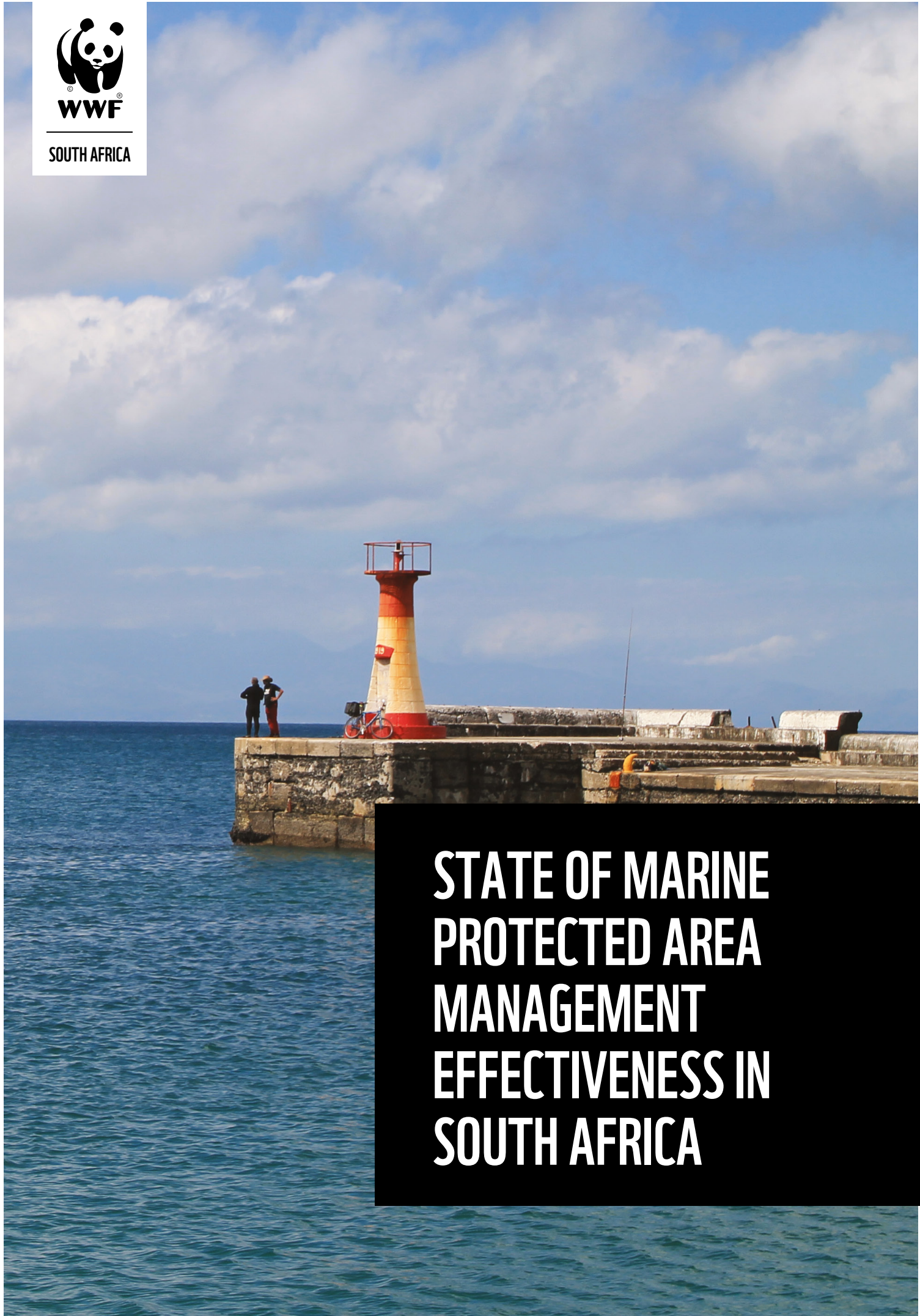




SOUTH AFRICA



STATE OF MARINE PROTECTED AREA MANAGEMENT EFFECTIVENESS IN SOUTH AFRICA

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FOREWORD

South Africa is recognised globally as a marine biodiversity hotspot, with close to 13,000 marine species identified from our oceans. Moreover, almost a third of all these species recorded here are endemic to South Africa, ranking South Africa as the third highest in terms of marine species endemism in the world.

As a country we are truly privileged to have such a wealthy heritage of natural marine resources that can be used for food security, job creation, sport, recreation, medicinal purposes and cultural activities. The oceans are also vitally important in regulating our climate and act as a buffer to climate change by sequestering carbon. However, with such a great privilege comes great responsibility to protect the oceans and their abundant resources for our wellbeing and for the benefit of generations to come. Government acknowledges this responsibility and has internationally committed the country to expand marine protected areas (MPAs) to reach 10% coverage of South Africa's exclusive economic zone (EEZ). MPAs are one of the most important tools to safeguard our marine natural heritage by protecting vulnerable and important habitats, ecosystems and environmental processes, and can assist in contributing to more productive fisheries. MPA expansion, by itself, will not bring about the desired impact. This impact will only be truly realised if all MPAs are also effectively managed.

WWF has been working alongside government in developing a rapid assessment tool to track management effectiveness, namely the MPA Management Effectiveness Tracking Tool (METT). METT assessments are conducted by WWF in consultation with MPA management authorities approximately every 5 years, with the first METT conducted in 2009. The 2018 METT assessment is particularly special in the manner in which the METT data are presented. Robin Adams, who is the MPA Forum co-ordinator for WWF and was a former CapeNature and SANPARKS manager, and Peter Kowalski, MPA Professional (WIO-COMPAS), fully deserve the credit in using their experiences and insights in redesigning the METT report to make it more concise and user-friendly. This allows management authorities to quickly understand the major MPA deficiencies and the report also provides useful recommendations on priority next steps. The MPA scorecard has been abandoned in favour of the traffic light system and works well to focus attention on priority areas. The report recommendations are also written to promote stepwise improvement in MPA management effectiveness. The ability to compare an MPA assessment to the overall assessment for the MPA management authority is thoughtfully considered, which is hoped to encourage more collaboration within a management authority in addressing strategies and next steps.

The METT is not perfect yet as MPA objectives would need to be considered in assessing overall effectiveness of MPAs, but this version is certainly a major step up. This resource represents an indispensable aid for any prudent MPA manager and is useful in assisting with prioritisation of funding, strategy development and MPA work going forward. Looking ahead to the next METT assessment in 2024 it is hoped that this MPA METT will support management authorities in improving all MPAs effectiveness scores to at least basic management levels.

CRAIG SMITH

Senior Manager: Marine Programme (WWF)

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ABBREVIATIONS

APO	Annual plan of operations
CBD	Convention on Biological Diversity
DFFE	Department of Forestry, Fisheries and the Environment
DFFE: O&C	Department of Forestry, Fisheries and the Environment, Branch: Oceans and Coast
ECPTA	Eastern Cape Parks and Tourism Agency
EEZ	Exclusive economic zone
EMI	Environmental Management Inspector
FCO	Fishery Control Officer
KPA	Key performance area
KZN	KwaZulu-Natal (province of South Africa)
METT	Management Effectiveness Tracking Tool
MLRA	Marine Living Resources Act
MPA	Marine protected area
NEMA	National Environmental Management Act
NEM: PAA	National Environmental Management: Protected Areas Act
NEM: BA	National Environmental Management: Biodiversity Act
NEM: ICMA	National Environmental Management: Integrated Coastal Management Act
NHRA	National Heritage Resources Act
PA	Protected area
SA	South Africa(n)
SAHRA	South African Heritage Resources Agency
SAMSA	South African Maritime Safety Authority
SANParks	South African National Parks
SAPS	South African Police Service
WWF	World Wide Fund for Nature

EXECUTIVE SUMMARY

WWF introduced the Management Effectiveness Tracking Tool (METT) to the South African marine protected area (MPA) network in 2009.

The METT allows MPA managers to identify needs, constraints and priority actions to improve the effectiveness of MPA management. This rapid site-level self-assessment tool has since been adapted by Government and serves as the primary tool for monitoring the management effectiveness of protected areas (PAs) throughout South Africa. The questionnaire used in this tool assesses MPA management effectiveness by scoring indicators in six major areas of MPA management: context, planning, inputs, outputs, process and outputs.

In cooperation with Government, nationwide MPA METT assessments were conducted by WWF in 2009 and 2013. A *State of Management of South Africa's Marine Protected Areas* report was then produced following the completion of each nationwide assessment. While the METT has been a very useful tool used for MPAs to monitor their management effectiveness trends, the results of METT-SA Version 3 (METT-SA 3) cannot be directly compared to those of previous versions. The present document is the report for the 2018 assessment using METT-SA 3. The version used during this assessment was adapted by Government and as such cannot be used to compare results from previous versions; therefore, this MPA METT assessment will serve as the baseline for assessing future MPA management effectiveness trends in South African MPAs.

For the 2018 MPA METT assessment, managers and staff from 27 sites (19 coastal MPAs, 1 lagoon MPA, 4 island MPAs and 3 island nature reserves) completed the METT-SA 3 questionnaire. As a self-assessment tool, the METT assessment process relies on the honesty and correct interpretation of the METT by MPA managers and participants. All MPA staff conducted the METT process with professionalism and a clear knowledge and understanding of their respective MPAs. To ensure accuracy and consistency, WWF and Department of Forestry, Fisheries and the Environment (DFFE) representatives engaged in interviews, discussions and site visits with the MPA managers and staff to verify the METT results for each MPA.

The METT results for an MPA are not a 'scorecard' of the MPA manager's performance since many indicators measure items not directly controlled by MPA managers (e.g. legal status, MPA design, budget security). Instead, the results reflect the management effectiveness trends within the context of each MPA management authority. However, this tool is not designed to compare scores between sites or management authorities. To avoid the pitfalls of score-based management, a simplified colour-based system was used to highlight where urgent action is required in an MPA to improve management effectiveness. In this system, the colour red denotes priority indicators (0–33% score) where MPA management needs improvement, while orange denotes indicators with basic management (66% management effectiveness score) that

require improvement and green denotes indicators with optimal management (100% score).

Overall, the challenges faced by South African MPAs have largely remained unchanged since the previous METT assessment. While certain indicators of MPA effectiveness were optimally managed across all MPAs in South Africa, the majority of MPAs continue to lack adequate funding, staffing and resources, extensive monitoring to inform adaptive MPA management, adequate public awareness programmes, effective law enforcement, and adequate cultural heritage management.

This report proposes a phased approach to achieving optimal MPA management effectiveness that is guided by regular METT assessments (approximately every 5 years). The first step of this approach (Phase 1) involves urgently addressing priority management effectiveness indicators to achieve a basic management level while maintaining indicators that already have a basic or optimal management level. Phase 2 begins after all management effectiveness indicators have reached a basic management level. This phase involves improving indicators with a basic management level to an optimal management level. Phase 3 then begins after all management effectiveness indicators are at an optimal level. At this phase, all management effectiveness indicators should continue to be monitored, maintained and managed via regular METT assessments to identify and address areas of management concern. Since the METT is a rapid site-level self-assessment tool that identifies actions aimed towards optimal management effectiveness, MPA managers should be trained in implementing adaptive management to achieve and maintain optimal management effectiveness.

Besides providing MPA-level results, METT results were also pooled to highlight priority management effectiveness indicators and analyse trends across management authorities and the entire South African MPA network. Notably, MPAs with priority indicators can collaborate with and learn from other MPAs managed under the same management authority that optimally manage those indicators. Collaboration could also occur at the MPA network level between management authorities—a process that can be facilitated via the MPA Forum.

When combined with regular METT assessments, this phased approach to achieving optimal MPA management effectiveness can serve as a tool to address priority management effectiveness indicators that Government and management authorities can focus on to assist MPA managers and staff in improving their MPA management effectiveness. Over time, this phased approach should ultimately result in optimal management effectiveness across the entire South African MPA network.

SOUTH AFRICA: MARINE PROTECTED AREA NETWORK OVERVIEW

WHAT IS A MARINE PROTECTED AREA?

A marine protected area (MPA) is a legally designated area of coast and/or ocean that is managed to protect marine habitats, ecosystems, species and natural processes. MPAs should contribute to the resilience, maintenance and restoration of ecosystem services while supporting good governance as well as socio-economic and cultural objectives.

When MPAs are effectively managed and proven to be effective in meeting their objectives, their benefits can include:

- Increased biodiversity protection that results in greater biomass production
- The maintenance of ecosystem services that increase resilience
- Fish ‘spillover’ from MPAs to adjacent areas
- Increased socio-economic and recreational opportunities
- The provision of environmental health benchmarks for degraded areas outside of MPAs
- Protection of the geological features and/or processes of an MPA
- The identification and protection of cultural sites, cultural value and local indigenous knowledge
- Controlled environments for monitoring and research
- Opportunities to educate the public on the benefits of MPAs
- Sustainable public use and enjoyment of MPAs
- to preserve the ecological integrity of those areas;
- to conserve biodiversity in those areas;
- to protect areas representative of all ecosystems, habitats and species naturally occurring in South Africa;
- to protect South Africa’s threatened or rare species;
- to protect an area which is vulnerable or ecologically sensitive;
- to assist in ensuring the sustained supply of environmental goods and services;
- to provide for the sustainable use of natural and biological resources;
- to create or augment destinations for nature-based tourism;
- to manage the interrelationship between natural environmental biodiversity, human settlement and economic development;
- generally, to contribute to human, social, cultural, spiritual and economic development; or
- to rehabilitate and restore degraded ecosystems and promote the recovery of endangered and vulnerable species.

WHAT IS THE PURPOSE AND FUNCTION OF SOUTH AFRICA’S MARINE PROTECTED AREAS?

The purposes and functions stated for declaring South African MPAs under the National Environmental Management: Protected Areas Act (NEM: PAA) 57 of 2003 include:

- To protect ecologically viable areas representative of South Africa’s biological diversity and its natural landscapes and seascapes in a system of protected areas;

HOW MANY MARINE PROTECTED AREAS DOES SOUTH AFRICA HAVE?

Before 2019, the South African MPA network consisted of 24 MPAs (19 coastal, 1 lagoon and 4 island MPAs) within South Africa’s mainland exclusive economic zone (EEZ), plus 1 MPA located outside of the mainland EEZ (Prince Edward Islands MPA) (see Figure 7, p. 15).

These MPAs—excluding Prince Edward Islands MPA—made up 0.5% of South Africa’s EEZ. However, by declaring an additional 20 MPAs in 2019, South Africa increased its MPA network to 5.4% of its EEZ, resulting in a total of 42 MPAs (for more information on the current MPA network, visit www.marineprotectedareas.org.za).

The 2018 MPA METT assessment was conducted on 27 sites (19 coastal MPAs, 1 lagoon MPA, 4 island MPAs and 3 island nature reserves). Thus, the present report will focus on the findings and context of these sites only.

WHAT LEGISLATION GOVERNS SOUTH AFRICAN MARINE PROTECTED AREAS?

In South Africa, it is the responsibility of the Government to provide a safe and healthy environment, as stated in a range of legislation and the Constitution.

Section 24 of the Constitution enshrines environmental rights in South Africa by stating that everyone has the right to an environment that is not harmful to their health or well-being and to have the environment protected. Thus, the State has a duty to realise the right to environmental protection and is further required to protect against any harmful conduct towards the environment by legislative means. For example:

- MPAs are declared and managed under the National Environmental Management: Protected Areas Act (NEM: PAA) 57 of 2003 (link: <https://www.gov.za/documents/national-environmental-management-protected-areas-act>).
- MPA staff use the Marine Living Resources Act (MLRA) 18 of 1998 and its Regulations to assist them with many MPA compliance issues (link: <https://www.gov.za/documents/marine-living-resources-act-27-may-1998-0000>).
- Coastal issues such as development and transgressions in the coastal zone are managed via the National Environmental Management: Integrated Coastal Management Act (NEM: ICMA) 24 of 2008 and its Regulations (link: <https://www.gov.za/documents/national-environmental-management-integrated-coastal-management-act>).
- Biodiversity is managed using the National Environmental Management: Biodiversity Act (NEMA: BA) 10 of 2004 (link: <https://www.gov.za/documents/national-environmental-management-biodiversity-act-0>).
- Cultural heritage sites and shipwrecks in MPAs are administered by the South African Heritage Resources Agency (SAHRA) and managed using the National Heritage Resources Act (NHRA) 25 of 1999 (link: <https://www.gov.za/documents/national-heritage-resources-act>).

WHAT LEGAL DESIGNATIONS DO SOUTH AFRICA'S MPAS HAVE?

- Many of South Africa's coastal MPAs were declared under Section 43 of the MLRA. However, on 16 May 2014, the

Marine Living Resources Amendment Act 5 of 2014 (link: <https://www.gov.za/documents/marine-living-resources-amendment-act-0>), which repealed Section 43 of the MLRA with effect from 2 June 2014, was signed into law. Thus, all South African MPAs declared under the MLRA are now legislated under the NEM: PAA and the MPA management mandate was also amended and moved under the NEM: PAA (Amendment Act 21 of 2014).

- Zones within MPAs can be classified as follows:
 - **Restricted** – This is a no-take area or zone in an MPA (or a complete MPA) where no disturbance, extraction or harvesting of marine resources and plant life is permitted.
 - **Controlled** – This is an open area or zone in an MPA where the extraction and harvest of marine resources are allowed with a valid permit and under restrictions related to species, bag and size limits. Permits can be purchased that can allow for activities such as:
 - Scuba diving
 - Rock and shore angling
 - Fishing from a vessel
 - Bait collection
 - Jet ski use
 - Harvesting molluscs
 - Professional photography
 - Filming
 - Research

WHAT OTHER PROTECTED STATUS CAN SOUTH AFRICA'S OCEANS BE GIVEN?

- **Wilderness areas**
 - This is an area that forms part of an MPA where no extraction is allowed but non-consumptive ecotourism activities that do not disturb the wilderness ecology and habitats can operate with a permit (permit conditions ensure no harm to the environment). Examples of such activities include great white shark cage diving, boat-based whale watching, filming and scenic boat cruises.
- **Sanctuary area**
 - This is an area of ocean and/or coast that is legally protected to allow for research and the protection of wildlife spawning grounds and aggregation areas. An example of a sanctuary area is the Walker Bay Whale Sanctuary, where an area of ocean has been granted protection to allow for cetacean aggregations to remain free from disturbance.

WHAT ENFORCEMENT POWERS DO MPA STAFF HAVE?

MPA staff are afforded search, seizure and arrest powers that they can enforce if trained, designated and appointed under the following legislation:

- Provincial ordinances if appointed as Peace Officers in provincially-managed MPAs.
- Municipal by-laws if appointed as Peace Officers in municipally-managed MPAs.
- South African Maritime Safety Authority (SAMSA) Small Vessel Safety Regulations if appointed by SAMSA as a Safety Officer.
- MLRA regulations if appointed as a Fishery Control Officer (FCO).
- NEM: PAA and NEM: ICMA regulations if trained and appointed as an Environmental Management Inspector (EMI).

South African MPAs face many challenges that impact the effectiveness of their enforcement staff:

- Inadequate funds to equip, train and maintain the training of enforcement staff.
- Due to remoteness and a lack of enforcement staff, many MPA offices have no relationship with local courts, prosecutors and police stations.
 - All MPAs should have a relationship with their local court and police station since prosecutors that understand an MPA's function and context can assist in MPA cases that appear on the court roll. MPAs should investigate the possibility of inviting local prosecutors to their MPA to enable them to better understand the MPA, its objectives, operations and threats.
- MPA staff seldom participate in local law enforcement forums.
 - Such forums can develop relationships with the local police and Department of Forestry, Fisheries and the Environment (DFFE) enforcement staff.
- Many MPAs lack regular scientific research and monitoring to facilitate adaptive management practices that protect species and habitats from threats.
- Many MPAs lack a standard threat analysis template.
 - Such a template can highlight where illegal activities occur and facilitate action plans to implement law enforcement mitigation measures with the South African Police Service (SAPS) and/or DFFE.
- The inadequate, vandalised and/or missing boundary beacons and signage for many MPAs result in a lack of compliance among MPA users.

“MPAs were created to achieve a number of objectives, such as protecting certain features or populations of animals, or recovering populations back to a healthy level, or improving some human enterprise such as SCUBA diving, or whale watching and of course fish yield. We need to know if these MPAs were successful or not, and we do that by collecting data on the metrics concerned. We need to know how many fish there are, and how many tourists visit the area and if those tourists were satisfied with their experience or not. How much revenue was derived and how much effort was spent in managing the area? We need to measure wider than the MPAs too, because ultimately we expect the MPAs to improve the broader marine and coastal environment, ecologically and socially. We must never stop measuring! And then of course we need to crunch the numbers and report on the success or otherwise of the MPAs. How else will we know if we are doing the right thing?”

Dr C Attwood - UCT

THE MANAGEMENT EFFECTIVENESS TRACKING TOOL

PURPOSE AND HISTORY

WWF introduced the Management Effectiveness Tracking Tool (METT) to the South African MPA network in 2009 (Tunley, 2009). The METT allows protected area (PA) managers to identify needs, constraints, priority actions and progress over time to improve the effectiveness of PA management. This rapid site-level self-assessment tool has since been adapted by Government and serves as the primary tool for monitoring management effectiveness in PAs throughout South Africa. The questionnaire used in this tool assesses and summarises MPA management effectiveness by scoring indicators within six major areas of MPA management (see Figure 1).

In cooperation with Government, nationwide MPA METT assessments were conducted by WWF in 2009 and 2013. A *State of Management of South Africa's Marine Protected Areas* report was then produced following the completion of each nationwide assessment. The goal of these assessments is to collect management effectiveness data from the South African MPA network approximately every 5 years to identify management effectiveness trends and priority indicators where action is needed to improve MPA management effectiveness.

The present document represents the report for the 2018 assessment using METT-SA Version 3 (METT-SA 3), which was adapted from previous versions (Tunley, 2009; Chadwick et al., 2014). This MPA METT assessment will serve as the baseline for studying future MPA management effectiveness trends in South African MPAs. Due to changes across versions of the METT-SA, it was not possible to directly compare the results of the present assessment with those of previous assessments.

The 2018 MPA METT assessment was completed by WWF and the Department of Forestry, Fisheries and the Environment: Oceans and Coasts (DFFE : O&C) with the cooperation of MPA managers, MPA stakeholders and staff that the MPA managers or management authorities deemed relevant. MPA managers and staff from 27 sites (19 coastal MPAs, 1 lagoon MPA, 4 island MPAs and 3 island nature reserves) across seven management authorities completed the METT-SA 3 questionnaire. As a self-assessment tool, the METT assessment process relies on the honesty and correct interpretation of the METT by MPA managers and participants. To ensure accuracy and consistency, WWF and Government engaged in interviews, discussions and site visits with the MPA managers and staff to verify the METT

results for each MPA. All MPA staff conducted the METT process with professionalism and a clear knowledge and understanding of their respective MPAs. In some cases, the scores supplied by MPA staff were questioned and resulted in the METT indicator scores provided by the manager either being increased, decreased or deemed not applicable. A consensus agreement was reached for all scores before they were recorded by WWF. The scores and next steps recorded on the METT score sheet then served as the data used to compile the present report.

FIGURE 1 - MAJOR AREAS OF MARINE PROTECTED AREA MANAGEMENT EFFECTIVENESS ASSESSED USING THE MANAGEMENT EFFECTIVENESS TRACKING TOOL.



STRENGTHS AND WEAKNESSES

Strengths

- Functions as an MPA management tool.
- Designed as an easy site-specific rapid self-assessment tool for MPAs to improve management effectiveness.
- Identifies urgent MPA management actions required to improve management effectiveness and allows managers (with assistance from their management authority) to record the next steps they intend to implement for improvement.
- Many participants can be involved in the METT process.
- Allows MPA managers to have direct input in assessing MPA management effectiveness.
- Provides uniform baseline data on MPA management effectiveness across the South African MPA network.
- A relatively inexpensive exercise.

Weaknesses

- Weak in addressing the socio-economic contribution of MPAs to adjacent communities and the outcomes of measuring biodiversity objectives.
- The METT does not directly address any issues related to climate change.
- Low scores for certain indicators can reflect the processes and systems of management authorities and are not within the control of MPA managers.
- Assessors can interpret METT indicators differently for the same MPA, which can result in scoring discrepancies between MPA managers and their supervisors.
- Using the METT does not result in immediate improvements to MPA management effectiveness since the METT tracks trends over time.
- Not being able to measure the trends over time due to the METT template changing (e.g. results from Version 3 cannot be directly compared to Version 1).

- Some MPA budgets are not increased annually, which impacts management effectiveness but is not reflected in the METT results.

SCORING AND EVALUATION

South Africa’s MPAs are managed by many passionate, committed and highly-experienced staff. However, they face many challenges in striving to maintain management effectiveness. For example, previous *State of Management of South Africa’s Marine Protected Areas* reports (Tunley, 2009; Chadwick et al., 2014) noted that challenges such as understaffing, a lack of resources, lack of research data and underfunding prevent optimal management effectiveness. That is why an approach to improving MPA management effectiveness should begin by identifying priority indicators that require urgent management intervention while maintaining indicators that are already at a basic or optimal management level.

For each indicator (i.e. question) in METT-SA 3, answers have an associated score ranging from either 0–1 or 0–3, with 0 being the lowest possible score (see Figure 2 for an example of the indicator scoring process).

Based on a global analysis of PA management effectiveness assessments, Leverington *et al.* (2008) divided scores into three equal ranges to create categories:

- <33%: Management inadequate
- 33–67%: Basic management with significant deficiencies
- ≥67%: Sound management

In a report by Cowan *et al.* (2010) on the management effectiveness of South Africa’s terrestrial PAs, scores of 67% or greater were also considered to reflect sound management. For consistency, this system was applied to individual indicators in the present MPA METT assessment (see Table 1, p. 11).

Hockings *et al.* (2018) noted that many METT users do not apply the tool optimally since they tend to focus on scores instead of the steps required to achieve management effectiveness—a trend that has also been observed in the South African context. This problem is exacerbated when METT scores are linked to the performance of MPA managers and staff.

FIGURE 2 - EXAMPLE OF SCORING FOR AN INDICATOR UNDER METT-SA 3.

2: Planning: Where do we want to be? All aspects of broad planning which set the longer term vision and objectives for the site						
Indicators	Answers			Rating	Comments & verification (Justify your selection and/or comment on current situation. Also make a note of the assumptions made. Where necessary provide verification for your score)	Next steps (Identify actions to improve the score by next evaluation)
Questions	(Select & score one of the following answers in each section that most closely fits your PA)		Value			
2.2 Management plan Is there an approved management plan as required by the relevant legislation?	There is no management plan with measurable objectives for the site.		0			
	A management plan with measurable objectives is being prepared or has been prepared.		1			
	An updated management plan with measurable objectives approved by the Minister/MEC (as applicable) exists.		2			
	An updated, integrated management plan with measurable objectives and covering all aspects of site management (see insert) is approved by the Minister/MEC (as applicable).		3			

TABLE 1 – COLOUR-BASED CLASSIFICATION SYSTEM FOR METT-SA 3 INDICATORS BASED ON SCORE.

Colour	RED	ORANGE	GREEN	CLEAR
Management Level	Priority	Basic	Optimal	Not Applicable
Indicator Score	0 (or a score of 1 on the 0–3 scale)	2	3 (or a score of 1 for the 0–1 scale)	N/A
Percent Value	0–33%	67%	100%	N/A
Implication	No management or seriously constrained	Basic level of management with improvement(s) required	Sound level of management	The indicator does not apply to the MPA

To address this chronic issue in the present METT assessment, a simplified colour-based system was used to highlight where urgent action is required in an MPA to improve management effectiveness (see Table 1). In this system, the colour red indicates priority indicators where MPA management needs improvement, while orange indicates areas of basic management that require improvement and green indicates areas of optimal management. The proposed system promotes urgent management action by clearly identifying priority indicators while avoiding the pitfalls of focusing on scores. This allows MPA managers and management authorities who are under-resourced to direct time and funds to address indicators that require urgent intervention. Ultimately, this scoring system returns the use of the METT in South African MPAs to its designed purpose as a rapid site-specific tool used by managers to ensure effective MPA management.

THE PHASED APPROACH TO ACHIEVING OPTIMAL MPA MANAGEMENT EFFECTIVENESS USING METT-SA 3

Optimal overall MPA management effectiveness can be achieved over time when priority indicators are identified and addressed. Thus, it is suggested that MPA managers and their agencies consider a phased approach to achieving optimal MPA management effectiveness (see Figure 3, p. 12).

Based on the METT assessment results, MPA managers could enact the phased approach to achieving optimal MPA effectiveness via the following steps:

Phase 1

Urgently address priority indicators

- Identify the priority (red) indicators for your MPA. In partnership with the MPA management authority, develop a system to address all priority indicators by prioritising the planning and implementation of actions to raise these indicators to a basic management level (orange) while

maintaining indicators that are already at the basic and optimal (green) management levels.

- Only proceed to Phase 2 once all priority indicators have been resolved.

Phase 2

Progress to optimal management

- Once indicators with only basic and optimal management levels exist, determine which indicators at a basic management level can be upgraded to an optimal level through management action. Then, plan and implement actions to raise these indicators to an optimal level while maintaining all existing optimally managed indicators at their current level.
- Only proceed to Phase 3 once all indicators with a basic management level have been resolved.

Phase 3

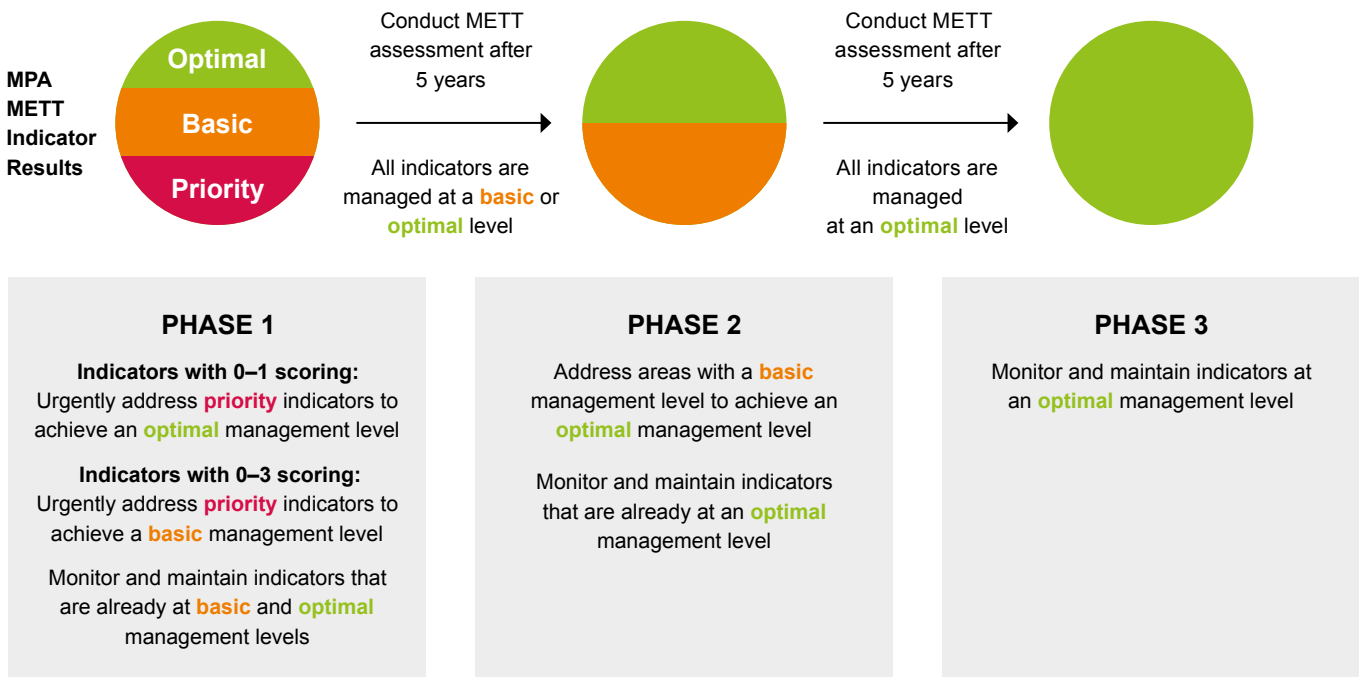
Maintenance of MPA management effectiveness

- Monitor, maintain and manage the optimally managed indicators through regular METT assessments (every 5 years) to highlight areas of concern. Plan and implement actions to mitigate any identified threats to management effectiveness.

One major goal should be to determine a simple and cost-effective method of eliminating the red indicators (Phase 1) to ensure that all South Africa’s MPAs are at least meeting the needs of management effectiveness at a basic level within the next 5 years. This would place the South African MPA network on track to achieving the goal of ensuring a higher level of overall management effectiveness (Phase 2).

Continuously evaluating management effectiveness every 5 years helps to ensure that the appropriate systems and processes are monitored and that South African MPAs are effectively managed.

FIGURE 3 - THE PHASED APPROACH TO ACHIEVING OPTIMAL MPA MANAGEMENT EFFECTIVENESS USING METT-SA 3 INDICATOR RESULTS.



VISUALISING DATA FOR INTERPRETATION

By colour-coding the METT results, MPA managers can rapidly identify problem areas. Instead of using a lengthy, in-depth matrix that must be assessed based on each metric value, the results for each MPA (presented in “Marine Protected Area Results”, pp. 16–126) are visualised as pie charts for each of the six major areas of MPA management (i.e. context, planning, inputs, outputs, process and outputs), with next steps provided for priority indicators that require urgent management action (see example in Figure 4, p. 13). This format consolidates the results and highlights the actions needed to address management requirements under Phase 1 of the approach toward optimal MPA management effectiveness.

Besides providing MPA-level results, METT results were also pooled to highlight priority management effectiveness indicators and analyse trends across management authorities (see example in Figure 5, p.13) and the entire MPA network (see example in Figure 6, p. 14). MPAs with priority indicators can collaborate with and learn from MPAs under the same management authority that optimally manage those indicators. This form of collaboration could also occur at the MPA network level between management authorities.

“Global research on protected areas management effectiveness has highlighted the strong relationship between effective management of Marine Protected Areas and the extent to which local communities are involved in the management of and benefit from an MPA. Research in South Africa has confirmed these findings: where there is poor communication with surrounding communities and they are not involved in the planning and management of the MPA, the effectiveness of the MPA is undermined. Local communities contribute valuable, dynamic local knowledge of marine ecosystem interactions and environmental change, most often derived over generations. If enabled to participate effectively and equitably, local communities can be critical custodians of marine and coastal ecosystems.”

Dr J Sunde - Board Member, ABALOBI ICT4FISHERIES

FIGURE 4 - EXAMPLE LAYOUT OF MPA METT RESULTS FOR THE CONTEXT SECTION.

(A) Pie chart summarising indicator results. Red sections are priority indicators, while orange sections are indicators with a basic management level and green sections are indicators with an optimal management level. (B) Table outlining priority indicators that require urgent management action.

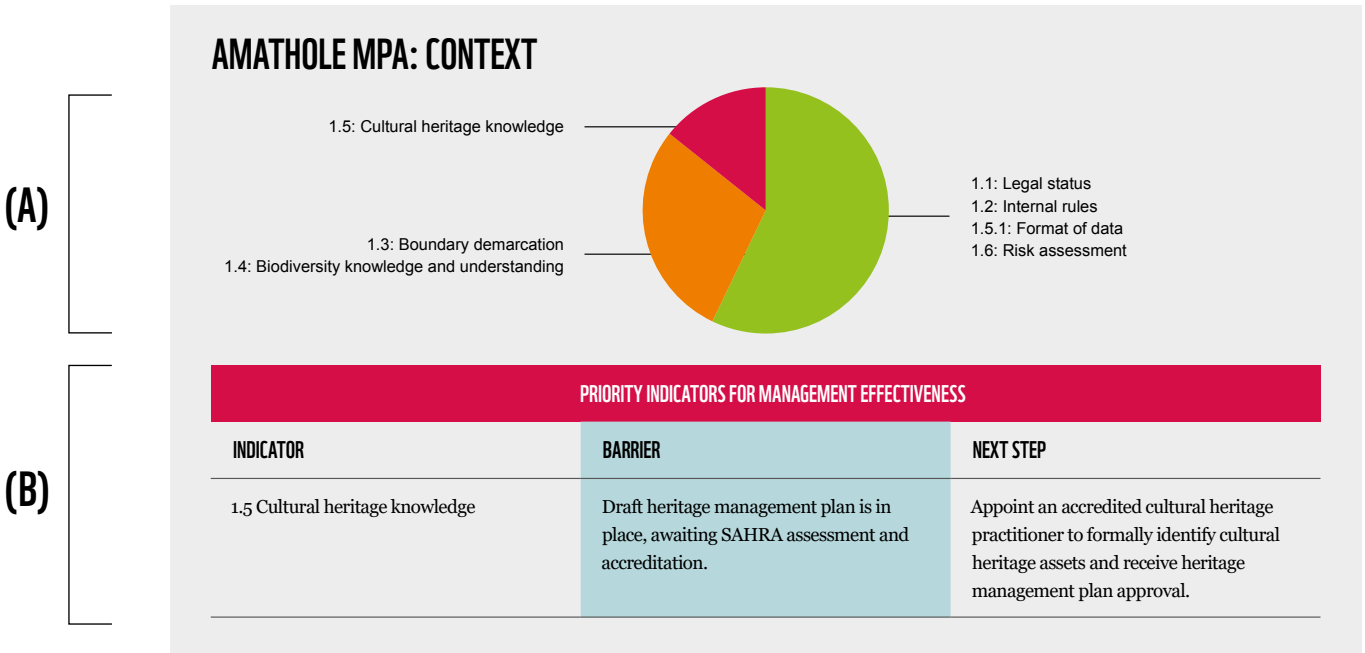


FIGURE 5 - EXAMPLE LAYOUT OF MANAGEMENT AGENCY-LEVEL METT TRENDS FOR THE CONTEXT SECTION.

(A) Bar graph summarising indicator results across the entire South African MPA network. Red sections are priority indicators, while orange sections are indicators with a basic management level and green sections are indicators with an optimal management level. (B) Table highlighting indicators at varying levels of management effectiveness.

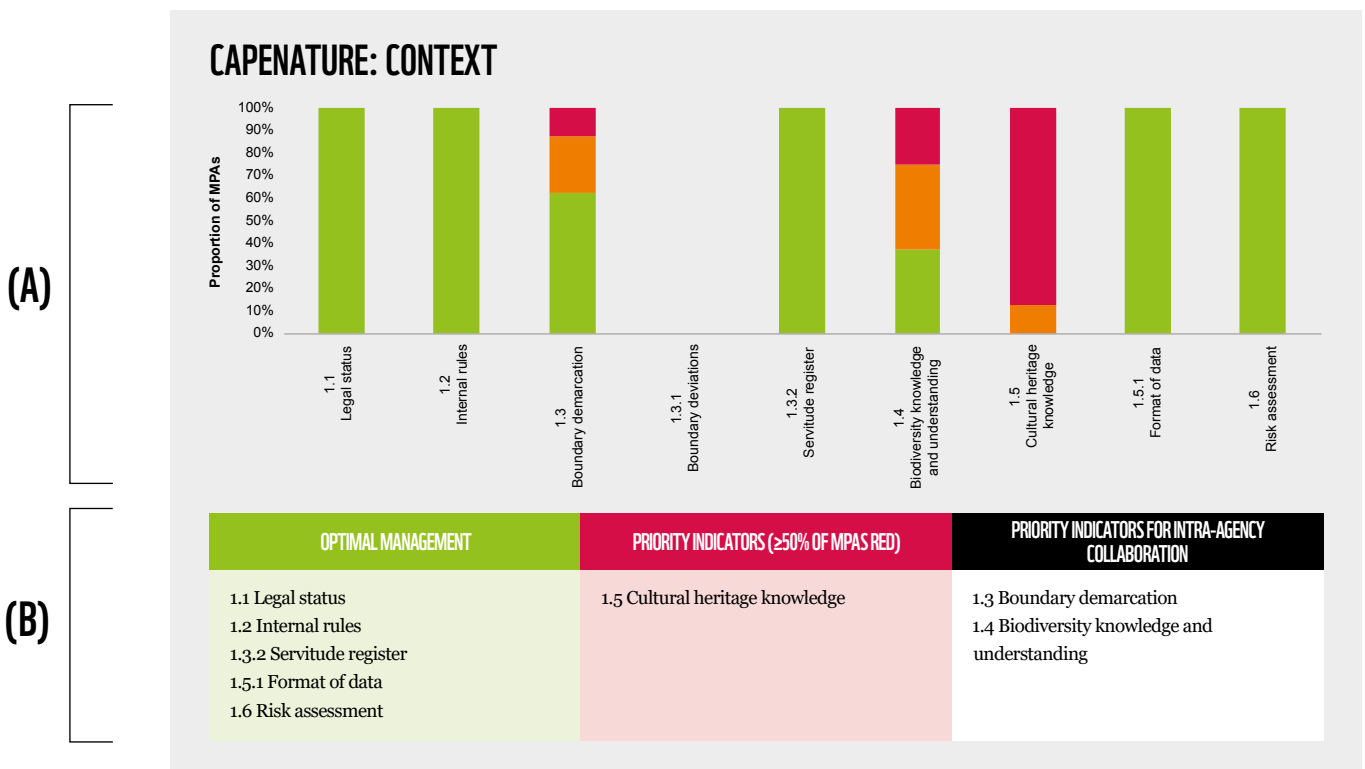
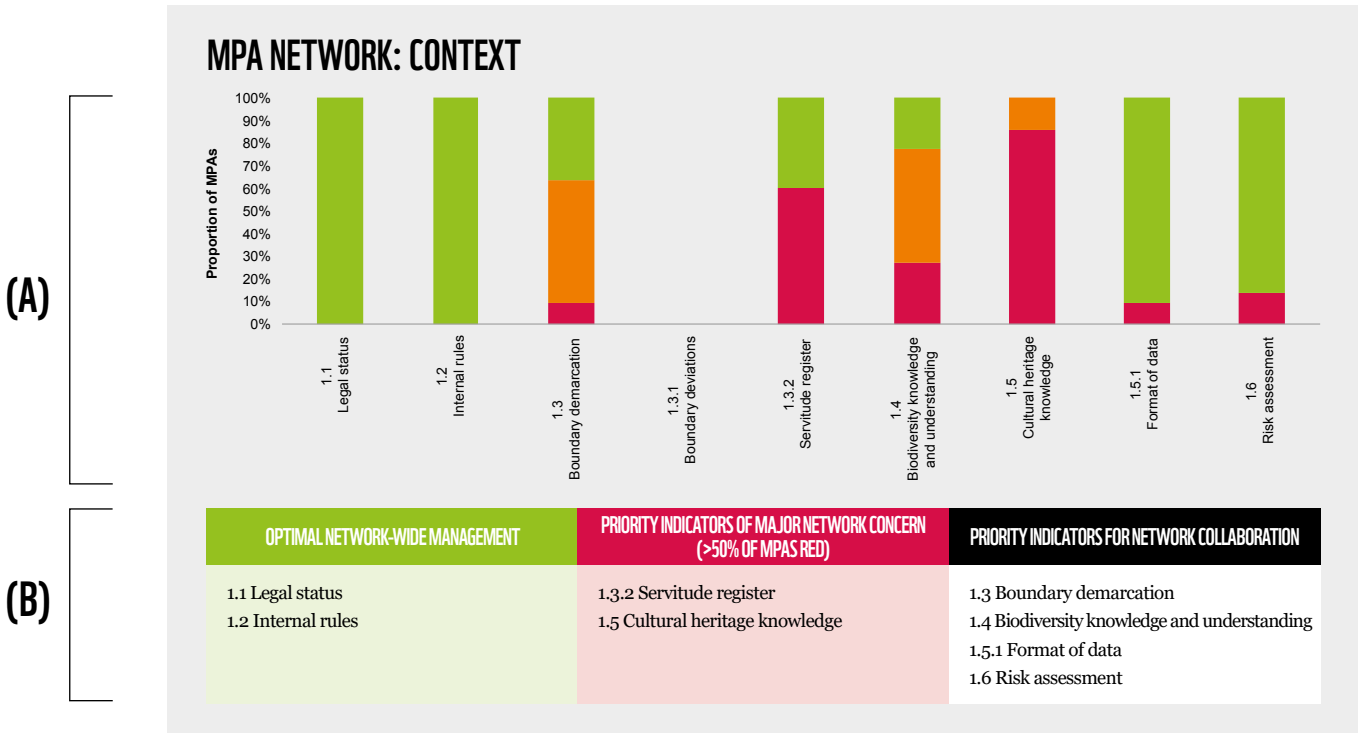


FIGURE 6 - EXAMPLE LAYOUT OF MPA NETWORK-LEVEL METT TRENDS FOR THE CONTEXT SECTION.

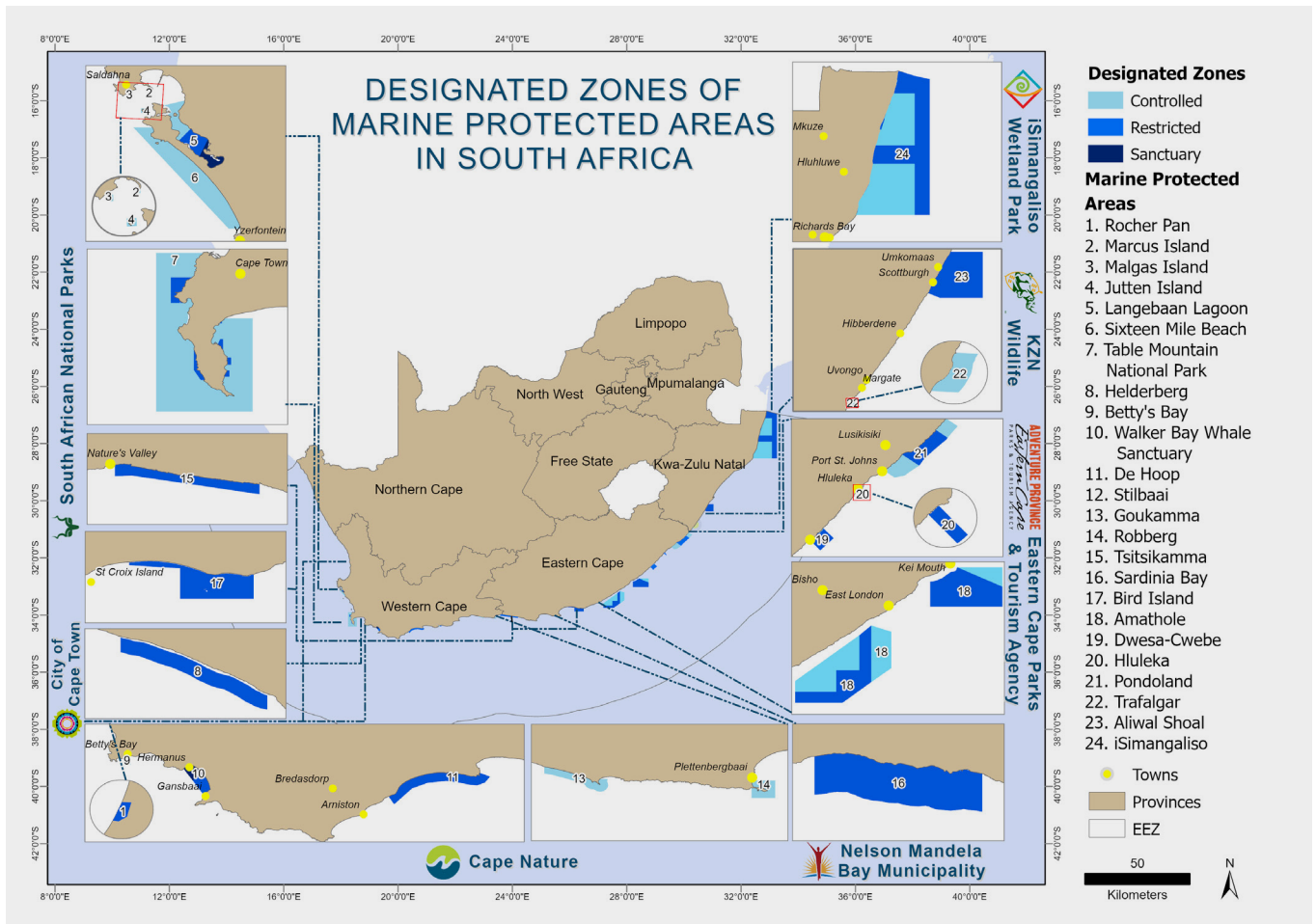
(A) Bar graph summarising indicator results across the entire South African MPA network. Red sections are priority indicators, while orange sections are indicators with a basic management level and green sections are indicators with an optimal management level. (B) Table highlighting indicators at varying levels of management effectiveness.



“Past research in South Africa and elsewhere has shown that large, well enforced, no-take MPAs that include good reef habitat, allow resident reef fish to increase in abundance and size over time. They also protect healthier, fitter and more fecund fish and facilitate spillover into adjacent fished areas. This is extremely important, especially in the face of climate change, as it allows reef fish populations to have greater resilience and the ability to adapt. In the context of recreational fishing this is really important and it is time for all recreational anglers to embrace South Africa’s MPAs and to assist the management authorities in making them work for the benefit of all.”

Dr B Mann – ORI

FIGURE 7 - MAP OF SOUTH AFRICA'S MPA NETWORK AND THE MANAGEMENT AUTHORITIES FOR EACH MARINE PROTECTED AREA.



“For some South Africans the ocean is a mysterious and feared environment, for others it is a playground, a place for holidays and recreation. Most people know surprisingly little about marine life, and our dependence on a healthy ocean. MPAs are wonderful outdoor classrooms, natural places where young and old can connect to nature, rekindle the spirit and learn about our relationship to the ocean, amazing marine biodiversity and the role of the oceans in human health. Touching, feeling smelling and tasting – MPAs provide learners and educators with the best of ‘hands on’ experiential learning. For older students MPAs are living laboratories where they can undertake field work and gain valuable practical experience. Research has shown that spending time in nature is good for the body and the spirit, and that young people exposed to nature are more likely to grow into adults who care for the environment. Learning in our MPAs helps to build a new ocean literate generation, inspired to care for nature.”

Dr J Mann - ORI

MARINE PROTECTED AREA RESULTS

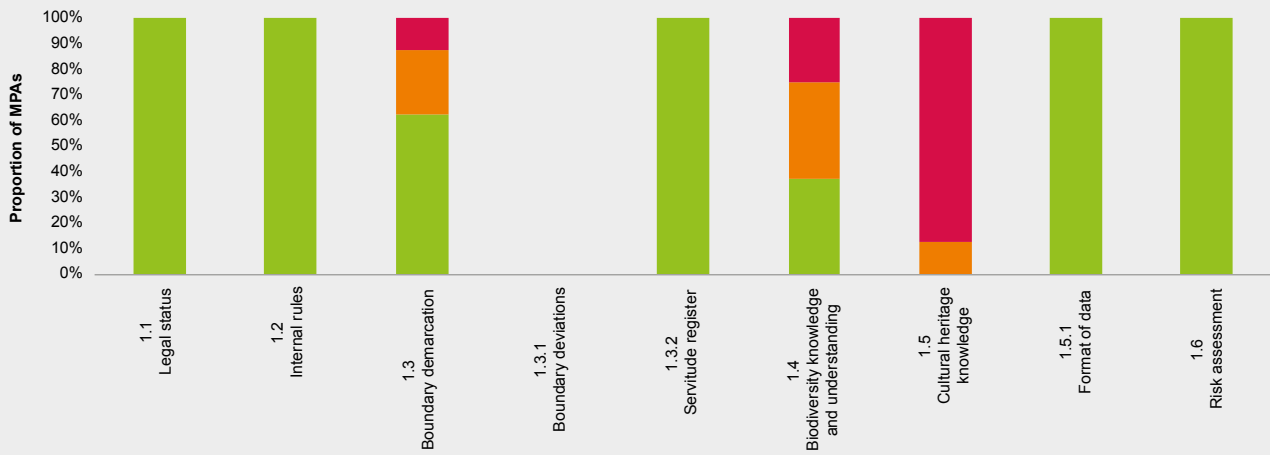


MANAGEMENT AUTHORITY OVERVIEW: CAPENATURE

MPAs managed:

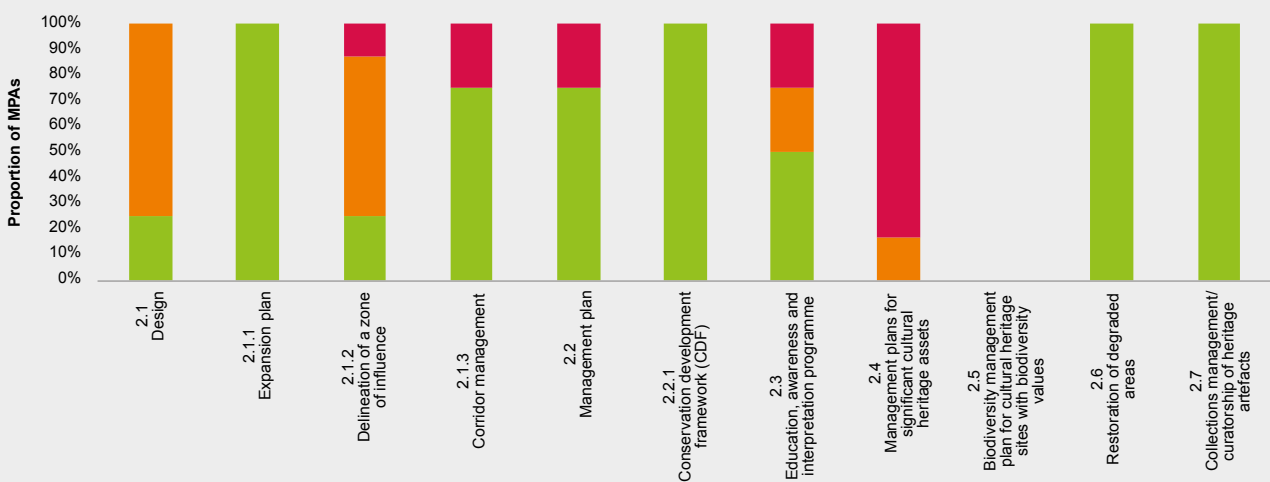
- Betty's Bay Marine Protected Area
- Bird Island Nature Reserve (Lambert's Bay)
- Dassen Island Nature Reserve
- De Hoop Marine Protected Area
- Dyer Island Nature Reserve
- Goukamma Marine Protected Area
- Robberg Marine Protected Area
- Stilbaai Marine Protected Area

CAPENATURE: CONTEXT



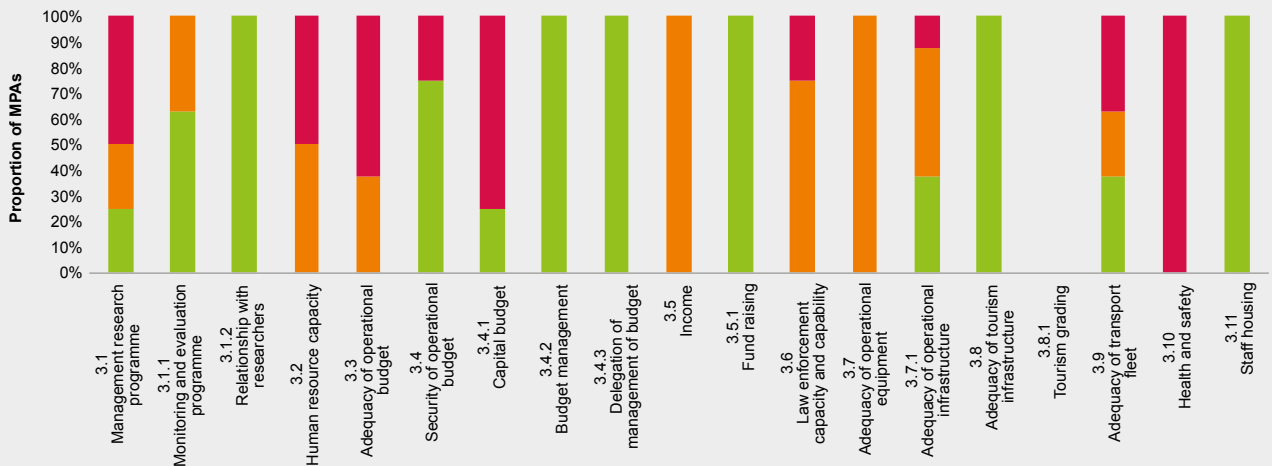
OPTIMAL MANAGEMENT	PRIORITY INDICATORS (≥50% OF MPAS RED)	PRIORITY INDICATORS FOR INTRA-AGENCY COLLABORATION
1.1 Legal status 1.2 Internal rules 1.3.2 Servitude register 1.5.1 Format of data 1.6 Risk assessment	1.5 Cultural heritage knowledge	1.3 Boundary demarcation 1.4 Biodiversity knowledge and understanding

CAPENATURE: PLANNING



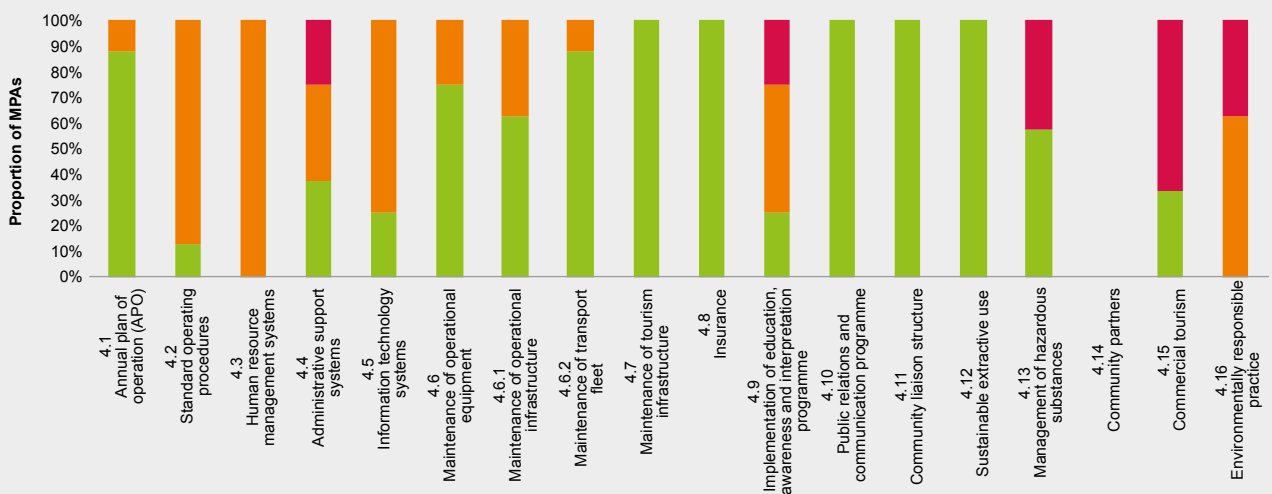
OPTIMAL MANAGEMENT	PRIORITY INDICATORS (≥50% OF MPAS RED)	PRIORITY INDICATORS FOR INTRA-AGENCY COLLABORATION
2.1.1 Expansion plan 2.2.1 Conservation development framework (CDF) 2.6 Restoration of degraded areas 2.7 Collections management/curatorship of heritage artefacts	2.4 Management plans for significant cultural heritage assets	2.1.2 Delineation of a zone of influence 2.1.3 Corridor management 2.2 Management plan 2.3 Education, awareness and interpretation programme

CAPENATURE: INPUTS



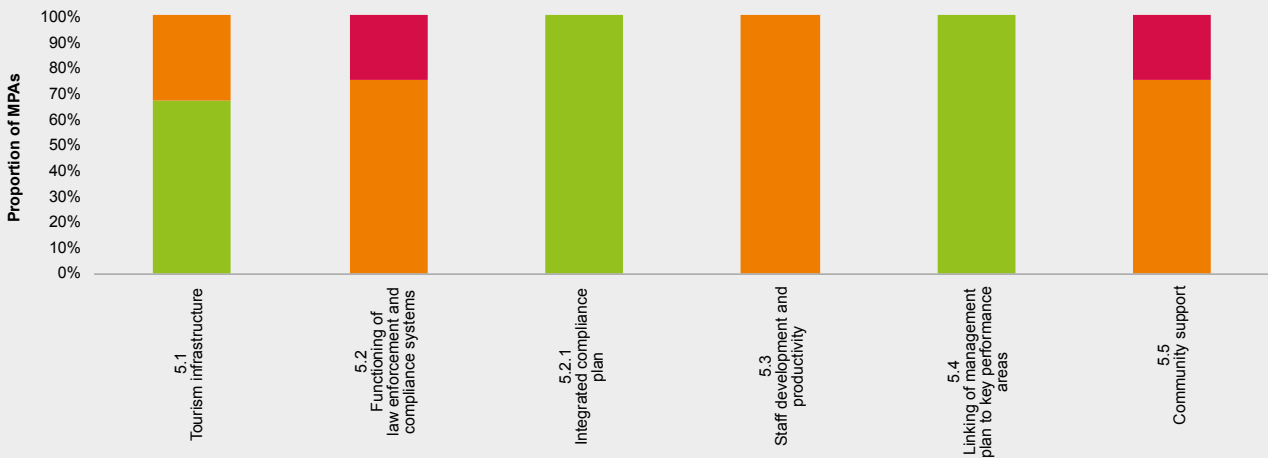
OPTIMAL MANAGEMENT	PRIORITY INDICATORS (≥50% OF MPAS RED)	PRIORITY INDICATORS FOR INTRA-AGENCY COLLABORATION
3.1.2 Relationship with researchers 3.4.2 Budget management 3.4.3 Delegation of management of budget 3.5.1 Fundraising 3.8 Adequacy of tourism infrastructure 3.11 Staff housing	3.1 Management research programme 3.2 Human resource capacity 3.3 Adequacy of operational budget 3.4.1 Capital budget 3.10 Health and safety	3.4 Security of operational budget 3.6 Law enforcement capacity and capability 3.7.1 Adequacy of operational infrastructure 3.9 Adequacy of transport fleet

CAPENATURE: PROCESS



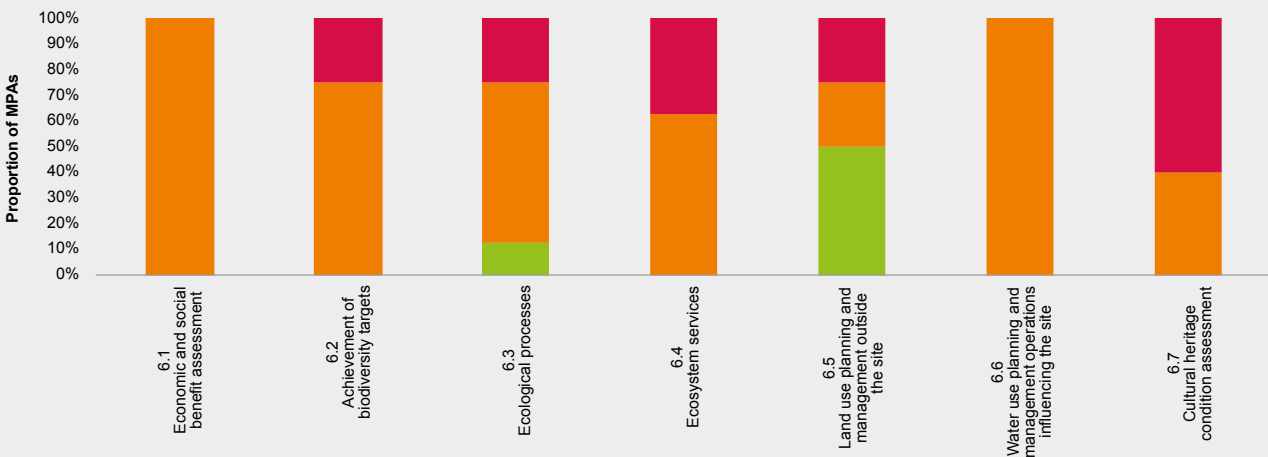
OPTIMAL MANAGEMENT	PRIORITY INDICATORS (≥50% OF MPAS RED)	PRIORITY INDICATORS FOR INTRA-AGENCY COLLABORATION
4.7 Maintenance of tourism infrastructure 4.8 Insurance 4.10 Public relations and communication programme 4.11 Community liaison structure 4.12 Sustainable extractive use	4.15 Commercial tourism	4.4 Administrative support systems 4.9 Implementation of education, awareness and interpretation programme 4.13 Management of hazardous substances 4.16 Environmentally responsible practice

CAPENATURE: OUTPUTS



OPTIMAL MANAGEMENT	PRIORITY INDICATORS (≥50% OF MPAS RED)	PRIORITY INDICATORS FOR INTRA-AGENCY COLLABORATION
5.2.1 Integrated compliance plan 5.4 Linking of management plan to key performance areas		5.2 Functioning of law enforcement and compliance systems 5.5 Community support

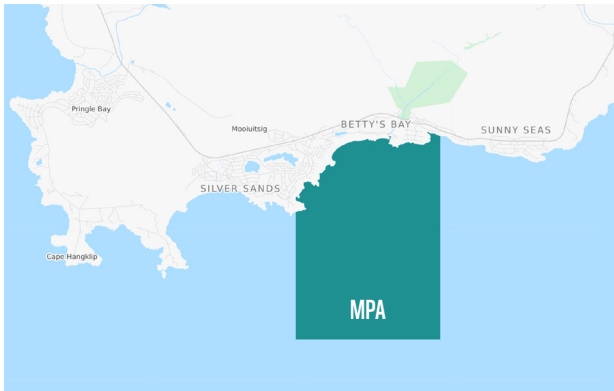
CAPENATURE: OUTCOMES



OPTIMAL MANAGEMENT	PRIORITY INDICATORS (≥50% OF MPAS RED)	PRIORITY INDICATORS FOR INTRA-AGENCY COLLABORATION
	6.7 Cultural heritage condition assessment	6.2 Achievement of biodiversity targets 6.3 Ecological processes 6.4 Ecosystem services 6.5 Land use planning and management outside the site

BETTY'S BAY MARINE PROTECTED AREA

Betty's Bay, Western Cape



Established: 1981

Area of protected ocean: 20.14 km²

Length of protected coastline: 3.2 km

Key features: Stony Point African penguin colony

Habitat: Kelp beds, rocky shores, offshore reefs

Notable species: African penguin, abalone, west coast rock lobster

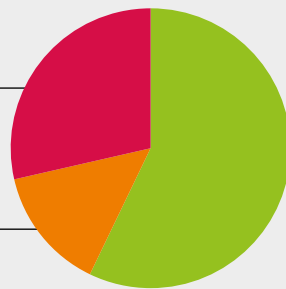
MANAGEMENT EFFECTIVENESS INDICATORS



BETTY'S BAY MPA: CONTEXT

1.4: Biodiversity knowledge and understanding
1.5: Cultural heritage knowledge

1.3: Boundary demarcation

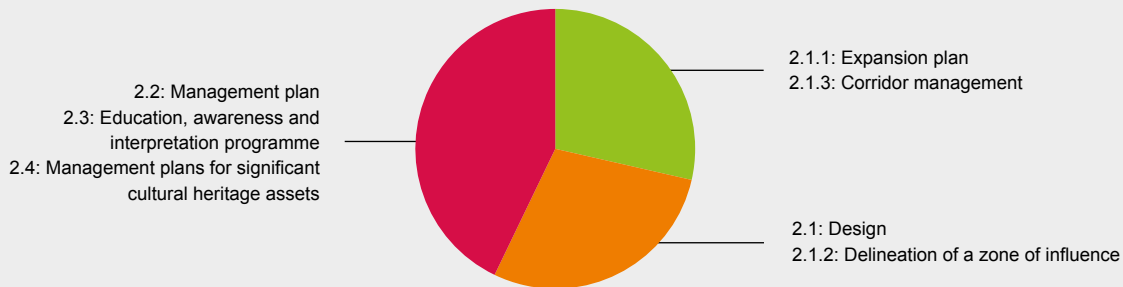


1.1: Legal status
1.2: Internal rules
1.5.1: Format of data
1.6: Risk assessment

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
1.4: Biodiversity knowledge and understanding	Biodiversity objectives are not being achieved due to lack of information on key species, habitats, ecosystems and invasive species of the MPA.	Implement the biodiversity research and monitoring programmes set out in the draft MPA management plan to support the achievement of biodiversity objectives.
1.5: Cultural heritage knowledge	Only an informal cultural heritage survey has identified heritage assets (i.e. whaling station, shipwreck).	Appoint an accredited cultural heritage practitioner to formally identify cultural heritage assets.

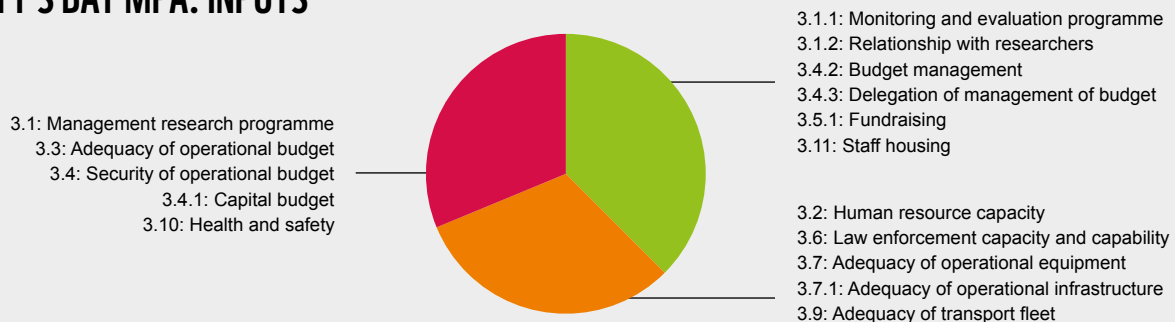
BETTY'S BAY MPA: PLANNING



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
2.2: Management plan	The current draft management plan is not approved by the Minister/MEC.	Obtain Minister or MEC approval.
2.3: Education, awareness and interpretation programme (EAI)	The existing EAI programme has not been approved.	Obtain approval for the EAI programme.
2.4: Management plans for significant cultural heritage assets	No formal site management plans exist for identified significant cultural heritage sites.	Appoint an accredited heritage practitioner to develop a formal site management plan for significant cultural heritage.

BETTY'S BAY MPA: INPUTS



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
3.1: Management research programme	Research needs have been identified, but current research is not relevant to the MPA management objectives.	Identify and conduct research based on critical management objectives.
3.3: Adequacy of operational budget	The allocated operational budget is inadequate to effectively manage the MPA.	Secure an adequate operational budget.
3.4: Security of operational budget	There is no secure operational budget. Ad hoc requests are made for DFFE funding on an annual basis and are insufficient.	Secure an operational budget specific to the site that is secure and guaranteed on an annual cycle.

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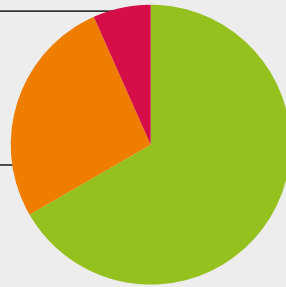
BETTY'S BAY MPA: INPUTS CONTINUED

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
3.4.1: Capital budget	No capital budget is available to replace equipment, infrastructure and vehicles.	Secure an adequate capital budget to replace equipment, infrastructure and vehicles.
3.10: Health and safety	No external audit has certified that site management complies with and implements the Occupational Health and Safety Act.	Conduct an external health and safety audit to confirm compliance with the Occupational Health and Safety Act.

BETTY'S BAY MPA: PROCESS

- 4.16: Environmentally responsible practice
- 4.1: Annual plan of operation
- 4.3: Human resource management systems
- 4.5: Information technology systems
- 4.9: Implementation of education, awareness and interpretation programme

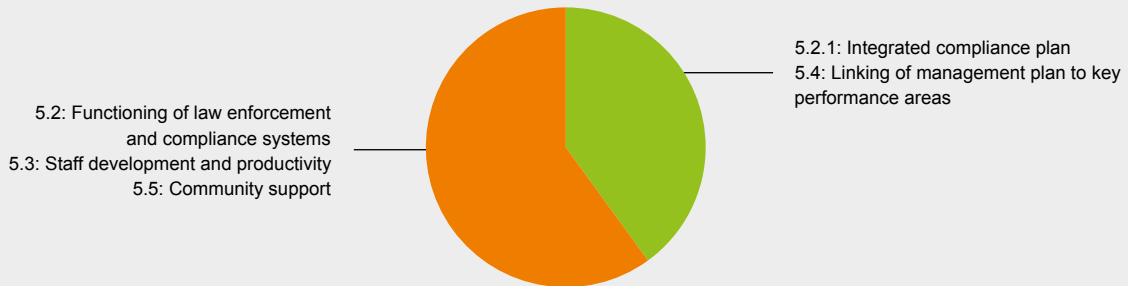


- 4.2: Standard operating procedures
- 4.4: Administrative support systems
- 4.6: Maintenance of operational equipment
- 4.6.1: Maintenance of operational infrastructure
- 4.6.2: Maintenance of transport fleet
- 4.8: Insurance
- 4.10: Public relations and communication programme
- 4.11: Community liaison structure
- 4.12: Sustainable extractive use
- 4.13: Management of hazardous substances

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

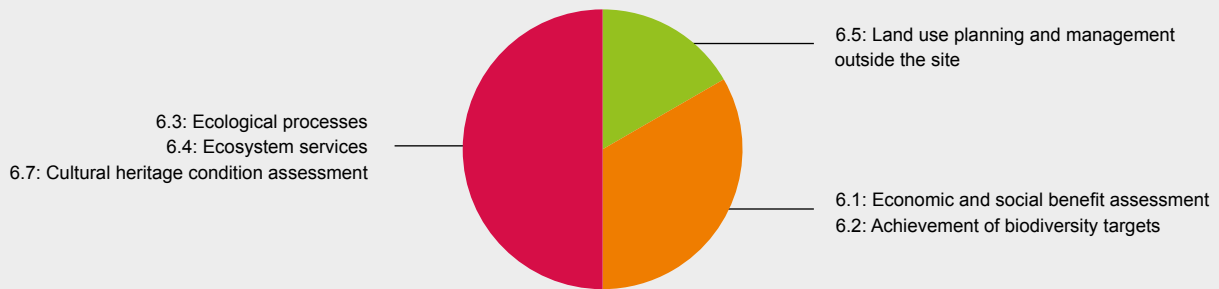
INDICATOR	BARRIER	NEXT STEP
4.16: Environmentally responsible practice	While some environmentally responsible practices have been enacted, no formal plans exist to implement all aspects of environmentally responsible practice.	Create formal plans for environmentally responsible practice.

BETTY'S BAY MPA: OUTPUTS



BASIC LEVEL OF MANAGEMENT EFFECTIVENESS

BETTY'S BAY MPA: OUTCOMES

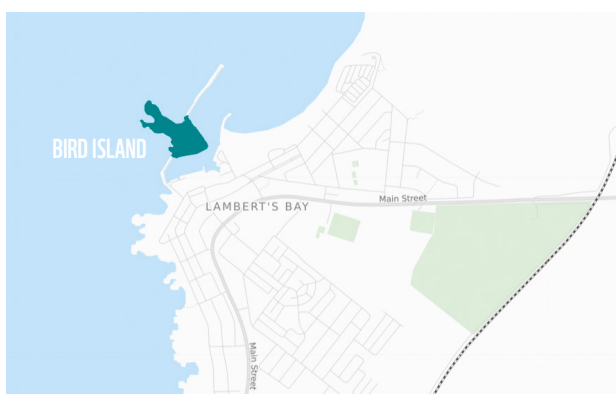


PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
6.3: Ecological processes	Ecological processes are only partially maintained with some ecological integrity and biodiversity being compromised due to budget and staffing constraints.	Allocate an appropriate budget to ensure that ecological processes are being adequately maintained/augmented by process simulation without biodiversity being compromised.
6.4: Ecosystem services	Ecological processes and systems are being partially maintained, resulting in the provision of limited ecosystem service benefits to the site and neighbouring land users/communities.	Ensure that ecological processes and systems are being adequately maintained, resulting in the provision of ecosystem service benefits to the site and neighbouring land users/communities.
6.7: Cultural heritage condition assessment	Some cultural heritage assets and values are not being managed as required in the management plan.	Ensure that cultural heritage assets and values are being managed as required in the management plan and heritage management plan.

BIRD ISLAND NATURE RESERVE (LAMBERT'S BAY)

Lambert's Bay, Western Cape



Established: 1988

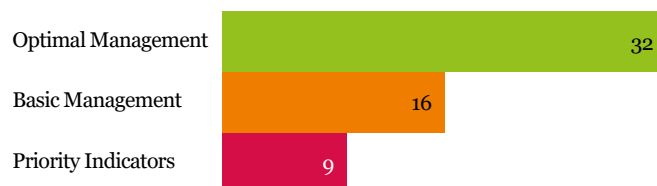
Area of protected ocean: 0.02 km²

Key features: The only island along the South African coast that allows visitors for viewing birds and marine life

Habitat: Rocky shore, sandy shore

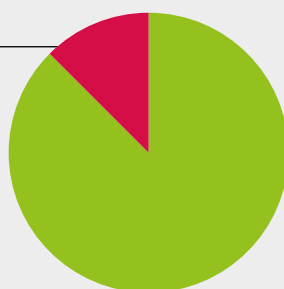
Notable species: Cape cormorants, white-breasted cormorants, crowned cormorants, Cape gannet, kelp gulls, Hartlaub's gulls, swift terns, common terns, sandwich terns and Cape fur seals

MANAGEMENT EFFECTIVENESS INDICATORS



BIRD ISLAND (LAMBERT'S BAY): CONTEXT

1.5: Cultural heritage knowledge

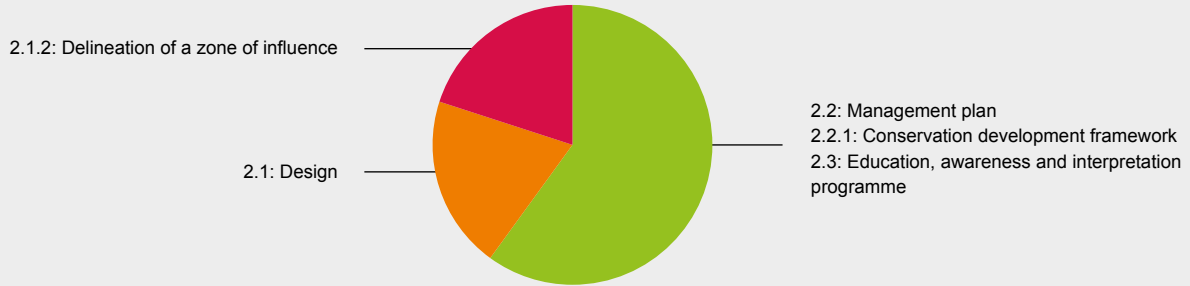


- 1.1: Legal status
- 1.2: Internal rules
- 1.3: Boundary demarcation
- 1.3.2: Servitude register
- 1.4: Biodiversity knowledge and understanding
- 1.5.1: Format of data
- 1.6: Risk assessment

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
1.5: Cultural heritage knowledge	Only informal cultural heritage surveys have been performed to identify heritage assets.	Appoint an accredited cultural heritage practitioner to formally identify cultural heritage assets.

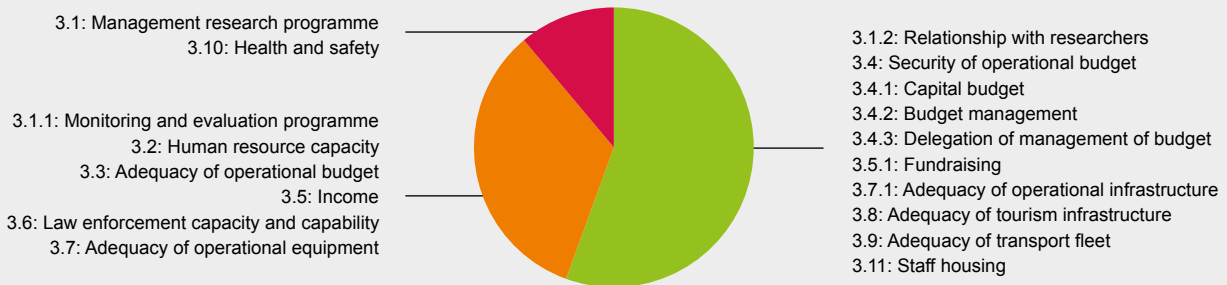
BIRD ISLAND (LAMBERT'S BAY): PLANNING



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
2.1.2: Delineation of a zone of influence	No zone of influence has been established and no documented discussions have been held with neighbouring landowners.	Establish a zone of influence and document discussions with neighbouring landowners.

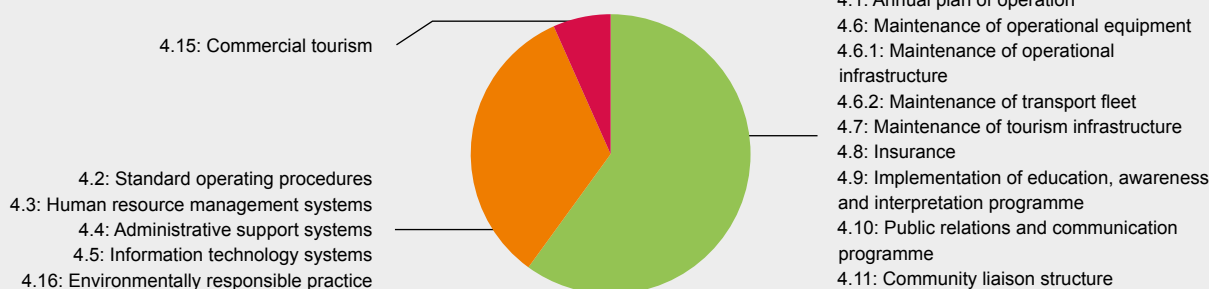
BIRD ISLAND (LAMBERT'S BAY): INPUTS



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
3.1: Management research programme	Research needs have not been identified and no management-focused research is occurring.	Identify and conduct research based on critical management objectives.
3.10: Health and safety	No external audit has certified that site management complies with and implements the Occupational Health and Safety Act.	Conduct an external health and safety audit to confirm compliance with the Occupational Health and Safety Act.

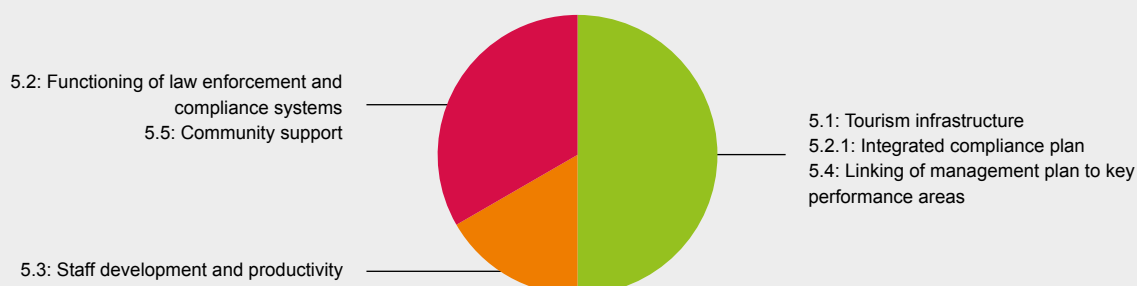
BIRD ISLAND (LAMBERT'S BAY): PROCESS



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
4.15: Commercial tourism	No current relationships exist between MPA personnel and tourism operators/ concessionaires to enhance visitor experiences, protect values and resolve conflicts.	Improve interactions and develop cooperation with tourism operators by identifying and regularly meeting with tour operators working in the MPA to establish good working relationships.

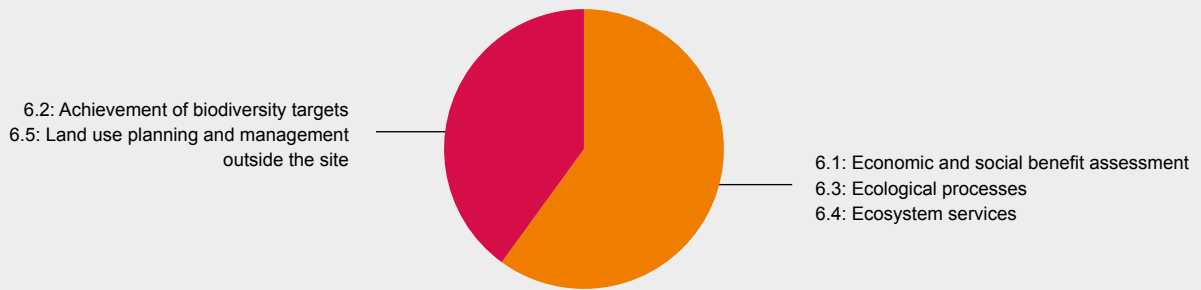
BIRD ISLAND (LAMBERT'S BAY): OUTPUTS



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
5.2: Functioning of law enforcement and compliance systems	Protection systems for controlling illegitimate access and activities in the PA are poorly implemented.	Develop adequate protection systems or mechanisms to successfully control current levels of legitimate and illegitimate access and activities in the MPA.
5.5: Community support	Minimal support or assistance from the community. No programmes exist on the island to accommodate volunteers from the community.	Enlist community members to assist and support the site with some site management tasks and fundraising.

BIRD ISLAND (LAMBERT'S BAY): OUTCOMES



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
6.2: Achievement of biodiversity targets	Critical biodiversity targets are not being met.	Ensure that all critical biodiversity targets are being met.
6.5: Land use planning and management outside the site	Land use planning does not take the needs of the site into account, but it is not detrimental to the site.	Ensure that land use planning at least partially considers the long-term needs of the site. Some cooperation from industries such as agriculture, forestry and mining exists.

DASSEN ISLAND NATURE RESERVE

Yzerfontein, Western Cape



Established: 1988

Area of protected ocean: 2.3 km²

Key features: Second largest South African coastal island on the continental shelf

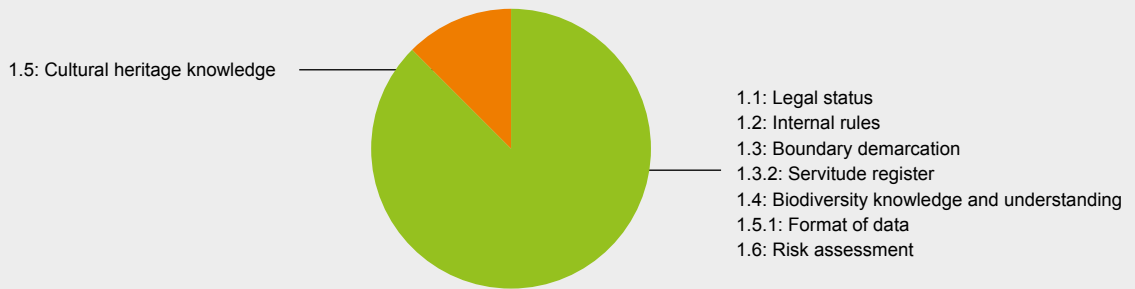
Habitat: Cape sandy inner shelf, Cape rocky mid-shelf mosaic, Cape island shore and Cape kelp forest.

Notable species: African penguin, Leach’s storm petrel, west coast rock lobster, abalone, southern right whale, humpback whale, Bryde’s whale, minke whale, orca, Heaviside’s dolphin

MANAGEMENT EFFECTIVENESS INDICATORS



DASSEN ISLAND: CONTEXT

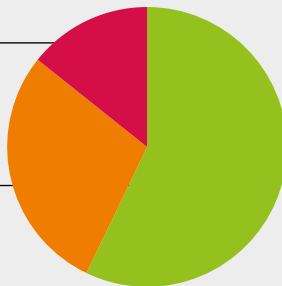


BASIC LEVEL OF MANAGEMENT EFFECTIVENESS

DASSEN ISLAND: PLANNING

2.4: Management plans for significant cultural heritage assets

2.1: Design
2.1.2: Delineation of a zone of influence



2.1.1: Expansion plan
2.2: Management plan
2.2.1: Conservation development framework
2.3: Education, awareness and interpretation programme

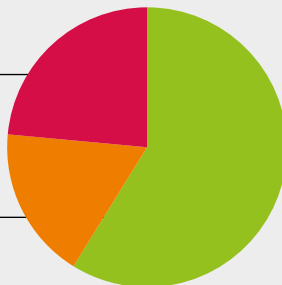
PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
2.4: Management plans for significant cultural heritage assets	No formal site management plans for significant cultural heritage sites have been created by an accredited heritage practitioner.	Appoint an accredited heritage practitioner to develop a formal site management plan for significant cultural heritage.

DASSEN ISLAND: INPUTS

3.2: Human resource capacity
3.6: Law enforcement capacity and capability
3.9: Adequacy of transport fleet
3.10: Health and safety

3.3: Adequacy of operational budget
3.5: Income
3.7: Adequacy of operational equipment



3.1: Management research programme
3.1.1: Monitoring and evaluation programme
3.1.2: Relationship with researchers
3.4: Security of operational budget
3.4.1: Capital budget
3.4.2: Budget management
3.4.3: Delegation of management of budget
3.5.1: Fundraising
3.7.1: Adequacy of operational infrastructure
3.11: Staff housing

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
3.2: Human resource capacity	The approved staff organogram is not sufficient, and some posts are unfunded or vacant.	Develop and approve an organigram that reflects critical management objectives. Ensure that human resource capacity meets the approved levels.
3.6: Law enforcement capacity and capability	Major deficiencies in capacity/resources/support to enforce internal rules/regulations. Staff lack law enforcement skills.	Develop a strategy to eliminate major deficiencies in capacity/resources/support to enforce internal rules/regulations.
3.9: Adequacy of transport fleet	There is an insufficient number of suitable vehicles to conduct critical management activities.	Secure a sufficient number of suitable vehicles to conduct critical management activities.

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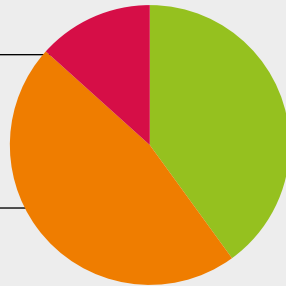
DASSEN ISLAND: INPUTS CONTINUED

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
3.10: Health and safety	No external audit has certified that site management complies with and implements the Occupational Health and Safety Act.	Conduct an external health and safety audit to confirm compliance with the Occupational Health and Safety Act.

DASSEN ISLAND: PROCESS

- 4.9: Implementation of education, awareness and interpretation programme
- 4.13: Management of hazardous substances
- 4.2: Standard operating procedures
- 4.3: Human resource management systems
- 4.4: Administrative support systems
- 4.5: Information technology systems
- 4.6.1: Maintenance of operational infrastructure
- 4.6.2: Maintenance of transport fleet
- 4.16: Environmentally responsible practice



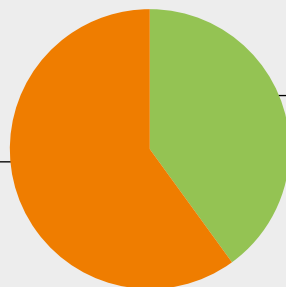
- 4.1: Annual plan of operation
- 4.6: Maintenance of operational equipment
- 4.8: Insurance
- 4.10: Public relations and communication programme
- 4.11: Community liaison structure
- 4.12: Sustainable extractive use

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
4.9: Implementation of education, awareness and interpretation programme	Only limited ad hoc implementation of an EAI programme is being performed.	Implement the existing EAI programme where possible.
4.13: Management of hazardous substances	No formal, legally compliant programme with functional infrastructure exists.	Develop a formal, legally compliant programme with functional infrastructure.

DASSEN ISLAND: OUTPUTS

- 5.2: Functioning of law enforcement and compliance systems
- 5.3: Staff development and productivity
- 5.5: Community support

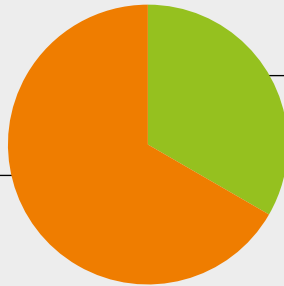


- 5.2.1: Integrated compliance plan
- 5.4: Linking of management plan to key performance areas

BASIC LEVEL OF MANAGEMENT EFFECTIVENESS

DASSEN ISLAND: OUTCOMES

- 6.1: Economic and social benefit assessment
- 6.2: Achievement of biodiversity targets
- 6.4: Ecosystem services
- 6.7: Cultural heritage condition assessment

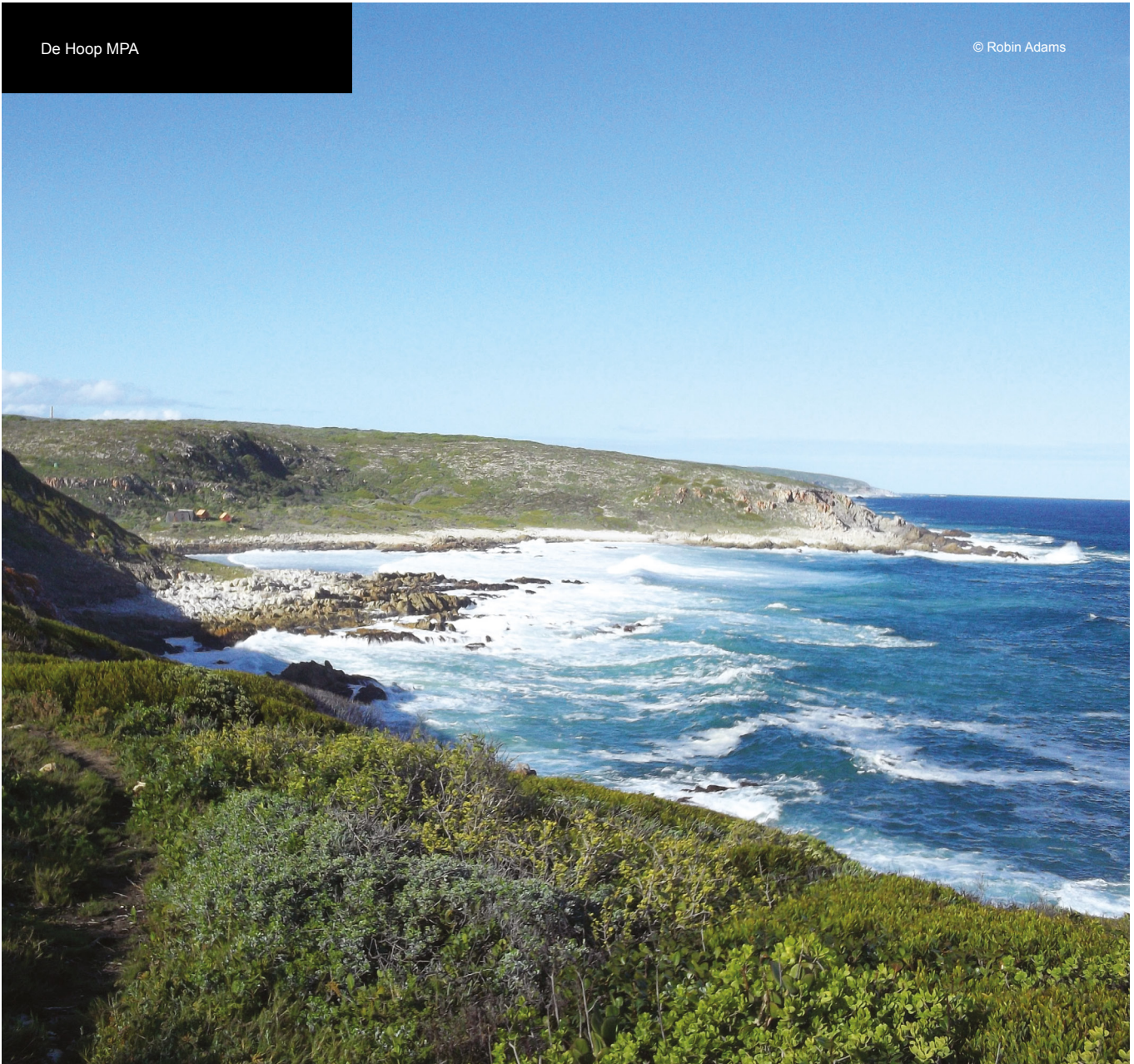


- 6.3: Ecological processes
- 6.5: Land use planning and management outside the site

BASIC LEVEL OF MANAGEMENT EFFECTIVENESS

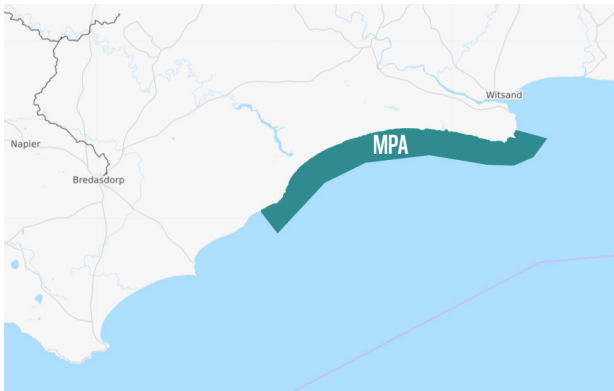
De Hoop MPA

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DE HOOP MARINE PROTECTED AREA

Western Cape



Established: 1985

Area of protected ocean: 288.9 km²

Length of protected coastline: 51 km

Key features: Migratory route and calving area for southern right whales

Habitat: Offshore reefs, rocky shores with intertidal rock pools, sandy shores, coastal dunes, seagrass

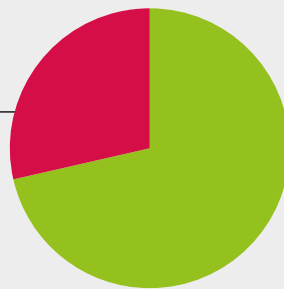
Notable species: Abalone, galjoen, black musselcracker, white musselcracker, spotted gulley shark, hammerhead sharks, great white shark, southern right whale

MANAGEMENT EFFECTIVENESS INDICATORS



DE HOOP MPA: CONTEXT

1.4: Biodiversity knowledge and understanding
1.5: Cultural heritage knowledge

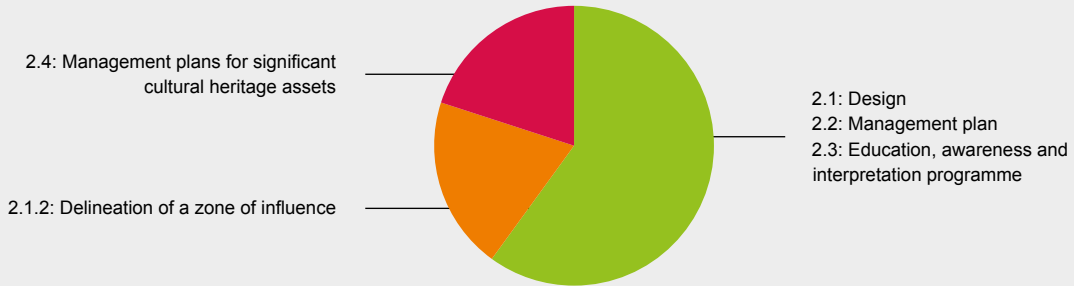


1.1: Legal status
1.2: Internal rules
1.3: Boundary demarcation
1.5.1: Format of data
1.6: Risk assessment

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
1.4: Biodiversity knowledge and understanding	Biodiversity objectives are not being achieved due to lack of information on key species, habitats, ecosystems and invasive species of the MPA.	Develop appropriate biodiversity research and monitoring programmes to support the achievement of biodiversity objectives.
1.5: Cultural heritage knowledge	Only an informal cultural heritage survey has identified heritage assets.	Appoint an accredited cultural heritage practitioner to formally identify cultural heritage assets.

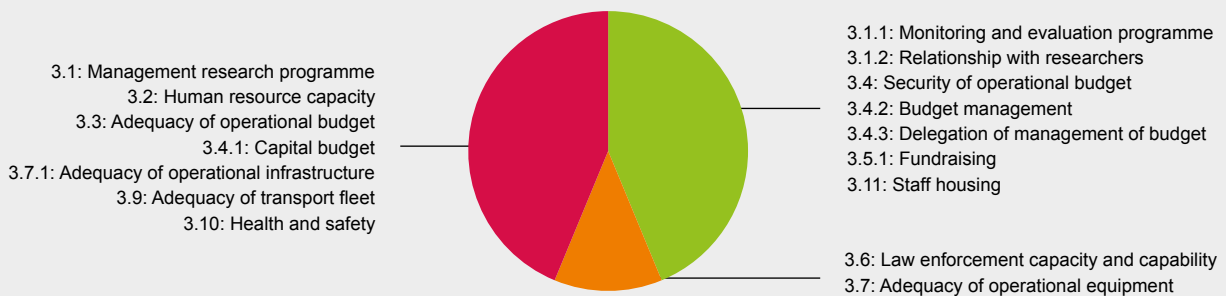
DE HOOP MPA: PLANNING



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
2.4: Management plans for significant cultural heritage assets	No formal site management plans exist for identified significant cultural heritage sites.	Appoint an accredited heritage practitioner to develop a formal site management plan for significant cultural heritage.

DE HOOP MPA: INPUTS



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
3.1: Management research programme	Research needs have been identified, but current research is not relevant to the MPA management objectives.	Conduct research based on critical management objectives.
3.2: Human resource capacity	The approved staff organogram is not sufficient, and some posts are unfunded or vacant.	Develop and approve an organigram that reflects critical management objectives.
3.3: Adequacy of operational budget	The allocated operational budget is inadequate.	Allocate an adequate operational budget and source external funding innovations and initiatives.
3.4.1: Capital budget	Inadequate capital budget is available to replace equipment, infrastructure and vehicles.	Secure an adequate capital budget to replace equipment, infrastructure and vehicles.

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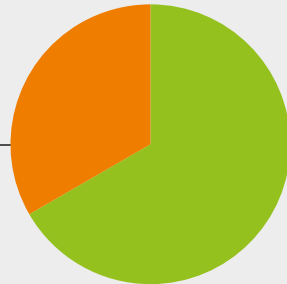
DE HOOP MPA: INPUTS CONTINUED

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
3.7.1: Adequacy of operational infrastructure	Operational infrastructure is inadequate for management needs.	Secure operational infrastructure to adequately address current management needs.
3.9: Adequacy of transport fleet	There is an insufficient number of suitable vehicles to conduct critical management activities.	Secure a sufficient number of suitable vehicles to conduct critical management activities.
3.10: Health and safety	No external audit has certified that site management complies with and implements the Occupational Health and Safety Act.	Conduct an external health and safety audit to confirm compliance with the Occupational Health and Safety Act.

DE HOOP MPA: PROCESS

- 4.2: Standard operating procedures
- 4.3: Human resource management systems
- 4.6: Maintenance of operational equipment
- 4.9: Implementation of education, awareness and interpretation programme
- 4.16: Environmentally responsible practice

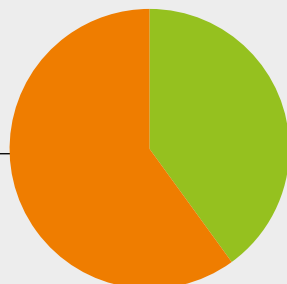


- 4.1: Annual plan of operation
- 4.4: Administrative support systems
- 4.5: Information technology systems
- 4.6.1: Maintenance of operational infrastructure
- 4.6.2: Maintenance of transport fleet
- 4.8: Insurance
- 4.10: Public relations and communication programme
- 4.11: Community liaison structure
- 4.12: Sustainable extractive use
- 4.13: Management of hazardous substances

BASIC LEVEL OF MANAGEMENT EFFECTIVENESS

DE HOOP MPA: OUTPUTS

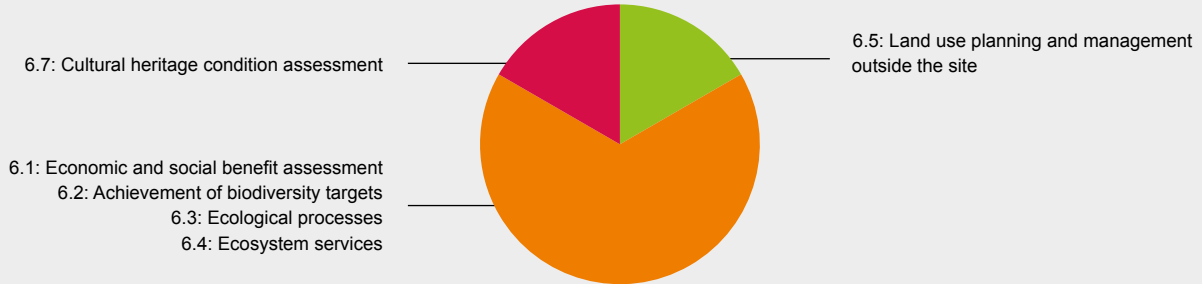
- 5.2: Functioning of law enforcement and compliance systems
- 5.3: Staff development and productivity
- 5.5: Community support



- 5.2.1: Integrated compliance plan
- 5.4: Linking of management plan to key performance areas

BASIC LEVEL OF MANAGEMENT EFFECTIVENESS

DE HOOP MPA: OUTCOMES

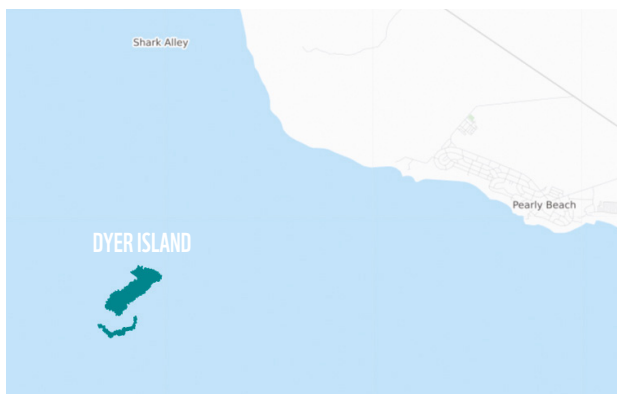


PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
6.7: Cultural heritage condition assessment	Cultural heritage assets and values are not being managed as required in the management plan or heritage management plan.	Ensure that cultural heritage assets and values are being managed as required in the management plan or heritage management plan.

DYER ISLAND NATURE RESERVE

Western Cape



Established: 1988

Area of protected ocean: 0.16 km²

Key features: Protected bird sanctuary and hotspot for shark cage diving

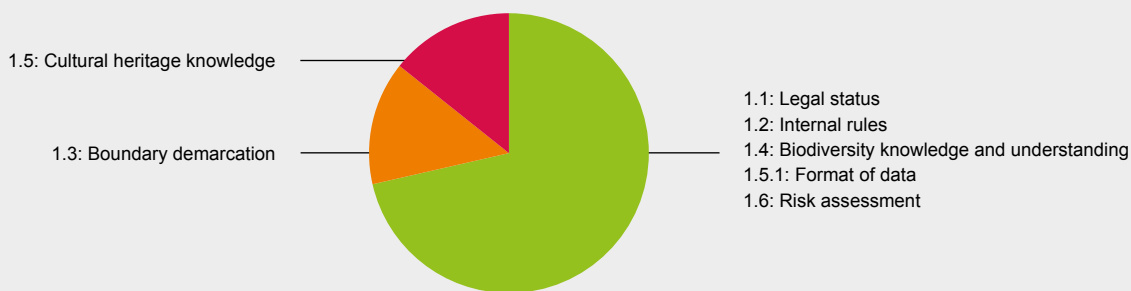
Habitat: Sandstone formations, granite coastline, shingle beach, sandy beach

Notable species: Leach's storm petrel, African penguin, bank cormorant, crowned cormorant, Hartlaub's gull, great white shark, Cape fur seal and abalone

MANAGEMENT EFFECTIVENESS INDICATORS



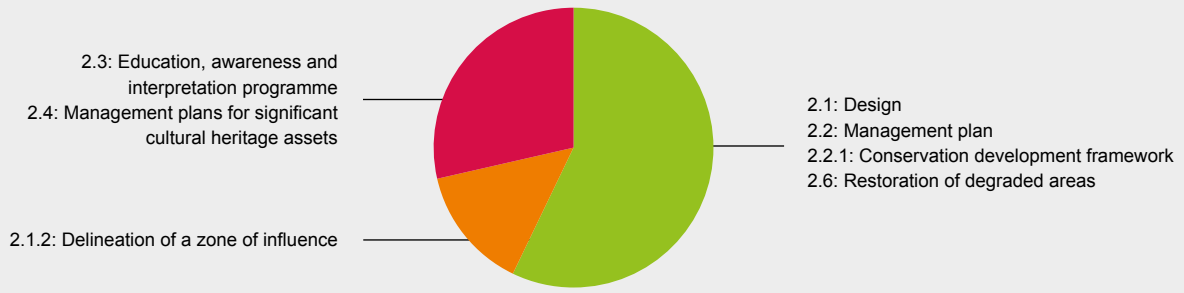
DYER ISLAND: CONTEXT



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
1.5: Cultural heritage knowledge	Only an informal cultural heritage survey has identified heritage assets.	Appoint an accredited cultural heritage practitioner to formally identify cultural heritage assets.

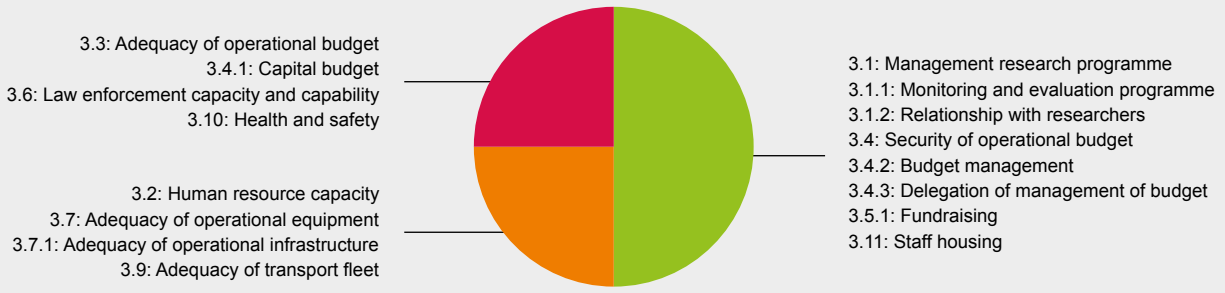
DYER ISLAND: PLANNING



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
2.3: Education, awareness and interpretation programme	No EAI programme exists.	Develop and approve an EAI programme.
2.4: Management plans for significant cultural heritage assets	No formal site management plans for informally recognised significant cultural heritage sites (i.e. guano and seal harvesting sites and buildings).	Appoint an accredited heritage practitioner to develop a formal site management plan for significant cultural heritage.

DYER ISLAND: INPUTS



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
3.3: Adequacy of operational budget	The allocated operational budget is inadequate to effectively manage the MPA.	Secure an adequate operational budget.
3.4.1: Capital budget	Inadequate capital budget is available to replace equipment, infrastructure and vehicles.	Secure an adequate capital budget to replace equipment, infrastructure and vehicles.

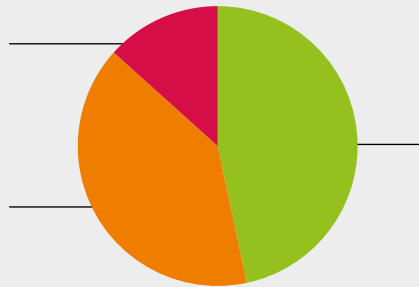
DYER ISLAND: INPUTS CONTINUED

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
3.6: Law enforcement capacity and capability	Major deficiencies in capacity/resources/support to enforce internal rules/regulations.	Develop a strategy to eliminate major deficiencies in capacity/resources/support to enforce internal rules/regulations.
3.10: Health and safety	No external audit has certified that site management complies with and implements the Occupational Health and Safety Act.	Conduct an external health and safety audit to confirm compliance with the Occupational Health and Safety Act.

DYER ISLAND: PROCESS

- 4.9: Implementation of education, awareness and interpretation programme
- 4.13: Management of hazardous substances
- 4.2: Standard operating procedures
- 4.3: Human resource management systems
- 4.5: Information technology systems
- 4.6: Maintenance of operational equipment
- 4.6.1: Maintenance of operational infrastructure
- 4.16: Environmentally responsible practice



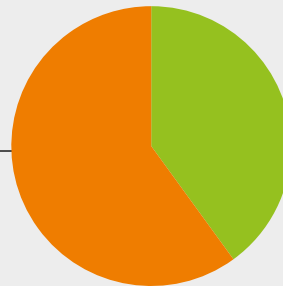
- 4.1: Annual plan of operation
- 4.4: Administrative support systems
- 4.6.2: Maintenance of transport fleet
- 4.8: Insurance
- 4.10: Public relations and communication programme
- 4.11: Community liaison structure
- 4.12: Sustainable extractive use

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
4.9: Implementation of education, awareness and interpretation programme	Only limited ad hoc implementation of an EAI programme is being performed.	Develop and implement an EAI programme that can present the value of Dyer Island and integrate it into existing EAI programmes.
4.13: Management of hazardous substances	No formal, legally compliant programme with functional infrastructure exists.	Develop a formal, legally compliant programme with functional infrastructure.

DYER ISLAND: OUTPUTS

5.2: Functioning of law enforcement and compliance systems
5.3: Staff development and productivity
5.5: Community support

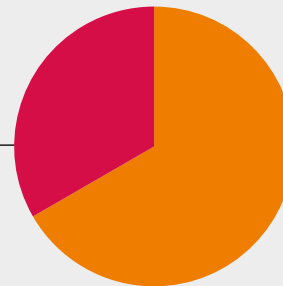


5.2.1: Integrated compliance plan
5.4: Linking of management plan to key performance areas

BASIC LEVEL OF MANAGEMENT EFFECTIVENESS

DYER ISLAND: OUTCOMES

6.3: Ecological processes
6.4: Ecosystem services



6.1: Economic and social benefit assessment
6.2: Achievement of biodiversity targets
6.5: Land use planning and management outside the site
6.7: Cultural heritage condition assessment

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
6.3: Ecological processes	Ecological processes are only partially maintained with some ecological integrity and biodiversity being compromised.	Ensure that ecological processes are being adequately maintained/augmented by process simulation without biodiversity being compromised.
6.4: Ecosystem services	Ecological processes and systems are being partially maintained, resulting in the provision of limited ecosystem service benefits to the site and neighbouring land users/communities.	Ensure that ecological processes and systems are being adequately maintained, resulting in the provision of ecosystem service benefits to the site and neighbouring land users/communities.

GOUKAMMA MARINE PROTECTED AREA

Knysna, Western Cape



Established: 1990

Area of protected ocean: 32 km²

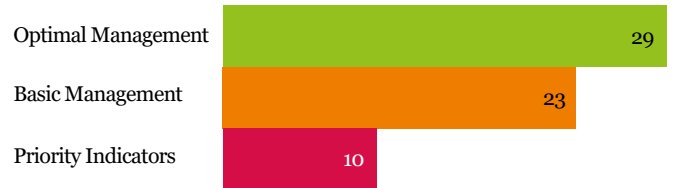
Length of protected coastline: 16 km

Key features: Contributes to improved fishing in adjacent areas through MPA 'spill-over'

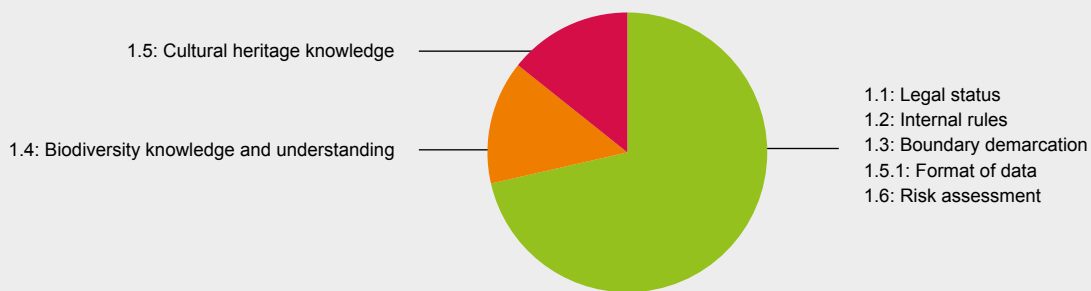
Habitat: Subtidal rocky reefs, offshore reefs, intertidal rock pools

Notable species: East coast sole, loggerhead, green, hawksbill and leatherback turtles, whales, dolphins, great white shark, Cape fur seals

MANAGEMENT EFFECTIVENESS INDICATORS



GOUKAMMA MPA: CONTEXT

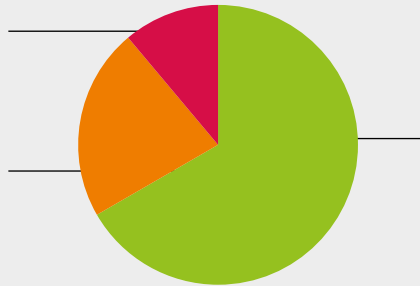


PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
1.5: Cultural heritage knowledge	Only an informal cultural heritage survey has identified heritage assets.	Appoint an accredited cultural heritage practitioner to formally identify cultural heritage assets.

GOUKAMMA MPA: PLANNING

- 2.4: Management plans for significant cultural heritage assets
- 2.1: Design
- 2.1.2: Delineation of a zone of influence



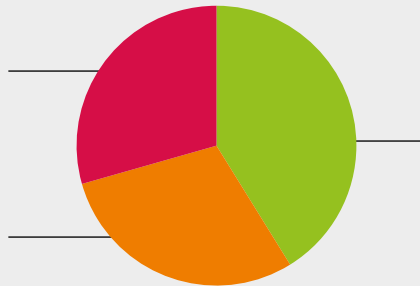
- 2.1.1: Expansion plan
- 2.1.3: Corridor management
- 2.2: Management plan
- 2.3: Education, awareness and interpretation programme
- 2.6: Restoration of degraded areas
- 2.7: Collections management / curatorship of heritage artefacts

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
2.4: Management plans for significant cultural heritage assets	No formal site management plans exist for identified significant cultural heritage sites.	Appoint an accredited heritage practitioner to develop a formal site management plan for significant cultural heritage.

GOUKAMMA MPA: INPUTS

- 3.2: Human resource capacity
- 3.3: Adequacy of operational budget
 - 3.4.1: Capital budget
- 3.9: Adequacy of transport fleet
- 3.10: Health and safety
- 3.1: Management research programme
 - 3.1.1: Monitoring and evaluation programme
- 3.6: Law enforcement capacity and capability
- 3.7: Adequacy of operational equipment
- 3.7.1: Adequacy of operational infrastructure



- 3.1.2: Relationship with researchers
- 3.4: Security of operational budget
 - 3.4.2: Budget management
 - 3.4.3: Delegation of management of budget
- 3.5.1: Fundraising
- 3.8: Adequacy of tourism infrastructure
- 3.11: Staff housing

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
3.2: Human resource capacity	The approved staff organogram is not sufficient, and some posts are unfunded or vacant.	Develop and approve an organigram that reflects critical management objectives. Ensure that human resource capacity meets the approved levels.
3.3: Adequacy of operational budget	The allocated operational budget is inadequate to effectively manage the MPA.	Secure an adequate operational budget.
3.4.1: Capital budget	Inadequate capital budget is available to replace equipment, infrastructure and vehicles.	Secure an adequate capital budget to replace equipment, infrastructure and vehicles.
3.9: Adequacy of transport fleet	There is an insufficient number of suitable vehicles to conduct critical management activities.	Secure a sufficient number of suitable vehicles to conduct critical management activities.

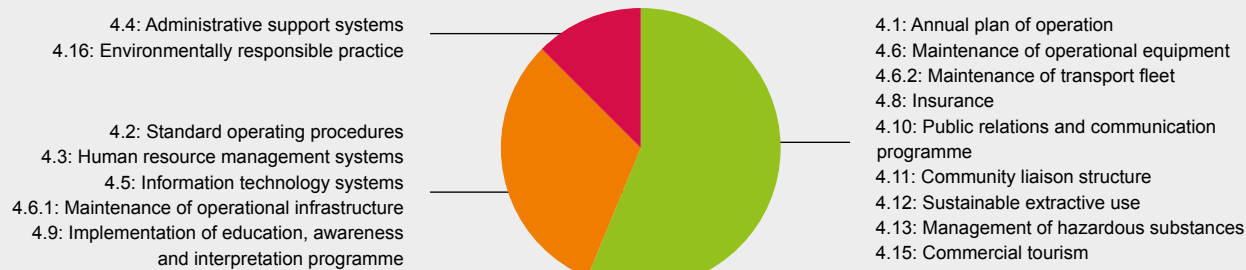
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GOUKAMMA MPA: INPUTS CONTINUED

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
3.10: Health and safety	No external audit has certified that site management complies with and implements the Occupational Health and Safety Act.	Conduct an external health and safety audit to confirm compliance with the Occupational Health and Safety Act.

GOUKAMMA MPA: PROCESS

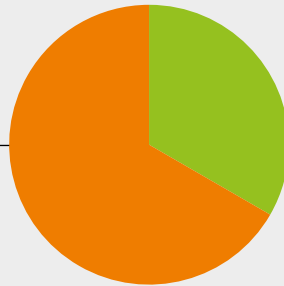


PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
4.4: Administrative support systems	Administrative support systems are inadequate and do not contribute to management effectiveness.	Improve administrative support systems to adequately contribute to management effectiveness.
4.16: Environmentally responsible practice	No formal plan exists for instituting environmentally sustainable practices.	Complete the development and implementation of a formal plan for environmentally sustainable practices.

GOUKAMMA MPA: OUTPUTS

- 5.1: Tourism infrastructure
- 5.2: Functioning of law enforcement and compliance systems
- 5.3: Staff development and productivity
- 5.5: Community support

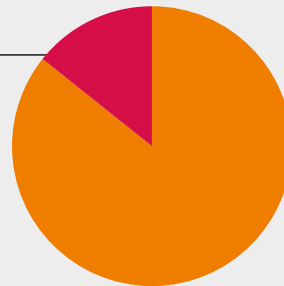


- 5.2.1: Integrated compliance plan
- 5.4: Linking of management plan to key performance areas

BASIC LEVEL OF MANAGEMENT EFFECTIVENESS

GOUKAMMA MPA: OUTCOMES

- 6.7: Cultural heritage condition assessment



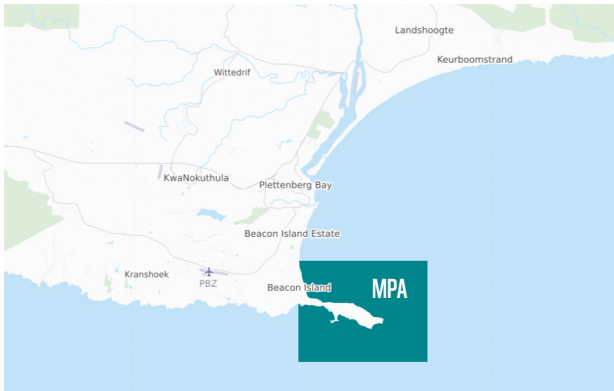
- 6.1: Economic and social benefit assessment
- 6.2: Achievement of biodiversity targets
- 6.3: Ecological processes
- 6.4: Ecosystem services
- 6.5: Land use planning and management outside the site
- 6.6: Water use planning and management operations influencing the site

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
6.7: Cultural heritage condition assessment	Cultural heritage assets and values are not being managed as required in the management plan or heritage management plan.	Ensure that cultural heritage assets and values are being managed as required in the management plan or heritage management plan.

ROBBERG MARINE PROTECTED AREA

Plettenberg Bay, Western Cape



Established: 1998

Area of protected ocean: 42 km²

Length of protected coastline: 9.5 km

Key features: World Heritage Site and National Monument

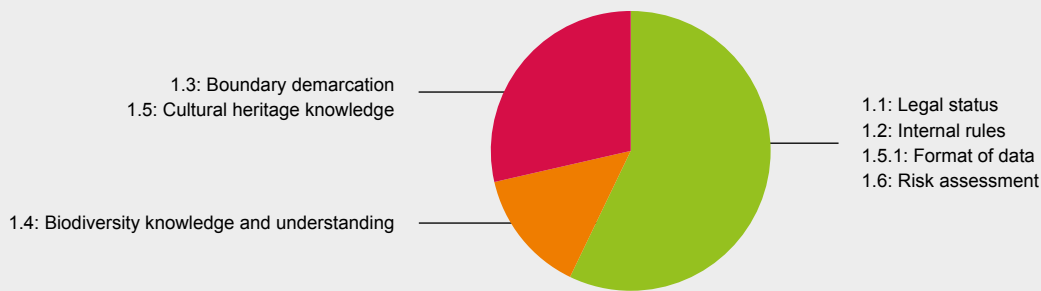
Habitat: Rocky coastline, sandy beaches, offshore reefs, and soft sediment areas

Notable species: Loggerhead, green and hawksbill turtles, whales, dolphins, Cape fur seals, red steenbras, black mussel cracker, east coast sole, silver kob

MANAGEMENT EFFECTIVENESS INDICATORS



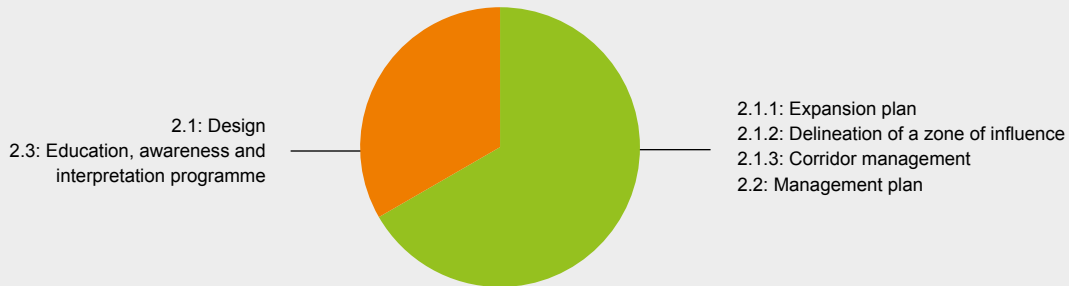
ROBBERG MPA: CONTEXT



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

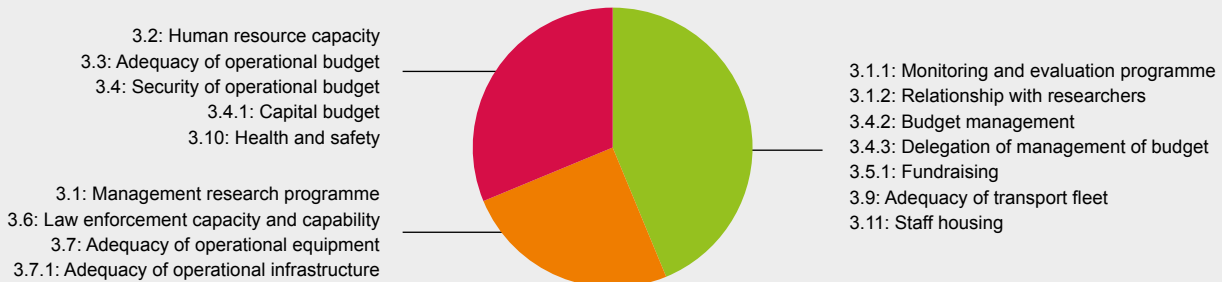
INDICATOR	BARRIER	NEXT STEP
1.3: Boundary demarcation	MPA boundary is not appropriately demarcated and is not known by the public.	Install MPA boundary beacons and appropriate signage.
1.5: Cultural heritage knowledge	Only an informal cultural heritage survey has identified heritage assets.	Appoint an accredited cultural heritage practitioner to formally identify cultural heritage assets.

ROBBERG MPA: PLANNING



BASIC LEVEL OF MANAGEMENT EFFECTIVENESS

ROBBERG MPA: INPUTS



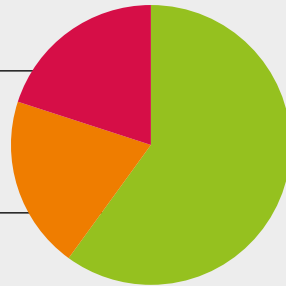
PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
3.2: Human resource capacity	The approved staff organogram is not sufficient, and some posts are unfunded or vacant.	Develop and approve an organigram that reflects critical management objectives. Address the existing funding shortage to ensure that human resource capacity meets the approved levels.
3.3: Adequacy of operational budget	The allocated operational budget is inadequate to effectively manage the MPA and only covers MPA staff salaries.	Secure an adequate operational budget.
3.4: Security of operational budget	There is no secure operational budget.	Secure an adequate operational budget specific to the site that is secure and guaranteed on an annual cycle.
3.4.1: Capital budget	No capital budget is available to replace equipment, infrastructure and vehicles.	Secure an adequate capital budget to replace equipment, infrastructure and vehicles.
3.10: Health and safety	No external audit has certified that site management complies with and implements the Occupational Health and Safety Act.	Conduct an external health and safety audit to confirm compliance with the Occupational Health and Safety Act.

ROBBERG MPA: PROCESS

4.4: Administrative support systems
 4.13: Management of hazardous substances
 4.16: Environmentally responsible practice

4.2: Standard operating procedures
 4.3: Human resource management systems
 4.9: Implementation of education, awareness and interpretation programme



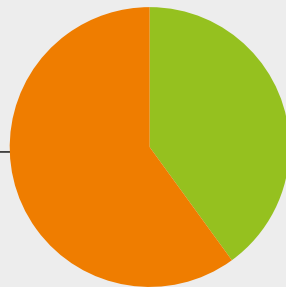
4.1: Annual plan of operation
 4.5: Information technology systems
 4.6: Maintenance of operational equipment
 4.6.1: Maintenance of operational infrastructure
 4.6.2: Maintenance of transport fleet
 4.8: Insurance
 4.10: Public relations and communication programme
 4.11: Community liaison structure

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
4.4: Administrative support systems	Administrative support systems are inadequate and do not contribute to management effectiveness.	Improve administrative support systems to adequately contribute to management effectiveness.
4.13: Management of hazardous substances	No formal, legally compliant programme with functional infrastructure exists. Boat fuel is currently being stored in the boathouse, which is unsafe.	Develop a formal, legally compliant programme with functional infrastructure (e.g. fuel store).
4.16: Environmentally responsible practice	No formal plan exists for instituting environmentally sustainable practices.	Complete the development and implementation of a formal plan for environmentally sustainable practices.

ROBBERG MPA: OUTPUTS

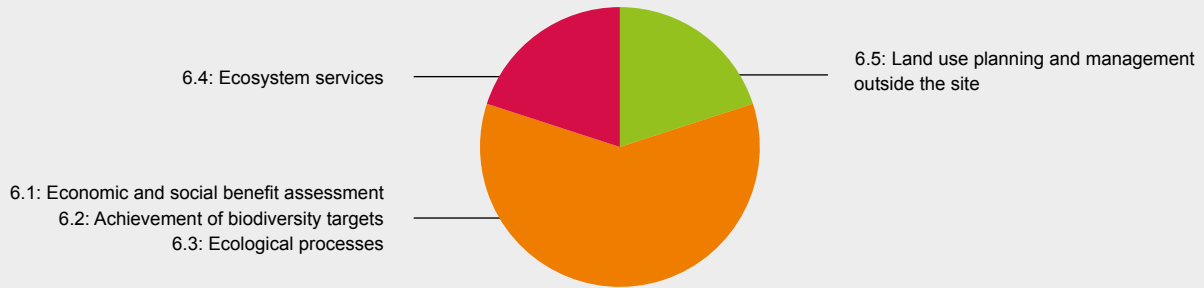
5.2: Functioning of law enforcement and compliance systems
 5.3: Staff development and productivity
 5.5: Community support



5.2.1: Integrated compliance plan
 5.4: Linking of management plan to key performance areas

BASIC LEVEL OF MANAGEMENT EFFECTIVENESS

ROBBERG MPA: OUTCOMES

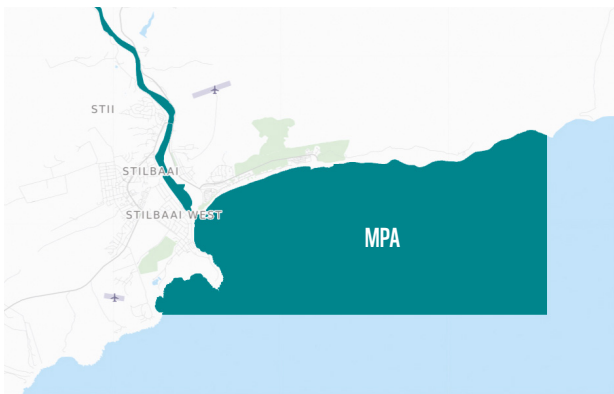


PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
6.4: Ecosystem services	Ecological processes and systems are being partially maintained, resulting in the provision of limited ecosystem service benefits to the site and neighbouring land users/communities.	Ensure that ecological processes and systems are being adequately maintained, resulting in the provision of ecosystem service benefits to the site and neighbouring land users/communities.

STILBAAI MARINE PROTECTED AREA

Stilbaai, Western Cape



Established: 2008

Area of protected ocean: 20 km²

Length of protected coastline: 13.8 km

Key features: Permanently open estuary, sandy and rocky bays, stone-age fish traps

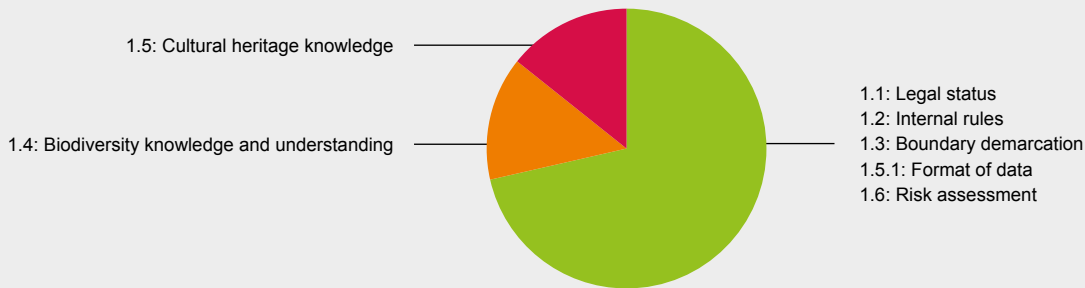
Habitat: Estuary, coastal dune system, salt marshes, reefs, estuarine reeds

Notable species: Southern right whale, ragged-tooth shark, African mottled and longfin eels, pansy shell

MANAGEMENT EFFECTIVENESS INDICATORS



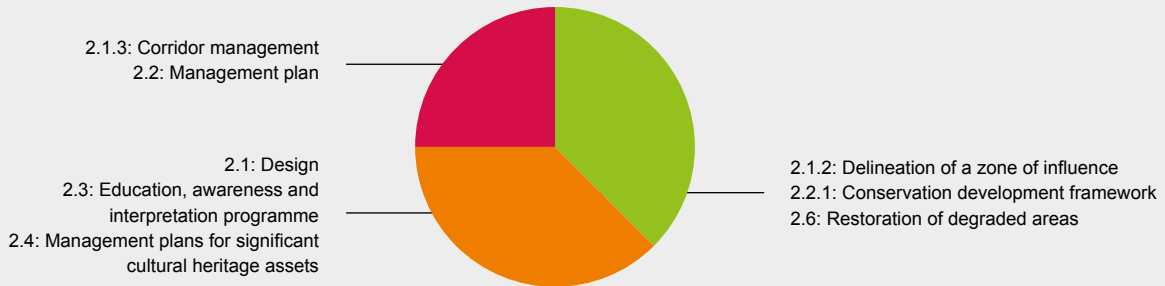
ST ILBAAI MPA: CONTEXT



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
1.5: Cultural heritage knowledge	Only an informal cultural heritage survey has identified heritage assets.	Appoint an accredited cultural heritage practitioner to formally identify cultural heritage assets.

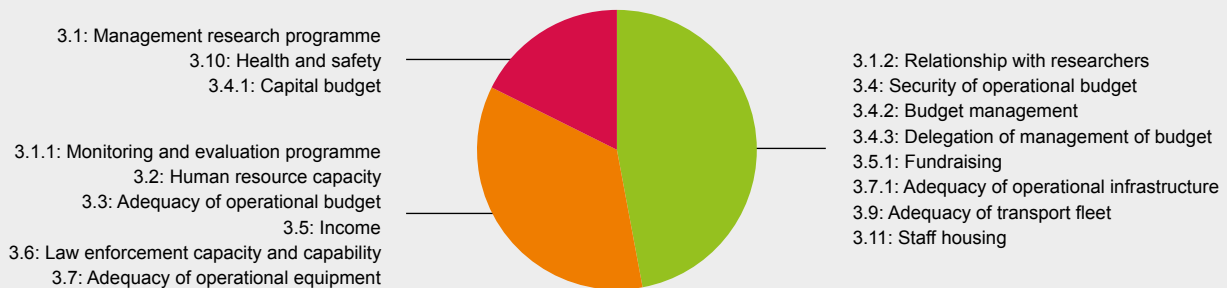
STILBAAI MPA: PLANNING



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
2.1.3: Corridor management	There is no existing plan for MPA corridor management.	Develop an MPA corridor management plan.
2.2: Management plan	The current management plan is not approved by the Minister/MEC.	Obtain Minister or MEC approval.

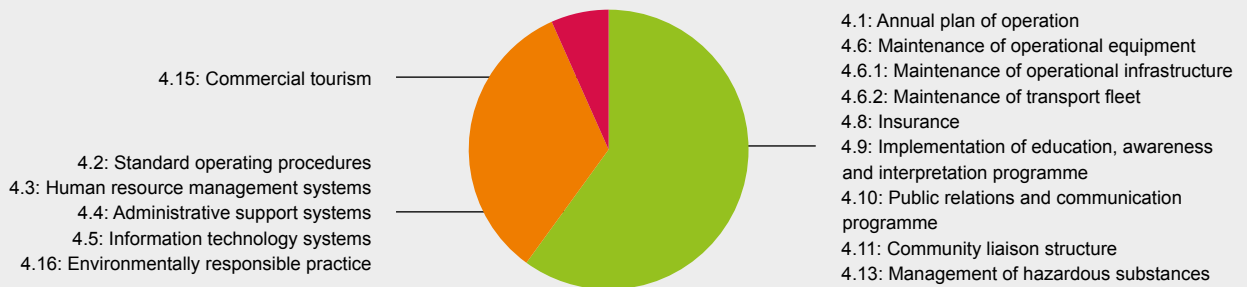
STILBAAI MPA: INPUTS



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
3.1: Management research programme	Research needs have not been identified and no management-focused research is occurring.	Identify and conduct research based on critical management objectives.
3.10: Health and safety	No external audit has certified that site management complies with and implements the Occupational Health and Safety Act.	Conduct an external health and safety audit to confirm compliance with the Occupational Health and Safety Act.
3.4.1: Capital budget	No capital budget is available to replace equipment, infrastructure and vehicles.	Secure an adequate capital budget to replace equipment, infrastructure and vehicles.

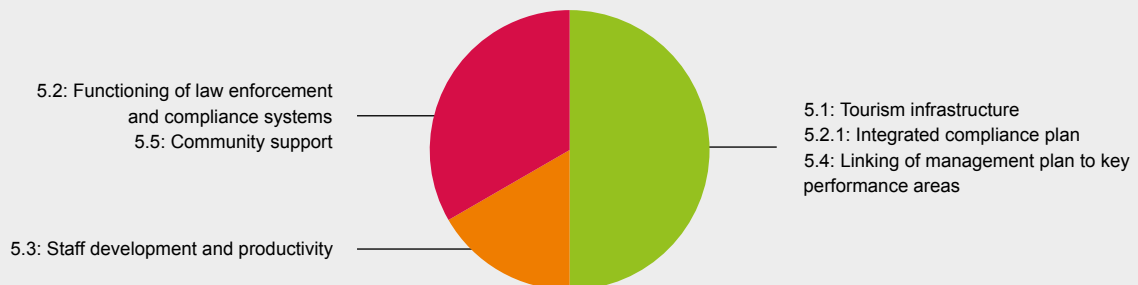
STILBAAI MPA: PROCESS



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
4.15: Commercial tourism	Poor interactions and lack of cooperation between MPA personnel and tourism operators/concessionaires to enhance visitor experiences, protect values and resolve conflicts.	Improve interactions and develop cooperation with tourism operators.

STILBAAI MPA: OUTPUTS

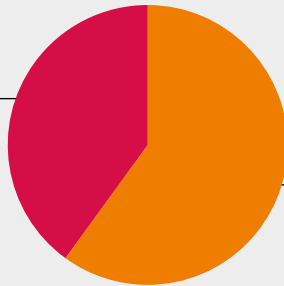


PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
5.2: Functioning of law enforcement and compliance systems	Adequate protection systems or mechanisms are not being successfully implemented to control current levels of legitimate and illegitimate access and activities in the MPA.	Develop adequate protection systems or mechanisms to successfully control current levels of legitimate and illegitimate access and activities in the MPA.
5.5: Community support	Minimal support or assistance from the community.	Enlist community members to assist and support the site with some site management tasks and fundraising.

STILBAAI MPA: OUTCOMES

6.2: Achievement of biodiversity targets
6.5: Land use planning and management outside the site



6.1: Economic and social benefit assessment
6.3: Ecological processes
6.4: Ecosystem services

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
6.2: Achievement of biodiversity targets	Critical biodiversity targets are not being met.	Ensure that critical biodiversity targets are being met.
6.5: Land use planning and management outside the site	Land use planning does not take the needs of the site into account, but it is not detrimental to the site.	Ensure that land use planning at least partially considers the long-term needs of the site. Some cooperation from industries such as agriculture exists.



CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

MANAGEMENT AUTHORITY OVERVIEW: CITY OF CAPE TOWN

MPAs managed:

- Helderberg Marine Protected Area

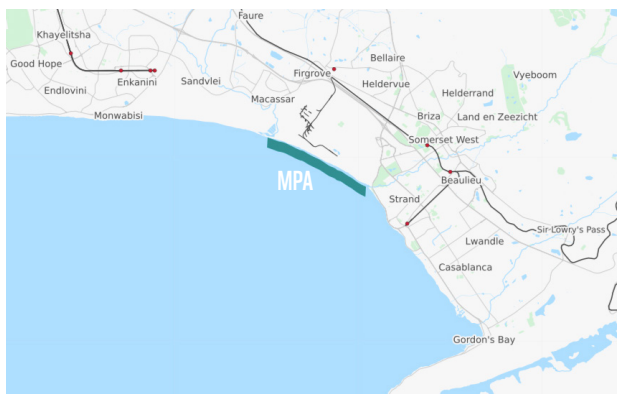
See Helderberg MPA METT results for an overview of management effectiveness.

HELDERBERG MARINE PROTECTED AREA

Western Cape



CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD



Established: 2000

Area of protected ocean: 24.6 km²

Length of protected coastline: 14 km

Key features: Undeveloped sandy and rocky shore, important spiritual site

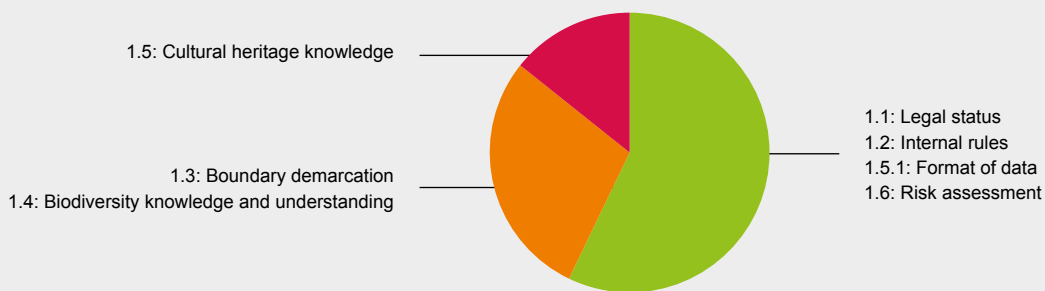
Habitat: Sandy shores, rocky reefs, kelp beds, mobile dune system

Notable species: Roman, red stumpnose, galjoen, red steenbras, broadnose sevengill shark, spotted gulley shark

MANAGEMENT EFFECTIVENESS INDICATORS



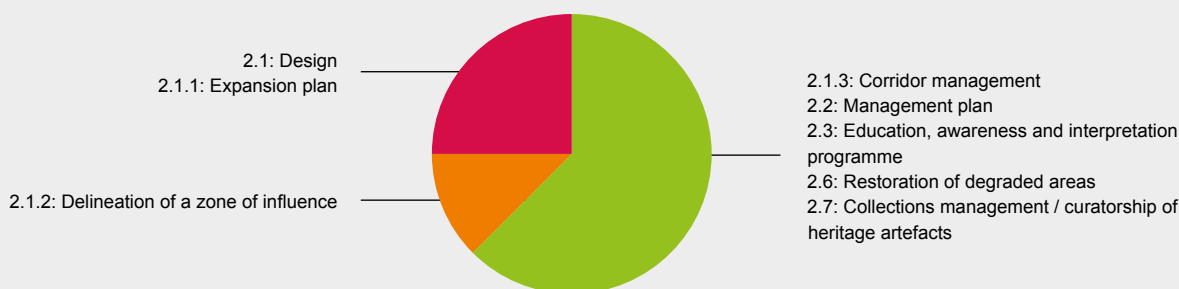
HELDERBERG MPA: CONTEXT



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
1.5 Cultural heritage knowledge	An informal cultural heritage survey has identified no heritage assets.	Appoint an accredited cultural heritage practitioner to formally identify any potential cultural heritage assets.

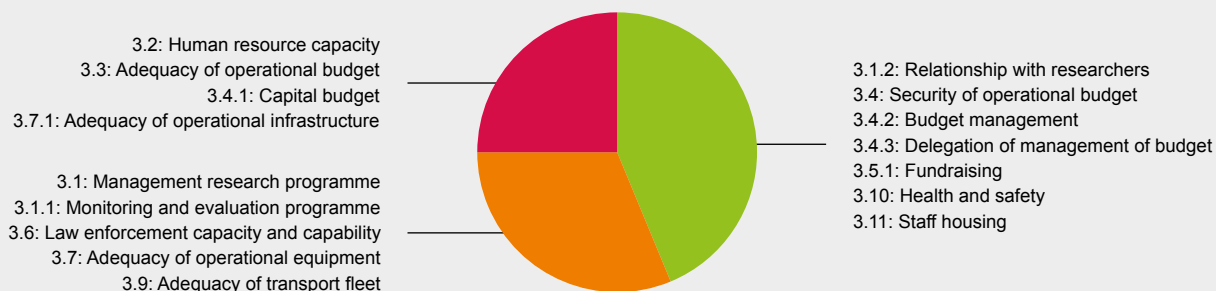
HELDERBERG MPA: PLANNING



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
2.1 Design	The design of the MPA is inadequate to meet conservation objectives and mitigating measures (e.g. managing areas beyond the MPA) do not compensate for these inadequacies.	Enact mitigating measures to compensate for MPA design inadequacies.
2.1.1 Expansion plan	No expansion plan has been set out in line with the organisation's expansion strategy.	Develop an expansion plan in line with the organisation's expansion strategy.

HELDERBERG MPA: INPUTS



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
3.2 Human resource capacity	The approved staff organogram is not sufficient, and some posts are unfunded or vacant.	Revise the current staff organogram and resolve staffing issues. Ensure that human resource capacity meets the approved levels.
3.3: Adequacy of operational budget	The allocated operational budget is inadequate to effectively manage the MPA.	Secure an adequate operational budget.
3.4.1: Capital budget	Inadequate capital budget is available to replace equipment, infrastructure and vehicles.	Secure an adequate capital budget to replace equipment, infrastructure and vehicles.

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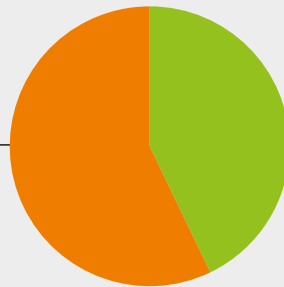
HELDERBERG MPA: INPUTS CONTINUED

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
3.7.1: Adequacy of operational infrastructure	Operational infrastructure is inadequate for management needs.	Secure operational infrastructure to adequately address current management needs.

HELDERBERG MPA: PROCESS

- 4.1: Annual plan of operation
- 4.2: Standard operating procedures
- 4.4: Administrative support systems
- 4.5: Information technology systems
- 4.6.1: Maintenance of operational infrastructure
- 4.9: Implementation of education, awareness and interpretation programme
- 4.10: Public relations and communication programme
- 4.16: Environmentally responsible practice

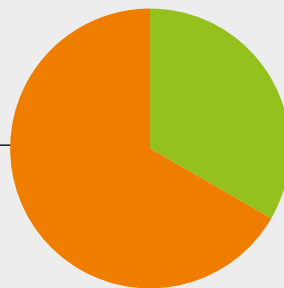


- 4.3: Human resource management systems
- 4.6: Maintenance of operational equipment
- 4.6.2: Maintenance of transport fleet
- 4.8: Insurance
- 4.11: Community liaison structure
- 4.13: Management of hazardous substances

BASIC LEVEL OF MANAGEMENT EFFECTIVENESS

HELDERBERG MPA: OUTPUTS

- 5.1: Tourism infrastructure
- 5.2: Functioning of law enforcement and compliance systems
- 5.3: Staff development and productivity
- 5.5: Community support

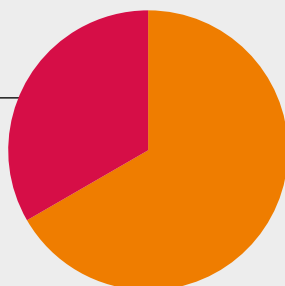


- 5.2.1: Integrated compliance plan
- 5.4: Linking of management plan to key performance areas

BASIC LEVEL OF MANAGEMENT EFFECTIVENESS

HELDERBERG MPA: OUTCOMES

6.1: Economic and social benefit assessment
6.2: Achievement of biodiversity targets



6.3: Ecological processes
6.4: Ecosystem services
6.5: Land use planning and management outside the site
6.6: Water use planning and management operations influencing the site

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

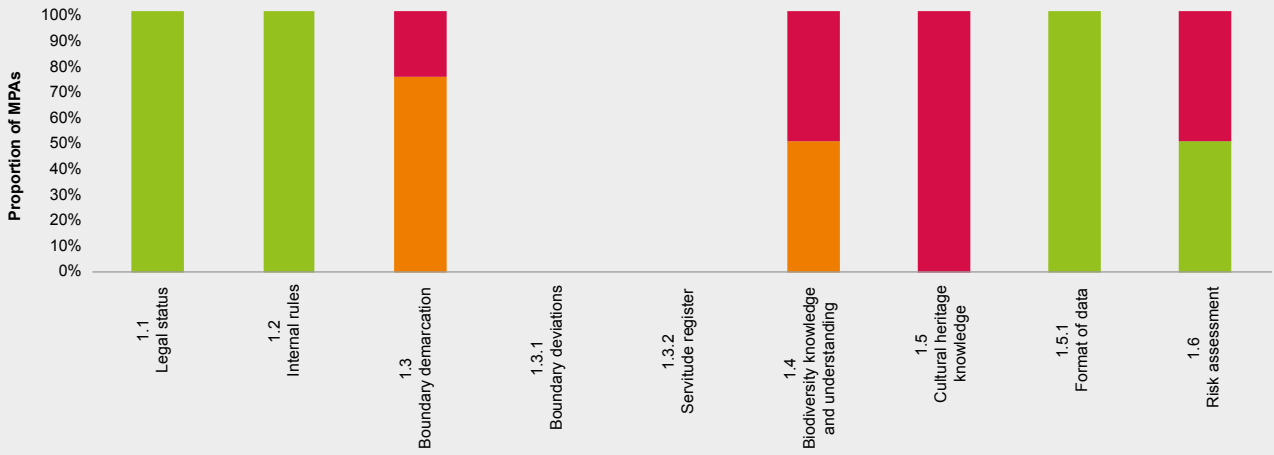
INDICATOR	BARRIER	NEXT STEP
6.1 Economic and social benefit assessment	The local or regional socioeconomic impact of the MPA on communities has not been assessed.	Conduct a socioeconomic benefit assessment to determine the impact of the MPA on the local and regional economy.
6.2 Achievement of biodiversity targets	Critical biodiversity targets are not being met.	Ensure that critical biodiversity targets are being met.

MANAGEMENT AUTHORITY OVERVIEW: EASTERN CAPE PARKS AND TOURISM AGENCY

MPAs managed:

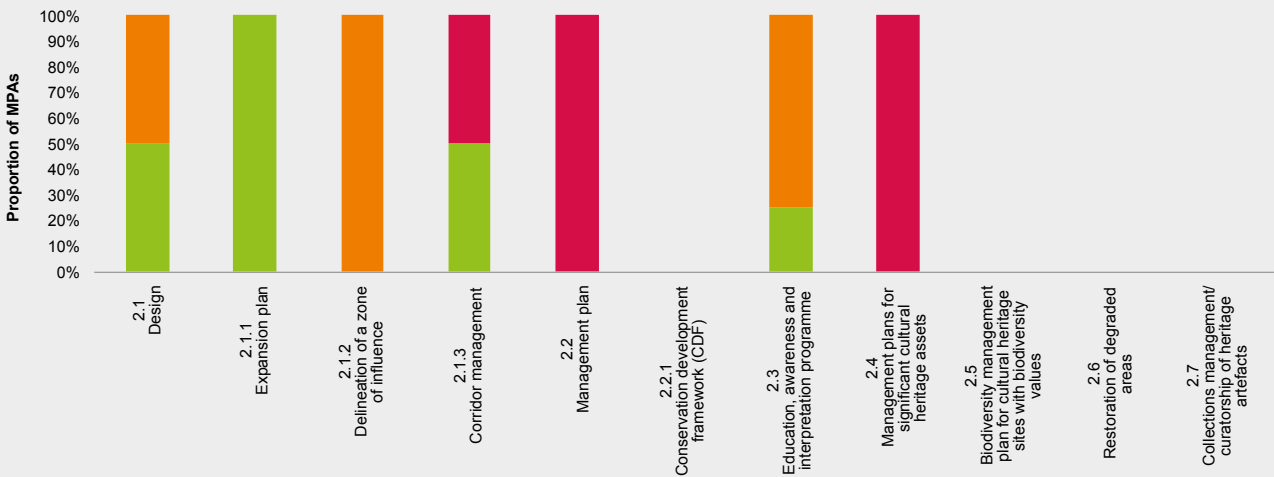
- Amathole Marine Protected Area
- Dwesa-Cwebe Marine Protected Area
- Hluleka Marine Protected Area
- Pondoland Marine Protected Area

ECPTA: CONTEXT



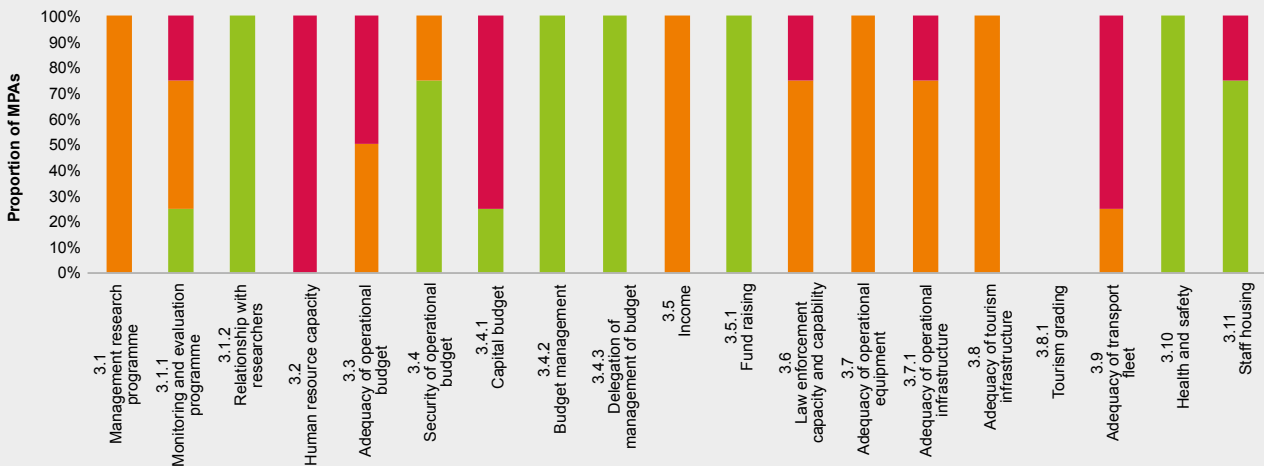
OPTIMAL MANAGEMENT	PRIORITY INDICATORS (≥50% OF MPAS RED)	PRIORITY INDICATORS FOR INTRA-AGENCY COLLABORATION
1.1 Legal status 1.2 Internal rules 1.5.1 Format of data	1.4 Biodiversity knowledge and understanding 1.5 Cultural heritage knowledge 1.6 Risk assessment	1.3 Boundary demarcation

ECPTA: PLANNING



OPTIMAL MANAGEMENT	PRIORITY INDICATORS (≥50% OF MPAS RED)	PRIORITY INDICATORS FOR INTRA-AGENCY COLLABORATION
2.1.1 Expansion plan	2.1.3 Corridor management 2.2 Management plan 2.4 Management plans for significant cultural heritage assets	

ECPTA: INPUTS



OPTIMAL MANAGEMENT

- 3.1.2 Relationship with researchers
- 3.4.2 Budget management
- 3.4.3 Delegation of management of budget
- 3.5.1 Fundraising
- 3.10 Health and safety

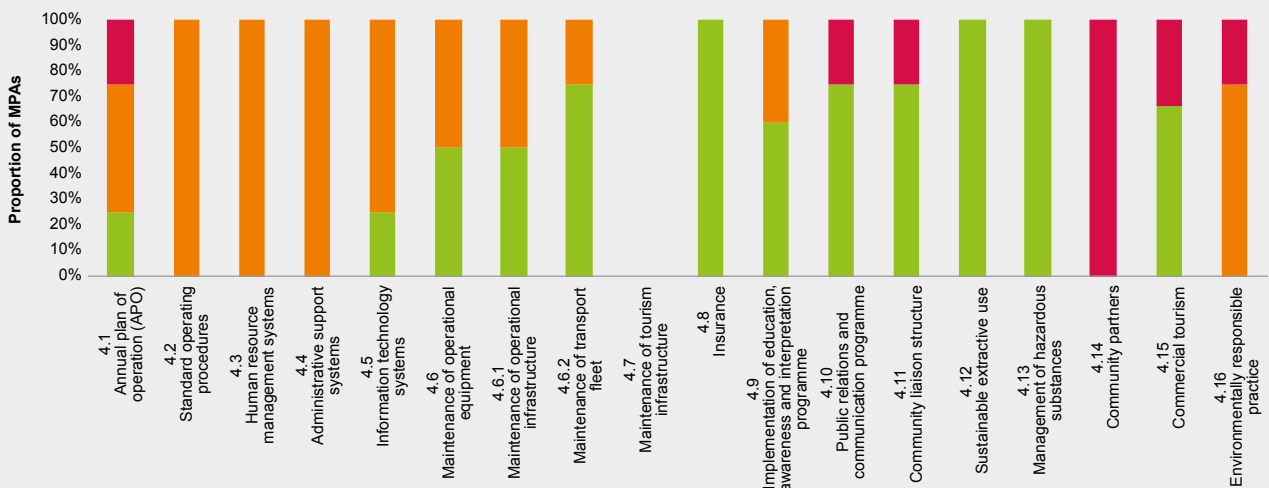
PRIORITY INDICATORS (≥50% OF MPAS RED)

- 3.2 Human resource capacity
- 3.3 Adequacy of operational budget
- 3.4.1 Capital budget
- 3.9 Adequacy of transport fleet

PRIORITY INDICATORS FOR INTRA-AGENCY COLLABORATION

- 3.1.1 Monitoring and evaluation programme
- 3.6 Law enforcement capacity and capability
- 3.7.1 Adequacy of operational infrastructure
- 3.11 Staff housing

ECPTA: PROCESS



OPTIMAL MANAGEMENT

- 4.8 Insurance
- 4.13 Management of hazardous substances

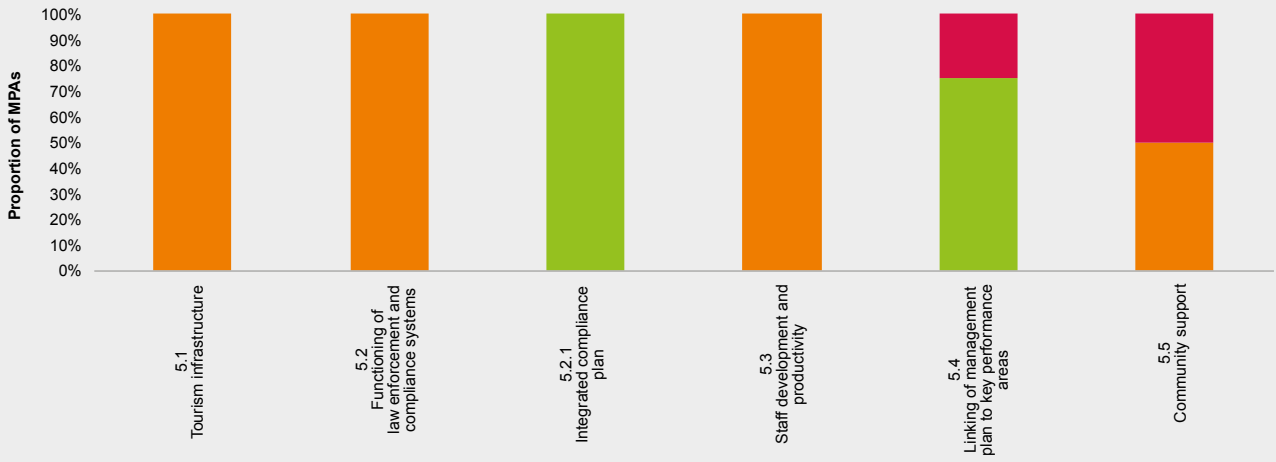
PRIORITY INDICATORS (≥50% OF MPAS RED)

- 4.14 Community partners

PRIORITY INDICATORS FOR INTRA-AGENCY COLLABORATION

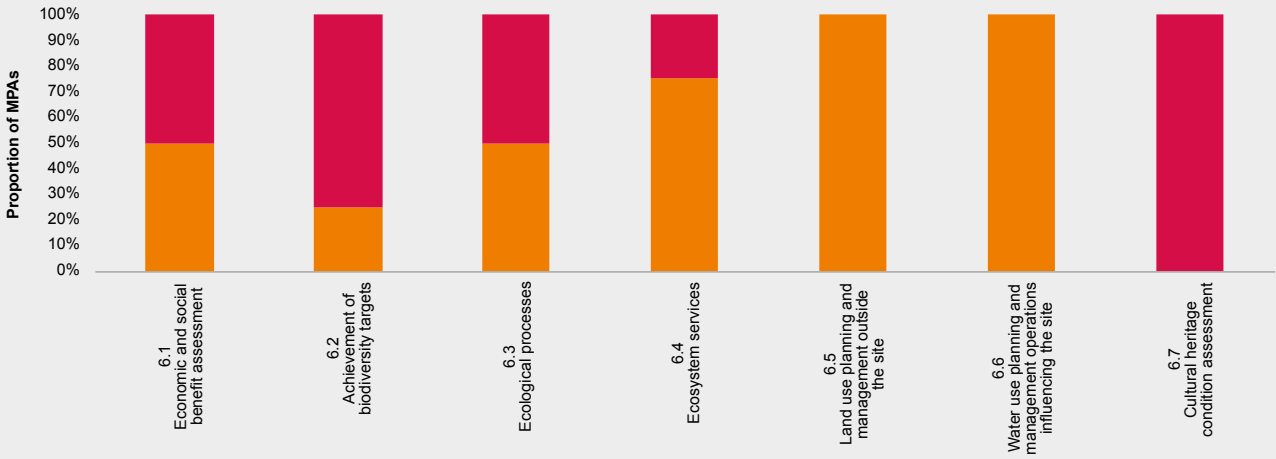
- 4.1 Annual plan of operation (APO)
- 4.10 Public relations and communication programme
- 4.11 Community liaison structure
- 4.15 Commercial tourism
- 4.16 Environmentally responsible practice

ECPTA: OUTPUTS



OPTIMAL MANAGEMENT	PRIORITY INDICATORS (≥50% OF MPAS RED)	PRIORITY INDICATORS FOR INTRA-AGENCY COLLABORATION
5.2.1 Integrated compliance plans	5.5 Community support	5.4 Linking of management plan to key performance areas

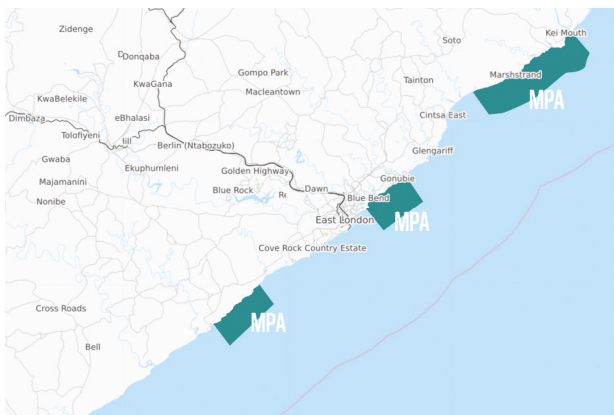
ECPTA: OUTCOMES



OPTIMAL MANAGEMENT	PRIORITY INDICATORS (≥50% OF MPAS RED)	PRIORITY INDICATORS FOR INTRA-AGENCY COLLABORATION
	6.1 Economic and social benefit assessment 6.2 Achievement of biodiversity targets 6.3 Ecological processes 6.7 Cultural heritage condition assessment	6.4 Ecosystem services

AMATHOLE MARINE PROTECTED AREA

Eastern Cape



Established: 2011

Area of protected ocean: 247.75 km²

Length of protected coastline: 54 km

Key features: Endemic reef fish refuge

Habitat: Sandy beaches, rocky intertidal, kelp forests

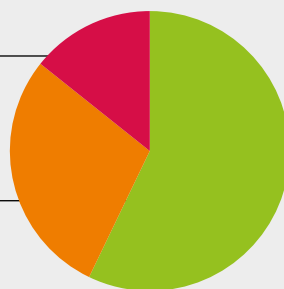
Notable species: Seventy-four, red steenbras, dageraad, black musselcracker, galjoen, abalone, dolphins, whales

MANAGEMENT EFFECTIVENESS INDICATORS



AMATHOLE MPA: CONTEXT

- 1.5: Cultural heritage knowledge
- 1.3: Boundary demarcation
- 1.4: Biodiversity knowledge and understanding

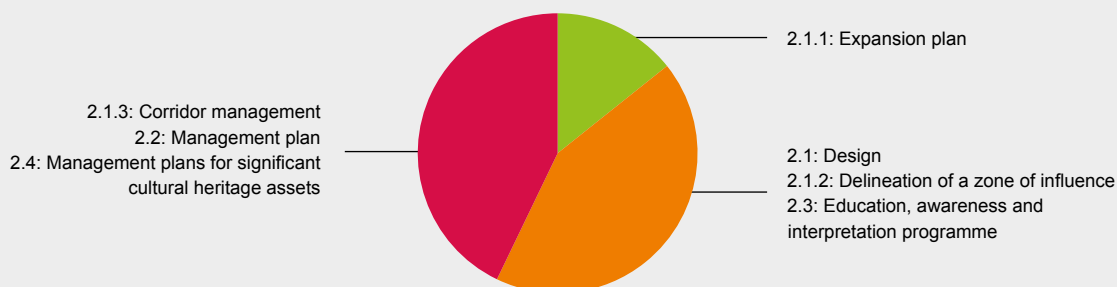


- 1.1: Legal status
- 1.2: Internal rules
- 1.5.1: Format of data
- 1.6: Risk assessment

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
1.5 Cultural heritage knowledge	Draft heritage management plan is in place, awaiting SAHRA assessment and accreditation.	Appoint an accredited cultural heritage practitioner to formally identify cultural heritage assets and receive heritage management plan approval.

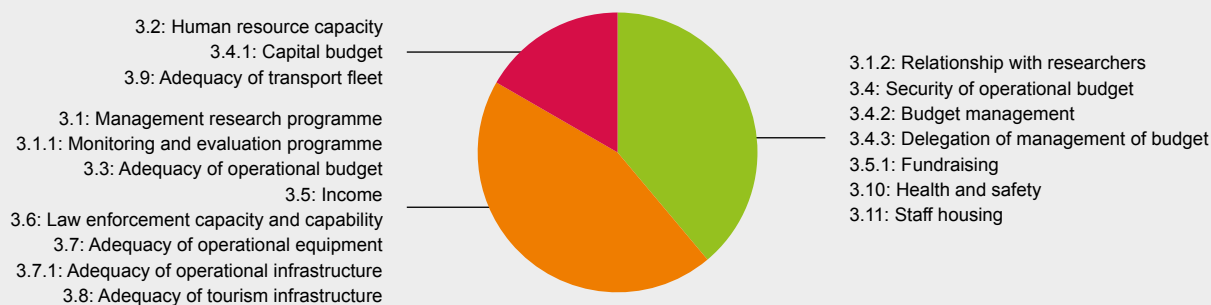
AMATHOLE MPA: PLANNING



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
2.1.3: Corridor management	There is no existing plan for MPA corridor management.	Develop an MPA corridor management plan.
2.2: Management plan	The current management plan is not approved by the Minister/MEC.	Obtain Minister or MEC approval.
2.4: Management plans for significant cultural heritage assets	Only a draft heritage management plan by ECPTA is currently in place.	Appoint an accredited heritage practitioner to develop a formal site management plan for significant cultural heritage that will be approved and incorporated into the MPA management plan.

AMATHOLE MPA: INPUTS



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
3.2: Human resource capacity	The approved staff organogram is not sufficient, and some posts are unfunded or vacant due to lack of funding. Terrestrial reserve staff assist with many MPA tasks.	Develop and approve an organigram that reflects critical management objectives. Ensure that human resource capacity meets the approved levels. Fill vacant positions.

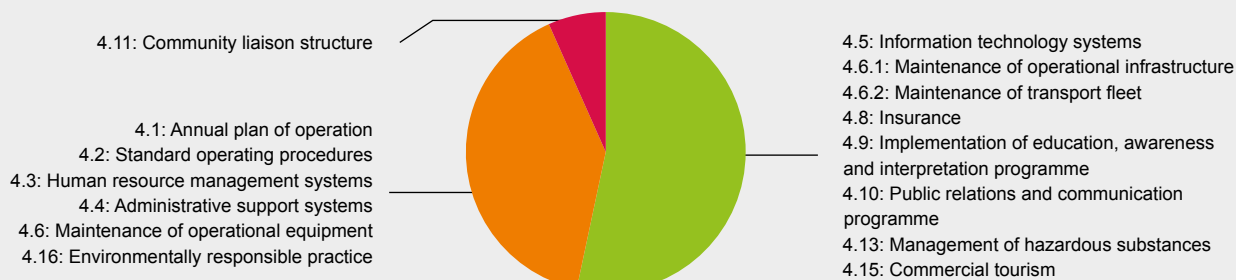
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AMATHOLE MPA: INPUTS CONTINUED

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
3.4.1: Capital budget	Inadequate capital budget is available to replace equipment, infrastructure and vehicles.	Secure an adequate capital budget to replace equipment, infrastructure and vehicles.
3.9: Adequacy of transport fleet	There is an insufficient number of suitable vehicles to conduct critical management activities (only one vehicle available).	Secure a sufficient number of suitable vehicles to conduct critical management activities.

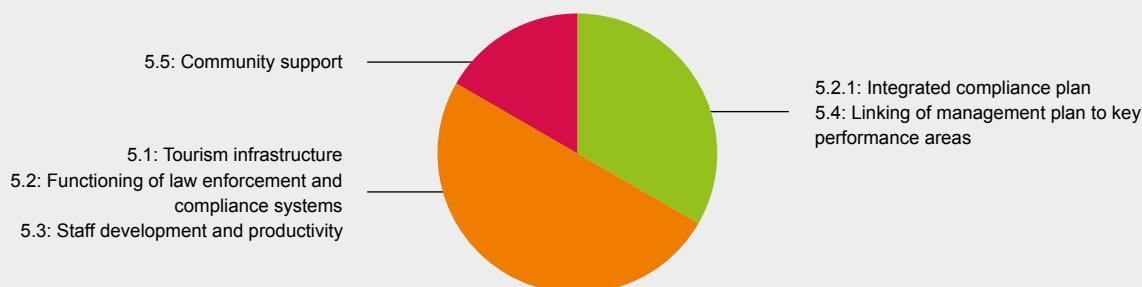
AMATHOLE MPA: PROCESS



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
4.11: Community liaison structure	No well-represented, functioning and formalised community liaison structure exists that contributes to the management/development of the MPA.	Develop an appropriate community liaison structure.

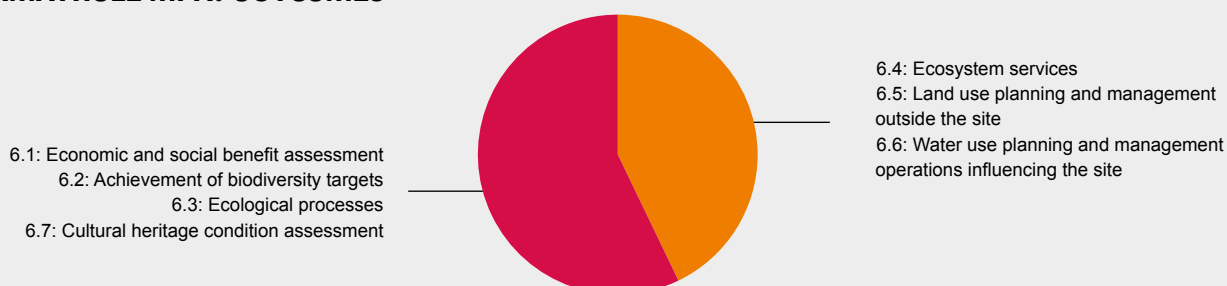
AMATHOLE MPA: OUTPUTS



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
5.5: Community support	Minimal support or assistance from the community.	Enlist community members to assist and support the site with some site management tasks and fundraising.

AMATHOLE MPA: OUTCOMES

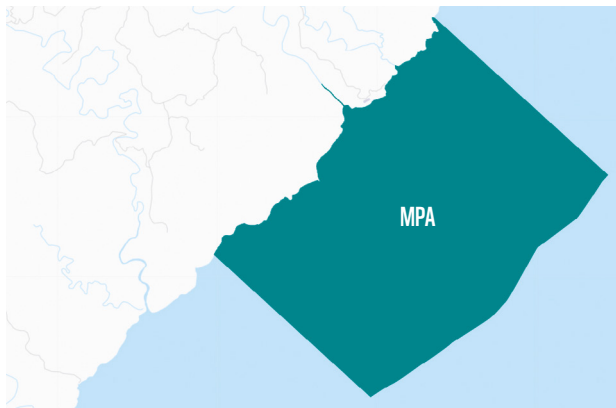


PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
6.1: Economic and social benefit assessment	The local or regional socioeconomic impact of the MPA on communities has not been assessed.	Conduct a socioeconomic benefit assessment to determine the impact of the MPA on the local and regional economy.
6.2: Achievement of biodiversity targets	Critical biodiversity targets are not being met due to lack of staff, budget and resources.	Ensure that critical biodiversity targets are being met.
6.3: Ecological processes	Ecological processes are only partially maintained with some ecological integrity and biodiversity being compromised due to lack of staff, budget and resources.	Ensure that ecological processes are being adequately maintained/augmented by process simulation without biodiversity being compromised.
6.7: Cultural heritage condition assessment	Cultural heritage assets and values are not being managed as required in the current management plan and draft heritage management plan.	Ensure that cultural heritage assets and values are being managed as required in the management plan and heritage management plan.

DWESA-CWEBE MARINE PROTECTED AREA

Eastern Cape



Established: 1991

Area of protected ocean: 193 km²

Length of protected coastline: 14 km

Key features: Protects important fish habitat

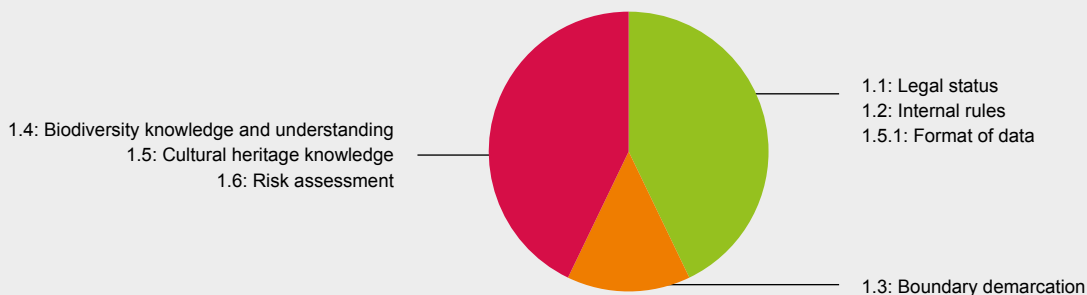
Habitat: Intertidal zones, reefs, estuary, coastal dunes, spawning areas for white steenbras and dusky kob

Notable species: Dusky kob, white steenbras

MANAGEMENT EFFECTIVENESS INDICATORS



DWESA-CWEBE MPA: CONTEXT



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
1.4: Biodiversity knowledge and understanding	Biodiversity objectives are not being achieved due to lack of information on key species, habitats, ecosystems and invasive species of the MPA.	Develop appropriate biodiversity research and monitoring programmes to support the achievement of biodiversity objectives.

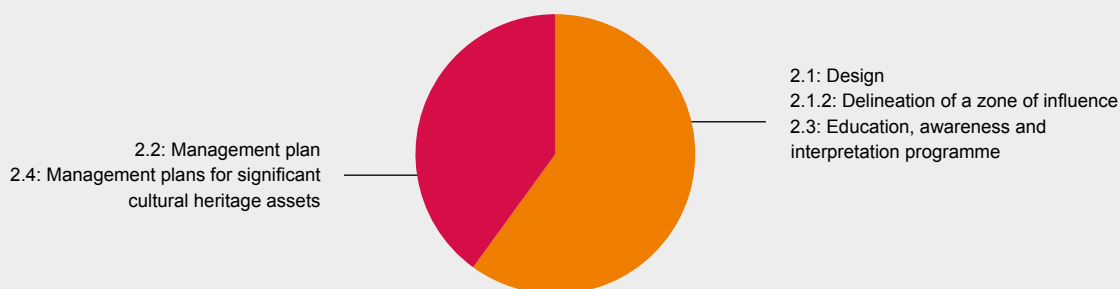
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DWESA-CWEBE MPA: CONTEXT CONTINUED

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
1.5: Cultural heritage knowledge	Only an informal cultural heritage survey has identified heritage assets (i.e. shipwreck).	Appoint an accredited cultural heritage practitioner to formally identify cultural heritage assets.
1.6: Risk assessment	No comprehensive risk assessment has been performed specifically for the MPA.	Perform an MPA-specific strengths, weaknesses, opportunities, and threats (SWOT) analysis.

DWESA-CWEBE MPA: PLANNING

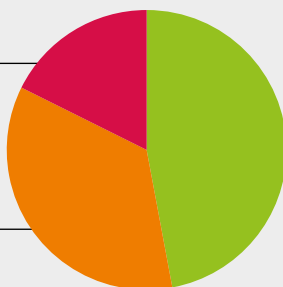


PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
2.2: Management plan	There is no management plan with measurable objectives.	Prepare a management plan with measurable objectives approved by the Minister/MEC.
2.4: Management plans for significant cultural heritage assets	A draft management plan exists for identified significant cultural heritage sites (i.e. shipwreck).	Appoint an accredited heritage practitioner to develop a formal site management plan for significant cultural heritage.

DWESA-CWEBE MPA: INPUTS

- 3.1.1: Monitoring and evaluation programme
- 3.2: Human resource capacity
- 3.7.1: Adequacy of operational infrastructure
- 3.1: Management research programme
- 3.3: Adequacy of operational budget
- 3.5: Income
- 3.6: Law enforcement capacity and capability
- 3.7: Adequacy of operational equipment
- 3.9: Adequacy of transport fleet



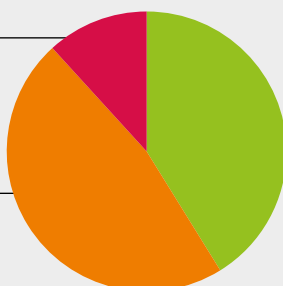
- 3.1.2: Relationship with researchers
- 3.4: Security of operational budget
- 3.4.1: Capital budget
- 3.4.2: Budget management
- 3.4.3: Delegation of management of budget
- 3.5.1: Fundraising
- 3.10: Health and safety
- 3.11: Staff housing

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
3.1.1: Monitoring and evaluation programme	While monitoring needs have been identified, only ad hoc observation is being performed.	Formally monitor critical management objectives.
3.2: Human resource capacity	The approved staff organogram is not sufficient, and some posts are unfunded or vacant.	Develop and approve an organogram that reflects critical management objectives.
3.7.1: Adequacy of operational infrastructure	Operational infrastructure is inadequate for management needs.	Secure operational infrastructure to adequately address current management needs.

DWESA-CWEBE MPA:PROCESS

- 4.1: Annual plan of operation
- 4.14: Community partners
- 4.2: Standard operating procedures
- 4.3: Human resource management systems
- 4.4: Administrative support systems
- 4.5: Information technology systems
- 4.6: Maintenance of operational equipment
- 4.6.1: Maintenance of operational infrastructure
- 4.9: Implementation of education, awareness and interpretation programme
- 4.16: Environmentally responsible practice



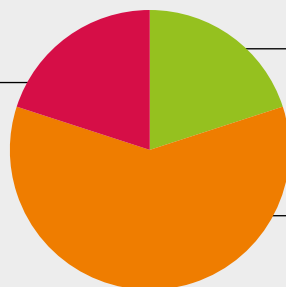
- 4.6.2: Maintenance of transport fleet
- 4.8: Insurance
- 4.10: Public relations and communication programme
- 4.11: Community liaison structure
- 4.12: Sustainable extractive use
- 4.13: Management of hazardous substances
- 4.15: Commercial tourism

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
4.1: Annual plan of operation (APO)	No MPA management plan exists that can be linked to the existing APO.	Develop a management plan that links APO actions to MPA management plan targets.
4.14: Community partners	No formal representative structure for community partners to participate in decision making according to a legally binding co-management agreement.	Develop a formal co-management agreement.

DWESA-CWEBE MPA: OUTPUTS

5.4: Linking of management plan to key performance areas



5.2.1: Integrated compliance plan

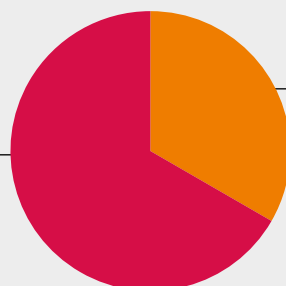
5.2: Functioning of law enforcement and compliance systems
5.3: Staff development and productivity
5.5: Community support

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
5.4: Linking of management plan to key performance areas (KPAs)	No management plan exists to link to the KPAs of the MPA manager.	Link the future MPA management plan to the KPAs of the MPA manager.

DWESA-CWEBE MPA: OUTCOMES

6.2: Achievement of biodiversity targets
6.3: Ecological processes
6.4: Ecosystem services
6.7: Cultural heritage condition assessment



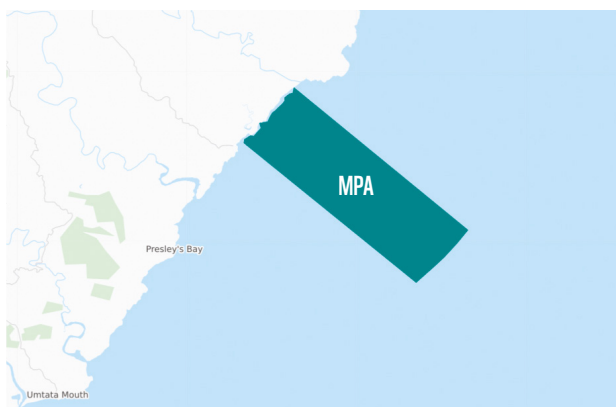
6.1: Economic and social benefit assessment
6.5: Land use planning and management outside the site

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
6.2: Achievement of biodiversity targets	Biodiversity targets have not been set.	Set critical biodiversity targets in the management plan and ensure that they are being met.
6.3: Ecological processes	Ecological processes are only partially maintained with some ecological integrity and biodiversity being compromised.	Ensure that ecological processes are being adequately maintained/augmented by process simulation without biodiversity being compromised.
6.4: Ecosystem services	Ecological processes and systems are being partially maintained, resulting in the provision of limited ecosystem service benefits to the site and neighbouring land users/communities.	Ensure that ecological processes and systems are being adequately maintained, resulting in the provision of ecosystem service benefits to the site and neighbouring land users/communities.
6.7: Cultural heritage condition assessment	Cultural heritage assets and values are not being managed as required in the management plan or heritage management plan.	Ensure that cultural heritage assets and values are being managed as required in the management plan or heritage management plan.

HLULEKA MARINE PROTECTED AREA

Eastern Cape



Established: 2000

Area of protected ocean: 41 km²

Length of protected coastline: 4 km

Key features: Protects invertebrate and fish communities

Habitat: Sandy beaches, rocky shores, shallow subtidal reef

Notable Species: Southern right whale, humpback whale, humpback dolphin, bottlenose dolphin, dusky kob, white steenbras, east coast rock lobster

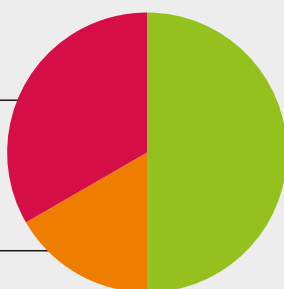
MANAGEMENT EFFECTIVENESS INDICATORS



HLULEKA MPA: CONTEXT

1.3: Boundary demarcation
1.6: Risk assessment

1.4: Biodiversity knowledge and understanding

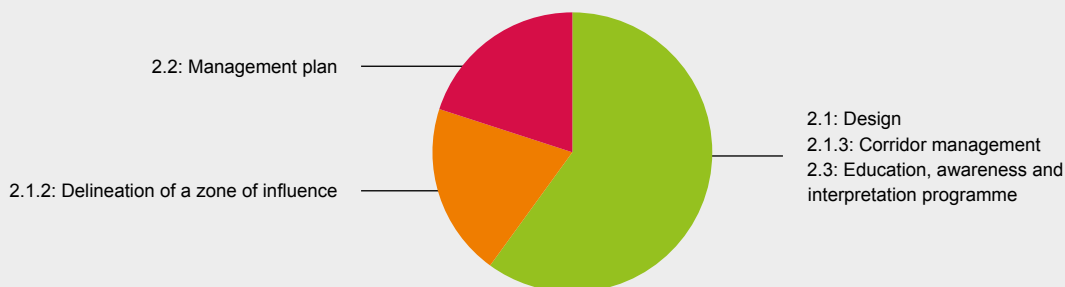


1.1: Legal status
1.2: Internal rules
1.5.1: Format of data

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
1.3: Boundary demarcation	MPA boundary is not appropriately demarcated and is not known by the public.	Erect beacons to demarcate MPA boundaries.
1.6: Risk assessment	No comprehensive risk assessment has been performed specifically for the MPA.	Perform an MPA-specific strengths, weaknesses, opportunities, and threats (SWOT) analysis.

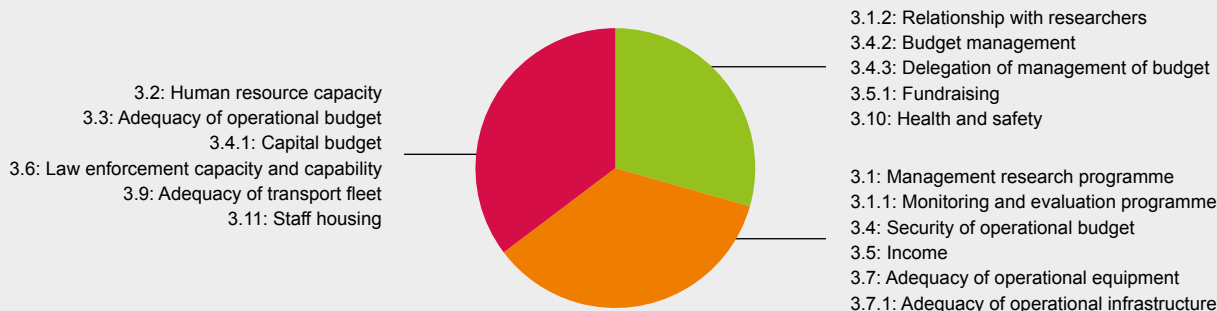
HLULEKA MPA: PLANNING



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
2.2: Management plan	The current management plan is not yet approved by the Minister/MEC.	Obtain Minister or MEC approval.

HLULEKA MPA: INPUTS



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
3.2: Human resource capacity	The approved staff organogram is not sufficient and some posts are vacant.	Develop and approve an organigram that reflects critical management objectives. Ensure that human resource capacity meets the approved levels.
3.3: Adequacy of operational budget	The allocated operational budget is inadequate.	Allocate an adequate operational budget.
3.4.1: Capital budget	Inadequate capital budget is available to replace equipment, infrastructure and vehicles.	Secure an adequate capital budget to replace equipment, infrastructure and vehicles.
3.6: Law enforcement capacity and capability	Major deficiencies in capacity/resources/support to enforce internal rules/regulations due to a staff shortage.	Develop a strategy to eliminate major deficiencies in capacity/resources/support to enforce internal rules/regulations that includes filling vacant posts.

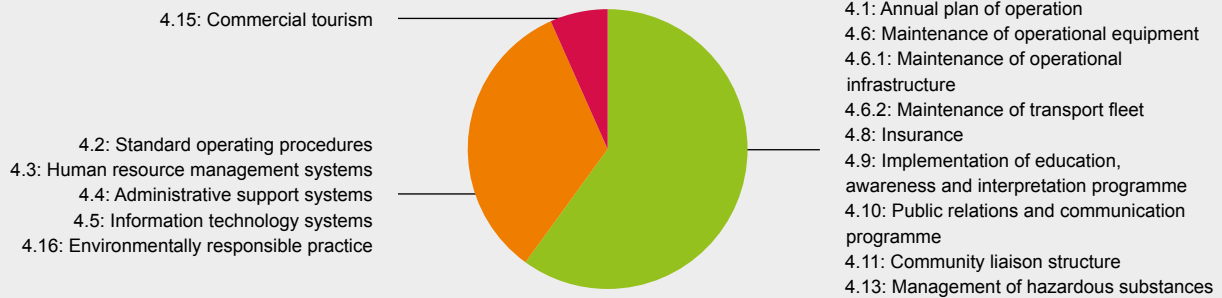
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HLULEKA MPA: INPUTS CONTINUED

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
3.9: Adequacy of transport fleet	There are no suitable vehicles to conduct critical management activities.	Secure a sufficient number of suitable vehicles to conduct critical management activities.
3.11: Staff housing	Staff housing policy in place. However, on-site accommodation is required for the MPA officer.	Implement the staff housing policy to ensure that all staff are housed accordingly.

HLULEKA MPA: PROCESS

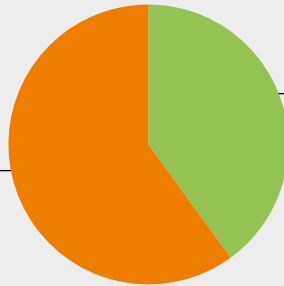


PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
4.15: Commercial tourism	No current interactions between MPA personnel and tourism operators/ concessionaires to enhance visitor experiences, protect values and resolve conflicts.	Improve interactions and develop cooperation with tourism operators by identifying and regularly meeting with tour operators working in the MPA to establish good working relationships.

HLULEKA MPA: OUTPUTS

5.2: Functioning of law enforcement and compliance systems
5.3: Staff development and productivity
5.5: Community support



5.2.1: Integrated compliance plan
5.4: Linking of management plan to key performance areas

BASIC LEVEL OF MANAGEMENT EFFECTIVENESS

HLULEKA MPA: OUTCOMES

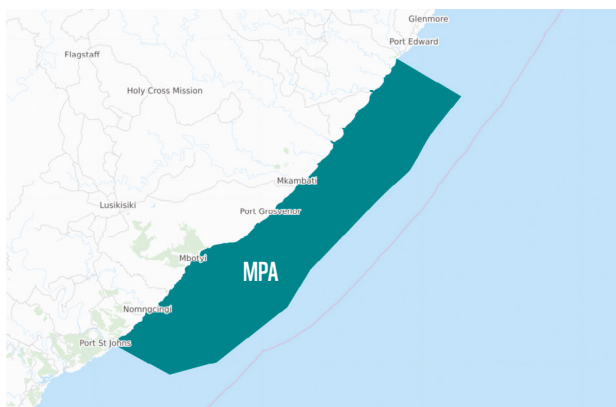


6.1: Economic and social benefit assessment
6.2: Achievement of biodiversity targets
6.3: Ecological processes
6.4: Ecosystem services
6.5: Land use planning and management outside the site

BASIC LEVEL OF MANAGEMENT EFFECTIVENESS

PONDOLAND MARINE PROTECTED AREA

Eastern Cape



Established: 2004

Area of protected ocean: 1 100 km²

Length of protected coastline: 90 km

Key features: South Africa's largest coastal MPA, which hosts the annual sardine migration (sardine run), pristine estuaries and unique biodiversity with elements of sub-tropical and warm temperate ecosystems

Habitat: Estuaries, spawning areas for endangered threatened species, sandy shores, rocky shores, offshore reefs and productive intertidal zones

Notable species: Red steenbras, scotsman, black musselcracker, dusky kob, whales, dolphins

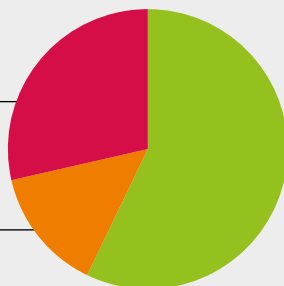
MANAGEMENT EFFECTIVENESS INDICATORS



PONDOLAND MPA: CONTEXT

1.4: Biodiversity knowledge and understanding
1.5: Cultural heritage knowledge

1.3: Boundary demarcation

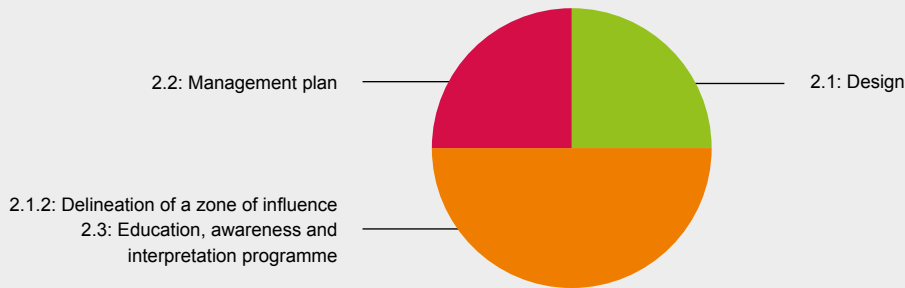


1.1: Legal status
1.2: Internal rules
1.5.1: Format of data
1.6: Risk assessment

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
1.4: Biodiversity knowledge and understanding	Biodiversity objectives are not being achieved due to lack of information on key species, habitats, ecosystems and invasive species of the MPA.	Develop appropriate biodiversity research and monitoring programmes to support the achievement of biodiversity objectives.
1.5: Cultural heritage knowledge	No cultural heritage surveys have been undertaken.	Appoint an accredited cultural heritage practitioner to formally identify cultural heritage assets.

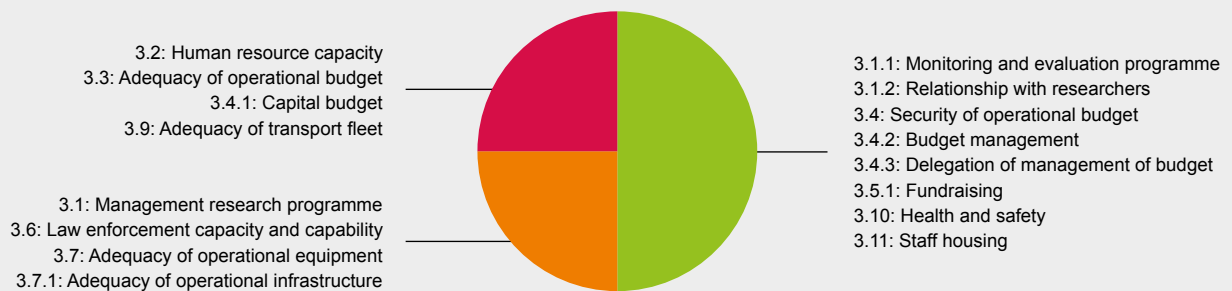
PONDOLAND MPA: PLANNING



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
2.2: Management plan	The existing MPA management plan needs to be revised and updated.	Develop an updated MPA management plan for approval by the Minister/MEC.

PONDOLAND MPA: INPUTS

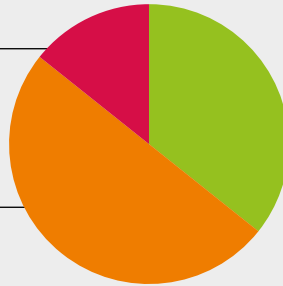


PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
3.2: Human resource capacity	The approved staff organogram is not sufficient, and some posts are unfunded or vacant.	Develop and approve an organigram that reflects critical management objectives. Secure additional budget to ensure that human resource capacity meets the approved levels.
3.3: Adequacy of operational budget	The allocated operational budget is inadequate to effectively manage the MPA.	Secure an adequate operational budget.
3.4.1: Capital budget	No capital budget is available to replace equipment, infrastructure and vehicles.	Secure an adequate capital budget to replace equipment, infrastructure and vehicles.
3.9: Adequacy of transport fleet	There is an insufficient number of suitable vehicles to conduct critical management activities.	Secure a sufficient number of suitable vehicles dedicated to conducting critical MPA management activities.

PONDOLAND MPA:PROCESS

- 4.10: Public relations and communication programme
- 4.16: Environmentally responsible practice
- 4.1: Annual plan of operation
- 4.2: Standard operating procedures
- 4.3: Human resource management systems
- 4.4: Administrative support systems
- 4.5: Information technology systems
- 4.6.1: Maintenance of operational infrastructure
- 4.6.2: Maintenance of transport fleet



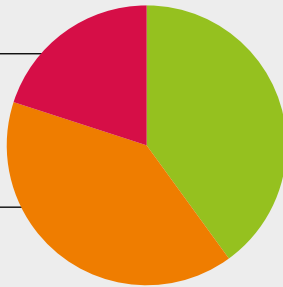
- 4.6: Maintenance of operational equipment
- 4.8: Insurance
- 4.9: Implementation of education, awareness and interpretation programme
- 4.11: Community liaison structure
- 4.13: Management of hazardous substances

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
4.10: Public relations and communication programme	Some ad hoc public relations and communication activities occur.	Develop a formal public relations and communications programme.
4.16: Environmentally responsible practice	There are no environmentally responsible practices in place.	Develop and implement a plan for instituting environmentally responsible practices.

PONDOLAND MPA:OUTPUTS

- 5.5: Community support
- 5.2: Functioning of law enforcement and compliance systems
- 5.3: Staff development and productivity



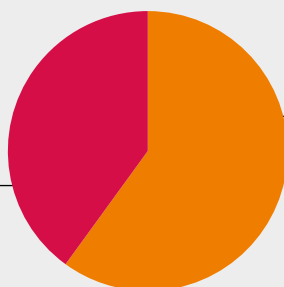
- 5.2.1: Integrated compliance plan
- 5.4: Linking of management plan to key performance areas

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
5.5: Community support	Minimal support or assistance from the community.	Enlist community members to assist and support the site with some site management tasks and fundraising.

PONDOLAND MPA:OUTCOMES

6.1: Economic and social benefit assessment
6.2: Achievement of biodiversity targets



6.3: Ecological processes
6.4: Ecosystem services
6.5: Land use planning and management outside the site

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
6.1: Economic and social benefit assessment	The local or regional socioeconomic impact of the MPA on communities has not been assessed.	Conduct a socioeconomic benefit assessment to determine the impact of the MPA on the local and regional economy.
6.2: Achievement of biodiversity targets	Critical biodiversity targets are not being met.	Ensure that critical biodiversity targets are being met.

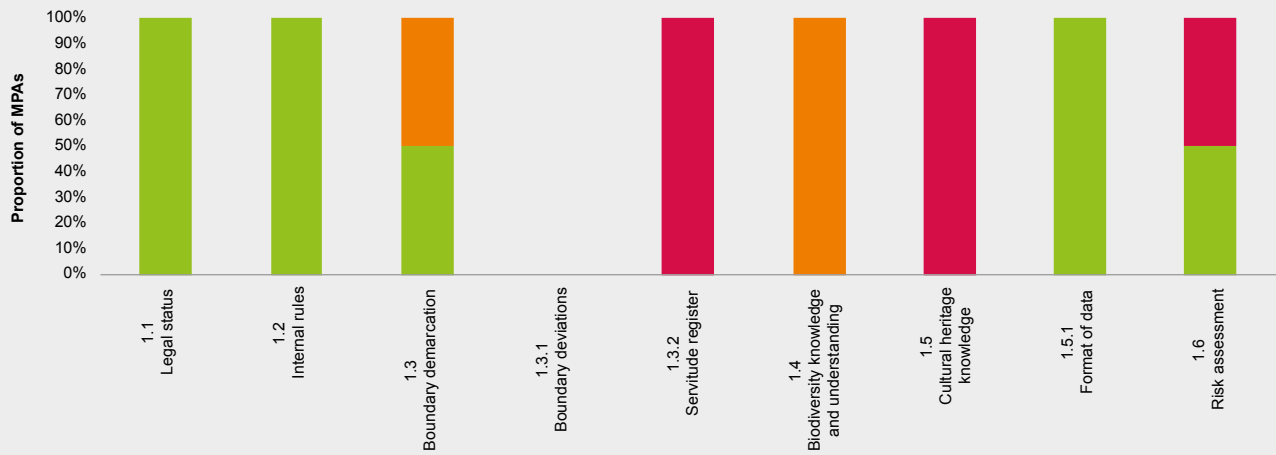


MANAGEMENT AUTHORITY OVERVIEW: EZEMVELO KZN WILDLIFE

MPAs managed:

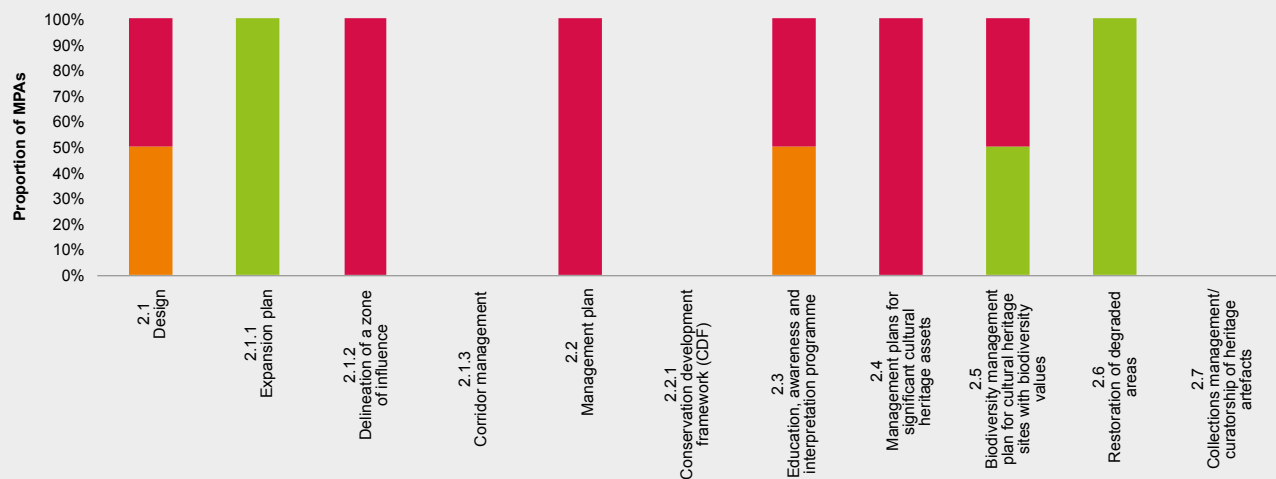
- Aliwal Shoal Marine Protected Area
- Trafalgar Marine Protected Area

EZEMVELO KZN WILDLIFE: CONTEXT



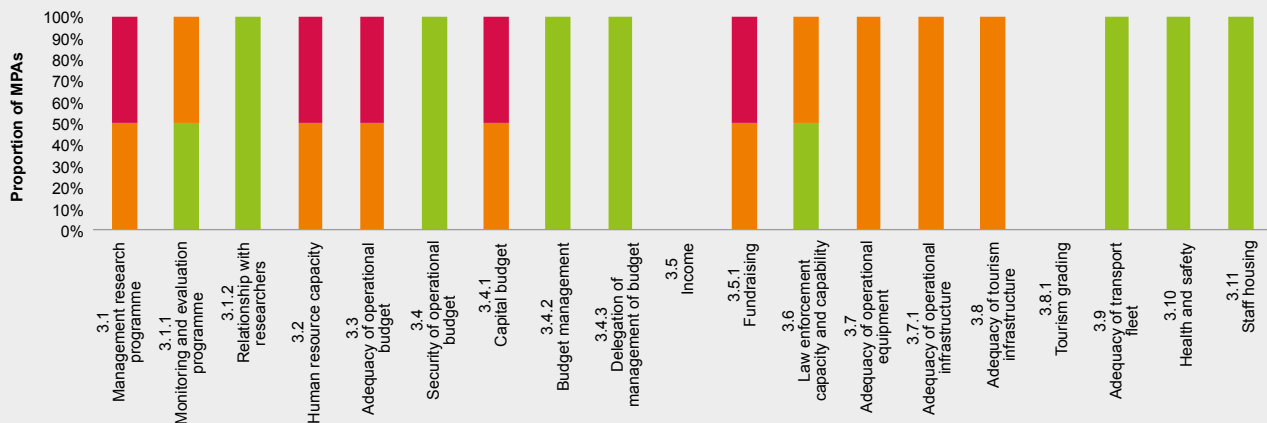
OPTIMAL MANAGEMENT	PRIORITY INDICATORS (≥50% OF MPAS RED)	PRIORITY INDICATORS FOR INTRA-AGENCY COLLABORATION
1.1 Legal status 1.2 Internal rules 1.5.1 Format of data	1.3.2 Servitude register 1.5 Cultural heritage knowledge 1.6 Risk assessment	

EZEMVELO KZN WILDLIFE: PLANNING



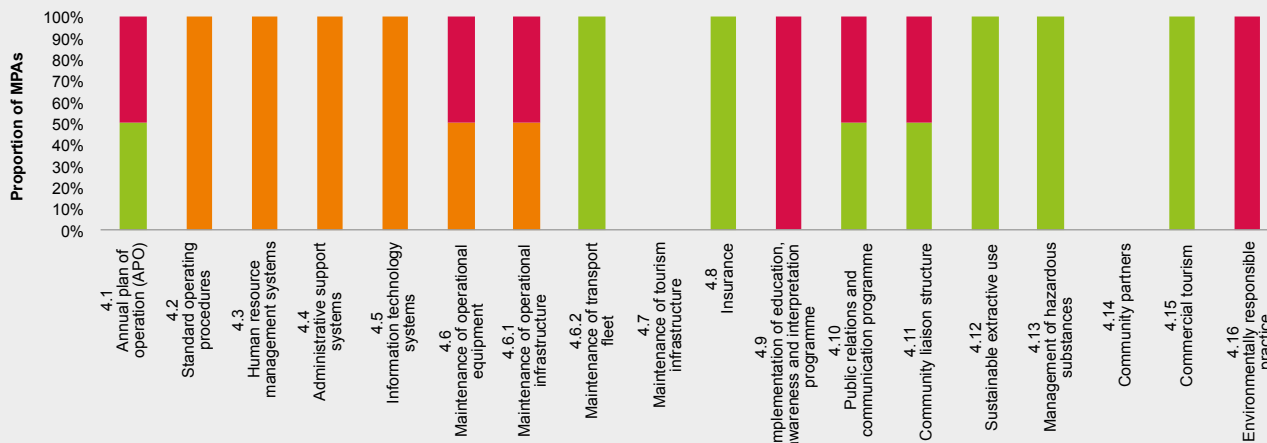
OPTIMAL MANAGEMENT	PRIORITY INDICATORS (≥50% OF MPAS RED)	PRIORITY INDICATORS FOR INTRA-AGENCY COLLABORATION
2.1.1 Expansion plan 2.6 Restoration of degraded areas	2.1 Design 2.1.2 Delineation of a zone of influence 2.2 Management plan 2.3 Education, awareness and interpretation programme 2.4 Management plans for significant cultural heritage assets 2.5 Biodiversity management plan for cultural heritage sites with biodiversity values	

EZEMVELO KZN WILDLIFE: INPUTS



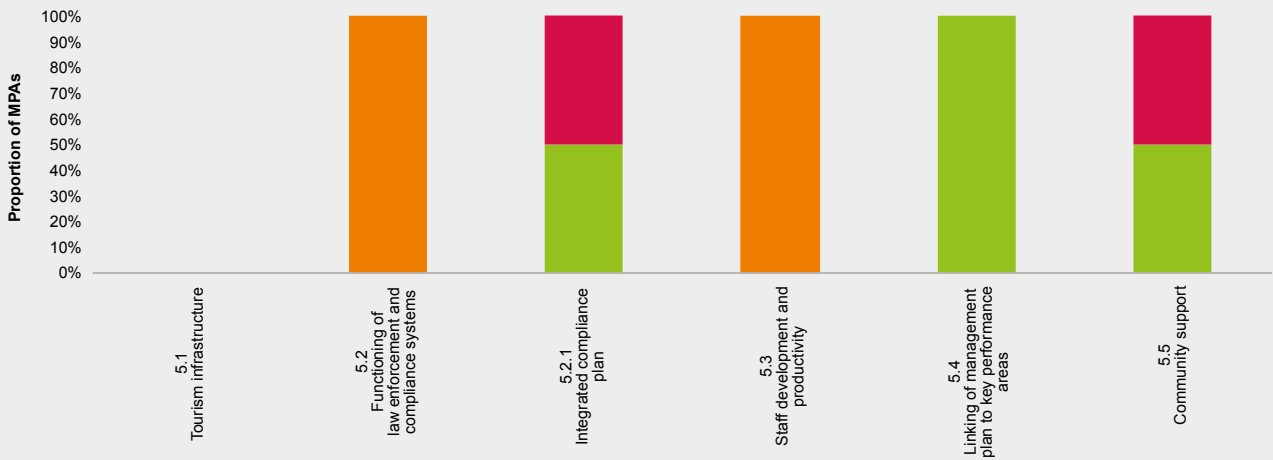
OPTIMAL MANAGEMENT	PRIORITY INDICATORS (≥50% OF MPAS RED)	PRIORITY INDICATORS FOR INTRA-AGENCY COLLABORATION
3.1.2 Relationship with researchers 3.4 Security of operational budget 3.4.2 Budget management 3.4.3 Delegation of management of budget 3.9 Adequacy of transport fleet 3.10 Health and safety 3.11 Staff housing	3.1 Management research programme 3.2 Human resource capacity 3.3 Adequacy of operational budget 3.4.1 Capital budget 3.5.1 Fundraising	

EZEMVELO KZN WILDLIFE: PROCESS



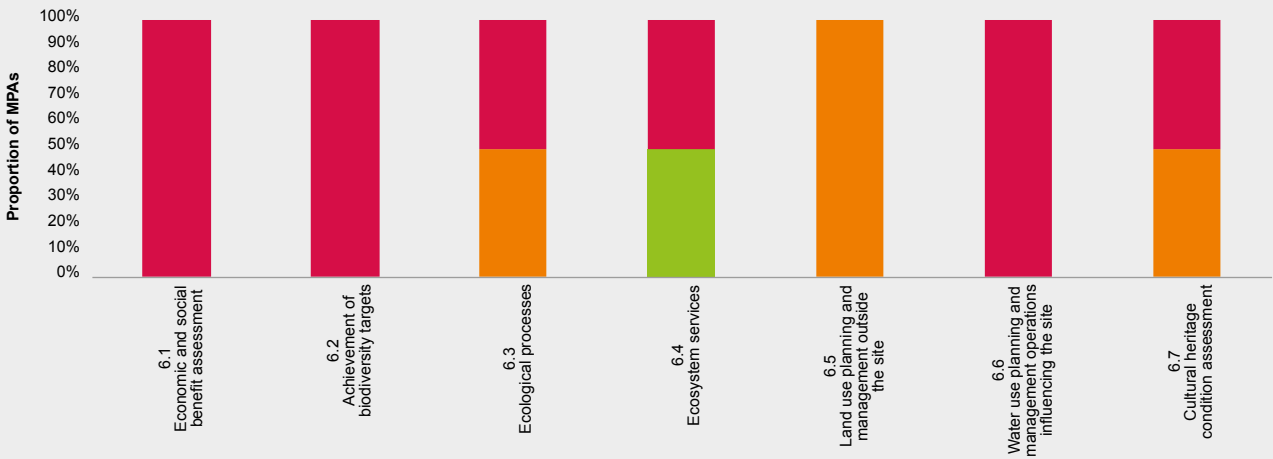
OPTIMAL MANAGEMENT	PRIORITY INDICATORS (≥50% OF MPAS RED)	PRIORITY INDICATORS FOR INTRA-AGENCY COLLABORATION
4.6.2 Maintenance of transport fleet 4.8 Insurance 4.12 Sustainable extractive use 4.13 Management of hazardous substances 4.15 Commercial tourism	4.1 Annual plan of operation (APO) 4.6 Maintenance of operational equipment 4.6.1 Maintenance of operational infrastructure 4.9 Implementation of education, awareness and interpretation programme 4.10 Public relations and communication programme 4.11 Community liaison structure 4.16 Environmentally responsible practice	

EZEMVELO KZN WILDLIFE: OUTPUTS



OPTIMAL MANAGEMENT	PRIORITY INDICATORS (≥50% OF MPAS RED)	PRIORITY INDICATORS FOR INTRA-AGENCY COLLABORATION
5.4 Linking of management plan to key performance areas	5.2.1 Integrated compliance plan 5.5 Community support	

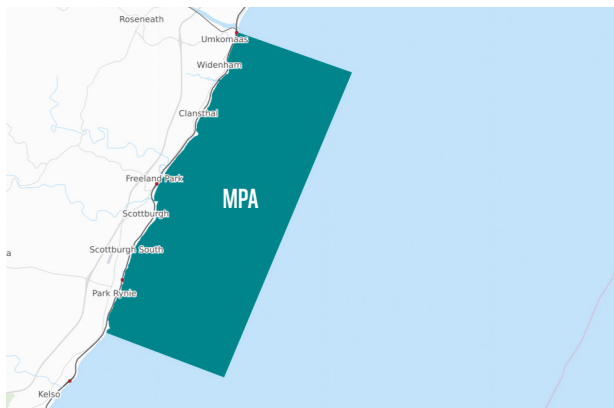
EZEMVELO KZN WILDLIFE: OUTCOMES



OPTIMAL MANAGEMENT	PRIORITY INDICATORS (≥50% OF MPAS RED)	PRIORITY INDICATORS FOR INTRA-AGENCY COLLABORATION
	6.1 Economic and social benefit assessment 6.2 Achievement of biodiversity targets 6.3 Ecological processes 6.4 Ecosystem services 6.6 Water use planning and management operations influencing the site 6.7 Cultural heritage condition assessment	

ALIWAL SHOAL MARINE PROTECTED AREA

KwaZulu-Natal



Established: 1991

Area of protected ocean: 126 km²

Length of protected coastline: 18.3 km

Key features: Fossilised sand dune reef with soft and hard corals that support reef fish and a thriving SCUBA diving industry

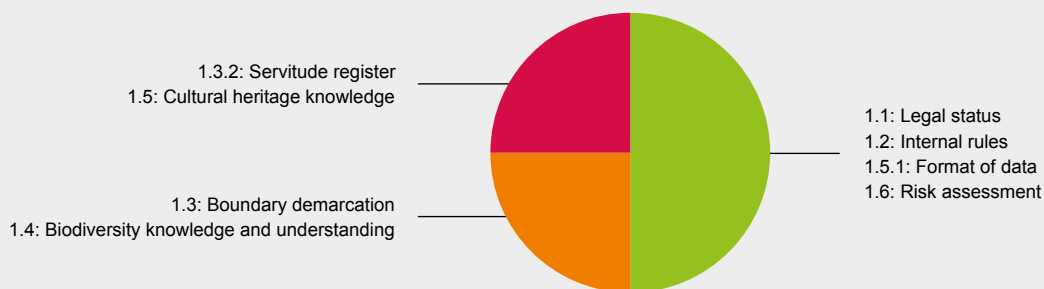
Habitat: Rocky shore, sandy shore, subtidal rocky reef, deep offshore reef

Notable species: Ragged-tooth shark, bull shark, tiger shark, hammerhead sharks, whale shark, humpback whale, humpback and bottlenose dolphins, marine turtles and reef fish

MANAGEMENT EFFECTIVENESS INDICATORS



ALIWAL SHOAL MPA: CONTEXT

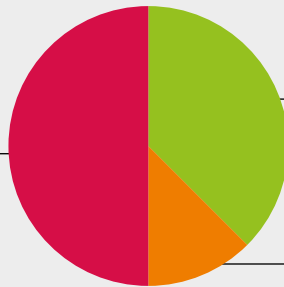


PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
1.3.2: Servitude register	No register of servitudes has been compiled for the MPA.	Compile a servitude register for the MPA with all relevant conditions.
1.5: Cultural heritage knowledge	Only an informal cultural heritage survey has identified heritage assets (i.e. shipwrecks).	Appoint an accredited cultural heritage practitioner to formally identify cultural heritage assets.

ALI WAL SHOAL MPA: PLANNING

- 2.1.2: Delineation of a zone of influence
- 2.2: Management plan
- 2.3: Education, awareness and interpretation programme
- 2.4: Management plans for significant cultural heritage assets



- 2.1.1: Expansion plan
- 2.5: Biodiversity management plan for cultural heritage sites with biodiversity value
- 2.6: Restoration of degraded areas

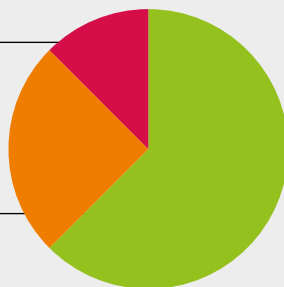
2.1: Design

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
2.1.2: Delineation of a zone of influence	No zone of influence has been established and no documented discussions have been held with neighbouring landowners. The controlled zone is currently used as a buffer zone.	Establish a zone of influence and document discussions with neighbouring landowners.
2.2: Management plan	The current management plan is not approved by the Minister/MEC.	Obtain Minister or MEC approval.
2.3: Education, awareness and interpretation programme	EAI is included in the annual work plan and conducted ad hoc. No specific EAI programme is in place.	Formalise an EAI programme.
2.4: Management plans for significant cultural heritage assets	No formal site management plans have been drawn up for shipwreck sites.	Include formal site management plans for shipwrecks in the revised MPA management plan following MPA expansion.

ALI WAL SHOAL MPA: INPUTS

- 3.3: Adequacy of operational budget
- 3.4.1: Capital budget
- 3.1: Management research programme
- 3.2: Human resource capacity
- 3.7: Adequacy of operational equipment
- 3.7.1: Adequacy of operational infrastructure



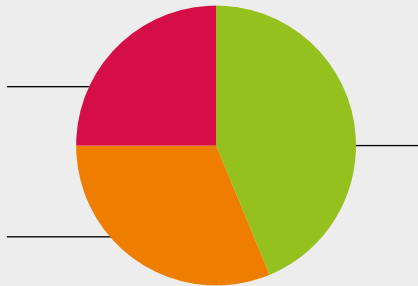
- 3.1.1: Monitoring and evaluation programme
- 3.1.2: Relationship with researchers
- 3.4: Security of operational budget
- 3.4.2: Budget management
- 3.4.3: Delegation of management of budget
- 3.5.1: Fundraising
- 3.6: Law enforcement capacity and capability
- 3.9: Adequacy of transport fleet
- 3.10: Health and safety
- 3.11: Staff housing

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
3.3: Adequacy of operational budget	The allocated operational budget is inadequate to effectively manage the MPA.	Secure an adequate operational budget.
3.4.1: Capital budget	Inadequate capital budget is available to replace equipment, infrastructure and vehicles.	Secure an adequate capital budget to acquire and/or replace equipment, infrastructure and vehicles.

ALI WAL SHOAL MPA: PROCESS

- 4.6.1: Maintenance of operational infrastructure
- 4.9: Implementation of education, awareness and interpretation programme
- 4.10: Public relations and communication programme
- 4.16: Environmentally responsible practice
- 4.2: Standard operating procedures
- 4.3: Human resource management systems
- 4.4: Administrative support systems
- 4.5: Information technology systems
- 4.6: Maintenance of operational equipment



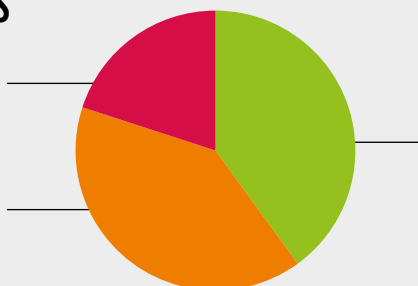
- 4.1: Annual plan of operation
- 4.6.2: Maintenance of transport fleet
- 4.8: Insurance
- 4.11: Community liaison structure
- 4.12: Sustainable extractive use
- 4.13: Management of hazardous substances
- 4.15: Commercial tourism

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
4.6.1: Maintenance of operational infrastructure	No formal maintenance schedule exists for MPA operational infrastructure, and only ad hoc maintenance is being performed.	Develop and implement a maintenance schedule for critical operational infrastructure to meet set standards.
4.9: Implementation of education, awareness and interpretation programme	Only limited ad hoc implementation of an EAI programme is being performed by volunteers and limited staff.	Develop and implement a formal EAI programme. Fill the vacant Community Conservation Officer position.
4.10: Public relations and communication programme	There is no formal public relations and communication programme specific to this site. Community Conservation Officer position vacant.	Develop a formal public relations and communications programme. Fill the vacant Community Conservation Officer position.
4.16: Environmentally responsible practice	No formal plan exists for instituting environmentally sustainable practices.	Complete the development and implementation of a formal plan for environmentally sustainable practices.

ALI WAL SHOAL MPA: OUTPUTS

- 5.2.1: Integrated compliance plan
- 5.2: Functioning of law enforcement and compliance systems
- 5.3: Staff development and productivity



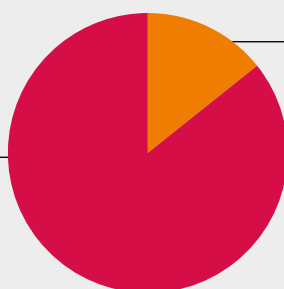
- 5.4: Linking of management plan to key performance areas
- 5.5: Community support

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
5.2.1: Integrated compliance plan	No integrated compliance plan exists to address all aspects of law enforcement and develop cooperation with law enforcement agencies.	Budget for and develop an integrated compliance plan.

ALI WAL SHOAL MPA: OUTCOMES

- 6.1: Economic and social benefit assessment
- 6.2: Achievement of biodiversity targets
- 6.3: Ecological processes
- 6.4: Ecosystem services
- 6.6: Water use planning and management operations influencing the site
- 6.7: Cultural heritage condition assessment



- 6.5: Land use planning and management outside the site

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
6.1: Economic and social benefit assessment	The local or regional socioeconomic impact of the MPA on communities has not been assessed.	Conduct a socioeconomic benefit assessment to determine the impact of the MPA on the local and regional economy.
6.2: Achievement of biodiversity targets	Critical biodiversity targets are not being met.	Ensure that critical biodiversity targets are being met by incorporating biodiversity targets into MPA management.
6.3: Ecological processes	Ecological processes are only partially maintained with some ecological integrity and biodiversity being compromised (e.g. controlled zone has consumptive use).	Ensure that ecological processes are being adequately maintained/augmented by process simulation without biodiversity being compromised by increasing the protection and monitoring of ecological processes.
6.4: Ecosystem services	Ecological processes and systems are being partially maintained, resulting in the provision of limited ecosystem service benefits to the site and neighbouring land users/communities.	Ensure that the next management plan includes systems to adequately maintain ecological processes and systems.
6.6: Water use planning and management operations influencing the site	Water use planning and water needs in terms of quantity and quality are detrimental to the site.	Ensure that water use planning and management at least partially considers the long-term needs of the site.
6.7: Cultural heritage condition assessment	All cultural heritage assets and values are not being managed as required in the management plan or heritage management plan.	Ensure that cultural heritage assets and values are being managed as required in the management plan or heritage management plan.

TRAFALGAR MARINE PROTECTED AREA

KwaZulu-Natal



Established: 2000

Area of protected ocean: 3.5 km²

Length of protected coastline: 7 km

Key features: Fossils embedded in rocky intertidal zone, high seaweed diversity

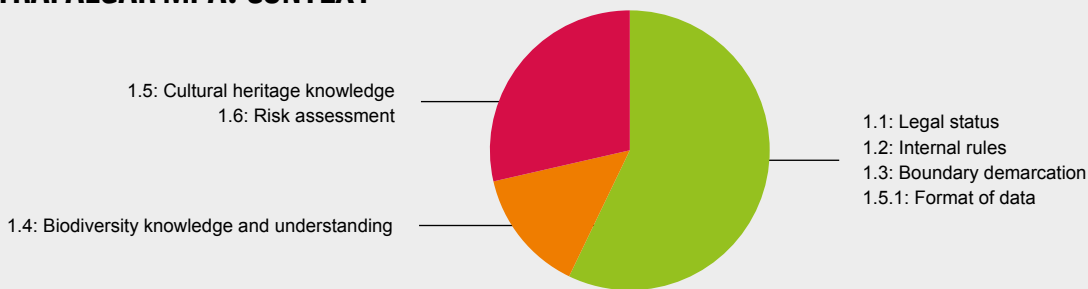
Habitat: Rocky reef with seaweed, rocky intertidal zone, sandy beach, coastal dune, estuary

Notable species: Ragged-tooth shark, bull shark, tiger shark, hammerhead sharks, whale shark, humpback whale

MANAGEMENT EFFECTIVENESS INDICATORS



TRAFALGAR MPA: CONTEXT

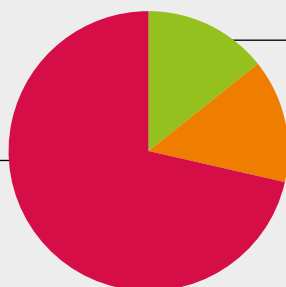


PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
1.5: Cultural heritage knowledge	Only an informal cultural heritage survey has identified heritage assets.	Appoint an accredited cultural heritage practitioner to formally identify cultural heritage assets.
1.6: Risk assessment	No comprehensive risk assessment has been performed for the MPA.	Perform an MPA-specific strengths, weaknesses, opportunities, and threats (SWOT) analysis.

TRAFALGAR MPA: PLANNING

- 2.1: Design
 - 2.1.2: Delineation of a zone of influence
- 2.2: Management plan
- 2.4: Management plans for significant cultural heritage assets
- 2.5: Biodiversity management plan for cultural heritage sites with biodiversity value



2.1.1: Expansion plan

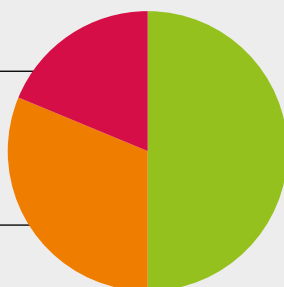
2.3: Education, awareness and interpretation programme

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
2.1: Design	The design of the MPA is inadequate to meet conservation objectives.	Enact mitigating measures to compensate for MPA design inadequacies.
2.1.2: Delineation of a zone of influence	No zone of influence has been established and no documented discussions have been held with neighbouring landowners.	Establish a zone of influence and document discussions with neighbouring landowners.
2.2: Management plan	There is no management plan with measurable objectives.	Prepare a management plan with measurable objectives approved by the Minister/MEC.
2.4: Management plans for significant cultural heritage assets	No formal site management plans for significant cultural heritage sites have been completed by an accredited heritage practitioner.	Appoint an accredited heritage practitioner to develop a formal site management plan for significant cultural heritage.
2.5: Biodiversity management plan for cultural heritage sites with biodiversity value	No comprehensive biodiversity management plan exists for cultural heritage sites within the MPA.	Develop and implement a comprehensive biodiversity management plan for cultural heritage sites.

TRAFALGAR MPA: INPUTS

- 3.1: Management research programme
- 3.2: Human resource capacity
 - 3.5.1: Fundraising
- 3.1.1: Monitoring and evaluation programme
- 3.3: Adequacy of operational budget
- 3.6: Law enforcement capacity and capability
- 3.7: Adequacy of operational equipment
 - 3.7.1: Adequacy of operational infrastructure



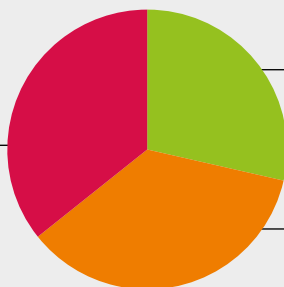
- 3.1.2: Relationship with researchers
- 3.4: Security of operational budget
 - 3.4.1: Capital budget
 - 3.4.2: Budget management
 - 3.4.3: Delegation of management of budget
- 3.9: Adequacy of transport fleet
- 3.10: Health and safety
- 3.11: Staff housing

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
3.1: Management research programme	Research needs have not been identified and no management-focused research is occurring.	Identify and conduct research based on critical management objectives.
3.2: Human resource capacity	No human resource capacity exists because the MPA has no dedicated staff. Staff based at Aliwal Shoal MPA are shared with Trafalgar MPA.	Develop and approve an organigram specifically for Trafalgar MPA that reflects critical management objectives. Ensure that human resource capacity meets the approved levels.
3.5.1: Fundraising	No skills and capacity exist to raise external sources of funding for specific projects.	Develop skills and capacity within the organisation to raise external sources of funding.

TRAFALGAR MPA: PROCESS

- 4.1: Annual plan of operation
- 4.6: Maintenance of operational equipment
- 4.9: Implementation of education, awareness and interpretation programme
- 4.11: Community liaison structure
- 4.16: Environmentally responsible practice



- 4.6.2: Maintenance of transport fleet
- 4.8: Insurance
- 4.10: Public relations and communication programme
- 4.13: Management of hazardous substances
- 4.2: Standard operating procedures
- 4.3: Human resource management systems
- 4.4: Administrative support systems
- 4.5: Information technology systems
- 4.6.1: Maintenance of operational infrastructure

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
4.1: Annual plan of operation (APO)	The APO is not linked to MPA management plan targets. The existing work plan is tied to that of Aliwal Shoal MPA.	Link APO actions to future MPA management plan targets.

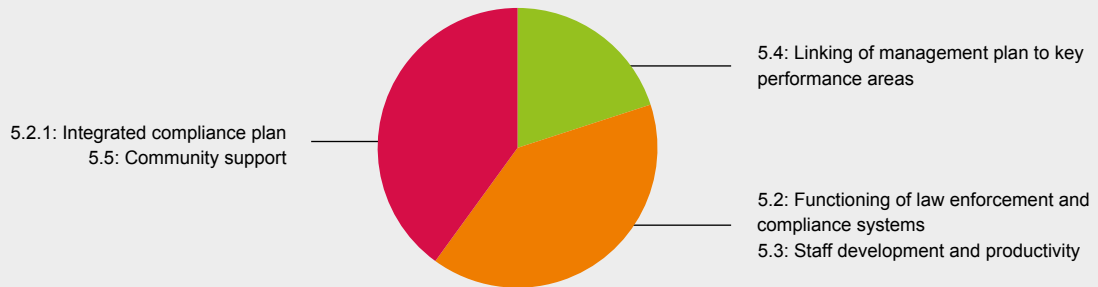
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TRAFALGAR MPA: PROCESS CONTINUED

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
4.6: Maintenance of operational equipment	No maintenance schedule exists for operational equipment since the MPA has no dedicated equipment (shared with and based at Aliwal Shoal).	Develop a maintenance schedule for critical operational equipment to meet set standards.
4.9: Implementation of education, awareness and interpretation programme	Only limited ad hoc implementation of an EAI programme is being performed.	Implement the existing EAI programme.
4.11: Community liaison structure	There is no well-represented, functioning and formalised community liaison structure that contributes to MPA management.	Develop an appropriate community liaison structure.
4.16: Environmentally responsible practice	Existing plans for certain environmentally sustainable practices have not commenced.	Continue to establish and implement a formal plan for environmentally responsible practices.

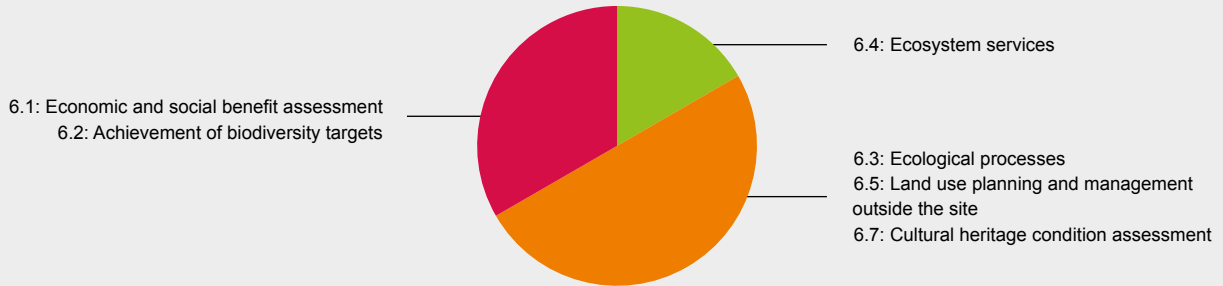
TRAFALGAR MPA: OUTPUTS



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
5.2.1: Integrated compliance plan	No integrated compliance plan exists to address all aspects of law enforcement and develop cooperation with law enforcement agencies.	Develop an integrated compliance plan.
5.5: Community support	Minimal support or assistance from the community.	Enlist community members to assist and support the site. Conduct further stakeholder engagement.

TRAFALGAR MPA: OUTCOMES



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
6.1: Economic and social benefit assessment	The local or regional socioeconomic impact of the MPA on communities has not been assessed.	Conduct a socioeconomic benefit assessment to determine the impact of the MPA on the local and regional economy.
6.2: Achievement of biodiversity targets	Critical biodiversity targets are not being met.	Ensure that critical biodiversity targets are being met under the future management plan.



MANAGEMENT AUTHORITY OVERVIEW: ISIMANGALISO WETLAND PARK AUTHORITY

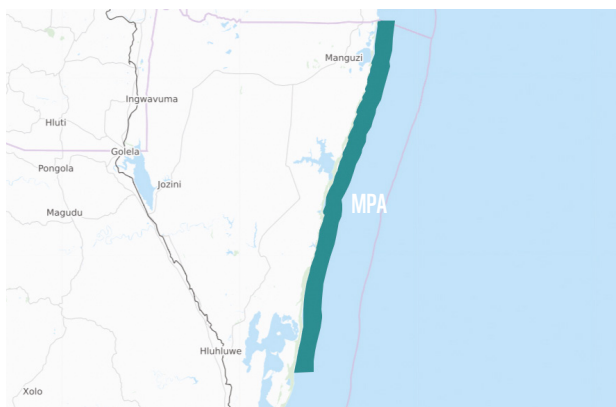
MPAs managed (combined for analysis):

- Maputaland Marine Protected Area
- St. Lucia Marine Protected Area

See iSimangaliso MPA METT results for an overview of management effectiveness.

ISIMANGALISO MARINE PROTECTED AREA

KwaZulu-Natal



Managing Agency: iSimangaliso Wetland Park Authority

Established: 1998

Area of protected ocean: 443 km²

Length of protected coastline: 145 km

Key features: Part of a UNESCO World Heritage Site with wetlands of international importance

Habitat: Sandy beaches, coastal dunes, coral reefs

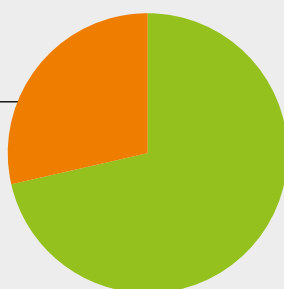
Notable species: Loggerhead and leatherback turtles, coelacanth, whales, sharks, reef fish

MANAGEMENT EFFECTIVENESS INDICATORS



ISIMANGALISO MPA: CONTEXT

1.3: Boundary demarcation
1.5: Cultural heritage knowledge



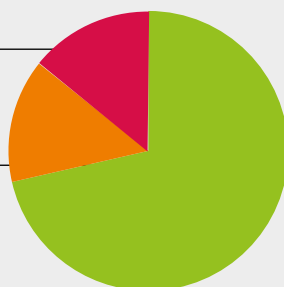
1.1: Legal status
1.2: Internal rules
1.4: Biodiversity knowledge and understanding
1.5.1: Format of data
1.6: Risk assessment

BASIC LEVEL OF MANAGEMENT EFFECTIVENESS

ISIMANGALISO MPA: PLANNING

2.4: Management plans for significant cultural heritage assets

2.1: Design



2.1.1: Expansion plan
2.1.2: Delineation of a zone of influence
2.1.3: Corridor management
2.2: Management plan
2.3: Education, awareness and interpretation programme

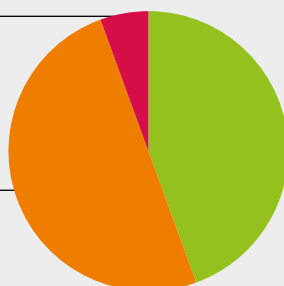
PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
2.4: Management plans for significant cultural heritage assets	No formal site management plans in place for identified significant cultural heritage sites.	Appoint an accredited heritage practitioner to develop a formal site management plan for significant cultural heritage.

ISIMANGALISO MPA: INPUTS

3.4.1: Capital budget

3.1: Management research programme
3.1.1: Monitoring and evaluation programme
3.2: Human resource capacity
3.3: Adequacy of operational budget
3.6: Law enforcement capacity and capability
3.7: Adequacy of operational equipment
3.7.1: Adequacy of operational infrastructure
3.8: Adequacy of tourism infrastructure
3.9: Adequacy of transport fleet



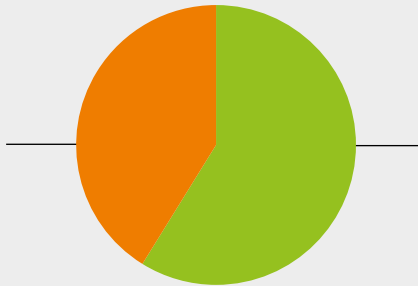
3.1.2: Relationship with researchers
3.4: Security of operational budget
3.4.2: Budget management
3.4.3: Delegation of management of budget
3.5: Income
3.5.1: Fundraising
3.10: Health and safety
3.11: Staff housing

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
3.4.1: Capital budget	Inadequate capital budget is available to replace equipment, infrastructure and vehicles.	Secure an adequate capital budget to replace equipment, infrastructure and vehicles.

ISIMANGALISO MPA: PROCESS

- 4.2: Standard operating procedures
- 4.3: Human resource management systems
- 4.4: Administrative support systems
- 4.5: Information technology systems
- 4.6: Maintenance of operational equipment
- 4.6.1: Maintenance of operational infrastructure
- 4.16: Environmentally responsible practice

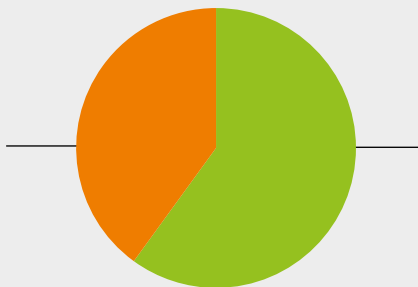


- 4.1: Annual plan of operation
- 4.6.2: Maintenance of transport fleet
- 4.8: Insurance
- 4.9: Implementation of education, awareness and interpretation programme
- 4.10: Public relations and communication programme
- 4.11: Community liaison structure
- 4.12: Sustainable extractive use
- 4.13: Management of hazardous substances
- 4.14: Community partners
- 4.15: Commercial tourism

BASIC LEVEL OF MANAGEMENT EFFECTIVENESS

ISIMANGALISO MPA: OUTPUTS

- 5.2: Functioning of law enforcement and compliance systems
- 5.3: Staff development and productivity

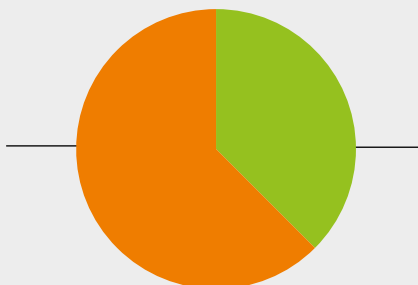


- 5.2.1: Integrated compliance plan
- 5.4: Linking of management plan to key performance areas
- 5.5: Community support

BASIC LEVEL OF MANAGEMENT EFFECTIVENESS

ISIMANGALISO MPA: OUTCOMES

- 6.1: Economic and social benefit assessment
- 6.2: Achievement of biodiversity targets
- 6.5: Land use planning and management outside the site
- 6.6: Water use planning and management operations influencing the site
- 6.7: Cultural heritage condition assessment



- 6.3: Ecological processes
- 6.4: Ecosystem services

BASIC LEVEL OF MANAGEMENT EFFECTIVENESS

MANAGEMENT AUTHORITY OVERVIEW: NELSON MANDELA BAY METROPOLITAN MUNICIPALITY

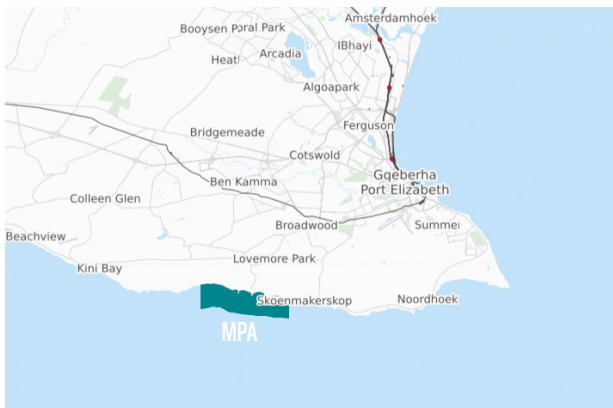
MPAs managed:

- Sardinia Bay Marine Protected Area

See Sardinia Bay MPA METT results for an overview of management effectiveness.

SARDINIA BAY MARINE PROTECTED AREA

Eastern Cape



Established: 2000

Area of protected ocean: 12.91 km²

Length of protected coastline: 7 km

Key features: Protects important linefish species and abalone

Habitat: Rocky and sandy shores, coastal dunes, subtidal rocky reefs

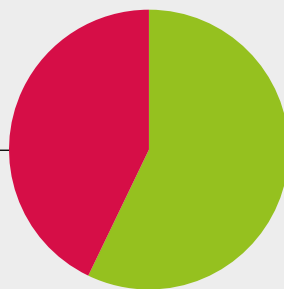
Notable species: Numerous pelagic and reef fish, abalone

MANAGEMENT EFFECTIVENESS INDICATORS



SARDINIA BAY MPA: CONTEXT

1.4: Biodiversity knowledge and understanding
1.5: Cultural heritage knowledge
1.5.1: Format of data



1.1: Legal status
1.2: Internal rules
1.3: Boundary demarcation
1.6: Risk assessment

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
1.4: Biodiversity knowledge and understanding	Biodiversity objectives are not being achieved due to lack of information on key species, habitats, ecosystems and invasive species of the MPA.	Develop appropriate biodiversity research and monitoring programmes to support the achievement of biodiversity objectives.

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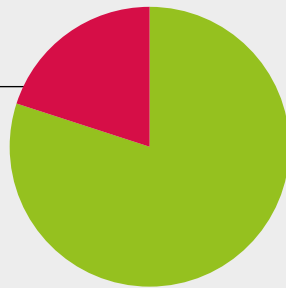
SARDINIA BAY MPA: CONTEXT CONTINUED

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
1.5: Cultural heritage knowledge	Only an informal cultural heritage survey has identified heritage assets.	Appoint an accredited cultural heritage practitioner to formally identify cultural heritage assets.
1.5.1: Format of data	Biodiversity and cultural heritage knowledge data are not in a format that is accessible and understandable to the MPA manager for decision making.	Convert data into an accessible and understandable format to facilitate decision making by the MPA manager.

SARDINIA BAY MPA: PLANNING

2.7: Collections management / curatorship of heritage artefacts



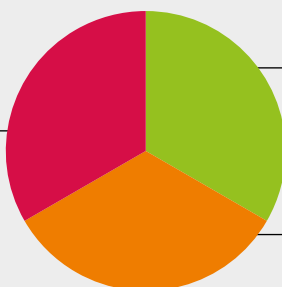
2.1: Design
2.1.2: Delineation of a zone of influence
2.2: Management plan
2.3: Education, awareness and interpretation programme

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
2.7: Collections management/curatorship of heritage artefacts	No collections management plan exists for the curation of heritage artefacts	Develop and implement a collections management plan for the curation of heritage artefacts.

SARDINIA BAY MPA: INPUTS

3.1: Management research programme
 3.2: Human resource capacity
 3.4: Security of operational budget
 3.4.1: Capital budget
 3.5.1: Fundraising



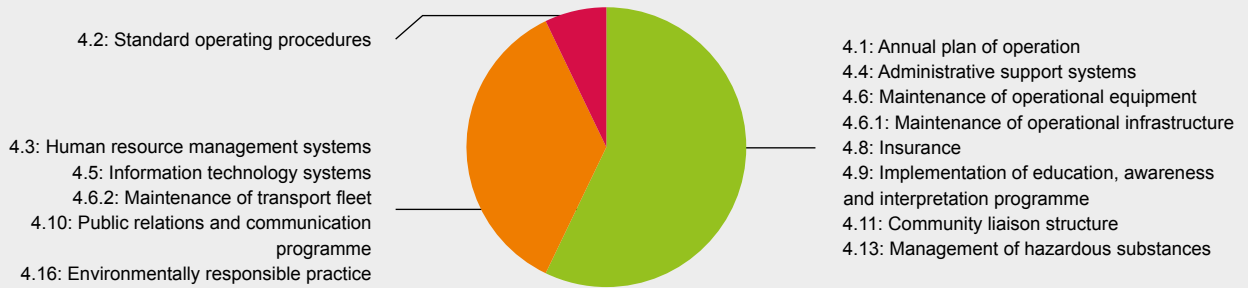
3.1.2: Relationship with researchers
 3.4.2: Budget management
 3.4.3: Delegation of management of budget
 3.9: Adequacy of transport fleet
 3.10: Health and safety

3.1.1: Monitoring and evaluation programme
 3.3: Adequacy of operational budget
 3.6: Law enforcement capacity and capability
 3.7: Adequacy of operational equipment
 3.7.1: Adequacy of operational infrastructure

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
3.1: Management research programme	Research needs have been identified, but current research is not relevant to the MPA management objectives.	Conduct research based on critical management objectives.
3.2: Human resource capacity	The approved staff organogram is not sufficient, and some posts are unfunded or vacant.	Develop and approve an organogram that reflects critical management objectives. Ensure that human resource capacity meets the approved levels.
3.4: Security of operational budget	There is no secure operational budget.	Secure an operational budget specific to the site that is secure and guaranteed on an annual cycle.
3.4.1: Capital budget	No capital budget is available to replace equipment, infrastructure and vehicles.	Secure an adequate capital budget to replace equipment, infrastructure and vehicles.
3.5.1: Fundraising	No skills and capacity exist to raise external sources of funding for specific projects.	Develop skills and capacity within the organisation to raise external sources of funding.

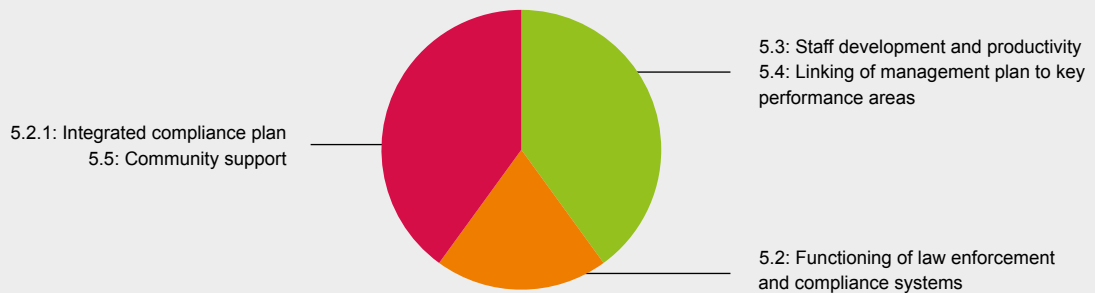
SARDINIA BAY MPA: PROCESS



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
4.2: Standard operating procedures (SOPs)	Existing SOPs are not linked to critical management activities and are not being implemented or updated.	Update and implement SOPs pertaining to critical management activities.

SARDINIA BAY MPA: OUTPUTS

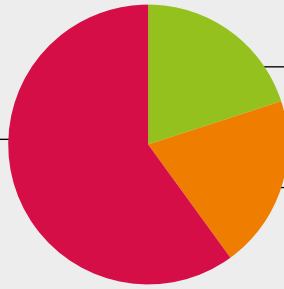


PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
5.2.1: Integrated compliance plan	No integrated compliance plan exists to address all aspects of law enforcement and develop cooperation with law enforcement agencies.	Develop an integrated compliance plan.
5.5: Community support	Minimal support or assistance from the community.	Investigate the possibility of appointing a community liaison officer to work with communities and enlist community members to assist and support the site with some site management tasks and fundraising.

SARDINIA BAY MPA: OUTCOMES

6.1: Economic and social benefit assessment
6.2: Achievement of biodiversity targets
6.3: Ecological processes



6.5: Land use planning and management outside the site

6.4: Ecosystem services

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
6.1: Economic and social benefit assessment	The local or regional socioeconomic impact of the MPA on communities has not been assessed.	Conduct a socioeconomic benefit assessment to determine the impact of the MPA on the local and regional economy.
6.2: Achievement of biodiversity targets	Biodiversity targets have not been set. Research must be conducted to identify and monitor biodiversity.	Set critical biodiversity targets and ensure that they are being met.
6.3: Ecological processes	Ecological processes are only partially maintained with some ecological integrity and biodiversity being compromised.	Ensure that ecological processes are being adequately maintained/augmented by process simulation without biodiversity being compromised.

Bird Island MPA

© Robin Adams



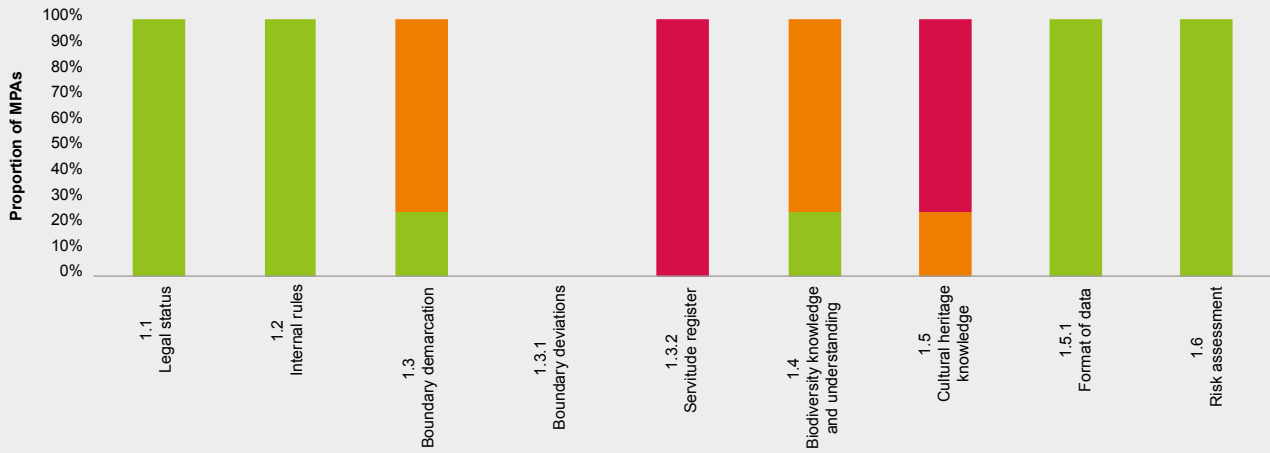


MANAGEMENT AUTHORITY OVERVIEW: SANPARKS

MPAs managed:

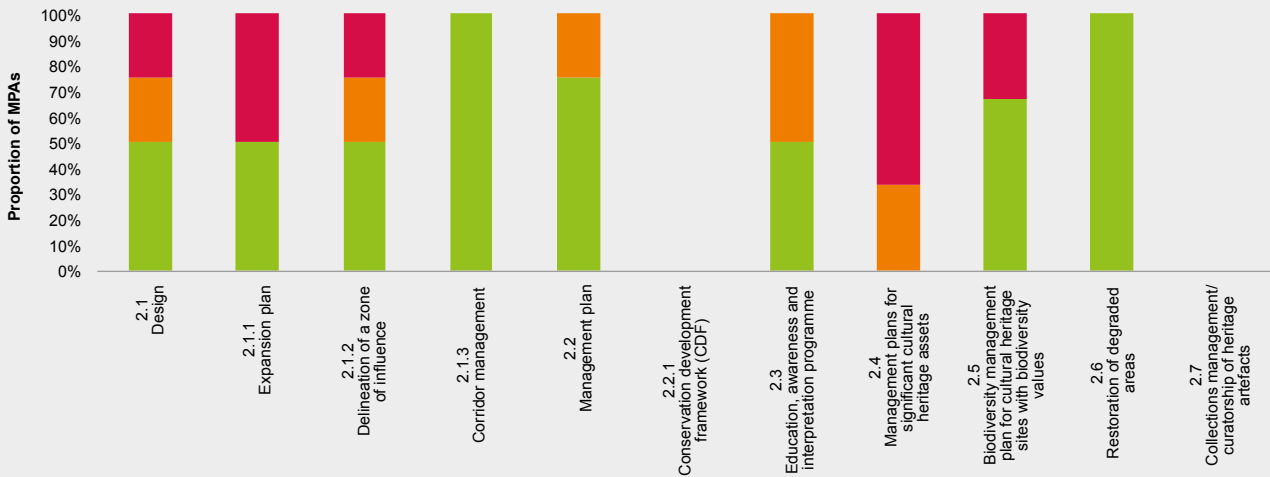
- Bird Island Marine Protected Area (Addo Elephant National Park)
- Table Mountain National Park Marine Protected Area
- Tsitsikamma National Park Marine Protected Area
- West Coast National Park Marine Protected Areas, which include:
 - Sixteen Mile Beach Marine Protected Area
 - Langebaan Lagoon Marine Protected Area
 - Malgas Island Marine Protected Area
 - Jutten Island Marine Protected Area
 - Marcus Island Marine Protected Area

SANPARKS: CONTEXT



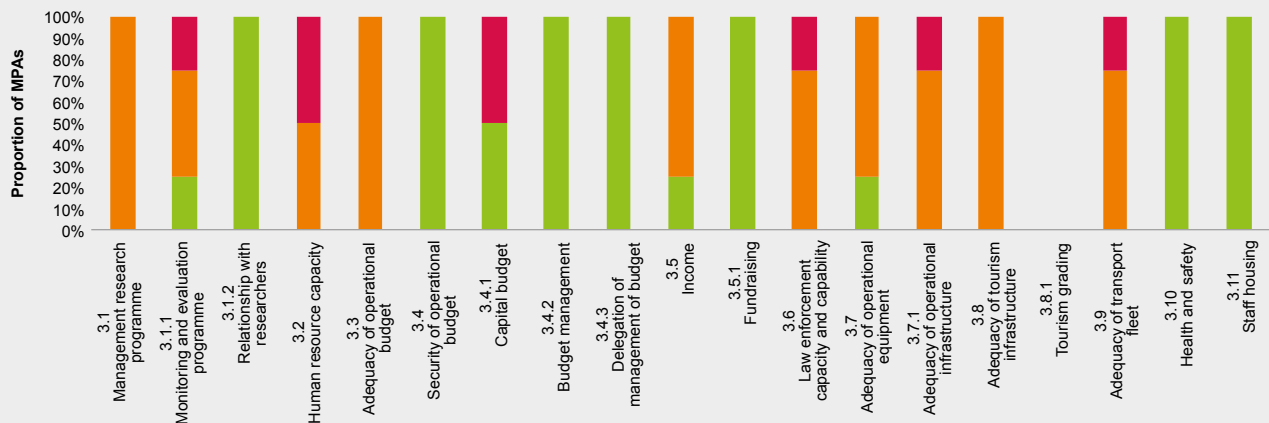
OPTIMAL MANAGEMENT	PRIORITY INDICATORS (≥50% OF MPAS RED)	PRIORITY INDICATORS FOR INTRA-AGENCY COLLABORATION
1.1 Legal status 1.2 Internal rules 1.5.1 Format of data 1.6 Risk assessment	1.3.2 Servitude register 1.5 Cultural heritage knowledge	

SANPARKS: PLANNING



OPTIMAL MANAGEMENT	PRIORITY INDICATORS (≥50% OF MPAS RED)	PRIORITY INDICATORS FOR INTRA-AGENCY COLLABORATION
2.1.3 Corridor management 2.6 Restoration of degraded areas	2.1.1 Expansion plan 2.4 Management plans for significant cultural heritage assets	2.1 Design 2.1.2 Delineation of a zone of influence 2.5 Biodiversity management plan for cultural heritage sites with biodiversity values

SANPARKS: INPUTS



OPTIMAL MANAGEMENT

- 3.1.2 Relationship with researchers
- 3.4 Security of operational budget
- 3.4.2 Budget management
- 3.4.3 Delegation of management of budget
- 3.5.1 Fundraising
- 3.10 Health and safety
- 3.11 Staff housing

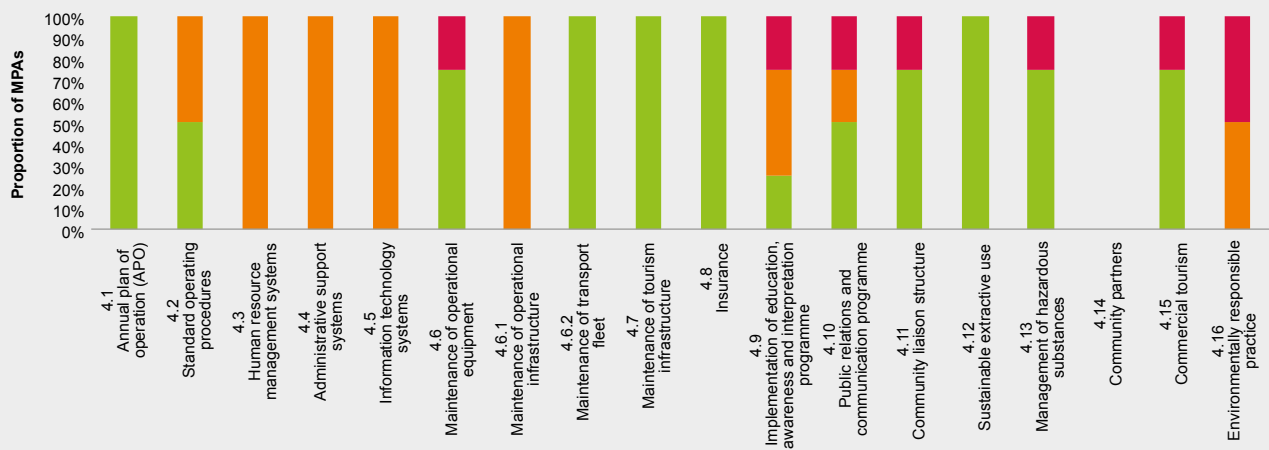
PRIORITY INDICATORS (≥50% OF MPAS RED)

- 3.2 Human resource capacity
- 3.4.1 Capital budget

PRIORITY INDICATORS FOR INTRA-AGENCY COLLABORATION

- 3.1.1 Monitoring and evaluation programme
- 3.6 Law enforcement capacity and capability
- 3.7.1 Adequacy of operational infrastructure
- 3.9 Adequacy of transport fleet

SANPARKS: PROCESS



OPTIMAL MANAGEMENT

- 4.1 Annual plan of operation (APO)
- 4.6.2 Maintenance of transport fleet
- 4.7 Maintenance of tourism infrastructure
- 4.8 Insurance
- 4.12 Sustainable extractive use

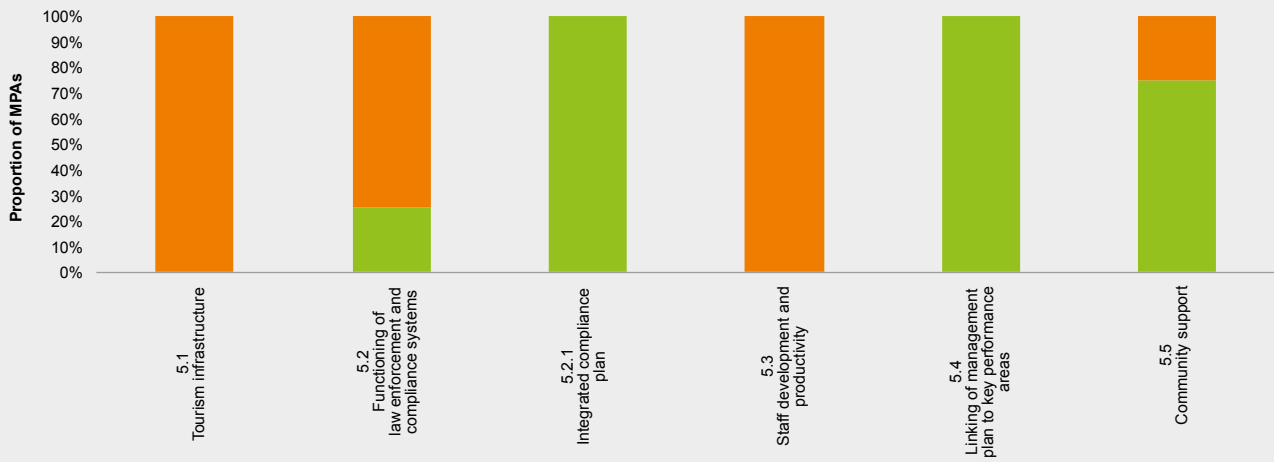
PRIORITY INDICATORS (≥50% OF MPAS RED)

- 4.16 Environmentally responsible practice

PRIORITY INDICATORS FOR INTRA-AGENCY COLLABORATION

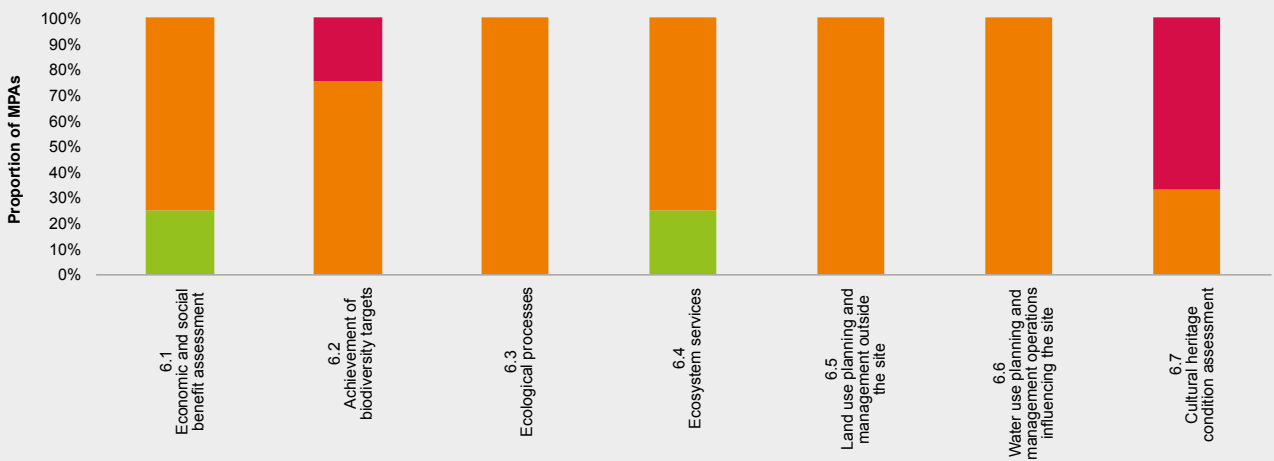
- 4.6 Maintenance of operational equipment
- 4.9 Implementation of education, awareness and interpretation programme
- 4.10 Public relations and communication programme
- 4.11 Community liaison structure
- 4.13 Management of hazardous substances
- 4.15 Commercial tourism

SANPARKS: OUTPUTS



OPTIMAL MANAGEMENT	PRIORITY INDICATORS (≥50% OF MPAS RED)	PRIORITY INDICATORS FOR INTRA-AGENCY COLLABORATION
5.2.1 Integrated compliance plan 5.4 Linking of management plan to key performance areas		

SANPARKS: OUTCOMES



OPTIMAL MANAGEMENT	PRIORITY INDICATORS (≥50% OF MPAS RED)	PRIORITY INDICATORS FOR INTRA-AGENCY COLLABORATION
	6.7 Cultural heritage condition assessment	6.2 Achievement of biodiversity targets

BIRD ISLAND MARINE PROTECTED AREA

Eastern Cape



Established: 2004

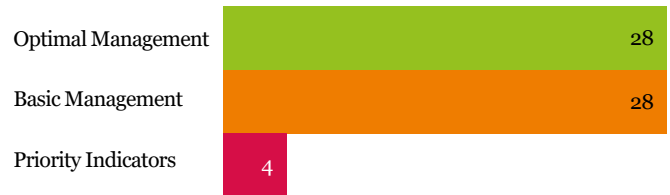
Area of protected ocean: 70.38 km²

Key features: MPA surrounds four islands (Bird Island, Stag Island, Seal Island and Black Rocks Island) and represents an important breeding habitat for marine bird species, supporting the largest breeding colony of Cape gannets on earth

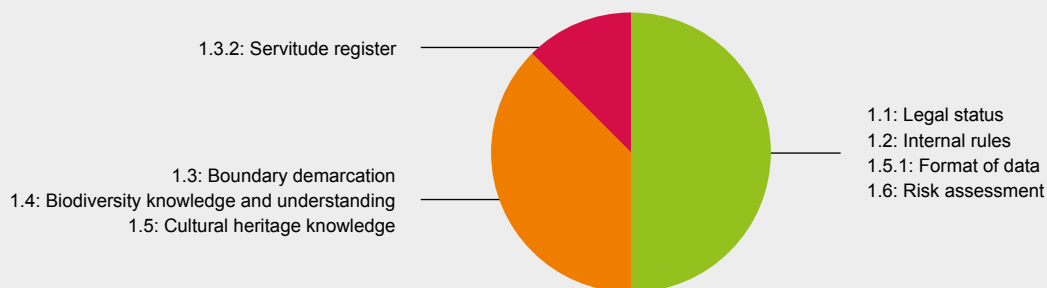
Habitat: Rocky shores, sandy shores, off shore, soft sediments

Notable species: Cape gannet, African penguin, abalone, Cape fur seal, great white shark

MANAGEMENT EFFECTIVENESS INDICATORS



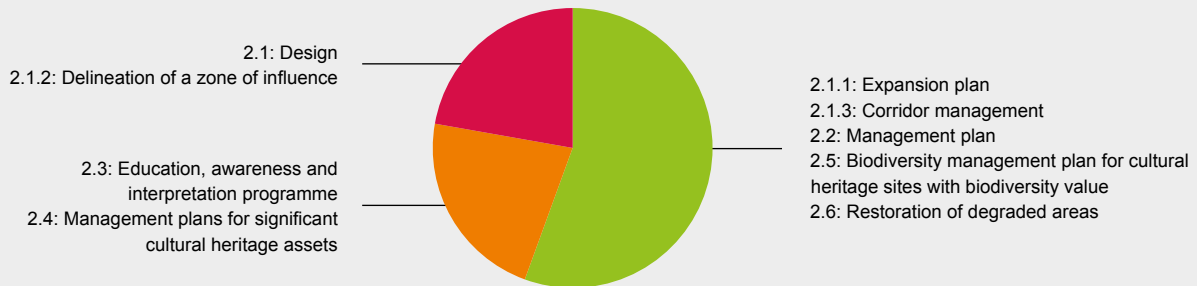
ADDO BIRD ISLAND MPA: CONTEXT



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
1.3.2: Servitude register	No register of servitudes has been compiled for the MPA (e.g. lighthouse, solar panels).	Compile a servitude register for the MPA with all relevant conditions.

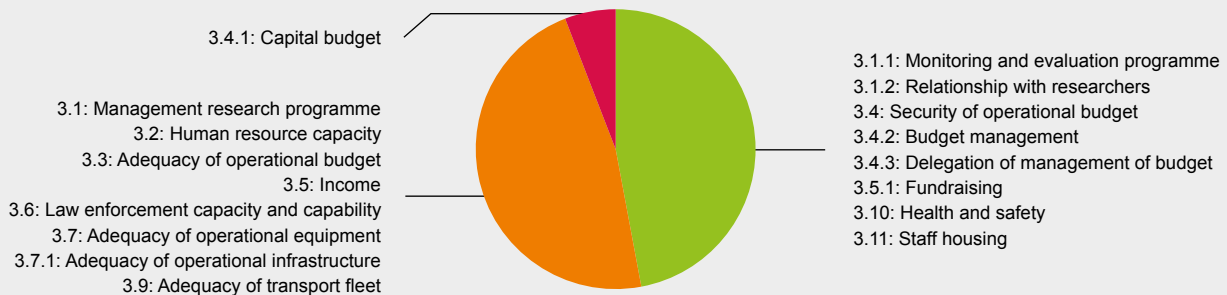
ADDO BIRD ISLAND MPA: PLANNING



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
2.1: Design	The design of the MPA is inadequate to meet conservation objectives.	Enact mitigating measures to compensate for MPA design inadequacies.
2.1.2: Delineation of a zone of influence	No zone of influence has been established and no documented discussions have been held with user groups.	Investigate the establishment of a zone of influence and document discussions with user groups.

ADDO BIRD ISLAND MPA: INPUTS

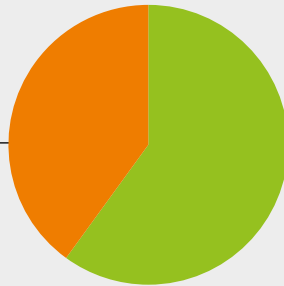


PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
3.4.1: Capital budget	Inadequate capital budget is available to acquire and/or replace equipment, infrastructure and vehicles (e.g. new patrol vessel, truck, boat shed, night sights).	Secure an adequate capital budget to acquire and/or replace equipment, infrastructure and vehicles.

ADDO BIRD ISLAND MPA: PROCESS

- 4.3: Human resource management systems
 - 4.4: Administrative support systems
 - 4.5: Information technology systems
- 4.6.1: Maintenance of operational infrastructure
- 4.9: Implementation of education, awareness and interpretation programme
- 4.16: Environmentally responsible practice

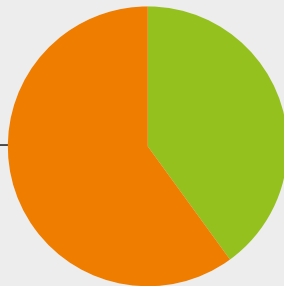


- 4.1: Annual plan of operation
- 4.2: Standard operating procedures
- 4.6: Maintenance of operational equipment
 - 4.6.2: Maintenance of transport fleet
- 4.8: Insurance
- 4.10: Public relations and communication programme
- 4.11: Community liaison structure
- 4.13: Management of hazardous substances
- 4.15: Commercial tourism

BASIC LEVEL OF MANAGEMENT EFFECTIVENESS

ADDO BIRD ISLAND MPA: OUTPUTS

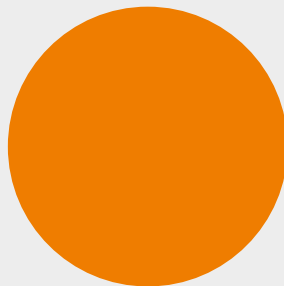
- 5.2: Functioning of law enforcement and compliance systems
- 5.3: Staff development and productivity
 - 5.5: Community support



- 5.2.1: Integrated compliance plan
- 5.4: Linking of management plan to key performance areas

BASIC LEVEL OF MANAGEMENT EFFECTIVENESS

ADDO BIRD ISLAND MPA: OUTCOMES

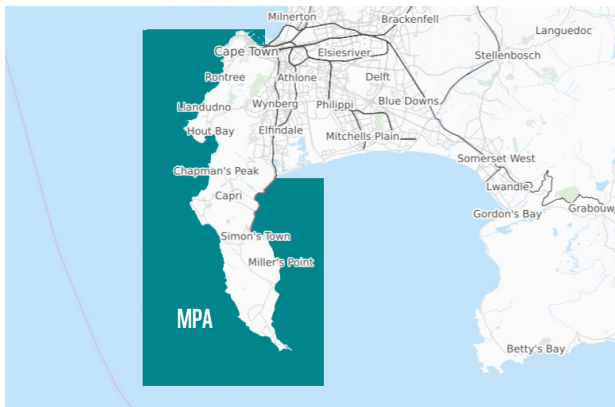


- 6.1: Economic and social benefit assessment
- 6.2: Achievement of biodiversity targets
- 6.3: Ecological processes
- 6.4: Ecosystem services
- 6.5: Land use planning and management outside the site
- 6.7: Cultural heritage condition assessment

BASIC LEVEL OF MANAGEMENT EFFECTIVENESS

TABLE MOUNTAIN NATIONAL PARK MARINE PROTECTED AREA

Western Cape



Established: 2004

Area of protected ocean: 984 km²

Length of protected coastline: 127 km

Key features: Rich in biodiversity and contains culturally significant areas with fish traps, numerous wrecks and traditional fishing communities

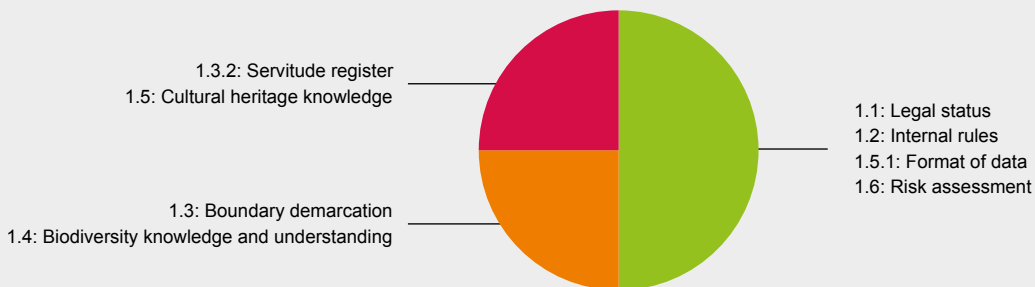
Habitat: Rocky shores, sandy shores, coastal dunes, offshore reefs, inshore reefs, kelp forests

Notable species: Great white shark, broadnose sevengill shark, orca, abalone, African penguin, Cape fur seal, dolphins, southern right whale, sunfish, humpback whales, hottentot, red roman, geelbek, galjoen, black musselcracker, red steenbras

MANAGEMENT EFFECTIVENESS INDICATORS



TABLE MOUNTAIN NATIONAL PARK MPA: CONTEXT

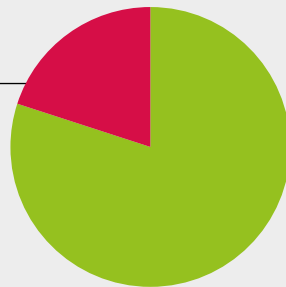


PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
1.3.2: Servitude register	No register of servitudes has been compiled for the MPA.	Compile a servitude register for the MPA with all relevant conditions.
1.5: Cultural heritage knowledge	Only informal cultural heritage surveys have identified heritage assets (i.e. shipwrecks and fish traps).	Appoint an accredited cultural heritage practitioner to formally identify cultural heritage assets.

TABLE MOUNTAIN NATIONAL PARK MPA: PLANNING

2.4: Management plans for significant cultural heritage assets



2.1: Design
2.1.2: Delineation of a zone of influence
2.2: Management plan
2.3: Education, awareness and interpretation programme

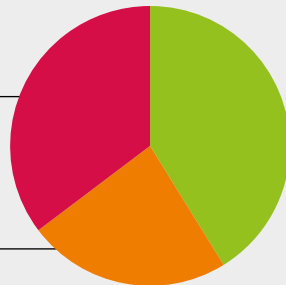
PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
2.4: Management plans for significant cultural heritage assets	No site management plans exist for identified significant cultural heritage sites.	Appoint an accredited heritage practitioner to develop a formal site management plan for significant cultural heritage.

TABLE MOUNTAIN NATIONAL PARK MPA: INPUTS

3.1.1: Monitoring and evaluation programme
3.2: Human resource capacity
3.4.1: Capital budget
3.6: Law enforcement capacity and capability
3.7.1: Adequacy of operational infrastructure
3.9: Adequacy of transport fleet

3.1: Management research programme
3.3: Adequacy of operational budget
3.5: Income
3.7: Adequacy of operational equipment



3.1.2: Relationship with researchers
3.4: Security of operational budget
3.4.2: Budget management
3.4.3: Delegation of management of budget
3.5.1: Fundraising
3.10: Health and safety
3.11: Staff housing

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
3.1.1: Monitoring and evaluation programme	While monitoring needs have been identified, only ad hoc observation is being performed.	Formally monitor critical management objectives.
3.2: Human resource capacity	The approved staff organogram is not sufficient.	Develop and approve an organigram that reflects critical management objectives.
3.4.1: Capital budget	No capital budget is available to replace equipment, infrastructure and vehicles.	Secure an adequate capital budget to replace equipment, infrastructure and vehicles.
3.6: Law enforcement capacity and capability	Major deficiencies in capacity/resources/support to enforce internal rules/regulations.	Develop a strategy to eliminate major deficiencies in capacity/resources/support to enforce internal rules/regulations.

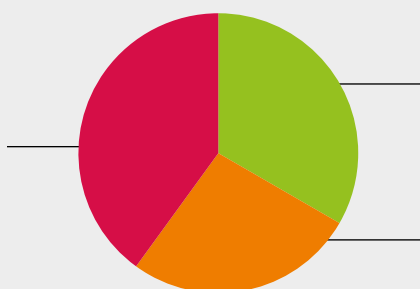
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TABLE MOUNTAIN NATIONAL PARK MPA: INPUTS CONTINUED

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS		
INDICATOR	BARRIER	NEXT STEP
3.7.1: Adequacy of operational infrastructure	Operational infrastructure is inadequate for management needs.	Secure or upgrade operational infrastructure where necessary to adequately address current management needs.
3.9: Adequacy of transport fleet	There is an insufficient number of suitable vehicles to conduct critical management activities. Notably, MPA vessels are not equipped for night time duties.	Secure a sufficient number of suitable vehicles and relevant equipment to conduct critical management activities.

TABLE MOUNTAIN NATIONAL PARK MPA: PROCESS

4.9: Implementation of education, awareness and interpretation programme
 4.10: Public relations and communication programme
 4.11: Community liaison structure
 4.13: Management of hazardous substances
 4.15: Commercial tourism
 4.16: Environmentally responsible practice



4.1: Annual plan of operation
 4.2: Standard operating procedures
 4.6: Maintenance of operational equipment
 4.6.2: Maintenance of transport fleet
 4.8: Insurance

4.3: Human resource management systems
 4.4: Administrative support systems
 4.5: Information technology systems
 4.6.1: Maintenance of operational infrastructure

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS		
INDICATOR	BARRIER	NEXT STEP
4.9: Implementation of education, awareness and interpretation programme	Only limited ad hoc implementation of an EAI programme is being performed.	Fill the vacant People and Conservation officer post and implement the existing EAI programme.
4.10: Public relations and communication programme	There is no formal public relations and communication programme.	Fill vacant Public Relations and Communications position and develop a formal public relations and communications programme.
4.11: Community liaison structure	No well-represented, functioning and formalised community liaison structure currently exists that contributes to the management/development of the MPA.	Develop an appropriate community liaison structure by consulting extensively and continuing the establishment of the Park Forum.
4.13: Management of hazardous substances	No formal, legally compliant programme with functional infrastructure exists (e.g. fuel and oil are stored on vessels).	Develop a formal, legally compliant programme with functional infrastructure (e.g. a hazardous material store).

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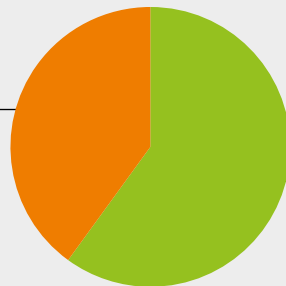
TABLE MOUNTAIN NATIONAL PARK MPA: PROCESS CONTINUED

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
4.15: Commercial tourism	Poor interactions and lack of cooperation between MPA personnel and tourism operators/concessionaires to enhance visitor experiences, protect values and resolve conflicts.	Improve interactions and develop cooperation with tourism operators by establishing formal links with tour operators working in the MPA.
4.16: Environmentally responsible practice	No formal plan exists for instituting environmentally sustainable practices.	Complete the development and implementation of a formal plan for environmentally sustainable practices.

TABLE MOUNTAIN NATIONAL PARK MPA: OUTPUTS

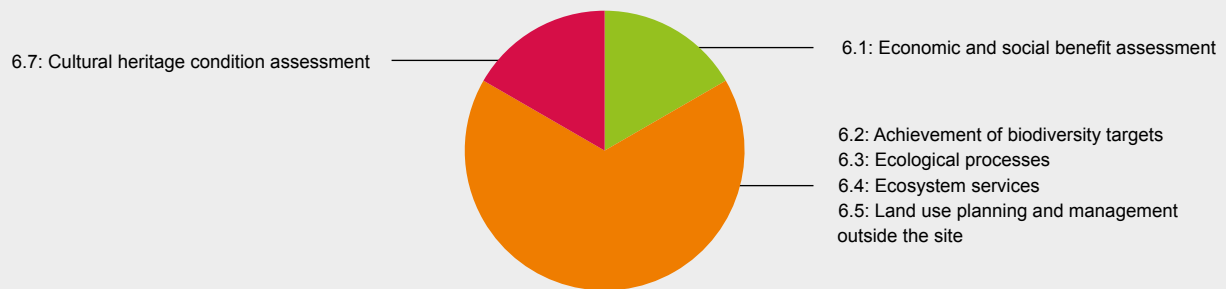
5.2: Functioning of law enforcement and compliance systems
5.3: Staff development and productivity



5.2.1: Integrated compliance plan
5.4: Linking of management plan to key performance areas
5.5: Community support

BASIC LEVEL OF MANAGEMENT EFFECTIVENESS

TABLE MOUNTAIN NATIONAL PARK MPA: OUTCOMES



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
6.7: Cultural heritage condition assessment	No cultural heritage assessment has taken place.	Appoint an accredited cultural heritage practitioner to conduct a cultural heritage assessment and management plan and manage cultural heritage accordingly.

TSITSIKAMMA MARINE PROTECTED AREA

Eastern Cape



Established: 1964

Area of protected ocean: 186 km²

Length of protected coastline: 60 km

Key features: Estuary, coastal indigenous forests, coastal ravines, boulder bays

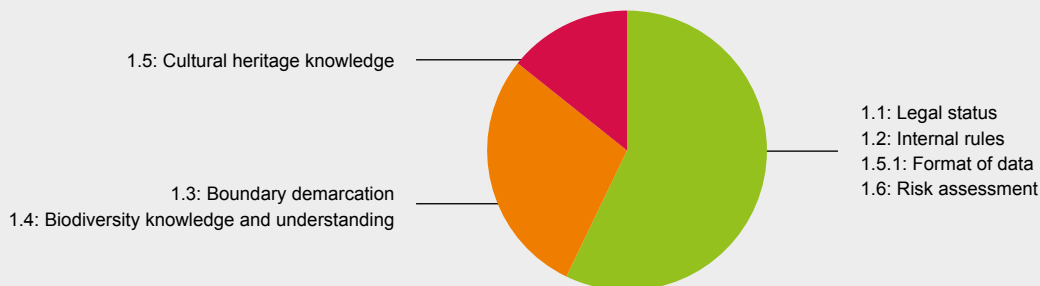
Habitat: Rocky shores, sandy shores, coastal dunes, subtidal rocky reefs, subtidal sandy benthos

Species: Dageraad, red stumpnose, red steenbras, seventy-four, black musselcracker, white steenbras, dusky kob, carpenter, roman

MANAGEMENT EFFECTIVENESS INDICATORS



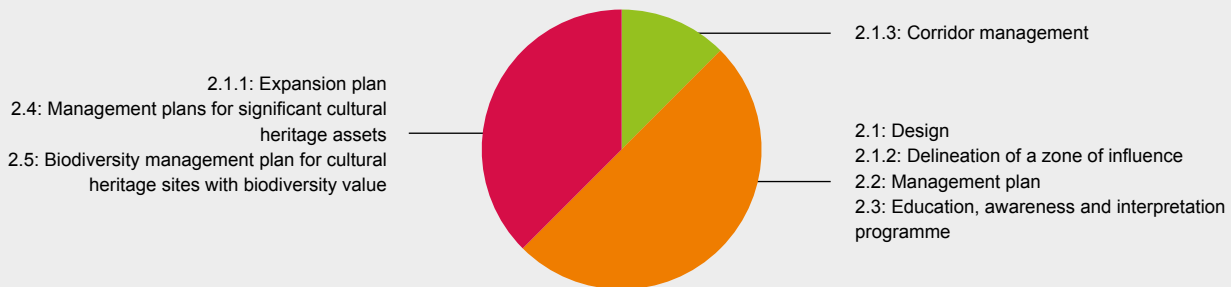
TSITSIKAMMA NATIONAL PARK MPA: CONTEXT



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
1.5: Cultural heritage knowledge	Only an informal cultural heritage survey has identified heritage assets.	Appoint an accredited cultural heritage practitioner to formally identify cultural heritage assets.

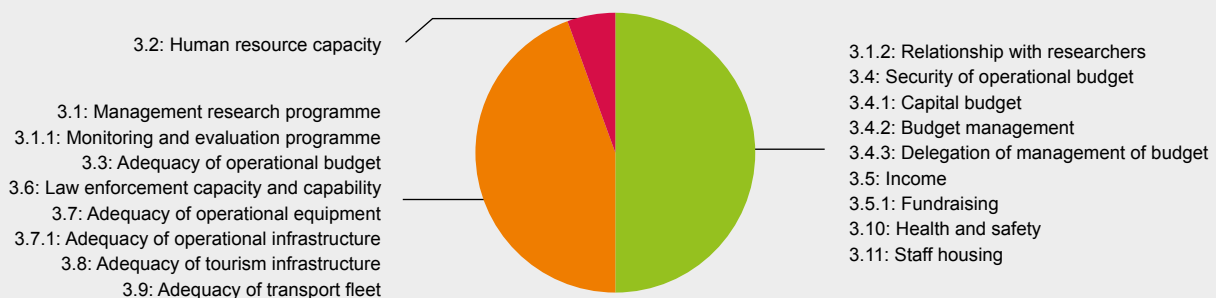
TSITSIKAMMA NATIONAL PARK MPA: PLANNING



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
2.1.1: Expansion plan	No formal expansion plan has been set out in line with the organisation's expansion strategy.	Develop an expansion plan in line with the organisation's expansion strategy.
2.4: Management plans for significant cultural heritage assets	No formal site management plans for significant cultural heritage sites have been drawn up by an accredited heritage practitioner.	Appoint an accredited heritage practitioner to develop a formal site management plan for significant cultural heritage.
2.5: Biodiversity management plan for cultural heritage sites with biodiversity values	No comprehensive biodiversity management plan exists for cultural heritage sites within the MPA.	Develop and implement a comprehensive biodiversity management plan for cultural heritage sites within the MPA.

TSITSIKAMMA NATIONAL PARK MPA: INPUTS

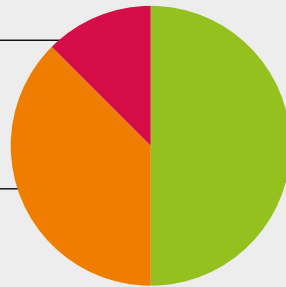


PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
3.2: Human resource capacity	The approved staff organogram is not sufficient. The staff compliment should be increased to meet the workload of additional monitoring within the areas of the MPA recently opened to fishing.	Develop and approve an organigram that reflects critical management objectives. Ensure that human resource capacity meets the approved levels.

TSITSIKAMMA NATIONAL PARK MPA: PROCESS

- 4.6: Maintenance of operational equipment
- 4.16: Environmentally responsible practice
- 4.2: Standard operating procedures
- 4.3: Human resource management systems
- 4.4: Administrative support systems
- 4.5: Information technology systems
- 4.6.1: Maintenance of operational infrastructure
- 4.9: Implementation of education, awareness and interpretation programme



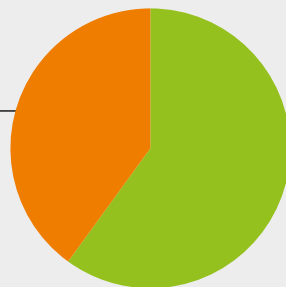
- 4.1: Annual plan of operation
- 4.6.2: Maintenance of transport fleet
- 4.8: Insurance
- 4.10: Public relations and communication programme
- 4.11: Community liaison structure
- 4.12: Sustainable extractive use
- 4.13: Management of hazardous substances
- 4.15: Commercial tourism

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
4.6: Maintenance of operational equipment	No maintenance schedule exists for operational equipment, and only ad hoc maintenance is being performed.	Develop a maintenance schedule for critical operational equipment to meet set standards.
4.16: Environmentally responsible practice	No formal plan exists for instituting environmentally sustainable practices.	Complete the development and implementation of a formal plan for environmentally sustainable practices.

TSITSIKAMMA NATIONAL PARK MPA: OUTPUTS

- 5.2: Functioning of law enforcement and compliance systems
- 5.3: Staff development and productivity

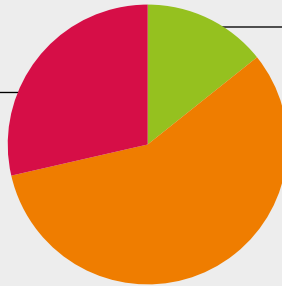


- 5.2.1: Integrated compliance plan
- 5.4: Linking of management plan to key performance areas
- 5.5: Community support

BASIC LEVEL OF MANAGEMENT EFFECTIVENESS

TSITSIKAMMA NATIONAL PARK MPA: OUTCOMES

6.2: Achievement of biodiversity targets
6.7: Cultural heritage condition assessment



6.4: Ecosystem services

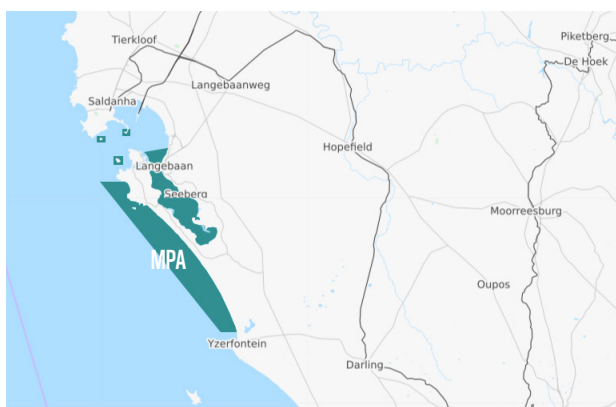
6.1: Economic and social benefit assessment
6.3: Ecological processes
6.5: Land use planning and management outside the site
6.6: Water use planning and management operations influencing the site

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
6.2: Achievement of biodiversity targets	Critical biodiversity targets are not being met.	Ensure that critical biodiversity targets are being met.
6.7: Cultural heritage condition assessment	No cultural heritage assessment has taken place.	Appoint an accredited cultural heritage practitioner to conduct a formal assessment to identify cultural heritage assets.

WEST COAST NATIONAL PARK MARINE PROTECTED AREA

Western Cape



Established: 1985

Area of protected ocean: 280 km²

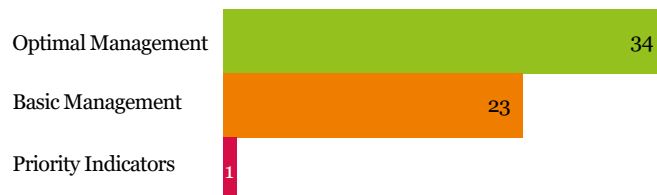
Length of protected coastline: 65 km

Key features: Encompasses five individual MPAs: Malgas Island, Jutten Island, Marcus Island, the Langebaan Lagoon and Sixteen Mile Beach

Habitat: Lagoon, sandy beaches, coastal dune system, subtidal reefs

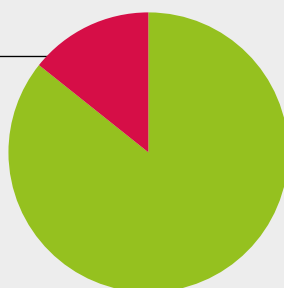
Notable species: Mullet, black mussel, abalone, sand prawn, white steenbras

MANAGEMENT EFFECTIVENESS INDICATORS



WEST COAST NATIONAL PARK MPA: CONTEXT

1.5: Cultural heritage knowledge



- 1.1: Legal status
- 1.2: Internal rules
- 1.3: Boundary demarcation
- 1.4: Biodiversity knowledge and understanding
- 1.5.1: Format of data
- 1.6: Risk assessment

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
1.5: Cultural heritage knowledge	Only an informal cultural heritage survey has identified heritage assets (i.e. shipwrecks, historical fishing sites).	Appoint an accredited cultural heritage practitioner to formally identify cultural heritage assets.

WEST COAST NATIONAL PARK MPA: PLANNING



- 2.1: Design
- 2.1.2: Delineation of a zone of influence
- 2.2: Management plan
- 2.3: Education, awareness and interpretation programme
- 2.5: Biodiversity management plan for cultural heritage sites with biodiversity value

BASIC LEVEL OF MANAGEMENT EFFECTIVENESS

WEST COAST NATIONAL PARK MPA: INPUTS

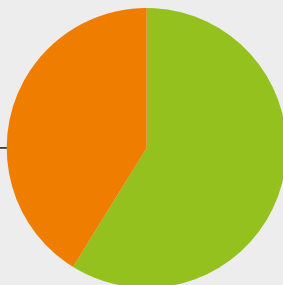


- 3.1: Management research programme
- 3.1.1: Monitoring and evaluation programme
- 3.2: Human resource capacity
- 3.3: Adequacy of operational budget
- 3.5: Income
- 3.6: Law enforcement capacity and capability
- 3.7.1: Adequacy of operational infrastructure
- 3.8: Adequacy of tourism infrastructure
- 3.9: Adequacy of transport fleet

- 3.1.2: Relationship with researchers
- 3.4: Security of operational budget
- 3.4.1: Capital budget
- 3.4.2: Budget management
- 3.4.3: Delegation of management of budget
- 3.5.1: Fundraising
- 3.7: Adequacy of operational equipment
- 3.10: Health and safety
- 3.11: Staff housing

BASIC LEVEL OF MANAGEMENT EFFECTIVENESS

WEST COAST NATIONAL PARK MPA: PROCESS



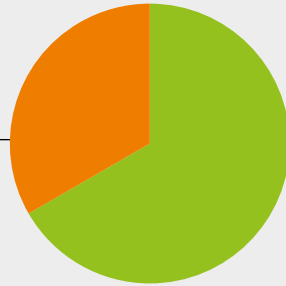
- 4.2: Standard operating procedures
- 4.3: Human resource management systems
- 4.4: Administrative support systems
- 4.5: Information technology systems
- 4.6.1: Maintenance of operational infrastructure
- 4.10: Public relations and communication programme
- 4.16: Environmentally responsible practice

- 4.1: Annual plan of operation
- 4.6: Maintenance of operational equipment
- 4.6.2: Maintenance of transport fleet
- 4.7: Maintenance of tourism infrastructure
- 4.8: Insurance
- 4.9: Implementation of education, awareness and interpretation programme
- 4.11: Community liaison structure
- 4.12: Sustainable extractive use
- 4.13: Management of hazardous substances
- 4.15: Commercial tourism

BASIC LEVEL OF MANAGEMENT EFFECTIVENESS

WEST COAST NATIONAL PARK MPA: OUTPUTS

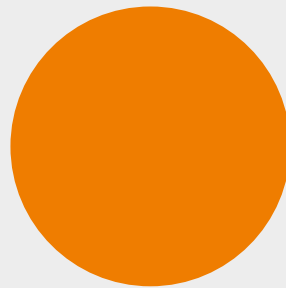
5.1: Tourism infrastructure
5.3: Staff development and productivity



5.2: Functioning of law enforcement and compliance systems
5.2.1: Integrated compliance plan
5.4: Linking of management plan to key performance areas
5.5: Community support

BASIC LEVEL OF MANAGEMENT EFFECTIVENESS

WEST COAST NATIONAL PARK MPA: OUTCOMES



6.1: Economic and social benefit assessment
6.2: Achievement of biodiversity targets
6.3: Ecological processes
6.4: Ecosystem services
6.5: Land use planning and management outside the site

BASIC LEVEL OF MANAGEMENT EFFECTIVENESS

MANAGEMENT AUTHORITY OVERVIEW: NO MANAGEMENT AUTHORITY

One South African MPA lacks a formal management agreement:

- Rocherpan Marine Protected Area

See Rocherpan MPA METT results for an overview of management effectiveness.

ROCHERPAN MARINE PROTECTED AREA

Western Cape



Established: 1998

Area of protected ocean: 1.5 km²

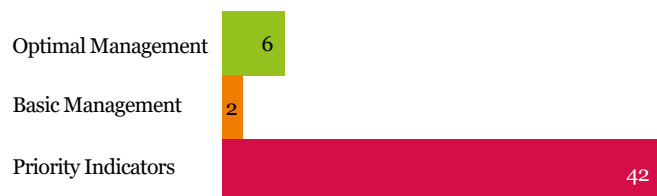
Length of protected coastline: 3 km

Key features: Protects seabird habitat

Habitat: Sandy beaches

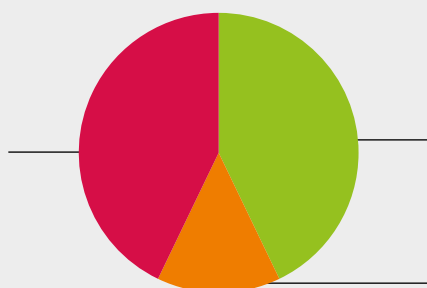
Notable species: Flamingos, gulls, silver kob, lesser sandshark

MANAGEMENT EFFECTIVENESS INDICATORS



ROCHERPAN MPA: CONTEXT

1.4: Biodiversity knowledge and understanding
1.5: Cultural heritage knowledge
1.5.1: Format of data



1.1: Legal status
1.2: Internal rules
1.6: Risk assessment

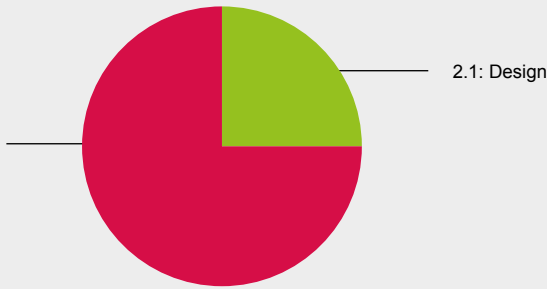
1.3: Boundary demarcation

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
1.4: Biodiversity knowledge and understanding	No information is available on key species, habitats, ecosystems and invasive species of the MPA to inform the management of biodiversity objectives.	Develop appropriate biodiversity research and monitoring programmes to support the achievement of biodiversity objectives.
1.5: Cultural heritage knowledge	No cultural heritage survey has been performed.	Appoint an accredited cultural heritage practitioner to formally identify cultural heritage assets.
1.5.1: Format of data	No data are available for the MPA.	Develop database using an accessible and understandable format to facilitate decision making by the MPA manager.

ROCHERPAN MPA: PLANNING

2.1.2: Delineation of a zone of influence
2.2: Management plan
2.3: Education, awareness and interpretation programme

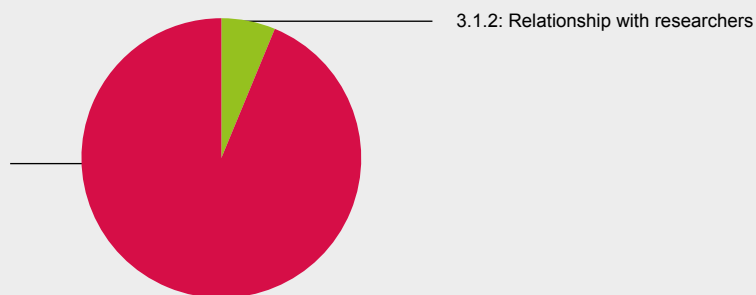


PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
2.1.2: Delineation of a zone of influence	No zone of influence has been established and no documented discussions have been held with neighbouring landowners.	Establish a zone of influence and document discussions with neighbouring landowners.
2.2: Management plan	There is no management plan with measurable objectives.	Prepare a management plan with measurable objectives approved by the Minister/MEC.
2.3: Education, awareness and interpretation programme	No EAI programme exists.	Develop and approve an EAI programme.

ROCHERPAN MPA: INPUTS

3.1: Management research programme
3.1.1: Monitoring and evaluation programme
3.2: Human resource capacity
3.3: Adequacy of operational budget
3.4: Security of operational budget
3.4.1: Capital budget
3.4.2: Budget management
3.4.3: Delegation of management of budget
3.5: Fundraising
3.5.1: Fundraising
3.6: Law enforcement capacity and capability
3.7: Adequacy of operational equipment
3.7.1: Adequacy of operational infrastructure
3.9: Adequacy of transport fleet
3.10: Health and safety
3.11: Staff housing



PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
3.1: Management research programme	Research needs have not been identified and no management-focused research is occurring.	Identify and conduct research based on critical management objectives.
3.1.1: Monitoring and evaluation programme	No monitoring needs have been identified and no monitoring work is occurring in the MPA.	Develop and implement a monitoring programme to at least address critical management objectives.

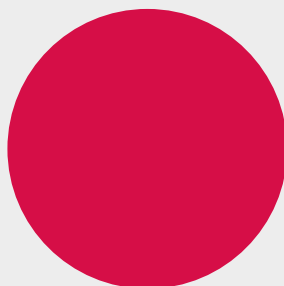
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ROCHERPAN MPA: INPUTS CONTINUED

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
3.2: Human resource capacity	No human resource capacity exists since there are no dedicated MPA staff.	Develop and approve an organigram that reflects critical management objectives. Ensure that human resource capacity meets the approved levels.
3.3: Adequacy of operational budget	No operational budget is available for the MPA.	Secure an operational budget for the MPA.
3.4: Security of operational budget	There is no secure operational budget.	Secure an operational budget specific to the site that is secure and guaranteed on an annual cycle.
3.4.1: Capital budget	No capital budget is available to replace equipment, infrastructure and vehicles.	Secure an adequate capital budget to replace equipment, infrastructure and vehicles.
3.4.2: Budget management	There is no budget to manage.	Secure a budget to manage the MPA.
3.4.3: Delegation of management of budget	While the reserve manager is responsible for managing budgets, there is no MPA budget to manage.	Secure a budget to manage the MPA.
3.5.1: Fundraising	No skills and capacity exist to raise external sources of funding for specific projects.	Develop a management agreement with the DFFE .
3.6: Law enforcement capacity and capability	The MPA has no capacity/resources/support to enforce rules and regulations.	Secure funding to develop acceptable capacity/resources/support to enforce rules and regulations.
3.7: Adequacy of operational equipment	There is no operational equipment specific to the MPA.	Secure funds to provide adequate equipment for MPA operations.
3.7.1: Adequacy of operational infrastructure	There is no operational infrastructure to satisfy management needs.	Secure operational infrastructure to adequately address current management needs.
3.9: Adequacy of transport fleet	There is no fleet available for the MPA despite the identified need.	Secure a capital budget for the purchase or lease of an adequate transport fleet.
3.10: Health and safety	No external audit has certified that site management complies with and implements the Occupational Health and Safety Act.	Conduct an external health and safety audit to confirm compliance with the Occupational Health and Safety Act.
3.11: Staff housing	There are no MPA staff to house.	Not applicable.

ROCHERPAN MPA: PROCESS



- 4.1: Annual plan of operation
- 4.2: Standard operating procedures
- 4.3: Human resource management systems
- 4.4: Administrative support systems
- 4.5: Information technology systems
- 4.6: Maintenance of operational equipment
- 4.6.1: Maintenance of operational infrastructure
- 4.6.2: Maintenance of transport fleet
- 4.9: Implementation of education, awareness and interpretation programme
- 4.10: Public relations and communication programme
- 4.11: Community liaison structure
- 4.13: Management of hazardous substances
- 4.16: Environmentally responsible practice

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
4.1: Annual plan of operation (APO)	There is no APO for the MPA.	Develop an APO that links actions to MPA management plan targets.
4.2: Standard operating procedures (SOPs)	There are no SOPs in place for the MPA.	Develop and implement SOPs pertaining to critical management activities.
4.3: Human resource management systems	There are no HR management systems due to no staff being employed at the MPA.	Develop and implement an adequate HR management system that contributes to management effectiveness.
4.4: Administrative support systems	There are no administrative support systems in place at the MPA.	Develop and implement adequate administrative support systems that contribute to management effectiveness.
4.5: Information technology systems	There are no information technology systems in place specifically for the MPA, which significantly undermines management effectiveness.	Develop and implement adequate information technology systems that contribute to management effectiveness.
4.6: Maintenance of operational equipment	There is no operational equipment to maintain.	Develop and implement a maintenance schedule for all operational equipment to be maintained at set standards.
4.6.1: Maintenance of operational infrastructure	There is no operational infrastructure to maintain.	Develop and implement a maintenance schedule for all operational infrastructure to be maintained at set standards.
4.6.2: Maintenance of transport fleet	There is no transportation fleet to maintain.	Develop and implement a maintenance schedule for all critical assets of the transport fleet to be maintained at set standards.
4.9: Implementation of education, awareness and interpretation programme	There is no EAI taking place.	Develop and implement an EAI programme.
4.10: Public relations and communication programme	There is no formal public relations and communication programme.	Develop and implement a formal public relations and communications programme.

CONTINUED ON NEXT PAGE

ROCHERPAN MPA: PROCESS CONTINUED

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
4.11: Community liaison structure	No community liaison structure exists specifically for the MPA.	Develop and implement a well-represented, functioning and formalised community liaison structure specifically for the MPA.
4.13: Management of hazardous substances	No formal, legally compliant programme with functional infrastructure exists for the management of hazardous substances in the MPA.	Develop and implement a formal, legally compliant programme with functional infrastructure for the management of hazardous substances for the MPA.
4.16: Environmentally responsible practice	There are no environmentally responsible practices in place for the MPA.	Secure funding to develop and implement a plan for environmentally responsible practices.

ROCHERPAN MPA: OUTPUTS



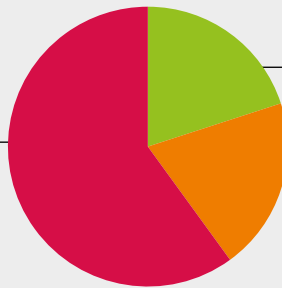
- 5.2: Functioning of law enforcement and compliance systems
- 5.2.1: Integrated compliance plan
- 5.3: Staff development and productivity
- 5.4: Linking of management plan to key performance areas
- 5.5: Community support

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

INDICATOR	BARRIER	NEXT STEP
5.2: Functioning of law enforcement and compliance systems	There are no protection systems or mechanisms to control current levels of legitimate and illegitimate access and activities in the MPA.	Develop adequate protection systems or mechanisms to successfully control current levels of legitimate and illegitimate access and activities in the MPA.
5.2.1: Integrated compliance plan	No integrated compliance plan exists to address all aspects of law enforcement and develop cooperation with law enforcement agencies.	Develop an integrated compliance plan.
5.3: Staff development and productivity	There are no MPA staff and no productivity targets have been set.	Develop and implement productivity targets.
5.4: Linking of management plan to key performance areas (KPA's)	No management plan to link to the KPA's of the MPA manager.	Link the future MPA management plan to the KPA's of the MPA manager.
5.5: Community support	Minimal support or assistance from the community.	Enlist community members to assist and support the site with some site management tasks and fundraising.

ROCHERPAN MPA: OUTCOMES

6.1: Economic and social benefit assessment
6.2: Achievement of biodiversity targets
6.3: Ecological processes



6.4: Ecosystem services

6.5: Land use planning and management outside the site

PRIORITY INDICATORS FOR MANAGEMENT EFFECTIVENESS

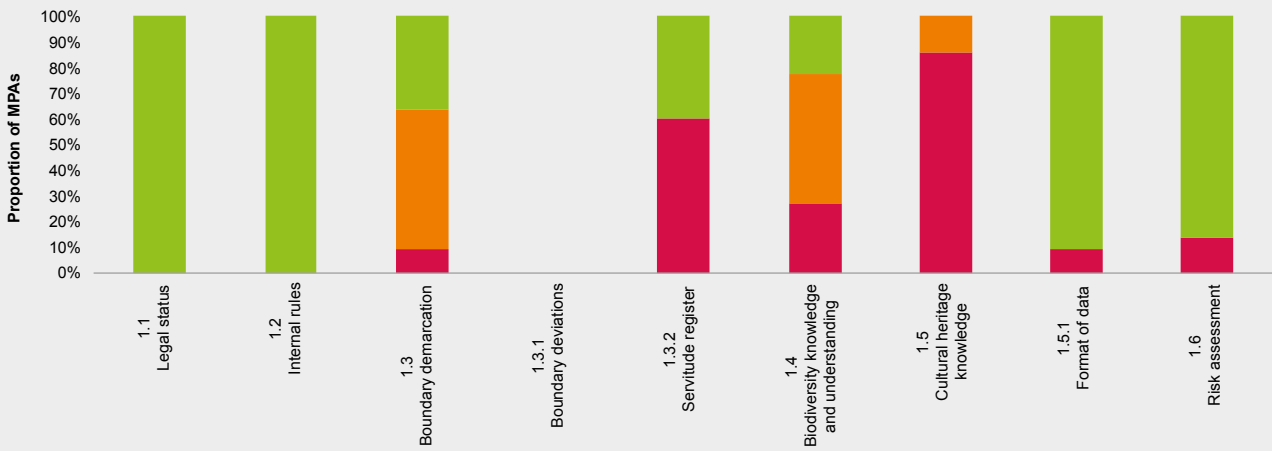
INDICATOR	BARRIER	NEXT STEP
6.1: Economic and social benefit assessment	The local or regional socioeconomic impact of the MPA on communities has not been assessed.	Conduct a socioeconomic benefit assessment to determine the impact of the MPA on the local and regional economy.
6.2: Achievement of biodiversity targets	Biodiversity targets have not been set.	Set critical biodiversity targets and ensure that they are being met.
6.3: Ecological processes	There is no current maintenance of ecological processes in the MPA, resulting in ecological integrity and biodiversity being compromised.	Ensure that ecological processes are being adequately maintained/augmented by process simulation without biodiversity being compromised.

“South Africa’s ocean territory is unique in covering three oceans, two major current systems, a diverse climatology and a very varied topographical setting with depths reaching 6000 m . This incredible variety in oceanographic and geological settings drives high marine biodiversity at the ecosystem and species level. Much of this heritage is only ours to manage and benefit from, with many ecosystem types and species found nowhere else on earth. Well designed, effectively managed MPAs provide a way to safeguard this heritage for future generations. MPAs play a role in keeping ecosystems healthy, helping resources recover and keeping oceans resilient so that we can cope better with climate change. MPAs also provide reference areas where scientists can study change, have baselines that inform us of the natural state of ecosystems and allow us to measure and adapt to change.”

Dr K Sink - SANBI

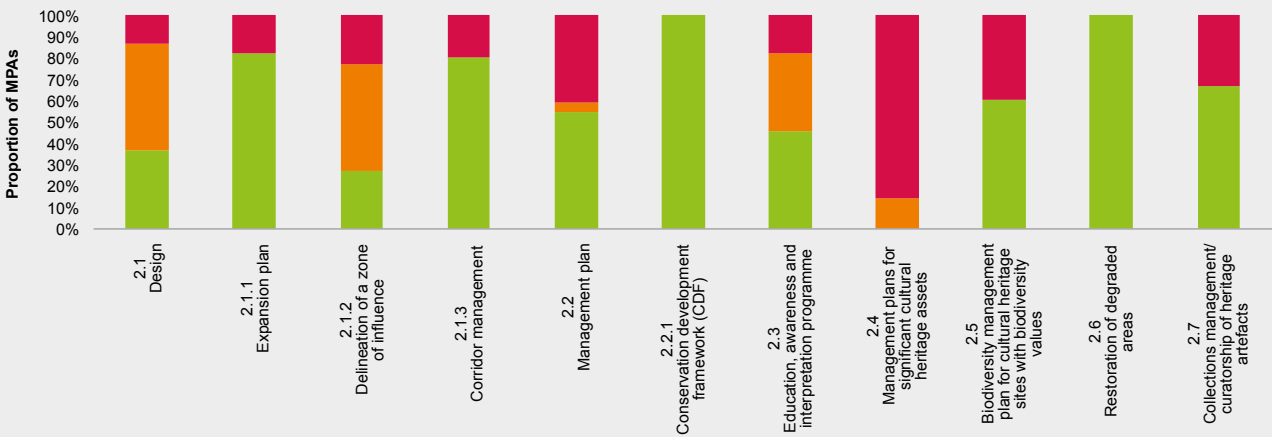
SOUTH AFRICAN MARINE PROTECTED AREA NETWORK OVERVIEW

MPA NETWORK: CONTEXT



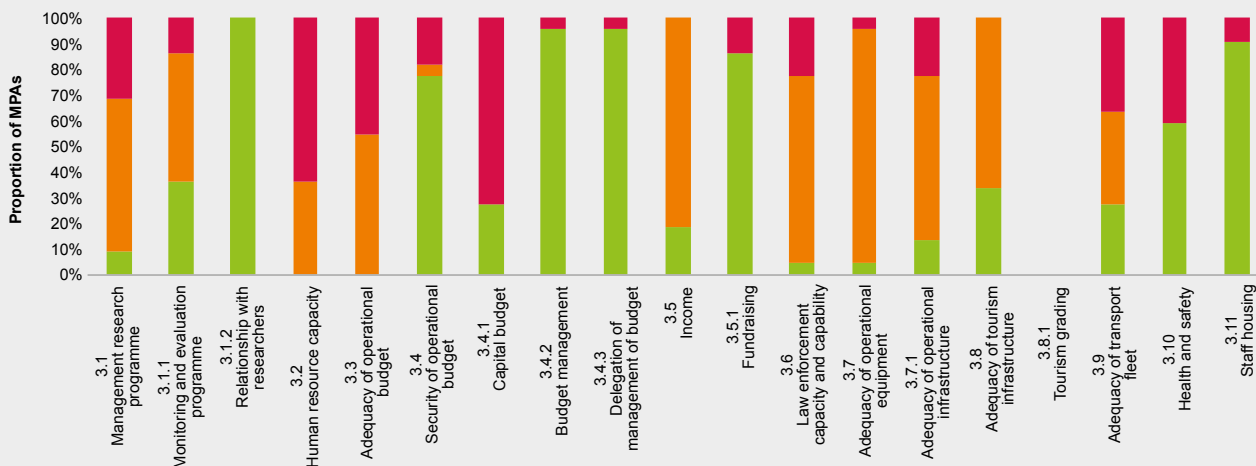
OPTIMAL NETWORK-WIDE MANAGEMENT	PRIORITY INDICATORS OF MAJOR NETWORK CONCERN (>50% OF MPAS RED)	PRIORITY INDICATORS FOR NETWORK COLLABORATION
<ul style="list-style-type: none"> 1.1 Legal status 1.2 Internal rules 	<ul style="list-style-type: none"> 1.3.2 Servitude register 1.5 Cultural heritage knowledge 	<ul style="list-style-type: none"> 1.3 Boundary demarcation 1.4 Biodiversity knowledge and understanding 1.5.1 Format of data 1.6 Risk assessment

MPA NETWORK: PLANNING



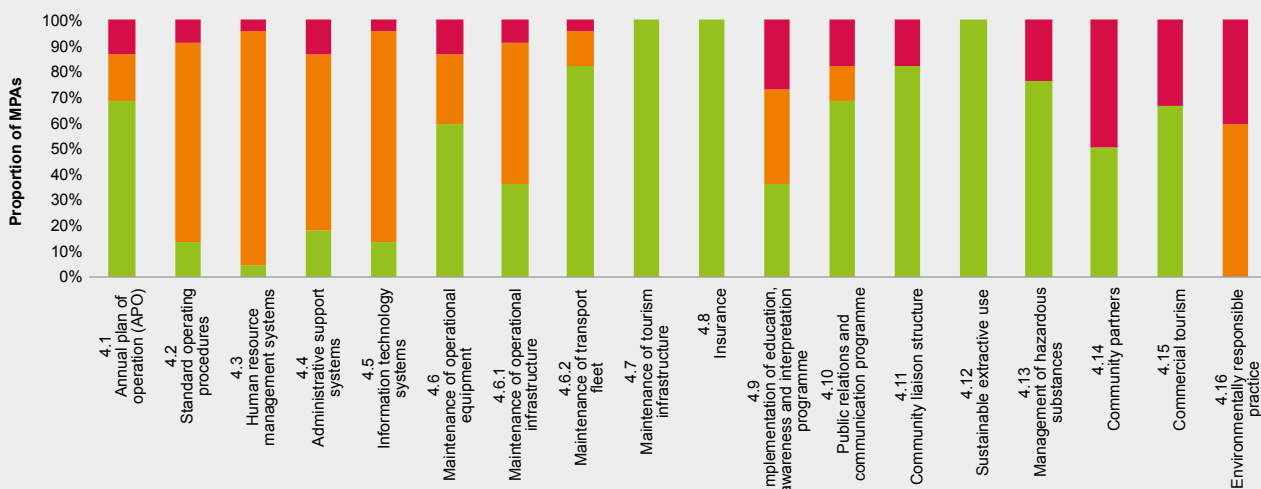
OPTIMAL NETWORK-WIDE MANAGEMENT	PRIORITY INDICATORS OF MAJOR NETWORK CONCERN (>50% OF MPAS RED)	PRIORITY INDICATORS FOR NETWORK COLLABORATION
<ul style="list-style-type: none"> 2.2.1 Conservation development framework (CDF) 2.6 Restoration of degraded areas 	<ul style="list-style-type: none"> 2.4 Management plans for significant cultural heritage assets 	<ul style="list-style-type: none"> 2.1 Design 2.1.1 Expansion plan 2.1.2 Delineation of a zone of influence 2.1.3 Corridor management 2.2 Management plan 2.3 Education, awareness and interpretation programme 2.5 Biodiversity management plan for cultural heritage sites with biodiversity values 2.7 Collections management/curatorship of heritage artefacts

MPA NETWORK: INPUTS



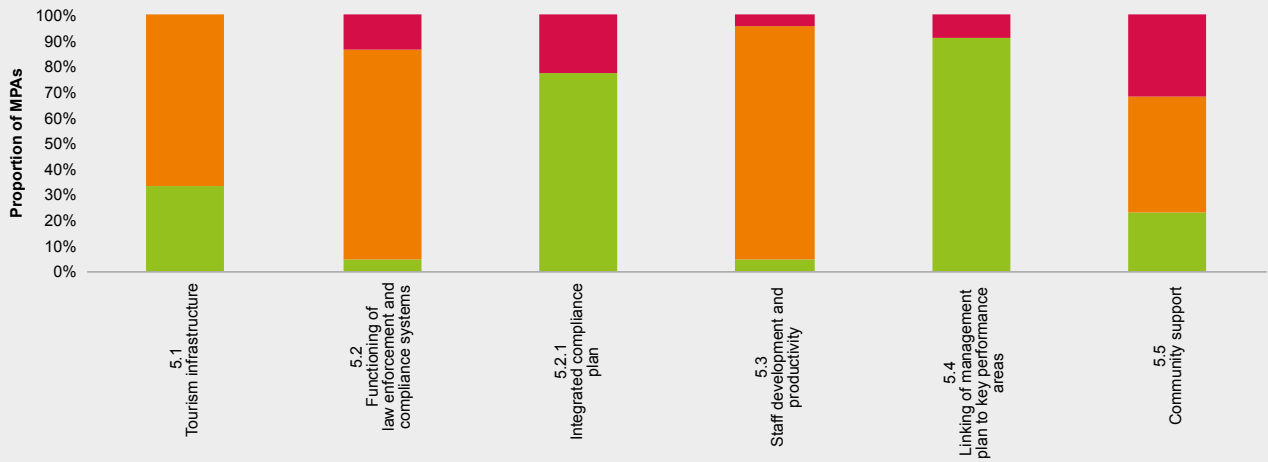
OPTIMAL NETWORK-WIDE MANAGEMENT	PRIORITY INDICATORS OF MAJOR NETWORK CONCERN (>50% OF MPAS RED)	PRIORITY INDICATORS FOR NETWORK COLLABORATION
3.1.2 Relationship with researchers	3.2 Human resource capacity 3.4.1 Capital budget	3.1 Management research programme 3.1.1 Monitoring and evaluation programme 3.3 Adequacy of operational budget 3.4 Security of operational budget 3.4.2 Budget management 3.4.3 Delegation of management of budget 3.5.1 Fundraising 3.6 Law enforcement capacity and capability 3.7 Adequacy of operational equipment 3.7.1 Adequacy of operational infrastructure 3.9 Adequacy of transport fleet 3.10 Health and safety 3.11 Staff housing

MPA NETWORK: PROCESS



OPTIMAL NETWORK-WIDE MANAGEMENT	PRIORITY INDICATORS OF MAJOR NETWORK CONCERN (>50% OF MPAS RED)	PRIORITY INDICATORS FOR NETWORK COLLABORATION
4.7 Maintenance of tourism infrastructure 4.8 Insurance 4.12 Sustainable extractive use	4.14 Community partners	4.1 Annual plan of operation (APO) 4.2 Standard operating procedures 4.3 Human resource management systems 4.4 Administrative support systems 4.5 Information technology systems 4.6 Maintenance of operational equipment 4.6.1 Maintenance of operational infrastructure 4.6.2 Maintenance of transport fleet 4.9 Implementation of education, awareness and interpretation programme 4.10 Public relations and communication programme 4.11 Community liaison structure 4.13 Management of hazardous substances 4.15 Commercial tourism 4.16 Environmentally responsible practice

MPA NETWORK: OUTPUTS



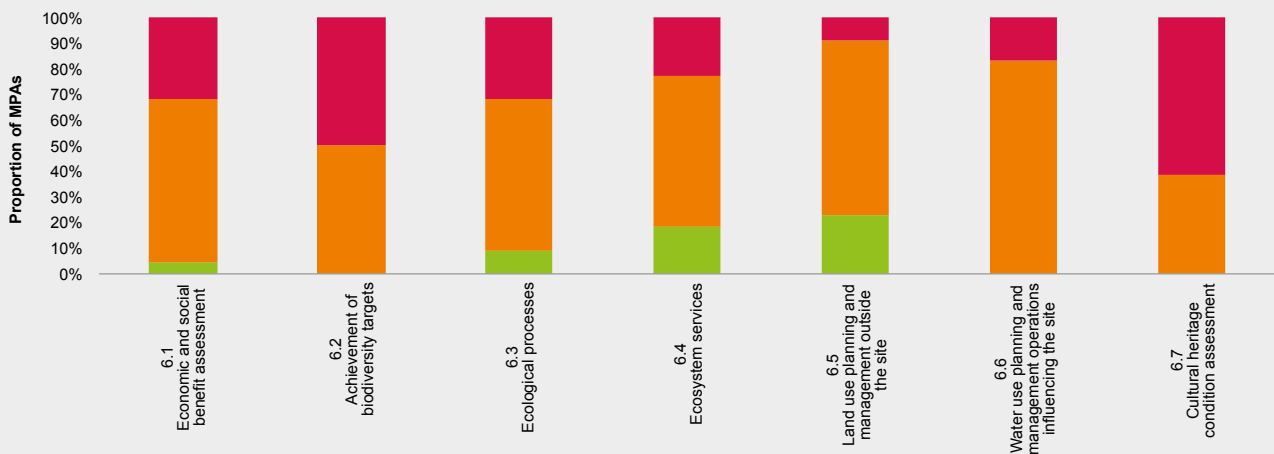
OPTIMAL NETWORK-WIDE MANAGEMENT

PRIORITY INDICATORS OF MAJOR NETWORK CONCERN (>50% OF MPAS RED)

PRIORITY INDICATORS FOR NETWORK COLLABORATION

- 5.2 Functioning of law enforcement and compliance systems
- 5.2.1 Integrated compliance plan
- 5.3 Staff development and productivity
- 5.4 Linking of management plan to key performance areas
- 5.5 Community support

MPA NETWORK: OUTCOMES



OPTIMAL NETWORK-WIDE MANAGEMENT

PRIORITY INDICATORS OF MAJOR NETWORK CONCERN (>50% OF MPAS RED)

PRIORITY INDICATORS FOR NETWORK COLLABORATION

- 6.2 Achievement of biodiversity targets
- 6.7 Cultural heritage condition assessment

- 6.1 Economic and social benefit assessment
- 6.3 Ecological processes
- 6.4 Ecosystem services
- 6.5 Land use planning and management outside the site
- 6.6 Water use planning and management operations influencing the site

KEY FINDINGS

South Africa has made enormous progress in working towards the Convention on Biological Diversity (CBD) goal of declaring 10% of its EEZ as MPAs by declaring an additional 20 MPAs (**see www.marineprotectedareas.org.za**).

Government has now legislated just over 5.4% of its EEZ as MPAs—a massive increase from 0.5% in 2019. While certain indicators of MPA Management effectiveness were optimally managed across all MPAs in South Africa (see "South African Marine Protected Area Network Overview", pp. 127–131), a major challenge moving forward involves maintaining effectively managed MPAs that meet their objectives. Overcoming this challenge will involve addressing the following needs of MPAs:

- a) Adequate funding, staffing and resources
- b) Extensive monitoring to inform adaptive MPA management
- c) Improved public awareness
- d) Effective law enforcement
- e) Improved cultural heritage management

FUNDING, STAFFING AND RESOURCES

Most MPAs in South Africa are underfunded, which has trickle-down effects on many aspects of MPA management. Based on the present METT assessment, 73% of South Africa's MPAs have an inadequate capital budget, while 45% have either an inadequate or non-existent operational budget. These deficiencies can prevent MPAs from fully meeting their objectives, thus hindering their ability to deliver the many benefits of MPAs to South Africans.

Adequate staffing is pivotal to ensuring that MPAs are managed efficiently and effectively. However, 64% of South Africa's MPAs have insufficient human resource capacity and/or vacant positions, which can severely limit management effectiveness. Furthermore, 23% of South Africa's MPAs are constrained by inadequate operational infrastructure and transport fleets.

MONITORING TO INFORM ADAPTIVE MPA MANAGEMENT

Although research and monitoring are integral to ensuring that MPAs are managed effectively and meeting their objectives, many MPAs lack the funds to initiate research and monitoring projects that can assist MPA managers in making vital management decisions (e.g. closing areas where over-extraction has occurred, monitoring ecological trends and mitigating climate change). Overall, the present METT assessment indicates that 27% of South Africa's MPAs do not have sufficient information on key species, habitats, ecosystems and invasive species to inform the management of biodiversity objectives. Furthermore, 32% of South Africa's MPAs are not performing research relevant to achieving management objectives. This context could be contributing to 50% of South Africa's MPAs failing to meet all of their biodiversity targets. Additionally, the South African MPA network has no climate change mitigation plan in place. Climate change threats should be identified and addressed by MPAs.

Although targeted research and adaptive management are critical to achieving management effectiveness, 45% of South Africa's MPAs do not have an updated and approved management plan covering all aspects of protected area management with measurable objectives. Moreover, many of South Africa's MPAs are attached to terrestrial national parks or provincial reserves that are moving towards integrated management plans (IMPs) that involve one management plan (MP) being developed, which primarily covers management actions for the terrestrial national park or reserve and only includes a section addressing the MPA portion. This trend could be problematic for MPA management since less focus is often placed on MPAs and their management in this context.

PUBLIC AWARENESS

A significant challenge in MPA management involves coexisting with adjacent coastal communities. MPAs and communities should ideally collaborate on aspects such as quotas, projects and management practices. Overall, there is a low level of public awareness of MPAs, the role they serve in maintaining healthy oceans and the socio-economic contributions they provide. According to the results, 56% of South Africa's MPAs do not have an education, awareness and interpretation programme that is fully integrated into the MPA management plan. A partnership between Government and NGOs is required to shift public perception regarding the value of MPAs to promote them as the foundation for the long-term health of our marine ecosystems and the ecosystem services providing socio-economic benefits that many communities rely on.

This lack of public MPA awareness partially stems from vaguely and inconsistently demarcated MPA boundaries throughout South Africa, which can create enforcement issues. Based on the results of the present METT assessment, 64% of MPAs do not have fully demarcated boundaries. This can cause the public to be unaware of and/or not respect MPA boundaries and regulations. To alleviate this issue, standardised MPA boundary demarcation should be developed nationwide alongside MPA signage that outlines the designated MPA zones and their GPS points (with links to download these points onto navigation devices).

LAW ENFORCEMENT

Regarding law enforcement capacity and capability across South African MPAs, 73% of South Africa's MPAs have some deficiencies in their capacity to enforce rules and regulations, while 23% of MPAs face major deficiencies in this regard. While some success has been observed in terms of poaching reduction within a few MPAs, adequate enforcement is often impossible in many MPAs due to a lack of funds, training and capacity. One of the main challenges raised during the METT process was that many MPA staff struggled to obtain FCO cards that designate them to enforce the MLRA.

This lack of law enforcement capacity and capability can severely limit the effectiveness of MPAs in providing benefits to South Africans. Notably, 32% of South Africa's MPAs were not maintaining all ecological processes, with some ecological integrity being compromised. Furthermore, 23% of South Africa's MPAs were identified as only partially maintaining ecosystem services.

CULTURAL HERITAGE MANAGEMENT

While cultural heritage is an important aspect of numerous South African MPAs, 90% of the studied sites have not formally identified cultural heritage assets, while 86% of South African MPAs with (largely informally) identified cultural heritage assets did not have formal site management plans drawn up by an accredited heritage practitioner.

“Managers of Marine Protected Areas are at the forefront of research, law enforcement and public engagement about marine conservation. They require expertise in carrying out research, compliance and enforcement, maintenance, monitoring and a wide range of administration tasks including report writing and dealing with the press. MPA Managers need an holistic understanding of not only the ecosystem approach to management, but also the legal, compliance and governance framework of the MPA. As MPAs become more integrated with local communities and society, so too do managers need to have a clear understanding of the objectives of the MPA so that they can interact with local communities and members of the public in an effective way. MPAs are often the one conservation tool that the public and fishers are most aware of and therefore under frequent scrutiny – they are therefore an opportunity to showcase effective governance when run by well capacitated managers.”

Dr S Hampton - : IOI-SA (International Ocean Institute – African Region)

RECOMMENDATIONS

Previous State of Management of South Africa's Marine Protected Areas reports focused on providing detailed METT scores and highly specific recommendations for MPA managers and management authorities to follow.

The present report aims to avoid the pitfalls of focusing on scores and overly detailed instructions for managers by providing a streamlined approach to identifying and resolving management effectiveness deficiencies. In line with Phase 1 of the phased approach to achieving optimal MPA management effectiveness, this report provides a management effectiveness overview for each MPA, which managers can use to rapidly identify priority management effectiveness indicators, barriers to management effectiveness, and the next steps required to achieve a basic level of management or greater. It is recommended that managers develop and implement action plans to address priority indicators based on the unique and constantly evolving context of their specific MPA and management authority.

Notably, the process of achieving Phase 1 can be guided by multiple forms of collaboration. First, when MPA managers aim to address a priority indicator, they are encouraged to refer to the trends for that indicator across their management authority to identify whether the indicator is optimally managed at another MPA under the same management authority. If so, they are encouraged to liaise with those MPA managers to identify best practices and lessons learned from the process of achieving a basic or optimal level of management for that indicator. This form of collaboration is particularly useful since the structure and context of each management authority is unique. However, if an indicator is not better managed at any MPA under the same management authority, MPA managers are encouraged to engage in network-wide collaboration. Thus, both intra-agency and network-wide collaboration can serve as effective strategies to enhance the potential for success in improving management effectiveness.

Furthermore, the MPA Forum (typically hosted annually) can serve as an excellent platform for this form of collaboration. There exists a need for Government, MPA managers and MPA staff to meet regularly, compare experiences, learn from experts and network. Using the MPA Forum, individuals and groups in the MPA sector can engage in face-to-face collaboration to address the priority indicators of network concern (see “South African Marine Protected Area Network Overview”, pp. 127–131).

When combined with regular METT assessments (every 5 years), the phased approach to achieving optimal MPA management effectiveness can serve as a tool to address priority indicators that Government and management authorities can jointly focus on by assisting MPA managers and staff. Through collaboration and dynamic problem-solving over time, this approach should ultimately result in optimal management effectiveness across the entire South African MPA network.

METT-SA 3 AND THE FUTURE

The present METT assessment will serve as the baseline for management trends across all South African MPAs over the next 5-year period. The next MPA METT assessment planned by WWF using METT-SA 3 will be performed in 2024, which will allow the comparison of results from this report and the monitoring of improvements and possible areas of concern.

While the METT has contributed to South African MPAs working towards the goal of improving management effectiveness, the METT alone cannot assess the overall effectiveness of MPAs since it remains essential to determine whether South Africa's MPAs are meeting their objectives. As the foundation upon which South Africa's MPAs were created, MPA objectives should guide the management of South Africa's MPAs. However, South Africa's MPAs lack a mechanism or methodology to measure whether these objectives are being met. If MPAs are assessed and found to achieve their objectives, it would prove their overall effectiveness and thus justify their establishment.

In partnership with the DFFE, WWF has been developing a project to address the challenge of determining whether MPAs are meeting their objectives, with the METT serving as an integral part in developing this process. The concept of this project was presented to a diverse group of South African MPA sector stakeholders at the 2016 MPA Forum in Port Elizabeth. Based on their feedback at the MPA Forum, the need to measure MPAs against their objectives and proceed with this project was evident.

Therefore, WWF partnered with the DFFE to raise funding and conduct a desktop study to determine the best practices for developing a process to measure overall MPA effectiveness (i.e. management effectiveness and the achievement of MPA objectives). This project is in its pilot phase and involves four MPAs as pilot sites (Dwesa-Cwebe, Namaqualand, Betty's Bay and Aliwal Shoal).

The METT has shown great value to the South African MPA network by allowing managers to assess their MPAs using a standard template and work with their management authorities to develop strategies and plans to improve their MPA management effectiveness. The South African MPA sector faces many challenges and individuals at all levels must work together to develop novel and dynamic solutions. It is hoped that the phased approach to achieving optimal MPA management effectiveness will be adopted by MPAs and guided by strong intra-agency and network-wide collaboration to achieve the ultimate goal of optimal management effectiveness across all South African MPAs.

“Many countries, including South Africa, have been declaring MPAs mainly towards meeting their obligations as signatories to international agreements, notably to achieve Aichi Target 11: to protect 10% of coastal and marine areas by 2020, which is also echoed in the Sustainable Development Goal 14.5. However, while the challenge of establishing a representative system of MPAs is considerable, it is arguably surpassed by the challenge of managing MPAs effectively over time. Only by ensuring their effective management can MPAs contribute to ambitious overarching goals such as biodiversity conservation or fisheries management. Ultimately, evaluation of management effectiveness needs to take into account how the MPA is performing in terms of achieving its management objectives, which emphasizes the need for clear, achievable and measurable objectives. Monitoring and evaluating MPA effectiveness is essential for adaptive management and its importance is further underscored by an increasing need to justify the existence of MPAs, given the growing human population especially in coastal areas and increasing demand for ocean space and resources from various sectors.”

Dr S Kirkman - Department of Forestry, Fisheries and the Environment (DFFE)

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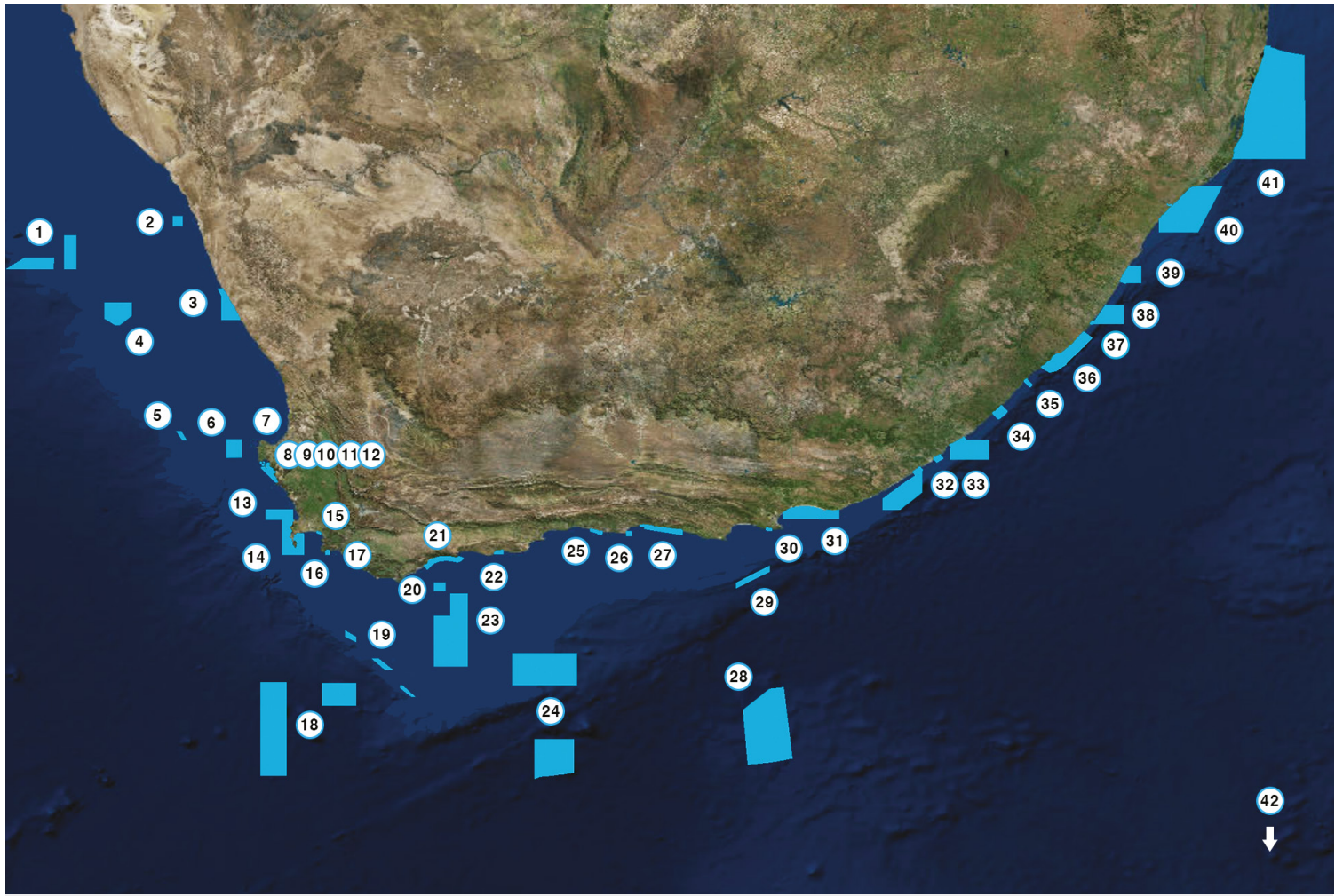
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© Robin Adams



Betty's Bay MPA



- | | | |
|---------------------------|----------------------------|----------------------------|
| 1 - ORANGE SHELF EDGE | 15 - HELDERBERG | 29 - PORT ELIZABETH CORALS |
| 2 - NAMAQUA FOSSIL FOREST | 16 - BETTY'S BAY | 30 - SARDINIA BAY |
| 3 - NAMAQUA NP | 17 - WALKER BAY | 31 - ADDO ELEPHANT NP |
| 4 - CHILDS BANK | 18 - SE ATLANTIC SEAMOUNTS | 32 - AMATHOLE |
| 5 - BENGUELA MUD | 19 - BROWNS BANK CORALS | 33 - AMATHOLE OFFSHORE |
| 6 - CAPE CANYON | 20 - AGULHAS MUD | 34 - DWESA-CWEBE |
| 7 - ROCHERPAN | 21 - DE HOOP | 35 - HLULEKA |
| 8 - MALGAS ISLAND | 22 - STILBAAI | 36 - PONDOLAND |
| 9 - MARCUS ISLAND | 23 - AGULHAS BANK COMPLEX | 37 - TRAFALGAR |
| 10 - JUTTEN ISLAND | 24 - SW INDIAN SEAMOUNTS | 38 - PROTEA BANKS |
| 11 - LANGEBAAN LAGOON | 25 - GOUKAMMA | 39 - ALIWAL SHOAL |
| 12 - SIXTEEN MILE BEACH | 26 - ROBBERG | 40 - UTHUKELA BANKS |
| 13 - ROBBEN ISLAND | 27 - TSITSIKAMMA | 41 - ISIMANGALISO |
| 14 - TABLE MOUNTAIN NP | 28 - AGHULAS FRONT | 42 - PRINCE EDWARD ISLANDS |



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