

Amathole District Municipality

**COASTAL MANAGEMENT PROGRAMME:
CONDENSED VERSION**



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EXECUTIVE SUMMARY

The purpose of this document is to present the Coastal Management Programme for the Amathole District Municipality in the Eastern Cape, which has been developed in accordance with the National Environmental Management: Integrated Coastal Management Act (Act No 24 of 2008). This Coastal Management Programme for the ADM has been developed for the period of 2016 to 2020.

Historically, the coast has provided communities with a rich source of resources (such as fish, seaweed, molluscs, etc.) and has therefore resulted in the coast being heavily exploited. As the population along the coastline increases, along with an increase in reliance on coastal resources, the sustainability of these coastal resources has been cast into the spotlight. The sustainability of coastal resources is being threatened by increasing development along the coast, pollution and over exploitation of natural resources, just to name a few. In order for the coastline to be promoted an asset that can be enjoyed by a variety of users, the current and future sustainability of coastal resources needs to be prioritised.

South Africa has a coastline that is both ecologically diverse and rich in natural resources. The National Coastal Management Programme of South Africa (2014) (NCMP) identifies South Africa's coastline as a national asset. The Amathole District Municipality's (ADM) coastline is equally diverse and rich in resources and as a result, many coastal communities depend heavily on these coastal resources for both subsistence needs (food, etc.) and as a source of income.

The contribution of coastal resources to the South African economy is estimated to be approximately R 57 billion (UNOPS, 2011) where the direct economic benefits of coastal resources in South Africa are approximately 35% of the country's GDP. Within the ADM, the primary direct economic benefits of coastal resources within the ADM include seaweed collection, mussel collection, recreational fishing and coastal tourism. The ADM coastline also provides a valuable source of educational and scientific opportunities that cannot be quantified with regards to monetary value.

The overall structure of the ADM Coastal Management Programme is as follows:

INTRODUCTION

- This chapter provides the background to the purpose of the ADM Coastal Management Programme as well as provides a brief summary of the value of the ADM's coastal resources. This chapter also provides a brief summary of the process that was followed in developing the ADM Coastal Management Programme as well as the framework for integrated coastal management in the ADM.

SITUATION ANALYSIS

- This chapter briefly describes the ADM's coastal environment and well as the state of the coastal environment. The state of the coastal environment, as well as the identification of future needs, are discussed within the framework for coastal management as a template. The information in this chapter then informs the identification of coastal management objectives for the ADM.

ROLES AND RESPONSIBILITIES FOR COASTAL MANAGEMENT

- This chapter defines the roles and responsibilities of the ADM with regards to coastal management according to the ICMA. This chapter also provides a summary of the roles and responsibilities in terms of collaborative partnerships with other key roleplayers.

VISION AND PRIORITIES FOR COASTAL MANAGEMENT

- This chapter provides the ADM's vision for coastal management. This chapter also includes the key principals that provide a platform where the ADM's vision can be practically applied. The key coastal management priorities and coastal management in the ADM are also discussed in this chapter.

COASTAL MANAGEMENT OBJECTIVES AND ACTIONS

- This chapter describes the coastal management objectives of the ADM with regards to the priorities that were identified. Specific actions and performance indicators have been listed in this chapter that will be undertaken by the ADM. The actions that were developed were informed by the situation analysis as well as stakeholder engagement workshops that were held throughout the process of developing the ADM Coastal Management Programme.

IMPLEMENTATION PLAN

- The final chapter of the Coastal Management Programme provides detailed implementation plans for each of the key coastal management priority areas. Actions, performance indicators, timeframes and responsibilities have been allocated to fulfill each coastal management objective described in the previous chapter.

The promulgation of the ICMA aimed to establish a set of requirements to effectively implement coastal and estuarine management in South Africa. The adoption of an integrated approach to coastal management in South Africa is to promote the conservation and sustainable use of the coastal environment. The ICMA provides a variety of tools that enable the implementation of effective coastal management with Coastal Management Programmes being the most effective tool for integrated coastal management being provided.

The Coastal Management Programme that has been developed for the ADM includes strategies and plan to assist the ADM to effectively implement the ICMA at a municipal level. The ADM coastal Management Programme also allows the ADM to plan coastal development accordingly, to set a course for the future of the ADMs coastal environment by identifying current coastal management issues and to ultimately provide actions that will assist the ADM in addressing those coastal management issues. The development of the ADM's Coastal Management Programme also aims to better facilitate cooperative governance between various spheres and sectors of government, as well as including the private sector and communities in coastal management activities.

The framework for the ADM CMP, which signifies the primary components to be addresses within the ADM CMP, was based on both the NCMP (2014) and the Eastern Cape CMP (2013). The framework aims to provide a holistic and structured guideline as to how to undertake the situation analysis and to identify coastal issues and future needs within the ADM's coastal zone. The ADM Coastal Management Plan and its goals and objectives are as dynamic as the natural processes of the coast itself. Therefore the framework, goals, objectives and actions needs to be continuously adapted and improved as new information, issues and knowledge becomes available:

The ADM's vision for coastal management highlights the importance of protecting coastal ecosystems while identifying opportunities for sustainable coastal developments and resources utilisation. The coastal management objectives provides direction and focus when working to achieve the ADM's vision for coastal management.

Cooperative governance as a vital component in the implementation for coastal management objectives and strategies.

Coastal planning and development is becoming a crucial component of coastal management where appropriate and sustainable development within the coastal zone is facilitated.

Climate change and dynamic coastal processes needs to highlight the importance of being able to respond to the dynamic process through increased resilience of natural and social systems as well as to start considering the possibility of implementing the phased retreat of infrastructure in high risk areas.

Land and marine based sources of pollution where effective management and prevention strategies are required order to reduce and respond to land based and marine based sources of pollution in the coastal zone.

Estuaries that require the establishment and implementation of strategies to improve the management and protection of estuarine resources as well as the need to secure sufficient financial resources to fund and implement identified actions, research projects, initiatives and advisory forums.

Facilitation of coastal access with the promotion and facilitation of equitable access to coastal resources and coastal public property, recognising the importance of access preservation as well as promoting custodianship and stewardship of the coastal zone.

Awareness, education, training, capacity building and information by facilitating the cooperative management of the coastal zone between, national and provincial government, municipalities and coastal communities.

Compliance, monitoring and enforcement through the facilitation of compliance with applicable coastal legislation and the promotion of the environmental management inspectorate and facilitation of training and designation of environmental management inspectors by the ADM will contribute to ensuring that the coastal zone is managed effectively.

natural resource management with the effective management of natural resources needs to include the maintenance of ecosystem integrity and health, the assessment and effective management of coastal protected areas, including marine protected areas as well as the identification and rehabilitation of damaged and degraded coastal ecosystems and habitats.

State of the Coast Reporting be carried out in order to evaluate the findings of these monitoring programmes as required by Section 9. State of the Coast Reporting informs the subsequent reviews of the ADM CMP as well as informs future coastal planning processes.

The vision for the ADM CMP has been extracted from the EC CMP and was agreed upon during the stakeholder engagement workshops and has therefore been adopted for the purposes of this CMP:

We, the people of Amathole District Municipality, recognise the intrinsic value, and appreciate the scenic beauty, diversity and richness of our unique coastline.

We aim to take ownership of the coast and foster a spirit of custodianship and shared responsibility as our coast is a unique shared asset, which has social, cultural, ecological and economic value.

We aspire to manage the coast in an integrated manner that takes both the cultural and biological value into account.

We strive to utilise the natural resources of our diverse coastline in a sustainable and equitable manner, which maximises the benefits for all people of the province and ensures the long term maintenance of biodiversity and ecological integrity of coastal habitats.

We strive to promote sustainable development and alleviate poverty on an equitable and participatory manner that considers the requirements of all stakeholders and takes cognisance of the conservation and biological importance of our coastline as well as national and provincial interests.

We seek to guide the management of the Great Kei coast in a way that eliminates the threats of unsustainable utilisation of the coastal resources while optimising the opportunities that can be derived from the coastal zone.

The framework that was developed for the ADM Coastal Management Programme provided the template for the Situation Analysis as well as the structure adopted during the stakeholder engagement workshops. The Situation Analysis and the various stakeholder engagement workshops resulted in the identification of seven key priority areas for coastal management. For each of the seven priorities in the ADM’s Coastal management Programme, goals and management objectives were detailed for each.

Priority 1: The development of infrastructure within the coastal zone

Goal: The promotion and facilitation of development within the coastal zone in the most environmentally appropriate manner possible, taking into account the threat of climate change impacts on development within the coastal zone.
Management Objective 1.1: Review of existing coastal development within the ADMs coastal zone
Management Objective 1.2: Provision of bulk sanitation and water infrastructure to coastal development nodes
Management Objective 1.3: The development of tourism infrastructure within the ADM coastal zone

Priority 2: The facilitation of coastal public access and provision of public amenities

Goal: To ensure that safe and equitable access to the coast for all people within the ADM is facilitated and maintained by identifying areas that require the provision of new coastal access points and by ensuring that existing coastal access points, and the public amenities associated thereof, are in a state that conforms with the requirements set out in the ICMA.
Management Objective 2.1: The facilitation of physical and equitable public access to the ADM coastal zone
Management Objective 2.2: Improve the condition of existing public access points and associated public amenities

Priority 3: Spatial Planning tools for development in the coastal zone

Goal: To develop spatial planning guidelines for the sustainable development of the ADM coastal zone consistent with ICMA and other legislation and policy requirements, particularly: <ul style="list-style-type: none"> – Coastal Protection Zone

- Coastal Management Lines
- Coastal Access
- Climate change risks
- Coastal EMF

by incorporating appropriate spatial principles into next SDF review, defining and establishing urban edges for all urban nodes in the coastal zone and ensuring environmentally sensitive areas and 'no-go' development areas, identified in the Coast EMF are pro-actively integrated by the SDF.

Management Objective 3.1: Develop spatial planning guidelines for the sustainable development of the ADM coastal zone

Priority 4: Coastal awareness and education

Goal: Instil a sense of custodianship of the coast amongst all coastal communities through education and awareness of coastal conservation and management by creating centralised, publically accessible database of all municipal plans relevant to coastal management, coastal bylaws and coastal legislation and regulations, updating and maintaining the coastal stakeholder database and the development of a coastal education and awareness programme.

Management Objective 4.1: Creation of a central, publically accessible database of all relevant coastal plans, policies and legislation

Management Objective 4.2: Coastal stakeholder database

Management Objective 4.3: The facilitation of coastal education and awareness programmes within the ADM

Priority 5: The management of estuary resources

Goal: The development and implementation of estuary management plans for the Keiskamma, Great Kei and Mbashe estuaries that are in accordance with the National Estuary Management Protocol.

Management Objective 5.1: Analysis of the current threat on estuaries within the ADM

Management Objective 5.2: Development of estuary management plans in accordance with the National Estuary Management Protocol

Management Objective 5.3: Incorporation of Estuary Management Plans into the ADM IDP and SDF

Priority 6: Marine resource sustainability through effective management

Goal: Develop a coordinated and transparent programme for the monitoring and control of marine resource conservation and utilisation through the coordination and alignment of all conservation plans, the development of a Marine Resource Utilisation Monitoring programme and by strengthening the ADMs coastal enforcement capabilities.

To gain Blue Flag Beach Status for at least one beach within each coastal Local Municipality.

Undertake a environmental and socio-economic feasibility assessment for the potential formalisation of sand mines along the ADM coast.

Management Objective 6.1: Review of sensitive and protected coastal areas

Management Objective 6.2: Development of a Marine Resource Utilisation Management Programme for the ADM coastal zone

Management Objective 6.3: Increase enforcement capacity to enforce coastal and environmental compliance

Management Objective 6.4: Develop bylaws for the management of coastal resources

Management Objective 6.5: Increase the number of beaches with Blue Flag Status

Management Objective 6.6: Conduct an environmental, social and economic feasibility assessment on formalising existing illegal sand mines within the ADM Coastal Zone

Priority 7: Management of water quality and pollution within the coastal zone

Goal: Address coastal pollution through the establishment of an ADM coastal water and sanitation committee which will review existing ADM estuary/swimming beach monitoring programmes (locations and parameters), engage with DEA: Oceans and Coasts regarding appropriate existing programmes that the ADM may be able to take part in (e.g. WftC programmes) and to review current reporting procedures used by ADM, DWS and DEA: Oceans and Coasts

Develop an Water Quality and Pollution Monitoring (WQM) Programme for disclosure at DM level which will

include the identification of point and non-point pollution sources, coastal water quality objectives and appropriate responses to identified pollution events. The WQPM Programme will bear specific reference to beaches that either have Blue Flag Beach status (i.e. Hamburg) or those that will be put forward to receive Blue Flag Beach status. Develop by-laws for the management of pollution in the coastal zone.

Management Objective 7.1: The creation of a Coastal Sanitation and Water Quality Committee for the ADM

Management Objective 7.2: Develop and implement a Coastal Water Quality and Pollution Monitoring for the ADM

Management Objective 7.3: Develop and adopt bylaws for the management of pollution in the coastal zone.

The key coastal management priorities, the ADM's coastal management objectives as well as the actions and performance indicators developed in the ADM's Coastal management Programme represent the ADM's commitment to implementing the ICMA in the ADM over the next five years (2016-2020).

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1.1 Background

Around the world, coastline is the most highly populated area with many major cities being located along the coast. The concentration of the population along the coastline places pressure on coastal resources due to increasing social and economic demands.

Historically, the coast has provided communities with a rich source of resources (such as fish, seaweed, molluscs, etc.) and has therefore resulted in the coast being heavily exploited. As the population along the coastline increases, along with an increase in reliance on coastal resources, the sustainability of these coastal resources has been cast into the spotlight. The sustainability of coastal resources is being threatened by increasing development along the coast, pollution and over exploitation of natural resources. In order for the coastline to be promoted as an asset that can be enjoyed by a variety of users, the current and future sustainability of coastal resources needs to be prioritised.

The Constitution of the Republic of South Africa (1996) has emphasised that the people of South Africa have a right to an environment that is protected for the benefit of both present and future generations. The promulgation of legislation that focuses on the conservation of the environments and the prevention and management of pollution and ecological degradation has been highlighted within the Constitution. As a result, the National Environmental Management Act (Act No. 107 of 2008) (NEMA) was promulgated in 2008 and amended in 2014. The primary objectives of NEMA are to promote an integrated and coordinated approach to the management of the environment through cooperative governance.

The objectives of NEMA, with regards to coastal management, were implemented through the White Paper for Sustainable Coastal Development in South Africa (DEAT, 2000) (White Paper). The adoption of the White Paper was the first step towards an integrated approach to managing the South African coastline. The White Paper was focused on the management of coastal resources through the control of resource utilization. The shortcoming with regards to the White Paper was that little consideration was given to the social aspect of coast management and the promotion of the sustainable use of coastal resources. The White Paper did not provide a coordinated approach to coastal management with respect to the holistic management of coastal resources. Instead, the White Paper promoted sector-specific coastal resource utilization.

In order to establish the statutory requirements for Integrated Coastal Management, the Integrated Coastal Management Act (Act No. 24 of 2008) (ICMA) was promulgated in 2008. The ICMA was developed to provide tools to ensure that development within the coastal zone and the use of coastal resources is both socially and economically justifiable. The ICMA also aims to ensure the development in the coastal zone and the use of coastal resources is ecologically sustainable and that transgressions within the coastal zone are dealt with using appropriate measures.

One of the tools that the ICMA makes provision for is the development of Coastal Management Programmes (CMPs). CMPs incorporate strategies and plans that are developed through the identification of current management challenges and user-conflicts and allow organs of state to plan accordingly within the objectives set out to effectively manage the coastline. CMPs also provide a platform to facilitate the cooperative management of the coastal zone within a projected period of time by bringing together various spheres of government, the private sector and communities.

1.2 Value of the coast

South Africa has a coastline that is both ecologically diverse and rich in natural resources. The National Coastal Management Programme of South Africa (2014) (NCMP) identifies South Africa's coastline as a national asset. The Amathole District Municipality's (ADM) coastline is equally diverse and rich in resources and as a result, many coastal communities depend heavily on these coastal resources for both subsistence needs (food, etc.) and as a source of income. The NCMP describes the coastal environment as:

- An **economic** place where commercial, recreational and subsistence activities take place
- A **social** place where people can enjoy themselves and come to relax and find spiritual peace
- A **biophysical** place where land, sea and air meet and interact, and where beaches, sand dunes, rocky headlands and estuaries support a wide range of coastal biodiversity.

The description of the coastal environment, as described by the NCMP is encompassing of the ADM's diverse and resource rich coastline. These aspects of the coastline (economic aspect, social aspect and biophysical aspect) are interlinked and each aspect needs to be effectively managed to ensure coastal resource sustainability.

1.3 Context of the Coastal Management Programme

In terms of the ICMA, CMPs are considered to be an important tool for effective integrated coastal management in South Africa. Section 48 of the ICMA requires that coastal district and local municipalities develop CMPs that are in alignment with both the NCMP and the provincial CMP (Eastern Cape CMP - 2013). While the NCMP and the provincial CMPs are required to address strategic planning and implementation in the coastal zone, municipal CMPs are required to address operational focused planning and implementation in the coastal zone.

1.4 Purpose of the Amathole District Coastal Management Programme

With specific reference to the ADM CMP, the ICMA (Section 49) states that a municipal coastal management programme must –

- a) Be a coherent municipal policy directive for the management of the coastal zone within the jurisdiction of the municipality
- b) Be consistent with –
 - (i) The national and provincial coastal management programmes; and
 - (ii) The national estuarine management protocol

More specifically, the ICMA (Section 49) states that the ADM CMP must include the following components:

- A municipal vision for the management of the coastal zone, including the sustainable use of coastal resources
- Municipal coastal management objectives
- Priorities and strategies that achieve the following:
 - Coastal management objectives of the ADM
 - Applicable coastal management objectives stipulated within the NCMP and provincial CMP
 - Address the issue of high percentage of vacant plots and the low occupancy levels of residential dwellings
 - The designation of areas for the purposes of mixed cost housing and taking into account the needs of previously disadvantaged individuals
 - Addressing coastal erosion and accretion
 - Strategies to deal with issues pertaining to coastal access
- Performance indicators to measure progress with the achievement of the objectives

Section 29 of the ICMA also states that the ADM CMP may include a programme of projected expenditure and investment to be made by the ADM to implement the CMP, a description of specific areas within the coastal zone that may require special management strategies or estuary management plans.

The ADM CMP is a tool that will assist the ADM in managing the coastline in a structured manner by providing guidance and direction. However, the priorities identified in the ADM CMP, like the coastal zone, are dynamic and must be periodically re-examined to revise strategies. For this reason, the ICMA (Section 48) requires that the ADM review the CMP at least once every five years, and if necessary, amend the CMP.

1.5 Amathole District Coastal Management Programme Development Process

An integrated approach was adopted for development of this ADM CMP whereby the coastal LMs were engaged separately. The coastal LMs include:

- Ngqushwa LM,
- Great Kei LM,
- Mnquma LM and
- Mbashe LM.

The development of the ADM CMP followed the following general process:

- Firstly, an initial framework for coastal management in the ADM was developed, which outlined the key components of an integrated CMP. This formed the structure of the CMP.
- A draft situation analysis of the coastal zone and coastal management along the ADM coastline was prepared.
- Through a series of stakeholder workshops, coastal issues and potential future needs were identified.
- From the proposed framework and the situation analysis, which included coastal issues identified during the initial stakeholder workshops, coastal management issues were prioritised into high, medium and low priority issues. These priority issues were then presented at another round of stakeholder workshops, which aimed to verify the prioritisation process and to agree on the ADM's vision for coastal management.
- A preliminary list of indicators for coastal management was derived from the priority issues identified as well as consultation with the Eastern Cape CMP (2013). This was done in order to monitor the progress of the implementation of the CMP to achieve management objectives.
- Finally, specific coastal management actions for the ADM CMP were identified, from which detailed implementation plans were developed.

1.6 Framework of the ADM CMP

The framework of the ADM CMP, which signifies the primary components to be addressed within the ADM CMP, was based on both the NCMP and the Eastern Cape CMP. The framework aims to provide a holistic and structured guideline as to how to undertake the situation analysis and to identify coastal issues and future needs:

1. The **vision** of the ADM CMP was developed to not only reflect the ecological aspects of the coastal zone but also to reflect the social, economic and cultural aspects of the coastal zone.
2. The **objectives** of the ADM CMP were formulated in order to achieve the ADM's vision for coastal management.
3. **Cooperative governance** is key in the implementation for coastal management objectives and strategies. Effective cooperative governance requires the participation of all stakeholders, coastal governance and co-responsibility, integrated, coordinated decision making, planning and development, the continued learning and practical implementation of programmes and processes and ensuring compliance with international conventions, protocols and agreements.
4. Due to the ever increasing demand for ocean and coastal space, appropriate **coastal planning and development** is becoming an important component of coastal management. Appropriate coastal planning and development requires that measures are put in place with an emphasis on local economic development opportunities and approval procedures, the identification and exploitation of sustainable livelihood opportunities as well as the holistic planning and development processes with focus being placed on sustainable and equitable spatial development trends in the coastal zone.
5. As development within the coastal zone increases, **climate change and dynamic coastal processes** need to be considered. Coastal management needs to highlight the importance of being able to respond to the dynamic process through increased resilience of natural and social systems as well as to start considering the possibility of implementing the phased retreat of infrastructure in high risk areas.
6. **Land and marine based sources of pollution** require effective management and prevention strategies in order with emphasis on reducing and responding to land based and marine based sources of pollution in the coastal zone and to ensure adherence to the waste management hierarchy of reduce, reuse, recycle. The effective management of waste within the coastal zone require cooperation between various departments within the local and district municipalities, government departments as well as coastal communities.
7. The ADM CMP needs to be in alignment with the national estuary management protocol. The ADM has a high number of **estuaries** that require the establishment and implementation of strategies to improve the management and protection of estuarine resources as well as the need to secure sufficient financial resources to fund and implement identified actions, research projects, initiatives and advisory forums.

8. The ICMA (Section 49) identifies the **facilitation of coastal access** as a key component of the ADM CMP. Emphasis needs to be placed on the promotion and management of access to coastal public property, the promotion and facilitation of equitable access to coastal resources and coastal public property, recognising the importance of access preservation as well as promoting custodianship and stewardship of the coastal zone.
9. **Awareness, education, training, capacity building and information** are key aspects in facilitating the cooperative management of the coastal zone between , national and provincial government, municipalities and coastal communities. The generation of internal capacity within the ADM to effectively manage the coast is also vital in ensuring the objectives and strategies set out in the ADM CMP are implemented. Awareness of the coastal zone amount various key stakeholder can be achieved through the facilitation of knowledge production and exchange, the promotion of knowledge sharing of coastal issues and instilling a sense of ownership of the coastal zone amongst all stakeholders.
10. In order to ensure that coastal management objectives and coastal legislation are being implemented in a responsible manner, **compliance, monitoring and enforcement** strategies need to be developed. The facilitation of compliance with applicable coastal legislation and the promotion of the environmental management inspectorate and facilitation of training and designation of environmental management inspectors by the ADM will contribute to ensuring that the coastal zone is managed effectively. The selection of indicators and implementation of monitoring programmes are vital to assessing the progress towards achieving the CMP vision and the coastal management objectives. In order to evaluate the findings of these monitoring programmes, Section 93 of the ICMA requires that **State of the Coast Reporting** be carried out. State of the Coast Reporting informs the subsequent reviews of the ADM CMP as well as informs future coastal planning processes.
11. An important aspect of coastal management is **natural resource management**. The effective management of natural resources needs to include the maintenance of ecosystem integrity and health, the assessment and effective management of coastal protected areas, including marine protected areas as well as the identification and rehabilitation of damaged and degraded coastal ecosystems and habitats.

2 SITUATIONAL ANALYSIS

This chapter describes the current state of affairs along the ADM coastline that is relevant to coastal management. A brief outline of the coastal environment and the status of coastal ecosystems along the ADM coastline have been described. The status of coastal management along the ADM coastline has been assessed using the framework for coastal management as set out in Chapter 1.6. Current coastal issues, existing responses to address these issues and proposed responses to address these issues if no existing responses were identified have been described.

2.1 Geography

The ADM is situated within the central part of the Eastern Cape Province, which lies in the southeast of South Africa and borders the Indian Ocean (Figure 2.1). The ADM has a land area of 21 595 km² with approximately 190km of coastline stretching along the Sunshine Coast from the Fish River to just south of Hole in the Wall along the Wild Coast.

The ADM is comprised of six local municipalities, of which four are situated along the coastline. These four coastal local municipalities include:

- Ngqushwa,
- Great Kei,
- Mquma and
- Mbashe Local Municipalities

2.2 Natural Coastal Environment

Brief Description

As indicated above, the ADMs coastline stretched approximately 190km from the Fish River to just south of the Mpako

River near Hole in the Wall. In general, the Eastern Cape is known to have the highest number of river catchments draining into the ocean through functional estuaries out of any other province in South Africa. This value is estimated to account for 22% of all South Africa's estuaries (DEAT, 1998). These estuaries make up a large portion of the sheltered marine habitat along the Eastern Cape coast. Therefore, the effective management of estuaries is vital to maintain biodiversity as well as socio-economic development (Van Niekerk and Turpie, 2012).

The ADM coastline spans two bio-geographical regions, namely the warm temperate south coast and the sub-tropical east coast (Brown and Jarman, 1978).

ADM coastal Environment

The coastal environment of the ADM is described within one of the 64 large marine ecosystems (LMEs) of the world, namely the Agulhas Somali Current (NOAA, 2013). LMEs are defined as large areas of ocean space that are allocated adjacent to the continents where primary productivity in coastal waters is considered to be generally higher than in open ocean areas.

Along the ADM coastline, the Agulhas current flows southwards and the seas surface temperatures can range from 25°C in summer to 21°C in winter (Lutjeharms, 2006). The primary production within the coastal environment along the ADM coast is considered to be lower than the coastal environment along the west coast due to the warmer, nutrient poor waters that make their way down from the equatorial region of the Indian Ocean. However, the occasional upwelling of nutrient rich water does occur along the shelf break, just off shore of the ADM coast (Lomabard *et al.*, 2004).

Elements of the ADM Coastline and Key Features

The coastal zone of the ADM consists of a wide variety of environments including sandy beaches, rocky shores, estuaries, coastal dunes, coastal grasslands and coastal forests (Figure 2.3). Statistical information regarding the land cover for each coastal environment along the ADM coastline is not available. The widely diverse coastal environments present along the ADM coastline is reflected in the marine biodiversity zones. The ADMs coastline falls within the Agulhas Bioregion as well as the Agulhas Sub-photic biozone.

Health Status of the Coastal Ecosystem

Threat Status and protection level of the ADM coastline

The health status of the ADMs coastal ecosystems was extracted from a number of sources namely:

- The National Biodiversity Assessment (NBA 2011),
- South African National Biodiversity Institute's Vegetation Map (SANBI, 2006),
- Eastern Cape Biodiversity Conservation Plan (ECBCP, 2001) and the
- ADMs Environmental Management Programme, State of Environment Report (2012).

The NBA also assessed the protection level of the South African coastline to indicate which sections of the coast were well protected or not. The NBA states that the majority of the ADM coastline is moderately to well protected (Figures 1-4).

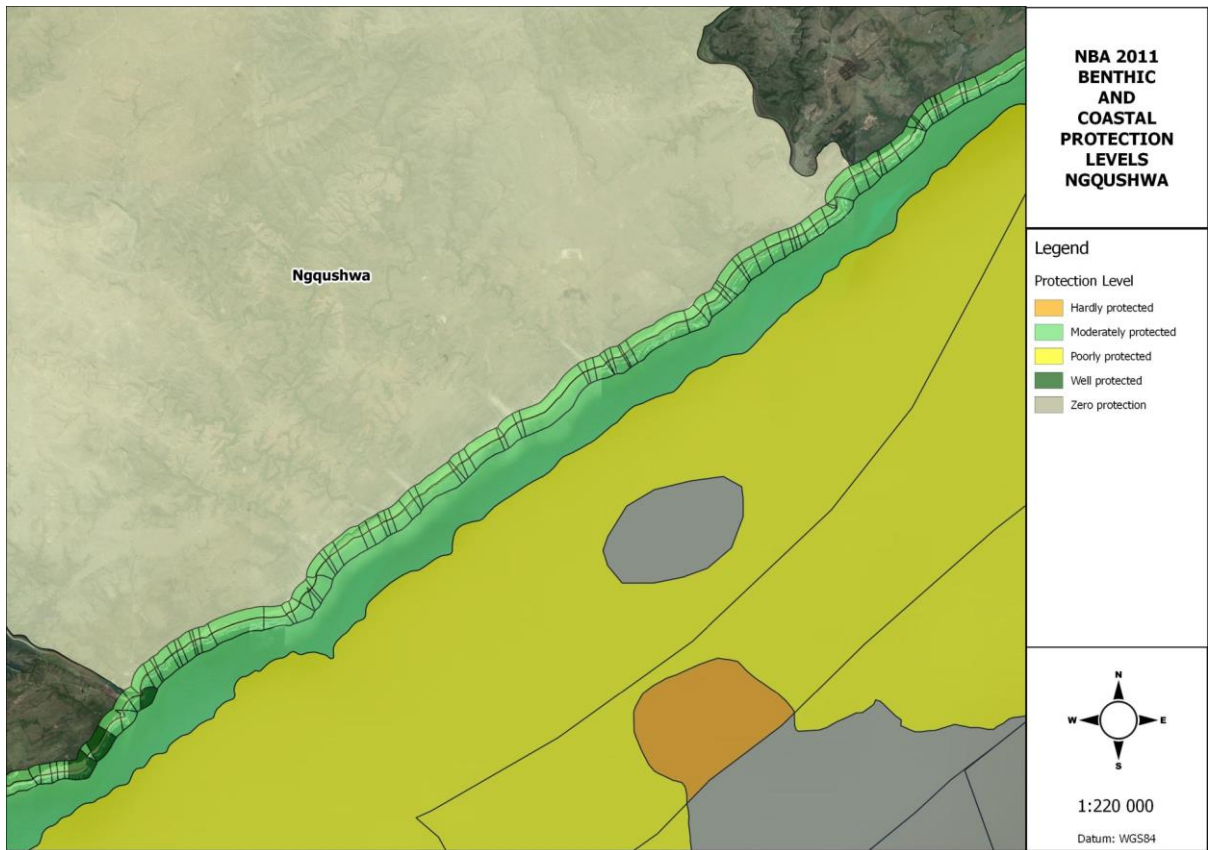


Figure 1: The benthic and coastal protection level of the Ngqushwa coastline (NBA, 2011)

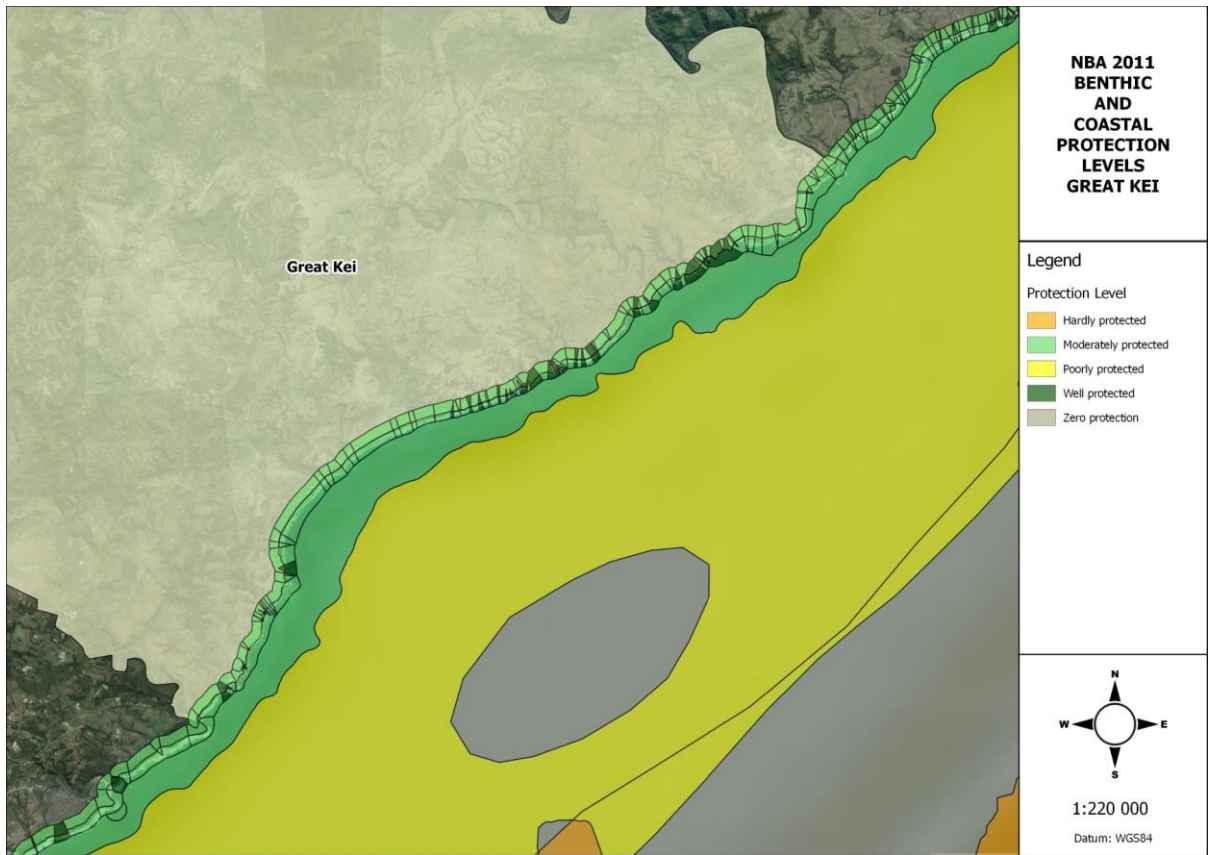


Figure 2: The benthic and coastal protection level of the Great Kei coastline (NBA, 2011)

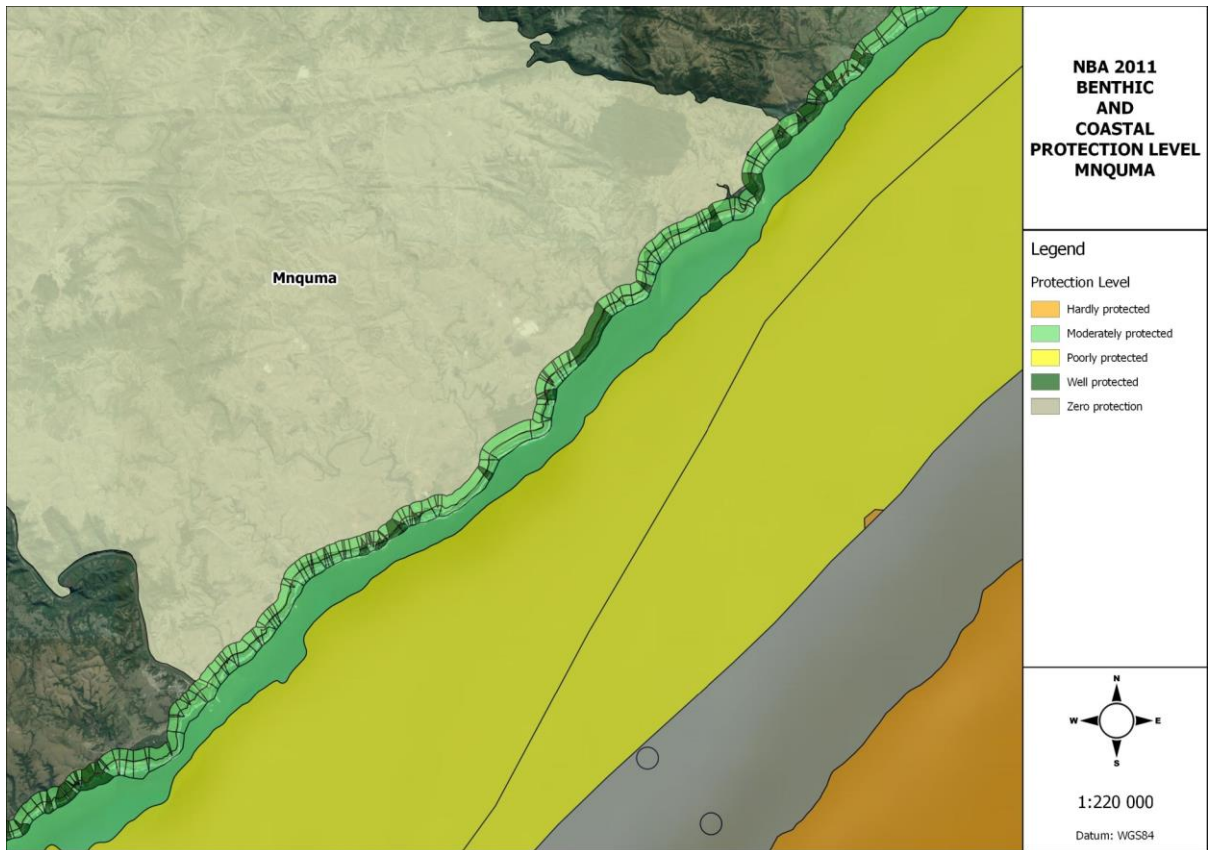


Figure 3: The benthic and coastal protection level of the Mnquma coastline (NBA, 2011)

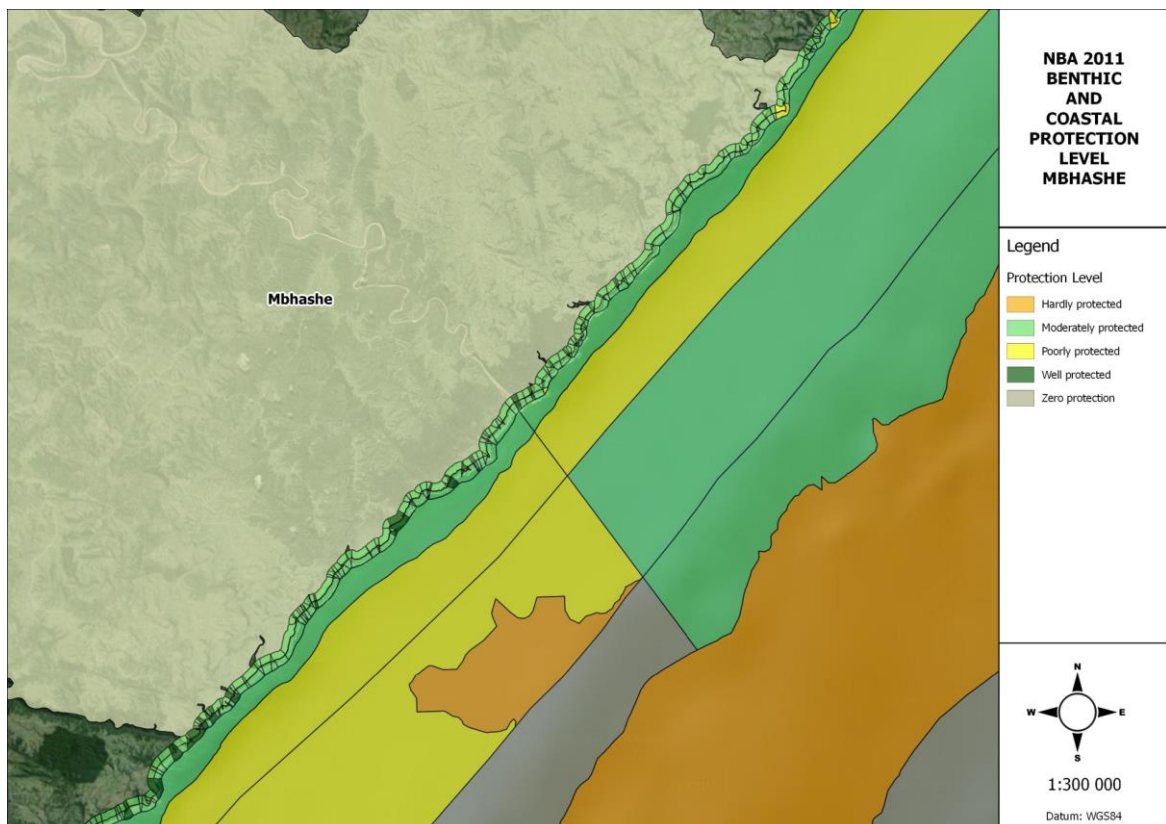


Figure 4: The benthic and coastal protection level of the Mbashe coastline (NBA, 2011)

The NBA assessed the ecosystem threat status of the marine and coastal environments of the South African coastline. The NBA indicates that more than 50% of the ADM's coastline is considered Vulnerable and this is attributed to the high number of estuaries that are located along the ADMs coastline (Figures 5-8).

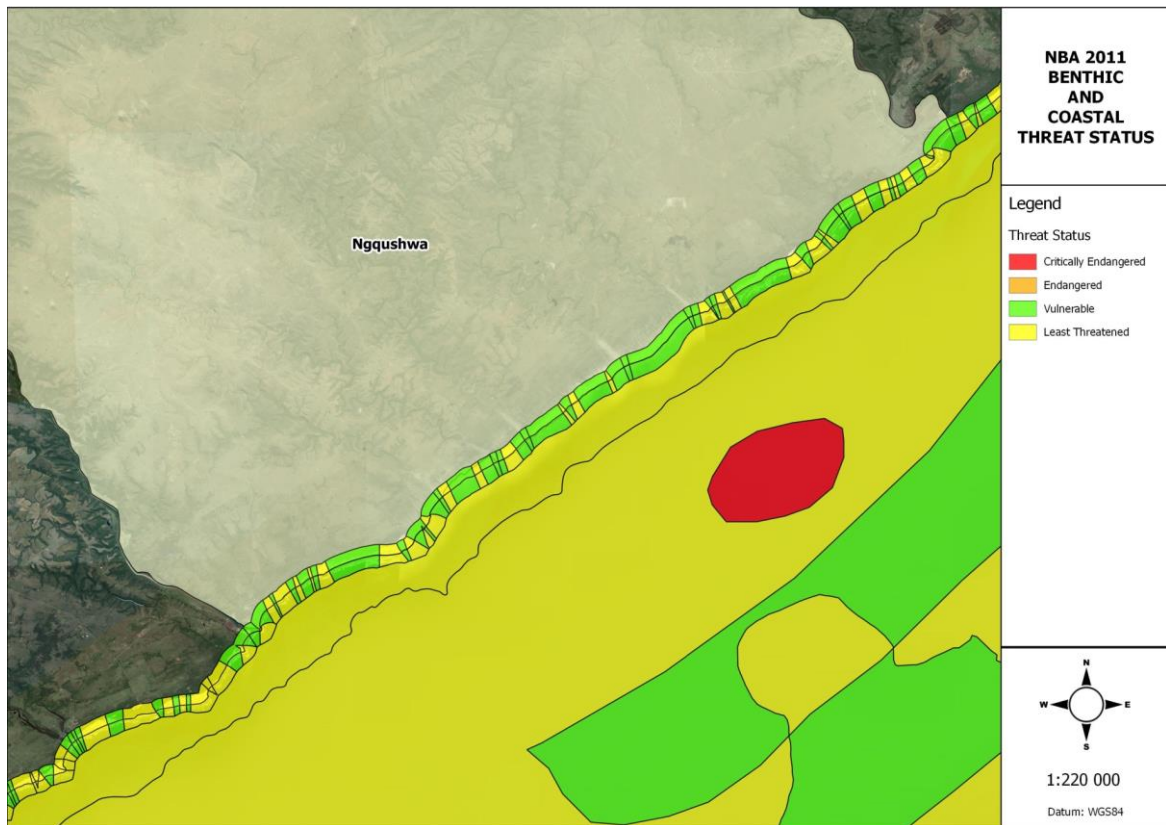


Figure 5: The benthic and coastal threat status of the Ngqushwa coastline, as described by the NBA 2011

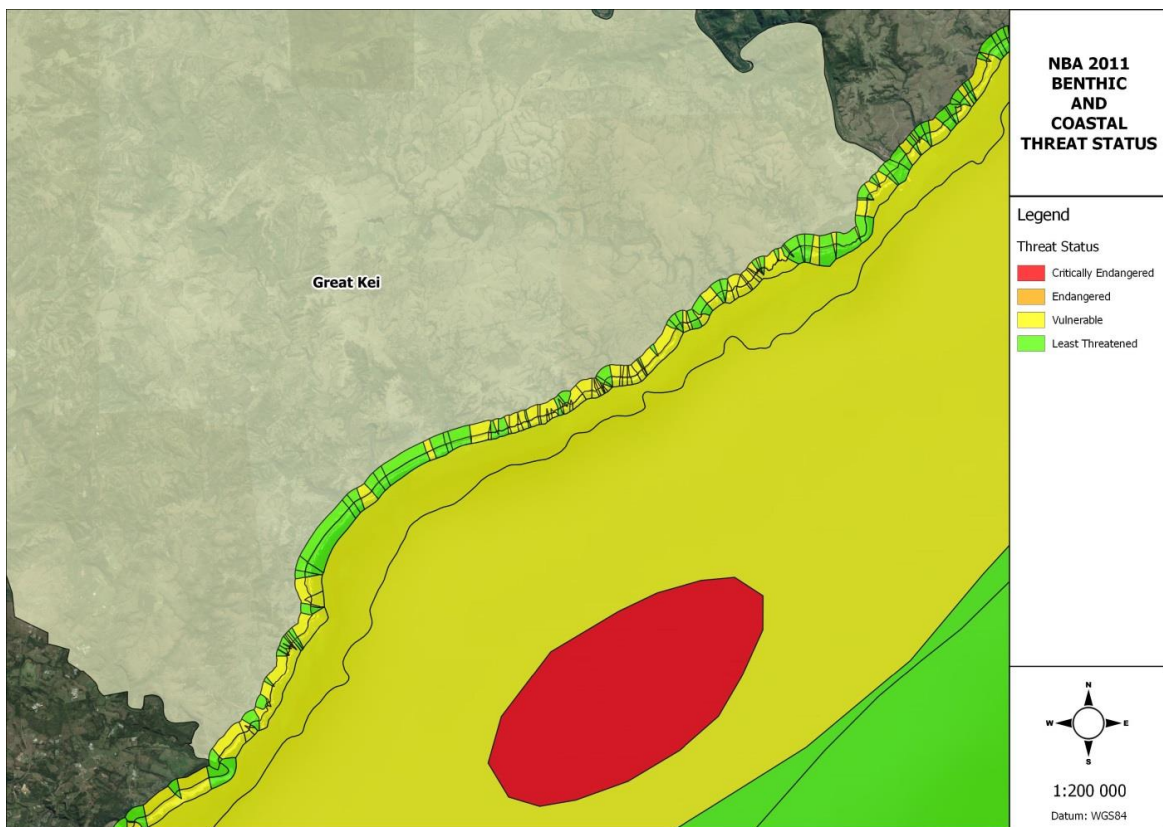


Figure 6: The benthic and coastal threat status of the Great Kei coastline, as described by the NBA 2011



Figure 7: The benthic and coastal threat status of the Mnquma coastline, as described by the NBA 2011

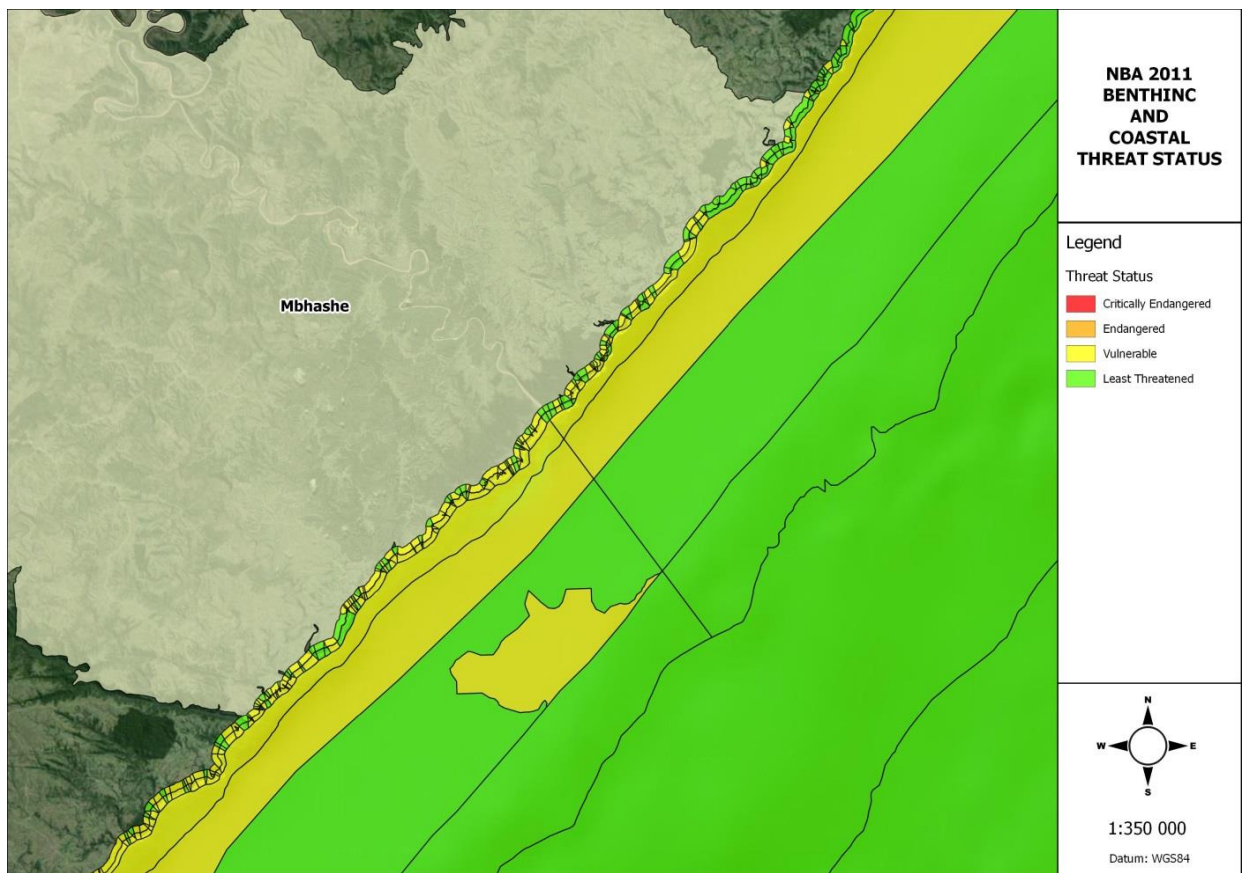


Figure 8: The benthic and coastal threat status of the Mbhashe coastline, as described by the NBA 2011

Estuaries

ADM has a large concentration of estuaries along its coastline. ADM has 64 functional estuaries (NBA, 2011) which comprise approximately 40% of all the estuaries within the Eastern Cape and approximately 22% of all estuaries within South Africa. The health status of South Africa estuaries was evaluated as part of the NBA (van Niekerk and Turpie, 2012) where the Present Ecological State (PES) of each estuary was determined and classified as follows:

- Class A: Unmodified, natural
- Class B: Largely natural with few modifications
- Class C: Moderately modified
- Class D: Largely modified
- Class E: Seriously modified
- Class F: Critically/ extremely modified
- Other

In order to obtain detailed information as to how the PES of the estuaries was determined, reference can be made to the Technical Report for the estuary assessment as part of the NBA (van Niekerk and Turpie, 2012).

The results of the PES study for the estuaries within the ADM showed that:

- 35% of the 63 estuaries are classified at Class A: Unmodified, natural,
- 54% of the 63 estuaries are classified as Class B: Largely natural with few modifications and
- 11% of the 63 estuaries are classified as Class C: Moderately modified.

The results of the PES study highlight the need to ensure that the estuaries within the ADM are effectively managed to ensure that their overall good state is maintained.

Table 1 below lists the estuaries within each of the coastal local municipalities in the ADM and the Present Ecological State of each.

Table 1: A list of estuaries within each coastal municipality in the ADM and their Present Ecological State (PES) as described in the NBA 2011.

Class A: Unmodified, Natural			
Ngqushwa	Great Kei	Mnquma	Mbhashe
Freshwater Poort	Cunge Nyara Quko	Gqunge Nebelele Ngqwara Sihlontlweni/ Gcini Zalu	Beechamwood Ku-Bhula/ Mbhanan Ku-Nocekedwa Kwa-Amanzimuzama Kwa-Goqo Mendu Mendwana Ngadla Ngoma/ Kobule Nqakanqa Sundwana Unnamed 1 Unnamed 2/ Mpame
Class B: Largely natural with few modifications			
Ngqushwa	Great Kei	Mnquma	Mbhashe

Birha Gqutywa Mgwalana Mpekweni Mtana Mtati Ngculura	Kwelera Bulura Cefane Kwenxura Imtendwe Haga Haga Mtendwe Cwili	Cebe Gxara Kobonqaba Ncizele Ngogwane Nxaxo/ Ngqusi Qolora Qora Timba	Bulungula Jujura Ku-Mpenzu Kwa-Suka Mncwasa Nkanya Ngabara Ntlonyane Shixini Xora
Class C: Moderately modified			
Ngqushwa	Great Kei	Mnquma	Mbhashe
Great Fish Keiskamma Old Womans	Chintsa Morgan Great Kei	None	Mbhashe
Class D: Largely Modified			
Ngqushwa	Great Kei	Mnquma	Mbhashe
None	None	None	None
Class E: Seriously Modified			
Ngqushwa	Great Kei	Mnquma	Mbhashe
None	None	None	None
Class F: Critically/extremely modified			
Ngqushwa	Great Kei	Mnquma	Mbhashe
None	None	None	None

Eastern Cape Biodiversity Conservation Plan

With regards to terrestrial biodiversity and threat status within the coastal zone, the Eastern Cape Biodiversity Conservation Plan (ECBCP) was developed in 2007 as a first attempt at detailed, low-level conservation mapping for land-use planning purposes. Specifically, the aims of the Plan were to map Critical Biodiversity Areas (CBAs) through a systematic conservation planning process. The current biodiversity plan includes the mapping of priority aquatic features, land-use pressures, Critical Biodiversity Areas (CBAs) and develops guidelines for land and resource-use planning and decision-making. The main outputs of the ECBCP are the identification of CBAs (also called BLMC) which provides a recommended land use objectives (Table 2).

Table 2. Terrestrial Critical Biodiversity Areas and Biodiversity Land Management Classes, as described by the Eastern Cape Biodiversity Conservation Plan.

CBA map category	Code	Biodiversity Land Management Class	Recommended land use objective
Protected areas	CBA1	Natural landscapes	Maintain biodiversity in as natural state as possible. Manage for no biodiversity loss.
Terrestrial CBA 1 (not degraded)			
Terrestrial CBA 1 (degraded)	CBA2	Near-natural landscapes	Maintain biodiversity in near natural state with minimal loss of ecosystem integrity. No transformation of natural habitat should be permitted.
Terrestrial CBA 2			

CBA map category	Code	Biodiversity Land Management Class	Recommended land use objective
Other natural areas	CBA3	Functional landscapes	Manage for sustainable development, keeping natural habitat intact in wetlands (including wetland buffers) and riparian zones. Environmental authorisations should support ecosystem integrity.
Transformed areas	Transformed	Transformed landscapes	Manage for sustainable development.

The ECBCP maps CBAs based on extensive biological data and input from key stakeholders. The ECBCP, although mapped at a finer scale than the National Spatial Biodiversity Assessment (Driver et al., 2005) is still, for the large part high-levelled. Therefore, it is imperative that the status of the environment needs to be verified on the ground before the management recommendations associated with the ECBCP are considered (Berliner and Desmet, 2007). In spite of these shortcomings, the ECBCP has been adopted by the Provincial Department of Economic Development, Environmental Affairs and Tourism (DEDEAT) as a strategic biodiversity for the Eastern Cape. The ADM coastline contains extensive areas designated as CBA 1 and CBA 2 and very little in the way of protected areas in comparison (Figure 9 to 12).

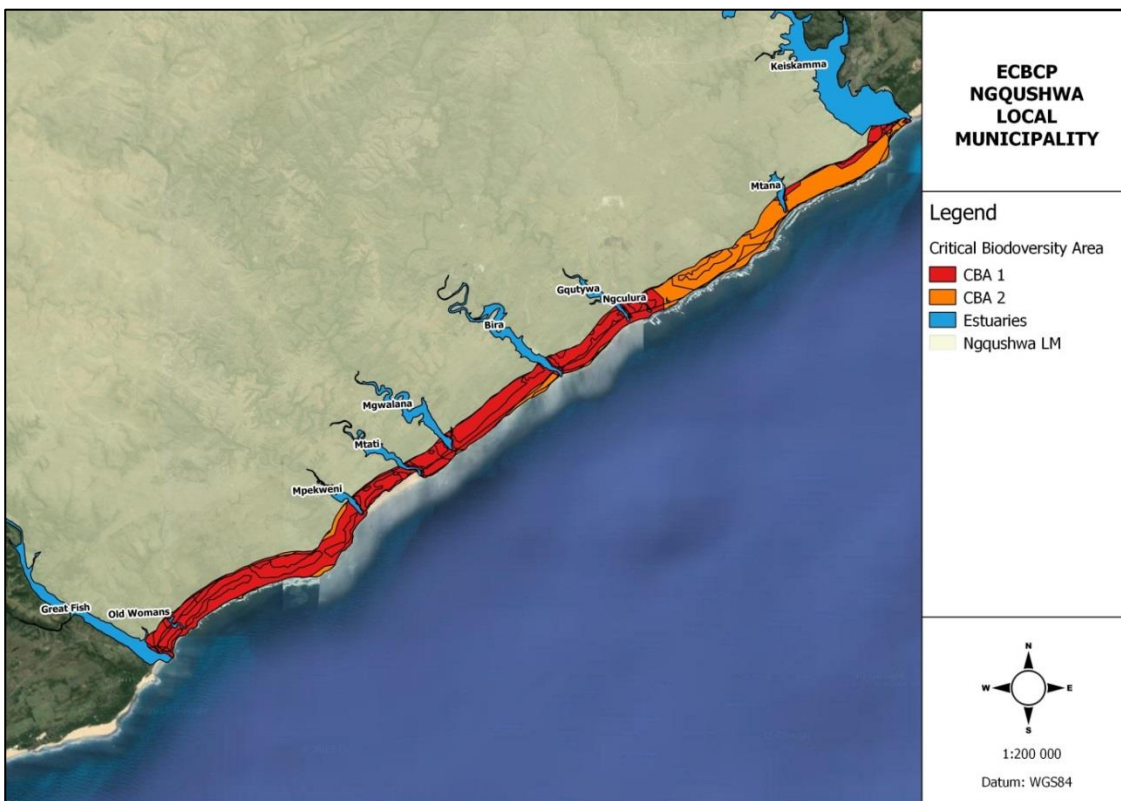


Figure 9: The terrestrial critical biodiversity areas along the Ngqushwa coastline (1km from the high-water mark) according the ECBCP (2007)

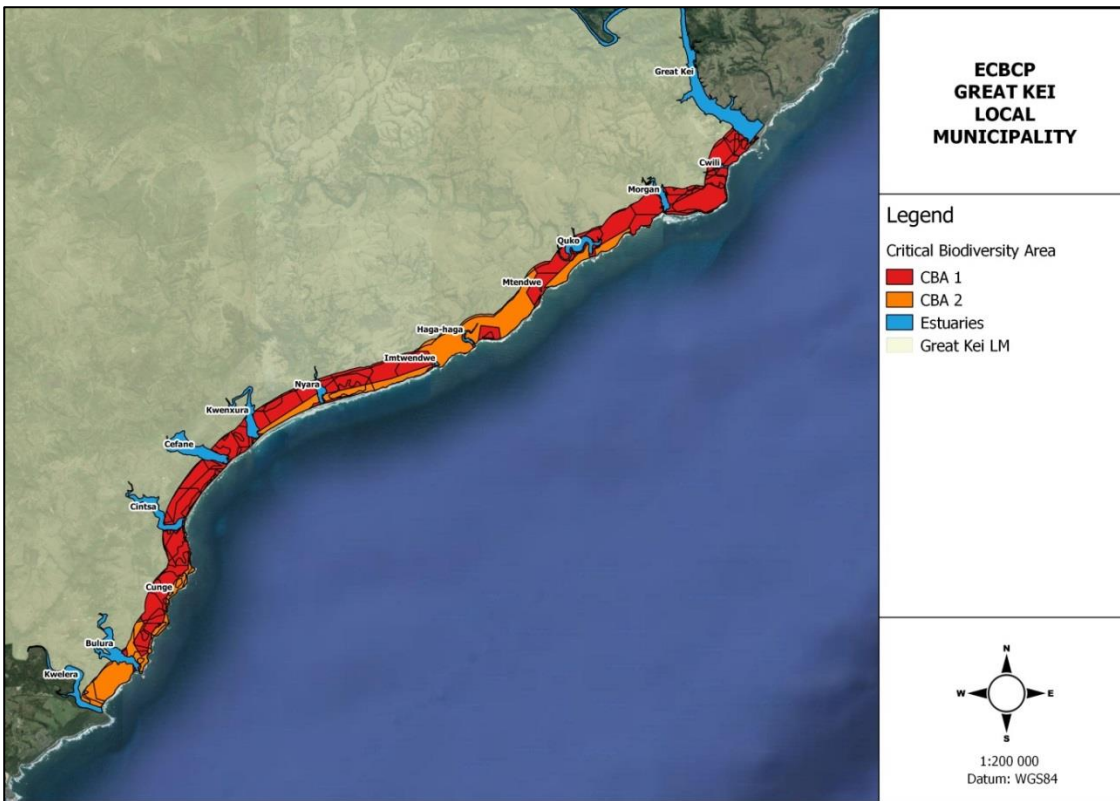


Figure 10: The terrestrial critical biodiversity areas along the Great Kei coastline (1km from the high-water mark) according the ECBCP (2007)

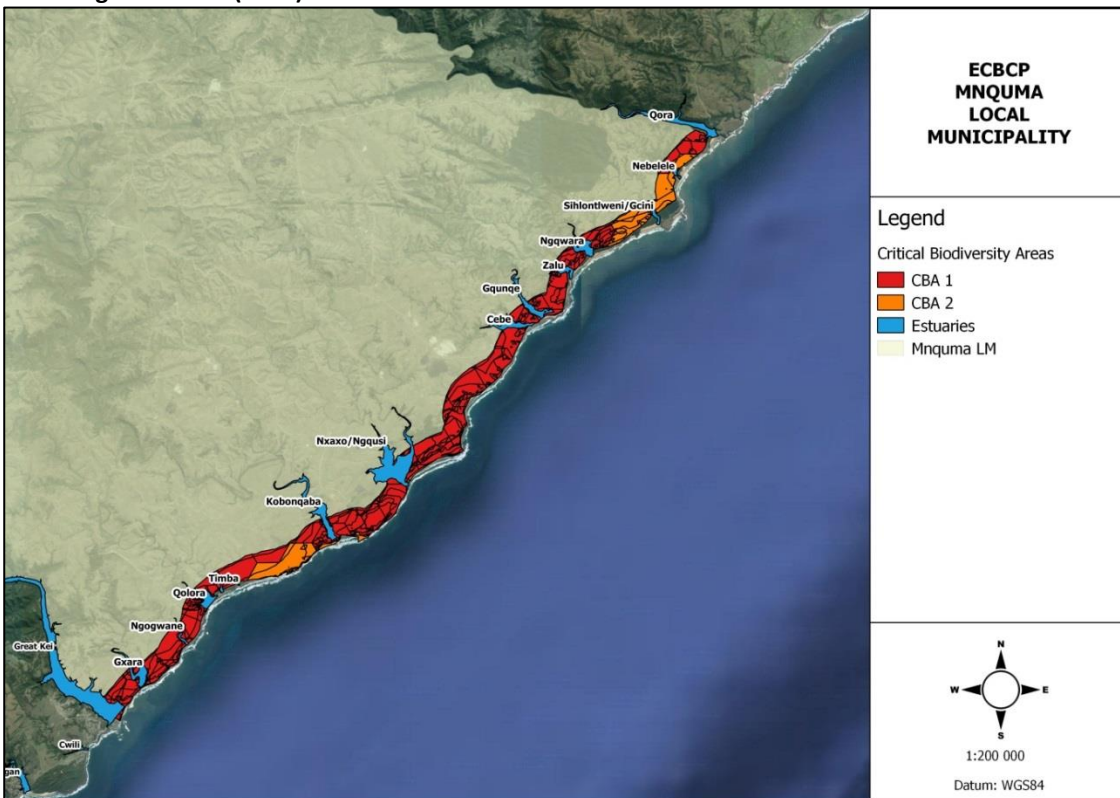


Figure 11: The terrestrial critical biodiversity areas along the Mnquma coastline (1km from the high-water mark) according the ECBCP (2007)

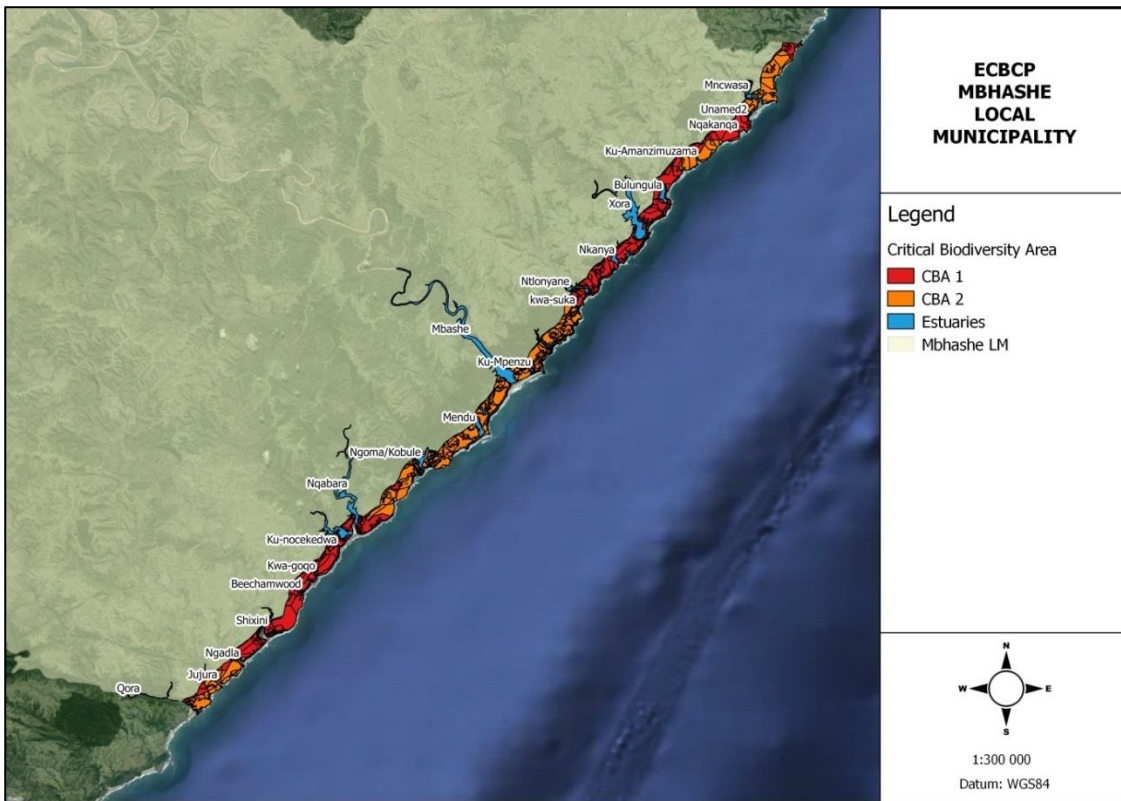


Figure 12: The terrestrial critical biodiversity areas along the Mbashe coastline (1km from the high-water mark) according the ECBCP (2007)

South African National Biodiversity Institute – Vegetation Types

The South African National Biodiversity Institute (SANBI) has created a map describing the vegetation types found within South Africa and has compiled a distribution map for all the identified vegetation types.

Table 3 provides a description of each of the vegetation types found along the ADM coastline as well gives an indication of the conservation and protected status of each.

Table 3: Vegetation types along the ADM coastline and their conservation and protection status. (Mucina and Rutherford, 2006).

Biome	Vegetation type	Conservation status	Description of protected status
Albany Thicket	Albany Coastal Belt	Least threatened	Poorly protected
	Buffels thicket	Vulnerable	Hardly protected
	Great Fish Thicket	Least threatened	Poorly protected
Azonal vegetation	Albany Dune Strandveld	Least threatened	Well protected
	Cape Seashore Vegetation	Least threatened	Well protected
Waterbodies	Cape Coastal Lagoons	N/A	N/A
Forest	Southern Coastal Forest	Least threatened	Well protected
Indian Ocean Coastal Belt	Transkei Coastal Belt	Vulnerable	Hardly protected
Savannah	Bisho thornveld	Least threatened	Hardly protected

2.3 Vision and Objectives

South Africa’s Constitution clarifies the objectives of local government as follows:

- To provide a democratic and accountable government for local communities;
- To ensure the provision of services to communities in a sustainable manner;
- To promote social and economic development;

- To promote a safe and healthy environment; and
- To encourage the involvement of communities and community organisations in the matters of local government.

The vision of the ADM as expressed in its 2015/2016 IDP review captures these objectives:

“Commitment towards selfless, excellent and sustainable service to all our communities.”

The vision for the Amathole DM CMP has been extracted from the EC CMP. The vision was agreed upon during the stakeholder engagement workshops and therefore has been adopted for the purposes of this CMP:

We, the people of Amathole District Municipality, recognise the intrinsic value, and appreciate the scenic beauty, diversity and richness of our unique coastline.

We aim to take ownership of the coast and foster a spirit of custodianship and shared responsibility as our coast is a unique shared asset, which has social, cultural, ecological and economic value.

We aspire to manage the coast in an integrated manner that takes both the cultural and biological value into account.

We strive to utilise the natural resources of our diverse coastline in a sustainable and equitable manner, which maximises the benefits for all people of the province and ensures the long term maintenance of biodiversity and ecological integrity of coastal habitats.

We strive to promote sustainable development and alleviate poverty on an equitable and participatory manner that considers the requirements of all stakeholders and takes cognisance of the conservation and biological importance of our coastline as well as national and provincial interests.

We seek to guide the management of the Great Kei coast in a way that eliminates the threats of unsustainable utilisation of the coastal resources while optimising the opportunities that can be derived from the coastal zone.

The goal of the Amathole DM CMP is to promote sustainable and ecologically responsible infrastructure development, economic growth and community development within the coastal zone through rationalized programs within the limits of available natural resource base. The ADM CMP also aims to achieve the following objectives:

- Integration of sustainability principles in planning and subsequent activities within the coastal zone;
- The continued development of coastal infrastructure to facilitate public access to the coastal zone;
- Encourage interdepartmental cooperation in planning decision-making processes with regards to coastal management;
- Coastal biodiversity conservation; and
- Empowerment of coastal communities through the development of coastal tourism and sustainable utilization of coastal resources.

2.4 Cooperative Governance

In order for coastal management to be successful, a lead agency is required to coordinate coastal management efforts. In South Africa, both National and Provincial spheres of government have departments that have are focused on the management of the coastline, namely DEA: Ocean and Coasts and, within the Eastern Cape, DEDEAT: Biodiversity and Coastal Zone Management.

Effective coastal Management efforts are also reliant on a wide range of stakeholders that have an interest in the coast and the management thereof. These Stakeholders encompass other government organisations such as, but not limited to:

- Department of Mineral Resources,
- Department of Rural Development and Land Reform,
- Department of Traditional Affairs,
- Department of Agriculture, Forestry and Fisheries.

Other relevant coastal stakeholders include local municipalities, NGOs and civil society.

At ADM level, there is limited capacity, resources and knowledge to fulfil their coastal management role. The ADM has an Environmental Management Unit, which falls within the Land, Human Settlements and Local Economic Development Department. The ADMs designated coastal environmental officer position has been included in the ADMs organogram and is as follows:

Mr Bongani Mvulo

Tel: (043) 783 2337

Email: bonganimv@amathole.gov.za

Physical Address: Waverley Office Park,
3 – 33 Philip Frame,
Chiselhurst,
East London,
5247

Postal Address: P.O. Box 320,
East London,
5200

The effective management of the coastal zone also requires cooperation from numerous units within the ADM's organisational structure. These include, but are not limited to the following units:

- Water Services Authority Regulatory Services
- Environmental Pollution
- Protection Services
- Planning, Programme Development and Implementation
- Land Reform and Spatial Planning
- Local Municipal Support

At an LM level, little capacity exists to effectively manage the coastal zone and no clear terms of reference has been created to indicate the roles and responsibilities required by the ICMA for each coastal local municipality. The LMs are primarily responsible for the facilitation of new and maintenance of existing infrastructure within their areas of jurisdiction. Within each LM, the following positions exist within the organisational structure to support coastal zone management:

- Ngqushwa – Environment and Waste Manager within the Community Services Department:
Mr Raymond Mkhontwana
Email: rmkhontwana@ngqushwamun.co.za
Tel: (078) 069 2359
- Great Kei – There is no formal Environmental Officer. However, environmental management duties have been assigned to a representative of the Community Services Department:
Ms Nolundi Ntamesi
Email: nolly63@yahoo.com
Tel: (073) 180 8909
- Mnquma – Environmental manager within the Environmental Management Department
Ms Asanda Masinyane
Email: AMasinyane@mnquma.gov.za
Tel: (072) 030 5946
- Mbhashe - There is no formal Environmental Officer. However, environmental management duties have been assigned to the Community Services Department
Mr Sinesipho Mboxo
Email: imibongoyethu@gmail.com
Tel: (063) 689 7134

Local Municipalities are under capacitated to effectively carry out coastal management objectives within their areas of their jurisdiction. It is therefore imperative that the ADM provide a supporting role to the local municipalities and to assist and drive coastal management projects.

Co-operative governance

In terms of the current legislation, such as the Intergovernmental Relations Framework Act (Act 13 of 2005) and the Local Government: Municipal Structures Act (Act 117 of 1998), government departments are obliged to act in a co-operative manner. Co-operative governance can be described as consisting of two main components: 'vertical' and 'lateral' cooperative governance.

- 'Vertical' co-operative governance relies on integration between the coastal management bodies of the Local Municipalities, Amathole District Municipality and with the Provincial and National authorities. Currently there appears to be limited co-ordination between the various levels of government with respect to decision-making around issues impacting on the stakeholders and the coastal assets of the ADM.
- 'Lateral' cooperative governance relies on inter-departmental integration, coordination and communication between the ADM and other governmental departments/parastatals, for example, DEDEAT, DAFF, ECPTA, DRDLR, DMR, DEA, SAPS .

Protected Areas

Co-operative governance is also important with respect to the management of protected areas. ECPTA is responsible for the management of these areas, but there needs to be cooperation and a focus on the management of the interface with other land uses. It should also be noted that all spheres of Government (National, Provincial, District and Local Municipalities), and traditional authorities, have an obligation to practice Duty of Care on the natural environment in terms of Section 28 of the National Environmental Management Act 1998 (NEMA).

ADM Coastal Committee

The ADM has established a Coastal Committee that meets on a quarterly basis. The ADM Coastal Committee is chaired by ADM Environmental Manager, Mr Luyanda Mafumbu. A variety of stakeholder are invited and encouraged to attend these meetings. These stakeholders include:

- Representatives from the Department of Environmental Affairs
- Representatives from the Department of Agriculture, Forestry and Fisheries
- Representatives from the Eastern Cape Parks and Tourism Agency
- Representatives from the Department of Economic Development, Environmental Affairs and Tourism
- Local municipal officials
- Residents and rate payers associations
- Local enterprises that have a vested interest in the coastal zone (eg: Wild Coast Abalone)

The ADM also participates in the Provincial Coastal Committee where priority issues highlighted at the ADM Coastal Committee meetings are raised at a provincial platform.

ORV Task Group

The provincial Off-Road Vehicles (ORV) Regulations Task Group was established to attend to the administration of the then-ORV Regulations (Control of Vehicles in the Coastal Zone Regulations), previously promulgated under NEMA, and which dealt with the use of vehicles in the coastal zone, as well as boat launch sites. The subsequent promulgation of the ICM Act necessitated the drafting of two sets of regulations under the ICM Act, dealing separately with the use of vehicles in the coastal zone, and with the management of boat launch sites, namely:

- i. NEM: ICM Act – Control of use of vehicles in the coastal zone area, 2014.
- ii. NEM: ICM Act – Regulations for the management of public launch sites in the coastal zone, 2014.

The provincial ORV Task Group therefore oversees the administration of both sets of regulations – the use of vehicles in the coastal zone, and for the management of boat launch sites.

The ADM has at least 19 boat launch sites within its area of jurisdiction. Therefore the ADM participates in the provincial ORV Task Group in order to ensure appropriate management of matters relating to boat launch sites and the use of vehicles in the coastal zone.

Based on the above as well as feed-back from stakeholders, the future needs in terms of facilitating and improving cooperative governance are as follows:

- The development and continual updating of a coastal stakeholder database
- The inclusion of Traditional Leadership at the ADM Coastal Committee meetings.
- Further encourage the ADM Coastal Committee as a platform for the public to engage with the authorities with regards to coastal issues.
- Work to strengthen partnerships between the ADM, the local municipalities and the provincial and national spheres of government
- Draft a clear Term of Reference for coastal management for the local municipality that is in alignment with the ICMA

2.5 Coastal Planning and Development

ADM SDF

A review of the most recent ADM SDF was carried out in 2012/2013. This was done to ensure that the ADMs SDF was aligned with National and Provincial SDFs. However, it is important that the ADM SDF incorporates spatial planning objectives outlined in projects such as the Coastal EMF (2012), Wild Coast EMP (2014) and the Wild Coast SDF (currently being developed).

Some of the major issues that were highlighted during the ADM SDF review with regards to coastal management include:

- The prediction of the wetting and warming of the climate;
- The prediction of the rise in the sea-level;
- The demand for housing and infrastructure compared high potential agriculture versus high conservation value;
- Climate change risks to infrastructure should be incorporated in future planning.
- The tourist routes along the primary roads within the district require constant maintenance and upgrades.

Some of the intervention plans that have been proposed in the ADM SDF review (2012/2013) include:

- Investigate spatial planning and land use management implications in respect of climate change and the adaptation opportunities, including the implications of rising sea levels, flooding in low lying areas, drought, desertification and storm/tornado prone regions;
- Detailed mapping and identification of environmental sensitive areas;
- Mapping of resource areas including; high potential agricultural areas, forestry resource potential, indigenous natural resource areas, heritage areas, tourism and renewable energy potential areas.
- Integrate Area Based Plans proposals into the Spatial Development Framework with priority land acquisition areas and focus areas.

The proposed interventions as described in the ADM SDF (2012/2013) have not yet been implemented. The development process of this CMP has identified some of these interventions as high priority issues and will be addressed in the Implementation Plans.

Coastal Management Units and Boundaries

The definition of the coastal zone, as defined by the ICMA, is the area that that comprises of:

- coastal public property;
- the coastal protection zone;
- coastal access land;
- coastal protected areas;
- the seashore;
- coastal waters; and
- the exclusive economic zone.

Coastal Development

The ADM coastline does not have major cities and economic hubs located along the coastline. The prominent coastal settlements located along the ADM coastline include:

- Ngqushwa
 - Fish River Sun Hotel
 - Mpekweni Beach Resort
 - Mtati cottages
 - Mgwalana
 - Birha
 - Hamburg
- Great Kei
 - Yellow Sands
 - Glen Gariff
 - Glen Eden
 - Queensberry Bay
 - Chintsa West and East
 - Cefani cottages and Viskop
 - Bosbokstrand resort
 - Haga-Haga
 - Marshstrand
 - Morgan Bay
 - Kei Mouth
- Mnquma
 - Qolora
 - Wavecrest
 - Mazeppa Bay
 - Kobb Inn
- Mbhashe
 - Nqabara
 - Dwesa-Cwebe campsite and cottages
 - Anchorage Hotel
 - Ntlonyane cottages
 - Xora
 - Bulungula
 - Mpame cottages

There are various programmes that aim to promote development along the ADM coastline (Coastal Environmental Management Framework, Wild Coast Environmental Management Programme, etc.) and will be discussed in more detail within this chapter.

Aspire

Aspire is the development agency of the ADM that was established in 2005 and is registered as the Amathole Economic Development Agency. The types of projects that Aspire are involved in include town center development, growth point or node development, corridor investments and developing markets.

Within the ADM coastal zone, Aspire are involved in the regeneration of Hamburg through the provision of the following facilities:

- Market square with an amphitheatre to provide attractive public space
- Music academy to groom local children into international performers
- Environmental and skills centre, including a bicycle hire and repair shop
- Crèche for the children of local workers
- Craft workshops (embroidery, printmaking and ceramics) and a gallery for the Keiskamma Trust
- Repair of the water supply of the community garden to increase food security

- Traffic circle with an artistic feature at the entrance of town to calm down traffic and provide a gateway into Hamburg
- Park to provide an attractive recreational space for residents and visitors

An environmental and skills center as well as an arts center have been developed in Hamburg.

Tourism facilities

The ADM's IDP (2015-2016) has highlighted Tourism as a priority area with the intention of developing a Tourism Master Plan to promote holistic and sustainable regional economic development. However, various areas along the ADM coastline have been promoted as tourism destinations. These tourism developments include the following:

- Ngqushwa
 - Various hotels and resorts (e.g. Fish River Sun, Fish River Caravan Park, Mpekweni Beach Resort, etc.)
 - Birha Arts and Crafts
 - Hamburg Artist Retreat (developed by Aspire)
 - Sunshine Route
 - Hamburg Nature Reserve
- Great Kei
 - Various beach hotels and resorts (e.g. Prana Lodge, Crawfords Beach Lodge, Morgan Bay Hotel, Kei Mouth, etc.)
 - Backpacking facilities (e.g. Buccaneers in Chintsa West)
 - Hiking trails (Strandloper Trail from Kei Mouth to Gonubie)
 - Beach Horseback Riding operations (e.g. Wild Coast Horse Trails)
 - A small craft market at Chintsa East
 - Deep sea fishing charters
 - Whale and dolphin watching
 - Golf course in Kei Mouth
 - Shell museum in Kei Mouth
 - Wild Coast Jikeleza Route
 - East London Nature Reserve
- Mngquma
 - Various hotels and resorts (e.g. Trennergys, Wavecrest, Mazeppa Bay Hotel)
 - 4x4 trail
 - Hiking Trails (Wild Coast Meander)
 - Fishing activities
- Mphashe
 - Various hotels and resorts (e.g. Kobb Inn, Nqabara Eco River Lodge, The Haven Hotel, Bulls Inn, etc.)
 - Backpacking facilities (Bulungula Lodge, Wild Lubanzi)
 - Dwesa-Cwebe Nature Reserve
 - Hiking trails (Wild Coast Meander)
 - Fishing activities

Aquaculture

Operation Phakisa

The first phase of the implementation of Operation Phakisa was initiated by President Jacob Zuma in July 2014. Operation Phakisa identified for critical areas to explore and further unlock the economic potential of the South African Coastline. The development of the aquaculture sector was identified as one of these critical areas.

Through Operation Phakisa, the Aquaculture Laboratory was established, which aims to promote the development of the aquaculture industry. 24 aquaculture projects have been identified across South Africa, six of which are in the Eastern Cape.

Both the kob farm and the oyster farm in Hamburg, as well as the Qolora Aquaculture Development Zone have been identified as priority projects by the Aquaculture Laboratory. The Aquaculture Laboratory aims to facilitate the expansion of these projects to increase their economic potential.

Hamburg

A community based aquaculture initiative has been developed in Hamburg. The aim of the project was to create employment opportunities for the local community and to allow the local community to develop a specific set of skills. A pilot facility is currently in operation where kob is being produced. The farm has recently received Environmental Authorization for a 1000 ton expansion site from DEDEAT.

An oyster farm is also located within the Keiskamma Estuary at Hamburg. The oyster farm is currently producing 16 tonnes of oysters per annum. Through the Aquaculture Lab (Operationa Phakisa), the need for expansion of the oyster farm to produce 54 tonnes per annum has been identified. Approximately 21 members of the local community are employed by the oyster farm and kob farm.

Wild Coast Abalone

A large commercial abalone aquaculture operation, namely Wild Coast Abalone is located near Marshstrand. This facility provides employment for the local community.

Qolora Aquaculture Development Zone

A proposed aquaculture development zone located at Qolora recently received environmental authorisation (DEDEAT Ref No: AR/6/F/544,545,546/1/10) and is still in the planning and design phase. This potential aquaculture development is a DAFF driven initiative and is an Operation Phaskisa prioritised project.

Coastal EMF

A Desired State of the Environment report was drafted for the Coastal EMF (2010) which covers the area from Cannon Rocks to Kei Mouth. The objective of the DSoE plan was to produce a spatial plan that could serve as a spatial planning framework for the coastal zone for the next ten year period (i.e. from 2010 to 2020), which would inform the revision of future provincial, municipal and local Spatial Development Frameworks and thereby facilitate more efficient, integrated and sustainable coastal development within the study area.

The following areas of additional growth within the ADM beyond the footprint of existing settlements were provided for:

- Ngqushwa:
 - Fish River Resort to the north of the R72, and conversion in part to a medium density residential estate;
 - Mpekweni Beach Resort, within the existing erf, but not towards the coastline;
 - On the north-eastern bank of Mgwalana Mouth to the north of the R72, subject to the availability of appropriate waste water treatment facilities and potable water; and
 - At Birha, to the immediate north and north-east of the existing settlement, subject to the availability of appropriate waste water treatment facilities and potable water.
- Great Kei
 - Inland to the immediate north-west of "The Glens" complex, subject to the availability of appropriate waste water treatment facilities and potable water;
 - Infill within Cintsa East to facilitate more integrated planning and "sustainable communities" principles;
 - Inland to the immediate north of Marshstrand, subject to the availability of appropriate waste water treatment facilities and potable water;
 - Infill within Morgan Bay to facilitate more integrated planning and "sustainable communities" principles; and
 - Inland to the immediate north-west of Kei Mouth.

The following key natural resource features were identified for safe-guarding:

- General
 - The primary and secondary vegetated dunes along the entire coastline;
 - The grassland transition zone to the interior of vegetated dunes, which is typically dominated by grassland communities;
 - Estuaries, rivers and their banks;
- Ngqushwa
 - The dune systems along the entire Ngqushwa coastline;
 - The Grassland (Hamburg Dune Thicket dominated by Grassland) on the north-eastern bank of the Great Fish River; and
 - The Grassland (Hamburg Dune Thicket dominated by Grassland) located between the second stream north of the Gqutywa River and the third stream south of the Keiskamma River.
- Great Kei
 - The dune systems along the entire Great Kei coastline,
 - Southern Coastal Forest at Cintsa East and Kei Mouth;
 - Cintsa Dune Thicket dominated by grassland to the immediate west of Haga-Haga and between Doublemouth and Morgan's Bay;
 - Buffels Thicket on the valley slopes of the Kwelera River, including Buffels Thicket with Forest;
 - The stromatolite site;
 - Various ship wreck sites; and
 - Moderate and moderately-high potential agricultural land, where these were not conflict with land-use requirements for housing and biodiversity conservation, which comprised much of the rural areas of the Municipality, particularly between Yellowsands and Bosbokstrand.

The following inappropriate land-uses were identified for further investigation and intervention:

- Ngqushwa
 - The homes on the banks of the Great Fish River adjacent to the Truck Stop;
 - The units within the proposed residential node on the south-west of the Mpekweni River located within the vegetated dune area;
 - The clearing of primary dune vegetation in front of residential homes at Birha; and
 - The vast urban and peri-urban sprawl at Hamburg.
- Great Kei
 - The clearing of primary dune vegetation in front of residential homes at the western extent of Kei Mouth.

Wild Coast Environmental Management Plan (EMP)

The Wild Coast Environmental Management Plan (2014) aims to address unplanned settlements encroaching into areas of high environmental importance, threatening the aesthetic and ecological value of the Wild Coast. The Wild Coast EMP has been developed as a planning tool for the DEDEAT that will guide and facilitate development along the Wild Coast in a sustainable manner. The Wild Coast EMP has outlined land-use management categories which describes guidelines that pertain to spatial development within an environmental management context along the Wild Coast (Table 4)

Table 4: Land-use management categories as described in the Wild Coast EMP (2014).

CATEGORY	DEFINITION
First Order Nodes/Formal Coastal Towns	Areas that in terms of low environmental sensitivity and existing infrastructure and/or the feasibility of providing infrastructure can accommodate intensive development. Actual or proven potential supply of municipal services such as bulk water, sewerage and waste management is a basic condition for any area to have 1st Order Node status. Developments that do not need to be in the coastal zone should however still wherever possible be placed outside the immediate coastal zone, inclusive of a buffer with estuaries. Any First Order Node can be considered for formal town establishment.
Second Order Nodes	Areas with significant constraints to development, e.g. and which can accommodate moderate levels of tourism, resort and cottage development. One key difference between a Second Order Node and a Third Order Node would be that in a Second Order Node more than one fairly substantial development could take place, while in a

CATEGORY	DEFINITION
	Third Order Node only one development will generally be permitted.
Coastal Settlements	Areas in which coastal communities were historically settled, i.e. occupied before 1992 when the Transkei Decree took effect. Only local residential and agricultural use permitted, subject to a Local Area Plan agreed between DEDEAT and community.
Third Order Nodes	Areas within Biodiversity and Landscape Management Areas that have been specifically identified as suitable for tourism/resort developments. The scale of development will be determined by the nature of the receiving environment, but 3rd Order Nodes should not be located in green-fields areas. Excepting in areas that already contain substantial existing development, e.g. cottages, there should not be more than one resort/tourism development in a specific 3rd Order Node.
Biodiversity and Landscape Management Areas	Areas in which no development or land-use other than live-stock grazing is permitted, excepting in identified 3rd Order Nodes. Some Biodiversity and Landscape Management Areas will contain one or more 3rd Order Nodes and in other B&LMA's no development will be permitted, as there are no areas suitable for development.
Protected Areas	Formally proclaimed Protected Areas. These areas are included for mapping purposes, but are not subject to the EMF/Policy, but to the policies of the applicable Management Agency.
Protected Area Expansion Areas	Areas that are formally approved by a Protected Area Management Agency for the purposes of either expanding existing Protected Areas or the establishment of new formally proclaimed Protected Areas. Generally the provisions applicable to a B&LMA will apply to these areas. Should Protected Area Expansion for such an area not be successful,
Indigenous State Forests	Areas that are under the jurisdiction of DAFF and therefore not the sole mandate of DEDEAT or ECPTA. Any development in these areas generally requires two authorizations, one from DAFF and one from DEDEAT. In the interim these forests have been included in the B&LMA and Protected Area Expansion categories in the table above,

The Wild Coast EMP has identified the development nodes within the ADM such as Qorha (First Order Node), Nqabarha (Second Order Node), and Xora (Second Order Node), as well as several other lower order nodes which encompass holiday resorts and facilities (Table 5).

Table 5: Wild Coast development nodes within the ADM (adapted from NEMA: Wild Coast Environmental Management Plan, 2014)

DEVELOPMENT NODE	
Category	Location
First Order Nodes	Mnquma: Qolora Mouth Mbhashe: Kobb Inn (Qora Mouth)
Second Order Nodes	Mnquma Wavecrest Cebe Cottages Mbhashe Mazeppa Bay Nqabarha Xora Mouth
Third Order Nodes	Mnquma: The Mound Cebe Camping Village Mbhashe: Nqabarha Peninsula Nkanya Bulungula Lodge Mpame Cottages
Coastal Settlements	Mnquma:

	Cebe Village Gcina 1 Gcina 2 Mbhashe: Jotela Kwateza Nqabarha Ngomani Ntlonyana Qatywa Bulungula Mpame
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Reflecting on the above as well as feed-back from stakeholders, the future needs in terms of coastal planning and development are as follows:

- The incorporation of coastal spatial planning tools, such as the Coastal EMF, Wild Coast EMP and the ICMA, into the ADMs SDF
- Consistent application of the legislation with regards to development in the coastal zone
- Clarity is required regarding the status of ownership of land within the coastal zone as well as the zoning status of land with regards to the identification of development opportunities
- Identification of areas along the coastline that require new tourism facilities or the upgrade of existing tourism facilities, which are to be incorporated into the ADMs Tourism Master Plan and IDP
- The ADM to provide assistance to the coastal Local Municipalities with respect the development and upgrade of infrastructure such as roads, public amenities and tourism facilities

2.6 Climate Change and Dynamic Coastal Processes

Climate change is defined by the United Nations Framework Convention on Climate Change (UNFCCC) as “a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is additional to natural climate variability over comparable time periods”.

Provincial climate change strategy

The EC CMP points to a need to be able to respond to dynamic coastal processes through:

- Increased resilience of natural and social systems; and for a
- Phased retreat of infrastructure in high risk areas.

These principles are consistent with the province’s Climate Change Response Strategy (ECCCRS) 2011, which, inter alia, deals with coastal infrastructure and livelihoods.

The ECCCRS calls for increased resilience of coastal infrastructure and resources against the potential effects of sea-level rise, storm surges, flooding and increased sea temperatures. It also provides a useful analysis of various magnitudes of impact and risk-level and likelihood (Table 6).

Table 6: Risk matrix for coastal and marine environments, reproduced from the Eastern Cape Climate Change Response Strategy 2011

Primary Impact	2 nd Order Impact	3 rd Order Impact	Risk or Opportunity	Significance (Likelihood)
Sea level rise	Together with storm surges, inundation of liquid fuel delivery and transfer infrastructure in ports	Reduced security of liquid fuel supply	Risk	High
Changes in annual average precipitation	Increased annual average precipitation to the east of the province resulting in increased	Potentially improved viability of hydro-electric power generation	Opportunity	Medium

Primary Impact	2 nd Order Impact	3 rd Order Impact	Risk or Opportunity	Significance (Likelihood)
	stream flow			
Changes in annual average precipitation	Increased annual average precipitation to the east of the province, together with increased mean temperature, may increase biological productivity	Increased availability of biomass, biofuel and biogas feedstocks for local and provincial energy generation and refining.	Opportunity	Medium
Higher	Increased demand event for chilling, air conditioning,	increased power demand over and above existing growth projections -	Risk	Medium
Increased storm severity/ Extreme weather events.	Storm surges, together with sea level rise and increased flood frequency, may result in direct damage to energy transmission and distribution systems.	Threats to provincial energy security	Risk	Medium

The ADM Climate Change Vulnerability Assessment (2013)

The ADM Climate Change Vulnerability Assessment (2013) indicated that the primary manifestations of climate change that are expected to be relevant to the ADM includes the following:

- Average monthly temperatures will increase by 1.5 to 2.5 degrees;
- Annual average precipitation may increase in certain areas or decrease in others;
- The way in which precipitation occurs will change, namely:
 - Increased variability from year to year;
 - Heavier and more intense rain;
 - Higher likelihood of destructive storms;
 - Shorter return period for floods; and
 - Between very wet periods, longer dry spells and increased likelihood/ severity of droughts.
- Sea level rise coupled with high tides, stronger storm surges and higher frequency flooding will increase the chances of extreme high-water events, local inundation and coastal erosion.

Through the development of the ADM Climate Change Vulnerability Assessment, contour maps were generated for selected sites where vulnerable infrastructure occurs (Figure 13 and 14). Infrastructure that is considered vulnerable to climate change, in particular sea level rise, is located below the 5 meter contour line that has been proposed to encompass the inundation areas that will potentially result from global warming. These contour maps indicate the effect of sea level rise on vulnerable coastal developments



Figure 13: Coastal infrastructure Mpekweni that lies below the 5 metre contour, thus vulnerable to sea level rise.



Figure 14: Coastal infrastructure at Morgan Bay that lies below the 5 metre contour, thus vulnerable to sea level rise.

Coastal management lines

No coastal management lines have been gazetted for the ADM coastline.

Reflecting on the above as well as feed-back from stakeholders, the future needs in terms of adaptation to climate change are as follows:

- Development of an inventory identifying infrastructure that is vulnerable to climate change along the ADM coastline
- Adoption of coastal management lines within key development areas along the ADM coastline
- Incorporation of climate change adaptation strategies into the ADM IDP and SDF

2.7 Land and Marine Based Sources of Pollution

The majority of coastal villages and resorts within the ADM are not serviced by bulk water infrastructure, except for the following coastal resorts in Great Kei:

- Chintsa;
- Morgan Bay; and
- Kei Mouth.

The primary sewerage infrastructure utilised by coastal villages and resorts is the use of septic tank systems with soak-aways. This is due to the general rural nature of the ADM coastline.

Inadequate stormwater infrastructure, together with poorly maintained septic tanks, contributes to the waste and pollution issues along the ADM coastline. While issue of the seepage of septic tanks into coastal waters is relevant to the entire ADM coastline, the issue has been highlighted as a priority within the ADM by DEDEAT.

ADM is the Water Services Authority and is responsible for the provision of bulk water services and sanitation services. The ADM Water Services Development Plan: Need Development Plan (2015) highlight the following sanitation projects (Table 7) to address the sanitation issues within the ADM coastline:

Table 7: The ADM Water Services Development Plan: Needs Development Plan (2015) for sanitation projects within the coastal zone of the ADM

Project Description			Project Status	Project Duration
Project Name	Project Number	Project Description		
Hamburg Sanitation Project	N/ECDC12/040/S	Upgrade sanitation infrastructure in Hamburg tourist node	Viability: Approved Feasibility: Completed Feasibility Approval: In process	5 Years Started: 2013
Chintsa Sanitation Project	N/ECDC12/042/S	Chintsa Regional Sanitation Infrastructure scheme	Viability: Approved Feasibility: Completed Feasibility Approval: In process	4 Years Started: 2012
Kei Mouth Sanitation Project	N/ECDC12/041/S	Upgrade sanitation infrastructure in Kei Mouth tourist node	Viability: Approved Feasibility: Completed Feasibility Approval: In process	3 Years Started: 2013
Dwesa/Cwebe Sanitation Project	ECDC365	Dwesa/Cwebe Sanitation Project	Viability: Approved Feasibility: Completed In construction phase	3 Years Started: 2014
Morgan Bay Waste Water Treatment Works	N/ECDC12/008/S	Morgan's Bay - New Waste Water Treatment Works	Viability: Approved Feasibility: Completed Feasibility Approval: Approved In design phase	3 Years Started: 2012
Morgan Bay Sewerage Upgrade	N/ECDC12/009/S	Morgan Bay Sewerage Upgrade	Viability: In process Feasibility: In process In conceptual phase	
Mazeppa Sanitation Project	N/ECDC/035/S	Upgrade sanitation infrastructure in Mazeppa Bay village	Viability: Approved Feasibility: Completed Feasibility In process In feasibility phase	2 Years Started: 2013
Morgan Bay/ Igxara	N/ECDC/044/S	Morgan's Bay /	Viability: Not yet	2 Years

Project Description			Project Status	Project Duration
Project Name	Project Number	Project Description		
Sanitation Project		Igxara sanitation Feasibility Phase	approved Feasibility: Not yet started In feasibility phase	Started: 2015

Reflecting on the above as well as feed-back from stakeholders, the future needs in terms of the management of land and marine based sources of pollution within the coastal zone of the ADM as follows:

- An assessment of the state of the sewerage infrastructure within coastal villages and resorts needs to be conducted
- Provision of bulk sanitation and water infrastructure to coastal development nodes
- The development and implementation of a Water Quality and Pollution Monitoring Programme for all estuaries and swimming beaches along the ADM Coastline
- Development of coastal pollution bylaws

2.8 Estuaries

The ADM coastline had a high concentration of estuaries where most of the estuaries have been described as being in good condition. The condition of the estuaries for each of the coastal LMs along the ADM coastline is summarised in Table 8 below. Most of the information was sourced from the following reports:

- “Geomorphology, Ichthyofauna, Water Quality and Aesthetics of South African Estuaries” compiled by the Division of Water, Environment and Forestry Technology, Environmentek, CSIR (2000)
- Whitfield, A.K. & Baliwe, N.G. 2013. A century of science in South African estuaries: Bibliography and review of research trends. SANCOR Occasional Report No. 7: 289 p

IT IS IMPORTANT TO NOTE THAT THE INFORMATION ON THESE ESTUARIES IS POOR, AND OUTDATED. IT IS LIKELY THAT THE CONDITION OF MANY OF THESE ESTUARIES HAVE DECREASED SIGNIFICANTLY.

Table 8: The condition of the estuaries along the ADM coastline

Estuary name	Local Municipality	Locality	Region	Classification	Condition	Information	Comments
Great Fish	Ngqushwa	33°29'40.22"S; 27° 8'11.18"E	Warm-temperate	Permanently open, medium/large estuary	Moderate aesthetics and good water quality	Moderate information available	<ul style="list-style-type: none"> Fish River Sun Hotel and golf course at river mouth R72 crosses over the estuary Moderate development along the banks of the estuary Important estuary for recreational activities. E.g. angling
Old Womans	Ngqushwa	33°28'58.87"S; 27° 8'51.61"E	Warm-temperate	Closed, medium estuary	Moderate aesthetics and good water quality	Moderate information available	<ul style="list-style-type: none"> Clearance of land along parts of the banks of the estuary to accommodate a gold course
Mpekweni	Ngqushwa	33°26'15.86"S; 27°13'52.80"E	Warm-temperate	Closed, medium estuary	Moderate aesthetics and good water quality	Moderate information available	<ul style="list-style-type: none"> Mpekweni Beach Resort at river mouth R72 crosses over the estuary Some clearance of land along the banks of the estuary to accommodate agricultural activities
Mtati	Ngqushwa	33°25'21.03"S; 27°15'31.37"E	Warm-temperate	Open/closed, medium estuary	Good aesthetics and fair water quality	Moderate information available	<ul style="list-style-type: none"> Small scale development at the river mouth
Mgwalana	Ngqushwa	33°24'41.19"S; 27°16'21.86"E	Warm-temperate	Closed, medium estuary	Moderate aesthetics and good water quality	Moderate information available	<ul style="list-style-type: none"> Moderate sized residential development at the river mouth R72 crosses over the estuary
Birha (Begha)	Ngqushwa	33°22'45.48"S; 27°19'9.62"E	Warm-temperate	Open/closed, medium estuary	moderate aesthetics and fair water quality	Moderate information available	<ul style="list-style-type: none"> Moderate development at river mouth Clearance of land down to the banks of the estuary for residential use Coastal public access points at river mouth
Gqutywa	Ngqushwa	33°21'34.52"S; 27°21'23.04"E	Warm-temperate	Closed, medium estuary	Good aesthetics and good water quality	Moderate information available	<ul style="list-style-type: none"> Minimal development along the lower reaches of the estuary as this estuary falls within a declared conservation area (Hamburg Nature Reserve)
Ngculura	Ngqushwa	33°21'14"S; 27°21'52"E	Warm-temperate	open, Small Estuary	Good aesthetics and good water quality	Minimal information available	<ul style="list-style-type: none"> Minimal development along the lower reaches of the estuary as this estuary falls within a declared conservation area (Hamburg Nature Reserve)
BlueKrans	Ngqushwa	33°20'4.07"S; 27°24'46.90"E	Warm-temperate	Closed, small estuary	good aesthetics and water quality not determined	Minimal information available	<ul style="list-style-type: none"> Minimal development along the lower reaches of the estuary as this estuary falls within a declared conservation area (Hamburg Nature Reserve)

Estuary name	Local Municipality	Locality	Region	Classification	Condition	Information	Comments
							Reserve)
Freshwater Poort	Ngqushwa	33°20'0"S; 27°24'42"E	Warm-temperate	open, Small Estuary	Good aesthetics	Minimal information available	<ul style="list-style-type: none"> Minimal development along the lower reaches of the estuary as this estuary falls within a declared conservation area (Hamburg Nature Reserve)
Mtana	Ngqushwa	33°19'6.34"S; 27°25'56.55"E	Warm-temperate	Closed, medium estuary	Good aesthetical and good water quality	Moderate information available	<ul style="list-style-type: none"> Minimal development along the lower reaches of the estuary
Keiskamma	Ngqushwa	33°16'48.73"S; 27°29'0.33"E	Warm-temperate	Permanently open; medium/large estuary	Moderate aesthetics and good water quality	Moderate information available	<ul style="list-style-type: none"> The village of Hamburg is situated at the river mouth Moderate development along the lower reaches of the estuary Land cleared along the banks of the estuary for agricultural and residential purposes Increasing freshwater abstraction and human impacts in the catchment
Kwelera	Great Kei	32°54'24.09"S; 28° 4'27.33"E	Warm-temperate	Permanently open, medium/large estuary	Moderate aesthetics and good water quality	Moderate information available	<ul style="list-style-type: none"> Yellow Sands Caravan park located on eastern bank of the river mouth Slip way for launching of boats present on the western bank of the river mouth Infrastructure for coastal public access is present along the western bank of the river
Bulura	Great Kei	32°53'20.30"S; 28° 5'31.86"E	Warm-temperate	Temporary closed/open, small estuary	Moderate aesthetics and good water quality	Moderate information available	<ul style="list-style-type: none"> Glen Garriff and Glen Eden residential areas located on western and eastern banks of the estuary respectively Infrastructure for coastal public access is located on eastern bank of the river mouth
Cunge	Great Kei	32°51'37.81"S; 28° 6'36.84"E	Warm-temperate	Closed, small estuary	Good aesthetics and good water quality	Moderate information available	<ul style="list-style-type: none"> Small scale development along the lower reaches of the estuary
Cintsa	Great Kei	32°50'2.70"S; 28° 6'46.78"E	Warm-temperate	Temporary closed/open, medium estuary	Moderate aesthetics and good water quality	Moderate information available	<ul style="list-style-type: none"> Residential development on eastern and western banks of the estuary Land has been cleared down to the banks of the estuary on some properties

Estuary name	Local Municipality	Locality	Region	Classification	Condition	Information	Comments
Cefane	Great Kei	32°48'27.54"S; 28° 8'6.41"E	Warm-temperate	Temporary closed/open, medium estuary	Moderate aesthetics and very good water quality	Moderate information available	<ul style="list-style-type: none"> • Moderate residential development at the river mouth • Sections of land along the banks of the estuary is being utilised for agriculture
Kwenxura	Great Kei	32°47'50.24"S; 28° 8'54.49"E	Warm-temperate	Temporary closed/open, medium estuary	good aesthetics and very good water quality	Moderate information available	<ul style="list-style-type: none"> • No development has occurred along the banks of the lower reaches of the estuary
Nyara	Great Kei	32°46'57.73"S; 28°10'49.65"E	Warm-temperate	Closed, medium estuary	good aesthetics and very good water quality	Moderate information available	<ul style="list-style-type: none"> • Minimal development along the lower reaches of the estuary • Bosbokstrand Holiday Resort is located on the eastern bank of the estuary
Imtendwe	Great Kei	32°46'8"S; 28° 14'7"E	Warm-temperate	Closed/ Small estuary	Good aesthetics and moderate water quality	Minimal information available	<ul style="list-style-type: none"> • Minimal development along the lower reaches of the estuary • Holiday chalets are located at the mouth of the estuary
Haga Haga	Great Kei	33°20'4.07"S; 27°24'46.90"E	Warm-temperate	Closed, medium estuary	Moderate aesthetics and good water quality	Moderate information available	<ul style="list-style-type: none"> • Moderate residential developments are located on both the western and eastern banks of the lower reaches of the estuary • The Haga Haga hotel is situated on the eastern bank of the river mouth
Mtendwe	Great Kei	32°44'22.70"S; 28°17'5.82"E	Warm-temperate	Temporary closed/open, small estuary	Good aesthetics and good water quality	Minimal information available	<ul style="list-style-type: none"> • Minimal development occurs on the western bank of the estuary mouth and minimal development occurs along the upper reaches of the estuary
Quko	Great Kei	33°19'6.34"S; 27°25'56.55"E	Warm-temperate	Open, medium/large estuary	Good aesthetical and good water quality	Moderate information available	<ul style="list-style-type: none"> • Minimal development along the lower reaches of the river
Morgan Bay	Great Kei	33°16'48.73"S; 27°29'0.33"E	Warm-temperate	Closed, medium estuary	Moderate aesthetics and good water quality	Moderate information available	<ul style="list-style-type: none"> • Moderate residential development has occurred along the western banks of the estuary
Cwili	Great Kei	33°16'48.73"S; 27°29'0.33"E	Warm-temperate	Temporary closed/open, small estuary	Moderate aesthetics and good water quality	Moderate information available	<ul style="list-style-type: none"> • Moderate development has occurred along the western and eastern banks of the estuary. • An access road from Morgan's Bay to Kei Mouth crosses over the estuary
Great Kei	Great Kei	32°40'40.29"S; 28°23'3.13"E	Warm-temperate	Permanently open, medium/large estuary	Moderate aesthetics and good water quality	Moderate information available	<ul style="list-style-type: none"> • Moderate development has occurred on the western bank of the estuary

Estuary name	Local Municipality	Locality	Region	Classification	Condition	Information	Comments
Gxarha	Mnquma	28° 23' 56.87"S; 32° 39' 58.16"E	Warm-temperate	Temporarily closed/open	Good aesthetics with fair water quality	Moderate information available	<ul style="list-style-type: none"> No development along the lower reaches of the river
Ngogwane	Mnquma	28° 25'17.91"S; 32°38'55.31"E	Warm-temperate	Temporarily closed/open	Good aesthetics with fair water quality	Minimal information available	<ul style="list-style-type: none"> An old campsite is located on the eastern bank of the estuary Some sand mining activities take place nearby the estuary.
Qolorha	Mnquma	32°37'49"S; 28°25'59"E	Warm-temperate	Temporarily closed/open	Good aesthetics with poor water quality	Minimal information available	<ul style="list-style-type: none"> Moderate residential development has occurred along the western banks of the estuary Trennerys Hotel is located on the western bank of the estuary
Ncizele	Mnquma	32°37'43"S; 28°26'19"E	Warm-temperate	Temporarily closed/open	Good aesthetics with good water quality	Minimal information available	<ul style="list-style-type: none"> No development along the lower reaches of the river
Timba	Mnquma	32°37'31"S; 28° 26'45."E	Warm-temperate	Permanently open			<ul style="list-style-type: none"> No development along the lower reaches of the river
Khobonqaba	Mnquma	32°36'25"S; 28°29'25"E	Warm-temperate	Permanently open	Good aesthetics with poor water quality	Minimal information available	<ul style="list-style-type: none"> Minimal development along the lower reaches of the river
Ngqusi/Nxaxo	Mnquma	32°35'05"S; 28°31'32"E	Warm-temperate	Permanently open	Good aesthetics with poor water quality	Minimal information available	<ul style="list-style-type: none"> Wavecrest holiday resort in the southern shore of the estuary mouth
Cebe	Mnquma	32°31'22"S; 28°35'06"E	Warm-temperate	Temporarily closed/open	Good aesthetics and good water quality	Minimal information available	<ul style="list-style-type: none"> Minimal development along the lower reaches of the river Cebe community rest camp is located on the western banks of the estuary
Gqunqe	Mnquma	32°31'08"S; 28°35'23"E	Warm-temperate	Temporarily closed/open	Excellent aesthetics and excellent water quality	Minimal information available	<ul style="list-style-type: none"> No development along the lower reaches of the river
Zalu	Mnquma	32°30'09"S; 28°36'12"E	Warm-temperate	Temporarily closed/open	Good aesthetics with fair water quality	Minimal information available	<ul style="list-style-type: none"> Small floodplain and surrounding area used for grazing cattle
Ngqwara	Mnquma	32°29'32"S; 28°36'51"E	Warm-temperate	Temporarily closed/open	Good aesthetics with fair water quality	Minimal information available	<ul style="list-style-type: none"> Small floodplain and surrounding area used for grazing cattle
Sihlontlweni	Mnquma	32°28'48"S; 28°38'45"E	Warm-temperate	Temporarily closed/open	Good aesthetics and good water quality	Minimal information available	<ul style="list-style-type: none"> Minimal development along the lower reaches of the river Mazeppa Bay Hotel is located on the eastern

Estuary name	Local Municipality	Locality	Region	Classification	Condition	Information	Comments
							bank on the estuary
Nebelele	Mnquma	32°27'45"S; 28°39'21"E	Warm-temperate	Temporarily closed/open	Good aesthetics and good water quality	Minimal information available	<ul style="list-style-type: none"> Small floodplain and surrounding area used for grazing cattle
Qora	Mnquma	32°26'50"S; 28°40'21"E	Warm-temperate	Permanently open	Good aesthetics and good water quality	Minimal information available	<ul style="list-style-type: none"> Estuary regularly used for recreational boating and fishing Kobb Inn is located just to the east of the estuary mouth
Jujura	Mbhashe	32°25'49"S; 28°41'40"E	Warm-temperate	Temporarily open/closed	Good aesthetics and poor water quality	Minimal information available	<ul style="list-style-type: none"> Infrastructure for coastal public access is present on the banks of the estuary
Ngadla	Mbhashe	32°25'03"S; 28°42'33"E	Warm-temperate	Temporarily open/closed	Good aesthetics and poor water quality	Minimal information available	<ul style="list-style-type: none"> A slipway is present for launching ski boats out of the river mouth
Shixini	Mbhashe	32°24'10"S; 28°43'39"E	Warm-temperate	Permanently open	Good aesthetics and good water quality	Minimal information available	<ul style="list-style-type: none"> A ferry operates on a daily basis to ferry vehicles and people across the estuary
Beechamwood	Mbhashe	32° 22'29"S; 28° 45'7"E	Warm-temperate	Temporarily closed/open	Excellent aesthetics and excellent water quality	Minimal information available	<ul style="list-style-type: none"> Minimal development along the lower reaches of the estuary Cottages are located just to the east of the estuary
Tenza	Mbhashe	32° 22'10"S; 28° 45'27"E	Warm-temperate	Temporarily closed/open	Good aesthetics and good water quality	Minimal information available	<ul style="list-style-type: none"> No development along the lower reaches of the estuary
KwaGoqo	Mbhashe	32° 21'55"S; 28° 45'42"E	Warm-temperate	Temporarily closed/open	Good aesthetics and good water quality	Minimal information available	<ul style="list-style-type: none"> Erosion caused by vehicles in the vicinity of the estuary is of concern
KuNocekedwa	Mbhashe	32° 20'53"S; 28° 46'39"E	Warm-temperate	Temporarily closed/open	Good aesthetics and good water quality	Minimal information available	<ul style="list-style-type: none"> No development along the lower reaches of the river
Nqabarha	Mbhashe	32°20'21"S; 28°47'23"E	Warm-temperate	Permanently open	Good aesthetics and good water quality	Minimal information available	<ul style="list-style-type: none"> Cottages located on the eastern banks of the estuary mouth A slipway is present for launching ski boats into the river
Dwesa	Mbhashe	32°18'18"S; 28° 49' 46"E	Warm-temperate	Temporarily closed/open	Excellent aesthetics and excellent water quality	Minimal information available	<ul style="list-style-type: none"> Falls within the Dewsa-Cwebe Nature Reserve Chalets located along the banks of the estuary.

Estuary name	Local Municipality	Locality	Region	Classification	Condition	Information	Comments
Kobule	Mbhashe	32°18'05"S; 28°50'18"E	Warm-temperate	Temporarily closed/open	Excellent aesthetics and excellent water quality	Minimal information available	<ul style="list-style-type: none"> No development along the lower reaches of the estuary Falls within the Dwesa-Cwebe Nature Reserve
Mendu	Mbhashe	32° 16' 51.29"S; 28° 52' 40.03"E	Warm-temperate	Temporarily closed/open	Excellent aesthetics and excellent water quality	Minimal information available	<ul style="list-style-type: none"> No development along the lower reaches of the estuary Falls within the Dwesa-Cwebe Nature Reserve
Mendwana	Mbhashe	32° 16' 8.13"S; 28° 53' 3.25"E	Warm-temperate	Temporarily closed/open	Excellent aesthetics and excellent water quality	Minimal information available	<ul style="list-style-type: none"> No development along the lower reaches of the estuary Falls within the Dwesa-Cwebe Nature Reserve
Mbhashe	Mbhashe	32° 14' 59.94"S; 28° 54' 6.84"E	Subtropical	Permanently open	Good aesthetics and fair water quality	Moderate information available	<ul style="list-style-type: none"> Minimal development along the lower reaches of the estuary Falls within the Dwesa-Cwebe Nature Reserve
Ku-Mpenzu	Mbhashe	32° 14' 37.77"S; 28° 54' 51.90"E	Subtropical	Temporarily closed/open	Good aesthetics and good water quality	Minimal information available	<ul style="list-style-type: none"> Minimal development along the lower reaches of the estuary The Haven Hotel is located on the western banks of the estuary
Ku-Bhula	Mbhashe	32° 13' 41.18"S; 28° 55' 40.81"E	Subtropical	Temporarily closed/open	Good aesthetics and fair water quality	Minimal information available	<ul style="list-style-type: none"> No development along the lower reaches of the estuary
KwaSuka	Mbhashe	32°12'19.06"S; 28° 56' 48.78"E	Subtropical	Temporarily open/closed	Good aesthetics and good water quality	Minimal information available	<ul style="list-style-type: none"> Minimal development along the lower reaches of the estuary Cottages are located along the western side of the estuary
Ntlonyane	Mbhashe	32° 11' 40.93"S; 28° 57' 23.98"E	Subtropical	Temporarily open/closed	Good aesthetics and fair water quality	Minimal information available	<ul style="list-style-type: none"> Much of the floodplain and surrounding area used for cattle grazing
Nkanya	Mbhashe	32°10'39"S; 28°58'34"E	Subtropical	Temporarily open/closed	Good aesthetics and good water quality	Minimal information available	<ul style="list-style-type: none"> Sand mining activities take place on the eastern banks of the estuary The floodplain and surrounding area is used for cattle grazing
KwaHayi (Sundwana)	Mbhashe	32° 10' 24.33"S; 28° 58' 55.12"E	Subtropical	Temporarily open/closed	Excellent aesthetics and excellent water quality	Minimal information available	<ul style="list-style-type: none"> Sand mining activities take place on the eastern banks of the estuary The floodplain and surrounding area is used for cattle grazing
Xora	Mbhashe	32° 9.' 31.08"S; 28° 59' 44.10"E	Subtropical	Permanently open	Good aesthetics and fair water quality	Minimal information available	<ul style="list-style-type: none"> Moderate development occurs along the lower reaches of the estuary Cottages are located along the western bank of the estuary Sand mining activities take place on the eastern

Estuary name	Local Municipality	Locality	Region	Classification	Condition	Information	Comments
							banks of the estuary
Bulungula	Mbhashe	32° 8.' 16.82"S; 29° 0.' 41.46"E	Subtropical	Temporarily open/closed	Good aesthetics and good water quality	Minimal information available	<ul style="list-style-type: none"> • Much of the floodplain and surrounding area used for cattle grazing • Bulungula Backpackers is located on the western banks of the estuary
KuAmanzimnyama	Mbhashe	32° 6.' 53.72"S; 29° 2' 0.17"E	Subtropical	Temporarily open/closed	Excellent aesthetics and excellent water quality	Minimal information available	<ul style="list-style-type: none"> • Much of the floodplain and surrounding area used for cattle grazing
Unnamed2 (Mpame)	Mbhashe	32° 5' 18.90"S; 29° 4' 9.60"E	Subtropical	Temporarily open/closed	Good aesthetics and good water quality	Minimal information available	<ul style="list-style-type: none"> • Moderate development occurs along the lower reaches of the estuary • Cottages are located along the western bank of the estuary
Mncwasa	Mbhashe	32° 4.' 57.74"S; 29° 4' 33.87"E	Subtropical	Temporarily open/closed	Good aesthetics and good water quality	Minimal information available	<ul style="list-style-type: none"> • No development occurs along the lower reaches of the estuary • Much of the floodplain and surrounding area used for cattle grazing

A number activities and developments within the estuarine functional zone were observed during a reconnaissance flight of the ADM coastline. However, no data was available at the time that allows quantification of the exact number of illegal structures within each estuary. Based on the results from the National Estuary Health Assessment however, estuary management plans are urgently required for the Keiskamma, Great Kei and Mbashe River estuaries. These estuaries have been shown in the Nation Estuary Health Assessment to experience a higher level of anthropogenic pressures than the other estuaries located along the ADM coastline.

Reflecting on the above as well as feed-back from stakeholders, the future needs in terms of estuary management along the ADM coastline are as follows:

- **To conduct and analysis of the current threat on estuaries within the ADM**
- **Develop and implement estuary management plans in accordance with the National Estuary Management Protocol for the Keiskamma, Great Kei and Mbashe River estuaries**
- **Incorporation of these Estuary Management Plans into the ADM IDP and SDF**

2.9 Facilitation of Coastal Access

The facilitation of coastal public access is specifically highlighted in the ICMA as a key component of effective Integrated Coastal Management. Coastal public access is reasonably well facilitated along the ADM coastline with a few exceptions along the Ngqushwa LM coastline. Along the Ngqushwa coastline, large tracts of privately owned land, and land where the ownership status is not clear, located along the Ngqushwa LM coastline.

Table 9 below describes the current state of coastal access along the ADM coastline.

Table 9: An assessment of the coastal public access points along the ADM coastline

Public access point	Local Municipality	Comments
Fish River	Ngqushwa	<ul style="list-style-type: none"> • Public access to the beach is facilitated by the Fish River Sun Hotel. Golf carts are available to take visitors to the beach. • Public access through the Fish River Caravan Park is restricted.
Mpekweni	Ngqushwa	<ul style="list-style-type: none"> • No public amenities (ablution facilities, braai facilities, rubbish collection bins, etc.) are made available at Mpekweni. • Public access to the beach is facilitated by the Mpekweni Beach Resort. Golf carts are available to take visitors to the beach.
Mgwalana	Ngqushwa	<ul style="list-style-type: none"> • No public amenities (ablution facilities, braai facilities, rubbish collection bins, camping facilities etc.) are made available at Mgwalana. • An access road exists from the R72. • Public boat launch sites, both surf and river, are located at Mgwalana. • The public access road through Mgwalana is closed off by a security gate. • There is a reported case where permitted mussel collectors are denied access through the Mgwalana Resort to harvest mussels. • Life guards are on duty during peak periods.
Birha	Ngqushwa	<ul style="list-style-type: none"> • Birha can be accessed from the R72. • A public access road exists from the R72 to the Birha river mouth. • Infrastructure is available at the river mouth that provides adequate parking facilities. • Birha has ablution facilities but these facilities need to be upgraded to accommodate visitors during the busy seasons. • Rubbish collection bins are available at the parking area. • A private slipway is located within the Birha private residential development and cannot be accessed by the general public. • Birha has a public boat surf launch.

Public access point	Local Municipality	Comments
Hamburg	Ngqushwa	<ul style="list-style-type: none"> • Access to the beaches along the western side of the Keiskamma river is facilitated by a public road. • The access roads also require that they be upgraded. • Public parking facilities and public amenities (e.g. Ablution facilities, campsites) are available. • The public parking area is being threatened by encroaching sand dunes. • Rubbish collection bins are available at the public parking area. • The beach at Hamburg has recently been awarded Blue Flag status.
Yellowsands Caravan Park	Great Kei	<ul style="list-style-type: none"> • The public can only access the Yellow Sands beach by crossing the Kwelera River. • A public access road is present. However public access to the yellow sands beach is restricted by a guarded boom.
Glen Gariff	Great Kei	<ul style="list-style-type: none"> • A public parking area as well as waste collection bins have been provided at this access point.
Bulura River Mouth	Great Kei	<ul style="list-style-type: none"> • A tarred public parking area has been provided but is in poor condition and has sanded up. • Attempts have been made to address the issue of the road sanding up but has not been maintained. • Waste collection bins are located within the public parking area • A public ablution facility is present but it not maintained. • Illegal access through the dunes from the public parking is utilised by the public.
Queensberry Bay	Great Kei	<ul style="list-style-type: none"> • A public parking area has been provided. • No public amenities have been provided e.g. ablution facilities, braai facilities, camping facilities, etc. • A public access path is present to allow access to the beach.
Chintsa West	Great Kei	<ul style="list-style-type: none"> • Public parking has been made available. • Waste collection bins have been provided at the parking area. • A public access path has been constructed from the parking area to the beach. • A tidal pool is located at Chintsa West but is poorly maintained.
Chintsa East	Great Kei	<ul style="list-style-type: none"> • A public parking area has been provided • An access path from the parking area to the beach has been provided. • Waste collection bins are located in the parking area and at the beach access point • A wooden deck down to the beach has been constructed with braai facilities • Local vendor station have been constructed at the public parking area • WftC information boards are present at the public parking area.
Cefane	Great Kei	<ul style="list-style-type: none"> • A public access road is present that leads to the Cefane River Mouth Resort. • The public road is poorly maintained by the Great Kei LM. • Waste collection bins are located at the entrance to the Cefane River Mouth Resort. • No formalised parking area is available. • No public amenities have been provided e.g. ablution facilities, braai facilities, camping facilities, etc.
Haga Haga	Great Kei	<ul style="list-style-type: none"> • A public access road is present that facilitates access to the coast. • Waste collection bins are located along the length of this public road. • No formalised public parking areas have been provided. • No public amenities have been provided e.g. ablution facilities, braai facilities, camping facilities, etc.

Public access point	Local Municipality	Comments
Marshstrand	Great Kei	<ul style="list-style-type: none"> • A public access road is present that facilitates access to the coast. • No waste collection bins are present. • No formalised public parking area has been provided. • No public amenities have been provided e.g. ablution facilities, braai facilities, camping facilities, etc.
Mtendwe	Great Kei	<ul style="list-style-type: none"> • A public access road has been provided. • No waste collection bins have been provided. • No formalised public parking area has been provided. • No public amenities have been provided e.g. ablution facilities, braai facilities, camping facilities, etc.
Double Mouth Nature Reserve	Great Kei	<ul style="list-style-type: none"> • The access road to the Double Mouth campsite is a public road. • A rangers hut is located at the campsite where a fee is payed to access the campsite. • Waste collection bins have been provided at Double Mouth. • Ablution facilities have been provided • WftC information boards have been erected at the rangers hut. • The Double Mouth campsite is managed by the ECPTA.
Morgan Bay Cliffs	Great Kei	<ul style="list-style-type: none"> • A public access road allows access to the Morgan Bay cliffs. • No waste collection bins have been provided. • No formalised public parking area has been provided. • No public amenities have been provided e.g. ablution facilities, braai facilities, camping facilities, etc.
Morgan Bay	Great Kei	<ul style="list-style-type: none"> • A public access road provides access to the coast. • The public access road is in poor condition. • Waste collection bins have been provided. • No formalised public parking area has been provided. • No public amenities have been provided e.g. ablution facilities, braai facilities, camping facilities, etc.
Kei Mouth	Great Kei	<ul style="list-style-type: none"> • A public access road facilitates access to the coast. • Waste collection bins have been provided. • WftC information boards are present at specific points along the coastline. • A formalised public parking area has been provided. • A ferry operated to allow vehicles and people to cross the Great Kei river at a fee.
Seagulls	Mnquma	<ul style="list-style-type: none"> • Access to the coastal public property in the vicinity of Seagulls Cottages is freely available.
Trenerys	Mnquma	<ul style="list-style-type: none"> • Access into coastal public property in the vicinity of the Trennery Hotel is freely available.
Kobonqaba	Mnquma	<ul style="list-style-type: none"> • Access into coastal public property in the vicinity of cottages near Konobqaba is freely available.
Wavecrest	Mnquma	<ul style="list-style-type: none"> • Access into the coastal zone at Wavecrest is restricted.
Cebe	Mnquma	<ul style="list-style-type: none"> • Access into the coastal zone in the vicinity of the Cebe cottages is freely available.
Mazeppa Bay		<ul style="list-style-type: none"> • Access into the coastal zone in the vicinity of the Mazeppa Bay is freely available.
Qora	Mnquma	<ul style="list-style-type: none"> • At Qora mouth there is public access into the coastal zone. • The availability of a ferry at Qora mouth allows for movement across the mouth.
Kobb Inn	Mnquma	<ul style="list-style-type: none"> • Access into coastal public property in the vicinity of Kobb Inn Hotel and Dolphin View Guesthouse is restricted.
Nqabara	Mbhashe	<ul style="list-style-type: none"> • There is ample access into the coastal zone at Nqabara mouth.
Dwesa-Cwebe	Mbhashe	<ul style="list-style-type: none"> • Well-managed, minimal access into coastal zone within Dwesa-Cwebe Wildlife and Marine Sanctuary.

Public access point	Local Municipality	Comments
Xhora Mouth	Mbhashe	• Coastal access at Xhora mouth is easily available.
Bulungula	Mbhashe	• Ample coastal access at Bulungula mouth; need to manage and formalise access points.
Mpame	Mbhashe	• Access at Mpame Village into the coastal zone is freely available.

Launch sites

Launch sites are proclaimed in terms of the Integrated Coastal Management Act (Act No. 24 of 2008). A list of public launch sites has been gazetted and was released in March 2015. The official launch sites for the ADM are listed in Table 10 below:

Table 10: List of Public Launch Sites in the ADM (Gazette No. 3363)

Public Launch Site	Proposed Management Body	Current/ proposed operator
Mpekweni surf launch	Ngqushwa LM	Mpekweni Beach Resort Colin Whitehead
Mgwalana river launch	Ngqushwa LM	Mgwalana Cottage Association (S. Randall)
Mgwalana surf launch	Ngqushwa LM	S. Randall
Birha surf launch	Ngqushwa LM	Birha Ski Boat Club (D. R. Jones)
Birha river launch	Ngqushwa LM	Birha Ski Boat Club (D. R. Jones)
Keiskamma river launch	Ngqushwa LM	Keiskamma Ski Boast Club (J. Petzer)
Hamburg surf launch	Ngqushwa LM	Keiskamma Ski Boast Club (J. Petzer)
Chintsa East surf launch	Great Kei LM	Chintsa Ski Boat Club E Preston
Haga Haga surf launch	Great Kei LM	E V. Krull Manufacturing Mr F. Krull
Morgan Bay	Great Kei LM	Morgan Hotel R.W. Smith/ R. Brookes
Kei River Pont site	Great Kei LM	Kei Mouth Ski Boat Club John Rance
Qolora (McCreadies Gully) surf launch	Mnquma LM	Qolora Cottage Owners Association M. du Plessis
Mazeppa Bay	Mnquma LM	Mazeppa Bay Cottage Owners Association Cliffy Phillips
Wavecrest	Mnquma LM	Wavecrest Hotel
Nqabara River launch	Mbashe LM	Nqabara Cottage Owners Association Kevin Schroeder
Mpame surf launch	Mbashe LM	Bull's Inn Cameron Edwards
Qora river launch	Mbashe LM	Qora Cottage Owners Association N. Owen
Xorha surf and river launch	Mbashe LM	Xhora Cottage Owners Association D. Kretschmer/ R. Rooney

State of Beaches along the ADM coastline

Several of the beaches in the ADM have been assessed to determine their current state using several criteria listed below:

- Availability of access to the beach
- Availability of public amenities provided e.g. ablution facilities, braai/recreational facilities etc.
- Presence of lifeguards
- Location relative to coastal villages or nodes
- Presence of signage/ educational boards
- Water quality

Table 11 below gives a brief description of the beaches along the ADM coastline in order to provide a brief description of their current state.

Table 11: A brief description of the state of selected beaches along the ADM coastline

Beach	Local Municipality	Comments
Fish River	Ngqushwa	<ul style="list-style-type: none"> • Public access to the beach is limited • Amenities: <ul style="list-style-type: none"> ○ Parking available at Fish River Sun hotel entrance ○ Public are not permitted to utilise hotel ablution facilities ○ No public braai/recreational facilities are provided ○ No lifeguards on duty • Members of the public are permitted to park at the Fish River Sun hotel and are ferried to the beach via golf carts. • No public access is available at the fish river caravan park adjacent to the Fish River Sun hotel • No information boards/signage is visible • Fair water quality (CSIR, 2001)
Mpekweni	Ngqushwa	<ul style="list-style-type: none"> • No public access to the beach is available • Amenities: <ul style="list-style-type: none"> ○ No formalised public parking space is designated ○ No ablutions facilities are provided ○ No braai/recreational facilities are present ○ Lifeguards are on duty on a seasonal basis • The Mpekweni Beach Resort is situated at the River Mouth • No information boards/signage is visible • Good water quality (CSIR, 2001)
Birha	Ngqushwa	<ul style="list-style-type: none"> • Public access is provided via the R72 to the Birha River Mouth • A private slipway exists within the Birha Private residential development which cannot be accessed by the general public • Amenities: <ul style="list-style-type: none"> ○ Public parking facilities are provided ○ Waste collection is provided at the parking area ○ No braai/recreational facilities are present ○ Public ablution facilities are provided but need to be upgraded at accommodate the peak seasons. • Moderate development has occurred on the eastern side of the river bank • Fair Water Quality (CSIR, 2001)
Mgwalana	Ngqushwa	<ul style="list-style-type: none"> • No public access to the beach is available • Amenities: <ul style="list-style-type: none"> ○ No public parking areas provided ○ No ablution or recreational facilities provided ○ Lifeguards are on duty on a seasonal basis • Moderate sized residential development at the river mouth • Good water quality (CSIR, 2001)
Hamburg	Ngqushwa	<ul style="list-style-type: none"> • Hamburg beach can accessed be via a public road along the western side of the Keiskamma River • Amenities: <ul style="list-style-type: none"> ○ Public parking facilities are provided but are threatened by encroaching sand dunes. ○ Ablution facilities are provided albeit in poor condition ○ Campsites are also available ○ Waste collection bins are present in the parking area ○ Lifeguards are on duty on a seasonal basis ○ Information sign boards are present • The Hamburg village is situated at the river mouth with moderate

Beach	Local Municipality	Comments
		<p>development along the lower reaches of the estuary</p> <ul style="list-style-type: none"> • Water quality is deemed to be of good quality in the Keiskamma estuary.
Yellow Sands	Great Kei	<ul style="list-style-type: none"> • There is a public access road present but access to it is restricted by a guarded boom • The Yellow Sands beach is only accessible by crossing the Kwelera River • Amenities: <ul style="list-style-type: none"> ○ No formalised public parking area is provided ○ No public waste collection bins are provided ○ No formalised public braai/recreational facilities are provided ○ Lifeguards are on duty on a seasonal basis • Yellow Sands Caravan Park is located on the eastern bank of the river mouth • No information boards/signage is visible • Good Water Quality (CSIR, 2001)
Bulura	Great Kei	<ul style="list-style-type: none"> • Public access is located on the eastern bank of the river mouth. • Amenities: <ul style="list-style-type: none"> ○ A formalised parking area has been provided but is in poor condition and has sanded up ○ Waste collection bins are provided but poorly maintained ○ A public ablution facility is present but it is not maintained ○ No recreational/braai facilities are present ○ Lifeguards are on duty on a seasonal basis • Residential areas are located on the eastern (Glen Eden) and western (Glen Garriff) banks of the estuary • No information boards/signage are visible • Good water quality (CSIR, 2001)
Chintsa West and East	Great Kei	<ul style="list-style-type: none"> • A public access path has been constructed from the parking area to the beach. • Amenities: <ul style="list-style-type: none"> ○ A public parking area has been provided ○ Waste collection bins are provided ○ Braai facilities are provided on a wooden deck down to the beach ○ A local vendor station has been constructed at the public parking area at Chintsa East ○ Lifeguards are on duty on a seasonal basis • WftC information boards are present at the public parking area at Chintsa East • Residential development is present on the eastern banks of the estuary • Good water quality (CSIR, 2001)
Cefane	Great Kei	<ul style="list-style-type: none"> • A public access road is present that leads to the Cefane River Mouth Resort • Amenities: <ul style="list-style-type: none"> ○ No formalised parking area is provided ○ Waste collection bins are provided ○ No formalised public braai facilities are provided ○ No ablution facilities are present ○ No life guards on duty • There is moderate residential development at the river mouth • No information boards/signage are visible • Very good water quality (CSIR, 2001)
Haga Haga	Great Kei	<ul style="list-style-type: none"> • A public access road is present that facilitates access to the coast. • Amenities: <ul style="list-style-type: none"> ○ No formalised public parking areas have been provided ○ Waste collection bins are provided ○ No formalised braai/recreational facilities are provided ○ No life guards on duty • Moderate residential developments are located on both the western and

Beach	Local Municipality	Comments
		<p>eastern banks of the lower reaches of the estuary</p> <ul style="list-style-type: none"> • No information boards/signage is visible • Good water quality (CSIR, 2001)
Morgan Bay	Great Kei	<ul style="list-style-type: none"> • A public access road provides access to the coast. • Amenities: <ul style="list-style-type: none"> ○ No formalised parking area is provided ○ Waste collection bins are provided ○ No formalised braai facilities are provided. • Information boards/signage is visible • There is moderate residential development along the western banks of the estuary • Good water quality (CSIR, 2001)
Kei Mouth	Great Kei	<ul style="list-style-type: none"> • A public access road facilitates access to the coast. • Amenities: <ul style="list-style-type: none"> ○ A formalised parking area has been provided. ○ A ferry operates to allow vehicles and people to cross the Great Kei river at a fee ○ Public ablution facilities are provided ○ Lifeguards are on duty on a seasonal basis • Moderate development has occurred along the coastline. • WftC information boards are present at specific points along the coastline. • The water quality at Kei Mouth has not yet been determined.
Qolora Mouth	Mnquma	<ul style="list-style-type: none"> • A public access road facilitates access to the coast. • Amenities: <ul style="list-style-type: none"> ○ No parking area has been provided. ○ Public ablution facilities have been provided ○ Lifeguards are on duty on a seasonal basis • The water quality has not been determined
Wavecrest	Mnquma	<ul style="list-style-type: none"> • A public access road facilitates access to the coast. • Amenities: <ul style="list-style-type: none"> ○ No parking area has been provided. ○ No public ablution facilities have been provided ○ Lifeguards are on duty on a seasonal basis • The water quality has not been determined
Cebe	Mnquma	<ul style="list-style-type: none"> • A public access road facilitates access to the coast. • Amenities: <ul style="list-style-type: none"> ○ No parking area has been provided. ○ No public ablution facilities have been provided ○ Lifeguards are on duty on a seasonal basis • The water quality has not been determined
Mazeppa Bay	Mnquma	<ul style="list-style-type: none"> • A public access road facilitates access to the coast. • Amenities: <ul style="list-style-type: none"> ○ No parking area has been provided. ○ Public ablution facilities have been provided ○ Lifeguards are on duty on a seasonal basis • The water quality has not been determined
Qora mouth/Kobb Inn	Mnquma	<ul style="list-style-type: none"> • A public access road facilitates access to the coast. • Amenities: <ul style="list-style-type: none"> ○ No parking area has been provided. ○ Public ablution facilities have been provided ○ Lifeguards are on duty on a seasonal basis • The water quality has not been determined
Jujura	Mbhashe	<ul style="list-style-type: none"> • Amenities: <ul style="list-style-type: none"> ○ No parking area has been provided. ○ No public ablution facilities have been provided

Beach	Local Municipality	Comments
		<ul style="list-style-type: none"> ○ Lifeguards are on duty on a seasonal basis ● The water quality has not been determined
Beechamwoods	Mbhashe	<ul style="list-style-type: none"> ● A public access road facilitates access to the coast. ● Amenities: <ul style="list-style-type: none"> ○ No parking area has been provided. ○ Public ablution facilities have been provided ○ Lifeguards are on duty on a seasonal basis ● The water quality has not been determined
Nqabara	Mbhashe	<ul style="list-style-type: none"> ● A public access road facilitates access to the coast. ● Amenities: <ul style="list-style-type: none"> ○ No parking area has been provided. ○ No public ablution facilities have been provided ○ Lifeguards are on duty on a seasonal basis ● The water quality has not been determined
Dwesa-Cwebe	Mbhashe	<ul style="list-style-type: none"> ● Amenities: <ul style="list-style-type: none"> ○ No parking area has been provided. ○ No public ablution facilities have been provided ○ Lifeguards are on duty on a seasonal basis ● The water quality has not been determined
The Haven	Mbhashe	<ul style="list-style-type: none"> ● Amenities: <ul style="list-style-type: none"> ○ No parking area has been provided. ○ No public ablution facilities have been provided ○ Lifeguards are on duty on a seasonal basis ● The water quality has not been determined
Nkanya	Mbhashe	<ul style="list-style-type: none"> ● A public access road facilitates access to the coast. ● Amenities: <ul style="list-style-type: none"> ○ No parking area has been provided. ○ No public ablution facilities have been provided ○ Lifeguards are on duty on a seasonal basis ● The water quality has not been determined
Xhora	Mbhashe	<ul style="list-style-type: none"> ● Amenities: <ul style="list-style-type: none"> ○ No parking area has been provided. ○ No public ablution facilities have been provided ○ Lifeguards are on duty on a seasonal basis ● The water quality has not been determined
Bulungula	Mbhashe	<ul style="list-style-type: none"> ● A public access road facilitates access to the coast. ● Amenities: <ul style="list-style-type: none"> ○ No parking area has been provided. ○ No public ablution facilities have been provided – members of the public may use the facilities at the Bulungula Backpackers ○ Lifeguards are on duty on a seasonal basis ● The water quality has not been determined
Mpame	Mbhashe	<ul style="list-style-type: none"> ● Amenities: <ul style="list-style-type: none"> ○ No parking area has been provided. ○ No public ablution facilities have been provided ○ Lifeguards are on duty on a seasonal basis ● The water quality has not been determined

Blue Flag Programme

The Blue Flag Beach Programme is an international ecolabel awarded to municipalities whose beaches meet a specific list of criteria, spanning safety, amenities, water quality, environmental information and environmental management. Because of its international appeal, the Blue Flag programme promotes tourism as visitors from Europe are familiar with and prefer beaches with the Blue Flag status.

Water quality is the overriding determining factor for the awarding of the Blue Flag. The main parameters considered in water quality monitoring for the Blue Flag are the presence of the bacteria *Escherichia coli* and intestinal enterococci. The programme specifies that an independent laboratory provide water quality testing. It is thus critical that, in investigating the feasibility of participating in the Blue Flag, the municipality must be satisfied that there:

- (i) There is an accredited, independent laboratory to perform water quality testing, and such as laboratory is within a six-hour range of distance from the sampling site – bacterial samples must be tested within six hours of sampling;
- (ii) There is security on the beach during Blue Flag hours, either by way of law enforcement/police patrols, or a private security company;
- (iii) There is an adequate number of lifeguards on the beach, with the necessary equipment to perform their duties;
- (iv) Ablution facilities are cleaned on an ongoing basis during Blue Flag hours;
- (v) Ablution facilities have a baby changing station, soap and paper towel dispensers;
- (vi) There is adequate signage informing the public on the natural environment;
- (vii) There are environmental management programmes for the municipality;
- (viii) Litter is removed from the beach on an ongoing basis during Blue Flag hours; and
- (ix) There is a recycling programme during the Blue Flag hours.

The ADM must aim to achieve Blue Flag certification for at least 1 beach per Local Municipality. Hamburg Beach has achieved Blue Flag status already. It is recommended that the ADM also aim to achieve Blue Flag Status for the following beaches:

- Chintsa
- Mazeppa Bay; and
- Bulungula

Detailed information regarding each of the 33 criteria as well as the application process can be sourced from the Blue Flag Beach website – www.blueflag.org.

Reflecting on the above as well as feed-back from stakeholders, the future needs in terms of the facilitation of coastal public access are as follows:

- **The facilitation of physical and equitable public access to areas where access has not been adequately provided for along the ADM coastal zone (e.g. Mgwalana, Fish River)**
- **Assist the coastal Local Municipalities in improving the condition of existing public access points and associated public amenities**
- **An increase the number of beaches with Blue Flag Status**

2.10 Awareness, education, training, capacity building and information

Awareness and education

Awareness and education is key to promoting integrated coastal management. It is important that communities that are currently utilising the coast for recreational and economic purposes also understand the importance of sustainable utilisation of coastal resources.

National initiatives exist that promote the conservation of the coastline, including the ADM coastline. These awareness programmes include:

- World Water Day – 22nd March
- Earth Day – 22nd April
- World Environment Day – 5th June
- World Ocean Day – 8th June
- International Coastal Clean Up Week – 16th -19th September
- International Coastal Clean-up Day – 19th September
- National Marine Week – October

The ADM should ensure it is are involved in the campaigns mentioned above by collaborating with institutions such as DEDEAT, East London Museum, East London Aquarium, Hamburg Environmental Education Center, WESSA, WftC and coastal Local Municipalities.

Educational centers

Educational centers can provide a good platform for local communities to be educated on the importance of effectively managing the coastline. An Environmental Education Center has been developed in Hamburg and a Shell Museum is located in Kei Mouth. Educational centers that focus on coastal education could be developed in the other coastal Local Municipalities within the ADM.

ADM Coastal Committee

It is also important that an effective public participation programme take place when coastal developments and coastal spatial plans are drafted and implemented. The ADM has a Coastal Committee that meets quarterly in which stakeholders can participate. However, all relevant coastal stakeholders need to be included in these meetings and the coastal stakeholder database needs to be continuously updated.

Coastal legislation, policies, plans and frameworks are not always freely available to communities, particularly rural communities within the coastal zone of the ADM. When changes are made to these documents, they are also not always affectively communicated and this can cause issues when coastal developments and activities are proposed. The ADM Coastal Committee could provide the platform for coastal stakeholders to be notified of relevant coastal policies and legislation, as well as any changes made to these policies and legislation.

Working for the Coast (WftC) and the Extended Public Works Program (EPWP)

There are several programmes and initiatives that are headed by the National DEA Affairs that can assist the municipalities in managing environmental issues, especially along the coastline. A number of Working for the Coast and EPWPs programmes are being implemented within the ADM. Some of these projects include:

- Servicing Fish River, Birha and Hamburg beaches by picking up plastics, paper, fishing line, bottles, etc.
- Alien eradication, in particular Birha and Hamburg
- Upgrading and maintenance of coastal infrastructure like ablution facilities, braai facilities, litter bins, pathways, grass cutting, trimming and picnic areas
- Servicing Kwelera/Surinse, Chintsa West, Chintsa East, Haga Haga, Morgan Bay and Kei Mouth beaches by picking up plastics, paper, fishing line, bottles, etc.
- Alien species eradication, in particular Chintsa East and Haga Haga
- Rehabilitation of coastal dunes in Chintsa West
- Construction of a viewing deck and walk way in Chintsa West.
- Installation of lights at Qolora Mouth, Mazeppa Bay, Beechamwoods and Mpame beaches
- Construction of ablution facilities at Beechamwoods and Mpame beaches
- General coast cleaning, coast rehabilitation, installation of litter bins, installation of signage, maintenance of the existing structures, refurbishment and construction of braai stands along the Mnquma and Mbhashe Local Municipality coastlines.

Training of municipal officials

No formalised training programmes exist within the ADM that is focused on effective Integrated Coastal Management or coastal issues in general. In order for effective and sustainable coastal development to be considered by the ADM, awareness needs to be created around current coastal issues, existing coastal legislation and the effective implementation thereof and the effects of overexploitation of coastal resources and the impact on socio-economic aspects of the sustainable utilisation of those resources.

The ADM Coastal Committee meetings also provide a valuable platform for local municipal officials to come be exposed to coastal issues and ways in which to practically address these issues.

Community development

In order to create a sense of custodianship of the coast within the ADM, training programmes need to be implemented where communities are trained to fulfil roles such as life guards, rangers, peace officers, beach maintenance personnel, etc. Through these training programmes, job creation for coastal communities is facilitated.

Reflecting on the above as well as feed-back from stakeholders, the future needs in terms of education, awareness and training with regards to effective Integrated Coastal Management are as follows:

- **Creation of a central, publically accessible database of all relevant coastal plans, policies and legislation Update the coastal stakeholder database.**
- **Develop a coastal stakeholder database that is continuously updated.**
- **The facilitation of coastal education and awareness programmes within the ADM.**
- **Training of coastal communities to fulfil roles such as life guards, rangers, peace officers, beach maintenances personnel, etc. This will facilitate the creation of jobs for coastal communities.**

2.11 Compliance, monitoring and enforcement

Various items of legislation exist that require that permits be issued and compliance and monitoring activities take place. The ICMA is fundamental in the management of the coastal zone in terms of enforcing and monitoring activities within the coastal zone.

Illegal Structures within the Coastal Zone

Along the ADM coastline, an aerial survey identified a number of potentially illegal activities or developments that require monitoring and enforcement. Structures such as boardwalks, decks and jetties require that an Environmental Authorisation be issued.

Off Road Vehicles

The use of vehicles in coastal areas is regulated by GN R. 496 National Environmental Management: Integrated Coastal Management Act (24/2008): Control of use of vehicles in the Coastal Area Regulations (2014). Vehicles may not enter the coastal area without an appropriate permit issues in terms of these Regulations. However, permits for use of vehicles in coastal conservation areas (within 1 kilometer of the high-water mark) within the Ciskei and Tranksi may be issued in term of the Ciskeian Nature Conservation Act (Act No. 10 of 1987) and Transkei Decree (Act No. 9 of 1992) respectively.

Shell-grit Collection and Sand Mining

Illegal sand mining is also an issue within the coastal zone of the ADM. Borrowpits and quarries require that mining permits and mining rights be issued by the DMR. This process is both costly and time consuming, which results in communities mining areas illegally. Mining activities in the ADM coastal zone need to be assessed, monitored and, if found to be illegal, appropriate enforcement actions be undertaken.

DMR have been approached to provide information pertaining to mining sites within the ADM that have been issued with mining rights or mining permits. The DMR (Mr Azwihangwisi Mulaudzi) responded by saying that the information is sensitive due to third party involvement. Access to this information would have to be applied for through the Promotion of Access to Information Act (Act No 2 of 2000).

Abalone poaching

Abalone poaching occurs throughout the ADMs coastal zone.

Illegal Foresting

Cases of illegal foresting have also been reported at Khabonqaba and Gqungqe.

Appointment of EMIs

No EMIs have been appointed for the ADM region. Essentially, EMIs are appointed under NEMA, and their role is to ensure that environmental legislation is followed and enforced. The EMIs have the powers to:

- Investigate: question witnesses, inspect and remove articles, take photographs and audio-visual recordings, take samples and remove waste;
- Inspect: enter premises to ascertain whether legislation is being followed and seize evidence of criminal activity;
- Enforce: search premises, containers, vessels, vehicles, aircraft and pack animals; seize evidence and contraband; establish road blocks and make arrests.; and
- Administrate: issue compliance notices and admission of guilt fines.

Issues of environmental transgressions and noncompliance require of municipalities the ability to respond and enforce the relevant laws. At this stage, the DEDEAT is the designated authority to enforce environmental and coastal management laws. For the ADM to be able to deal with transgressions such as the illegal cottages, appointment of Environmental Management Inspectors (EMIs) by the municipality would contribute to curbing the challenges of illegal cottages, unauthorised use of vehicle in the coastal zone, and other environmental offences.

Through the stakeholder consultation process, coastal communities, particularly along the Ngqushwa and Great Kei coastlines, have suggested that community watch forums be established where there is close cooperation between themselves, SAPS, DEDEAT and the municipality to maintain effective monitoring of illegal activities along the coast.

Reflecting on the above as well as feed-back from stakeholders, the future needs in terms of compliance, monitoring and enforcement are as follows:

- **Increase enforcement capacity to enforce coastal and environmental compliance through the appointment of EMIs and/or peace officers specific to coastal compliance as well as the development of a community watch programme**

2.12 Natural Resource Management

Ecosystem integrity

The majority of the ADM coastline is in relatively good condition due to the limited access available to the coast. Few large settlements or cities are located along the ADM coastline. The greatest threats to the ecological integrity of the ADM coastline include unregulated and illegal exploitation of coastal resources, such as abalone poaching and illegal sand mining, coastal sprawl and pollution of coastal waters and estuaries by the lack of provision of bulk sewerage infrastructure.

The ADM works with other government organisations such as DEDEAT and ECPTA to try and conserve the ecological integrity of the ADM coastline. In order to preserve the ecological integrity of the ADM coastline, sensitive and protected areas need to be clearly demarcated in spatial development frameworks and plans such as the ADM SDF, Coastal EMF and the Wild Coast EMP. These spatial plans need to be consulted when any development or activities occur within the coastal zone.

Protected areas

The ADM has a reasonably well protected coastline due to a number of nature reserves and marine protected areas located along the coast (Figure 2.19). However, the exact percentage of land within the coastal zone that is formally protected is not known. These nature reserves include:

- Hamburg Nature Reserve
- East London Coast Nature Reserve
- Double Mouth Nature Reserve
- Kei Mouth State Reserve
- Dewsa-Cwebe Nature Reserve
- Nyara River Mouth to Kei River Mouth Marine Protected Area

The protected areas located within the ADM are managed by the ECPTA in conjunction with DEDEAT. Apart for the public amenities at the Double Mouth Nature Reserve and the Dwesa-Cwebe Nature Reserve, none of the other nature reserves along the ADM coastline have any public amenities and the boundary fences have not been maintained.

It is important that the ADM incorporate the boundaries of protected areas into the SDF as the location of protected areas has an impact on development. NEMA sets a buffer zone around protected areas where development within these areas required an Environmental Impact Assessment. It is recommended that these areas are included in the ADM SDF and any other municipal spatial planning tools.

The Morgan Bay cliffs and double mouth area are areas of the ADM coastline that contain high aesthetic and ecological value. The integrity of the ecosystems associated with the cliffs and the double mouth areas should be preserved and protected from development. It is therefore recommended that the Morgan Bay Cliffs be formally proclaimed as a Nature Reserve under the National Environmental Management: Protected Areas Act (Act No 57 of 2003).

Sand mining

Sand mining is a persisting issue along the entirety of the ADM coastline, particularly along the Wild Coast. A Report titled "Strategic investigation into the sand-mining activities in the coastal zone of the Wild Coast" was compiled in 2004 by Coastal and Environmental Services (CES), MBB Consulting Services (EC) Inc. and Masibambane Specialist Legal Consultants.

From the report it was found that:

- "Sand mining was an activity that takes place along the entire coastline, possibly in all coastal and riverine villages.
- The intensity of use of each site was closely related to proximity to an economically active and developing area.
- Proximity to a surfaced road had an influence on the extent of activities.
- In the Pondoland area there was some level of control on mining, whether it was through tribal authorities or the municipality in the case of , whereas there is limited control further south of the study area; and
- The sites were found in all systems (dune, river, estuary), although there was a dominance of riverine / estuarine sites."

The report was an initial step towards an objective of developing sustainable and responsible utilisation of the sand resource along the Wild Coast.

The WC EMP also highlights the issue of sand mining, which results in damage of ecosystems and loss of biodiversity along sections of the Wild Coast. The WC EMP indicates that the majority of the offenders reside outside of the affected areas, with local communities receiving little or no benefit from the sand-mining activities. Furthermore, the WC EMP points out that even though legalizing some sites is more desirable than closing all of them, there are major challenges when identifying the legitimate holder of a mining license, and to who and how benefits from the sale of sand should be distributed. It is recommended that a detailed environmental, social and economic assessment be carried to for the proposed formalisation of illegal sand mines along the ADM coastline.

Sand mining and shell grit collection activities at Hamburg are permitted activities, where permits have been obtained from DAFF for both the collection activities and access to the beach.

Indigenous forests

In general, the conservation status of indigenous coastal forest is uncertain (Berliner, 2005). Many forests located within the ADM are found within poor rural areas where they play an important part in the livelihoods, culture and local economy of the people. Illegal forestry is still regarded as a major threat to the formal indigenous forestry sector in the ADM. Illegal harvesting of forest resources has been observed at Khobonqaba and Gqunqe (Kibi, pers comm).

According to Berliner (2005), preserving the connectivity between remaining remnants of natural habitat and

protected areas has been generally neglected in the design of reserves. Given the high degree of fragmentation, maintenance of habitat connectivity is considered to be a critical consideration for the long-term persistence of forest biodiversity. In recent years, there has been a growing realisation that the conservation of ecological process requires a broader landscape approach integrating different forms of land use with conservation.

Small scale fishing

Small-scale fishing activities are taking place at numerous locations along the ADM coastline. Even though fisheries management is not a mandate of the ADM (it is the mandate of the Department of Agriculture, Forestry and Fisheries – DAFF), the ADM, together with the Local Municipalities, must still ensure the provision of an enabling environment for such fishing activities, such as infrastructure support, economic development initiatives, etc.

Based on the above as well as feed-back from stakeholders, the future needs in terms of natural resource management are as follows:

- **A review of sensitive and protected coastal areas and the formal proclamation of the Morgan Bay Cliffs as a Nature Reserve**
- **The development of a Marine Resource Utilisation Management Programme for the ADM coastal zone**
- **Undertaking of an environmental, social and economic feasibility assessment for the formalisation of illegal sand mines along the ADM coastline**

3 ROLES AND RESPONSIBILITIES FOR COASTAL MANAGEMENT

3.1 Mandatory Roles and Responsibilities in terms of the ICMA

The ICMA is the central piece of legislation that highlights the roles and responsibilities of government departments and other role players with regards to coastal management. While the roles and responsibilities of the National and Provincial government are important to consider at local government level, this chapter will only highlight those roles and responsibilities pertaining to the ADM. Table 12 summarises the key roles and responsibilities of the ADM in coastal management in terms of the ICMA.

Table 12: The key roles and responsibilities of the ADM and other supporting government bodies in terms of the ICMA

Aspect	Related Section/s In The ICMA	Brief Description of Role and Responsibility	Assistance from other Organs of State
Access to coastal public property	18, 19, 20	Ensuring that the public has equitable access to coastal public property by designating coastal access land, designate in by-laws strips of coastal access land to promote access to CPP along the coast, withdraw inappropriate coastal access land and Follow an environmentally sensitive and socially responsible process in designating coastal access land. This is the responsibility of the LM.	DEA, DEDEAT
Coastal management line demarcation on zoning maps	25	Delineate coastal management lines in municipal zoning schemes maps (should participate in any provincial coastal management line determinations, but this is discretionary; alternatively can work with province to determine coastal management lines. Province will have to Gazette).	DEDEAT
Determining and adjusting coastal boundaries of coastal access land	29	Ensure specified considerations are taken into account when determining or adjusting a coastal boundary of coastal access land.	DEA, DEDEAT
Marking coastal boundaries zoning maps	31	Delineate coastal boundaries determined or adjusted in terms of S26 on zoning scheme maps	

Aspect	Related Section/s In The ICMA	Brief Description of Role and Responsibility	Assistance from other Organs of State
Municipal Coastal Management Programmes	48, 49, 55	Prepare and adopt a municipal coastal management programme for managing the coastal zone or specific parts of the coastal zone in the municipality.	DEA, DEDEAT
Consistency and alignment between Municipal Coastal Management Programmes and other statutory plans	51, 52	Ensure that any plan, policy or programme adopted by an organ of state that may affect coastal management is consistent and aligned with municipal coastal management programmes, which in turn is aligned with provincial coastal management programmes and the national coastal management programme and ensure that IDPs (including its spatial development framework) is consistent with other statutory plans [See S52 (1) (a-f)] adopted by either a national or a provincial organ of state.	
Consultation and public participation	53	Adequate consultation and public participation precede the exercising of a power by a municipality, which this Act requires to be exercised in accordance with this section.	DEDEAT
Implementation of land use legislation in the coastal protection zone	62	In implementing any legislation that regulates the planning or development of land, in a manner that conforms to the principles of co-operative governance contained in Chapter 3 of the Constitution, apply that legislation in relation to land in the coastal protection zone in a way that gives effect to the purposes for which the protection zone is established as set out in section 17.	DEA, DEDEAT, ECPTA

Please refer to the NCMP (2014) for the roles and responsibilities of the National and Provincial spheres of government with regards to coastal management, as described in the ICMA.

3.2 Collaborative Partnerships for Coastal Management

In order to effectively achieve integrated coastal management in the ADM, cooperative governance must be promoted where methods and approaches are defined to ensure that optimal involvement of all coastal stakeholders in decision making processes for coastal management projects and initiatives highlighted in the ADM CMP are achieved. The NCMP (2014) describes examples of collaborative partnerships that will be helpful in achieving the goals and objectives highlighted in the ADM CMP include the following:

- Involvement of communities in coastal management by engaging with community leaders, ward councillors, rate payers associations, etc.
- The improvement of partnerships between government (both Provincial and National), civil society (through effective public participation) and the private sector (local businesses, corporate companies, etc.)
- The strengthening of relationships between communities and conservation agencies (DEDEAT and ECPTA)
- Improved conflict-resolution mechanisms
- Improved communication between spheres of government and institutional structures
- Improved co-ordination between sectors within the ADM (e.g.: Community Services, Engineering Services, etc.)
- Encouraging sustainable development that adheres to the various pieces related to environmental and coastal management
- Inclusion of public review into land use planning processes
- Reduction of bureaucracy of development proposals
- Elevating the priority of coastal management by incorporating goals, objectives and actions into the ADM IDP

- Integration of coastal management principals into plans and strategies for all sectors of the ADM (SDF, IDP, LED, etc.)

3.3 Development of bylaws

Section 11 of the Local Municipal Government: Municipal Systems Act (Act No. 32 of 2000) clearly defines the executive and legislative authority that can be exercised by a municipality. Section 11(2) and (3) states the following:

- (2) A municipality may exercise executive and legislative authority within its boundaries only, but may, by written agreement with another municipality and subject to Chapter 5 of the Municipal Structures Act and other applicable national legislation, exercise executive authority in the area of that other municipality.
- (3) A municipality exercises its legislative or executive authority by—
- (a) developing and adopting policies, plans, strategies and programmes, including setting targets for delivery;
 - (b) promoting and undertaking development;
 - (c) establishing and maintaining an administration;
 - (d) administering and regulating its internal affairs and the local government affairs of the local community;
 - (e) implementing applicable national and provincial legislation and its by-laws;
 - (f) providing municipal services to the local community, or appointing appropriate service providers in accordance with the criteria and process set out in section 78;
 - (g) monitoring and, where appropriate, regulating municipal services where those services are provided by service providers other than the municipality;
 - (h) preparing, approving and implementing its budgets;
 - (i) imposing and recovering rates, taxes, levies, duties, service fees and surcharges on fees, including setting and implementing tariff, rates and tax and debt collection policies;
 - (j) monitoring the impact and effectiveness of any services, policies, programmes or plans;
 - (k) establishing and implementing performance management systems;
 - (l) promoting a safe and healthy environment;
 - (m) passing by-laws and taking decisions on any of the above-mentioned matters; and
 - (n) doing anything else within its legislative and executive competence.

Bylaws can act as a tool to provide capacity for the ADM to enforce laws within the area of their jurisdiction. The Local Government Municipal Systems Act (Act No 32 of 2000) Section 12 states that only a member of committee of a municipal council may introduce a bylaw in the council after which it must be published in the Provincial Gazette.

The National Sea Shore Act (Act No. 21 of 1935) also makes provision for the development of by-laws to regulate activities within coastal areas.

4 VISION AND PRIORITIES FOR COASTAL MANAGEMENT

4.1 The Amathole District Municipality Vision for the Coastline

South Africa's Constitution clarifies the objectives of local government as:

- To provide a democratic and accountable government for local communities;
- To ensure the provision of services to communities in a sustainable manner;
- To promote social and economic development;
- To promote a safe and healthy environment; and
- To encourage the involvement of communities and community organisations in the matters of local government.

The vision of the ADM as expressed in its 2015/2016 IDP review captures these objectives:

“Commitment towards selfless, excellent and sustainable service to all our communities.”

The vision for the Amathole DM CMP has been adapted from the EC CMP vision, which also captures the vision of the NCMP(2014). The vision was agreed upon during the stakeholder engagement workshops and therefore has been adopted for the purposes of this CMP:

We, the people of Amathole District Municipality, recognise the intrinsic value, and appreciate the scenic beauty,

diversity and richness of our unique coastline.

We aim to take ownership of the coast and foster a spirit of custodianship and shared responsibility as our coast is a unique shared asset, which has social, cultural, ecological and economic value.

We aspire to manage the coast in an integrated manner that takes both the cultural and biological value into account.

We strive to utilise the natural resources of our diverse coastline in a sustainable and equitable manner, which maximises the benefits for all people of the province and ensures the long term maintenance of biodiversity and ecological integrity of coastal habitats.

We strive to promote sustainable development and alleviate poverty on an equitable and participatory manner that considers the requirements of all stakeholders and takes cognisance of the conservation and biological importance of our coastline as well as national and provincial interests.

We seek to guide the management of the Amathole coast in a way that eliminates the threats of unsustainable utilisation of the coastal resources while optimising the opportunities that can be derived from the coastal zone.

The following guiding principles for coastal management within the ADM are closely aligned with the principals set out in the EC CMP and the NCMP:

Economic development

- Coastal economic development opportunities must be optimised to meet society's needs and to promote the well being of coastal communities through sustainable activities that do not compromise the long term opportunities for people living in the coastal zone.

Social Equity

- Coastal Management efforts must ensure that all people, including future generations, enjoy the rights of human dignity, equality and freedom. Access to resources and benefits from the main opportunities provided by coastal resources must be made available to the public in an equitable manner.

Ecological integrity

- The diversity, health and productivity of coastal ecosystems must be maintained and, where appropriate, rehabilitated.

Holism

- The coast must be treated as a distinctive and indivisible system, recognising the inter-relationships between coastal users and ecosystems and between land, sea and air.

Risk Aversion and Precaution

- Coastal management efforts must adopt a risk-averse and precautionary approach under conditions of uncertainty.

Accountability and Responsibility

- Coastal management is a shared responsibility. All people must be held responsible for the consequence of their actions or lack of actions, including financial responsibility for negative impacts.

Duty of Care

- All people and organisations must act with due care to avoid negative impacts on the coastal environment and coastal resources.

Integration and Participation

- A dedicated, co-ordinated and integrated coastal management approach must be developed and conducted in a participatory, inclusive and transparent manner.

Co-operative governance

- Partnerships between government, the private sector and civil society must be built in order to ensure co-responsibility for coastal management and to empower stakeholders to participate effectively.

Adaptive Management Approach

- Incrementally adjusting practises based on learning through common sense, experience, experimenting and monitoring.

4.2 The Amathole District Municipality's Priorities for Coastal Management

The Situational Analysis (Chapter 2) describes the state of the ADMs coastal ecosystems. The Situational Analysis along with contributions from multiple stakeholder engagement workshops held in each coastal LM contributed significantly to the assessment of the status of coastal management within the ADM.

The ADM does not have the resources or the capacity to address every coastal issue or challenge with which it is faced. It is also good coastal management practice to focus available resources on those issues that are deemed to be significant and require urgent response and to embark on a "cycle of improvement".

To this end, the ADM coastal issues identified in the Situational Analysis were prioritised according to a set of criteria. These criteria included:

- Magnitude of the issue
- Severity of the issue
- Risk associated with the issue
- Effect on the image of the ADM
- Temporal effect of the issue
- Opportunity costs to the ADM as a result of the issue

Although subjective, the prioritisation process adopted encourages a closer assessment of issues (scale and magnitude), and to allocate scores. While a level of subjectivity was implicit in the process, this process helped to provide some measure of priority. It is believed that the final set of high priority issues fairly reflects the priority challenges that ADM should address in this CMP. Out of this process, seven priorities emerged (in no particular order of importance):

- **Priority 1:** Coastal Infrastructure Development (CID)
- **Priority 2:** Coastal Public Access and Amenities (CPA)
- **Priority 3:** Coastal Spatial Planning (CSP)
- **Priority 4:** Education and awareness (EA)
- **Priority 5:** Estuary management (EM)
- **Priority 6:** Management of coastal resources (MCR)
- **Priority 7:** Water quality and pollution management (WQPM)

Priority 1: Development of infrastructure within the coastal zone

Goal: The promotion and facilitation of development within the coastal zone in the most environmentally appropriate manner possible, taking into account the threat of climate change impacts on development within the coastal zone.

Coastal infrastructure is important in the facilitation of tourism, economic development and the provision of public access to the coast. A lack of infrastructure and services has hindered development of the coastal zone in the ADM. However, the economic and infrastructure needs within the coastal areas of the ADM must be addressed in an environmentally appropriate manner that fulfils the objectives of the ICMA.

The development and maintenance of infrastructure falls within the mandate of the LMs. However, it is imperative that the ADM provide assistance to the Local Municipalities through the provision of resources to address issue related to the development and maintenance of infrastructure within the coastal zone.. The ADM has developed a climate change adaption strategy that needs to inform the LMs in order to ensure that climate change impacts within the coastal zone are adequately mitigated.

Priority 2: Facilitation of coastal public access and provision of public amenities

Goal: To ensure that safe and equitable access to the coast for all people within the ADM is facilitated and maintained by identifying areas that require the provision of new coastal access points and by ensuring that existing coastal access points, and the public amenities associated thereof, are in a state that conforms with the requirements set out in the ICMA.

To gain Blue Flag Beach Status for at least one beach within each coastal Local Municipality.

The provision of public access to the coast is clearly addressed in the ICMA. Within the ADM, public access to the coast is not fully facilitated due to the lack of public access, amenities and awareness within the coastal zone, the poor condition of existing access roads to coastal areas and the lack of open communication between the communities and authorities with regards to the provision of public access within the coastal zone.

The lack of access to the coast could result in the loss of tourism opportunities limit economic benefit to communities within the coastal zone. The provision and maintenance of public amenities falls within the mandate of the LMs. However, the ADM needs to provide assistance to the LMs buy assisting with the provision of resources to enable the LMs to promote coastal tourism.

Priority 3: Spatial Planning tools for development in the coastal zone

Goal: To develop spatial planning guidelines for the sustainable development of the ADM coastal zone consistent with ICMA and other legislation and policy requirements, namely:

- Coastal Protection Zone
- Coastal Management Lines
- Coastal Access
- Climate change risks
- Coastal Environmental Management Framework
- Wild Coast Environmental Management Programme

This can be achieved by incorporating appropriate spatial principles into the ADM SDF, defining and establishing urban edges for all urban nodes in the coastal zone and ensuring environmentally sensitive areas and 'no-go' development areas, identified in the Coast EMF are pro-actively integrated by the SDF.

The integrity of marine and coastal resources is vulnerable to a variety impacts largely resulting from human activities such as coastal urban and rural sprawl, uncontrolled and unmonitored development in coastal areas and development that may pose a threat to eco-tourism through environment degradation.

There will inevitably be impacts due to the increasing development along the ADM coastal. However, in order to preserve the coastline and prevent degradation, it is necessary to provide guidelines and a framework to inform spatial planning with all development along the coastal zone.

Priority 4: Coastal awareness and education

Goal: Instil a sense of custodianship of the coast amongst all coastal communities through education, training and awareness of coastal conservation and management by creating centralised, publically accessible database of all municipal plans relevant to coastal management, coastal bylaws and coastal legislation and regulations, updating and maintaining the coastal stakeholder database and the development of a coastal education and awareness programme.

The ADM coastline is rich in biodiversity and has many estuaries, beaches and rocky shores that are in good condition. It is important to conserve and effectively manage this natural heritage through awareness and education of the coastline. This requires the coordination and cooperation of the communities, authorities and private sector. Community development needs to be promoted through the training of community members to serve as lifeguards, rangers, etc.

Priority 5: Management of estuary resources

Goal: The development and implementation of estuary management plans for the Keiskamma, Great Kei and Mbashe estuaries in accordance with the National Estuary Management Protocol.

Estuaries are sensitive unique environments and are susceptible to pollution and degradation from sources upstream and the surrounding areas. ADM has a large number of estuaries along its coastline, most of which are in good condition. It is important to develop and implement strategies for managing these estuaries to preserve their ecological integrity.

Priority 6: Marine resource sustainability through effective management

Goal: Develop a coordinated and transparent programme for the monitoring and control of marine resource consumption and utilisation through the coordination and alignment of all conservation plans, the development of a Marine Resource Utilisation Monitoring programme and by strengthening the ADMs coastal enforcement capabilities. To gain Blue Flag Beach Status for at least one beach within each coastal Local Municipality. Undertake an environmental and socio-economic feasibility assessment for the potential formalisation of sand mines along the ADM coast.

The marine environment includes inshore and offshore reefs, sandy beaches and rocky shores. This area is an extremely valuable asset and resource due to its aesthetic value, ecological and biological diversity and economic potential. However, the integrity of the marine resources is vulnerable to a variety of impacts largely resulting from varying levels of human induced pressure. Numerous plant and animal populations (such as abalone, limpets, mussels and lobster and other shellfish, seaweed, bait species, etc.) along the ADM coastline are subject to varying degrees of exploitation for subsistence and non-subsistence purposes, both permitted and un-permitted. Certain coastal communities along the ADM coastline are dependent on harvesting various marine organisms either for food or to generate an income as well as sand mining. Many of these harvesting and mining practices continue unchecked and in an unsustainable manner resulting in over exploitation and degradation of the coastal zone.

Priority 7: Management of water quality and pollution within the coastal zone

Goal: Address coastal pollution through the establishment of an ADM coastal water and sanitation committee which will review existing ADM estuary/swimming beach monitoring programmes (locations and parameters), engage with DEA: Oceans and Coasts regarding appropriate existing programmes that the ADM may be able to take part in (e.g. WftC programmes) and to review current reporting procedures used by ADM, DWS and DEA: Oceans and Coasts

Develop a Water Quality and Pollution Monitoring (WQM) Programme for disclosure at DM level which will include the identification of point and non-point pollution sources, coastal water quality objectives and appropriate responses to identified pollution events. The WQPM Programme will bear specific reference to beaches that either have Blue Flag Beach status (i.e. Hamburg) or those that will be put forward to receive Blue Flag Beach status.

Develop by-laws for the management of discharge of pollution into the coastal zone.

Development within the coastal zone in ADM is focused around estuaries and swimming beaches. According to a survey conducted by the CSIR in 2001, many of the estuaries along the ADM coastline are in good condition but are starting to deteriorate. It is vital to ensure that the water quality of these estuaries and swimming beaches is of the highest quality for recreational and economic activities and that pollution is managed to prevent the contamination of estuaries and swimming beaches and to prevent the degradation of the ecological integrity of the ADM coastline.

5 COASTAL MANAGEMENT OBJECTIVES AND ACTIONS

The vision for the ADM coastline, along with the seven priorities identified in the previous chapter (Chapter 4) provides the focus for coastal management for the ADM. In order to address the seven priorities and to promote the implementation of the ADM CMP, specific management objectives and actions are required.

This chapter addresses the ADMs coastal management objectives, with respect to the seven coastal management priorities identified, with focus being drawn on the municipal mandate in terms of the ICMA while ensuring alignment with the national management objectives as well.

Specific actions have been developed for the ADM to achieve the ADMs CMP objectives. These actions have been developed based on the Situational Analysis and stakeholder consultation.

5.1 Priority 1: Coastal Infrastructure Development

Management Objective 1.1: Review of existing coastal development within the ADMs coastal zone		
Actions	Targets	
	Completion date	Performance indicators
Delineation of existing coastal nodes within the ADM coastal zone.	March 2016	Clearly demarcated boundaries of coastal nodes incorporated within the ADMs SDF.
A report on the state of the sewerage infrastructure in each coastal node from each coastal Local Municipality.	March 2016	State of sewage infrastructure in the coastal zone summarised in Situational Analysis of the ADM IDP.
Identification of infrastructure vulnerable to storm surges and sea level rise within the ADMs coastal zone.	March 2016	A geo-database of all infrastructure in the coastal zone that is vulnerable to climate change.
Identification of coastal lands which have inappropriate zonings or rights for development.	March 2016	A geo-database of the current zonings and rights for development in the coastal zone.
Management Objective 1.2: Provision of bulk sanitation and water infrastructure to coastal development nodes		
Actions	Targets	
	Completion date	Performance indicators
Ensure that the following sanitation projects are completed, as per the ADM Water Services Development Plan: Hamburg, Chintsa, Kei Mouth, Dwesa/Cwebe, Morgan Bay and Mazeppa Bay.	March 2020	Operational bulk sanitation infrastructure at the following coastal nodes: Hamburg, Chintsa, Kei Mouth, Dwesa/Cwebe, Morgan Bay and Mazeppa Bay.
Provide bulk sanitation to the following coastal nodes: Mgwalana, Birha, Qolora and Wavecrest	March 2020	Operational bulk sanitation infrastructure at the following coastal nodes: Mgwalana, Birha, Qolora and Wavecrest.
Management Objective 1.3: The development of tourism infrastructure within the ADM coastal zone		
Actions	Targets	
	Completion date	Performance indicators
Identify at least one key location within each coastal Local Municipality where infrastructure is required to increase coastal tourism potential	March 2017	Identification of four key coastal areas requiring infrastructure for the development of tourism incorporated into the ADM Tourism Master Plan.

5.2 Priority 2: Coastal Public Access and Amenities

Management Objective 2.1: The facilitation of physical and equitable public access to the ADM coastal zone		
Actions	Targets	
	Completion date	Performance indicators
Maintain an inventory of all coastal access points and their legal status (e.g: Mtati and Yellowsands)	December 2016	Geo-database of all coastal access points and their legal status.
Assist the Ngqushwa Local Municipality to resolve access issues at Mgwalana and Fish River.	March 2017	Public access points at Mgwalana and Fish River.
Identify at least one new coastal public access point with associated public amenity infrastructure in each coastal Local Municipality	March 2019	Four new coastal public access points along the ADM coastline, including public amenity infrastructure.
Management Objective 2.2: Improve the condition of existing public access points and associated public amenities		
Actions	Targets	
	Completion date	Performance indicators
Assist the Local Municipalities to upgrade the following existing coastal	December 2017	Upgraded coastal public amenities at Hamburg, Morgan Bay and Kei Mouth.

public amenities: Hamburg, Morgan Bay and Kei Mouth.		
Management Objective 2.3: Increase the number of beaches with Blue Flag Status		
Actions	Targets	
	Completion date	Performance indicators
Nominate one beach from each coastal LMs to receive Blue Flag Beach Status.	March 2016	List of four beached nominated for Blue Flag Status
Initiate process to achieve Blue Flag Status for each nominated beach within the ADM	March 2020	Achieve Blue Flag Status for four beaches within the ADM

5.3 Priority 3: Coastal Spatial Planning

Management Objective 3.1: Develop spatial planning guidelines for the sustainable development of the ADM coastal zone		
Actions	Targets	
	Completion date	Performance indicators
Develop ADM Coastal Spatial Planning Guidelines in alignment with the ICMA – Refer to sample guidelines in Appendix D	March 2016	Developed ADM Coastal Spatial Planning Guideline
Incorporate the following key spatial principals into the next SDF review: Coastal protection zone, coastal management lines, coastal access points and climate change risks.	March 2016	Incorporation of key spatial planning principals into the 2016 ADM and LM SDFs.
Ensure that LMs establish urban edges for all urban nodes within the ADM and LM coastal zone.	March 2016	Urban edges for all urban nodes within the coastal zone clearly indicated in the ADM SDF
Ensure that environmentally sensitive areas and “no-go” development areas, as identified in the Coastal EMF and Wild Coast EMF are integrated into the LMs SDFs.	March 2016	Environmentally sensitive and “no-go” areas identified in the Coastal EMF and Wild Coast EMF are clearly indicated in the ADM and LM SDFs.

5.4 Priority 4: Education and Awareness

Management Objective 4.1: Creation of a central, publically accessible database of all relevant coastal plans, policies and legislation		
Actions	Targets	
	Completion date	Performance indicators
Create an online database of all relevant coastal plans, policies, legislation, etc for ADM and coastal LMs.	March 2016	A link to the online centralised database accessible from the ADM webpage.
Ensure all public libraries within the ADM have hard copies to all relevant coastal plans, policies, legislation, etc. that are easily accessible by the public	March 2016	A checklist of the availability of all hardcopies of relevant coastal plans, policies, legislation, etc to be sent to all public libraries within the ADM.
Management Objective 4.2: Coastal stakeholder database		
Actions	Targets	
	Completion date	Performance indicators
Develop and maintain an ADM coastal stakeholder database	January 2016	ADM Coastal stakeholder database. Recorded participation of coastal stakeholders at ADM Coastal Committee meetings.

Inclusion of tribal authorities and community trusts at ADM Coastal Committee meetings	January 2016	Recorded participation of tribal authorities and community trusts at ADM Coastal Committee meetings.
Management Objective 4.3: The facilitation of coastal education and awareness programmes within the ADM		
Actions	Targets	
	Completion date	Performance indicators
ADM to develop new coastal awareness and education programmes	March 2017	A coastal education and awareness programme to be presented at schools. One coastal and awareness campaign initiated within each coastal Local Municipality.
ADM to develop coastal awareness and education centers within each coastal LM	March 2020	Utilisation of the existing Environmental Learning Center in Hamburg as a coastal awareness and education center Development of a coastal and awareness center in the Great Kei Local Municipality Development of a coastal and awareness center in the Mngquma Local Municipality Development of a coastal and awareness center in the Mbhashe Local Municipality

5.5 Priority 5: Estuary Management

Management Objective 5.1: Analysis of the current threat on estuaries within the ADM		
Actions	Targets	
	c	Performance indicators
ADM, in conjunction with DEDEAT, to determine the number of illegal structures (jetties, houses, launch sites, access roads, etc.) for each estuary.	March 2016	A geo-database of all illegal structures within each estuary.
ADM, in conjunction with DEDEAT, to determine the extent of illegal activities occurring within each estuary within the ADM	March 2016	A geo-database of all illegal activities occurring within each estuary.
Management Objective 5.2: Development of estuary management plans in accordance with the National Estuary Management Protocol		
Actions	Targets	
	Completion date	Performance indicators
ADM to promote the development of estuary management plans for the Keiskamma, Great Kei and Mbhashe estuaries	March 2020	Estuary Management Plan for Keiskamma estuary. Estuary Management Plan for the Great Kei estuary. Estuary Management Plan for the Mbhashe estuary.
Management Objective 5.3: Incorporation of Estuary Management Plans into the ADM IDP and SDF		
Actions	Actions	
	Completion date	Performance indicators
ADM to incorporate the actions identified in the Estuary Management Plans into the ADM and coastal LMs IDPs and SDFs	March 2020	Action Plans from the Estuary Management plans incorporated as key objectives in the ADM and coastal LMs IDPs. Estuary Management actions incorporated into the ADM and coastal LMs SDFs.

5.6 Priority 6: Management of Coastal Resources

Management Objective 6.1: Review of sensitive and protected coastal areas		
Actions	Targets	
	Completion date	Performance indicators

Undertake a review of all sensitive and protected areas within the ADMs coastal zone which incorporated the delineation of buffer zones around each identified site.	March 2016	Delineation of sensitive and protected areas, and their respective buffer zones, into the ADM and coastal LMs SDFs.
Management Objective 6.2: Formal Proclamation of the Morgan Bay Cliffs Nature Reserve		
Actions	Targets	
	Completion date	Performance indicators
ADM to initiate the process of the preparation and the submission of Draft Management Plans for the proposed Morgan Bay Cliffs Nature Reserve.	August 2016	Formal Proclamation of the Morgan Bay Cliffs Nature Reserve.
Management Objective 6.3: Development of a Marine Resource Utilisation Management Programme for the ADM coastal zone		
Actions	Targets	
	Completion date	Performance indicators
Develop and adopt an ADM Marine Resource Utilisation Management Programme	March 2017	Adopted Marine Resource Utilisation Management Programme.
Management Objective 6.4: Develop bylaws for the management of coastal resources		
Actions	Targets	
	Completion date	Performance indicators
Develop bylaws for the management of coastal resources	March 2017	Adoption of bylaws for management of coastal resources
Management Objective 6.5: Increase enforcement capacity to enforce coastal and environmental compliance		
Actions	Targets	
	Completion date	Performance indicators
With the assistance of DEA and DEDEAT, ADM to appoint at least one Environmental Management Inspector (EMI)	March 2017	At least one EMI appointed for the ADM.
Appointment of one peace officer in each coastal LM along the ADMs coast line	March 2017	One peace officer appointed in each of the coastal Local Municipalities.
Facilitate the development of community watch programmes in each coastal LM along the ADMs coastline	March 2017	Establishment of community watch programmes in each coastal Local Municipality.
Management Objective 6.6: Conduct an environmental, social and economic feasibility assessment on formalising existing illegal sand mines within the ADM Coastal Zone		
Actions	Targets	
	Completion date	Performance indicators
Undertake an environmental, social and economic feasibility assessment for the formalisation of illegal sand mines along the ADM coastline	March 2018	Environmental, social and economic feasibility report

5.7 Priority 7: Coastal Water Quality and Pollution Monitoring

Management Objective 7.1: The creation of a Coastal Sanitation and Water Quality Committee for the ADM		
Actions	Targets	
	Completion date	Performance indicator
Establish an ADM Coastal Sanitation and Water Quality Committee	June 2017	Established ADM Coastal Sanitation and Water Quality Committee.
Management Objective 7.2: Develop and implement a Coastal Water Quality and Pollution Monitoring for the ADM		

Actions	Targets	
	Completion date	Performance indicator
Source funding for the development of the ADM Coastal Water Quality and Pollution Monitoring Programme	June 2017	Funding secured and indicated in the ADM IDP.
Develop and implement the ADM Coastal Water Quality Monitoring Programme	June 2018	Implementation of the ADM Coastal Water Quality and Pollution Monitoring Programme
Management Objective 7.3: Develop and adopt bylaws for the management of discharge of pollution into the coastal zone.		
Actions	Targets	
	Completion date	Performance indicator
Develop bylaws for the management of pollution in the coastal zone.	August 2017	Adoption of coastal pollution bylaws

6 IMPLEMENTATION PLAN

In order to develop a plan to facilitate integrated coastal management in the ADM, as presented in the ADM Coastal Management Programme, a vision for coastal management in the ADM was agreed upon, which highlights the desired outcomes for coastal management in the ADM with regards to both the conservation and preservation of the coastal environment as well as the sustainable use of coastal resources by communities within the ADM.

The situational analysis and various stakeholder engagement workshops resulted in the identification of seven key coastal management priorities. For each of the identified coastal management priorities, coastal management objectives were developed to guide the ADM in implementing the ADM CMP. In addition, specific actions were assigned to each coastal management objective, which the ADM will undertake over the next five years (2016 – 2020) to achieve the ADMs vision for the coastline.

A detailed Implementation Plan has been developed for each priority action. Seven detailed Implementation Plans have been developed for each of the coastal management priorities through the development of Coastal Management Action Plans (CMAP). The seven CMAPS are attached in Appendix D and include:

- CMAP1 – Coastal Infrastructure Development
- CMAP2 – Coastal Public Access Facilitation
- CMAP3 – Coastal Spatial Planning
- CMAP4 – Education and awareness
- CMAP5 – Estuary Management
- CMAP6 – Management of Coastal Resources
- CMAP7 – Coastal water quality and pollution monitoring

Each of the seven CMAPs includes the following information:

- Relevant IDP programmes and/or projects that pertain to the implementation of the relevant action plan
- An overview of issues that were identified that informed necessitated the development of the relevant CMAP
- Where applicable, the locality where the relevant CMAP is to take place.
- Details on the possible causes of identified issues that informed the development of the relevant CMAP
- A description of the impacts of the issues that informed the development of the relevant CMAP
- Objectives and targets required for the effective implementation of the relevant CMAP
- Performance indicators to monitor the progress of the implementation of the relevant actions within the CMAP
- A coastal management toolbox that can be consulted to effectively implement the relevant CMAP
- Legislation and regulatory framework that pertains to the development and implementation of the relevant CMAP.
- Allocation of responsibility to implement the relevant actions within the CMAP
- Indication of the proposed budget required to implement the relevant actions within CMAP
- The timeframes in which the relevant actions within the CMAP are required to be implemented

These Implementation Plans, CMAPs and actions are dynamic and require annual or quarterly review to ensure that all issues are effectively addressed by the ADM.

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APPENDIX A: Stakeholder Engagement

APPENDIX B: Implementation Plans

APPENDIX A: STAKEHOLDER ENGAGEMENT

In order to effectively engage with all possible stakeholders, the following workshops and meetings were held to facilitate the issues gathering process:

- 10 November 2014 – Inception Meeting in East London
- 27 February 2015 – Consultation with Mquma Community Services Department in Butterworth
- 5 March 2015 – Information session with iKamva and DEDEAT in East London
- 9 March 2015 – Stakeholder Engagement Workshop in Hamburg
- 10 March 2015 – Stakeholder Engagement Workshop in Chintsa East
- 11 March 2015 – Stakeholder Engagement Workshop in Butterworth
- 12 March 2015 – Stakeholder Engagement Workshop in Idutywa
- 17 March 2015 – ADM Municipal Coastal Committee meeting in Kei Mouth
- 27 March 2015 – Provincial Coastal Committee Meeting in Port Alfred
- 14 May 2015 – Stakeholder engagement Workshop in Butterworth
- 21 May 2015 – Stakeholder Engagement Workshop in Makhazi (Great Kei LM)
- 22 May 2015 – ADM Municipal Coastal Committee meeting in Hamburg
- 25 May 2015 – DEA: Oceans and Coasts Coastal Management Programme Development Workshop
- 29 May 2015 – Stakeholder Engagement Workshop in Chintsa East
- 24 July 2015 – PSC meeting in East London
- 28 July – Stakeholder Consultation in Chintsa East
- 4 August – Consultation with Great Kei LM in Komga
- 13 August – Stakeholder Consultation with Mquma LM in Butterworth
- 14 August – Presentation at the Border Kei Chamber of Commerce in East London
- 5 September – Working session with ADM in East London
- 9 September 2015 – PSC meeting in Chintsa East.
- 22 September 2016 – PSC meeting in East London
- 13 October 2016 – PSC meeting in East London: ADM CMP hand-over.

The tables below list the National, provincial and district stakeholders, as well as the Interested and Affected Parties that were engaged with during the development of this ADM CMP:

National, provincial and district stakeholders

Organisation	Name	Contact Information
ADM	Bongani Mvalo	bonganmv@amathole.gov.za
ADM	Luyanda Mafumbu	mafumbul@amathole.gov.za
ADM	M. Mtongana	mtonganam@amathole.gov.za
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ECPTA	Bev Geach	bev.geach@ecpta.co.za
ECPTA	Jan Venter	Jan.Venter@ecpta.co.za
ECPTA	Nobusika Makeleni	Nobusika.Makeleni@ecpta.co.za
ECPTA	Shane October	shane.october@ecpta.co.za
EL Museum	Greg Brett	gbrett@elmuseum.zo.org
EL Museum	Kevin Cole	kcole@elmuseum.za.org
WESSA	Mike Denison	Mike.Denison@wessa.co.za

I&APs from the Ngqushwa LM

Organisation	Name	Contact Information
LM Rep.	Raymond Mkhontwana	rmkhontwana@ngqushwamun.co.za
LM manager	Shepard Mnweba	
Ward councillor (Ward 11)	Thembelani Dyibhishe	081 542 2838
Ward councillor (Ward 12)	Army Ndanda	nndanda@gmail.com
Fish River Sun Hotel	Minnie Nieuwoudt	
Fish River Caravan Park	Ask for the manager	
Mpekweni Beach Resort	Coiln Whitehead	
Mgwalana	Shirley Randall	
Mgwalana	Ian Turnbull	
Mgwalana	D. Roestorff	
Bira	Janey Moodie	
Hamburg	Carol Hofmeyr	
Hamburg	Gloria	
Mtati Lagoon	Blaine	

I&APs from the Great Kei LM

Organisation	Name	Contact Information
LM Rep.	Nolundi Ntamesi	NNtamesi@greatkeilm.gov.za
LM official	L. Gomana	Lgomanal@greatkeilm.gov.za
Ward councillor (Ward 2)	Moyisile Mzamo	(073) 587 9714
Ward councillor (Ward 6)	Nosipho Ngubayena	(083) 420 2373
Ward 6 Committee	Norah Dyanti	(073) 793 7297
Ward 6 Committee	Nomthandazo Nqayi	(071) 003 4931
Ward 6 Committee	Koloni Mlilwana	(071) 905 9731
Ward 6 Committee	Luzuko Patuluto	luzuko.patuluto@gmail.com
Bulugha	Chay Bachar	
Inverlochy	Soekie	
Chintsa Bay	Marlene Neumann	
Chintsa West	Barbara Blain	

Organisation	Name	Contact Information
Chintsa East	Esther Manthe	
Chintsa East	Rod Drayton	
Haga Haga	Diane Williams	
Haga Haga Conservancy	Roger Ellis	
Cefani	Dougie Kunhardt	
Morgans Bay RPA Chairman	GJ Breetzke	
Morgans Bay RPA	Sakkie Stone	
Morgans Bay RPA	Pieter Haak	
Morgans Bay RPA	Ray Brown	
Morgans Bay RPA	Bob Funnell	
Kei Mouth (RPA Chairman)	J.P. Deetlefs	
Kei Mouth (RPA)	Ian Scott	
Areena Riverside resort	Ed Rathbone	
Yellow sands caravan park	Jason Leppan	
Umnenga Lodge	Calister Standton	
Khamanga Bay	Keith Standton	
Inkwenkwezi Game Farm	Keith Standton	
Cyprea Sands	Bev Muller	
Inkwenkwezi	Graham Standton	
Wild Coast Abalone	Richard Clarke	
Crawfords Beach Lodge	Ian Crawford	
Crawfords Beach Lodge	Mark Crawford	
Prana lodge	Tim Davidson	
Olivewood Estate	Tim Davidson	
Cefani	Mark Cairns	
Kei Mouth Ski Boat Club	Gary Thompson	
Chintsa Ski Boat Club	Clint Lentz	
Kei Mouth RPA	Lappies Labuscagne	
Morgan Bay Aquatic club	Ray Brooks	
Olivewood Estate	Jelena Unger	
Former GKM manager	Steve Roberts	
Morgan Bay Beach Launch	Richard Warren Smith	
Great Kei resident	Butch and Alida Kriel	
Great Kei resident	Chris Rance	
Great Kei resident	Colin Larrett	
Great Kei resident	Gary Corlet	
Great Kei resident	Keith Ehrenreich	
Great Kei resident	Kevin Crossman	
Great Kei resident	Marjon Meyer	
Great Kei resident	Mark Richter	
Great Kei resident	Micheal Webster	
Great Kei resident	Theo Meyer	
Great Kei resident	Trent Milne	
Arendsnes	Louis Greef	
CERPA	Rick Tudhope	

Organisation	Name	Contact Information
Glen Gariff and KSBC	Theunis van del Vyver	
Wild Coast FM and resident	Wayne Naylor	

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Chief Tenza (Ward 22)	Mr Dumalisile	dumalisile@webmail.co.za
Trust Nqabara	Bongani Dyomfana	073 0322070
Trust Nqabara	Mzuzile Jiya	073 0969413
Ward Councillor	Luyanda Gogoba	083 5849747
Ward Committee	Pilisa Ncumezo	078 8458750
Ward Councillor Tenza/Jotela	Councillor Ndinisa	083 4528526

I&APs from the Mbhashe LM

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MNQUMA LM	N. Mbongwana	nmbongwana@mnquma.gov.za

APPENDIX B: IMPLEMENTATION PLANS

CMAP1 – Coastal Infrastructure Development

 <p>AMATHOLE DISTRICT MUNICIPALITY</p>		Date:
		Revision No:
		Prepared by:
		Approved by:
CMAP NO:	001	
CMAP TITLE:	Coastal Infrastructure Development	
Overview of issue:	<p>Coastal infrastructure is vital in the facilitation of tourism, economic development and the provision of public access to the coast.</p> <p>Issue A lack of infrastructure and services has hindered development of the coastal zone in ADM. However, the economic and infrastructure needs within the coastal areas in ADM must be addressed in an environmentally appropriate manner that fulfils the objectives of the ICMA.</p>	
Causes of identified issue	<ul style="list-style-type: none"> - Poor sewage infrastructure and management in coastal areas. - Lack of open conversation between the communities and authorities with regards to the development of the coastal zone. - Infrastructure located in areas vulnerable to climate change impacts - Uncertainty as to the status of ownership of land and zoning of land in some areas. 	
Impacts of issue:	<ul style="list-style-type: none"> - Destruction and damage of infrastructure due to storm surges and sea level rise. - Destruction of coastal dunes and beaches. - Destruction of estuarine habitats and wetlands. - Lack of development due to inadequate sewage infrastructure. - Poor water quality of estuaries and swimming beaches - Loss of tourism opportunities. 	
Objectives and Targets:	<p>Objective(s) To ensure that safe and equitable access to the coast for all people within the ADM is facilitated and maintained by identifying areas that require the provision of new coastal access points and by ensuring that existing coastal access points, and the public amenities associated thereof, are in a state that conforms with the requirements set out in the ICMA.</p> <p>Sub-objectives</p> <ul style="list-style-type: none"> - Review of existing coastal development within the ADMs coastal zone (Housing, resorts, coastal access, public amenities, etc). - Provision of bulk sanitation and water infrastructure to coastal development nodes - The development of tourism infrastructure within the ADM coastal zone 	
Key performance indicators (KPIs):	<ul style="list-style-type: none"> - Clearly demarcated boundaries of coastal nodes incorporated within the ADM and LM SDFs. - State of sewage infrastructure in the coastal zone summarised in Situational Analysis of the ADMs WSDP and IDP. - A geo-database of all infrastructure in the coastal zone that is vulnerable to climate change. - A geo-database of the current zonings and rights for development in the coastal zone. - Operational bulk sanitation infrastructure at the following coastal nodes: Hamburg, Chintsa, Kei Mouth, Dewsa/Cwebe, Morgan Bay and Mazeppa Bay. - Operational bulk sanitation infrastructure at the following coastal nodes: 	

	<p>Mgwalana, Birha, Qolora and Wavecrest.</p> <ul style="list-style-type: none"> - Identification of four key coastal areas requiring infrastructure for the development of tourism incorporated into the ADM Tourism Master Plan. 				
Toolbox:	<ul style="list-style-type: none"> - DEA: Oceans and Coasts - Working for the Coast - EPWP - ECPTA - DEDEAT: Coastal Zone Management - Eastern Cape Provincial Coastal Committee - Amathole District Coastal Committee - DEA: Oceans and Coasts resources - Aspire <table border="1" style="width: 100%;"> <tr> <td style="width: 60%;"> <p>Dr D.E. (Niel) Malan Deputy Director: Coastal Planning & Environmental Protection Department of Environmental Affairs and Tourism Private Bag X2 Rogge Bay Cape Town 8012Tel: +27-21-4023021 Fax: +27-21-4023009 Web: http://www.environment.gov.za</p> </td> <td style="width: 40%;"></td> </tr> <tr> <td colspan="2">E-mail dmalan@environment.gov.za</td> </tr> </table>	<p>Dr D.E. (Niel) Malan Deputy Director: Coastal Planning & Environmental Protection Department of Environmental Affairs and Tourism Private Bag X2 Rogge Bay Cape Town 8012Tel: +27-21-4023021 Fax: +27-21-4023009 Web: http://www.environment.gov.za</p>		E-mail dmalan@environment.gov.za	
<p>Dr D.E. (Niel) Malan Deputy Director: Coastal Planning & Environmental Protection Department of Environmental Affairs and Tourism Private Bag X2 Rogge Bay Cape Town 8012Tel: +27-21-4023021 Fax: +27-21-4023009 Web: http://www.environment.gov.za</p>					
E-mail dmalan@environment.gov.za					
Legislation and regulatory framework:	<p>National legislation</p> <ul style="list-style-type: none"> - National Environmental Management Act 107 of 1998 - National Environmental Management: Integrated Coastal Management Act 24 of 2008 - National Environmental Management: Protected Areas Act 57 of 2003 - National Environmental Management: Biodiversity Act 10 of 2004 - Marine Living Resources Act 18 of 1998 - National Water Act 36 of 1998 <p>Relevant policy;</p> <ul style="list-style-type: none"> - White Paper on Sustainable Coastal Development in South Africa (2000) <p>Links to other plans, authorities, regulations;</p> <ul style="list-style-type: none"> - National Coastal Management Programme (2014) - Eastern Cape Coastal Management Programme (2013) - Amathole District Municipality Integrated Environmental Management Plan (2012) - STEP Programme - DEDEAT National Biodiversity Programme - ECBCP: terrestrial and aquatic - ADM SDF (2012) - ADM IDP (2012-2017) - Coastal EMF (2010) - Wild Coast EMP 				


COASTAL MANAGEMENT ACTION PLAN (CMAP)

CMAP Title: **Coastal Infrastructure Development**

No	Activity	Responsible Person	Budget Requirements	Starting Date	Completion Date	Comments
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1	<ul style="list-style-type: none"> Review of existing coastal development within the ADM and LM coastal zone must include: <ul style="list-style-type: none"> Delineation of existing ADM and LM coastal nodes A report on the state of the sewerage infrastructure in each coastal LM Identification of infrastructure vulnerable to storm surges and sea within the ADM and LM coastal zone Identification of coastal lands which have inappropriate zonings or rights for development within the coastal LMs 	<ul style="list-style-type: none"> ADM Health Services: Environmental Pollution ADM: Development and Spatial Planning LM Engineering 	• R300 000	June 2017	September 2017	Possible outsourcing of activity
2	<ul style="list-style-type: none"> The provision of bulk sanitation and water infrastructure to coastal development nodes includes: <ul style="list-style-type: none"> Completion of the following sanitation projects, as per the ADM Water Services Development Plan: Hamburg, Chintsa, Kei Mouth, Dwesa/Cwebe, Morgan Bay and Mazeppa Bay Provision of bulk sanitation to the following coastal nodes: Mgwalana, Birha, Qolora and Wavecrest 	<ul style="list-style-type: none"> ADM Engineering ADM Water Care Amatola Water 	R180 000 000	June 2017	March 2021	Outsourcing of activity
3	<ul style="list-style-type: none"> The development of tourism infrastructure within the ADM coastal zone by: <ul style="list-style-type: none"> Identifying at least one key location within each coastal LM where infrastructure is required to increase coastal tourism potential Incorporation of each identified site into the ADM and LM tourism development plans 	<ul style="list-style-type: none"> ADM Tourism ADM Community Services LM Community Services 	R 500 000	June 2017	June 2018	Outsourcing of activity

CMAP2 – Coastal Public Access Facilitation

 <p>AMATHOLE DISTRICT MUNICIPALITY</p>		Date:
		Revision No:
		Prepared by:
		Approved by:
CMAP NO:	002	
CMAP TITLE:	Coastal Public Access and Amenities	

<p>Overview of issue:</p>	<p>Coastal infrastructure is vital in the facilitation of tourism and economic development within the coastal zone of the ADM.</p> <p><u>Issue</u></p> <p>It should also be noted that the promulgated Integrated Coastal Management Act (ICMA, 2008), specifically provides for the facilitation of coastal public access.</p> <div style="border: 1px solid black; padding: 5px;"> <p><u>Integrated Coastal Management Act (ICMA)</u></p> <p>Access to coastal public property</p> <p>13. (1) Subject to this Act and any other applicable legislation, any natural person in the Republic –</p> <p>(a) has a right to reasonable access to coastal public property; and</p> <p>(b) is entitled to use and enjoy coastal public property, provided such use –</p> <p style="padding-left: 20px;">(i) does not adversely affect the rights of members of the public to use and enjoy the coastal public property;</p> <p style="padding-left: 20px;">(ii) does not hinder the State in the performance of its duty to protect the environment; and</p> <p style="padding-left: 20px;">(iii) does not cause an adverse effect</p> <p>(1A) Subject to subsections (2) and (3), no person may prevent access to coastal public property.</p> <p>(2) This section does not prevent prohibitions or restrictions on access to, or the use of, any part of coastal public property –</p> <p>(a) which is or forms part of a protected area;</p> <p>(b) to protect the environment, including biodiversity;</p> <p>(c) in the interests of the whole community;</p> <p>(d) in the interests of national security; or</p> <p>(e) in the national interest</p> <p>(3)(a) No fee may be charged for access to coastal public property without the approval of the Minister</p> <p>(b) The Minister may by notice in the Gazette publish maximum fee for access to coastal public property or infrastructure located therein, payable by persons in general or a category of persons.</p> <p>(c) Any person or organ of state may apply to the Minister to charge a fee in excess of the maximum published in terms of paragraph (b).</p> <p>(d) The provisions of paragraph (a) shall not apply to fees for the use of facilities or activities which are located on or in coastal public property.</p> <p>(4) The Minister, before granting approval for imposition of a fee, must require a public participation process in accordance with Part 5 of Chapter 6 to enable interested and affected parties to make representations.</p> <p>(5) Subsection (3) and (4) do not apply to coastal public property –</p> <p>(a) for which a coastal use permit has been issued in terms of section 65; or</p> <p>(b) that is, or forms part of, a protected area or a port or harbour..</p> </div>
<p>Causes of identified issue</p>	<ul style="list-style-type: none"> - Lack of public access, amenities and awareness within the coastal zone. - Poor condition of existing access roads to coastal areas. - Lack of open conversation between the communities and authorities with regards to the provision of public access within the coastal zone.
<p>Impacts of issue:</p>	<ul style="list-style-type: none"> - Loss of tourism opportunities. - Little or no economic benefit to communities within the coastal zone.
<p>Objectives and Targets:</p>	<p>Objective(s)</p> <p>To ensure that safe and equitable access to the coast for all people within the ADM is facilitated and maintained by identifying areas that require the provision of new coastal access points and by ensuring that existing coastal access points, and the public amenities associated thereof, are in a state that conforms with the requirements set out in the ICMA. The ADM must also aim to achieve Blue Flag Beach Status for at least one beach within each coastal Local Municipality.</p>


	<p>Sub-objectives</p> <ul style="list-style-type: none"> - The facilitation of physical and equitable public access to the ADM coastal zone - Improve the condition of existing public access points and associated public amenities - Increase the number of Blue Flag Beaches within the ADM 				
<p>Key performance indicators (KPIs):</p>	<ul style="list-style-type: none"> - Geo-database of all coastal access points and their legal status. - Public access points at Mgwalana and Fish River. - Four new coastal public access points along the ADM coastline, including public amenity infrastructure. - Upgraded coastal public amenities at Hamburg, Morgan Bay and Kei Mouth. - List of four beaches nominated to receive Blue Flag Beach Status. 				
<p>Toolbox:</p>	<ul style="list-style-type: none"> - DEA: Oceans and Coasts - Working for the Coast <ul style="list-style-type: none"> ➢ Department of Environmental Affairs. (2014). National Coastal Access Strategy for South Africa 2014. Strategy 2 to the Implementation of the ICM Act, March 2014. Cape Town. ➢ Department of Environmental Affairs. (2014). A Guide for the Designation and Management of Coastal Access in South Africa 2014. Guide 2 to the Implementation of the ICM Act, March 2014. Cape Town. - EPWP - ECPTA - DEDEAT: Coastal Zone Management - Eastern Cape Provincial Coastal Committee - Amathole District Coastal Committee - DEA: Oceans and Coasts resources - Aspire <table border="1" data-bbox="448 1037 1453 1429" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;"> Dr D.E. (Niel) Malan Deputy Director: Coastal Planning & Environmental Protection Department of Environmental Affairs and Tourism Private Bag X2 Rogge Bay Cape Town 8012Tel: +27-21-4023021 Fax: +27-21-4023009 Web: http://www.environment.gov.za </td> <td style="width: 50%;"></td> </tr> <tr> <td colspan="2" style="padding: 5px;">E-mail dmalan@environment.gov.za</td> </tr> </table>	Dr D.E. (Niel) Malan Deputy Director: Coastal Planning & Environmental Protection Department of Environmental Affairs and Tourism Private Bag X2 Rogge Bay Cape Town 8012Tel: +27-21-4023021 Fax: +27-21-4023009 Web: http://www.environment.gov.za		E-mail dmalan@environment.gov.za	
Dr D.E. (Niel) Malan Deputy Director: Coastal Planning & Environmental Protection Department of Environmental Affairs and Tourism Private Bag X2 Rogge Bay Cape Town 8012Tel: +27-21-4023021 Fax: +27-21-4023009 Web: http://www.environment.gov.za					
E-mail dmalan@environment.gov.za					
<p>Legislation and regulatory framework:</p>	<p>National legislation</p> <ul style="list-style-type: none"> - National Environmental Management Act 107 of 1998 - National Environmental Management: Integrated Coastal Management Act 24 of 2008 - National Environmental Management: Protected Areas Act 57 of 2003 - National Environmental Management: Biodiversity Act 10 of 2004 - Marine Living Resources Act 18 of 1998 - National Water Act 36 of 1998 <p>Relevant policy;</p> <ul style="list-style-type: none"> - White Paper on Sustainable Coastal Development in South Africa (2000) <p>Links to other plans, authorities, regulations;</p> <ul style="list-style-type: none"> - National Coastal Management Programme (2014) - Eastern Cape Coastal Management Programme (2013) - Amathole District Municipality Draft Integrated Coastal Management Programme (2015) - Amathole District Municipality Integrated Environmental Management Plan (2016/2017) - STEP Programme 				

- DEDEAT National Biodiversity Programme
- ECBCP: terrestrial and aquatic
- Coastal EMF (2010)
- Wild Coast EMP

COASTAL MANAGEMENT ACTION PLAN (CMAP)

CMAP Title: Coastal Public Access and Amenities

No	Activity	Responsible Person	Budget Requirements	Starting Date	Completion Date	Comments
1	<ul style="list-style-type: none"> • The facilitation of physical and equitable public access to the ADM coastal zone requires: <ul style="list-style-type: none"> - Development of an inventory of all coastal access points and their legal status (e.g: Mtati and Yellowsands) - The ADM to assist the Ngqushwa Local Municipality to resolve access issues at Mgwalana - Identification of at least one new coastal public access point with associated public amenity infrastructure in each coastal Local Municipality 	<ul style="list-style-type: none"> • ADM Development and Spatial Planning • ADM Local Municipal Support • ADM Local Economic Development • LM Infrastructure 	Possible source of funding from: <ul style="list-style-type: none"> • DEA: Oceans and Coasts • R 300 000 	June 2017	March 2021	Possible outsourcing of activity
2	<ul style="list-style-type: none"> • Improve the condition of existing public access points and associated public amenities: <ul style="list-style-type: none"> - Assist the Local Municipalities to upgrade the following existing coastal public amenities: Hamburg, Morgan Bay and Kei Mouth. 	<ul style="list-style-type: none"> • ADM Development and Spatial Planning • ADM Local Municipal Support • ADM Local Economic Development • LM Infrastructure 	R 500 000	June 2017	December 2018	
3	Increase the number of beaches with Blue Flag Status: <ul style="list-style-type: none"> - Nominate one beach from each coastal Local Municipality to receive Blue Flag Beach Status. - Achieve Blue Flag Status for each nominated beach within the ADM 	<ul style="list-style-type: none"> • ADM Environmental Management • ADM Health Services: Environmental Pollution • ADM Local Economic Development • LM Environmental Management 	R 800 000	June 2017	March 2021	

 <p>AMATHOLE DISTRICT MUNICIPALITY</p>		Date:
		Revision No:
		Prepared by:
		Approved by:
CMAP NO:	003	
CMAP TITLE:	Coastal Spatial Planning	
Overview of issue:	<p>The coastal and marine environment forms a significant part of the ADM jurisdiction and extends from the Great Fish River in the south to the River in the north, a distance of about 70 km. The coastal and marine environment comprises: inshore and offshore reefs, sandy beaches, rocky shores, estuaries, dunes and coastal vegetation. This area is an extremely valuable asset and resource due to its aesthetic value, ecological and biological diversity and economic potential.</p> <p>Coastal developmental sprawl</p> <p>The integrity of marine and coastal resources is vulnerable to a variety impacts largely resulting from human activities such as coastal urban and rural sprawl, uncontrolled and unmonitored development in coastal areas and development that may pose a threat to eco-tourism through environment degradation.</p> <p>This CMAP is important in providing guidance for managing the development in the coastal zone in order to promote sustainable coastal development in line with:</p> <ul style="list-style-type: none"> - White Paper for Sustainable Coastal Development (2000) - National Coastal Management Programme (2015) - Integrated Coastal Management Act (2008) - Eastern Cape Coastal Management Programme (2013) - Coastal EMF (2009) - Ngqushwa SDF and SEA (2012) - <p>There will inevitably be impacts due to the increasing development in the coastal zone within ADM. However, in order to preserve the coastline and prevent degradation, it is necessary to provide guidelines and a framework in which to best deal with any development in the coastal zone.</p> <p>Integrated Coastal Management Act (2008) (as amended 2014)</p> <p>It should be noted that the ICMA includes various requirements that have VERY IMPORTANT spatial planning implications for Ngqushwa LM and in terms of the SDF, with specific reference to Coastal Protection Zone, Coastal Management Lines and Coastal Access.</p> <p>Relevant sections of the ICMA include:</p> <ul style="list-style-type: none"> Section 16 - Composition of coastal protection zone Section 18 - Designation of coastal access land Section 20 – Responsibilities of municipalities with regard to coastal access land Section 25 - Establishment of coastal management (set-back) lines Section 31 - Marking coastal boundaries on zoning maps Section 56 - Planning schemes for areas within coastal zone Section 57 - Coastal planning and land use schemes of municipalities Section 62 - Implementation of land use legislation in coastal protection zone 	


Locality:	Entire length of ADM coastline and ebb and flow of estuaries
Causes of identified issue	<ul style="list-style-type: none"> - Population increase on coastline - Lack of demarcated urban edges - Lack of monitoring and enforcement of SDF - Lack of consideration of coastal environments and environmental issues in spatial planning in coastal areas - Lack of compliance with coastal legislation and policy
Impacts of issue:	<ul style="list-style-type: none"> - Disturbance and degradation of sensitive environments in coastal zone - Uncontrolled urban and rural sprawl along coastline. - Loss of coastal resources (e.g. wetlands, forests, dunes, etc.)
Objectives and Targets:	<p>Objective(s) Develop spatial planning guidelines for the sustainable development of the ADM coastal zone consistent with ICMA and other legislation and policy requirements, particularly:</p> <ul style="list-style-type: none"> - Coastal Protection Zone - Coastal Management Lines - Coastal Access - Climate change risks - Coastal EMF <p>Sub-objective(s)</p> <ul style="list-style-type: none"> - Develop spatial planning guidelines for the sustainable development of the ADM coastal zone
Performance indicators:	<ul style="list-style-type: none"> - Developed ADM Coastal Spatial Planning Guideline - Incorporation of key spatial planning principals into the ADM and LM 2016 SDF. - Urban edges for all urban nodes within the coastal zone clearly indicated in the ADM SDF - Environmentally sensitive and “no-go” areas identified in the Coastal EMF and Wild Coast EMF are clearly indicated in the ADM and LM SDFs.
Toolbox:	<ul style="list-style-type: none"> - GIS Mapping - ADM SDF and SEA - Coastal EMF - Wild Coast EMP - National Coastal Management Plan (2014) - Eastern Cape Coastal Management Programme (2013) - ECBCP- Eastern Cape Biodiversity Conservation Plan - ADM Environmental Management Programme (2012)
Legislation and regulatory framework:	<p>Legislation</p> <ul style="list-style-type: none"> - National Environmental Management: Integrated Coastal Management Act 24 of 2008 - National Environmental Management Act 107 of 1998 - National Environmental Management: Protected Areas Act 57 of 2003 - National Environmental Management: Biodiversity Act 10 of 2004 - Marine Living Resources Act 18 of 1998 - Ciskei (Environmental Conservation) Decree 9 of 1992 <p>Relevant policy;</p> <ul style="list-style-type: none"> - White Paper on Sustainable Coastal Development in South Africa (2000) - National Coastal Management Programme (2014) - Eastern Cape Coastal Management Programme (2013) - ECBCP- Eastern Cape Biodiversity Conservation Plan <p>Links to other plans, authorities, regulations;</p> <ul style="list-style-type: none"> - DWAF Working for Water - STEP Programme - DEAT - National Biodiversity Programme - SALGA – Municipal Biodiversity Programme

COASTAL MANAGEMENT ACTION PLAN (CMAP)

CMAP Title: **Coastal Spatial Planning**

No	Activity	Responsible Person	Budget Requirements	Starting Date	Completion Date	Comments
1	<ul style="list-style-type: none"> Develop spatial planning guidelines for the sustainable development of the ADM coastal zone: <ul style="list-style-type: none"> Develop ADM Coastal Spatial Planning Guidelines in alignment with the ICMA. Incorporate the following key spatial principals into the next SDF review: <ul style="list-style-type: none"> Coastal protection zone, coastal management lines, coastal access points and climate change risks. Ensure that LMs define and establish urban edges for all urban nodes within the ADMs coastal zone. Ensure that environmentally sensitive areas and “no-go” development areas, as identified in the Coastal EMF and Wild Coast EMF are integrated into the ADM and LM SDFs. 	<ul style="list-style-type: none"> ADM Environmental Management ADM Legislative Support Services ADM Development and Spatial Planning ADM GIS Unit 	Possible source of funding from: <ul style="list-style-type: none"> DEA: Oceans and Coasts R 500 000 	June 2017	December 2017	Possible outsourcing of activity

CMAP4 – Education and awareness

 <p>AMATHOLE DISTRICT MUNICIPALITY</p>	Date:
	Revision No:
	Prepared by:
	Approved by:
CMAP NO:	004
CMAP TITLE:	Information, Education and Awareness
Overview of issue:	The ADM coastline is rich in biodiversity and has many estuaries, beaches and rocky shores that are in good condition. It is vital to conserve and effectively manage this natural heritage and requires the coordination and cooperation of the communities, authorities and private sector. The following issues impact the effective coordination and cooperation of these parties in conserving and managing the coastline: <ul style="list-style-type: none"> Information regarding municipal plans relevant to coastal management, coastal bylaws and coastal legislation and regulations is not easily accessible by the public Communities are not engaged with regarding the development of municipal plans. Lack of education and awareness of coastal conservation within coastal communities
Causes of identified issue	<ul style="list-style-type: none"> Lack of centralised database for all municipal plans relevant to coastal management, coastal bylaws, coastal legislation and regulations that is easily accessible by the public. Coastal stakeholder database is not inclusive of all community representatives.

	<ul style="list-style-type: none"> - No clear channel with which the communities can engage with the municipality regarding coastal issues. - Lack of open dialogue between the authorities, municipality, tribal authorities and the public regarding coastal management. - No sense of custodianship of the coast within coastal communities - Lack of communication between the municipality and national departments regarding education and coastal programmes that could benefit the municipality. - Lack of education centers that focus on coastal conservation and management.
Impacts of issue:	<ul style="list-style-type: none"> - Communities that are affected by municipal plans have not had the opportunity to comment. - Inappropriate activities and development in the coastal zone occurs if municipal plans and coastal legislation is not easily accessible by the public. - Coastal issues are not addressed if communities cannot communicate with the municipality. - Municipalities do not benefit from projects such as WftC programmes. - Tribal Authorities are not afforded the opportunity to be involved in coastal management activities.
Objectives and Targets:	<p>Objective: The main objective of this CMAP is to instil a sense of custodianship of the coast amongst all coastally communities through education and awareness of coastal conservation and management.</p> <p>Sub-objectives:</p> <ul style="list-style-type: none"> - Creation of a central, publically accessible database of all relevant coastal plans, policies and legislation Update the coastal stakeholder database. - Develop a coastal stakeholder database. - The facilitation of coastal education and awareness programmes within the ADM.
Key performance indicators (KPIs):	<ul style="list-style-type: none"> - A link to the online centralised database accessible from the ADM webpage. - A checklist of the availability of all hardcopies of relevant coastal plans, policies, legislation, etc to be sent to all public libraries within the ADM. - ADM Coastal stakeholder database. - Recorded participation of coastal stakeholders at ADM Coastal Committee meetings. - Recorded participation of tribal authorities and community trusts at ADM Coastal Committee meetings. - Report on the current state of coastal awareness and education programmes in the ADM. - A list of opportunities for coastal awareness and education programmes within the ADM. - A coastal education and awareness programme to be presented at schools. - One coastal and awareness campaign initiated within each coastal Local Municipality. - Utilisation of the existing Environmental Learning Center in Hamburg as a coastal awareness and education center - Development of a coastal and awareness center in the Great Kei Local Municipality - Development of a coastal and awareness center in the Mnquma Local Municipality - Development of a coastal and awareness center in the Mbhashe Local Municipality
Toolbox:	<ul style="list-style-type: none"> - ADM: Environmental management - ADM IT department - DEA: WftC programme - EPWP - SEION - Keiskamma Trust - East London Museum - Eastern Cape Provincial Coastal Committee - Amathole District Coastal Committee - Rhodes University

	- Aspire	
	<table border="1"> <tr> <td>Dr D.E. (Niel) Malan Deputy Director: Coastal Planning & Environmental Protection Department of Environmental Affairs and Tourism Private Bag X2 Rogge Bay Cape Town 8012 Tel: +27-21-4023021 Fax: +27-21-4023009 Web: http://www.environment.gov.za E-mail dmalan@environment.gov.za</td> <td>Marita Venter Education Section of the East London Museum 319 Oxford Street(Entrance from Dawson Road) Southernwood East London Tel: 043 743 0686 Fax: 043 743 3127 Web: www.elmuseum.za.org Email: mventer@elmuseum.za.org</td> </tr> </table>	Dr D.E. (Niel) Malan Deputy Director: Coastal Planning & Environmental Protection Department of Environmental Affairs and Tourism Private Bag X2 Rogge Bay Cape Town 8012 Tel: +27-21-4023021 Fax: +27-21-4023009 Web: http://www.environment.gov.za E-mail dmalan@environment.gov.za
Dr D.E. (Niel) Malan Deputy Director: Coastal Planning & Environmental Protection Department of Environmental Affairs and Tourism Private Bag X2 Rogge Bay Cape Town 8012 Tel: +27-21-4023021 Fax: +27-21-4023009 Web: http://www.environment.gov.za E-mail dmalan@environment.gov.za	Marita Venter Education Section of the East London Museum 319 Oxford Street(Entrance from Dawson Road) Southernwood East London Tel: 043 743 0686 Fax: 043 743 3127 Web: www.elmuseum.za.org Email: mventer@elmuseum.za.org	
Legislation and regulatory framework:	<p>National legislation</p> <ul style="list-style-type: none"> - National Environmental Management Act 107 of 1998 - National Environmental Management: Integrated Coastal Management Act 24 of 2008 - National Environmental Management: Protected Areas Act 57 of 2003 - National Environmental Management: Biodiversity Act 10 of 2004 - Marine Living Resources Act 18 of 1998 - Ciskei Nature Conservation Act 10 of 1987 - National Water Act 36 of 1998 <p>Relevant policy;</p> <ul style="list-style-type: none"> - White Paper on Sustainable Coastal Development in South Africa (2000) <p>Links to other plans, authorities, regulations;</p> <ul style="list-style-type: none"> - National Coastal Management Programme (2014) - Eastern Cape Coastal Management Programme (2013) - Amathole District Municipality Draft Integrated Coastal Management Programme (2015/2016) - Amathole District Municipality Integrated Environmental Management Plan (2012) - STEP Programme - DEDEAT National Biodiversity Programme - ECBCP: terrestrial and aquatic - Coastal EMF (2010) - Wild Coast EMP 	

COASTAL MANAGEMENT ACTION PLAN (CMAP)


CMAP Title: Information, Education and Awareness

No	Activity	Responsible Person	Budget Requirements	Starting Date	Completion Date	Comments
1	<ul style="list-style-type: none"> • Create a centralised, publically accessible coastal database, which must include, but is not limited to, the following latest documents: <ul style="list-style-type: none"> - ADM IDP - ADM LSDF - ADM SEA - National CMP - Eastern Cape CMP 	<ul style="list-style-type: none"> • ADM Environmental Management • ADM Legislative Support Services • ADM Information Technology Services 	R 200 000	June 2017	August 2017	

	<ul style="list-style-type: none"> - ADM CMP - Coastal EMF - All environmental legislation - All coastal legislation - All coastal regulation - All coastal bylaws • Create an online database with a link to the database from the ADM website • All libraries must have hard copies of all relevant documents. 					
2	<ul style="list-style-type: none"> • Develop and maintain an ADM coastal stakeholder database • The following ADM stakeholders must be included: <ul style="list-style-type: none"> - Community Trusts - Coastal ward councillors and ward committees - Traditional leaders and community trusts in coastal areas - All coastal Rate Payers and Residents Associations - Representatives from hotels and resorts - Ski boat clubs 	<ul style="list-style-type: none"> • ADM Coastal Committee 	N/A	June 2017	March 2021	
3	<ul style="list-style-type: none"> • The facilitation of coastal education and awareness programmes within the ADM: <ul style="list-style-type: none"> - Develop new coastal education and awareness programme by incorporating existing programmes and new programmes identified in SWOT analysis - Develop education programme to be presented at schools. The programme must discuss the following coastal aspects: <ul style="list-style-type: none"> ➢ Description of the coast ➢ Ecological importance ➢ Economic importance ➢ Threats to the coast ➢ Coastal management tools ➢ How communities can work towards conserving and managing the coast - Development of Coastal Education Centers. The Coastal Education Centers must aim to achieve the following: <ul style="list-style-type: none"> ➢ Be easily accessible to the public ➢ Provide a center where research being conducted in the coastal zone can be communicated to the public ➢ Develop education themes 	<ul style="list-style-type: none"> • ADM: Environmental Management • ADM Coastal Committee • East London Museum • ADM Local Economic Development 	R 800 000	June 2017	March 2021	Possible outsourcing of activity

<ul style="list-style-type: none"> relating to coastal issues, which are renewed quarterly ➤ Create educational and interactive displays relating to coastal education themes - Utilise the existing Environmental Learning Center in Hamburg as a coastal awareness and education center - Development of a coastal and awareness center in the Great Kei Local Municipality - Development of a coastal and awareness center in the Mquma Local Municipality - Development of a coastal and awareness center in the Mbhashe 					
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CMAP5 – Estuary Management

 <p>AMATHOLE DISTRICT MUNICIPALITY</p>		Date:
		Revision No:
		Prepared by:
		Approved by:
CMAP NO:	005	
CMAP TITLE:	Estuary Management	
Overview of issue:	<p>The coastal and marine environment forms an important part of the ADM jurisdiction and extends from the Great Fish River in the south to the Mpako River in the north, a distance of about 190 km. The ADM coastline consists of 63 functional estuaries.</p> <p>Issue</p> <p>Estuaries are sensitive unique environments and are susceptible to pollution and degradation from sources upstream and the surrounding areas. ADM contains a large number of estuaries, most of which are in good condition. It is important to design and implement strategies for managing these estuaries so that any disturbance or degradation is limited.</p> <p>It should also be noted that the promulgated Integrated Coastal Management Act (ICMA, 2008), specifically provides for the development of Estuary Management Plans</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><u>Integrated Coastal Management Act (ICMA)</u></p> <p>ESTUARIES</p> <p>National estuarine management protocol</p> <p>33. (1) Estuaries within the Republic must be managed in a co-ordinated and efficient manner and in accordance with a national estuarine management protocol.</p> <p>(2) The Minister, with the concurrence of the Minister responsible for water affairs, must within four years of the commencement of this Act prescribe a national estuarine management protocol.</p> <p>(3) The national estuarine management protocol must—</p> <p>(a) determine a strategic vision and objectives for achieving effective integrated management of estuaries;</p> </div>	

	<p>(b) set standards for the management of estuaries; (c) establish procedures or give guidance regarding how estuaries must be managed and how the management responsibilities are to be exercised by different organs of state and other parties; (d) establish minimum requirements for estuarine management plans; (e) identify who must prepare estuarine management plans and the process to be followed in doing so; (f) specify the process for reviewing estuarine management plans to ensure that they comply with the requirements of this Act; and (g) be published for public comment in accordance with the procedure set out in Part 5 of Chapter 6.</p> <p>Estuarine management plan</p> <p>34. (1) The responsible body contemplated in section 33(3)(e) who develops an estuarine management plan must — (a) follow a public participation process in accordance with Part 5 of Chapter 6; and (b) ensure that the estuarine management plan and the process by which it is developed are consistent with— (i) the national estuarine management protocol; and (ii) the national coastal management programme and with the applicable provincial coastal management programme and municipal coastal management programme referred to in Parts 1, 2 and 3 of Chapter 6. (2) An estuarine management plan may form an integral part of a provincial coastal management programme or a municipal coastal management programme.</p>	
<p>Causes of identified issue</p>	<p>The following activities may contribute towards the deterioration in the environmental integrity of estuaries in the ADM:</p> <ul style="list-style-type: none"> - Pollution of estuary water bodies from upstream pollutants due to: <ul style="list-style-type: none"> o Increased urbanisation o Inappropriate development near water courses (estuaries) o Non-point pollution sources of pollution affecting rivers and marine environments (estuaries) - Inappropriate development adjacent to estuaries - Clearance of riparian vegetation along the estuary banks - Over utilization of estuary resources (over fishing, sand mining, etc.) - Seepage of sewage from coastal developments into estuary water bodies - Aquaculture activities located in estuaries or close by to estuaries - Unauthorised maintenance activities (e.g. breaching of estuaries) - Legislative developments (ICMA) (estuary management plans) - Disturbance of biota (noise, craft, etc.) 	
<p>Impacts of issue:</p>	<p>Impacts</p> <ul style="list-style-type: none"> - Degradation and pollution of estuaries and reduced associate biodiversity - Negative impacts on surrounding environments - Detrimental impacts on health of people living in close proximity or utilising resources from polluted estuaries - Deterioration in estuary resources - Negative impacts on potential tourism opportunities 	
<p>Objectives and Targets:</p>	<p>Objective(s)</p> <p>The development and implementation of estuary management plans for the Keiskamma, Great Kei and Mbashe estuaries that are in accordance with the National Estuary Management Protocol</p> <p>In order to achieve these objectives, the following needs to occur:</p> <ul style="list-style-type: none"> - Analysis of the current threat on estuaries within the ADM - Development of estuary management plans in accordance with the National Estuary Management Protocol 	

	<ul style="list-style-type: none"> - Incorporation of Estuary Management Plans into the ADM IDP and SDF 				
Key performance indicators (KPIs):	<ul style="list-style-type: none"> - A geo-database of all illegal structures within each estuary. - A geo-database of all illegal activities occurring within each estuary. - Estuary Management Plan for Keiskamma estuary. - Estuary Management Plan for the Great Kei estuary. - Estuary Management Plan for the Mbhashe estuary. - Action Plans from the estuary management plans incorporated as key objectives in the ADM and LM IDPS and SDFs. 				
Toolbox:	<ul style="list-style-type: none"> - DEA: Oceans and Coasts - Working for the Coast - DWS - Working for Water - Eastern Cape Provincial Coastal Committee - Amathole District Coastal Committee - DEA: Oceans and Coasts resources - National Biodiversity Assessment (2011) - CSIR Estuary survey (2001) <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px;"> Dr D.E. (Niel) Malan Deputy Director: Coastal Planning & Environmental Protection Department of Environmental Affairs and Tourism Private Bag X2 Rogge Bay Cape Town 8012Tel: +27-21-4023021 Fax: +27-21-4023009 Web: http://www.environment.gov.za </td> <td style="width: 50%; padding: 5px;"> - Dr Alan Boyd Director of Biodiversity and Coastal Research </td> </tr> <tr> <td style="padding: 5px;">E-mail dmalan@environment.gov.za</td> <td style="padding: 5px;">Email: ajboyd@environment.gov.za</td> </tr> </table>	Dr D.E. (Niel) Malan Deputy Director: Coastal Planning & Environmental Protection Department of Environmental Affairs and Tourism Private Bag X2 Rogge Bay Cape Town 8012Tel: +27-21-4023021 Fax: +27-21-4023009 Web: http://www.environment.gov.za	- Dr Alan Boyd Director of Biodiversity and Coastal Research	E-mail dmalan@environment.gov.za	Email: ajboyd@environment.gov.za
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E-mail dmalan@environment.gov.za	Email: ajboyd@environment.gov.za				
Legislation and regulatory framework:	<p>National legislation</p> <ul style="list-style-type: none"> - National Environmental Management Act 107 of 1998 - National Environmental Management: Integrated Coastal Management Act 24 of 2008 - National Environmental Management: Protected Areas Act 57 of 2003 - National Environmental Management: Biodiversity Act 10 of 2004 - Marine Living Resources Act 18 of 1998 - Ciskei Nature Conservation Act 10 of 1987 - National Water Act 36 of 1998 <p>Relevant policy;</p> <ul style="list-style-type: none"> - National Estuarine Management Protocol (2013) - White Paper on Sustainable Coastal Development in South Africa (2000) <p>Links to other plans, authorities, regulations;</p> <ul style="list-style-type: none"> - National Coastal Management Programme (2014) - Eastern Cape Coastal Management Programme (2013) - Amathole District Municipality Integrated Environmental Management Plan (2012) - STEP Programme - DEDEAT National Biodiversity Programme - ECBCP: terrestrial and aquatic - ADM SDF - ADM SEA - Coastal EMF (2010) - Wild Coast EMP (2013) 				


	<ul style="list-style-type: none"> - National Estuarine Management Protocol (revised 2014) - Off road vehicle regulations - Recreational fishing regulations
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COASTAL MANAGEMENT ACTION PLAN (CMAP)

CMAP Title: **Estuary Management**

No	Activity	Responsible Person	Budget Requirements	Starting Date	Completion Date	Comments
1	Analysis of the current threat on estuaries within the ADM <ul style="list-style-type: none"> - Determine the number of illegal structures (jetties, houses, launch sites, access roads, etc.) for each estuary. - Determine the extent of illegal activities occurring within each estuary within the ADM 	<ul style="list-style-type: none"> • ADM Environmental Management • Each coastal LM within the ADM • DEDEAT 	R 250 000	June 2017	June 2018	Possible outsourcing of activity
2	ADM to promote the development of estuary management plans for the following estuaries in accordance with the National Estuary Management Protocol: <ul style="list-style-type: none"> - Keiskamma, - Great Kei and - Mbhashe 	<ul style="list-style-type: none"> • ADM Environmental Management • DEA: Oceans and Coasts 	R900 000	June 2017	March 2021	Possible outsourcing of activity
3	Incorporation of Estuary Management Plans into the ADM and coastal LM IDPs and SDFs.	<ul style="list-style-type: none"> • ADM Environmental Management • ADM Coastal Committee 	N/A	June 2017	March 2021	Engage with DEA: Oceans and Coasts, DEA: WftC, DEDEAT, ADM and ECDC for funding

CMAP6 – Management of Coastal Resources

 <p>AMATHOLE DISTRICT MUNICIPALITY</p>		Date:
		Revision No:
		Prepared by:
		Approved by:
CMAP NO:	006	
CMAP TITLE:	Management of Coastal resources	
Overview of issue:	The marine environment includes inshore and offshore reefs, sandy beaches and rocky	

	<p>shores. This area is an extremely valuable asset and resource due to its aesthetic value, ecological and biological diversity and economic potential. However, the integrity of the marine resources is vulnerable to a variety of impacts largely resulting from varying levels of human induced pressure.</p> <p>Numerous plant and animal populations (such as abalone, limpets, mussels and lobster and other shellfish, seaweed, bait species, etc.) along the ADM coastline are subject to varying degrees of exploitation for subsistence and non-subsistence purposes, both permitted and un-permitted. Certain coastal communities along the ADM coastline are dependent on harvesting various marine organisms either for food or to generate an income.</p> <p>Exploitation of coastal biota for subsistence purposes includes the collection of various shellfish and angling. Many of these harvesting practices continue unchecked and in an unsustainable manner resulting in over exploitation.</p> <p>Many issues which directly or indirectly threaten marine resources include:</p> <ul style="list-style-type: none"> - Degradation of marine and coastal ecology as a result of uncontrolled development in sensitive coastal environments. - Loss of marine and coastal resources through pollution and development. - Loss of biodiversity through excessive harvesting of marine organisms. - Public access, amenities and awareness is in a sub-standard state - Illegal sand mining is degrading the coastal zone at a rapid rate. - Enforcement of the relevant marine and coastal legislation has been poor
Causes of identified issue	<ul style="list-style-type: none"> - Lack of clarity and coordination between government departments & spheres on roles and responsibilities - Inappropriate delegation of responsibilities without sufficient capacity and financial support - Lack of accountability during decision making process - Poor public awareness of existing regulations and laws - Poor compliance and enforcement of legislation - Increased development pressure (industrial, residential, tourism) leading to increased discharges of storm and waste water and associated cumulative impacts etc. - Illegal use of marine resources & over harvesting - Increases in land based pollution and seepage, mainly from soak-aways and poorly maintained sewerage treatment works upstream
Impacts of issue:	<ul style="list-style-type: none"> - Exploitation of marine (invertebrate and plant) resources - Loss of biodiversity due to over exploitation of marine resources - Habitat destruction - Loss of endemic/ endangered species - Reduced sustainability of eco-tourism due to degradation of marine environment - Degradation of estuaries and contamination of water through various pollution sources - Silting-up of rivers and estuaries - Habitat destruction of estuarine vegetation and wetlands - Habitat destruction of coastal dunes and beaches
Objectives and Targets:	<p>Objective(s)</p> <p>The overall objective of this CMAP is the development of a coordinated and transparent programme for the monitoring and control of marine resource conservation and utilisation.</p> <p>Sub-objective(s)</p> <ul style="list-style-type: none"> - Review of sensitive and protected coastal areas - Formal proclamation of the Morgan Bay Cliffs as a Nature Reserve under the NEM: Protected Areas Act (No 57 of 2003) - Development of a Marine Resource Utilisation Management Programme for the

	<p>ADM coastal zone</p> <ul style="list-style-type: none"> - Adoption of bylaws for the management of coastal resources - Increase enforcement capacity to enforce coastal and environmental - Undertake an environmental, social and economic feasibility assessment for the formalisation of illegal sand mines along the ADM coastline. <p>Requirements for this objective include:</p> <ul style="list-style-type: none"> - Coordination and alignment of all conservation plans - The submission of intent to declare and the drafting of a Management Plans for the proposed Morgan Bay Nature Reserve, in accordance with the National Protected Areas Act. - The development and implementation of coastal bylaws pertaining to marine resource utilisation - Develop a marine resource utilisation monitoring programme - The adoption of bylaws - The appointment of EMIs and/or peace officers specific to coastal compliance - Development of a community watch programme - The generation of an environmental, social and economic feasibility report for the proposed formalisation of illegal sand mines 				
Performance indicators:	<ul style="list-style-type: none"> - Delineation of sensitive and protected areas, and their respective buffer zones, into the ADM and LM SDFs. - Formal Proclamation of the Morgan Bay Cliffs Nature Reserve - Adopted Marine Resource Utilisation Management Programme. - Adoption of bylaws for the management of coastal resources - At least one EMI appointed for the ADM. - One peace officer appointed in each of the coastal Local Municipalities. - Establishment of community watch programmes in each coastal Local Municipality. - Environmental, social and economic feasibility report for the formalisation of illegal sand mines. 				
Toolbox:	<ul style="list-style-type: none"> - GIS- Conservation concern areas, tourist destinations and development hotspots, species distributions and level of conservation concern - Reporting and data dissemination procedures - Monitoring committee - Coordination between Environmental Management and DEA: Oceans and Coasts and ECBCP - Coastal EMF - Wild Coast EMP - ADM EMP - National Biodiversity Assessment (2011) - CSIR Estuary survey (2001) <table border="1" data-bbox="480 1525 1441 1821"> <tr> <td data-bbox="480 1525 959 1821"> <p>Zinceba Peter-Madikizela DEA: Compliance Private Bag X447 Pretoria 0001 South Africa Web: www.environment.gov.za</p> </td> <td data-bbox="959 1525 1441 1821"> <p>Mr Luanda Mafumbu ADM: Environmental Management 40 Cambridge Street East London 5201 Tel: 043 783 2393 Fax: Web: www.amathole.gov.za</p> </td> </tr> <tr> <td data-bbox="480 1821 959 1888"> <p>E-mail zpeter@environment.gov.za</p> </td> <td data-bbox="959 1821 1441 1888"> <p>Email: lmafumbu@amathole.gov.za</p> </td> </tr> </table>	<p>Zinceba Peter-Madikizela DEA: Compliance Private Bag X447 Pretoria 0001 South Africa Web: www.environment.gov.za</p>	<p>Mr Luanda Mafumbu ADM: Environmental Management 40 Cambridge Street East London 5201 Tel: 043 783 2393 Fax: Web: www.amathole.gov.za</p>	<p>E-mail zpeter@environment.gov.za</p>	<p>Email: lmafumbu@amathole.gov.za</p>
<p>Zinceba Peter-Madikizela DEA: Compliance Private Bag X447 Pretoria 0001 South Africa Web: www.environment.gov.za</p>	<p>Mr Luanda Mafumbu ADM: Environmental Management 40 Cambridge Street East London 5201 Tel: 043 783 2393 Fax: Web: www.amathole.gov.za</p>				
<p>E-mail zpeter@environment.gov.za</p>	<p>Email: lmafumbu@amathole.gov.za</p>				
Legislation and regulatory framework:	<ul style="list-style-type: none"> - National Environmental Management Act 107 of 1998 - National Environmental Management: Biodiversity Act 10 of 2004 - Conservation of Agricultural Resources Act, 1983 - National Forest Act 84 of 1998 - National Veld and Forest Act 101 of 1998 				

	<ul style="list-style-type: none"> - National Environmental Management: Protected Areas Act 57 of 2003 - National Environmental Management: Biodiversity Act 10 of 2004 - Environment Conservation Act 73 of 1989 - Marine Living Resources Act 18 of 1998 - Integrated Coastal Management Act <p>Relevant policy;</p> <ul style="list-style-type: none"> - White Paper on Sustainable Coastal Development in South Africa (2000) <p>Links to other plans, authorities, regulations;</p> <ul style="list-style-type: none"> - DWS Working for Water - STEP Programme - DEDEAT - National Biodiversity Programme - ECBCP- Eastern Cape Biodiversity Conservation Plan - Eastern Cape Coastal Management Programme (2013) - Coastal EMF - Wild Coast EMP - Off road vehicle regulations - Recreational fishing regulations
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COASTAL MANAGEMENT ACTION PLAN (CMAP)


CMAP Title: Management of Coastal resources

No	Activity	Responsible Person	Budget Requirements	Starting Date	Completion Date	Comments
1	All sensitive and protected areas within the ADM coastal zone must be identified and buffer zones must be delineated around each sensitive and protected area The sensitive and protected areas and their respective buffer zones must be incorporated into the ADM SDF and IDP.	<ul style="list-style-type: none"> • ADM Environmental Management • ECPTA • ADM GIS unit • ADM Spatial Planning and Development 	R 250 000	June 2017	March 2018	Possible outsourcing of activity
2	Formal Proclamation of the Morgan Bay Cliff as a Nature Reserve under the NEM: Protected Areas Act (No. 57 of 2003): Initiate the process of the preparation and submission of Draft Management Plans for the proposed Morgan Bay Cliffs Nature Reserve	<ul style="list-style-type: none"> • ADM Environmental Management • DEDEAT • ECPTA 	R 150 000	June 2017	March 2018	Possible outsourcing of activity
3	A Marine Resource Utilisation Programme for the ADM coastal zone must be developed. The Programme must incorporate the following aspects: <ul style="list-style-type: none"> - A baseline study of the current status of biologically and economically important marine resources - GIS mapping of the current state of marine resources - Public consultation with key marine resource user groups along the 	<ul style="list-style-type: none"> • ADM Environmental Management • SANBI • DEDEAT • DAFF • DEA: Ocean and Coasts 	R 500 000	June 2017	March 2018	Possible outsourcing of activity

	<p>ADM coastline including and education and awareness campaign</p> <ul style="list-style-type: none"> - Defined roles and responsibilities of the authorities, ADM and the community in monitoring the utilisation of marine resources - The development of a monitoring programme to monitor and prevent over utilization of marine resources 					
4	<p>The development and adoption of bylaws for the management of coastal resources. E.g:</p> <ul style="list-style-type: none"> - Collection of shell grit - Collection shellfish - Recreational fishing - Use of vehicles in the coastal area 	<ul style="list-style-type: none"> • ADM Environmental Management • Assisted by DAFF and DEA 	N/A	January 2017	March 2017	
5	<p>Increase enforcement capacity to enforce coastal and environmental compliance:</p> <ul style="list-style-type: none"> - Appointment of at least one Environmental Management Inspector (EMI) - Appointment of one peace officer in each coastal LM along the ADMs coast line - A community watch programme must be developed in each coastal LM: <ul style="list-style-type: none"> ➤ Coordinated approach to the monitoring of illegal activities along the ADM coastline ➤ Coordination between DEA, SAPS, ADM, LM's and communities ➤ Development of a clearly defined reporting procedure in the event of illegal activities being observed ➤ Clearly defined roles and responsibilities within the community watch programmes 	<ul style="list-style-type: none"> • ADM Environmental Management • ADM Local Government Support • ADM Community Safety and By-laws Enforcement • LM Community Services • DEDEAT • DEA: Ocean and Coasts • SAPS 	N/A	June 2017	Continuous	
6	<p>Undertake an environmental, social and economic feasibility assessment for the proposed formalisation of illegal sand mines along the ADM coastline. The feasibility assessment must highlight the following:</p> <ul style="list-style-type: none"> • Environmental: <ul style="list-style-type: none"> - Current extent of the sand mine - Key ecological features in the surrounding area - Proposed environmental impact of further mining if uncontrolled - Proposed environmental impact of further mining if controlled - Identification of permits, licenses, authorisations required under NEMA, NWA, MPRDA etc. • Social: <ul style="list-style-type: none"> - Number of communities who rely 	<ul style="list-style-type: none"> • ADM • Assistance from DEA, DMR, DRDLR 	R800 000	June 2017	June 2018	Possible outsourcing of activity

<ul style="list-style-type: none"> on sand mining - State of communities surrounding affected areas - How communities are currently affected - How communities will be affected if sand mining not formalised - How communities will be affected if sand mining is formalised - Social impact assessment • Economic: <ul style="list-style-type: none"> - Who currently benefits financially - Who will benefit financially if mines are formalised - Identification and assessment of various management scenarios - Assessment of current profits - Assessment of future profits if sand mines are not formalised - Assessments of future profits if sand mining is formalised 					
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CMAP7 – Coastal Water quality and pollution monitoring

 <p>AMATHOLE DISTRICT MUNICIPALITY</p>		Date:
		Revision No:
		Prepared by:
		Approved by:
CMAP NO:	007	
CMAP TITLE:	Coastal water quality and pollution monitoring	
Overview of issue:	<p>Development within the coastal zone in ADM is focused around estuaries and swimming beaches. According to a survey conducted by the CSIR in 2001, many of the estuaries along the ADM coastline are in good condition but are starting to deteriorate. It is vital to ensure that the water quality of these estuaries and swimming beaches is of the highest quality for recreational and economic activities and that pollution is managed to prevent the contamination of estuaries and swimming beaches and to prevent the degradation of the ecological integrity of the ADM coastline.</p> <p>Issue</p> <p>Water quality in estuaries is deteriorating due to the seepage of sewage from septic tanks along the banks of estuaries (e.g. Hamburg and Chintsa West and East). No bulk sewerage infrastructure is provided to any of the coastal areas and the existing sewerage infrastructure is poorly maintained. A monitoring programme is currently not implemented to measure the water quality and pollution in estuaries and swimming beaches.</p>	
Causes of identified issue	<ul style="list-style-type: none"> - Seepage from septic tanks along the banks of estuaries. - Lack of bulk sewerage infrastructure in coastal areas. - Coastal development increasing without increasing the capacity of the sewerage infrastructure. 	
Impacts of issue:	<ul style="list-style-type: none"> - High <i>E. coli</i> levels in estuaries and swimming beaches. - Decrease in tourism due to unsafe swimming beaches. - Potential loss of Blue Flag Status for Hamburg beach 	

	<ul style="list-style-type: none"> - No Blue Flag status for any other beaches along the ADM coastline - Loss of aquaculture opportunities that may rely on good water quality in estuaries. 				
Objectives and Targets:	<p>Objective(s) The development and implementation of a Water Quality and Pollution Monitoring Programme for all estuaries and swimming beaches along the ADM Coastline</p> <p>Sub-objectives</p> <ul style="list-style-type: none"> - The creation of a Coastal Sanitation and Water Quality Committee for the ADM - Develop and implement a Coastal Water Quality and Pollution Monitoring for the ADM - Development and adoption of coastal pollution bylaws 				
Key performance indicators (KPIs):	<ul style="list-style-type: none"> - Established ADM Coastal Sanitation and Water Quality Committee. - Funding secured and indicated in the ADM IDP. - Implementation of the ADM Coastal Water Quality and Pollution Monitoring Programme - Adoption of coastal pollution bylaws 				
Toolbox:	<ul style="list-style-type: none"> - GIS – monitoring locations and data capture - DEA: Oceans and Coasts - Working for the Coast - EPWP - DEDEAT: Coastal Zone Management - DAFF: Coastal Water Quality Guidelines - Eastern Cape Provincial Coastal Committee - Amathole District Coastal Committee - DEA: Oceans and Coasts resources - Application of relevant LM and DM by-laws - Engagement with other metro's and municipalities to resolve water quality issues. - <table border="1" data-bbox="448 1025 1453 1451"> <tr> <td>Dr D.E. (Niel) Malan Deputy Director: Coastal Planning & Environmental Protection Department of Environmental Affairs and Tourism Private Bag X2 Rogge Bay Cape Town 8012Tel: +27-21-4023021 Fax: +27-21-4023009 Web: http://www.environment.gov.za</td> <td>ADM Environmental Pollution ADM Water Care ADM: Environmental Health and Water Quality</td> </tr> <tr> <td>E-mail dmalan@environment.gov.za</td> <td></td> </tr> </table>	Dr D.E. (Niel) Malan Deputy Director: Coastal Planning & Environmental Protection Department of Environmental Affairs and Tourism Private Bag X2 Rogge Bay Cape Town 8012Tel: +27-21-4023021 Fax: +27-21-4023009 Web: http://www.environment.gov.za	ADM Environmental Pollution ADM Water Care ADM: Environmental Health and Water Quality	E-mail dmalan@environment.gov.za	
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E-mail dmalan@environment.gov.za					
Legislation and regulatory framework:	<p>National legislation</p> <ul style="list-style-type: none"> - National Environmental Management Act 107 of 1998 - National Environmental Management: Integrated Coastal Management Act 24 of 2008 - National Environmental Management: Protected Areas Act 57 of 2003 - National Environmental Management: Biodiversity Act 10 of 2004 - Marine Living Resources Act 18 of 1998 - National Water Act 36 of 1998 - Municipal Infrastructure Act - Local Government: Municipal Systems Act 32 of 2000 - Promotion of Access to Information Act of 2000 - Local Government: Municipal Systems Act 32 of 2000 <p>Relevant policy;</p> <ul style="list-style-type: none"> - White Paper on Sustainable Coastal Development in South Africa (2000) - Containing Waste to the Marine Environment of South Africa (2004) - White Paper for Integrated Pollution and Waste Management - National Waste Management Strategy 				

	<ul style="list-style-type: none"> - National Guideline for the Discharge of Effluent From Land-based Sources into the Coastal Environment <p>Links to other plans, authorities, regulations;</p> <ul style="list-style-type: none"> - National Coastal Management Programme (2014) - Eastern Cape Coastal Management Programme (2013) - Amathole District Municipality Integrated Environmental Management Plan (2012) - STEP Programme - DEDEAT National Biodiversity Programme - ECBCP: terrestrial and aquatic - ADM SDF - ADM SEA - ADM IDP - Coastal EMF (2010) - Wild Coast EMP (2013) - ADM EMP (2012)
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COASTAL MANAGEMENT ACTION PLAN (CMAP)

CMAP Title: **Water Quality and Pollution Monitoring**

No	Activity	Responsible Person	Budget Requirements	Starting Date	Completion Date	Comments
1	<ul style="list-style-type: none"> • Invite representatives from the following key role-players to sit on a Coastal Sanitation and Water Committee for ADM: <ul style="list-style-type: none"> - ADM: Environmental Health and Water Quality - ADM: IEMP - ADM: Health and Protection Services - LM Environmental and/or Waste managers 	<ul style="list-style-type: none"> • ADM Environmental Management • ADM Health Services: Environmental Pollution • ADM: Water Care • All Coastal LMs 	N/A	June 2017	September 2017	
2	<ul style="list-style-type: none"> • Develop and implement a Coastal Water Quality and Pollution Monitoring for the ADM <ul style="list-style-type: none"> - Source funding for the development of an Water Quality and Pollution Monitoring Programme - Develop a Water Quality and Pollution Monitoring Programme for disclosure to ADM Coastal Sanitation and Water Committee, authorities and public. - The development of the Water Quality and Pollution Monitoring Programme must: <ul style="list-style-type: none"> ➢ Be in line with DEA: Oceans and Coasts and ADM policy and programmes to avoid repetition of effort ➢ Follow a set reporting procedure and structure 	<ul style="list-style-type: none"> • ADM Environmental Management • ADM Health Services: Environmental Pollution • ADM: Water Care • DWS • DEDEAT: Coastal Zone Management • DEA: Ocean and Coasts • Department of Water and Sanitation 	R 500 000	September 2017	September 2018	Possible outsourcing of this activity

	<ul style="list-style-type: none"> ➤ Include a detailed description of data collection which must include data from existing water quality monitoring programmes (but may not necessarily be limited to) ➤ Report on potential pollution sources ➤ Identify appropriate rectification activities if possible ➤ Notification pollution incidents to the appropriate enforcement agency (DEA: Oceans and Coasts/DEDEAT/Green Scorpions) ➤ Provide evidence of non-compliance notification to relevant authorities 					
	<p>Develop bylaws to manage costal pollution. These bylaws should include, but are not limited to, the following:</p> <ul style="list-style-type: none"> - Dumping of solid waste in the coastal zone - Discharge of effluent into the coasta; zone - Discharge of stormwater into the coastal zone - Use of septic tanks and conservancy tanks in the coastal zone 	<ul style="list-style-type: none"> • ADM Environmental Management • ADM Health Services: Environmental Pollution • ADM: Water Care • DWS • DEDEAT: Coastal Zone Management • DEA: Ocean and Coasts • Department of Water and Sanitation 	N/A	January 2017	August 2017	