4</sup>):

- CLEAR AND ACCESSIBLE: it should be easy to read and understand, jargon free and well presented
- **CONCISE AND COMPREHENSIVE:** it should be no longer than is absolutely necessary, but with enough information to fulfil its functions
- ACCURATE AND OBJECTIVE: using the best available evidence and with the criteria for all judgements clearly explained
- SYSTEMATIC AND LOGICAL: Management policies and strategies should be derived from an assessment of the evidence and with a clear rationale given for all proposals
- ACCEPTABLE AND MOTIVATING: for all those with interests in the site;
- **PRECISE AND PRACTICAL:** with clear, measurable objectives and realistic methods for achieving them, resulting in progress towards desired outcomes which can be monitored
- FOCUSED AND EFFECTIVE: fulfilling its purpose as a tool for site management, meeting the needs of its users and satisfying any legal or other obligations
- **FLEXIBLE:** it should be reviewed sufficiently regularly to ensure that management can adapt to changing situations.

### 3.3 – Management Plans for Protected & Conserved Areas in Maldives

Under the Protected Areas Regulation (R78/2018) and Government guidelines for OECMs, each PCA in Maldives should have a single Management Plan document. The Ministry of Climate Change, Environment and Energy (MCCEE) and the Ministry of Tourism (MoT) have already developed guidelines for OECM's, in areas leased for tourism operations, which sets out the minimum requirements for a Management Plan<sup>5</sup>.

The Government of Maldives has expressed a desire to include the IUCN Green List Standard at the core of its PCA management strategy. The Green List Standard provides a management planning framework for all PCAs based on four pillars, 17 criteria and 50 indicators (IUCN & World Commission on Protected Areas, 2019<sup>6</sup>).

The four pillars are; Good Governance, Sound Design and Planning and Effective Management, which when implemented effectively, support the achievement of the fourth, Successful Conservation Outcomes (natural values, ecosystems services and cultural values).

Having a Management Plan in place will enable achievement of two of the Green List Standard indicators: Criterion 2.1, indicator 2.1.3 and Criterion 3.1, indicator 3.1.1. This National Management Plan Guidance for Protected and Conserved Areas aims to incorporate the Green List Standard and existing OECM and MPA Management Plan guidelines into one document that is applicable to all marine PCAs in Maldives.

It could also be applied to other PCAs in the country acknowledging that content unique to terrestrial sites has not been considered in this guidance.

 <sup>5</sup> MECCT, Ministry of Environment, Climate Change and Technology, Malé (2022). "Guideline for recognising areas as Other Effectives Area-Based Conservation Measures (OECMs) in areas leased for tourism operations."
 <sup>6</sup> IUCN World Commission on Protected Areas (WCPA) and Assurance Services International. (2019). IUCN Green List of Protected and Conserved Areas: User Manual, Version 1.2. Gland, Switzerland. Such a document will help ensure all Management Plans follow the same format and include the same essential information, whilst still allowing for specific individual needs. These guidelines will make it easier for PCA managers to fulfil their Management Plan requirements, ensure consistency across the PCA network and allow for more uniformed reporting on a national level.

Once a Management Plan has been developed, it must follow a sign off process before it can be officially adopted and published. To view the different sign off processes for each PCA please refer to the 'Maldives National Framework for Protected and Conserved Areas 2024-2029'.

Management Plans will work alongside PCA regulations by providing an overview of a PCA and its long-term management strategy. The regulation will remain as the mechanism to outline legal requirements associated with the PCA to allow for the enforcement of compulsory obligations.

Online training on MPA management, including developing a Management Plan is available on the UK's Marine Management Organisations' Learning Management System: https://www. mmotraining.org.uk/login/index.php<sup>7</sup>.

To access the learning platform please follow the link and complete the 'New User Request Form'. 4. The stage in which a Management Plan is developed may differ depending on the type of PCA.



### 4. MANAGEMENT PLAN PREPARATION

### **4.1** – Defining Your Process

The stage in which a Management Plan is developed may differ depending on the type of PCA. National MPAs are usually designated before a Management Plan is developed whereas Management Plans for OECM's must be prepared before the site is officially declared an OECM (MECCT 2022<sup>8</sup>).

Irrespective of this, the following key actions should be considered prior to the development stage of the Management Plan:

- Identify available capacity, resources and funds to develop the Management Plan.
- 2. Establish a management planning team. In most cases the PCA management authority will lead the preparation and development of the Management Plan.

However, plans could also be developed by consultants or similar parties if there is limited capacity within the site management team.

If a consultant is used it is important that the management authority oversees the work and understands the content for future development. The roles and responsibilities of the management planning team must be clearly defined, this is especially important for sites with multiple management leads.

- 3. Review the site's associated legislation to recognise the Management Plan approval process.
- Identify the site's protected area category as described in the Maldives Protected Area Regulation (2018/R-78) as this will affect the type of management measures required.
- Create a draft timeline for Management Plan development with key milestones. To allow time for adequate stakeholder consultation. A minimum of one year is advised.
- Prioritise planning actions based on available resources e.g., how many stakeholder workshops are realistically possible with the available budget and staff constraints.

<sup>8</sup> MECCT, Ministry of Environment, Climate Change and Technology, Malé (2022). "Guideline for recognising areas as Other Effectives Area-Based Conservation Measures (OECMs) in areas leased for tourism operations."



**4.2** – Data & Information Collection

Before developing a Management Plan, a data gathering exercise should be completed to help provide evidence and key information to support management decisions.

The amount of information gathered will be dependent on the availability of the data, the time and resources available.

Once the information is collated it should be contained within the Management Plan as background information to ensure consistency and accuracy.

The exercise will also help to identify data gaps which can be incorporated into future management actions.

PHOTO BY: OCPP

#### Examples of helpful background information to gather:

GEOGRAPHICAL	Location, boundary co-ordinates, and physical environment e.g., bathymetry, geology, and hydrology.	
BIODIVERSITY	Key species and habitats, reasons for protection, climate change effects, significant areas within the site e.g., cleaning stations, breeding grounds, nursery areas etc	
SOCIOECONOMIC	Resource use in and outside the site area, local communities, anthropogenic threats, visitor numbers	
MANAGEMENT	Governance setting, existing management measures and monitoring activities	

### 4.2.1 – Stakeholder and Community Engagement

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It is important that the PCAs' local governance structures and mechanisms provide local communities and stakeholders with appropriate opportunities to participate in management planning, processes and actions. It is therefore strongly advised to consult with stakeholders from the very beginning of the Management Plan process.

By holding a stakeholder consultation at the pre-planning stage, site managers can utilise local knowledge, gather background information including mapping current threats and area uses. It also provides an opportunity to create awareness of the Management Plan process amongst stakeholders and their inclusion in the process leading to greater support of the site.

There is no one engagement methodology that fits all stakeholders and all PCA management processes. Methods often used include community meetings, focus group meetings, workshops, individual interviews, surveys, advisory committees, and informational multimedia (e.g., brochures, social media, videos). Participatory mapping is a key tool to use at this stage, especially if there is not much data available about how the area is used or where key habitats and species occur – it can be done online (e.g., using a platform like SeaSketch) or during community / focus group meetings and workshops.

Perceptions and concerns differ across stakeholder groups and the need to understand these from multiple perspectives is important. Stakeholder mapping exercises and the development of a stakeholder engagement plan helps to target engagement activities more effectively and makes sure that the engagement methods used are tailored to the local situation, so that it will have the desired outcome.

Overarching guidance on developing a stakeholder engagement plan can be viewed in the 'Maldives National Framework for Management of Protected and Conserved Areas 2024-2029'.

Figure 1 provides an example of the stages where stakeholder engagement would be beneficial when developing a Management Plan.

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IDENTIFY STAKEHOLDERS	<ul> <li>→ Undertake a stakeholder mapping exercise to identify all sectors linked to the site. Sectors could include councils, Government ministries and authorities, fishing industry, NGO's, educational and religious institutes/leaders, tourism industry, press, national and international institutes and research bodies.</li> <li>→ Group stakeholders based on their level of interest in the site and their influence. Groupings will help to develop a stakeholder engagement plan, determining the most appropriate forms of engagement and communication methods for each group throughout the Management Plan process.</li> </ul>
PRE-PLANNING CONSULTATION	<ul> <li>→ Depending on resources and time a pre-planning stage consultation is beneficial to gather a range of information about the site including potential threats and area uses, highlighting potential user conflicts and helping to capture local ecological knowledge.</li> <li>→ All stakeholders can be included.</li> <li>→ Methods to collect information could be via an online 'call for evidence' using a survey, community meetings or a workshop.</li> <li>→ A summary of key findings from the consultation process should be documented and made available to stakeholders.</li> </ul>
MANAGEMENT ACTIONS CONSULTATION	<ul> <li>→ This is a key stage that all PCA managers should aim to complete to enable the development of site objectives, management actions and strategies that are supported by stakeholders.</li> <li>→ Identify stakeholders who have an active interest in the site and will be affected by management decisions.</li> <li>→ A workshop is a useful methodology to use for this stage and key outputs should be documented and shared.</li> </ul>
DRAFT MANAGEMENT PLAN CONSULTATION	<ul> <li>→ Once a draft of the full Management Plan has been completed a public consultation should be held to allow stakeholders and the community to review and provide comment. The consultation should run for a minimum of 3 weeks.</li> <li>→ The Management Plan should be easily accessible and appropriate engagement and communication methods should be used to widely share the consultation promoting transparency and opportunities for stakeholders to partake in the process.</li> <li>→ A summary of the comments received from the consultation should be published, noting how each comment has been addressed in the final Management Plan including reasons for comments that have not been actioned.</li> </ul>
FINAL MANAGEMENT PLAN PUBLICATION	→ Once the final version of the Management Plan has been approved by the relevant authority and adopted it should be made publicly available online and advertised to ensure stakeholders are aware and engaged with it.

**FIGURE 1:** Example of key stages where stakeholder engagement should be considered when developing a Management Plan for PCA. Managers should aim to complete stages in blue as a minimum.

5. Although all Management Plans are different, they should all follow a logical process.

# 5. WRITING A MANAGEMENT PLAN

### Although all Management Plans are different, they should all follow a logical process:

- 1. An introduction to the site and a discussion of its importance and the factors affecting it.
- 2. Defining the 'vision' for its future management.
- 3. Setting out how this vision will be achieved.
- 4. Finally, detailing how managers and others will assess effectiveness of the Plan.

The following sections (4.1 – 4.13) provide an overview of the key headings and descriptions that should be included in a Management Plan.

This template is applicable to all PCAs, however the level of detail provided within each section of the Management Plan may vary depending on the protected area category and level of activity in the site.

Sections 4.1, 4.5 and 4.8 are not obligatory for OECMs, following the existing OECM Management Plan guidelines developed by the MCCEE. These sections are also optional for PCAs with low levels of activity and no management measure requirements.

### It is encouraged that all sections of the template are included in Management

Plans for PCAs with high levels of activity and conflicting uses.

The requirements for effective management detailed in the IUCN Green List Standard can be incorporated into Management Plans using this overview.

Sections aligned with the Green List Standard have been outlined in the footnotes throughout the following sections and descriptions of each indicator are included in Appendix 1 (IUCN & World Commission on Protected Areas, 2017<sup>9</sup>).

### 5.1 – Executive Summary<sup>10</sup>

The Executive Summary is often the last part of the Management Plan to be completed as it summarises the essential issues and key outcomes.

It is important that this section is written in an accessible way with the target audience in mind as many of the final decisionmakers and stakeholders will not have time to read and digest the supporting detail.

#### It should be concise and briefly cover:

- Location and size of the site
  - Reason for protective status
- MPA goal/vision
- Management authority
- Purpose and scope of the plan

<sup>9</sup> IUCN and World Commission on Protected Areas (WCPA) (2017). IUCN green list of protected and conserved areas: standard, version 1.1. Gland, Switzerland <sup>10</sup> Optional for OECMs and PCAs with low levels of activity An executive summary may not be required in an OECM Management Plan if the document is short and concise.

### 5.2 – Introduction

This states the purpose and scope of the Management Plan and provides an explanation for the establishment of the site.

It may also contain summary information about the site, such as the date it was designated, location and size, organisations involved in the management and the process by which the Management Plan was developed. if the document is short and concise.

# **5.3** – Description of the Site

The description should refer to the characteristics of the PCA and the surrounding area.

It should provide a concise overview of relevant aspects, such as:

- The site's assigned Maldives Protected Area Category and it's equivalent IUCN Protected Area management category if applicable<sup>11</sup>
- A map showing the location of the site and its boundary
- The physical features: coastal landforms, bathymetry, tides, currents, climate, geology and geomorphology

- The biological features: ecosystems, habitats and species
- The cultural features: archaeological, historical and religious
- A summary of existing uses: recreational, commercial, research and education and traditional uses.

It is important that the description identifies uses and activities both occurring within and near the site, that may still adversely affect its values and resources<sup>12</sup>.

 For OECM Management Plans a summary of threats to the site should also be outlined in this section (please refer to section 4.5 for more information).

The description should be concise and directly relevant to the management of the site.

It should present factual information and should be quantified wherever possible. Supporting information (e.g., maps) can be included in appendices, or referred to with references.

In OECM Management Plans, this information can be incorporated into the Introduction section if preferred.

<sup>&</sup>lt;sup>11</sup> Aligns with the Green List Standard Framework Criterion 2.1, Indicator 2.1.2 <sup>12</sup> Aligns with the Green List Standard Framework Criterion 2.4, Indicator 2.4.1

# **5.4** – Key values of the Site

#### Also referred to as Ecological and Socioeconomic Benefits in OECM guidance<sup>13</sup>

This section should identify the key values for nature conservation and the associated ecosystem services and cultural values i.e., why the site is important, both to local communities and broader society.

It should highlight the important features<sup>14</sup> that must be protected and preserved to maintain the site's local, regional, or international significance.

This could include highlighting whether the site contains: outstanding examples of natural, scientific or ecological values, areas that are essential for protecting the ecological integrity of the wider ecosystem or rare, endemic threatened or endangered wildlife and habitats<sup>15</sup>.



PHOTO BY: MALDIVES WHALE SHARK RESEARCH PROGRAMME



PHOTO BY: FUVAHMULAH BIOSPHERE RESERVE

 <sup>13</sup> MECCT, Ministry of Environment, Climate Change and Technology, Malé (2022). "Guideline for recognising areas as Other Effectives Area-Based Conservation Measures (OECMs) in areas leased for tourism operations."
 <sup>14</sup> 'Features' are encompassed as part of the wider 'values' of the PCA, but are distinguished as specific ecological elements for which the PCA has been formally designated or selected.
 <sup>15</sup> Aligns with the Green List Standard Framework Criterion 2.1, Indicator 2.1.4

# **5.5** – Identification of Constraints, Opportunities, Threats<sup>16</sup>

The constraints on management should be identified, as should any major threats to the site's values. In an OECM Management Plan, threats should be considered in the site overview section (4.3).

**CONSTRAINTS**: Some constraints are a function of the natural environment, for example the ecological processes which exist in the area or the relative rarity of the resource.

Constraints may however also take other forms, such as legal obligations, health and safety considerations, gaps in the evidence base, or a lack of resources or expertise.

**THREATS:** Threats to, or pressures on the PCA may be human-induced or natural, and they may originate from within the PCA itself or from beyond its boundaries.

Threats may include, for example, population growth and settlement, vessel traffic, excessive fishing, removal of natural resources, visitor use of areas, invasive species or pollution.

It is important to consider why these threats are occurring and what impact they are having on the key habitats and species within the site.

Since successful outcomes will require consideration of likely future events, the factors which can affect the future of the PCA should also be identified and evaluated wherever possible, for example the impacts of new resource use activities or climate change. It is important that all PCAs specifically consider the likely impact of climate change on the site's values<sup>1718</sup>.

A list of threat categories described in the Management Effectiveness Tacking Tool, version 4 (METT-4) (a method used for evaluating the management effectiveness of a PCA) can be viewed in Appendix 2 to help systematically run through potential threats linked to a PCA.

**OPPORTUNITIES:** Predictions also help to identify opportunities for beneficial change as a result of the PCA, such as ecotourism development, improved crosssectoral partnerships, greater access to learning and training or improved community participation and awareness.

Once identified, the threats and opportunities should be clearly referred to in the Management Plan. Management objectives and actions should focus on reducing the threats, overcoming or dealing with the constraints and maximising the opportunities.

<sup>&</sup>lt;sup>16</sup> Optional for OECMs and PCAs with low levels of activity

<sup>&</sup>lt;sup>17</sup> Aligns with the Green List Standard Framework Criterion 2.3, Indicator 2.3.1

<sup>&</sup>lt;sup>18</sup> Aligns with the Green List Standard Framework Criterion 2.3, Indicator 2.3.2

#### 5.5.1 – Threat Prioritisation

Management actions or interventions should be developed to reduce the identified threats. Prioritising the threats helps to focus management actions on addressing the threats that pose the greatest risk to the site.

This process is especially useful for sites with restricted resources and provides a record of why certain management activities are being implemented. For small PCAs with fewer threats, or for OECMs, threats can be prioritised based on expert opinion of the site management authority or through local knowledge of the site through stakeholder engagement.

For larger PCAs with multiple human activities, a matrix can be used.

There are different ways of prioritising the threats and completing the matrix. One suggestion is to consider the likelihood and consequence of each threat on the five-point scale<sup>19</sup> described below:

#### TABLE 1: Likelihood Scale

LIKELIHOOD	FREQUENCY OF THREAT
Almost certain	→ Expected to occur more or less continuously throughout a year
Likely	→ Not expected to be continuous but expected to occur one or more times in a year
Possible	→ Not expected to occur annually but expected to occur within a 10-year period
Unlikely	→ Not expected to occur in a 10-year period but expected to occur in a 100-year period
Rare	→ Not expected to occur within the next 100 years

#### TABLE 2: Consequence scale

CONSEQUENCE	DESCRIPTION OF IMPACT	
Catastrophic → Impact is clearly affecting, or would clearly affect, the nature of the ecosystem over a wide area. Recovery periods greater than 20 years likely.		
Major	→ Impact is, or would be, extremely serious and possibly irreversible to a sensitive population or community. Recovery periods of 10 to 20 years likely.	
Moderate	→ Impact is, or would be, serious and possibly irreversible over a small area. Recovery periods of 10 to 20 years likely.	
Minor	→ Impact is, or would be, significant to a sensitive population or community at a local level. Recovery periods of five to 10 years likely.	
Insignificant	→ No impact; or if impact is, or would be, present then only to the extent that it has no discernible effect on the overall condition of the ecosystem.	

<sup>19</sup> Based on the 'Criteria for ranking likelihood and consequence of threats' used in the Great Barrier Reef Marine Park Authority 2019, Appendix 7. In Great Barrier Reef Outlook Report 2019, GBRMPA, Townsville The prioritisation should be based on evidence from monitoring programmes or scientific research where possible. If this information is not available, the threats can be prioritised based on expert opinion of the site management authority or through local knowledge of stakeholders. The threat prioritisation can be displayed as a graphic allowing the reader to visualise the information more easily. An example is shown below (Figure 2). The activities in the red and dark red boxes are the threats that management actions should focus on if resources are limited.

based on the likelihood and consequence of each threat occurring.

		LIKELIH	00D			
Rare	Unlikely	Possible	Likely	Almost Certain		
				<ul> <li>→ Sea temperature increase</li> <li>→ Ocean acidification</li> <li>→ Sea level rise</li> </ul>	Catastrophic	
	→ Large oil / chemical spills		→ Fishing	<ul> <li>→ IUU fishing</li> <li>→ Modified</li> <li>coastal habitats</li> <li>→ Sediment</li> <li>run off</li> </ul>	Major	CON
			<ul> <li>→ Boat traffic</li> <li>→ Development</li> <li>→ Tourist activities</li> </ul>	<ul> <li>→ Physical damage to reef structure</li> <li>→ Marine litter</li> </ul>	Moderate	CONSEQUENCE
				→ Small-scale oil/ chemical spills	Minor	
					Insignificant	
Low Risk Very High Risk FIGURE 2: Example of a Risk Matrix that could be used to identify and prioritise threats to a Protected and Conserved Area						

### 5.6 – Governance

This section describes how the site will be managed and should summarise the relevant authorities and organisations involved. An organogram could be included to clearly outline each organisation's roles and responsibilities in administering the Management Plan alongside key contact details.

Outside of the immediate management structure there may also be regional or national partners involved in management agreements that could briefly be described. For example, offshore sites may need to include information about Regional Fisheries Management Organisations (RFMOs).

The management decision-making process should also be explained, outlining how decisions will be made, who will be involved in making them and how they will be checked and scrutinised to ensure the site is managed properly.

A clearly outlined procedure to address stakeholder and community concerns will also help to encourage transparency and support for the management of the site.

### 5.6.1 – PCA Legislation & Other Management Tools

A description of the sites' key regulations, policies, codes of conduct and guidance should also be included in the Governance section or can standalone if preferred<sup>20</sup>.

When developing a Management Plan for a site with no existing management measures

in place, the Management Authority will need to consider whether management measures are required to meet the objectives of the site and address any threats identified in section 4.5. Opportunities for stakeholders to input to proposed measures should be provided to encourage community support and build understanding of management proposals.

Once proposed management measures have been developed, working with the MCCEE, the Management Authority should identify whether the measures can be included and enforced under the Protected Areas Regulation (R78/2018) or if the PCA will require a bespoke site level regulation. Examples of when a PCA may require its own regulation include when specific user/entrance fees, permits, fines, access rules are introduced or if the PCA has particular enforcement needs.

The following points should be considered for inclusion in this section of the Management Plan:

- Whether management measures apply to the whole site or specific areas
- If certain activities are permitted what methods are allowed
- When and what resources can be targeted
- If tourism activities are permitted are permits and/or guides required
- Are there specific entry times, associated fees etc.

Signposts to relevant legislation and documents can be used to avoid including mass amounts of detail. The site regulations

<sup>20</sup> Aligns with the Green List Standard Framework Criterion 3.6, Indicators 3.6.1 – 3.6.4

should be included in the appendices of the Management Plan. The 'Maldives National Framework for Management of Protected and Conserved Areas 2024-2029' provides links to national guidelines for some activities.

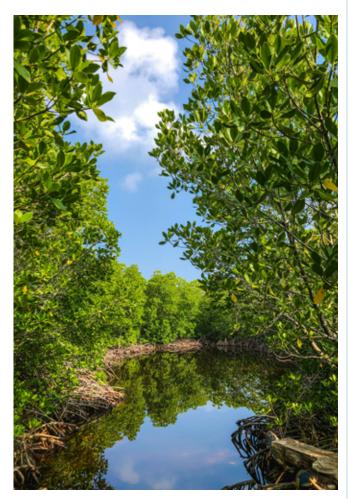


PHOTO BY: MUHAMMADH SAAMY

# **5.7** – Boundary and Zonation

Some larger PCAs may employ zoning to enable different activities to take place within different areas in the site. Zoning can provide protection for critical species and habitats whilst enabling sustainable human activities to continue in less sensitive areas. This section should clearly set-out the location of the boundary (and zones where applicable) including a map and GPS coordinates.

It should identify the objectives for each zone and define the activities that are permitted to operate in the zones and any associated rules around how these activities should take place<sup>21</sup>.

Two zone categories are commonly used for PCAs in Biosphere Reserves in Maldives: Core zone and Buffer zone. The Core zone requires significant levels of protection where non-extractive activities only can take place.

The Buffer zone consists of areas surrounding or connected to the Core zone and allows for a wider variety of human activities that are deemed to be sustainable and agreed upon by the Management Authority.

### 5.8 – Vision<sup>22</sup>

Many Management Plans have a vision or several high-level goals that describe the kind of PCA that the Management Plan is seeking to achieve in the long-term. The vision then provides the focus or direction for the management objectives.

The vision is often used in public engagement and communications materials and so should be short, simple and easily remembered, but also needs to clearly demonstrate the value of the site to the wider world.

<sup>21</sup> Aligns with the Green List Standard Framework Criterion 3.6, Indicators 3.6.1 – 3.6.4

<sup>22</sup> Optional for OECMs and PCAs with low levels of activity

Some examples of Management Plan visions are:

 Aldabra will serve as an inspiration for all, for the successful stewardship of the natural world (Aldabra Atoll Management Plan 2016)

 To conserve the natural and cultural heritage of the Phoenix Islands Protected Area for the sustained benefit of the peoples of the Republic of Kiribati and the world.
 (Phoenix Islands Protected Area Management Plan 2010 – 2014)

• To preserve and maintain a typical representative area of the coral reef communities, migratory marine birds, and threatened and endemic marine wildlife for the benefit of present and future generations. (Kisite-Mpunguti Marine Protected Area Management Plan, 2015-2025)

# 9 – Management Objectives <sup>23</sup>

The management objectives are operational within the time scale of the plan (although they may be renewed).

They are specific statements of intent. They link to the overarching vision and provide the framework for the more detailed management strategies and actions.

Well-stated objectives are critical in determining whether a Management Plan will be effective. Managers should be able to tell whether management activities are achieving the desired results, and this is only possible if objectives can be quantified that can in some way be measured.

#### The objectives should therefore be SMART:

- **SPECIFIC:** Clearly defined so that all people involved have the same understanding of what the terms in the objective mean
- **MEASURABLE:** Definable in relation to some standard scale (e.g., numbers, percentage, fractions)
- ACHIEVABLE: It must be possible to achieve the management objectives for the MPA, recognising the constraints faced by managers
- **RELEVANT:** Directly respond to the issues that have been identified in previous steps of the planning process
- **TIME LIMITED**: Achievable within a specified and appropriate period of time.

Some examples of SMART management objectives are:

By 2023, the population size of nesting turtles and seabirds is maintained at current levels or has increased

By 2028, existing invasive alien species are eradicated or under effective control (occur in less than 5% of MPA area) to reduce impact to the MPA's flora and fauna

There is no set rule on the number of management objectives a site should have but each objective should support the achievement of the overall vision.

Typically, objectives would be designed to cover governance, ecological, social, cultural, and economic aspects of the site.

<sup>23</sup> Aligns with the Green List Standard Framework Criterion 3.1, Indicator 3.1.1

# **5.10** – Management Strategies/Action Plans

Management objectives should be accompanied by a set of actions that need to be implemented to achieve those objectives.

This is arguably the most important component of management planning.

The range of options for management actions should be identified, and the most appropriate ones chosen for inclusion within the Management Plan.

When thinking about the best option, it is important to consider:

- Whether the proposed actions will contribute to achieving the objectives
- The identified constraints and whether the actions are realistic in the timeframe (considering staff time and resources)
- The management implications of each action
- How acceptable the options are to politicians and the wider public

There is no set way in which different management objectives and their associated actions should be grouped together; some Management Plans, for example, group management objectives into themes or programmes or group them to address specific management needs.

For certain core management problems, management objectives and associated

actions can be grouped into 'Management Strategies'. Strategies create a formalised, step-by-step process with a clear time frame to assist with effective implementation.

Typically, they would be formulated to cover the following general topics:

### **GOVERNANCE<sup>24</sup>:**

Management of the PCA: management actions should ensure that the correct processes and structures are in place to effectively manage the site.

This might include management actions such as: ensuring that the appropriate legislation is in place; the development of fee and permit systems; development of a zoning plan; establishment of a management board/ committee; development of partnerships with other organisations; effective engagement with stakeholders and local communities.

**PCA operations:** management actions should ensure that managers have the appropriate resources and capacity to be able to effectively manage the site.

This might include actions such as: ensuring that there is sufficient infrastructure, equipment and well-trained staff; identification of which should be conducted through a resource needs assessment.

Operations identified should be realistic and achievable whilst also being progressive and innovative to ensure value, efficiency and to minimise carbon outputs.

<sup>24</sup> Aligns with the Green List Standard Framework Criterion 3.1, Indicators 3.1.3 – 3.1.5



PHOTO BY: FUVAHMULAH BIOSPHERE RESERVE

### ECOLOGICAL<sup>25</sup>:

**Targeted conservation actions for key habitats and species:** management actions should include specific activities that will protect key species and habitats in the site.

This could include direct conservation actions such as: protection of nesting seabirds and turtles through removal of invasive species; protection of turtle nesting beaches; or habitat restoration activities.

**Research and monitoring:** management actions could cover topics such as: development of a research plan; specific research projects to address key evidence gaps; dissemination of scientific results; data management; implementation of long-term monitoring programmes e.g., for key habitats, key species (e.g., seabirds, turtles, fish), water quality and socioeconomics to feed into the assessment of management effectiveness.

### SOCIAL, CULTURAL AND ECONOMIC<sup>26</sup>:

Sustainable management of human activities within the PCA: management actions should cover activities to minimise impacts to the site from human activities.

This could include for example sustainable fisheries management; reduction of marine pollution and marine debris; biosecurity management; management of recreational activities; and development of marine emergency response procedures.

#### Communication, education and

awareness-raising: management actions could cover activities such as: development and dissemination of educational materials; development of an education programme for schoolchildren, visitors etc.; development of a volunteer programme; development of a website; or publicising the site in local and international media (news releases, feature stories etc.).

The management objectives and actions can be presented in a table format (table 3) with additional information such as the organisation responsible for each action, the timeframe for delivery, the priority level and the indicators to be used for assessing management effectiveness.

<sup>25</sup> Aligns with the Green List Standard Framework Criterion 3.2, Indicators 3.2.1 and 3.2.2

<sup>26</sup> Aligns with the Green List Standard Framework Criterion 3.3, Indicators 3.3.1 and 3.3.2

 TABLE
 3: An example of a management action table where management actions have been listed

 with their associated management objective and indicators and prioritised from low priority to high.

OBJECTIVE	ACTION	PRIORITY	INDICATORS
By 2023, the population size of nesting turtles is	Develop and implement a long-term monitoring programme for nesting turtles to determine the status and trends of the turtle population	High	Number of nesting turtles Nesting success
maintained at current levels or has increased	Establish a partnership with the local university to undertake research to better characterise turtle population dynamics, age structure and genetics	Medium	
	Undertake a rat eradication programme on the islands within the MPA	High	
	Collaborate with the local wildlife group and schools to undertake monthly beach clean-ups to remove macro-plastics from nesting beaches	High	
	Work in partnership with the local hotels to reduce light pollution adjacent to the nesting beaches	High	

# **5.11** – Compliance and Enforcement <sup>27</sup>

This section should clearly set out what compliance measures will be put in place to ensure that the site rules, regulations or permit conditions are complied with by all users.

It should consider different approaches for ensuring compliance ranging from encouragement of voluntary compliance through stakeholder engagement and education programmes through to routine patrols by enforcement officers.

It may consider the use of technology to enhance surveillance activities and assist in the enforcement of the site objectives. It should clearly show which organisations are responsible for compliance and enforcement, how they interact and what enforcement powers they have.

It should detail implications for offences, relevant legislation and set out information about how the number of enforcement actions taken will be recorded and reported.

Information on how members of the public could report suspected noncompliance or lodge complaints in relation to the PCA and how enforcement officers can be held accountable would also be useful to include under this section.

# **5.12** – Monitoring and Evaluation <sup>2829</sup>

Monitoring and evaluation is an essential stage of the management cycle. It determines how successfully the site is being managed. This section should summarise how the site will be monitored and reviewed, against its key SMART objectives detailed in section 4.9 Management Objectives.

It is recommended that an associated Research and Monitoring Plan is developed in line with the Management Plan to provide essential information on the status of the key ecological, social and cultural values of the site compared with baseline condition detailed in Section 3.2 Data & Information Collection.

Guidance on creating a Research and Monitoring Plan can be found in the 'Maldives National Research and Monitoring Plan Guidance for Protected and Conserved Areas'. Smaller sites may not require a separate Research and Monitoring Plan, instead how the ecological and social and cultural indicators will be assessed should be set out in this section.

Information such as which methods will be used, which organisations are responsible for carrying out the monitoring, how frequently the monitoring will be undertaken, and how the results will be documented, analysed, and communicated to stakeholders could also be considered.

This section should also set out how the effectiveness of management measures will be assessed and how frequently they should be assessed (a minimum of once every 5 years). This will include annual reviews as well as a more comprehensive review and evaluation on a less regular basis. The methods to be used for the evaluation should be stated as well as who will be involved in the evaluation process.

The 'Maldives National Framework for Management of Protected and Conserved Areas 2024-2029' suggests management effectiveness should be evaluated using the Management Effectiveness Tracking Tool version 4 (METT-4) methodology. Guidance on this methodology and examples of its use for Maldivian protected sites can be found in the Report of Protected Area Management Effectiveness Evaluations for three sites in the Maldives.

This section should also describe how the results of the PAME evaluation will be shared with stakeholders and the local community to highlight positive outcomes, areas to improve and outline any changes to management.

### 5.13 – Appendices

The appendices should provide additional information to support the Management Plan which could include:

- A boundary map of the site (including the zoning plan, if applicable)
- The relevant legislation for site designation and the regulation that any management measures fall under e.g., the Protected Areas Regulation (R78/2018) or a specific PCA level regulation associated with the site.
- Maps highlighting the location of key habitats/species and key areas of human activities.
- An inventory of species with mention of its IUCN Red List status, Maldives national Red List status if applicable, protected species regulation status and CITES status.

<sup>&</sup>lt;sup>28</sup> Aligns with the Green List Standard Framework Criterion 3.7, Indicators 3.7.1 and 3.7.2

<sup>&</sup>lt;sup>29</sup> Aligns with the Green List Standard Framework Criterion 4.1, Indicator 4.1.1; Criterion 4.2, Indicator 4.2.1; Criterion 4.3, Indicator 4.3.1

6. Throughout this document alignments with the IUCN Green List Standard have been highlighted in the footnotes to demonstrate where site managers can meet some of the IUCN Green List Standard indicators if they include the associated information in their Management Plans.

# 6. APPENDIX 1. IUCN GREEN LIST STANDARD ALIGNMENTS

Table 4 provides descriptions of the IUCN Green List Standard criterions and indicators that align with sections of the Maldives National Management Plan Guidance for Protected and Conserved Areas.

Throughout this document alignments with the IUCN Green List Standard have been highlighted in the footnotes to demonstrate where site managers can meet some of the IUCN Green List Standard indicators if they include the associated information in their Management Plans. Descriptions in table 4 are as they appear in the 'IUCN Green List of Protected and Conserved Areas: User Manual, Version 1.2'<sup>30</sup>.

Information has only been provided for criterion and indicators relevant to Management Plans, to view the IUCN Green List Standard in full refer to the IUCN Green List website - https://iucngreenlist. org/standard/global-standard/ 
 TABLE
 4:
 IUCN Green List Standard criterions and indicators that align with sections

 of the Maldives National Management Plan Guidance for protected and conserved areas

	IUCN GREEN LIST STANDARD CRITERION DESCRIPTION	IUCN GREEN LIST STANDARD INDICATOR DESCRIPTION	SECTIONS IN MALDIVES NATIONAL MANAGEMENT PLAN GUIDANCE FOR PCAS THAT ALIGN WITH GREEN LIST STANDARD INDICATORS
2. SOUND DESIGN & PLANNING	2.1 IDENTIFY AND UNDERSTAND MAJOR SITE VALUES: The site's major values for conservation of nature with associated ecosystem services and cultural values are identified and understood.	<b>2.1.2</b> The site has been listed and correctly assigned one of the six IUCN Protected Area management categories or has been listed as an 'Other Effective Area-based Conservation Measure', and been assigned one of the four IUCN governance types in the UN Environment World Conservation Monitoring Centre World Database on Protected Areas (WDPA).	<b>4.3</b> Description of the site
		<b>2.1.3</b> The site has a current management plan or equivalent that is used to guide management priorities and activities.	<b>2.3</b> Maldives marine sites management plans
		<b>2.1.4</b> The major natural values and associated ecosystem services and cultural values of the site are clearly identified and understood.	<b>4.4</b> Key values of the site
	2.3 UNDERSTAND THREATS AND CHALLENGES TO MAJOR SITE VALUES: Threats and challenges to major site values are described and understood in sufficient detail to enable effective planning and management to address them.	<b>2.3.1</b> Major current and potential threats to major natural values and associated ecosystem services and cultural values of the site are identified, understood and documented, and their location, extent and severity described in sufficient detail to enable effective planning and management to address them.	<b>4.5</b> Identification of constraints, opportunities, threats
		<b>2.3.2</b> The likely impact of climate change on the major site values has been assessed, understood, and documented.	

	IUCN GREEN LIST STANDARD CRITERION DESCRIPTION	IUCN GREEN LIST STANDARD INDICATOR DESCRIPTION	SECTIONS IN MALDIVES NATIONAL MANAGEMENT PLAN GUIDANCE FOR PCAS THAT ALIGN WITH GREEN LIST STANDARD INDICATORS
3. EFFECTIVE MANAGEMENT	2.4 UNDERSTAND THE SOCIAL AND ECONOMIC CONTEXT: The social and economic context of the site including the positive and negative social and economic impacts of the way it is managed is understood and reflected in management goals and objectives. 3.1 DEVELOP AND IMPLEMENT A LONG-TERM MANAGEMENT STRATEGY: The site has a long-term	<ul> <li>2.4.1 The social and economic characteristics of the region that may be affected (positively or negatively) by the site's designation and /or current management have been identified and the location, extent and magnitude of effects of the site on social and economic characteristics have been described in the management plan or equivalent.</li> <li>3.1.1 The site has a current management plan or functional equivalent which includes:</li> <li>a) the goals and objectives</li> </ul>	<ul> <li>4.3 Description of the site</li> <li>4.4 Key values of the site</li> <li>4.4 Key values of the site</li> <li>2.3 Maldives marine sites management plans</li> <li>4.9 Management Objectives</li> </ul>
u t	strategy that provides a clear explanation of the overall goals and objectives of management (explicitly including the conservation of the area's major values and achievement of its social and economic goals and objectives). This is reflected in an up-to- date management plan or its functional equivalent, which: - Provides clear and appropriate management directions: Strategies and actions specified in plans, policies and procedures are appropriate and sufficient to achieve the planned goals and objectives for the area.	for management of the natural values and social and/or economic objectives (where relevant) identified in Component 2 b) the management strategies and activities to achieve these goals over the long term and an indication of the activities that are allowed or prohibited in the site and any zoning or temporal / spatial restrictions on acc	<b>4.10</b> Management Strategies

	IUCN GREEN LIST STANDARD CRITERION DESCRIPTION	IUCN GREEN LIST STANDARD INDICATOR DESCRIPTION	SECTIONS IN MALDIVES NATIONAL MANAGEMENT PLAN GUIDANCE FOR PCAS THAT ALIGN WITH GREEN LIST STANDARD INDICATORS
	- Demonstrates adequate capacity to manage effectively: Key strategies and associated activities to achieve goals and objectives in the long-term are	<b>3.1.3</b> Adequate, functional and safe equipment and infrastructure is available and accessible to staff as appropriate to manage the site.	
supported by adequate financial and human resources, adequate staff competency, capacity development and training; appropriate access to equipment and adequate infrastructure; and measures are in place to deal with critical shortfalls.	<b>3.1.4</b> The site has adequate numbers of appropriately trained staff, led by an effective management team, to implement all aspects of its management plan in the long term.		
		<b>3.1.5</b> Management efforts support equity, including gender equity, related to site management.	
	<b>3.2 MANAGE</b> <b>ECOLOGICAL CONDITION:</b> Management can clearly demonstrate that ecological attributes and processes are being managed to maintain the area's major natural values and	<b>3.2.1</b> Strategies and actions to maintain ecological attributes and processes (including natural disturbances) to maintain or enhance the site's major values are identified and implemented.	<b>4.10</b> Management strategies / action plans - Ecological
	associated ecosystem services.	<b>3.2.2</b> The site can demonstrate that management activities related to natural values are being implemented and are sufficient for the maintenance of the site's major natural values and ecological processes.	
	3.3 MANAGE WITHIN THE SOCIAL AND ECONOMIC CONTEXT OF THE SITE: Management can clearly demonstrate that: - Rights- holders and stakeholders are	<b>3.3.1</b> The social and economic context of the site has been incorporated into management, based on consideration of social and economic goals and objectives for the site, as established in Criterion 2.4.	<b>4.10</b> Management strategies / action plans - Social, cultural and economic

IUCN GREEN LIST STANDARD CRITERION DESCRIPTION	IUCN GREEN LIST STANDARD INDICATOR DESCRIPTION	SECTIONS IN MALDIVES NATIONAL MANAGEMENT PLAN GUIDANCE FOR PCAS THAT ALIGN WITH GREEN LIST STANDARD INDICATORS
recognized and engaged effectively by management, and their interests are fairly and fully considered; - The social and economic benefits of the area are Recognized, promoted and are being maintained, OR, where such maintenance is incompatible with the maintenance of the area's natural values, any restrictions are designed and implemented in consultation with, and preferably following the free, prior and informed consent of right -holders and stakeholders.	<b>3.3.2</b> Opportunities to enhance the social and economic benefit of the site to local communities (where consistent with conservation of major site values) are considered during reviews of management plan and through adaptive governance, management and planning processes.	<b>4.10</b> Management strategies/action plans - Social, cultural and economic
3.6 MANAGE ACCESS, RESOURCE USE AND VISITATION: When permitted, activities within the area that involve direct access to recourses are	<b>3.6.1</b> The types and levels of permitted activities are clearly described, and are compatible with the conservation of major site values.	<b>4.6</b> Governance <b>4.7</b> Boundary and zonation
direct access to resources are compatible with and support the achievement of the area's conservation goals and objectives, meet the needs of users, and are properly regulated. When permitted, tourism and visitor management are compatible with and support the achievement of the area's conservation goals and objectives.	<ul> <li>3.6.2 Where use and access are permitted:</li> <li>Uses and access are managed to minimise harm to the major site values, for example through permits, design, access control, or education</li> <li>The site's management strives to accommodate the needs of users, so far as this is compatible with the achievement</li> </ul>	

IUCN GREEN LIST STANDARD CRITERION DESCRIPTION	IUCN GREEN LIST STANDARD INDICATOR DESCRIPTION	SECTIONS IN MALDIVES NATIONAL MANAGEMENT PLAN GUIDANCE FOR PCAS THAT ALIGN WITH GREEN LIST STANDARD INDICATORS
	<b>3.6.3</b> The nature and level of permitted access for visitors are clearly described and are compatible with the conservation of major site values and objectives.	<b>4.6</b> Governance <b>4.7</b> Boundary and zonation
	<ul> <li>3.6.4 Where visitor access is permitted:</li> <li>Visitor impacts are managed to minimise harm to major site values, for example through permits, access control, the provision and siting of facilities, education and enforcement</li> <li>There is no evidence that the impacts of visitors are majorly threatening the achievement of the site's objectives</li> <li>Visitor services and facilities are appropriate to the character, values and use of the site</li> <li>Visitor services and facilities meet specified safety standards</li> <li>Visitor services and facilities meet reasonable standards of environmental sustainability</li> <li>Interpretive, educational and information services for visitors meet visitors' needs (e.g. the needs of different audiences or age groups)</li> <li>The tourism industry within the site is managed to support the site's objectives</li> <li>Consideration has been given to the use of the site by disadvantaged</li> </ul>	

	IUCN GREEN LIST STANDARD CRITERION DESCRIPTION	IUCN GREEN LIST STANDARD INDICATOR DESCRIPTION	SECTIONS IN MALDIVES NATIONAL MANAGEMENT PLAN GUIDANCE FOR PCAS THAT ALIGN WITH GREEN LIST STANDARD INDICATORS
	<ul> <li><b>3.7 MEASURE SUCCESS:</b></li> <li>Monitoring, evaluation and learning provide an objective basis for determining measures of success. Monitoring and assessment programmes should be capable of providing data on: <ul> <li>Whether each of the site's major values is being successfully protected;</li> <li>Level and intensity of threats; and</li> <li>Achievement of management goals and objectives.</li> </ul> </li> <li>As appropriate, thresholds may be determined by changes in major values over a specified time period compared to those anticipated without the protected and conserved area.</li> </ul>	<ul> <li>3.7.1 For each of the major site values identified under Criterion 2.1, a monitoring system is in place and a set of performance measures has been defined and documented, which provides an objective basis for determining whether the associated value is being successfully protected.</li> <li>3.7.2 A threshold level has been specified and assessed in relation to each set of performance measures that relate to natural values, that if achieved, is considered to demonstrate objectively that the associated major site value is being successfully conserved.</li> <li>As appropriate, threshold determination can include the assessment of conservation impact based on change in major values over a specified time period compared to those anticipated without the protected and conserved area.</li> </ul>	<b>4.12</b> Monitoring and evaluation
4. SUCCESSFUL CONSERVATION OUTCOMES	4.1 DEMONSTRATE CONSERVATION OF MAJOR NATURAL VALUES: The area is meeting or exceeding the performance thresholds for nature conservation, consistent with its IUCN protected area management category.	<b>4.1.1</b> The site meets or exceeds the performance thresholds for the conservation of major natural values, specified in Indicator 3.7.2, or meets the requirements specified in Indicator 4.1.2.	<b>4.12</b> Monitoring and evaluation

	IUCN GREEN LIST STANDARD CRITERION DESCRIPTION	IUCN GREEN LIST STANDARD INDICATOR DESCRIPTION	SECTIONS IN MALDIVES NATIONAL MANAGEMENT PLAN GUIDANCE FOR PCAS THAT ALIGN WITH GREEN LIST STANDARD INDICATORS
2. SOUND DESIGN & PLANNING	4.1 DEMONSTRATE CONSERVATION OF MAJOR ASSOCIATED ECOSYSTEM SERVICES: The area is maintaining and providing the major ecosystem service values.	ON OF MAJOR       exceeds the performance         ECOSYSTEM       measures for the conservation of ecosystem services, as specified in Indicator 3.7.1.         ntaining and najor       measures for the conservation of ecosystem services, as specified in Indicator 3.7.1.	
	4.3 DEMONSTRATE CONSERVATION OF MAJOR CULTURAL VALUES: The area is maintaining and providing for the persistence of major cultural values.	<b>4.3.1</b> The site meets or exceeds the performance measures for the conservation of cultural values, as specified in Indicator 3.7.1.	

7. APPENDIX 2. METT-4 THREAT CATEGORIES

## 7. APPENDIX 2. METT-4 THREAT CATEGORIES

Table 5 provides a list of threat categories as listed in the Management Effectiveness Tracking Tool, version 4 (METT-4).

This list can be used by PCA Managers to methodologically consider potential

threats associated with the PCA in question, however, please note it is not an exhaustive list and many of the threats listed may not be applicable to a marine PCA.

 TABLE 5:
 List of threat categories and sub-categories related to protected and

 conserved areas from the Management Effectiveness Tracking Tool, version 4 (METT-4)

NO.	THREAT CATEGORY	THREAT SUB-CATEGORY
1.	<b>Residential and commercial</b> <b>development within a protected area</b> Threats from human settlements or other non- agricultural land uses with a substantial footprint.	<ul> <li>Housing and settlement</li> <li>Commercial and industrial areas</li> <li>Tourism and recreation infrastructure</li> </ul>
2.	Agriculture and aquaculture within a protected area (including silviculture and mariculture). Threats from farming and grazing as a result of agricultural expansion and intensification, including silviculture, mariculture and aquaculture.	<ul> <li>Annual and perennial non- timber crop cultivation.</li> <li>Drug cultivation (narcotics and other illegal drugs)</li> <li>Wood and pulp plantations.</li> <li>Livestock farming and grazing.</li> <li>Marine and freshwater aquaculture.</li> </ul>
3.	<b>Energy production and mining</b> Threats from production of non-biological resources.	<ul> <li>Oil and gas extraction</li> <li>Mining and quarrying</li> <li>Energy generation, including from hydropower dams, wind farms and solar panels.</li> </ul>
4.	<b>Transportation and service corridors</b> Threats from transport and a range of linear developments, including the vehicles that use some of them, such as wildlife mortality.	<ul> <li>Roads and railroads (include road killed animals)</li> <li>Utility and service lines (e.g., electricity cables, telephone lines)</li> <li>Tourism and recreation infrastructure</li> <li>Flight paths (e.g., aeroplanes, hot air balloons, gliders etc)</li> </ul>

NO.	THREAT CATEGORY	THREAT SUB-CATEGORY
5.	<b>Biological resource use and harm</b> Threats from consumptive use of "wild" biological resources including both deliberate and unintentional harvesting effects; also persecution or control of specific species (note this includes hunting and killing of animals).	<ul> <li>Hunting, killing and collecting terrestrial (native) animals (including killing of animals as a result of human/wildlife conflict).</li> <li>Gathering terrestrial (native) plants or plant products (non-timber).</li> <li>Logging</li> <li>Fishing, killing and harvesting (native) aquatic resources.</li> </ul>
6.	Human intrusions and disturbance Threats from human activities that alter, destroy or disturb habitats and species associated with non-consumptive uses of biological resources.	<ul> <li>Recreational activities and tourism</li> <li>War, civil unrest and military exercises.</li> <li>Research, education and other activities.</li> <li>Activities of park authority (e.g., construction or vehicle use, artificial watering points and dams)</li> <li>Deliberate vandalism, destructive activities or threats to protected area staff and visitors.</li> <li>Impacts from cultural and religious tourism.</li> </ul>
7.	<b>Natural system modifications</b> Threats from other actions that convert or degrade habitat or change the way the ecosystem functions.	<ul> <li>Habitat clearing</li> <li>Fire and fire suppression (including arson)</li> <li>Dams, hydrological modification and water management/use</li> <li>Increased fragmentation</li> <li>Isolation from other natural habitat (e.g., deforestation, dams without effective aquatic wildlife passages)</li> <li>Other 'edge effects' on park values</li> <li>Loss of keystone species (e.g., top predators, pollinators etc)</li> </ul>
8.	Invasive and other problematic species and genes	<ul> <li>Invasive non-native/alien plants (weeds)</li> <li>Invasive non-native/alien animals</li> <li>Pathogens (non-native or native but creating new/increased problems)</li> <li>Introduced genetic material (e.g., genetically modified organisms)</li> </ul>

NO.	THREAT CATEGORY	THREAT SUB-CATEGORY
9.	<b>Pollution entering or generated</b> Threats from introduction of exotic and / or excess materials or energy from point and non-point sources.	<ul> <li>Household sewage and urban waste water</li> <li>Sewage and waste water from protected area facilities (e.g., toilets, hotels etc)</li> <li>Industrial, mining and military effluents and discharges (e.g., unnatural temperatures, de-oxygenated, higher salinity, other</li> <li>Agricultural and forestry effluents (e.g., excess fertilisers or pesticides)</li> <li>Garbage and solid waste</li> <li>Air-borne pollutants</li> <li>Excess energy (e.g., heat pollution, lights etc)</li> <li>Sound pollution (especially from roads)</li> </ul>
10.	<b>Geological events</b> Geological events may be part of natural disturbance regimes in many ecosystems but they can be a threat if a species or habitat is damaged and has lost its resilience and is vulnerable to disturbance. Management capacity to respond to some of these changes may be limited.	<ul> <li>Volcanoes</li> <li>Earthquakes/Tsunamis</li> <li>Avalanches/Landslides</li> <li>Erosion and siltation/deposition (e.g., shoreline or riverbed changes)</li> </ul>
11.	<b>Climate change and severe weather</b> Threats from long-term climatic changes which may be linked to global warming and other sever climatic/weather events outside of the natural range of variation.	<ul> <li>Habitat shifting and alteration</li> <li>Droughts</li> <li>Temperature extremes</li> <li>Storms and flooding</li> <li>Ocean acidification</li> <li>Sea level rise</li> </ul>
12.	Cultural and social threats	<ul> <li>Loss of cultural links, traditional knowledge and/or management practices and use.</li> <li>Natural deterioration of important cultural site values.</li> <li>Destruction of cultural heritage buildings, gardens, sites etc.</li> <li>Loss of land tenure (including land grabbing)</li> </ul>
13.	Governance Problems	<ul> <li>Conflicting policies across sectors</li> <li>Confusion about government roles and responsibilities.</li> </ul>

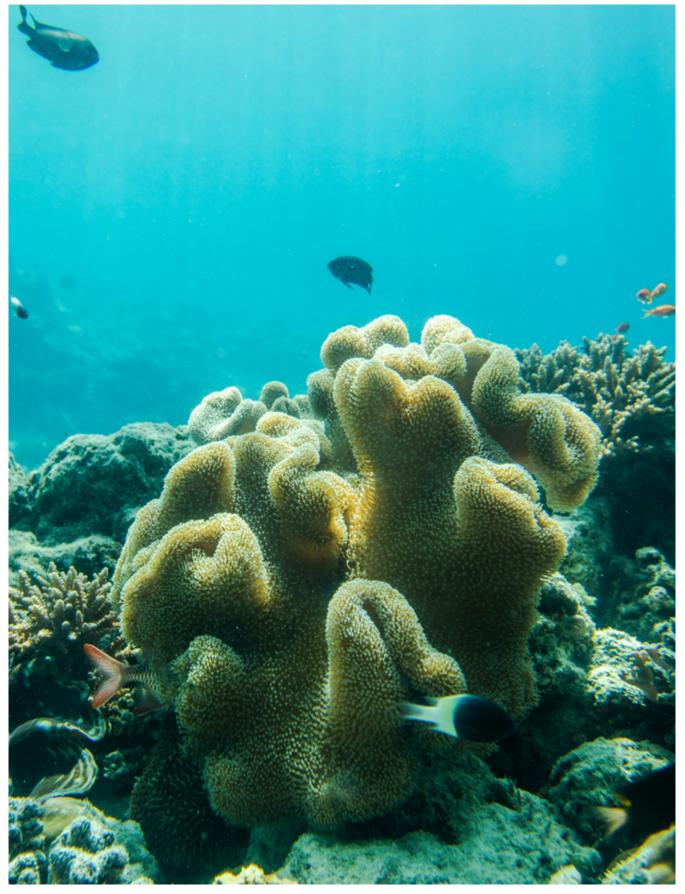


PHOTO BY: ISHAN (SEE FROM THE SKY)

## MALDIVES NATIONAL MANAGEMENT PLAN GUIDANCE FOR PROTECTED & CONSERVED AREAS

AUGUST 2024

