

MBHASHE LOCAL MUNICIPALITY

COASTAL MANAGEMENT PROGRAMME 2016-2021



June 2016-2021



MBHASHE LOCAL MUNICIPALITY

Address:

454 Stretfield Street

Dutywa

5000

Telephone: +27 (0) 47 489 5800

Fax: +27 (0) 47 489 5800

Website: www.mbhashemun.gov.za

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Preface

Over two decades ago, South Africa embarked on a journey towards transforming the way the coast was managed, a process which was earlier formalised through the gazetting of the White Paper for Sustainable Coastal Development in South Africa, of 2000, and which later culminated in the promulgating of the National Environmental Management: Integrated Coastal Management Act, Act No. 24 of 2008 (ICM Act). The ICM Act called for the inclusive and all-encompassing decision-making in the management of the coastal zone, for the protection of the natural environment as well as its sustainable utilisation by the communities who live in it. This Act further calls for the development and implementation of a Municipal Coastal Management Programme (MCMP) for municipalities. When developing a MCMP it is important to first understand the status quo with respect to the biophysical, social, institutional and operational circumstances that a municipality is confronted with respect to its coastal zone. It is on the basis of this comprehensive assessment of coastal issues within a municipality that leads to the informed development of plans and interventions geared at not only addressing the identified short-comings in coastal management within the municipality, but also to map out a detailed visionary strategy for the long-term management and utilization of coastal resources. The Mbhashe Local Municipality (Mbhashe LM) has embarked on a process to fulfil the requirements of the ICM Act with respect to coastal management programmes, by developing its own MCMP.

Executive Summary

The Republic of South Africa (South Africa) has made great strides in the last two decades-and-a-half towards the systematic introduction and establishment of key policy frameworks aimed at protecting coastal ecosystems while ensuring the realization of economic growth opportunities offered by its coastline. Such aims must be achieved in the face of the pressures from land-use change, including urbanization, and climate change, sea-level rise, coastal erosion and lowland flooding. Therefore, policy approaches that are multisectoral and occur at multiple levels are the only direction to take. Subsequently, South Africa developed the National Environmental Management: Integrated Coastal Management Act, No. 24 of 2008 (ICM Act), and as amended, which is a policy statement for the management of its coastal zone in an integrated manner.

Part 3 of Chapter 6 of the ICM Act requires of municipalities to develop **Municipal Coastal Management Programmes (MCMP)**. Sections 48 and 49 of the ICM Act provide clear instructions and guidance as to: (a) the process for the preparation, adoption and amendment of the MCMP; and (b) the content of each MCMP. A Coastal Management Programme (CMP) is a coherent policy directive for the management of the coastal zone.

This document, therefore, presents the MCMP for the Mbhashe Local Municipality (Mbhashe LM) for the period 2016-2021.

The development of the Mbhashe LM CMP comprised a four-step process:

Step 1: Setting of Vision and Principles

Step 2: Coastal Management Priorities

Step 3: Situation Analysis

Step 4: Compilation of a coastal management action plan

All information and content with respect to the above-mentioned process were generated through:

- A series of stakeholder workshops
- Review of published and unpublished information and literature
- On-site assessments of coastal locations with respect to infrastructure, facilities, dune management, etc.

The Vision for coastal management in the Mbhashe LM is aligned to the Vision found in the national and provincial (Eastern Cape) CMPs in order to ensure alignment between the three spheres of government. The Mbhashe LM's Vision for coastal management is as follows:

We, the people of the Mbhashe Local Municipality, recognize 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 spiritual and biological value into account.

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

We strive to promote sustainable development and alleviate poverty in 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, provincial and local interests.

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

According to Section 49(2c) of the ICMA, a municipal CMP must include, among others, priorities and strategies to:

- i. Achieve the coastal management objectives of the municipality;
- ii. Assist in the achievement of the national and provincial coastal management objective as may be applicable in the municipality;
- iii. Address the high presence of vacant plots and the low occupancy levels of residential dwellings;
- iv. Equitably designate zones for mixed cost housing and taking into account the needs of previously disadvantaged individuals;
- v. Address coastal erosion and accretion; and
- vi. Deal with access issues.

In order to promote alignment of the Mbhashe LM CMP with the provincial CMP, the Mbhashe LM, as decided during various stakeholder engagement sessions, retains the provincial Priorities, but focus objectives towards a local government context:

Priority	Title	Goal
1	Cooperative governance	Participation of all stakeholders, coastal governance and co-responsibility. Integrated, coordinated, decision making, planning and management. Continued learning and practical implementation of programmes. Compliance with national conventions, protocols, and agreements.
2	Coastal planning and development	Local economic development opportunities. Provide necessary support to coastal livelihoods initiatives. Effective planning processes and framework, promoting equitable coastal access and redress. Appropriate placement of coastal infrastructure.
3	Climate change and dynamic coastal processes	Identify high risk areas; Address coastal vulnerability; and Ensure mitigation against and adaptation to climate change.
4	Land and marine-based sources of pollution	Reducing land-based sources of pollution. Responding to marine-based sources of pollution. Ensure effective waste management policy is in place. Capacitate waste management.
5	Estuaries	Ensure all estuaries are managed in an integrated and holistic manner consistent with the National Estuarine Management Protocol. Comply with legislated requirements for estuarine management. Promote partnerships with stakeholders and other government agencies.
6	The facilitation of coastal access	Facilitate provision of free, safe and equitable access to coastal public property. Develop inventory of existing and potential access points. Ensure adequate management and regulation of coastal access.
7	Awareness and education	Ensure public and decision makers are appropriately aware, educated and trained, to ensure effective coastal management and social buy-in. Facilitation of knowledge production and exchange. Partnerships with state and private entities for education and awareness.
8	Compliance, monitoring and enforcement	Develop environmental enforcement capacity. Strong and coordinated partnerships with other state agencies.
9	Natural resource management	The maintenance of ecosystem integrity and health. Protect vulnerable ecosystems. Rehabilitate degraded ecosystems.

The Priorities listed above informed the structure and approach when conducting a Situation Analysis of coastal management issues in the district. Through engagement with stakeholders, a list of issues was generated under each Priority, and issues were ranked according to level of priority (low, medium or high). Furthermore, gaps with respect to coastal management in the district were identified.

Subsequently, a list of coastal management Actions was compiled for the Mbashe LM. The list of Actions was compiled based on the issues identified during the Situation Analysis process.

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Acronyms

ADM	Amathole District Municipality
ARC	Agricultural Research Council
CMP	Coastal Management Programme
CPP	Coastal Public Property
DEDEAT	Department of Economic Development, Environmental Affairs and Tourism
ECBCP	Eastern Cape Biodiversity Conservation Plan
ECCMP	Eastern Cape Coastal Management Programme
ECPTA	Eastern Cape Parks and Tourism Agency
ECSECC	Eastern Cape Socio Economic Consultative Council
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EstMP	Estuarine Management Plan
GDP	Gross Domestic Product
IAP	Invasive alien plant
ICM Act	National Environmental Management: Integrated Coastal Management Act, Act No. 24 of 2008
IDP	Integrated Development Plan
Mbhashe LM	Mbhashe Local Municipality
IWMP	Integrated Waste Management Plan
MCMP	Municipal Coastal Management Programme
MINTECH	Minister's Technical Committee

MPA	Marine Protected Area
NEPAD	New Partnership for Africa's Development
NGO	Nongovernmental Organisation
NPAES	National Protected Area Expansion Strategy
NSBA	National Spatial Biodiversity Assessment
ORV Regulations	Off-Road Vehicles Regulations
POE	Permanently open estuary
PTO	Permission to Occupy
SDBIP	Service Delivery and Budget Implementation Plan
RD&LR	Department of Rural Development and Land Reform
SDF	Spatial Development Framework
TOCE	Temporarily open/closed estuary
WESSA	Wildlife and Environment Society of South Africa
wrt	with respect to
WWF	World Wide Fund for Nature

1. Introduction

1.1. Coastal Management: a global perspective

It has been widely reported that the global population distribution is increasingly skewed towards the coastal zone, with an overwhelming concentration of populations living within a mere 10% of the earth's land surface (Fig. 1). In Africa, even though the migration to coastal regions is still not as strong as in other continents, over the last two decades, Africa's coastal cities have been growing by 4% or more a year, with trade and commercial opportunities being the overriding drawcards (Henrichsen 1998).

These demographic shifts present management challenges (Table 1) with respect to coastal resource availability and utilization. In the present day, the coastal areas are the locus of rapid urban and industrial growth, oil and gas development, industrial-scale fisheries and tourism (Fig. 1), a scenario which accentuates the resulting contemporary pressures on the coastal zone. A similar trend is mirrored in the South African context, though still not as pronounced as in the developed world, in which we see large concentrations along coastal regions.

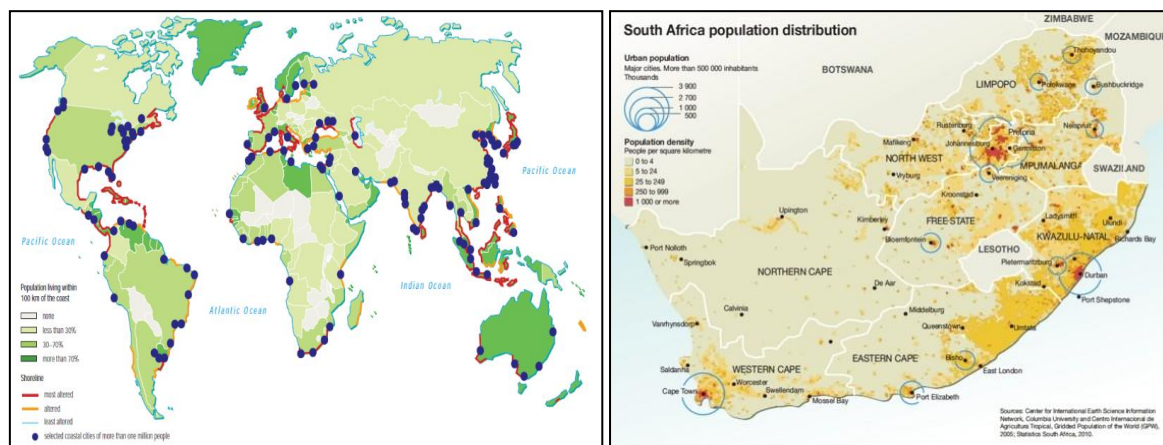


Figure 1: Global coastal populations and shoreline degradation (Arthurton and Korateng 2002), as well as population trends with respect to the Republic of South Africa.

Even though the developed world had long established management interventions to address this increasing pressure on the coastal zone, most of the developing world still grapples with inadequate capacity and resources to manage current coastal population growth in a sustainable manner. Management of such pressures on the coastal zone center on the introduction of comprehensive coastal management policy frameworks.

Table 1: Pressures on the coastal zone (Arthurton and Korateng 2002)

Development opportunities	Issue, threat and constraints related to development NEPAD issue in <i>italics</i>
Oil and gas production	Resource sustainability
	Marine and coastal pollution - water and airborne (marine and land-based)
	Coastal habitat loss
	Invasive species - from tanker ballast waters
Coastal mineral extraction	Habitat loss through excavation, siltation (sand mining)
	Restoration of industrial mining sites
	Coastal erosion from beach sand mining
Urban, industrial and port development	Urban sprawl and habitat loss through construction, siltation and industrial effluents; hazardous waste
	Pollution of coastal wetlands and seas
	Invasive species especially from shipping ballast waters
	Coastal erosion
	Inundation through sea-level rise: extreme wave events
Tourism growth	Urban sprawl and habitat loss from construction and tourism pressures
	Solid waste and sewage discharge: chemical effluent
	Loss of amenity value
	Coral bleaching
	Coastal erosion, beach loss
	Sea-level rise, extreme wave events
Marine fisheries growth and sustainability	Overharvesting and use of destructive methods
	By-catch and endangered species
	Regulation and enforcement, illegal fishing
	Protection of nursery areas
	Land-based pollution
	Reduced freshwater discharge from rivers
Coastal aquaculture growth	Wetland drainage and reclamation for agricultural and urban growth

	Habitat and biodiversity loss, especially from pond construction
	Urban, industrial and agricultural pollution (including aquaculture)
	Lack of freshwater input
	Institutional constraints
	Coastal erosion, sea-level rise
Coastal agriculture sustainability	Habitat and biodiversity loss
	Coastal siltation from increased run-off
	Reduced freshwater discharge from rivers
	Reduced flooding and sedimentation through damming
	Salinization of groundwater
	Control of fertilizers and pesticides
	Impact of urban sprawl
	Coastal erosion, sea-level rise

1.2. Integrated coastal management in South Africa

The Republic of South Africa (South Africa) has made great strides in the last two decades-and-a-half towards the systematic introduction and establishment of key policy frameworks aimed at protecting coastal ecosystems while ensuring the realization of economic growth opportunities offered by its coastline. These objectives must be achieved in the face of the pressures from land-use change, including urbanization, and climate change, sea-level rise, coastal erosion and lowland flooding. Therefore, policy approaches that are multisectoral and occur at multiple levels are the only direction to take.

Subsequently, South Africa developed the ICM Act, which is a policy statement for the management of its coastal zone.

Integrated coastal management has been defined in various literature and discussion forums. For the purposes of this document, and in order to promote institutional alignment as required in the ICM Act, the definition provided in the Eastern Cape Coastal Management Programme (ECCMP) will be preferred, which defines integrated coastal management as the **process for the management of a coastal area using an integrated and inclusive approach, taking cognisance of all aspects of the coastal zone, including geographical and political boundaries, in an attempt to achieve sustainable coastal development** (IUCN, 2006, cited in Cilliers *et al.*, 2010).

The Coastal Policy Green Paper of 1998 and subsequently the White Paper for Sustainable Coastal Development in South Africa (DEAT, 2000), were the first expressions of South Africa's direction towards the integrated management of the coastal zone. The White Paper promoted the sustainable use of coastal natural resources, for the benefit of future generations, through the implementation of management programmes informed by an integrated approach to coastal resources utilisation.

Subsequently, the ICM Act was promulgated to provide a legal framework which established statutory requirements in integrated coastal management.

It follows therefore that Part 3 of Chapter 6 of the ICM Act requires of municipalities to develop **MCMPs**.

Sections 48 and 49 of the ICM Act provide clear instructions and guidance as to: (a) the process for the preparation, adoption and amendment of the MCMP; and (b) the content of each MCMP.

1.3. The coastal zone as defined in the ICM Act

The development of the Mbhashe CMP is in fulfilment of the requirements of the ICM Act's Sections 48 and 49, as already discussed in preceding chapters. It is thus imperative to clearly and accurately situate the physical and geographical space within which this CMP is applicable, that is, identify the area of jurisdiction of this CMP; and that such an area corresponds to the legislative coverage of the ICM Act. The description of the area of jurisdiction of this CMP is based on two considerations:

- The municipal area of jurisdiction as established in terms of the Local Government: Municipal Structures Act, 1998 (Act No. 117 of 1998), and its associated coastal area (see Figs. 6 and 7); and
- The coastal zone as defined under the ICM Act (as amended).

In terms of the ICM Act (as amended) the coastal zone is defined as the area comprising coastal public property, the coastal protection zone, coastal access, coastal protected areas, the seashore, and coastal waters and the exclusive economic zone, and includes any aspect of the environment on, in, under and above such area (see Fig. 2).

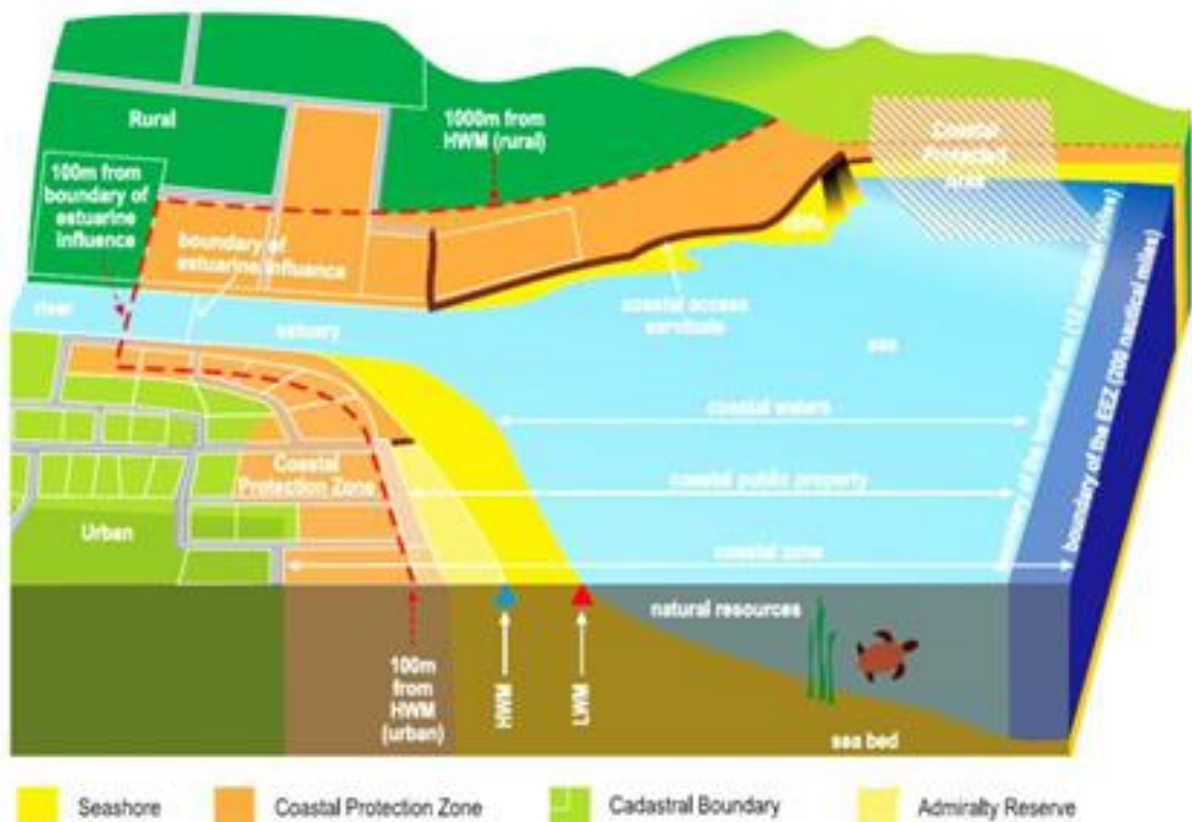


Figure 2: Depiction of the delineation of the coastal zone as defined in the ICM Act, and inclusive of coastal public property and the coastal protection zone.

1.4. What is a Coastal Management Programme?

A Coastal Management Programme (CMP) is a coherent policy directive for the management of the coastal zone (Republic of South Africa, Department of Environmental Affairs, 2013). It allows for the effective implementation of integrated coastal management by providing detailed guidelines, plans and interventions across various aspects and functions relevant to the coastal zone, such as socio-economics, biophysical environment, and development, among others.

The ICM Act specifies an alignment of CMPs across the three spheres of government, namely national, provincial and local. In other words, the MCMP must be “nested” within a provincial CMP, and a provincial CMP must be “nested” within a national CMP (Oceans and Coasts Branch of the Department of Environmental Affairs, 2012). This “nested” framework ensures the assignment of the appropriate scope and focus to the corresponding government sphere (Fig. 3).

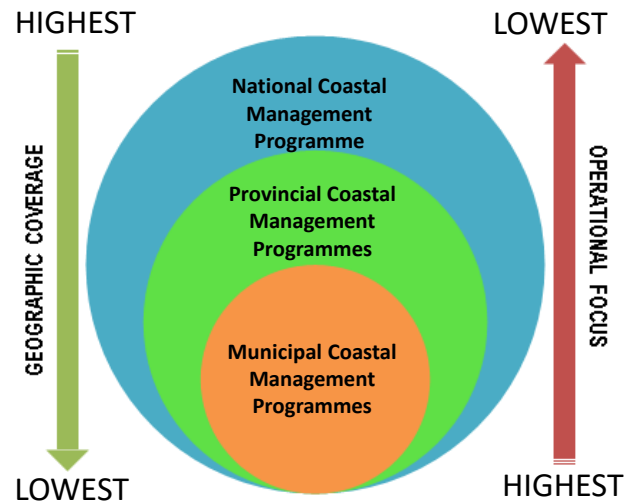


Figure 3: The “nested” framework within which CMPs should be designed, displaying the associated sphere of government, geographic coverage and the focus on operational aspects of coastal management (reproduced from Oceans and Coasts Branch of the DEA 2012).

At municipal level, it is invariably the metropolitan municipality or district municipality that develops a MCMP for coastal areas within its jurisdiction. However, within the context of a district municipality, such as the Amathole DM, a local municipality within its jurisdiction may develop its own MCMP, which in turn must align with the district MCMP, and thereby adding another nested layer to model depicted in Fig. 3.

It follows, therefore, that through the development of the CMP for the Mbhashe LM, the local municipality will be playing its role in ensuring the application of Integrated Coastal Management in South Africa, while fulfilling the legislative and regulatory requirements of the ICM Act.

2. Vision and principles for coastal management in the Mbashe LM

As discussed earlier in this document, there must be alignment of national, provincial and municipal CMPs. Section 49 (2a) of the ICM Act requires a MCMP to comprise a Vision for the management and sustainable use of coastal resources within the jurisdiction of the municipality. It follows therefore that the alignment of CMPs must be first and foremost reflected in the Visions of the respective CMPs.

To this end, the Mbashe LM retains the Eastern Cape Province's vision statement for the coast and locates it within the context of the Mbashe LM. The LM found the provincial vision to:

- wholly embody and give expression to the vision shared by the Mbashe LM;
- be clear and concise in terms of the mission for coastal management that the Mbashe LM MCMP wishes to achieve;
- be inclusive of all the necessary components, goals and role players involved;
- be adaptive and dynamic to address the changing needs of the environment and society; and,
- have longevity to ensure that the vision remains relevant over this MCMP's lifespan.

The Vision for coastal management in the Mbashe LM thus reads as follows:

We, the people of the Mbashe Local Municipality, recognize 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 spiritual and biological value into account.

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

We strive to promote sustainable development and alleviate poverty in 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, provincial and local interests.

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

The vision set out above incorporates several themes which are key to the understanding of the importance of the coast as a natural asset and resource. The following themes emanate from the vision:

- the need for an integrated approach to coastal management;
- the need to claim custodianship of the coast and ensure sustainable use thereof;
- the need to protect and preserve coastal biodiversity;
- promoting sustainable development within the coastal zone; and
- poverty alleviation as a key outcome of sustainable coastal resource utilization.

When summarizing the themes inherent in the Visions of the three spheres of government, it is clear that commonalities among the three exist, confirming the alignment of messages across the three spheres of government (Fig. 4).

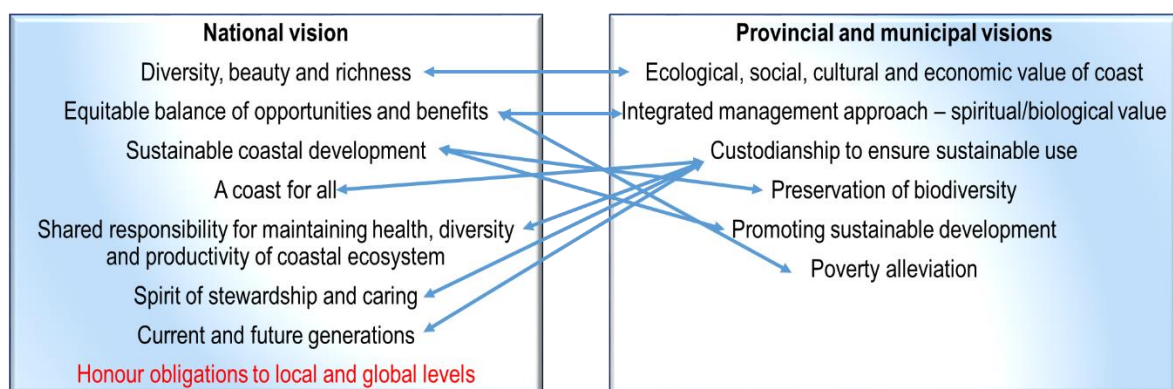


Figure 4: Summary of main themes emanating from vision statements contained in CMPs of national (left box) and provincial/Mbhashe LM (right box) CMPs. The provincial and Mbhashe LM themes have been combined in a single box, as their respective vision statements are identical. The red text indicates a national theme that does not correspond to any provincial/municipal theme.

The purpose of this MCMP is to unpack these themes and package them into clear and measureable goals and actions for coastal management in the Mbhashe LM. Such goals and actions are grounded on a set of guiding principles as expressed in the next section.

Guiding principles for coastal management in the Mbashe Local Municipality

The municipal vision, as presented above, provides an overarching statement for coastal management in the Mbashe LM. It is prudent that a set of guiding principles must accompany the Vision, with the purpose to outline the basis and rationale for action plans subsequently listed under this MCMP. It is intended that such guiding principles will share commonalities with those expressed in the national and/or provincial CMPs, underscoring the importance of alignment of CMPs across the three spheres of government.

For the purposes of the Mbashe LM CMP, the Mbashe LM retains the provincial guiding principles, which were adopted by the Eastern Cape government from the White Paper, the first policy directive for integrated coastal management in South Africa.

The following are the guiding principles for the Mbashe LM CMP:

National asset: *The coast must be retained as a national asset, with public rights to access and benefit from the many opportunities provided by coastal resources.*

Economic development: *Coastal economic development opportunities must be optimised to meet society's needs and to promote the wellbeing of coastal communities.*

Social equity: *Coastal management efforts must ensure that all people, including future generations, enjoy the rights of human dignity, equality and freedom.*

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 interrelationships between coastal users and ecosystems and between the 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 consequences of their 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.

All objectives, priorities, and actions to be discussed in succeeding chapters of this document, will be informed by the above vision and guiding principles. The guiding principles listed above align closely with the national guiding principles (see Fig. 5).

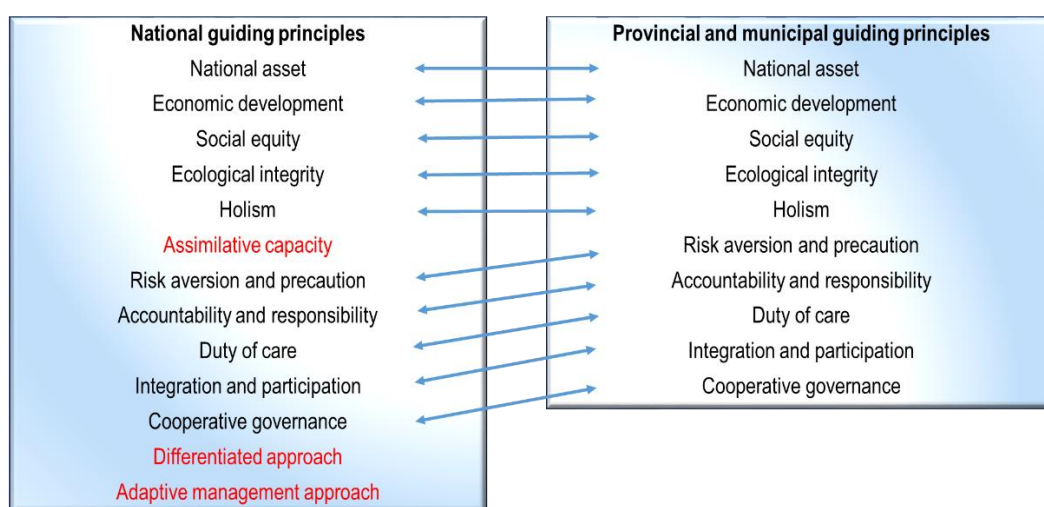


Figure 5: Summary of guiding principles for national (left box) and provincial/Mbhashe LM (right box) CMPs. The provincial and Mbhashe LM guiding principles have been combined in a single box, as they are identical. The red text indicates a national guiding principle that does not correspond to any provincial/municipal guiding principles.

3. Project scope and process for the development of the Mbhashe LM CMP

The DEA, under the auspices of its Environmental Protection and Infrastructure Programmes, commissioned the development of Coastal Management Programmes for municipalities in parts of the coastlines of KwaZulu-Natal and Eastern Cape provinces, in accordance with Sections 48-49 of the ICM Act. The Mbhashe LM was included in the list of such municipalities.

According to the ICM Act, an MCMP must include:

- i. A vision;
- ii. The coastal management objectives
- iii. Priorities and strategies to:
 - achieve the coastal management objectives of the municipality;
 - assist in the achievement of the national and provincial coastal management objectives as may be applicable in the municipality;
 - address the high percentage of vacant plots and the low occupancy levels of residential dwellings;
 - equitably designate zones as contemplated in section 56(1)(a)(i) for the purposes of mixed cost housing and taking into account the needs of previously disadvantaged individuals;
 - address coastal erosion and accretion; and
 - deal with access issues.
- iv. Performance indicators to measure progress with the achievement of those objectives.

A MCMP may also include:

- A programme of projected expenditure and investment by the municipality in coastal management infrastructure or in order to implement any coastal management programme;
- A description of specific areas within the coastal zone that require special coastal management, and management strategies for those areas;
- Estuarine management plans; and
- Any other matter that may be prescribed.

3.1. Process for the development of the Mbhashe LM CMP

Fig. 6 presents a flow diagram mapping the process undertaken during the development of the Mbhashe LM, from the initiation of the project through to the finalization of the CMP

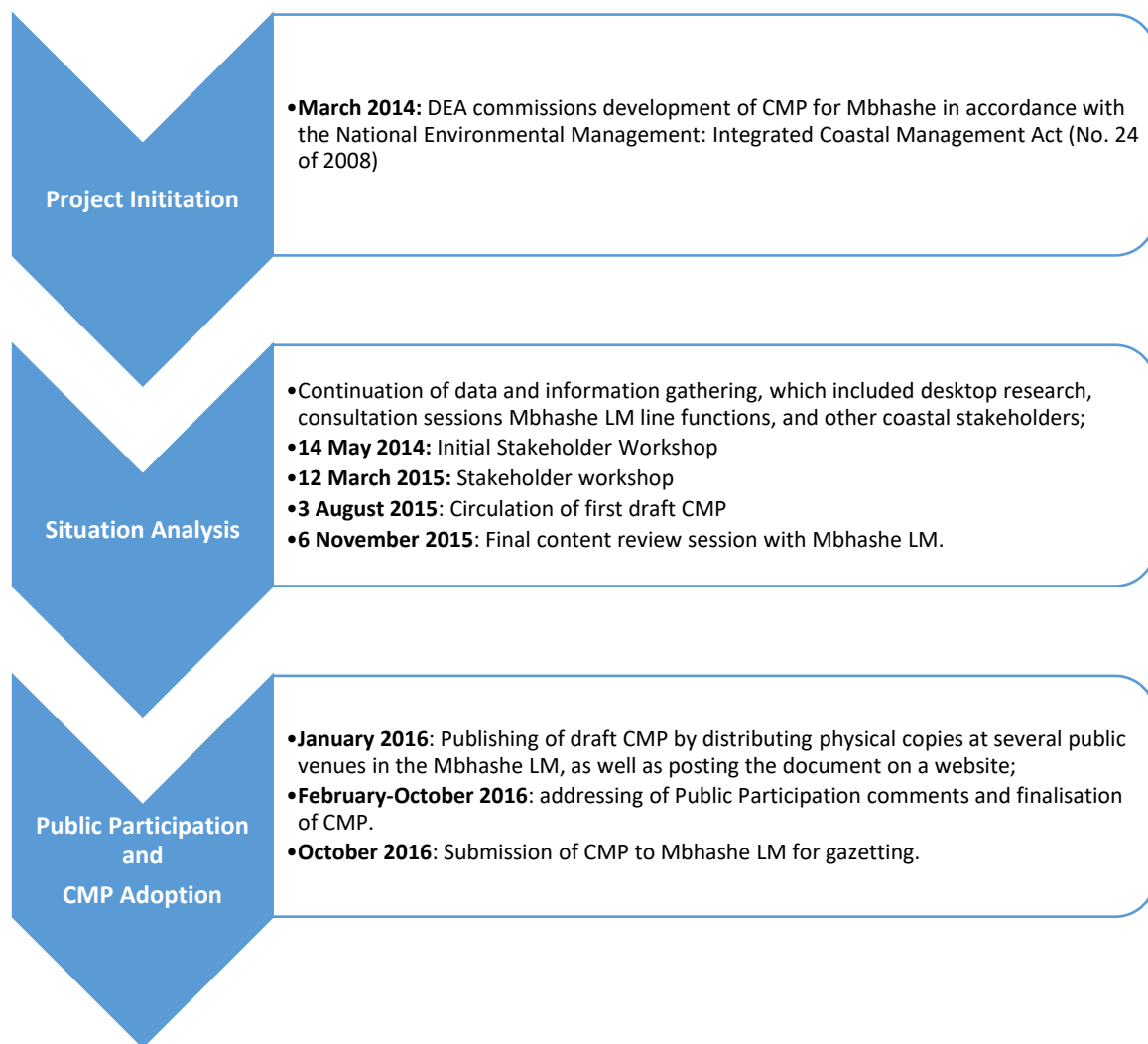


Figure 6: Flow diagram showing the sequence of steps towards the finalisation of the MBHASHE LM's CMP.

4. Legal framework

Here follows a summary of the key pieces of legislation and policy which inform the impetus, basis and grounding of coastal management not only at the national level, but also within the setting of a local sphere of government, namely, the district and local municipalities. It is recognized that at such a level of governance – the coal-face of service delivery – a strong policy framework can go a long way in providing a key instrument to attend to coastal management needs and challenges.

4.1. The National Development Plan

The National Development Plan (NDP) is an overarching plan that offers a long-term perspective on the state of the republic. It defines a plan of action for the country, and identifies the role that different sectors of society need to play in reaching that goal.

The NDP aims to eliminate poverty and reduce inequality by 2030. According to the plan, South Africa can realize these goals by drawing on the energies of its people, growing an inclusive economy, building capabilities, enhancing the capacity of the state, and promoting leadership and partnerships throughout society.

From an environmental perspective, the NDP explores the various challenges South Africa is faced with. Because of these challenges, and despite them, South Africa needs to: protect the natural environment and build environmental sustainability and resilience.

The NDP proposes three measures to protect the country's natural resources:

- i. An environmental management framework.
- ii. A target for the amount of land and oceans under protection (presently about 7.9 million hectares of land, 848km of coastline and 4 172km² of ocean are protected).
- iii. A set of indicators for natural resources, accompanied by publication of annual reports on the health of identified resources to inform policy.

4.2. National Environmental Management Act (No. 107 of 1998, and as amended)

The National Environmental Management Act (No. 107 of 1998, NEMA) provides for co-operative environmental governance by establishing principles for decision-making on matters affecting the environment, institutions that will promote cooperative governance and procedures for co-ordinating environmental functions exercised by organs of state; to provide for certain aspects of the administration and enforcement of other environmental management laws; and to provide for matters connected therewith.

This act allows for the development of Specific Environmental Management Acts, and it is through this provision that the ICM Act was developed.

4.3. National Environmental Management: Integrated Coastal Management Act (No. 24 of 2008)

Seeks to:

- a) Determine the coastal zone of South Africa;
- b) Provide, within the framework of the NEMA (discussed above), for the coordinated and integrated management of the coastal zone by all spheres of government in accordance with the principles of co-operative governance;
- c) Preserve, protect, extend and enhance the status of coastal public property as being held in trust by the State on behalf of all South Africans, including future generations;
- d) Secure equitable access to the opportunities and benefits of coastal public property; and
- e) Give effect to South Africa's obligations in terms of international law regarding coastal management and the marine environment.

It is Chapter 6 of this Act that, *inter alia*:

- i. Specifies the development of national, provincial and coastal CMPs;
- ii. Specifies the contents of such CMPs;
- iii. Requires alignment of CMPs across the three spheres of government; and
- iv. Provides for the review of CMPs.

This Mbashe LM CMP is thus drafted in accordance with the ICM Act and the provisions included in Chapter 6 with respect to the development of CMPs.

4.4. Marine Living Resources Act (No. 18 of 1998)

The purpose of this Act is to provide for the conservation of the marine ecosystem, the long-term sustainable utilisation of marine living resources and the orderly access to exploitation, utilisation and protection of certain marine living resources; and for these purposes to provide for the exercise of control over marine living resources in a fair and equitable manner to the benefit of all the citizens of South Africa; and to provide for matters connected therewith.

4.5. Environmental Conservation Decree (Decree No. 9 of 1992)

The Environmental Conservation Decree 9 (Decree No. 9 of 1992) is a piece of law remaining from the time when the Mbashe LM region fell under the Transkei, during the apartheid era. This Decree is still

the most useful tool for environmental and coastal management for authorities in the Province of the Eastern Cape.

The Decree regulates, among others:

- i. Protected natural environments;
- ii. Limited development areas;
- iii. Camping areas;
- iv. Hiking trails;
- v. Catchment and coastal areas; and
- vi. The sea and the seashore.

4.6. National environmental management act (107/1998): Wild Coast Environmental Management Plan

The purpose of this environmental management plan for the Wild Coast is for DEDEAT to, in terms of its dual mandate of both economic development and environmental management, establish a planning instrument to guide and facilitate development and sustainable use of the Wild Coast.

This document provides DEDEAT with a tool to support decision-making with respect to:

- i. Applications in terms of the NEMA EIA Regulations of August 2014 as well as applications in terms of the National Environmental Management Waste Management Act.
- ii. Boat launching applications and use of vehicles in the coastal corridor, including beaches.
- iii. Decisions regarding the designation of setback-lines, both in terms of the National Environmental Management Integrated Coastal Management Act [ICM Act] and the National Environmental Management Act [NEMA] EIA Regulations of 2014.
- iv. Decisions regarding the designation of Coastal Protection Zones, Coastal Public Property and Coastal Access Points in terms of the ICM Act.
- v. Any applications for coastal development and use that may be submitted to the Department in terms of provincial legislation.

The Wild Coast EMP is guided by the following principles:

- i. Development on the Wild Coast and in Wild Coast communities must take place and at an accelerated rate. If endemic poverty persists, efforts to protect the environment will in the long term not succeed.

- ii. In order to facilitate essential development more development nodes must be created and the size of some nodes increased.
 - iii. Development should be nodal in nature, meaning that there should also be areas that remain undeveloped. Development nodes should cater for a range of types and scale of development.
 - iv. Infrastructure provision must be focused on development nodes.
 - v. Developments and economic activities that do not specifically need to be in a coastal location should be located outside the Coastal Corridor, in this case more than 1 kilometre from the coast.
 - vi. Estuaries that are still pristine and undeveloped should be retained in that state and all development should have a suitable buffer with estuaries, at least 100 metres in most cases. Developments and economic activities that are potentially polluting should not be located near rivers and estuaries.
 - vii. The immediate coastal zone is a resource common to all and should not be exclusively occupied by large developments that prevent public use of the coastal area.
 - viii. The rights of communities that have historically occupied and used the coastal corridor must be acknowledged. Such communities should however not expand within the coastal corridor.
 - ix. Environmental management must attempt to redress imbalances of the past, and must promote equity.
 - x. Existing formal Protected Areas must be expanded and new formal Protected Areas established.
 - xi. Remaining Indigenous Forest on the Wild Coast must be protected and forest clearing of any kind should only be permitted under exceptional circumstances. Indigenous Forest rehabilitation projects should be strongly encouraged.
 - xii. Environmental management for the Wild Coast should as far as possible be aligned with existing plans and policies, including the Eastern Cape Provincial Spatial Development Plan and the Spatial Development Frameworks of coastal Municipalities.
- 4.7. Minerals and Petroleum Resources Development Act (No. 28 of 2002)**
- i. The MPRDA is the primary legislative tool through which the exploitation of minerals throughout South Africa is regulated. These include the territorial waters, including South Africa's economic exclusive zone of the sea and continental shelf.
 - ii. The act encompasses prospecting, mining, quarrying, excavating (e.g. removal from the dune or beach).

- iii. Minerals are defined as “any substance” whether solid, liquid or gas occurring natural in or on the earth or in or under water and which was formed by or subjected to a geological process, and includes sand, stone, rock, gravel, clay, soil any mineral occurring in residue stockpiles or in residue deposit.

4.8. National Forest Act No. 84 of 1998

- i. National Forest Act provides for conservation and sustainable forestry management. In order to achieve this, the Act provides for special measures to protect trees and forests, and states that.
- ii. No person may cut, disturb, damage, or destroy any living tree in or remove any such tree from a natural forest. Unless a license to do so has been issued or an exemption has been granted.
- iii. This act is administered by the Department of Agriculture, Forestry and Fisheries.

4.9. Local Government: Municipal Systems Act No. 32 of 2000 (as amended by Act 44 of 2003)

The Local Government: Municipal Systems Act No. 32 of 2000 (MSA) clearly specifies the intention to “build the local government into an efficient, development agency capable of integrating the activities of the spheres of government for the overall social and economic upliftment of communities in harmony with their local natural environment”. Importantly the Act defined “as sustainable development and includes social, economic, environmental, spatial, infrastructure, institutional, organisational and human resources upliftment of a community aimed at:

- Improving the quality of life of its members with specific reference to the poor and other disadvantaged sections of the community; and
- Ensuring that development serves present and future generations”.

4.10. Development Facilitation Act (Act No. 67 of 1995)

The principles contained in the Development Facilitation Act No 67 of 1995(DFA) include the need

- To introduce extraordinary measures to facilitate and speed up the implementation of reconstruction and development programmes and projects in relation to land; and in so doing to lay down general principles governing land development throughout the Republic;
- To provide for the establishment of a Development and Planning Commission for the purpose of advising the government on policy and laws concerning land development at national and provincial levels;

- To provide for the establishment in the provinces of development tribunals which have the power to make decisions and resolve conflicts in respect of land development projects;
- To facilitate the formulation and implementation of land development objectives by reference to which the performance of local government bodies in achieving such objectives may be measured;
- To provide for nationally uniform procedures for the subdivision and development of land in urban and rural areas so as to promote the speedy provision and development of land for residential, small-scale farming or other needs and uses;
- To promote security of tenure while ensuring that end-user finance in the form of subsidies and loans becomes available as early as possible during the land development process; and to provide for matters connected therewith.

4.11. Spatial Planning and Land Use Management Act (No. 16 of 2013)

The Spatial Planning and Land Use Management Act (No. 16 of 2013, SPLUMA) was assented to by the President of the Republic of South Africa on 5 August 2013. SPLUMA is a framework Act for all spatial planning and land use management legislation in South Africa. It seeks to promote consistency and uniformity in procedures and decision-making in this field. The other objects of this Act include addressing historical spatial imbalances and the integration of the principles of sustainable development into land use and planning regulatory tools and legislative instruments.

4.12. Local Government: Municipal Finance Management Act (No. 56 of 2003)

The object of this Act is to secure sound and sustainable management of the fiscal and financial affairs of municipalities and municipal entities by establishing norms and standards and other requirements for:

- ensuring transparency, accountability and appropriate lines of responsibility in the fiscal and financial affairs of municipalities and municipal entities;
- the management of their revenues, expenditures, assets and liabilities and the handling of their financial dealings;
- budgetary and financial planning processes and the co-ordination of those processes with the processes of organs of state in other spheres of government;
- borrowing;
- the handling of financial problems in municipalities;
- supply chain management; and
- other financial matters.

A full list of laws and policies is presented in Table 2, including information on roles and responsibilities.

Table 2: List of summarised national legislation relevant to coastal management in South Africa, including comments on roles and responsibilities.

Legislation	Activity/theme	Aim of law	Responsible authority	Municipal responsibility
Constitution of RSA, Act 108 of 1996 [Chapter 2: Bill of Rights]	Damage or degradation of the environment and the promotion of sustainable development.	Protects and promotes fundamental human rights, including an environmental right (section 24).	Organs of state (defined in section 239 of the Constitution).	Municipal decisions and plans must take into account that everyone has a right to an environment that is not harmful to their health or well-being.
Maritime Zones Act, 15 of 1994	Demarcation of the different zones of (and laws applicable in) South Africa's coastal and marine environment.	Laws enforced in the Republic apply in the territorial waters and to the air space above it.		Municipalities must be aware that their obligations and responsibilities in the implementation of laws may, unless otherwise indicated, include the implementation thereof in the territorial waters.
National Environmental Management Act, 107 of 1998 ("NEMA")	Prevention of damage to or degradation of the environment; Provision of principles for appropriate and sustainable environmental governance by relevant organs of state; Provision of a regime for environmental impact assessment ("EIA") through the EIA Regulations	Establishes principles for organs of state on matters that may significantly affect the environment and for co-operative environmental governance.	National Department of Environmental Affairs and Tourism (DEA) EIA Regulations administered mostly by provincial authorities.	Municipalities must consider the NEMA principles (in section 2) when their actions "may significantly affect the environment". Activities that require authorisation or permission in law and which may significantly affect the environment (see section 24) require environmental impact assessment in accordance with section 24(7). A municipality, as a relevant authority when an emergency incident occurs, may direct the responsible person to take specific measures within a specified time period to limit or remedy the effects of the incident.
National Environmental Management: Integrated Coastal Management No. 24 of 2008 (ICM ACT)	Conservation and sustainable development of the coastal zone	To establish a system of integrated coastal management in South Africa to promote the conservation of the coastal environment and the sustainable development of the coastal zone;	DEA / Provincial Authority / Local Authority	A municipality must prepare and adopt a municipal coastal management programme (CMP) for managing the coastal zone or specific parts of it in the municipality. CMPs must be reviewed every five years and can be amended. The programmes

Legislation	Activity/theme	Aim of law	Responsible authority	Municipal responsibility
		<p>To re-state the law relating to the seashore and the legal status of the seashore and other coastal land;</p> <p>To determine the responsibilities of organs of state in relation to the seashore and other coastal land;</p> <p>To prohibit incineration at sea and to control dumping at sea, pollution in the coastal zone and other adverse effects on the coastal environment;</p> <p>To give effect to South Africa's international obligations in relation to coastal matters.</p>		<p>may be prepared as part of integrated development plans.</p> <p>The Act stipulates that a municipal CMP must:</p> <p>(i) be a coherent municipal policy directive for the management of the coastal zone within the jurisdiction of the municipality; and</p> <p>(ii) be consistent with the ICM ACT, the Biodiversity Act including the national biodiversity framework and national and provincial CMPs.</p>
Control of Use of Vehicles in the Coastal Area Regulations	To manage and regulate the impact of vehicle use in the coastal area.	Govern the use of vehicles within the coastal area, including prohibitions, permissible uses, and permitting.	DEA	<p>Form part of consultation process during application processes for permits to use vehicles within its coastal area.</p> <p>Ensure that all use of vehicles within its coastal areas is in compliance with these regulations.</p>
Management of Public Launch Sites in the Coastal Zone Regulations	To manage and regulate the launching of vessels from public launch sites.	Govern the process for the listing of public launch sites and their management.	DEDEAT	<p>Ensure the use of all public launch sites within its jurisdiction is in compliance with the ICM ACT and these regulations.</p> <p>Ensure the management of the public launch sites in accordance with these regulations.</p>

Legislation	Activity/theme	Aim of law	Responsible authority	Municipal responsibility
National Environmental Management Biodiversity Act (10 of 2004)	<p>Protection of South Africa's biodiversity.</p> <p>The Act provisions on threatened ecosystems, bioregional plans and biodiversity management plans, and together with the Protected Areas Act that provisions for a range of protected area options including private or communal protected areas, gives us powerful tools for achieving biodiversity management and conservation in production landscapes.</p>	<p>Provides for the management and conservation of South Africa's biodiversity within the framework of the National Environmental Management Act 1998;</p> <p>the protection of species and ecosystems that warrant national protection;</p> <p>the sustainable use of indigenous biological resources;</p> <p>the fair and equitable sharing of benefits arising from bioprospecting involving indigenous biological resources;</p> <p>and for the establishment and functions of a South African National Biodiversity Institute.</p>	DEA / Provincial Authority / Local Authority	<p>National, provincial and local government are all considered 'competent authorities' for the control of an alien species or a listed invasive species.</p> <p>The National biodiversity framework may contain norms and standards for provincial and municipal environmental conservation plans (s38(2)).</p> <p>Bioregional plans may be produced by the Minister at the request of a municipality (s 39(2)(b)).</p> <p>Any organ of state that must produce an EMP (under NEMA) and all municipalities that have to prepare IDPs, must make sure that:</p> <ul style="list-style-type: none"> o The EMP/IDP is aligned with the national biodiversity framework and any applicable bioregional plan o The EMP/IDP incorporates provisions of the national biodiversity framework or a bioregional plan that specifically apply to it; o The EMP/IDP demonstrate how the national biodiversity framework and any applicable bioregional plan will be implemented by that organ <p>or state or municipality (s46(2))</p> <p>All organs of state in all spheres of government must prepare an invasive species monitoring, control and eradication plan for land under their control. This must be included within EMPs. Municipalities must include this plan as part of their IDP. Municipalities may be able to get help with preparation of this</p>

Legislation	Activity/theme	Aim of law	Responsible authority	Municipal responsibility
				plan from the National Biodiversity Institute (with the consent of Minister) (s71).
National Environmental Management: Protected Areas Act (57 of 2003)	Protection of South Africa's biological diversity. The Act provides for any land, including private or communal land, to be declared a protected area, and allows for the co-management of such a protected area by the landowner(s) or any suitable person or organisation.	<p>Provides for the protection and conservation of ecologically viable areas representative of South Africa's biological diversity and its natural landscapes and seascapes;</p> <p>Establishes a national register of all national, provincial and local protected areas;</p> <p>Provides for the management of protected areas in accordance with national norms and standards;</p> <p>Provides for intergovernmental co-operation and public consultation in matters concerning protected areas.</p>	DEA / Provincial Authority / Local Authority	<p>A municipality can declare a nature reserves (and determine the type of reserve), protected environments (and allocation of type and name)(s42, 43, 46, 47)</p> <p>Municipalities must follow an appropriate consultation process before designating a reserve or protected environment (s52).</p> <p>Local protected areas must be managed by the municipality itself or management must be assigned to a municipal entity (in accordance with the Local Government Municipal Finance Act) under the sole or shared ownership control of the municipality (s59).</p> <p>Local Protected Area management plans: a municipality must prepare a management plan for a local protected area and submit a copy of the plan to</p> <p>the MEC for environmental affairs in the province for approval (s 60(2)). Section 62 contains reference to the required contents of the management</p> <p>plan.</p> <p>Performance Indicators for monitoring performance of managed of provincial</p> <p>and local protected areas and the management of biodiversity in those areas may be established by the MEC for environmental affairs in a province (s64(2)).</p>

Legislation	Activity/theme	Aim of law	Responsible authority	Municipal responsibility
Environment Conservation Act, 73 of 1989		Provides for activities that require authorisation because of the significance of their actual/potential impact on the environment (by an EIA process that precedes authorisation), and the permitting of waste disposal sites.	DEA / Department of Water Affairs and Forestry (DWAF) / Provincial Authorities	<p>Listed activities require authorisation from the competent authority <u>before</u> such activities may be undertaken in the municipal area.</p> <p>Municipalities may, if a person performs an activity which may seriously damage or detrimentally affect the environment, issue a directive to such a person to cease such activity or to take such steps as are specified (see section 31A).</p>
National Heritage Resources Act, 25 of 1999	Destruction of heritage resources.	Management, conservation and protection of heritage resources.	National Department responsible for Arts and Culture / Provincial Authority / Local Authorities	Municipalities may be responsible for Grade III heritage resources or areas in the coastal zone or for areas where authority was delegated to them. Grade III heritage resources are resources other than those that are so exceptional that they are of special national significance (Grade I), and other than those that have special qualities which make them significant within the context of a province or a region (Grade II). According to this Act, municipalities are responsible for the identification and management of Grade III heritage resources.
National Water Act, 36 of 1998	Water resources, <u>including estuaries</u> .	To manage and conserve the nations water resources.	DWAF / Catchment Management Agencies (CMA).	<p>A municipality as an owner of land, a person in control of land or a person who occupies or uses the land where a situation exists which may cause, is causing or has caused pollution of a water resource, must take reasonable measures to prevent such pollution from occurring, continuing or recurring. ("Water resource" includes, among other things, an estuary, which is defined as "a partially or fully enclosed body of water that is open to the sea".)</p> <p>Where an emergency incident occurs and the municipality is the responsible person (i.e. person responsible for the incident, owns the substance involved in the incident or was in control of the substance involved the incident) its personnel must report the</p>

Legislation	Activity/theme	Aim of law	Responsible authority	Municipal responsibility
				incident to the relevant authorities and take measures to contain and minimise the effects of the incident.
Sea birds and Seals Protection Act, 46 of 1973	The Minister exercises control over seabirds, seals and products produced from seabirds and seals. Persons are prohibited from shooting or capturing any seabirds or seals.	Protection and control of the capture and killing of seabirds and seals and for the products of such animals.	DEA	Municipalities must be aware of this prohibition.
Marine Pollution (Control and Civil Liability) Act, 6 of 1981		Protection of the marine environment from pollution and to determine liability for the loss or damage caused by the discharge of oil from ships.	Department of Transport / South African Maritime Safety Authority (SAMSA)	The Minister may ratify the expenses incurred by a local authority for removing oil pollution from the sea discharged from any ship, to the extent to which those expenses could have been incurred by SAMSA.
Nature and Environmental Conservation Ordinance (Ordinance 19 of 1974)	Nature Conservation	Provides for the conservation and management of protected areas.	Provincial Authority / Local Authority	Local authorities are charged with establishing local nature reserves and exercising various powers and duties in respect of those local nature reserves, including the issuing or cancellation of permits or authorisations issued.

5. Description of the Mbhashe LM coastline

5.1.1. The municipal area of jurisdiction

Mbhashe LM is situated in the south-eastern part of the Eastern Cape Province, and is bound by the Qhora River in the south to Mncwasa River in the north along the Indian Ocean. Mbhashe is 3030.47 km² in area, with a coastline extending approximately 80km. Mbhashe has 31 wards, and five of them are bordered by the coast.

Mbhashe Local Municipality falls under the jurisdiction of the Amathole District Municipality and it borders King Sabata Dalindyebo, Ngcobo, and Ntsika Yethu Local Municipalities (Fig. 7).

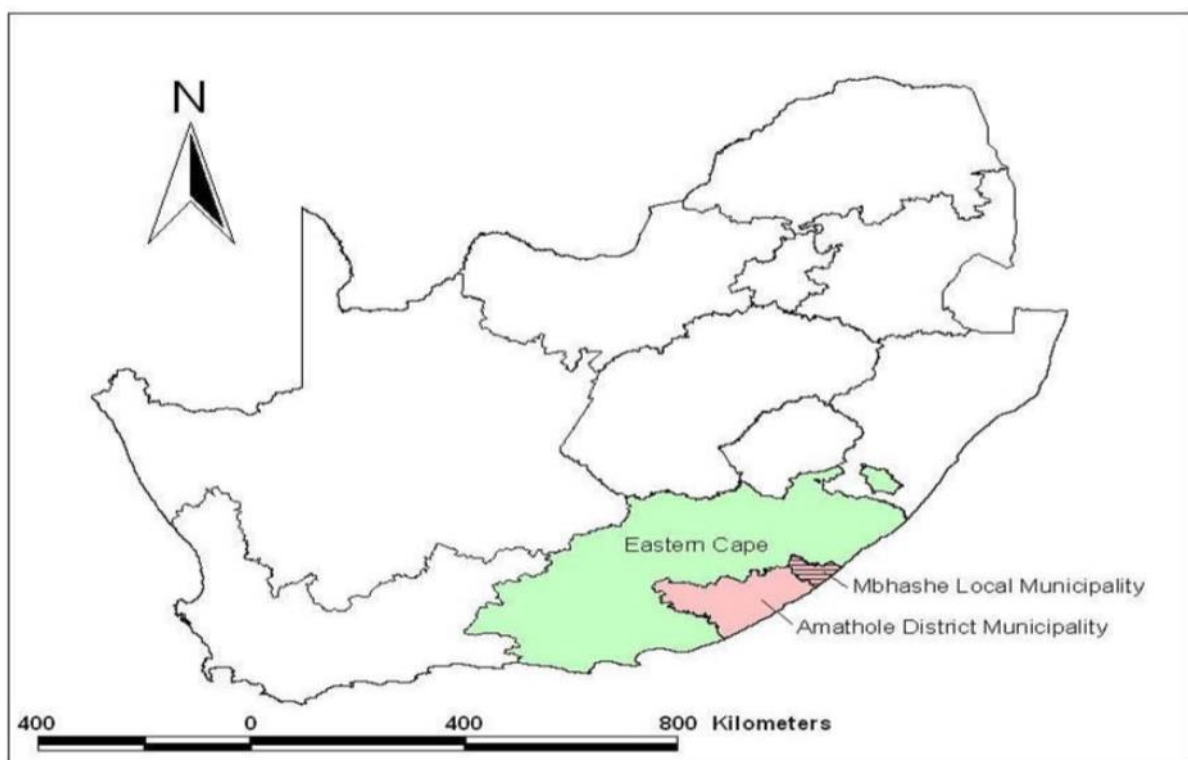


Figure 7: Location of Mbhashe LM within the Amathole District Municipality in the Eastern Cape Province, South Africa.

The municipality has three main urban centres, namely Dutywa, Willowvale (Gatyana) and Elliotdale (Xhora). Dutywa is the administrative centre of the municipality. Mbhashe is also important in Xhosa culture as it is where the head offices of the AmaXhosa Kingdom are located, at Nqadu Great Place.

Even though the coastline of the Mbhashe LM is generally undeveloped, there are various locations providing public recreational opportunities as well as servicing the low-scale tourism and hospitality industry (e.g. Fig. 8)







Figure 8: Examples of the prominent locations (mapped on Google Earth) along the Mbashe LM coastline (north to south), providing public recreational opportunities as well as serving as locations for the hospitality industry.

The location of the Mbashe LM along the east coast of South Africa is of ecological significance, as the biophysical environment associated with this coastal environment gives rise to such a unique coastline. The next section explores this biophysical environment in detail.

5.2. Biophysical description of the Mbashe LM coastline

5.2.1. Climate

The area has a relatively high average rainfall, with the coastal and mountain regions receiving over 1000mm per annum. Snow is not uncommon at high altitudes in winter, but the remainder of the country is temperate with high sub-tropical temperatures along the coast in summer.

The summer rainy seasons are sub tropically warm and pleasant, while the winters are mild. High temperatures in January (mid-summer) reach about 28°C, and in June (winter) about 21°C, with lows of 17 and 9°C respectively.

5.2.2. The East Coast coastal and marine environment

5.2.2.1. The physical environment

The characteristics and dynamics of the marine environment off the Mbashe LM coastline, on the east coast of South Africa, are driven by the Agulhas Current – a western boundary current which flows in a southward direction of the continental shelf of the east coast of southern Africa. Off the Mbashe shoreline, Agulhas Current is generally warm (approximately 8⁰-12⁰C sea surface temperatures) system (see Fig. 9A). Such ambient conditions influence the productivity levels – as indicated by mean chlorophyll-a (ranging from approximately 4 to 11mgm⁻³) – of the marine environment as well as the quality of habitat supporting marine biota (Fig. 9B).

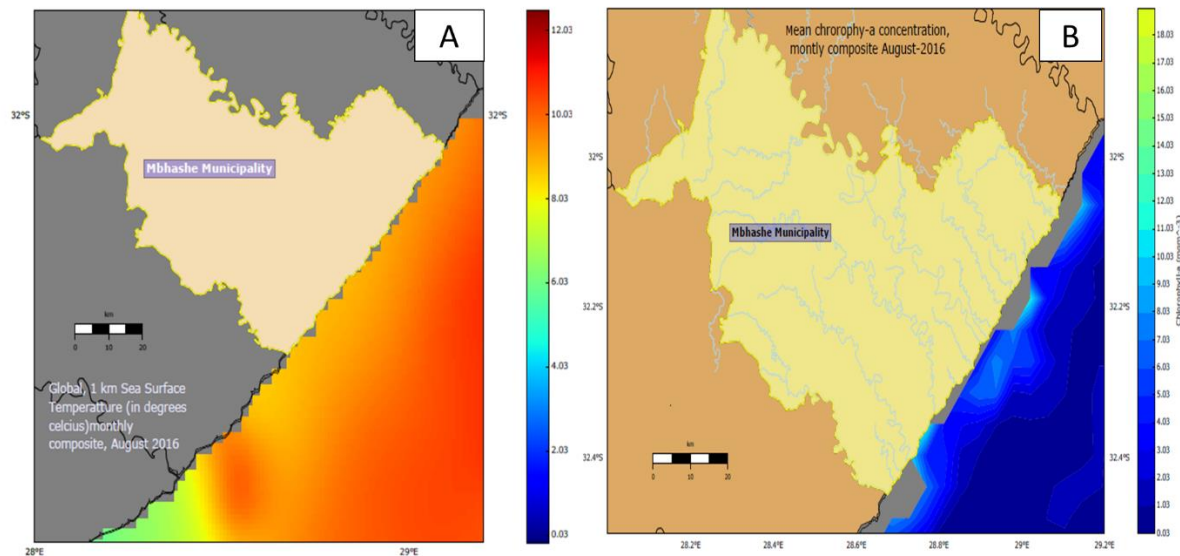


Figure 9: Typical sea surface temperature ($^{\circ}\text{C}$) and chlorophyll-a (mgm^{-3}) patterns with respect to the Agulhas-Current-driven marine environment off the coast of Mbashe LM, along the east coast of South Africa, estimated from satellite data averaged over a twelve-month period ending August 2016.

The marine habitat along the Mbashe LM coastline falls under a region classified as the Agulhas Current Ecoregion (Fig. 10), an oceanographically complex region, which includes the coast, continental shelf and shelf edge, with medium productivity, subjected to warm water intrusions from the Agulhas Current and wind-induced upwelling of cold South Atlantic central water (Harris 1978, as cited in Sink *et al.* 2012). This region considered to be highly threatened due to intense commercial fishing activities (Sink *et al.* 2012).

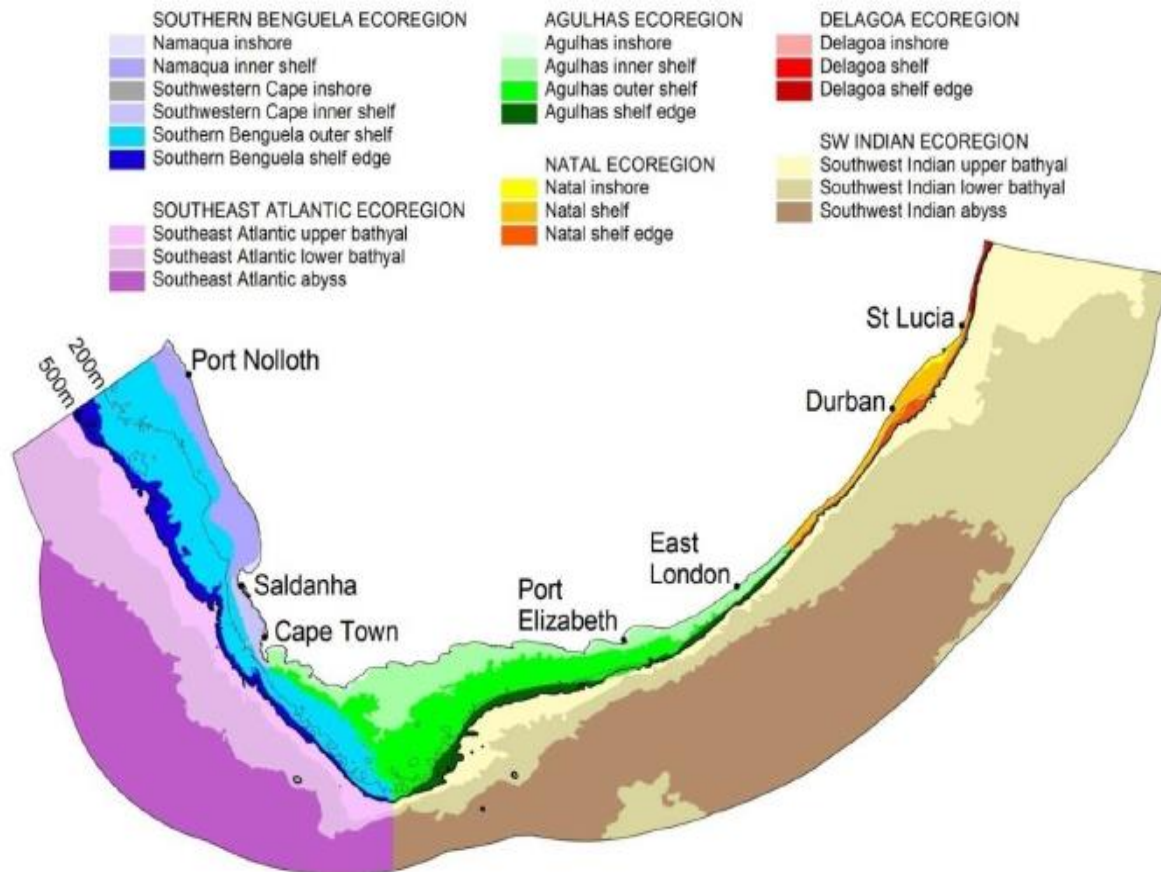


Figure 10: Six marine ecoregions with 22 ecozones incorporating biogeographic and depth divisions in the South African marine environment (Sink *et al.* 2012). The ecozones extend from the coastal (or supratidal) zone to the end of the Exclusive Economic Zone (EEZ), which marks the end of South African waters.

5.2.2.2. Shoreline profile

While the northern regions of the Wild Coast are characterised by rugged plateau of the Msikaba Formation sandstone, with narrow river gorges and relatively fewer sandy beaches, the southern region, which includes the coastline of the Mbashe LM features a relatively gentler undulating coastline, intermixed with rocky points (Reyers and Ginsburg 2005). The typical vegetation types here are the Transkei coastal belt grasslands, and scarp forest (Fig. 11)



Figure 11: The coastline along the Mbhashe LM is characterised by the Transkei coastal belt grassland and scarp forest.

5.2.2.3. ***The biological environment***

5.2.2.3.1. **Fishing**

Small-scale fishing activities are taking place at various locations along the Mbhashe LM shoreline. The most common fishing mode is through the use of rod and line, and to a lesser extent spear fishing (fisheries observers, *pers. comm.*). Fish species harvested include shad, black tail, banded galjoen, stone bream, kob, silver bream, Cape stumpnose, mullet and barbell. Furthermore, a wide range of invertebrates are also harvested from this shoreline, such as mussels, octopus, sea urchins, limpets, and oysters.

A total of 1 632 permits have been issued for small-scale fishing within the Mbhashe LM, with permit holders coming from 14 communities within the municipality (Table 3)

Table 3: Number of small-scale fisheries permit holders per location within the Mbhashe LM (data were made available courtesy of DAFF)

Area	Number of permits
Cwebe	260
Folokhwe	51
Hobeni 1	354
Jotela	45
Mahasana	76

Mendwana	152
Mpame	94
Mpume	68
Ngoma	58
Nqileni	76
Ntlangano	68
Ntubeni	170
Qatywa	116
Qhora	44
Total	1632

Even though fisheries management is not a mandate of the municipality (it is the mandate of the DAFF), the Mbashe LM, must still facilitate the provision of an enabling environment for such fishing activities, such as infrastructure support, economic development initiatives, etc.

5.2.2.3.2. Seaweed

The rocky shores of the Mbashe coastline are inhabited by seaweed species such as (or macrophytic marine algae) that are found sub-tidally but also in the intertidal zone. The species composition includes representatives of the red, green and brown algal groups and distributions also exhibits zonation similar to intertidal animals.

The most common intertidal species along the Mbashe LM rocky shores is *Gelidium pristoides*. Various species of the genus *Gelidium* are harvested along almost the entire Mbashe LM coastline for the production of agar. The predominant target species for this market is *G. pristoides*.

5.2.3. The Wild Coast

The Mbashe LM falls within a section of the coast of the Eastern Cape Province known as the Wild Coast. The Wild Coast stretches 250km from the Kei River in the south, to the Mtamvuma River in the north (as depicted in the map in Fig. 12).

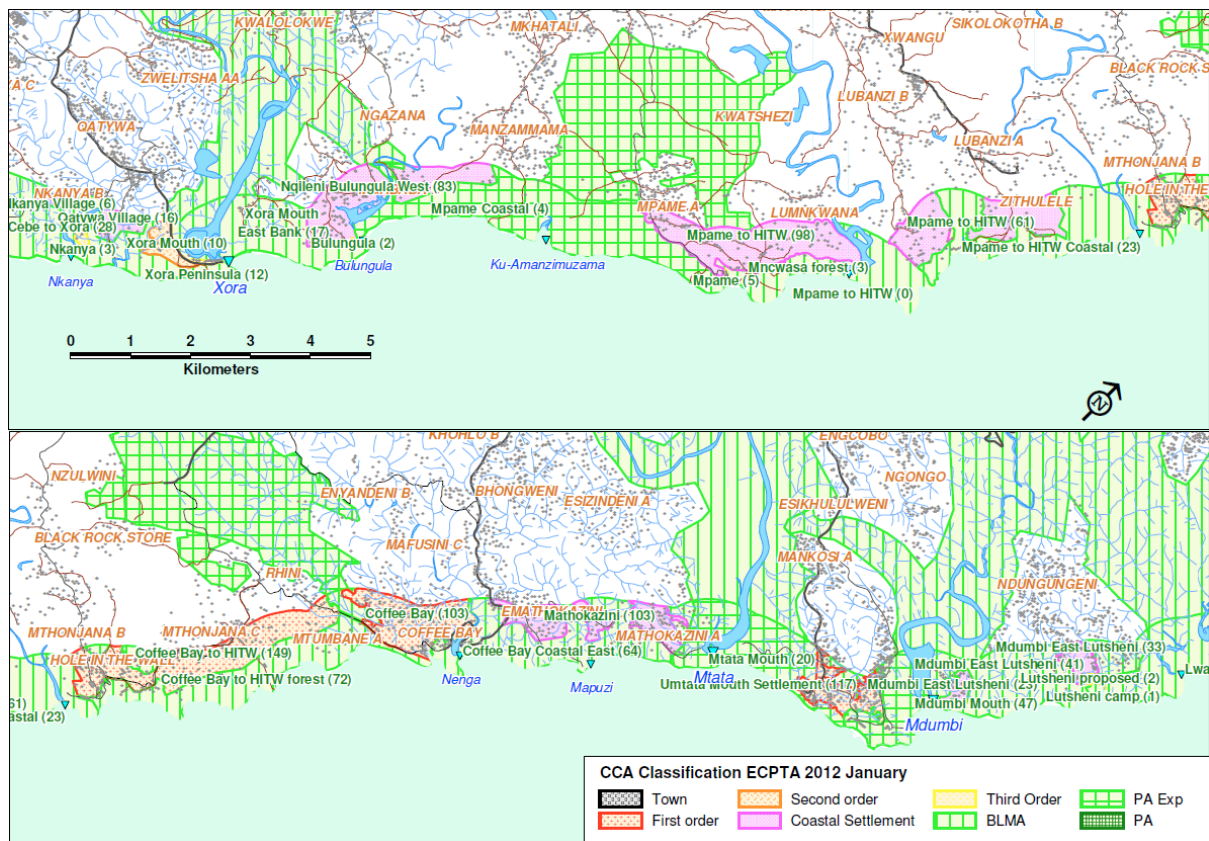


Figure 12: Coastal locations along the coastline of the Mbashe LM included under the Wild Coast Environmental Management Plan 2014,

The name “Wild Coast” speaks to the ruggedness of the coastline (Fig. 13), with a shoreline characterized by a diversity of shore types (sandy beaches, rocky shores), shoreline features (deep narrow gorges, waterfalls) and biomes (grasslands, coastal forests, dune thicket, mangroves, dune fynbos).



Figure 13: A photograph outlining the rugged nature of the shoreline which characterises the Wild Coast. The Mbashe LM’s coastline falls within the Wild Coast.

With respect to vegetation types, the Wild Coast is characterised by the Transkei coastal belt grassland and scarp forest, as summarised in Reyers and Ginsburg (2005). It is estimated that this region is endowed with approximately 50 000ha of indigenous forest, specifically the Indian Ocean coastal forest. Six subtypes make up the Indian Ocean coastal forest, namely, Pondoland Coast, South Coast, Dune, Swamp, Coast Scarp and mangrove forests (Reyers and Ginsburg 2005).

The Wild Coast is not only ecologically important with respect to marine and coastal habitat, it is also a key economic asset – though still at a low scale. The Wild Coast Conservation and Sustainable Development Project's Strategic Overview (SRK Consulting 2006) points to a concentration of economic activity along the coast, placing continued pressure on the coastal assets to sustain all development needs in the area. The Wild Coast, is still, however, able to provide sufficient environmental services to sustain coastal communities.

The Wild Coast Conservation and Sustainable Development Project's Municipal Situation Assessment chapter (SRK Consulting 2006) lists strategic opportunities associated with the Wild Coast's environmental assets (coastline, estuaries, river and wetland systems, and terrestrial habitats) are summarised in Table 4 as follows:

Table 4: Opportunities and constraints of environmental assets of the Wild Coast, their opportunities and their constraints (SRK Consulting 2006).

STRATEGIC ENVIRONMENTAL ASSETS	ENVIRONMENTAL ADVANTAGES / OPPORTUNITIES	ENVIRONMENTAL THREATS / CONSTRAINTS
<p>Marine Coastline (Ocean, Beaches and Rocky Shores)</p> <ul style="list-style-type: none"> Approximately 64km of coastline comprising sandy beaches, rocky shores and near-shore ocean – a high quality environment with relatively little development. MPA (south-western boundary being a line drawn 135° from Human's Rock, including the tidal portion of the Mbhashe River, extending eight nautical miles seawards of the high-water mark, with north-eastern boundary being a line drawn 135° from the Ntlonyane River mouth) at Dwesa-Cwebe Nature Reserve (approximately 18km of coastline). Until recently, this was a limited-use zone. <p>KEY ECOSYSTEM SERVICES</p>	<p>Marine Coastline (Ocean, Beaches and Rocky Shores)</p> <ul style="list-style-type: none"> Relatively good road access to most coastal destinations. The MPA provides for protection of marine species. Potential for increased ecotourism development along the coast, given that there is little development and a high value visual amenity. Compared to other parts of the Wild Coast the Dwesa-Cwebe Nature Reserve has untapped tourism potential (this is one of the largest conserved areas on the Wild Coast). Potential for seaweed harvesting for agar and sale for culinary purposes; culture of mud crabs for harvest and sale and local clay deposits for refinement, sale and use in curio making. 	<p>Marine Coastline (Ocean, Beaches and Rocky Shores)</p> <ul style="list-style-type: none"> Damage to beaches due to driving of vehicles above high water mark. Limited capacity for enforcing national ban on beach driving. Shingle shell and sand is being extracted from beaches. Extraction adjacent to river banks and on beaches is leading to bank / dune collapse. The MPA associated with the Dwesa-Cwebe Nature Reserve will limit the type of development and use of the coast for tourism / recreation. Poaching of abalone (<i>perlemoen</i>) is reportedly widespread along this stretch of coastline. Limited enforcement capacity for MPA limits the effectiveness of this area as a biodiversity refuge and area for ecological regeneration.

STRATEGIC ENVIRONMENTAL ASSETS	ENVIRONMENTAL ADVANTAGES / OPPORTUNITIES	ENVIRONMENTAL THREATS / CONSTRAINTS
<ol style="list-style-type: none"> 1. Amenity value – the ocean, beaches and rocky shores represent a unique amenity for tourists and related development, nature-based activities and education. 2. Harvestable resources – subsistence fishing, mussels, etc. provide local food security, fishing is a popular recreational activity for tourists. 3. Stability – the interface between the marine and terrestrial environments plays an important role in protecting land and estuaries from sea erosion, storm surf and ocean wind. 4. Waste assimilation – the marine coastline is the ultimate receiving environment for water-based outputs of development in the Mbhashe Municipality and inland areas, providing cost-savings and development opportunities. 5. Genetic diversity – local genetic conservation importance and educational value in the marine environment, particularly the Dwesa-Cwebe MPA. 6. Climate regulation – the marine environment regulates local climate, providing an environment that fosters tourism, agricultural production and development. 	<ul style="list-style-type: none"> • Relatively undeveloped nature of the coastline provides an opportunity to retain pristine sections of the coast with coordinated planning for future nodal developments. • High potential for sustainable harvesting of marine resources for local food security. 	<ul style="list-style-type: none"> • The Marine Coastline is the receiving environment for a number of large rivers, including the Mbhashe. Pollutants, sediment and poor quality water from these catchments may threaten the integrity of the coastline in the medium to long term as a result of inland development and agricultural land uses.
<p>Estuaries</p> <ul style="list-style-type: none"> • There are 12 estuaries in the Municipality covering an area of 586ha, three of which are each greater than 100ha in extent. • The Mbhashe, Xora and Nqabara estuaries are rated No. 2, 5 and 15 respectively in terms of conservation importance of the Wild Coast estuaries. <p>KEY ECOSYSTEM SERVICES</p> <ol style="list-style-type: none"> 1. Harvestable resources – fishing provides important local food security opportunity AND provides attraction for recreational use with added economic benefits. Estuaries provide fibre / wood harvesting opportunities for local use. 2. Amenity value – the estuaries represent a unique amenity for tourists and related development, 	<p>Estuaries</p> <ul style="list-style-type: none"> • All estuaries are in a “Good” or “Excellent” condition and provide opportunities for conservation and / or tourism development. • Four of the estuaries including the Mbhashe and Nqabara remain open all year round and some are navigable with a small boat for several kilometres upstream. This is an important opportunity for boat launching along the Wild Coast and for water-based recreation activities. • Estuaries that are open all year around allow for good ecological regeneration, waste disposal and assimilation functioning. • Potential to formalise the conservation status of the Nqabara estuary by extending the Dwesa-Cwebe Nature Reserve southwards. 	<p>Estuaries</p> <ul style="list-style-type: none"> • Open / closed nature of eight of the estuaries limits their capacity for waste assimilation and ecological regeneration. This will have an impact on the type and intensity of development that can take place in the upstream catchments, if estuarine integrity is to be protected. • The Mbhashe estuary, located in the Dwesa-Cwebe Nature Reserve, may be threatened by increasing development and poor land use management in the upstream catchment (which is significantly large). • Conservation importance of the Mbhashe, Xora and Nqabara estuaries will influence the level of upstream and adjacent development, given that these estuaries form the receiving environment for development in their respective catchments.

STRATEGIC ENVIRONMENTAL ASSETS	ENVIRONMENTAL ADVANTAGES / OPPORTUNITIES	ENVIRONMENTAL THREATS / CONSTRAINTS
<p>nature-based activities and education. Estuaries are safe swimming areas along the coast.</p> <p>3. Ecological productivity - estuaries support the regional regeneration of fish stocks and aspects of marine biodiversity, particularly those which are open all year round.</p> <p>4. Genetic diversity – local endemism with high genetic conservation importance and educational value.</p> <p>5. Waste assimilation – estuaries receive water-based outputs of development in the municipal area and inland, providing cost-savings and development opportunities, and protecting near-shore ocean quality.</p> <p>6. Sediment supply – estuaries regulate sediment flows onto beaches and into the near-shore environment.</p>	<ul style="list-style-type: none"> • The Nqabara estuary is an important mangrove resource and birding site. • Appropriately located cottages and facilities adjacent to estuaries pose an opportunity for consolidating recreation / tourist land uses in the short to medium term. • Opportunity for sustainable harvesting of estuarine resources for local food security and for sale to tourists, with implementation of a resource management system. 	<ul style="list-style-type: none"> • Sand mining, as occurring within the estuaries, contradicts conservation objectives. • Inappropriately located and serviced cottages and facilities may threaten the quality and integrity of estuaries.
<p>Rivers, Floodplains and Wetlands</p> <ul style="list-style-type: none"> • There are some 23 rivers in the Mbashe Municipal Area. • The largest river is the Mbashe followed by the Nqabara and then the Ntlongyana. The remaining key rivers are predominantly locally arising coastal rivers (in Cwebe these are the KwaSuku, Dakana, KuBhula, Mbanyana and KuMpenzu and in Dwesa, the Mendwane, Mendu, Ngoma and Ngomane). The Mbashe, Mendu, Mandwana, KuMpenzu and Mbanyane estuaries are also protected as no-fishing zones. • The Dwesa-Cwebe Reserve is water rich, with a number of rivers traversing the area and small wetlands and vleis are found throughout. • There are numerous non-perennial streams and a number of small pans, wetlands and vleis in the area. <p>KEY ECOSYSTEM SERVICES</p> <p>1. Water supply – high dependency on local water supplies for basic needs. Coastal development is mostly based on local water supplies. Major and minor rivers supply these needs.</p>	<p>Rivers, Floodplains and Wetlands</p> <ul style="list-style-type: none"> • Limited water quality studies undertaken indicate that overall, river water quality is good. This poses an opportunity for rural people and coastal development to use local water supplies with limited treatment; a cost savings for the local municipality. • The Nqabara, Mbashe and Xora systems are of high ecological and conservation value. The mouth of the Xora River is the site of a newly discovered endemic snail species. • The Mbashe River is the only feasible source of bulk water supply for the southern portions of the Mbashe Municipality (though other sources need to be investigated in order to relieve pressure on the Mbashe River). • Wetlands and floodplains, particularly those in the larger river catchments (Mbashe, Nqabara, Ntlongyana) perform an important role in regulating water, sediment and floods, thereby protecting estuaries and coastal infrastructure and assets. • Harvestable resources (beds of indigenous reeds) are found along the banks of the Nqabara, Ntlongyana and Mbashe rivers. 	<p>Rivers, Floodplains and Wetlands</p> <ul style="list-style-type: none"> • The overloaded sewage treatment works in Dutywa is believed to overflow into the Nqabara River, a threat to local and downstream water users, as well as natural assets in the coastal zone. • Water resources are being impacted on by poor land use management, increasing development and low levels of municipal servicing. Large catchments such as the Mbashe are particularly affected. • Illegal sand extraction is occurring on the Mbashe river floodplain and other rivers, resulting in water quality impacts and destabilisation of river banks and reduced flood attenuation capacity. • There are limited opportunities for large scale irrigation associated with the rivers other than the Mbashe, Nqabara and Ntlongyana, small scale irrigation schemes are, however, viable. • The need to protect flows into estuaries with a high conservation potential (including the Mbashe, the only major water resource in the area, may limit future damming and abstractions from the Municipality's rivers.

STRATEGIC ENVIRONMENTAL ASSETS	ENVIRONMENTAL ADVANTAGES / OPPORTUNITIES	ENVIRONMENTAL THREATS / CONSTRAINTS
<p>2. Water regulation – floodplains and wetlands play a key role in regulating water flows, securing year-round water supplies to users. Attenuation of floodwaters generated from upstream catchment areas, particularly with the larger rivers, and protecting the integrity of estuaries.</p> <p>3. Waste assimilation – rivers and associated ecosystems assimilate and dilute wastes from urban, rural settlement and agricultural land uses. This assists in protecting the marine and coastal assets, and securing the integrity of the Dwesa-Cwebe MPA.</p> <p>4. Sediment supply – rivers are the conduit for sand / soil that replenishes floodplains, estuaries and beaches. Wetlands and floodplains regulate the flow of sediments to the coastal zone. Sand is also an important natural product harvested from river areas.</p> <p>5. Harvestable resources – fishing provides important local food security opportunity. Wetlands and floodplains provide natural fibres and food resources for subsistence use.</p> <p>6. Amenity value – rivers (and waterfalls) represent an important amenity for tourists and related development, nature-based activities and education. Rivers are an important local recreational amenity for swimming.</p> <p>7. Genetic diversity – local endemism with high genetic conservation importance and educational value.</p>		<ul style="list-style-type: none"> • The Mbanyana River has a high silt load, nutrient enrichment and significant bacterial contamination. • High siltation rates in the Mbhashe River due to ESKOM electricity generating procedures. • The value of power generation on the three main rivers is also low, particularly if a better high-value user such as municipal or irrigation for high value crops were identified. • Decreasing accessibility and availability of reed bed resources points to unsustainable levels of use.
<p>Terrestrial Habitats</p> <ul style="list-style-type: none"> • Thicket comprising the Subtropical Dune Thicket is found in an isolated narrow band along the coast associated with the Dwesa-Cwebe Nature Reserve. • Eastern Cape Thornveld and Eastern Valley Bushveld are the dominant vegetation extending along the inland section of the planning domain. • Scarp Forest occurs in the Qora River valley, large intact areas exist in the Dwesa-Cwebe Nature Reserve and the Mpame Forest 	<p>Terrestrial Habitats</p> <ul style="list-style-type: none"> • The Dwesa-Cwebe Nature Reserve is the largest coastal section formally protected on the Wild Coast. Areas have been identified directly adjacent to the borders of the Reserve as offering opportunities to increase the size of the protected area. • Good opportunities for biodiversity conservation: a number of species reach their most northerly or southerly range limits in the Dwesa-Cwebe area and a number of rare bird species occur there. The forests also provide important 	<p>Terrestrial Habitats</p> <ul style="list-style-type: none"> • There is limited availability of harvestable resources within the Dwesa-Cwebe area due to its protected status. • The medicinal plants collected in the unprotected grasslands are now very scarce or no longer found. • There is no selectivity regarding wood harvested for fuel, which is placing pressure on conservation areas. • Indigenous forests are being over-exploited in some areas, which is threatening genetic resources and

STRATEGIC ENVIRONMENTAL ASSETS	ENVIRONMENTAL ADVANTAGES / OPPORTUNITIES	ENVIRONMENTAL THREATS / CONSTRAINTS
<p>with a few isolated patches occurring on the coastal areas.</p> <ul style="list-style-type: none"> • Transkei Coastal Belt grasslands, the second most dominant vegetation type cover a large part of the coastal plain and extend down to the coast in places. • Dwesa-Cwebe Nature Reserve boasts large stands of indigenous forest. By virtue of their size and composition, these forests (along with the Manubi State forest) are regionally important. • Riverine forest extends inland beyond the boundaries of the nature reserve and various river courses. The Nqabara, Ntlongonyana and Mbhashe Rivers and their catchment streams are the most important reservoirs of riverine forest. • Swamp forest includes a Mangrove forest in the estuary of the Nqabara River and along the eastern bank of the Mbhashe River. The forest habitat has an extremely high biodiversity with a wide range of plant and animal species. Other forests of high conservation value include the dune forests at Wavecrest and Kobonqaba (i.e. Wavecrest, Nxaxo and Ntlaboya). Almost the entire coastal dune forest strip between the Qora River and Kei River is demarcated State forest reserve (Centani Coastal Forest Reserve and Manubi-Centani Coastal Forest Reserve)¹. <p>KEY ECOSYSTEM SERVICES</p> <ol style="list-style-type: none"> 1. Harvestable resources – grasslands, thicket and forests provide harvestable resources for house building, food, fodder and natural medicine. 2. Soil retention and stability – vegetated areas secure the soil and prevent erosion, protecting the productivity of the landscape and the integrity of receiving river / estuarine environments. 	<p>habitat for communities of Blue Duiker, Samango Monkeys, Tree Dassies and the Giant Golden Mole that are rare and vulnerable. The grasslands in Dwesa-Cwebe are generally in good condition and do not suffer from the same grazing pressures as most communal areas. A number of bulbous flowering plants and indigenous orchids occur in the grasslands and have been heavily utilised for medicinal purposes.</p> <ul style="list-style-type: none"> • The Xora River and Mpame Forest have been identified as priority conservation areas, the latter being the forest habitat of the Giant Golden Mole, which is globally threatened. There is also the Mbhashe estuarine priority area. The Mpame Forest occurs near the mouth of the Mncwasa River and is important for its invertebrate diversity and endemism, as well as its importance to bird, mammal and plant species and, along with the other areas referred to, is important for conservation and ecosystem functioning. These areas offer the potential for use for formal / informal conservation / CBNRM. • To support the management and conservation of State forests within the area between the Kei and Mbhashe Rivers, the potential for the development of community forestry adjacent to these areas could be explored, especially inland, on areas that are already degraded. Such initiatives would also supply resources such as for construction material and furniture. • A trust has been set up between the community (approximately 2500 homesteads) and the Department of Land Affairs associated with the Dwesa-Cwebe Nature Reserve. • Inappropriately located and serviced cottages and tourist / recreation facilities may impact on 	<p>ecosystem functions. Forest products being sold commercially include building poles, kraalwood and firewood. The Mpame Forest priority area is threatened by grazing, forest cutting and small-scale mining.</p> <ul style="list-style-type: none"> • Low agricultural potential: the irrigation potential of coastal areas is low overall due to the fact that areas with a combination of a slope of 0-4%, good quality soil and irrigation water, are limited. There is virtually no transport system in the region by which local entrepreneurs can import goods or send out fresh produce or craft products. Those farmers who are able to produce vegetables for sale cannot sell much locally, due to the lack of demand in the area and, therefore, have to transport produce to Dutywa, Butterworth and East London in order to sell their products. Markets are perceived to be far and there is no marketing of locally produced vegetables to tourists. • The area along the Nqabara River is environmentally sensitive and will not be suitable for development. The forest habitat has an extremely high biodiversity with a wide range of plant and animal species. This area is regarded as a priority conservation area and has been a protected area since 1891. • Most potential tourism development areas already have cottages. • The extensive settlement in the area may limit or constrain the location and type of tourism / recreational developments that may take place.

¹ The only section of coastal land that is not State forest-land is between the Nxaxo River and the Kei River in the south. This has to do with the area's former status as privately owned farmland and the fact that very little forest occurs here.

STRATEGIC ENVIRONMENTAL ASSETS	ENVIRONMENTAL ADVANTAGES / OPPORTUNITIES	ENVIRONMENTAL THREATS / CONSTRAINTS
<p>3. Amenity value – forests and grasslands represent an important amenity for tourists and related development, nature-based activities and education.</p> <p>4. Genetic diversity – local endemism with high genetic conservation importance and educational value.</p> <p>5. Water regulation – areas under natural vegetation play a role in regulating water flows to streams and rivers, securing year-round water supplies to users and protecting the integrity of estuaries.</p> <p>6. Waste assimilation – grasslands and forests may assimilate and dilute wastes from urban, rural settlement and agricultural land uses. This assists in protecting coastal assets such as estuaries and the near-shore environment.</p> <p>7. Ecological productivity – livelihoods and economic opportunities are associated with the sustainable use of timber, grassland and non-timber forest products for craft and trade.</p> <p>8. Food Production - terrestrial landscapes provide opportunities for the production of food through agriculture.</p>	<p>future biodiversity conservation and tourism development options.</p>	

In conclusion, it is important to note that although development is perceived as an indication of the realisation of socio-economic benefits, development must be considered with caution. Any development programmes must be risk averse, while still promoting socio-economic opportunities. Such sustainable development can be achieved through the promotion of community-driven tourism projects rather than construction-driven development (ECPTA person. comm).

5.2.4. Conservation

The Dwesa-Cwebe Nature Reserve is intersected by the Mbashe River, and comprises the Dwesa-Cwebe Wildlife and Marine Sanctuary. Typical vegetation in the Dwesa-Cwebe Wildlife and Marine Sanctuary includes lowland forest, grasslands and acacia scrub. The Dwesa – Cwebe Nature Reserve conserves the largest tract of indigenous coastal forest in the Eastern Cape and is rich in intertidal and marine environment (Fearon, 2010). There is also sensitive dune forest present within the reserve. There are at least 290 bird species recorded in the two reserves. The nature reserve has seen the introduction

of game species such as red hartebeest, blesbok and blue wildebeest. Other large species found here are crocodile, buffalo, eland and warthog. Furthermore, the Dwesa-Cwebe Nature Reserve boasts diverse habitats such as forest, grassland, and mangrove. The birdlife in this reserve includes the Narina trogon, the mangrove kingfisher, the wailing cisticola, the plainbacked pipit, the broadtailed warbler, the yellow-throated longclaw, the croaking cisticola, the halfcollared kingfisher, the longtailed wagtail, the crowned eagle, and the crowned crane.

Lastly, the Dwesa-Cwebe Nature Reserve forms the inshore boundary of the Dwesa-Cwebe Marine Protected Area (MPA). The Dwesa-Cwebe MPA extends eight nautical miles offshore, and between, as a south-western boundary, a line drawn 135° from Human's Rock, and, as a north-eastern boundary, a line drawn 135° from the Ntlongonyane River mouth (Fig. 14) The MPA is approximately 18 000ha in size. In November 2015 the Minister of Environmental Affairs declared the MPA under section 22A of the National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) (NEMPAA), and published the Regulations for the Management of the Dwesa-Cwebe MPA.

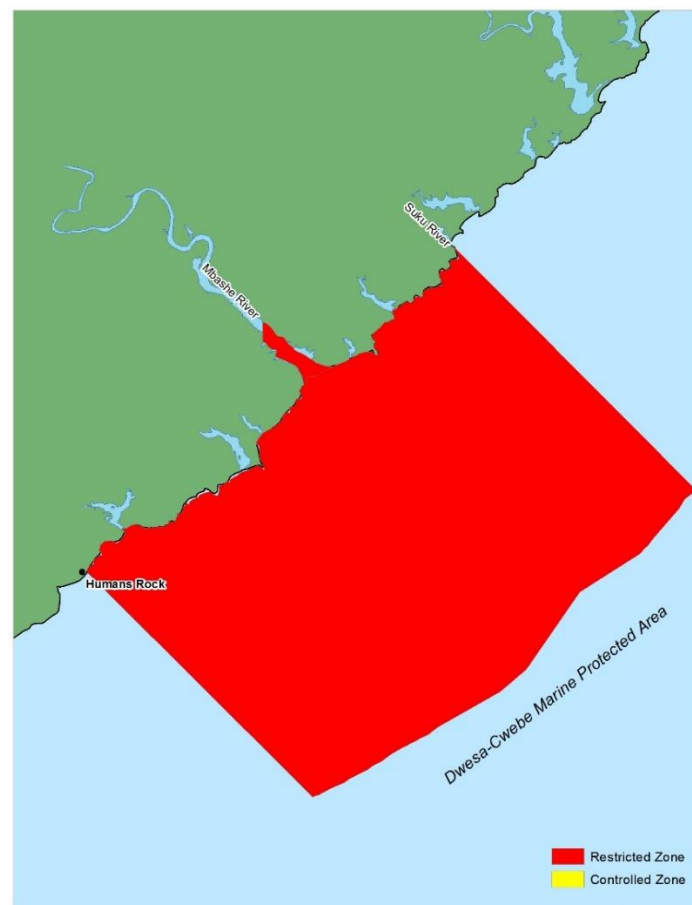


Figure 14: The Dwesa-Cwebe MPA along a section of the Mbhashe LM coastline and extending eight nautical miles offshore (www.bgis.sanbi.org).

5.3. Socio-economic description of Mphashe Local Municipality

Mphashe has an estimated population of 265 000 of which with 55% are males and 45% females. There are approximately 60 000 households (IDP 2012-2017). This implies an average of four people per household. The Mphashe population is largely youthful with about 44% being children (ages 1-14) of school going age, while 29% can be regarded as youth falling between ages of 15 and 35 (Fig. 15).

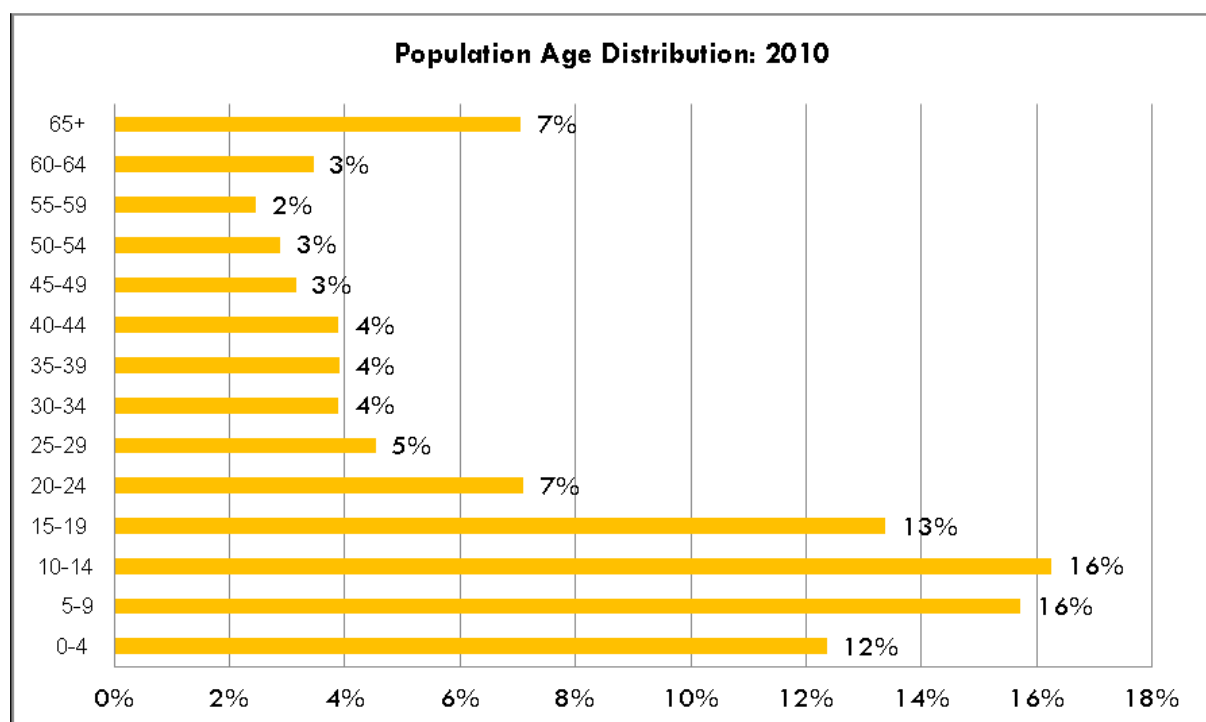


Figure 15: Population dynamics (Mphashe IDP 2012-2017).

Mphashe is predominantly rural, consisting of low-density rural settlements surrounded by communal areas used for agriculture and grazing. There are almost 22 000ha arable lands, but agricultural production is hampered by a lack of infrastructure, including a lack of fencing.

Potential exists for the dry-land cultivation of maize and beans, the production of broilers and eggs, and growing tomatoes using hydroponics. The production of bio-fuels could also lead to job creation and poverty alleviation.

Mphashe is well suited to livestock (sheep, cattle and goats) farming. Considerable efforts are being put into improving the quality of livestock, thereby increasing meat and milk production.

The forestry sector in the Eastern Cape makes a significant contribution to the rural economy and local employment. Due to biophysical characteristics, there are substantial areas which are suitable for commercial afforestation, creating the opportunity for more than doubling the current plantation area. Natural forests in the Mbhashe LM amount to 14281ha of land. Within the Mbhashe LM, there are 2432 state-owned forest plantations, and 30 community-owned plantations (Greenline Business Management (Pty) Ltd 2007).

Table 5 below summarises the extent of existing and potential forestry, and the numbers and scale of forestry activities for the Mbhashe LM. Furthermore, estimates of employment numbers and revenue generation within the plantations and existing wood processors are provided.

Table 5: Summary of existing and potential forestry and estimates of employment numbers and revenue generation within the plantations and existing wood processors of the Mbhashe LM (Greenline Business Management (Pty) Ltd 2007).

Sector Segment	Number	Scale/Extent (ha, m3/a or t/a)	Employees	Revenue (Rm/a)
Commercial Plantations	0	0		0
Woodlot Plantations	28	2462	79	0.6
Total Existing	28	2462	79	0.6
Afforestation Potential - Moderate		50982		
Afforestation Potential - Good		0		
Total Potential		50982		
Total Plantations		53444		
Natural Forests (Groups)		14281	54	
Sawmills - Large	0	0		
Sawmills - Medium	0	0		
Sawmills - Small	0	0		
Sawmills - Indigenous	0	0		
Chipboard	0	0		
Veneer	0	0		
Pole Treatment	0	0		
Charcoal	0	0		
Total Processing	0	0	0	0
Grand Total			79	0.6

Finally, manufacturing initiatives being undertaken in the Mbhashe LM include brick making, bakeries, leather work manufacturing, sewing and welding. There is also potential to develop fishing along the coast and river mouths. The bio-fuels initiative is also a project where Mbhashe could succeed on in the creation of employment and poverty alleviation.

6. Priorities for coastal management in the Mbashe LM

According to Section 49(2c) of the ICM Act, a municipal CMP must include, among others, priorities and strategies to:

- i. Achieve the coastal management objectives of the municipality;
- ii. Assist in the achievement of the national and provincial coastal management objective as may be applicable in the municipality;
- iii. Address the high presence of vacant plots and the low occupancy levels of residential dwellings;
- iv. Equitably designate zones for mixed cost housing and taking into account the needs of previously disadvantaged individuals;
- v. Address coastal erosion and accretion; and
- vi. Deal with access issues.

Both the national and Eastern Cape CMPs list a set of Priorities to which action plans must be assigned.

In order to promote alignment of the Mbashe LM CMP with the provincial CMPs, the Mbashe LM is retaining the provincial Priorities, but focus objectives towards a local government context.

These are the Priorities for the Mbashe LM CMP, and their associated Goals:

Priority	Title	Goal
1	Cooperative governance	Participation of all stakeholders, coastal governance and co-responsibility. Integrated, coordinated, decision making, planning and management. Continued learning and practical implementation of programmes. Compliance with national conventions, protocols, and agreements.
2	Coastal planning and development	Local economic development opportunities. Provide necessary support to coastal livelihoods initiatives. Effective planning processes and framework, promoting equitable coastal access and redress. Appropriate placement of coastal infrastructure.
3	Climate change and dynamic coastal processes	Identify high risk areas; Address coastal vulnerability; and Ensure mitigation against and adaptation to climate change.
4	Land and marine-based sources of pollution	Reducing land-based sources of pollution. Responding to marine-based sources of pollution. Ensure effective waste management policy is in place. Capacitate waste management.
5	Estuaries	Ensure all estuaries are managed in an integrated and holistic manner consistent with the National Estuarine Management Protocol. Comply with legislated requirements for estuarine management. Promote partnerships with stakeholders and other government agencies.

6	The facilitation of coastal access	Facilitate provision of free, safe and equitable access to coastal public property. Develop inventory of existing and potential access points. Ensure adequate management and regulation of coastal access.
7	Awareness and education	Ensure public and decision makers are appropriately aware, educated and trained, to ensure effective coastal management and social buy-in. Facilitation of knowledge production and exchange. Partnerships with state and private entities for education and awareness.
8	Compliance, monitoring and enforcement	Develop environmental enforcement capacity. Strong and coordinated partnerships with other state agencies.
9	Natural resource management	The maintenance of ecosystem integrity and health. Protect vulnerable ecosystems. Rehabilitate degraded ecosystems.

Furthermore, according to Section 49(1)(b)(i), the municipal CMP must align to both the national and provincial CMPs. This alignment is depicted in Fig. 16.

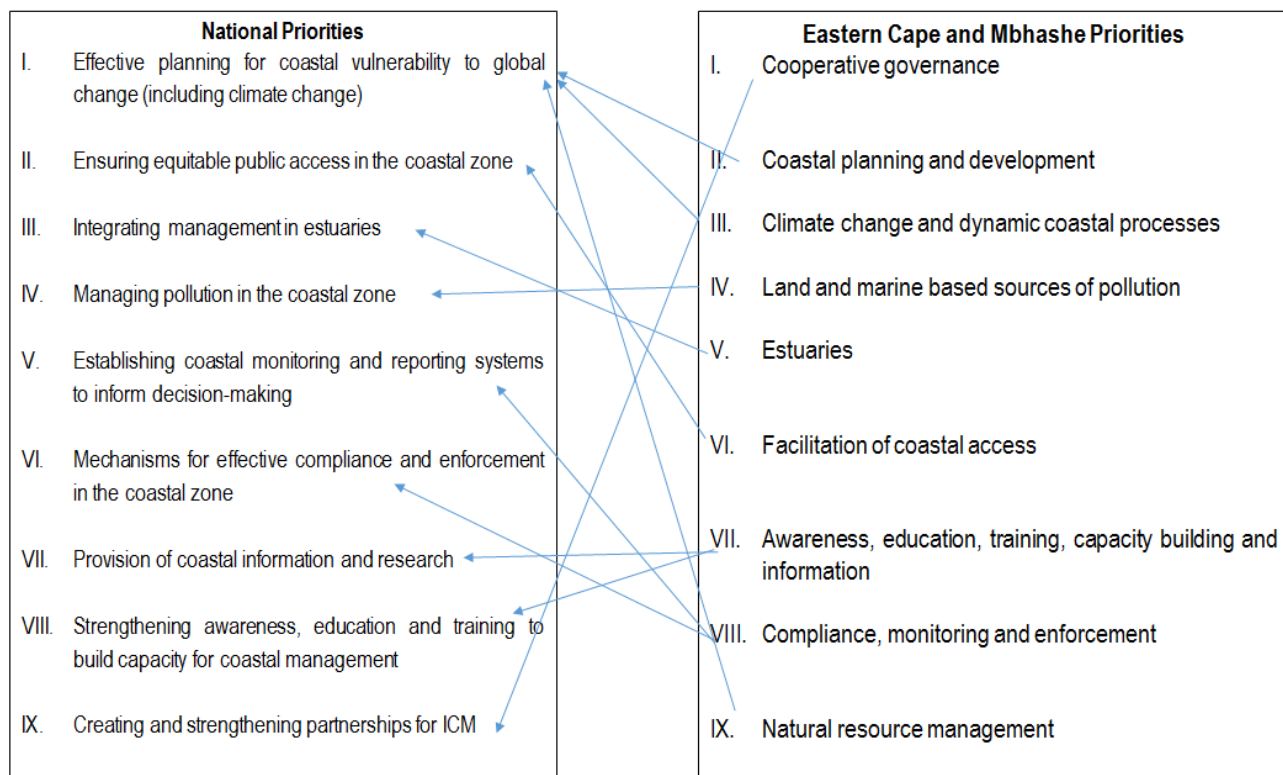


Figure 16: A list of coastal priorities for the Eastern Cape and Mbashe LM CMPs (right box). There is one list for provincial and municipal priorities as they are exactly the same. Arrows depict commonalities between the provincial and municipal priorities, with national priorities (left box).

An assessment of the Status Quo with respect to the nine Priorities of the Mbhashe LM is detailed in the next section.

7. Situation analysis for coastal management in the Mbhashe LM

A series of stakeholder engagement events were undertaken as indicated in Section 3.1 of this document, resulting in, *inter alia*, a list of issues affecting the management of the coastal zone within the Mbhashe LM. Following every discussion on a specific coastal issue, recommendations were made, which were assigned a priority status as applied in the EC CMP, as explained below.

7.1. Grouping of coastal management issues

In this section, coastal management issues are presented and grouped in accordance with the Mbhashe LM Priorities listed in the previous section, namely:

- I. Cooperative governance
- II. Coastal planning and development
- III. Climate change and dynamic processes
- IV. Land and marine-based sources of pollution
- V. Estuaries
- VI. The facilitation of coast access
- VII. Awareness, education, training, capacity building and information
- VIII. Compliance, monitoring and enforcement
- IX. Natural resource management

Within these priority groups, coastal management issues are rated using a set of criteria as described below.

7.2. Ranking of coastal management issues

The following criteria were applied in rating the priority status of coastal management issues:

- Magnitude/spatial scale
- Severity
- Risk
- Temporal
- Opportunity costs

a. **Magnitude/Spatial Scale** – refers primarily to the spatial extent of the particular pressure. Is it extensive or restrictive to the particular geographical area within the Mbhashe LM:

Score:

0 for absent;

- 1 for restricted/limited to isolated cases (< 5% of area);
- 2 for moderate presence – more than one coastal node (~20% of area);
- 3 for extensive - many coastal nodes but not all (~40% of area);
- 4 for whole of Mbhashe LM (100% of area).

b. **Severity** – refers to the harm that the pressure causes to the natural and social environment.

Does the pressure result in significant negative impacts, or are the changes to the coastal zone subtle?

Score:

- 0 for non-severe effects;
- 1 for low severity;
- 2 for moderate severity;
- 3 for high severity.

c. **Risk** – relates to whether or not the pressure represents a risk to human health or safety, or environmental risk.

Score:

- 0 for no risk environmental or human risks;
- 1 for low risk environmental or human risks;
- 2 for moderate environmental or human risks;
- 3 for significant environmental or human risks.

d. **Image** – refers to whether the particular pressure has negative implications for the image of the Mbhashe LM.

Score:

- 0 for no negative effect on Mbhashe LM's image;
- 1 for some potential negative effects;
- 2 for significant negative effects on image of Mbhashe LM.

e. **Temporal** – refers to whether the pressures take place for:

- a. Short periods of time (acute)
- b. Intermittently
- c. Long periods of time (chronic)

Score:

- 1 for short/isolated cases;
- 2 for regular intermittent;
- 3 for constant long periods.

f. **Opportunity costs** – refers to whether the pressure will result in opportunity costs due to a lack of investment in the area; or reduction in the number of tourists visiting the Mbhashe LM coast; or prevent sustainable development.

Score:

- 1 for no effect;
- 2 for a limited potential opportunity cost;
- 3 for a pressure resulting in definite opportunity costs.

Each pressure was scored for each of the six criteria. Total scores were then ranked as high, moderate or low environmental risk according to the following scale out of a total of 17:

High 13 -17

Medium 9 - 12

Low 0 – 8

In the following sections, coastal management issues that emerged from the stakeholder sessions are grouped in accordance to the nine afore-mentioned Priorities and ranked with respect to level of priority.

7.3. Priority 1: Cooperative governance

The features of cooperative governance are:

- Participation of all stakeholders, coastal governance and co-responsibility;
- Integrated, coordinated decision making, planning and management;
- Continued learning and practical implementation of programmes and processes; and
- Compliance with national conventions, protocols and agreements.

With respect to Cooperative Governance as a Priority for coastal management in the Mbhashe LM, the following goals have been set towards achieving effective cooperative governance:

Priority		Goal		Overview
No.	Description	No.	Description	
1	Cooperative governance	1A	Governance partnerships	<ul style="list-style-type: none"> • There shall be meaningful public participation in all coastal planning and management efforts; • The Mbhashe LM shall proactively seek to develop partnerships with the private sector, civil society and the research community in coastal planning and management; • A caring and responsible attitude towards the coast shall be encouraged amongst all coastal resource users to foster co-responsibility for its management. • There shall be meaningful public participation in all coastal planning and management efforts; • The Mbhashe LM shall proactively seek to develop partnerships with the private sector, civil society and the research community in coastal planning and management; • A caring and responsible attitude towards the coast shall be encouraged amongst all coastal resource users to foster co-responsibility for its management.
		1B	Synergy	<ul style="list-style-type: none"> • All planning and management efforts shall be underpinned by consideration given to inter-relationships between coastal ecosystems and human users. • Provision shall be made to ensure that there is adequate financial support (dedicated resource allocation for coastal plans and management), suitably trained and experienced personnel, appropriate technical equipment; and, that the Mbhashe LM's capacity for coastal planning and management is sufficient. • Institutional arrangements shall promote dialogue, cooperation, coordination and integration within and between government departments, the private sector and civil society. • The roles and responsibilities of government departments must be clarified and clearly understood at all levels of government (national, provincial and local). • Conflict shall be resolved wherever possible in a collaborative problem solving, consensus-building manner
		1C	Knowledge sharing	<ul style="list-style-type: none"> • The dedicated coastal management initiative developed must continue to be implemented and adapted through a process of continuous research, monitoring, review and adaptation. • Coastal planning and management activities shall be strategic, focused, practical and operational as well as SMART (Specific, Measureable, Attainable, Realistic and Time bound).
		1D	National conventions, protocols and agreements	Relevant national conventions, protocols and agreements shall be complied with as they relate to the Mbhashe LM.

7.3.1. Stakeholder engagement

Identified stakeholder groups

It is critical that the Mbhashe LM compile a list of all coastal stakeholders (Table 6). The list must be sector focused, so as to enable the identification of the necessary sector-based consultative forums. Sectors include

national government agencies, provincial agencies, strategic partners, local municipalities, NGOs and conservation interest groups, and the hospitality industry. It is important to note that this is a preliminary list of stakeholders, and that the stakeholder list must be updated on an ongoing basis, to include as many relevant coastal stakeholders as is necessary.

Table 6: A preliminary list of coastal stakeholders in the Mbhashe LM. This list must be expanded and updated on an ongoing basis.

Stakeholder	Unit	Telephone	Role
Sector: National Government			
Department of Agriculture, Forestry and Fisheries	Small Scale Fisheries:	(047) 6641985	Small scale fisheries management
Department of Environmental Affairs	Local Government Support	(043) 722 3282	Working for the Coast programme
	Environmental Protection and Infrastructure Programmes	(012) 399 9649	Working for the Coast programme
	Coastal Conservation Strategies	(021) 819 2490	Coastal management - national
Department of Mineral Resources	Regional Office	(047) 532 4488	Minerals and sand mining
Department of Rural Development and Land Reform	Land Reform	(043) 700 7003	To govern and facilitate integrated rural development programmes.
Department of Cooperative Governance and Traditional Affairs	Eastern Cape regional office	(040) 609 2207	National policies and legislation for local government
Sector: Provincial Government			
Department of Economic Development, Environmental Affairs and Tourism	Coastal Zone Management	(043)6057256	Provincial coastal zone management
	Biodiversity and Coastal Zone Management: Amathole Region	(043) 707 4098	Regional biodiversity and coastal programmes

Eastern Cape Department of Rural Development and Agrarian Reform	Regional office	(047) 491 1192	Rural livelihoods and economic opportunities for the Eastern Cape
Sector: Local Government			
Amathole District Municipality	Environmental Management	(043) 783 2337	District environmental management programmes
Mbhashe LM	Community Services Department	(047) 489 5800	public beach amenities and, waste management.
	LED (Development and Planning Department)		Livelihoods and tourism programmes
	Development and Planning Department		Environmental management, including Coastal Management.
Sector: Strategic Partners			
Eastern Cape Parks and Tourism Agency	Tourism	(043) 705 4400	Promoting eco- tourism in the Eastern Cape.
	People and Parks		Parks and conservation.
South African Local Government Association	Provincial office	(043) 727 1150	Support and capacity development within municipalities
Working for the Coast implementer: a new implementer is appointed every two-year cycle.			
Sector: Nongovernmental Organisations			
Wildlife and Environment Society of South Africa	Biodiversity Programme	(043)7385523	Support environmental and conservation programmes
Wild Coast Cottage Owners Association		support@wcoa.co.za	Facilitate an organized holiday cottage sector

7.3.2. Institutional arrangements for coastal management within Mbhashe LM

With the promulgation of the ICM Act, as well as the newly-introduced Phakisa Programme, there is no doubt as to the elevation of the coastal zone as a focus area. In order to ensure that national and provincial efforts are receiving the necessary support and implementation at municipal level of governance, coastal management capacity at municipal level must be sufficiently structured and developed to reflect the increased focus on coastal resources.

For Mbhashe LM, the responsibility for coastal management lies with the Environmental Officer, who resides within the Development and Planning Department. It is strongly advised that stronger relations and collaboration

is held with other line functions that implement work within the coastal zone, such as Community Services Department – responsible for public beach amenities – and other line functions within the Development and Planning Department, such as Town Planning and Local Economic Development (LED).

It is important that the Mbhashe LM is cautious about any duplication of functions between the Community Services Officers (Community Services directorate) and the Environmental Management Officer (Development and Planning directorate), and that clarity in roles and responsibilities is well established and maintained between the two directorates with respect to coastal management functions.

7.3.3. Cooperative governance in the Mbhashe LM

For the sustainable coastal development of the Mbhashe LM, participation of all coastal stakeholders in coastal management efforts is required. Coastal stakeholders must have the capacity to participate in management of the coast, and coastal governance should be conducted in a coordinated, integrated, co-operative and efficient manner.

In terms 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.

7.3.3.1. Coastal Committees

Sections 39-42 of the ICM Act require the establishment of National, Provincial and Municipal Coastal Committees. With respect to the Eastern Cape, the Provincial Coastal Committee (PCC) was established. The Mbhashe LM is represented in the PCC meetings.

A Municipal Coastal Committee (MCC) may be established at district and local municipality levels. Such a committee comprises coastal experts, government officials, other organs of states, community representatives, non-governmental organisation, etc.

A MCC may include:

- Persons with expertise in fields relevant to coastal management;
- Representatives of the management authorities of coastal protected areas or special management areas within the Mbhashe LM; and

- Representatives of communities or organisations with a particular interest in contributing to effective coastal management, such as organs of state, persons whose livelihoods or businesses rely on the use of coastal resources, environmental interest groups and research organisations.

The purpose of the MCC is to:

- Promote integrated coastal management in the municipality and the coordinated and effective implementation of the ICM Act and the Mbhashe LM CMP;
- Advise the municipal manager, the municipal council and the PCC on matters concerning coastal management within the Mbhashe LM;
- Advise the municipality on reviewing and amending the Mbhashe LM CMP;
- Promote a coordinated, inclusive and integrated approach to coastal management within the Mbhashe LM by providing a forum for, and promoting, dialogue, cooperation and coordination between the key organs of state and other persons involved in coastal management in the Mbhashe LM;
- Promote the integration of coastal management concerns and objectives into the Mbhashe LM's IDP and SDF and other plans, programmes and policies that affect the coastal environment; and
- Perform any coastal governance function delegated to it.

Mbhashe LM participates in the ADM Coastal Committee.

7.3.3.2. Provincial 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 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.

At the time of The Mbashe LM has three boat launch sites within its area of jurisdiction (see Section 8.8).

Furthermore, Mbashe LM must be involved in discussions relating the use of vehicles on the beach.

Mbashe LM is participating 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.

7.3.4. Issues relating to Priority 1

The following issues emerged from several stakeholder engagement sessions:

Issues	Impact	Existing response	Proposed intervention	Responsibility	Support
No stakeholder list	Uncoordinated stakeholder engagement	Environmental Officer will oversee the development and updating of stakeholder list	Identify sectors relevant to the coastal zone	Mbashe LM	ADM
Need to establish stakeholder engagement mechanisms for relevant sectors	Difficulty in identifying and addressing sector-based issues		Identify and list all coastal stakeholders		
Poor intergovernmental communication and consultation	Mbashe-related intergovernmental and sector programmes, campaigns and operations not communicated with Mbashe LM.	No clear channel of communication and coordination	Establish Mbashe LM Coastal Committee, based on ICM Act, and upon Council resolution.	Mbashe LM	ADM
Need to establish stakeholder engagement mechanisms for relevant sectors					
Community forums to receive better recognition (involved in decision making)	Lack of communication and coordination may lead to frustration for communities	Dwesa-Cwebe, Qatywa Development Trusts established	Ensure representation of Dwesa-Cwebe, Qatywa Community Trusts in Mbashe LM Coastal Committee	Mbashe LM	ADM, ECPTA
			Include Traditional Leadership in coastal management		

7.3.5. Ranking of Priority 1 issues

Issues presented in the previous paragraph were ranked in order to obtain their respective levels of priority:

Issues	Priority Rating Criteria						TOTAL SCORE	PRIORITY
	1. MAGNITUDE	2. SEVERITY	3. RISK	4. IMAGE	5. TEMPORAL	6. OPPORTUNITY LOSSES		
Lack of a formalised stakeholder list	4	0	2	2	3	3	14	HIGH
Need to establish stakeholder engagement mechanisms for relevant sectors	4	2	2	2	3	3	16	HIGH
Poor intergovernmental communication and consultation	4	1	0	1	2	2	10	MEDIUM
Community forums to receive better recognition (involved in decision making)	4	1	2	1	2	1	11	MEDIUM

7.4. Priority 2: Coastal planning and development

Section 57 of the ICM Act stipulates that:

- A coastal planning scheme of a municipality may form, and be enforced as part of, any land use scheme adopted by the municipality;
- A municipality may not adopt a land use scheme that is inconsistent with a coastal planning scheme established in terms of the ICM Act.
- If there is conflict between a municipal land use scheme established after the commencement of the ICM Act and a coastal planning scheme made in terms of this Act, the coastal planning scheme shall prevail.

Coastal planning schemes are thus useful to guide coastal planning, development and land use within the coastal zone of a municipality.

The features of coastal planning and development are:

- Emphasis on local economic development opportunities and approval procedures;
- Identification and exploitation of sustainable livelihood opportunities; and
- Holistic planning and development processes with emphasis on sustainable and equitable spatial development trends in the coastal zone.

With respect to Coastal Planning and Development as a Priority for coastal management in the Mbhashe LM, the following goals have been set towards achieving effective cooperative governance:

Priority		Goal		Overview
No.	Description	No.	Description	
2	Coastal planning and development	2A	Coastal economic development	<ul style="list-style-type: none"> • Promote the long term economic development potential of coastal localities and regions; • Coastal planning, administrative and management decision-making approval procedures shall be clarified and streamlined and duplication avoided; • Preference shall be given to distinctly coastal economic development opportunities and to activities that are specific to a coastal location, and cannot be located elsewhere (inland); • Boat launch sites must be effectively managed; • Adequate, accessible and safe public facilities shall be provided; • Mariculture and aquaculture opportunities shall be supported provided they have a reasonable impact on uplifting local communities; • Coastal tourism, leisure and recreational development opportunities shall be identified and promoted at appropriate coastal locations; and • All activities relating to coastal prospecting and mining rights shall be conducted in an environmentally sensitive manner.
		2B	Coastal livelihoods	<ul style="list-style-type: none"> • Development opportunities that seek to eliminate coastal poverty shall be proactively identified through local economic development opportunities and should promote sustainable livelihood options; and • Support the sustainable management of conservation areas to increase the value of the coastal zone.
		2C	Holistic development	Coastal planning efforts shall proactively identify and promote new, sustainable, distinctly coastal development opportunities that retain the scenic beauty of coastal areas, while promoting the densification of existing coastal corridors and nodes, and limiting ribbon development.
		2D	Holistic planning and land use	<ul style="list-style-type: none"> • Manage the design and built form of coastal settlements in harmony with aesthetic, amenity, biophysical, economic, social and cultural opportunities and constraints of the coastal zone; and • Coastal settlements and associated activities shall be managed to promote and enhance the socio-economic benefits, diversity, health and productivity of coastal ecosystems.

7.4.1. Economic development: Ocean Economy

Operation Phakisa is a fast results delivery programme that was launched in July 2014 to assist the implementation of the National Development Plan, aimed at supporting and enhancing economic growth and job creation. Operation Phakisa spans across several sectors that are geared up to exploit marine resources. Operation Phakisa therefore promotes a cross-sectoral collaboration and interaction towards realising the optimal benefit from marine resources. Its strength is in facilitating a conducive environment by partnering with business and labour to ensure improved cooperation between government, organised business and organised labour.

Operation Phakisa, through its multistakeholder forums, has identified sectors that require prioritisation with respect to the exploitation of the marine environment, namely:

- Marine transport and manufacturing;
- Tourism;
- Offshore oil and gas;
- Construction;
- Renewable energy;
- Fisheries and aquaculture;
- Communication;
- Desalination; and
- Marine protection services.

Through work emanating from Operation Phakisa Labs, four growth areas were identified, namely:

- Marine transport and manufacturing;
- Offshore oil and gas exploration;
- Aquaculture; and
- Marine protection services and governance.

Specific projects were identified for each of the growth areas listed above. The following projects may provide direct opportunities for the Mbhashe LM and its communities:

Marine transport and manufacturing

- Train TVET college graduates on work-place based experiential training programme

- Train learners as artisans, semi-skilled workers and professionals

Aquaculture

- Wild Coast abalone expansion
- Wild Coast abalone ranching and stock enhancement
- Establishment of an aquaculture development fund
- Improve domestic market access
- Strengthen emerging producers through increasing value chain ownership and production
- Government preferential procurement

Marine protection services and governance

- Creation of a MPA representative network
- MPA discovery, research and monitoring programme

7.4.2. Coastal planning and development in the Mbhashe LM

In line with the Eastern Cape CMP, the Mbhashe LM CMP retains Coastal Planning and Development as a coastal management Priority. An assessment of the status quo with respect to coastal planning and development in the Mbhashe LM was conducted through a series of engagement and interaction with stakeholders.

It has been recently reported that up to 47% of marine and coastal habitat types are threatened, with 17%, 7% and 23% being critically endangered, endangered and vulnerable, respectively (Sink *et al* 2012). This situation necessitates the employment of planning tools to guide responsible coastal development.

The Eastern Cape is globally recognised for its high biodiversity value and scenic beauty, especially its marine and coastal habitats. For instance, it has the highest biome diversity of any province, with no less than seven biomes: forest, fynbos, Nama Karoo, savanna, succulent Karoo and thicket (Berliner *et al* 2007). It is therefore critical that spatial planning interventions are implemented in order to ensure the protection of the natural environment in this region, while still promoting responsible coastal development.

There are provincial level, overarching planning tools that have a direct impact on how local authorities conduct their spatial planning in relation to the coastal zone.

Below, three of those planning tools are briefly discussed.

7.4.2.1. Eastern Cape Biodiversity Conservation Plan

The Eastern Cape provincial government developed the Eastern Cape Biodiversity Conservation Plan (ECBCP). The ECBCP is a broad-scale biodiversity plan. It integrates other existing broad-scale biodiversity plans in the Province, and supplements data shortages using mainly national data

Even though the ECBCP enjoys no legal status, it has been designed to serve as the basic biodiversity layer in Strategic Environmental Assessments, State of Environment Reports, SDFs, etc.

The ECBCP identifies Critical Biodiversity Areas (CBAs), which are terrestrial and aquatic features in the landscape that are critical for conserving biodiversity and maintaining ecosystem functioning (see Fig. 23).

The ECBCP land use guidelines are based on ten principles, namely:

- Avoid land use that results in vegetation loss in critical biodiversity areas.
- Maintain large intact natural patches – try to minimize habitat fragmentation in critical biodiversity areas
- Maintain landscape connections (ecological corridors) that connect critical biodiversity areas.
- Maintain ecological processes at all scales, and avoid or compensate for any effects of land uses on ecological processes.
- Plan for long-term change and unexpected events, in particular those predicted for global climate change.
- Plan for cumulative impacts and knock-on effects.
- Minimize the introduction and spread of non-native species.
- Minimize land use types that reduce ecological resilience (ability to adapt to change), particularly at the level of water catchments.
- Implement land use and land management practices that are compatible with the natural potential of the area
- Balance opportunity for human and economic development with the requirements for biodiversity persistence.

To facilitate the use of the ECBCP information, a land management objectives-based approach has been adopted. This approach rests on the concept of Biodiversity Land Management Classes (BLMCs). Each BLMC sets out the desired ecological state that an area should be kept in to ensure biodiversity persistence. The

BLMCs can be used to "red flag" areas where land use changes that may require environmental authorization (e.g. an EIA).

It is important to note that, at the development of this CMP, the ECBCP was under review, and will be revised. Any changes that may arise from the revision of the ECBCP must be noted and incorporated into relevant policies of the Mbhashe LM, including this CMP.

7.4.2.2. Wild Coast Spatial Development Framework

The Wild Coast SDF was compiled with the objective of identifying key conservation and development nodes along the coastline. Because the Mbhashe LM forms part of the Wild Coast, it has benefitted from the planning initiatives such as the Wild Coast Spatial Development Initiative, the Wild Coast Strategic Environmental Assessment, and the Wild Coast Environmental Management Plan (WCEPM), among others. It is important that the Wild Coast SDF and the Mbhashe LM SDF are consistently aligned.

7.4.2.3. Wild Coast EMP

The classification of development nodes according to the WC EMP is described in Table 7.

Table 7: Description and classification of development nodes as per WC EMP.

CATEGORY	COLOUR CODE	DEFINITION
First Order Nodes/Formal Coastal Towns	RED	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 1 st 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	BROWN	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 Third Order Node only one development will generally be permitted.
Coastal Settlements	PINK	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	PURPLE	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 3 rd 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 3 rd Order Node.
Biodiversity and Landscape Management Areas	GREEN [HATCHED]	Areas in which no development or land-use other than live-stock grazing is permitted, excepting in identified 3 rd Order Nodes. Some Biodiversity and Landscape Management Areas will contain one or more 3 rd Order Nodes and in other B&LMA's no development will be permitted, as there are no areas suitable for development.
Protected Areas	GREEN [HATCHED]	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	GREEN [HATCHED]	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, it will revert to the status of a Biodiversity and Landscape Management Area.
Indigenous State Forests	GREEN [HATCHED]	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 WC EMP has identified the development at nodes such as Qorha (First Order Node), Nqabarha (Second Order Node), and Xorha (Second Order Node), as well as several other lower order nodes which encompass holiday resorts and facilities (Table 8).

Table 8: Development nodes within the Wild Coast region, as described in the WC EMP.

Municipal Areas	AMATOLE DM AREA		OR TAMBO DM AREA				ALFRED NZO DM
	Mnquma LM	Mbhashe LM	King Sabata Dalinyebo	Nyandeni	Port St Johns	Inggquza Hill	Mbizana
Towns					Port St Johns		
First Order Nodes	Qolora Mouth	Kobb In [Qora Mouth]	Hole-in the Wall/Coffee Bay	Mthatha Mouth/ Mdumbi			Mzamba
Second Order Nodes	Wavecrest	Nqabarha		Sinangwana	Mngazana	Mbotyi	
	Cebe Cottages	Xora Mouth			Mngazi	Msikaba	
	Mazeppa Bay						
Coastal Settlements	Cebe Village	Jotela	Mathokazini	Lutsheni	Cwebeni		
	Gcina 1	Kwateza		Mamolweni	Khongeni		
	Gcina 2	Nqabarha		Lucingweni	Noqhekwane		
		Ngomani		Lutatweni	Manteku		
		Ntlonyana		Kwagingqi			
		Qatywa		Njela			
		Bulungula		Manutsheni			
		Mpame		Mncibe			
3 rd Order Nodes	The Mound	Nqabarha Peninsula		Presley Bay			Mnyameni
	Cebe Camping Area	Nkanya		Lwandle			
		Bulungula Lodge					
		Mpame Cottages					

In addition to the afore-mentioned planning tools, Mbhashe LM has established municipal spatial planning plans, which, among others, address development along its coastline (see next section).

7.4.2.4. Mbhashe development nodes

The Mbhashe LM IDP 2012-2017 provides a coastal spatial framework addressing three key components: A spatial overview of proposals for the area, a more detailed overview of seven coastal development nodes, and a spatial representation of the coastal protection corridor.

An overview of the proposals for Mbhashe LM coastal development, compiled from engagement with stakeholders, as well as extracts from the said IDP, is provided below.

- That certain key coastal access locations are upgraded (improved access road and facilities), towards the promotion of recreational use of the coastal area, and to create job opportunities through the provision of safety and security services.
- That the municipality investigates participation in the Blue Flag programme.
- That the municipality, in conjunction with the ADM, works towards the provision of water, electricity and sanitation services to the areas in which development has been proposed along the coast of Mbhashe LM, as such areas are key in economic development which support the livelihoods of coastal communities.
- That the municipality increases tourist activities by identifying activities which could be introduced in the coastal area, by providing appropriate tourism infrastructure in such coastal areas.

Areas earmarked for development in the coastal zone include the following:

Qhora Mouth (Ward 23) - 1st Order Node

The development node is situated along the main corridor (linear development zone) linking Willowvale to the Coast (at Kob Inn / Qora Mouth). This small area is primarily recognized as a strategic investment area for coastal tourism development and includes the Qora Mouth Second Order Node which includes the Kob Inn holiday resort. The node boasts mangrove swamps. A brick-making project is underway in the Gojela area. The area is also considered a “worst off area” in terms of the poverty index study and therefore requires programmes to alleviate poverty.

Nqabarha (Ward 29) - 2nd order Node

This Precinct’s location on the coast includes the 1km coastal zone earmarked as a strategic tourism area, falling within the Wild Coast Spatial Development Initiative Zone, and is demarcated as a “Special Development Zone” or “Eco-Tourism Zone”. Land use and activities envisaged include limited and regulated tourism activities, small accommodation facilities, controlled traditional residential housing, subsistence agriculture, social facilities and infrastructure to traditional residential settlements and low impact airstrips.

Haven, Nkanya and Qatywa (Ward 20)- 2nd order node

This Precinct’s location on the coast includes the 1km coastal zone earmarked as a strategic tourism area, falling within the Wild Coast Spatial Development Initiative Zone. The coastal zone falling within this area is

demarcated as “Special Development Zone” or “Eco-Tourism Zone”. Land use and activities envisaged include limited and regulated tourism activities, small accommodation facilities, controlled traditional residential housing, subsistence agriculture, social facilities and infrastructure to traditional residential settlements and low impact airstrips. Development initiatives in this Precinct must build on the existing initiatives and possible spin-offs generated from the adjacent Dwesa – Cwebe Development Initiatives.

Kufolokwe/Jotela & Beechamwood (ward 22) 2nd Order Node

This development node is situated between Kufolokwe and Jotela, between Sishixini River mouth and Ngadla River mouth. This small area is primarily recognized as a strategic investment area for coastal tourism development which includes the proposed development of Dwaai Holiday Country Resort. A camping facility has been proposed as a second order node at Beechamwood, and is on its planning phase.

Bulungula and Mpame (Ward 19) 2nd Order Node

This Precinct’s location on the coast includes the 1km coastal zone earmarked as a strategic tourism area, falling within the Wild Coast Spatial Development Initiative Zone. The coastal zone falling within this area is demarcated as “Special Development Zone” or “Eco-Tourism Zone”. Land use and activities envisaged include limited and regulated tourism activities such as boat launching at Mpame; small accommodation facilities such as the existing Bulungula backpacker lodge; a proposed Mpame Lodge; and a scheduled off-road vehicle use from Mpame to Mncwasa Rivers, through to Sharpley’s camping site, and from Xora mouth to Bulungula lodge.

Jotela, Kwatera, Nqabarha, Ngomani, Ntlonyana, Qatywa, Bulungula and Mpame (Ward 19,20,21,22,23) Coastal Settlements

These are areas in which coastal communities were historically settled, i.e. before 1992, when legislation regulating development in the Wild Coast (Transkei Decree Number 9 of 1992) took effect. Only local residential and agricultural uses are permitted, subject to a Local Area Plan agreed to between DEDEAT and the community. Local Area Plans must, as a minimum requirement, limit further spread of settlement into the Coastal Corridor.

7.4.3. Land tenure

Three governance structures own land in the Mbhashe LM, namely, government, tribal authorities, and local municipalities. Government through the Department of Rural Development and Land Reform is the main custodian of communal land. Legal forms of land tenure in the district include: freehold (mainly concentrated in the urban centres or townships, certain shops in rural areas, providing security to the owner), Permission To Occupy (mainly in the rural areas where there is no right of ownership), leasehold and grazing rights on commonage.

The Permission to Occupy (PTO) system, is a system whereby a user is allowed use or occupational rights over a piece of land within tribal land – where there is no right of ownership. The PTO cannot be transferred or inherited, it lapses when the holder is deceased. Even though PTOs are granted mostly for the purposes of land occupation, other land-use activities such as irrigation are also covered under the PTO system.

7.4.4. Issues relating to Priority 2

Issues raised during consultation with stakeholders with respect to Coastal Planning and Development are summarised below.

Issues	Impact	Existing response	Proposed intervention	Responsibility	Support
No coastal focus on LED strategy .	Unable to plan effectively for coastal opportunities	None	Incorporate coastal economic development into LED strategy/plan	Mbhashe LM	ADM, DEDEAT
The need for a defined coastal management area was highlighted and a land use management system to manage and guide coastal development was raised.	Lack of visionary plan for coastal development	None	Develop coastal spatial plans/tools	Mbhashe LM	ADM, DEDEAT
The need to develop Coastal Planning Schemes for the municipality was also raised.					
There was recognition of the need to understand the location and status of the Admiralty reserve. The issues of the complexity of land management and ownership in Traditional Authority areas were highlighted. The need to consider the role of land claims was raised.					

Concerns regarding illegal developments and squatters in the coastal area, difficulties in managing development in Traditional Authority areas. The need for considering alternative land uses for mined areas other than mining was highlighted, and the need for planning the long-term and sustainable allocation of mining areas.					
The need for identification of coastal development areas, investment nodes and packages for development opportunities.					
Concerns about the lack of appropriate infrastructure in coastal areas. Promotion of access amenities through the provision of appropriate amenities such as parking, toilets, boardwalks.	Minimal utilisation of coastal recreational areas.	Current facilities inadequate.	Improve coastal amenities.	Mbhashe LM	ADM, DEDEAT
Uncertainty on establishment of coastal setback lines	Difficulty in spatial planning and EIA Regulations implementation	EIA Regulations lines (100m from high-water mark, 32m from water course)	Close liaison with DEDEAT wrt coastal management lines	Mbhashe LM	ADM, DEDEAT
Concerns about the complexities involved in obtaining approvals in the coastal area.					

7.4.5. Ranking of Priority 2 issues

Issues presented in the previous paragraph were ranked in order to obtain their respective levels of priority:

Issues and Pressures	Priority Rating Criteria	TOTAL	PRIORITY
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	1.MAGNITUDE	2.SEVERITY	3.RISK	4.IMAGE	5.TEMPORAL	6. OPPORTUNITY LOSSES		
Need to incorporate coastal management focus into LED strategy	2	0	0	2	3	3	10	MEDIUM
The need for a defined coastal management area was highlighted and a land use management system to manage and guide coastal development was raised.	4	0	1	1	2	3	11	MEDIUM
The need to develop coastal planning schemes	1	1	2	1	2	3	10	MEDIUM
Need to understand the location and status of the admiralty reserve.	2	1	1	1	2	2	9	MEDIUM
The issues of the complexity of land management and ownership in areas under traditional authority were highlighted.	4	3	2	2	3	2	16	HIGH
The need to consider the role of land claims was raised.	3	1	0	1	1	2	8	LOW
Concerns regarding illegal development and squatters in the coastal zone, difficulties in managing developments in areas under traditional authorities.	2	1	1	1	2	1	8	LOW
The need to consider alternative land uses for mined areas rather than mining everywhere.	1	3	3	2	2	2	13	HIGH
The need for planning the long-term and sustainable allocation of mining areas.	3	3	3	2	2	3	16	HIGH

The need for identification of coastal development areas, investment nodes and packages, for development opportunities.	3	0	2	1	3	3	12	MEDIUM
Uncertainty on establishment of coastal setback lines.	3	1	1	1	3	2	11	MEDIUM
Concerns about the complexities involved in obtaining approvals in the coastal area.	3	1	2	1	1	2	10	MEDIUM

7.5. Priority 3: Climate change and dynamic coastal processes

The features of climate change and dynamic coastal processes are:

- Responding to dynamic coastal processes through increased resilience of natural and social systems; and
- Phased retreat of infrastructure in high risk areas.

Priority		Goal		Overview
No.	Description	No.	Description	
3	Climate change and dynamic coastal processes	3A	Promoting resilience	<ul style="list-style-type: none"> • Coastal development shall be planned to minimize disruption of dynamic coastal processes and to avoid exposure to significant risk from natural hazards; • The potential consequences of medium and long term climate change and associated sea-level rise shall be taken into account in all coastal planning and management; and • Phased coastal retreat will be prioritised as a principle which informs existing and future coastal development.

7.5.1. 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 2011 (Strategy), which, *inter alia*, deals with coastal infrastructure and livelihoods.

The Strategy 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 9).

Table 9: Risk matrix for coastal and marine environments, reproduced from the Eastern Cape's Climate Change Response Strategy 2011

Primary Impact (Manifestation)	2 nd Order Impact	3 rd Order Impact	Risk or opportunity ?	Significance (Likelihood x consequence)
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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 stream flow	Potentially improved viability of hydro-electric power generation	Opportunity	Medium
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 mean temperatures	Increased demand event for chilling, air conditioning, water services.	Increased power demand over and above existing growth projections - increased stress on reserve generation capacity and	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

Over the past two decades there has been a tremendous increase in focus on climate change and its associated consequences globally. There is general agreement, based on scientific evidence, that sea-level rise poses a serious risk to coastal settlements and infrastructure.

It follows therefore that the EC CMP lists specific tasks towards mitigation and adaptation strategies against sea-level rise, namely:

- i. Determine and designate coastal setback lines for the Eastern Cape coastline;
- ii. Protect and maintain dynamic coastal features that act as a buffer natural coastal processes and hazards;
- iii. Determine vulnerable areas and development guidelines in response to dynamic coastal processes; and
- iv. Develop disaster management plans.

These strategies require a technical and scientific analysis of coastal vulnerability with respect to sea-level rise.

7.5.2. Climate change within Mbhashe LM

The ADM Climate Change Vulnerability Assessment 2013 outlined expected indicators of climate change effects within the ADM's area of jurisdiction. Such indicators were:

- Average monthly temperatures will increase by 1.5° to 2.5°;
- 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.

The ADM Climate Change Vulnerability Assessment identified coastal locations that were vulnerable to global-warming-driven sea-level rise by virtue of their location below the 5-m contour along the coast.

It is critical that the Mbhashe LM develops a climate change strategy to address the potential risks associated with sea-level rise and global warming. Such a strategy must identify and analyse risk in areas where development is inappropriately located, such as those shown in Fig. 17.



Figure 17: Examples of locations along the Mbhashe LM coastline, where inappropriate-situated development and infrastructure can be vulnerable to sea-level rise. Left to right: boat houses in Nqabarha, Kobb Inn, and cottages in Mpame.

7.5.3. Issues relating to Priority 3

The following issues were identified by stakeholders.

Issues	Impact	Existing response	Proposed intervention	Responsibility	Support
Need to address sea-level rise risks	Exposed to tidal surges during storms, and sea-level rise threats.	None	Plan for coastal vulnerability	Mbhashe LM	ADM, DEDEAT, DEA
No climate change strategy	Unable to plan for climate change	None	Develop climate change strategy	Mbhashe LM	ADM, DEDEAT
Need for sea-level rise adaptation	Unprepared for storm surges and sea-level rise	None	Assess existing and needed sea defence infrastructure	Mbhashe LM	ADM

7.5.4. Ranking of Priority 3 issues

Issues presented in the previous paragraph were ranked in order to obtain their respective levels of priority:

Issues and Pressures	Priority Rating Criteria						TOTAL SCORE	PRIORITY
	1.MAGNITUDE	2.SEVERITY	3.RISK	4.IMAGE	5.TEMPORAL	6. OPPORTUNITY LOSSES		
Need to address sea-level rise risk.	2	2	2	1	1	2	10	MEDIUM
No climate change strategy	4	2	3	2	2	1	14	HIGH
Need for sea-level rise adaptation	1	2	1	1	1	1	7	MEDIUM

7.6. Priority 4: Land and marine –based sources of pollution

The feature of land and marine-based sources of pollution is:

- Reducing and responding to land and marine-based sources of pollution in the coastal zone.

With respect to Land and Marine-based Sources of Pollution as a Priority for coastal management in the Mbhashe LM, the following goals have been set towards achieving effective cooperative governance:

Priority		Goal		Overview
No.	Description	No.	Description	
4	Land and marine-based sources of pollution	4A	Pollution and waste management	<ul style="list-style-type: none"> • The discharge of all land-based point and diffuse sources of pollution that are likely to end up in coastal ecosystems shall be prevented, in accordance with the ICM Act; • The national guidelines with respect to land-based sources of pollution in the marine environment must be integrated into sector, including estuary management plans, and be implemented; and • Adequate and effective anticipatory and reactive measures shall be reviewed and supported in order to reduce the adverse consequences of human-induced coastal pollution disasters and hazards. Disaster management plans must be reviewed annually and updated, if required.
		4B	Pollution and waste prevention	<ul style="list-style-type: none"> • Pollution control and waste management measures shall be implemented to ensure that discharges of organic and bio-degradable substances are minimal, and that the assimilative capacity of coastal ecosystems is not exceeded; • The discharge of pollutants and waste into coastal ecosystems shall not be allowed to reach levels that adversely affect human health, use and enjoyment of the coast, and should take cognizance of any coastal management objectives set; and • Pollution monitoring must be improved

7.6.1. Solid waste management in the Mbhashe LM

There are no waste management services provided by the Mbhashe LM at its coastal sites. Waste management in the coastal zone of the Mbhashe LM is achieved through the Working for the Coast (WFTC) programme, a DEA-funded project. The WFTC programme not only provides much needed employment to unskilled workers, but it also allows for the maintenance of public beach amenities by way of litter pick, infrastructure maintenance and installation, and coastal rehabilitation.

Coastal areas such as The Haven, Dolphin View, Kob Inn, Dwesa-Cwebe Nature Reserve and Xhorha Mouth/Nkanya are significant generators of waste, particularly over peak holiday times. In Kob Inn waste is sorted and taken to East London for recycling while food waste is collected by a local pig farmer. In areas such

as Dolphin View waste materials such as glass and plastic bottles, cans and tins are sorted and taken to East London for recycling. Waste that is un-recyclable is either buried or burnt. Waste in Dwesa-Cwebe Nature Reserve is transported to the Dutywa disposal site. There are no records of waste quantities within the coastal areas.

The Mphashe LM had developed an IWMP for the period 2015-2019. The IWMP, among others, acknowledges the reliance on the WFTC programme for waste removal on public beaches. It also indicates that, though no data exists, waste generated in the coastal zone is minimal compared to urban areas within the municipality. It can thus be concluded that the WFTC programme provides sufficient capacity for waste management in coastal areas.

7.6.2. Pollution management in the Mphashe LM

With respect to the entire Mphashe LM coastal region, there is no sewage reticulation system, with property owners making use of septic tanks. There is no regular monitoring of the servicing of such tanks, and there are concerns of dysfunctional or leaking/leaching of the tanks, or even deliberate disposal of sewage into catchment or coastal environment.

It is critical that the Mphashe LM advocates for a thorough assessment of septic tank usage, in order to detect noncompliance cases.

Coastal waters and estuaries within the Mphashe LM are threatened by pollution resulting from the disposal of untreated industrial and untreated residential sewage effluent, and also inadvertent leakages into upstream rivers and estuaries. The location of waste facilities and sewage treatment facilities throughout the Mphashe LM both close to coastal estuaries and alongside rivers further up-stream may also compromising estuarine water quality. However, a lack of a routine water quality monitoring programme at key public beaches as well as estuaries, precludes any informed assessment of water quality in the coastal zone.

It is thus imperative that Mphashe LM initiates a coastal water quality monitoring programme at key coastal sites.

7.6.3. Issues relating to Priority 4

The following issues were identified by stakeholders with respect to land- and marine-based sources of pollution:

Issues	Impact	Existing response	Proposed intervention	Responsibility	Support
Need to be able to respond to oil spill incidents in accordance with the Oil Spill Contingency Plan: Amathole Region	Poor state of readiness for oil spill events.	Rely on ADM response capacity.	Structure and resource oil spill response capability in accordance with the Oil Spill Contingency Plan	Mbhashe LM	ADM, DEA
Need to monitor and ensure waste removal on beaches and estuaries	Unmanaged pollution into coastal zone.	WftC removing waste only from beaches. No programme for estuaries.	Improve distribution of waste bins on public beaches, and develop internal capacity for waste removal in order to ensure sustainability.	Mbhashe LM	DEA
No waste management by-law	Unable to enforce waste management regulations.	Only signage being used to regulate waste disposal.	Regulate waste management	Mbhashe LM	ADM
			Initiate pilot recycling programme		
Concerns over suspected dysfunctional septic tanks leaching into catchment area.	Coastal water quality may be affected.	None	Inspect septic tanks within 100m from beach and estuary.	Mbhashe LM, ADM	DEA, DEDEAT
			Regulate septic tanks use		

No records of discharge points into coastal and marine environments	Unmonitored land-based coastal pollution threat.	None: DEA investigating state of recorded and unrecorded discharge points.	Liaise with DEA to collaborate towards mapping of discharges into coastal and marine environments.	Mbhashe LM	ADM, DEDEAT, DEA
No water quality monitoring programme	Unable to plan for public safety wrt contact water use.	None	Initiate a water quality monitoring programme	Mbhashe LM	ADM, DEA

7.6.4. Ranking of Priority 4 issues

Issues presented in the previous paragraph were ranked in order to obtain their respective levels of priority:

Issues and Pressures	Priority Rating Criteria						TOTAL SCORE	PRIORITY
	1.MAGNITUDE	2.SEVERITY	3.RISK	4.IMAGE	5.TEMPORAL	6. OPPORTUNITY LOSSES		
Need to be able to respond to oil spill incidents in accordance with the Oil Spill Contingency Plan: Amathole Region	4	1	2	1	1	1	10	MEDIUM
Need to monitor and ensure waste removal on beaches and estuaries.	3	1	1	2	3	1	11	MEDIUM
There is no Waste Management By-Law at Mbhashe LM.	4	1	1	2	3	1	12	MEDIUM
Concerns over suspected dysfunctional septic tanks leaching into catchment area.	1	1	2	2	3	1	10	MEDIUM
No records of discharge points into coastal and marine environments.	2	1	1	1	3	1	9	MEDIUM
No coastal water quality monitoring programme.	2	1	1	1	3	2	10	MEDIUM

7.7. Priority 5: Estuaries

The features of Estuaries as a Priority are:

- Establishing and implementing a strategy to improve the management and protection of estuarine resources; and
- Securing sufficient financial resources to fund and implement identified actions, research projects, initiatives, and advisory forums.

With respect to Estuaries as a Priority for coastal management in the Mbhashe LM, the following goals have been set towards achieving effective estuarine management:

Priority		Goal		Overview
No.	Description	No.	Description	
5	Estuaries	5A	Protection and management	<ul style="list-style-type: none"> • Estuaries shall be assessed and prioritized for development of estuary management plans, urgent conservation, rehabilitation and other management interventions including detailed ecological water requirement studies; • An estuary management plan shall be developed and implemented for each estuary according to the National Estuarine Management Protocol beginning with priority estuarine systems, and all estuary management plans shall be incorporated into coastal development planning in order to prevent degradation of ecosystem health and functionality, loss of biodiversity and provision of ecosystem goods and services; • Estuarine research and monitoring shall be improved to track the health status, pollution levels, utilisation and outcomes of management actions and should part of estuary management plans; and • Community engagement, public participation and awareness programmes shall be promoted to foster appreciation and understanding of the benefits of estuary management.
		5B	Financial resources	<ul style="list-style-type: none"> • Funding shall be sourced to support estuarine research on systems where information is lacking; and • Operationalize, implement, capacitate and sustain efforts to plan, manage, monitor and report on progress with respect to estuary management goals and objectives.

7.7.1. Legislative framework

The ICM Act stipulates that estuaries must be managed in a coordinated and efficient manner and in accordance with a national estuarine management protocol.

Furthermore, the Act call for the development of an estuarine management plan, which may form part of a CMP.

The National Estuarine Management Protocol (Protocol) was subsequently published in 2013, and its purpose was to:

- a) Determine a strategic vision and objectives for achieving effective integrated management of estuaries;
- b) Set standards for the management of estuaries;
- c) Establish procedures or provide 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; and
- f) Specify the process for reviewing estuarine management plans to ensure that they comply with the requirements of the ICM Act.

The Protocol further gives guidance as to the responsible authority for the development of estuarine management plans and coordination of the implementation process. Generally speaking, because municipalities are closer to the activities and operational requirements in estuaries, local government is the responsible authority, except:

- Where an estuary falls within the boundary between more than one district municipalities, the provincial government is the responsible agency; and
- Where an estuary falls within a protected area, then the management authority responsible for the protected areas must develop the EMP.

7.7.2. Estuaries in South Africa

Estuaries are among the most threatened ecosystem types in South Africa (Fig. 18), with up to 40% of estuaries considered critically endangered (Sink *et al.* 2012).

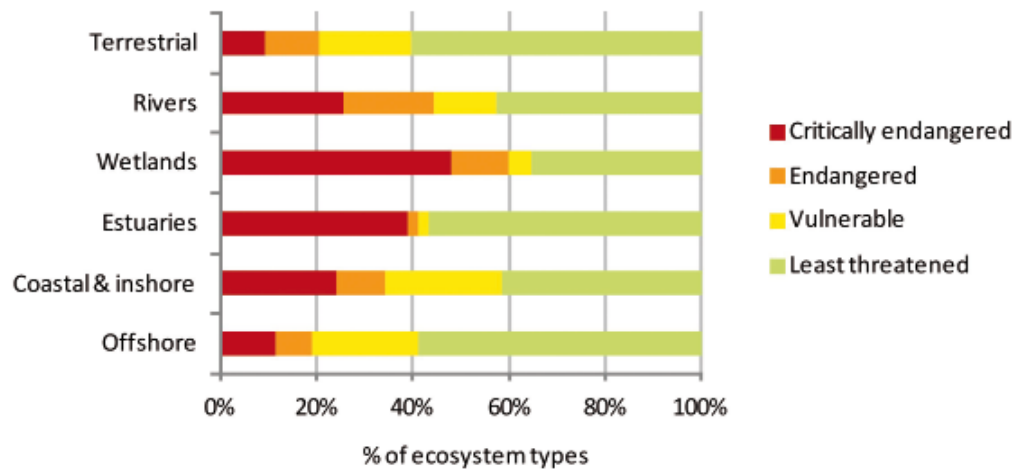


Figure 18: Status of ecosystem types in South Africa (Sink *et al.* 2012).

It follows, therefore, that estuaries enjoy a better protection status than most ecosystem types in South Africa. More than 30% of estuaries are considered well protected (Sink *et al.* 2012).

7.7.3. Estuaries within the Mbhashe LM

Estuaries in the Mbhashe LM are presented in Fig. 19.

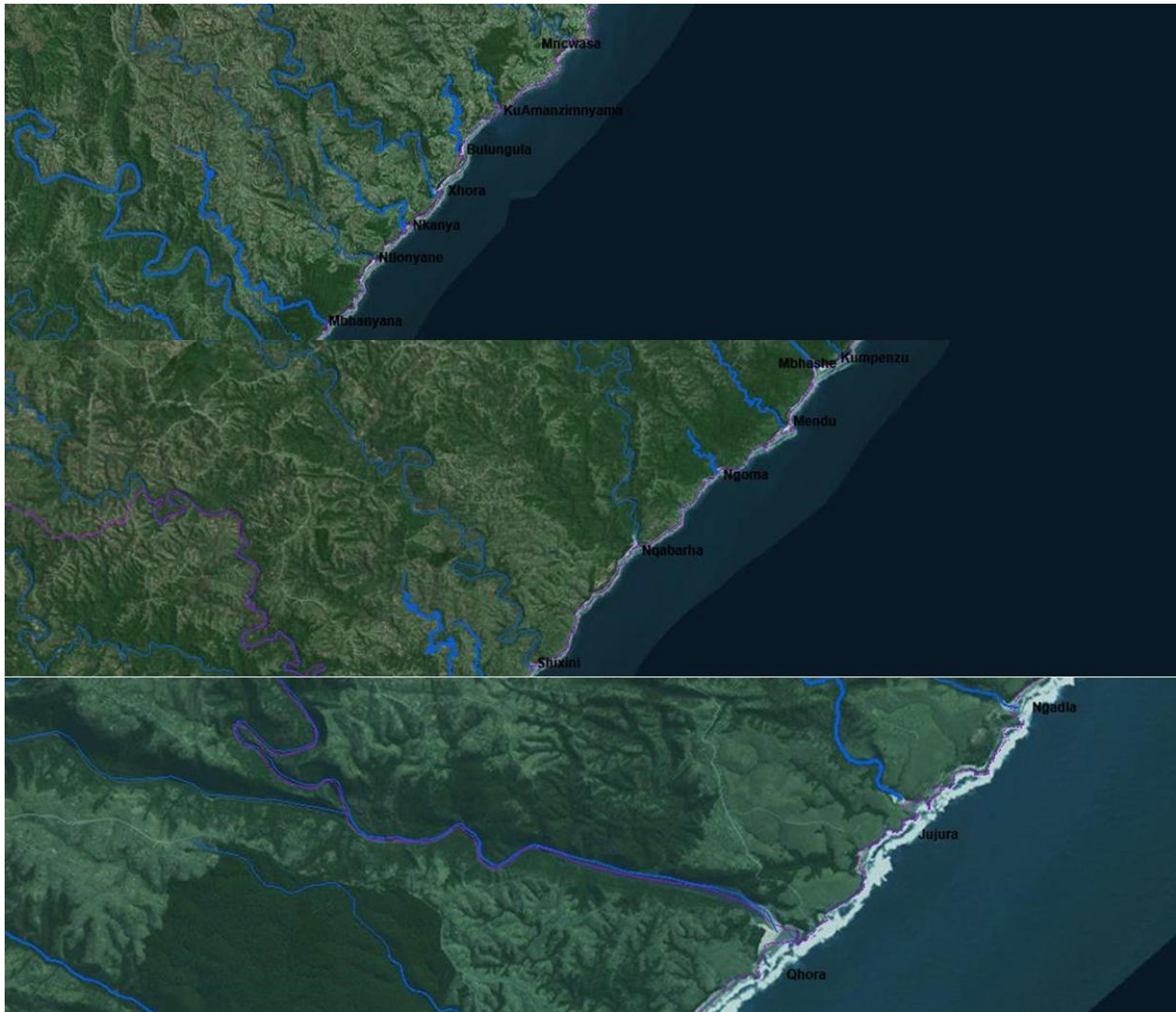


Figure 19: Map of estuaries along Mbashe LM shoreline (map generated from SANBI Biodiversity GIS website)

Estuaries in South Africa are classified according to two types, namely POEs and TOCEs (Whitfield and Bates 2007), also see Table 10. The differences between the two types are predominantly driven by rainfall and estuary size. The Eastern Cape Province has up to 80 TOCEs. Ongoing efforts are necessary to improve the data relating to the description of estuaries as POE/TOCE.

Table 10: Classification of estuaries along Mbashe LM's shoreline into POE (permanently open estuaries) and TOCE (temporarily open closed estuaries), based on Whitfield and Bates (2007). There are a number of estuaries within Mbashe LM that have not yet been classified in this manner.

POE	TOCE
Qhora	Jujura
Shixini	Ngadla
Mbashe	Ntlongonyane
KuMpenzu	Nkanya

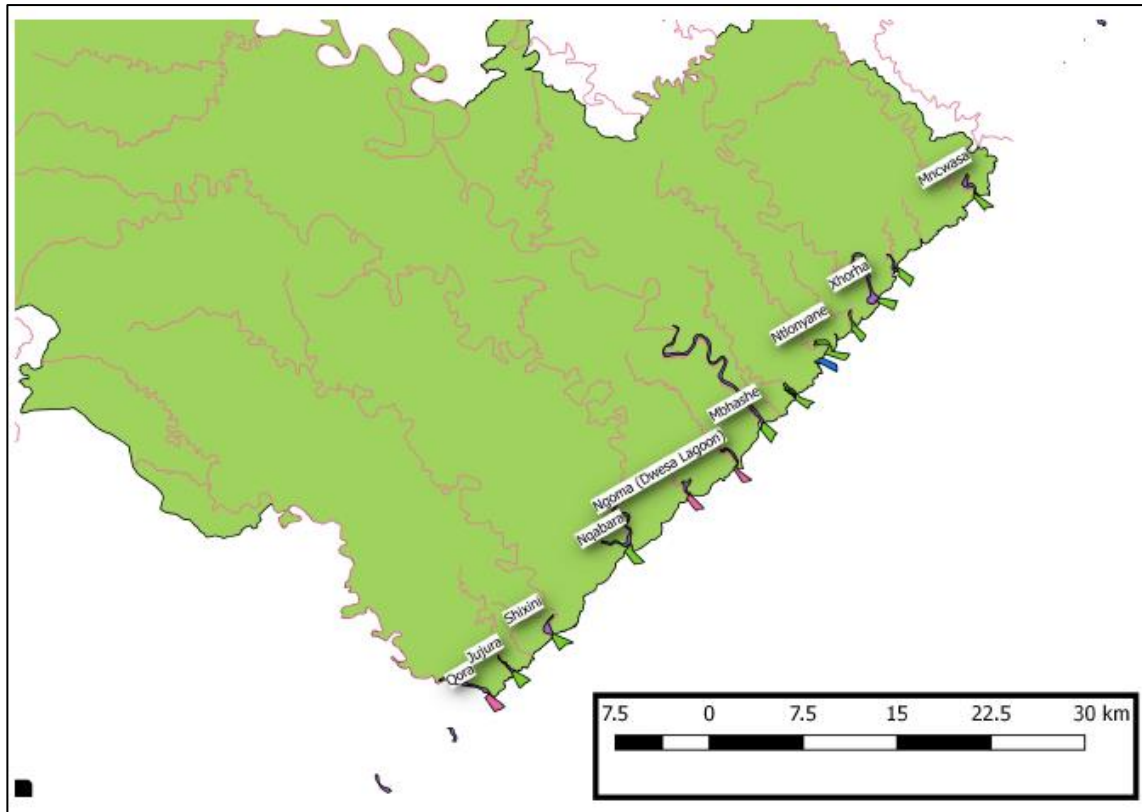




Figure 21: Map of known wetlands along the Mbashe LM's coastline (SANBI BGIS website). All the wetlands are closely associated with estuaries.

Presently, there are no water quality monitoring programmes for the estuaries and the beaches. Historically, a detailed assessment of South Africa's estuaries was conducted during the period 1992-1999, and the estuaries in the Mbashe LM were included in the assessment. These assessments provided a snapshot of the health of the estuaries, and highlighted areas that required urgent attention.



Below is a list and description of estuaries falling within Mbashe LM's area of jurisdiction, north to south. It must be noted that, in the absence of research focussing specifically on wetlands, the health of the wetlands listed above can be inferred from the description of the health of their associated estuaries.

	<p>Name: Qhora</p> <p>Classification: POE</p> <p>Biogeography: Warm-temperate</p> <p>Geomorphological classification: Type F</p> <p>Ichthyofauna: Moderate</p> <p>Water quality: Poor</p> <p>Aesthetics: Good</p> <p>Comments: Estuary regularly used for recreational boating and fishing</p>
	<p>Name: Jujura</p> <p>Classification: TOCE</p> <p>Biogeography: Warm-temperate</p> <p>Geomorphological classification: Type E</p> <p>Ichthyofauna: Good</p> <p>Water quality: Poor</p> <p>Aesthetics: Good</p> <p>Comments:</p>
	<p>Name: Ngadla</p> <p>Classification: TOCE</p> <p>Biogeography: Warm-temperate</p> <p>Geomorphological classification: Type E</p> <p>Ichthyofauna: Good</p> <p>Water quality: Poor</p> <p>Aesthetics: Good</p> <p>Comments: Poor water quality</p>

	<p>Name: Shixini</p> <p>Classification: POE</p> <p>Biogeography: Warm-temperate</p> <p>Geomorphological classification: Type F</p> <p>Ichthyofauna: Good</p> <p>Water quality: Poor</p> <p>Aesthetics: Good</p> <p>Comments: Poor water quality</p>
	<p>Name: Nqabarha</p> <p>Classification:</p> <p>Biogeography: Warm-temperate</p> <p>Geomorphological classification:</p> <p>Ichthyofauna:</p> <p>Water quality:</p> <p>Aesthetics:</p> <p>Comments: No information on this estuary</p>
	<p>Name: Mendu</p> <p>Classification:</p> <p>Biogeography: Warm-temperate</p> <p>Geomorphological classification:</p> <p>Ichthyofauna:</p> <p>Water quality:</p> <p>Aesthetics:</p> <p>Comments: No information on this estuary</p>

	<p>Name: Mbhashe</p> <p>Classification: POE</p> <p>Biogeography: Warm-temperate</p> <p>Geomorphological classification: F</p> <p>Ichthyofauna: Moderate</p> <p>Water quality: Fair</p> <p>Aesthetics: Good</p> <p>Comments: No information on this estuary</p>
	<p>Name: KuMpenzu</p> <p>Classification: POE</p> <p>Biogeography: Warm-temperate</p> <p>Geomorphological classification: E</p> <p>Ichthyofauna: Good</p> <p>Water quality: Fair</p> <p>Aesthetics: Good</p> <p>Comments: No information on this estuary</p>
	<p>Name: Ntlonyane</p> <p>Classification: TOCE</p> <p>Biogeography: Warm-temperate</p> <p>Geomorphological classification: E</p> <p>Ichthyofauna: Good</p> <p>Water quality: Fair</p> <p>Aesthetics: Good</p> <p>Comments: Much of the floodplain and surrounding area used for cattle grazing</p>

	<p>Name: Nkanya</p> <p>Classification: TOCE</p> <p>Biogeography: Warm-temperate</p> <p>Geomorphological classification: E</p> <p>Ichthyofauna: Good</p> <p>Water quality: Good</p> <p>Aesthetics: Good</p> <p>Comments: System in near-pristine condition</p>
	<p>Name: Xhora</p> <p>Classification: POE</p> <p>Biogeography: Warm-temperate</p> <p>Geomorphological classification: F</p> <p>Ichthyofauna: Good</p> <p>Water quality: Fair</p> <p>Aesthetics: Good</p> <p>Comments: Regarded as an exceptionally important system in need of further study.</p>
	<p>Name: Bulungula</p> <p>Classification: TOCE</p> <p>Biogeography: Warm-temperate</p> <p>Geomorphological classification:</p> <p>Ichthyofauna:</p> <p>Water quality:</p> <p>Aesthetics:</p> <p>Comments: No information on this estuary</p>

	<p>Name: KuAmanzimnyama</p> <p>Classification: TOCE</p> <p>Biogeography: Warm-temperate</p> <p>Geomorphological classification: F</p> <p>Ichthyofauna:</p> <p>Water quality:</p> <p>Aesthetics:</p> <p>Comments</p>
	<p>Name: Mncwasa</p> <p>Classification: TOCE</p> <p>Biogeography: Warm-temperate</p> <p>Geomorphological classification:</p> <p>Ichthyofauna:</p> <p>Water quality:</p> <p>Aesthetics:</p> <p>Comments: Baseline studies urgently required.</p>

7.7.4. Issues relating to Priority 5

In addition to the above mentioned requirements for estuarine management, the following issues were identified by stakeholders:

Issues	Impact	Existing response	Proposed intervention	Responsibility	Support
Need for EMPs for Mbhashe LM estuaries	Unable to fulfil ICM Act requirements wrt estuaries	None	Develop EMPs	Mbhashe LM	DEDEAT, DEA

No generation of current knowledge on estuarine ecology and threats.	Estuaries not managed in an informed manner.	None	Establish an estuarine research programme	Mbhashe LM	WSU, DEDEAT, DEA
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7.7.5. Ranking of Priority 5 issues

Issues presented in the previous paragraph were ranked in order to obtain their respective levels of priority:

Issues and Pressures	Priority Rating Criteria						TOTAL SCORE	PRIORITY
	1.MAGNITUDE	2.SEVERITY	3.RISK	4.IMAGE	5.TEMPORAL	6. OPPORTUNITY LOSSES		
Need for EMPs for Mbhashe LM estuaries	3	1	1	1	2	2	10	MEDIUM
No generation of current knowledge on estuarine ecology and threats	3	1	1	1	2	2	10	MEDIUM

7.8. Priority 6: Facilitation of coastal access

7.8.1. Legal framework

According to Section 18(1) of the ICM Act, a municipality whose area includes coastal public property must within four years of the commencement of the Act, make a by-law that designates strips of land as coastal access land in order to secure public access to the coastal public property.

The DEA: Oceans and Coasts subsequently developed a Guideline for the Designation of Coastal Access (2014), whose purpose was to provide strategic direction to the establishment and maintenance of coastal access in South Africa, as well as a framework within which coastal municipalities must designate coastal access and coastal access land (as per Section 18 of the ICM Act).

The features of facilitation of coastal access are:

- Promoting and managing access to coastal public property;
- Promoting and facilitating equitable access to coastal resources and coastal public property;
- Recognizing the importance of access preservation; and
- Promoting custodianship and stewardship of the coastal zone.

With respect to the Facilitation of Coastal Access as a Priority for coastal management in the Mbhashe, the following goals have been set towards achieving effective management of public access to coastal public property:

Priority		Goal		Overview
No.	Description	No.	Description	
6	The facilitation of coastal access	6A	Physical access	<ul style="list-style-type: none">• Opportunities for public access shall be provided at appropriate coastal locations, and improved where necessary, as per the ICM Act requirements;• Where appropriate, public access shall be managed (planned, mapped, controlled or consolidated to minimize adverse impacts and to resolve incompatible uses.
		6B	Equitable access	<ul style="list-style-type: none">• Access to coastal resources shall be allocated and used in a manner that is fair and just, with particular attention given to the needs and economic upliftment of disadvantaged communities
		6C	Access preservation	<ul style="list-style-type: none">• Coastal resources of historical, archaeological, cultural and scientific value shall be identified, regulated and preserved, protected or promoted, and access facilitate where appropriate;• Traditional and cultural activities along the coast shall be regulated and given special consideration in coastal planning and management, and incorporated into environmental management procedures.

7.8.2. Coastal access within Mbhashe LM

7.8.2.1. Coastal roads

Even though roads leading to the coastal zone are important in promoting and enabling access to the coastal zone, poorly-planned roads end up damaging the natural environment. The WC EMP argues that such poorly-planned roads are unsustainable, and impose a great burden on already limited funding for municipalities and other relevant authorities.

Section 40 of the Transkei Decree (No. 9, 1992) prohibits the driving of a vehicle along any part of the coastal zone, unless it is on a declared road. This effectively means that for all vehicles on coastal access roads such as the one shown in Fig. 22, and which is within 1000m from the high water mark, the user must be in possession of a permit. The DEDEAT is presently the permitting agency for such use.



Figure 22: An example of an unproclaimed coastal road at Mpame mouth, Mbhashe LM, which may be used subject to compliance with the Environmental Conservation Decree (Decree No. 9 of 1992).

The Transkei Decree is still a powerful instrument for provincial authorities in the ADM and Mbhashe LM areas of jurisdiction, with respect to environmental and coastal management. However, this law may be repealed in the near future and replaced with new environmental legislation. Furthermore, all coastal activities must now be governed in accordance with the ICM Act.

7.8.2.2. Boat launch sites

Until recently (now governed under the Regulations for the Management of Public Launch Sites in the Coastal Zone), boat launch sites were governed according to the then-ORV Regulations. Under those regulations, it was required that all public boat launch to be licensed by either the operating agency or the owner.

Presently, boat launch sites are placed under the Regulations for the Management of Public Launch Sites in the Coastal Zone, and have been separated from the ORV Regulations. Under this new arrangement, municipalities must merely submit a list to the MEC of the DEDEAT – the lead agency for coastal management in the Eastern Cape – of their designated public launch sites. The list must then be published in a provincial gazette, after the conclusion of a public participation process.

It follows therefore that the DEDEAT's first action in fulfilling the ICM Act's requirement for listing of public launch sites was through the publishing of such a list of proposed public boat launch sites in the Provincial Gazette No. 3363 of 31 March 2015, for public comment. Proposed public launch sites as included in the said Gazette were located at Nqabarha, Mpame, Qhora and Xhora.


At the time of drafting of this CMP, the gazetting of the final list of boat launch sites had not taken place.


Furthermore, the provincial government embarked on a process to further assist municipalities with the development of operational and management plans for the launch sites, in accordance with the Management of Public Launch Sites in the Coastal Zone Regulations. This process had not been completed at the time of drafting of this CMP.

7.8.2.3. Other coastal access points

The municipality sees more opportunities with the installation of boardwalks, hiking trails, to promote responsible coastal access. Even though hiking trails exist, the municipality still needs to promote them better for the benefit of the tourism sector.

Access into coastal public property at major coastal locations within the Mbhashe LM is summarised as below:

	<p>32°26'45.54" S 28°40'35.08" E</p> <p>Despite controlled access at Kob Inn at Qora mouth; there are alternative paths into the coastal zone.</p>
	<p>32°20'11.67" S 28°47'21.67" E</p> <p>There is ample access into the coastal zone at Nqabarha mouth.</p>
	<p>32°14'31.24" S 28°54'33.61" E</p> <p>Well-managed, minimal access into coastal zone within Dwesa-Cwebe Wildlife and Marine Sanctuary.</p>
	<p>32°09'36.47" S 28°59'46.45" E</p> <p>Coastal access at Xhora mouth is easily available.</p>
	<p>32°08'23.84" S 29°00'32.87" E</p> <p>Ample coastal access at Bulungula mouth; need to manage and formalise access points.</p>

	<p>32°05'54.35" S 29°03'40.79" E</p> <p>Access at Mpame Village into the coastal zone is freely available.</p>
	<p>Access into the coastal zone at Lubanzi is freely available.</p> <p>(32°03'53.37" S:29°05'14.23" E)</p>

7.8.3. Issues relating to Priority 6

The following issues were identified during stakeholder engagement sessions with respect to access into the coastal zone:

Issues	Impact	Existing response	Proposed intervention	Responsibility	Support
Need for improved promotion of access via the provision of appropriate amenities such as parking, toilets, boardwalks, etc	Limitation to the full enjoyment of recreational coastal amenities.	Informal beach access points	Formalise access into coastal zone by demarcating and gazetted coastal access points in accordance with the ICM Act.	Mbhashe LM	ADM, DEDEAT, DEA

			Regulate coastal access points.		
Need for efforts towards the construction of community access roads, using labour based-intensive techniques as a way of creating employment opportunities for the respective communities. Upgrading of key access points with appropriate facilities.	Limitation to the full enjoyment of recreational coastal amenities.	Informal beach access points	Plan and implement coastal access roads upgrades and construction.	Mbhashe LM	ADM, DEDEAT
Need to identify additional boat launch sites.	Limitation to access to marine environment for the exploitation of marine resources.	Three authorised boat launch sites within Mbhashe LM.	Propose additional boat launch sites.	Mbhashe LM	ADM, DEDEAT, DEA
			Regulate management of boat launch sites.		

7.8.4. Ranking of Priority 6 issues

Issues presented in the previous paragraph were ranked in order to obtain their respective levels of priority:

Priority Rating Criteria ->	1.MAGNITUDE	2.SEVERITY	3.RISK	4.IMAGE	5.TEMPORAL	6. OPPORTUNITY LOSSES	TOTAL SCORE	PRIORITY
Issues and Pressures								
Need for improved promotion of coastal access via the provision of appropriate amenities such as parking, toilets, boardwalks, etc.	3	1	1	1	3	2	11	MEDIUM
Need for efforts towards the construction of community access roads, using labour-based intensive techniques as a way of creating employment opportunities for the respective communities.	3	1	1	1	3	3	12	MEDIUM
Need to identify additional boat launch sites.	1	1	1	1	2	2	8	LOW

7.9. Priority 7: Awareness, education, training, capacity building and information

The features of Priority 7 are:

- Facilitation of knowledge production and exchange;
- Promotion of knowledge sharing of coastal issues; and
- Instilling a sense of ownership.

With respect to Priority 7 the following goals have been set towards achieving effective awareness, education, training, capacity building and information for the benefit of all stakeholders.

Priority		Goal		Overview
No.	Description	No.	Description	
7	Awareness, education, training, capacity building and information	7A	Awareness and training	<ul style="list-style-type: none"> • The Mbashe LM's awareness and training programmes must reflect the spirit of coastal management principles in South Africa; • The Mbashe LM's awareness and training programmes must recognise and cater for the traditional authorities as leaders of coastal communities within their areas of jurisdiction; • Education and training programmes for all stakeholders, inclusive of Mbashe LM officials, communities and other stakeholders, must be developed.
		7B	Information	<ul style="list-style-type: none"> • Partnerships with research institutions and agencies must be formed, so as to ensure current understanding of impacts of future development, population growth and climate change.
		7C	Stewardship	<ul style="list-style-type: none"> • Public awareness programmes, education and equitable access to resources should lead to the appreciation of a sense of ownership of the coast and recognition of its intrinsic value to the Mbashe LM. • Stewardship programmes should be encouraged and regulated to ensure a sense of ownership and shared responsibility of the coastal zone; and • Opportunities created by annual marine education events must be capitalised upon to improve integrated coastal management awareness.

7.9.1. Awareness and education in the Mbashe LM

Environmental awareness must be two-fold:

- External coastal awareness raising with respect to community members and the general public at large;
- and

- ii. Internal coastal awareness raising with respect to municipal officials and public representatives, to ensure high level buy-in for the resourcing of coastal management needs and imperatives.

In order to improve the level of environmental awareness raising on the part of the Mbhashe LM, the municipality must, *inter alia*:

- Incorporate coastal management in all existing environmental awareness programmes;
- Ensure the retention and resourcing of the Marine Day Celebration held in November 2015 as an annual event. The event must alternate to different locations towards ensuring that as many communities within the Mbhashe LM are afforded the opportunity to participate in the event;
- and,
- Continue to pursue external environmental awareness opportunities provided by other spheres of government, including the ADM, ECPTA, SANParks, etc.

The Mbhashe LM does not have a dedicated awareness programme, largely due to budgetary constraints, and prioritization in favour of other critical district programmes. The Mbhashe LM must find other training opportunities to incorporate coastal management education into them. For instance, through its participation in the Greenest Municipality Competition, the Mbhashe LM is able to drive environmental education programmes, by:

- Providing training and capacity building opportunities for officials;
- Providing training and awareness programmes for schools; and
- Providing waste management programmes for communities.

Furthermore, the municipality exploits various training and awareness opportunities organised by the provincial government, and NGOs such as WESSA.

At LM level, environmental awareness campaigns are recognised as key to changing mindsets of communities with respect to land degradation, destruction of vegetation, air quality, waste management, etc. Even though such campaigns are recommended in the IDPs of the LM, allocation of required resources, human and financial, remains the common challenges for the LMs.

7.9.2. Issues relating to Priority 7

The following issues and interventions were discussed during stakeholder engagement sessions.

Issues	Impact	Existing response	Proposed intervention	Responsibility	Support
It is imperative to empower communities with respect to the importance of the coastal zone; encourage participation in coastal initiatives, and instil a sense of pride and custodianship over coastal as a natural asset.	Awareness will lead to support of coastal conservation efforts by authorities.	Uncoordinated and limited awareness and information programmes.	Develop, resources and implement a coastal awareness programme.	Mbhashe LM	ADM, DEDEAT, DEA, ECPTA
			Develop partnerships and funding models for coastal awareness programmes		
Mbhashe LM not fully participating in awareness campaigns by external agencies.	Missed opportunities wrt participation in awareness raising.	Uncoordinated and limited.	Identify and participate in existing and planned awareness campaigns by external agencies.	Mbhashe LM	ADM, DEDEAT, DEA, ECPTA, NGOs
Capacity building, training and awareness raising wrt Mbhashe LM officials and political heads and representatives needed.	Buy-in and support from high-level management structures needed for coastal management.	Uncoordinated and limited.	Embark on awareness raising within Mbhashe LM personnel and management structures.	Mbhashe LM	

7.9.3. Ranking of Priority 7 issues

Issues presented in the previous paragraph were ranked in order to obtain their respective levels of priority:

Priority Rating Criteria ->	1.MAGNITUDE	2.SEVERITY	3.RISK	4.IMAGE	5.TEMPORAL	6. OPPORTUNITY LOSSES	TOTAL SCORE	PRIORITY
Issues and Pressures								
It is imperative to empower communities with respect to the importance of the coastal zone; encourage participation in coastal initiatives, and instill a sense of pride and custodianship over coastal zone as a natural asset.	1	0	1	0	3	2	7	LOW
Mbhashe LM not fully participating in awareness campaigns by external agencies.	1	0	1	1	3	2	8	LOW
Capacity building, training and awareness raising wrt Mbhashe LM officials and political heads and representatives needed.	4	1	1	1	3	2	12	MEDIUM

7.10. Priority 8: Compliance, monitoring and enforcement

The features of Priority 8 are:

- Facilitation of compliance with applicable coastal legislation; and
- Promotion of the environmental management inspectorate and facilitation of environmental management inspectors.

With respect to Priority 8 the following goals have been set towards achieving effective compliance, monitoring and enforcement for the benefit of all stakeholders.

Priority		Goal		Overview
No.	Description	No.	Description	
8	Compliance, monitoring and enforcement	8A	Compliance, monitoring and enforcement	<ul style="list-style-type: none">• Compliance with coastal and other applicable regulations must be encouraged and improved;• Designation and specialized training of EMIs must be facilitated by the Mbashe LM, and must be appropriately equipped and capacitated; and• The Mbashe LM must establish enforcement task teams, as well as participate in operations undertaken by other environmental enforcement agencies.

7.10.1. Compliance, monitoring and enforcement in the Mbashe LM

Many of the holiday cottages along the coast of the Mbashe LM are occupied based on the PTO system discussed earlier in this document. However, the Mbashe LM is facing a challenge of illegal cottages and other structures being erected along the coast. The DEDEAT's compliance unit is continually monitoring and taking action against the construction of illegal structures. Many of these structures are households and holiday homes (J.Pienaar, *pers. comm.*). Over the past decade, the DEDEAT has successfully removed many of these structures. Due to the sensitive nature of this topic, this CMP will not present further details of the alleged and convicted offenders.

7.10.2. Appointment of EMIs

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 authority with the necessary designation to enforce

environmental and coastal management laws. For the Mbashe LM to be able to attend to transgressions such as the illegal cottages, appointment of Environmental Management Inspectors (EMIs) by the municipality would go a long way in curbing the challenges of illegal cottages, unauthorised use of vehicle in the coastal zone, and other environmental offences.

Essentially, EMIs are appointed under NEMA , and their role is to see to it that environmental legislation is followed and enforced. The EMIs have the powers to:

- Investigate: question witnesses, inspect and remove articles, take photographs and audiovisual 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.

7.10.3. Issues relating to Priority 8

The following were issues identified and interventions proposed with respect to compliance at Mbashe LM.

Issues	Impact	Existing response	Proposed intervention	Responsibility	Support
Mbashe LM has no capacity to enforce environmental laws	Unable to respond independently to coastal transgressions	Reliance on DEDEAT and DEA for enforcement	Mbashe LM to appoint EMIs	Mbashe LM	DEDEAT, DEA
Need to capacitate municipal environmental law enforcement	Unable to respond adequately to transgressions	Depend on DEDEAT, DMR, and DEA for enforcement.	Develop municipal municipal law enforcement capacity for environmental matters.	Mbashe LM	ADM, DEA, DEDEAT
	Must rely on DEDEAT's limited enforcement capacity	Rely on DEDEAT, DEA for enforcement			

7.10.4. Ranking of Priority 8 issues

Issues presented in the previous paragraph were ranked in order to obtain their respective levels of priority:

Priority Criteria ->	Rating	1.MAGNITUDE	2.SEVERITY	3.RISK	4.IMAGE	5.TEMPORAL	6. OPPORTUNITY LOSSES	TOTAL SCORE	PRIORITY
Issues and Pressures									
Presently no by-laws to enforce ICM Act		4	2	2	2	3	1	14	HIGH
Mbhashe LM has no capacity to enforce environmental laws		4	2	2	2	3	1	14	HIGH

7.11. Priority 9: Natural resource management

The features of natural resource management are:

- The maintenance of ecosystem integrity and health; and
- To identify and rehabilitate damaged and degraded coastal ecosystems and habitats.

With respect to this Priority, the following goals have been set towards achieving the effective natural resource management.

Priority		Goal		Overview
No.	Description	No.	Description	
9	Natural resource management	9A	Ecosystem integrity	The biological diversity, natural functioning and ecological integrity, health and productivity, of coastal ecosystems, shall be maintained as per the requirements of the Mbashe LM IDP, SDF, EMP and other plans.
		9B	Rehabilitation	<ul style="list-style-type: none">• Coastal ecosystem and habitats that have been substantially degraded or damaged as a result of past human activities shall be rehabilitated.• Ensure that rehabilitated ecosystems and habitats are maintained through proper planning and environmental capacity building.

7.11.1. Natural resource management in the Mbashe LM

Marine and coastal ecosystems are subjected to a variety of pressures, including but not limited to fisheries, mining, shipping, oil and gas industries, waste water discharges, and development. In terms of the overall ecological condition – based on an analysis of the combined effects of the afore-mentioned pressures and others – the section of coastline belonging to Mbashe LM is regarded to be relatively “good” considering that up to 47% of coastal and marine environments in South Africa are threatened (National Biodiversity Assessment 2012).

There is a need, therefore, to maintain and protect the health of the Mbashe coast to ensure the long term provision of coastal goods and services to the municipality. The coast is an important contributor to the quality of life of the inhabitants of the Mbashe LM.

Key areas that require careful management are alien invasive vegetation removal and wetlands.

7.11.1.1. Invasive alien plants

The removal of Invasive alien plants (IAPs) has long received a major focus and investment from the DWA. The Working for Water (WfW) programme was established in 1995, with the purpose to reduce the presence IAPs from ecosystems across South Africa. Moreover, the DEA, through its Working for the Coast (WfC) programme, also provided further resources towards IAP removal along South Africa's coastline. Both the WfW and WfC programmes have and continue to provide opportunities for local municipalities to benefit from these programmes by facilitating the creation of labour-intensive work opportunities while performing ecologically important work.

Fig. 23 depicts the spatial distribution of IAPs along the Mbhashe LM's coastline, based on the National Invasive Alien Plant Survey of 2011 (ARC 2011). The maps presented in Fig. 23 allow for the planning of IAP removal by indicating areas of high IAP density.





Figure 23: Location of IAPs along the shoreline of Mbashe LM. The maps depict total average densities of all IAPs in a specific area (purple layer). the Dwesa-Cwebe Nature Reserve, which falls under the jurisdiction of the ECPTA.

The Mbashe LM benefits from the WftC programme, whose focus also includes IAP removal. It is important that the Mbashe LM develops a plan towards the systematic removal of IAPs along its coastline. Areas for IAP removal must be finalized in consultation with the DEDEAT, so as to ensure accurate identification of IAPs, and to ensure best practice and duty of care when performing the work.

7.11.1.2. Ecosystem integrity and health

The Mbashe LM benefits from a project funded by the national Department of Environmental Affairs, known as the Working for the Coast programme. This programme allows for the provision of workers distributed along key coastal locations, to perform tasks relating to natural resource management, such as:

- Alien invasive removal;
- Dune rehabilitation;
- Beach clean-ups; and
- Coastal management policies and plans, such as CMPs.

Because this coastline is characterised by traditional and poor communities, the unregulated harvesting of natural resources has been reported. For example, yellowwood is harvested mainly for erecting fencing and use as building material. Other plants are harvested for medicinal purposes.

7.11.1.3. Oil Spills

The DEA compiled a Coastal Oil Spill Contingency Plan, No. 13: Wild Coast Zone, where it sets out roles and responsibilities for stakeholders.

Under this plan, the Head of the district municipality's Disaster Management Centre and the coordinator of adjacent MPAs will be the Designated / local Authority Co-ordinator. When alerted, all Authorities concerned must nominate officers from within their organisations to become Area Controllers, Response Officers and Administration Officers for the duration of an incident.

The Designated Authorities will be required to provide assistance in the form of supervision, labour, transport and equipment for the protection and clean-up of their beaches and estuaries. They will also be responsible for making arrangements with local Traffic and Police Officers to ensure traffic and crowd control in the vicinity of the impacted area.

It is therefore critical that the Mphashe LM positions itself to be able to respond to coastal oil spill incidents in accordance with the Oil Spill Contingency Plan.

7.11.1.4. Sand mining

A Report titled "Strategic investigation into the sand-mining activities in the coastal zone of the Wild Coast" was completed in 2004 by Coastal and Environmental Services (CES), MBB Consulting Services (EC) Inc. and Masibambane Specialist Legal Consultants. The report was prepared for the EU Wild Coast Programme.

The report covered the following topics:

- Legislation and policy relevant to sand-mining activities;
- A geological assessment of the availability of sand for plaster and mortar on the Wild Coast;
- Identification and description of sand-mining sites;
- Resource demands in the Wild Coast area; and
- Community issues relating to sand-mining on the Wild Coast.

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, with a particular example being near the Mncwasa River mouth (Fig. 24)
- 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, with the R61 being the major factor in Mbhashe LM,
- 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.”



Figure 24: An example of sand mining taking place near Mncwasa River mouth. Such activities require verification of permitting from the DMR.

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 responds to the challenge of sand mining, which damages sections of the Wild Coast. The WC EMP argues that the offenders mainly reside outside of the affected areas, with locals deriving little or no benefit from the sand-mining.

Furthermore, the WC EMP points out that, even though legalizing some sites is more desirable than closing all of them, as proves to be difficult to get agreement on who the holder of a mining license should be, and to who and how benefits from sale of sand should accrue.

7.11.1.5. The Blue Flag programme

7.11.1.5.1. Blue flag programme

The Blue Flag is an international ecolabel awarded to municipalities whose beaches meet a specific list of set 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 a familiar with and prefer beaches with the Blue Flag. At this stage the Mbhashe LM does not have a Blue Flag beach within its area of jurisdiction.

7.11.1.5.2. Features of a blue flag beach

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 *Escherischia 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 is adequate parking space;
- viii. There are environmental management programmes for the municipality;
- ix. Litter is removed from the beach on an ongoing basis during Blue Flag hours; and
- x. There is a recycling programme during Blue Flag hours.

7.11.1.5.3. Assessment of Mbhashe LM beaches for Blue Flag eligibility

In assessing the potential for Mbhashe LM beaches to participate in the Blue Flag programme (Table 11), an assessment of the beaches was conducted, focussing on:

- Availability of public access to the beach;
- Availability of public ablution facilities;
- Availability of public parking facilities;
- Availability of lifeguards; and
- Proximity to the nearest nodal area.

Table 11: Assessment of beaches within Mbhashe LM, to establish potential for Blue Flag accreditation

Nodal Area	Features
1. Qhora	<p>Access- Clear and safer Access through Kobb-Inn Hotel</p> <p>Ablutions- no public ablutions only from hotel</p> <p>Parking- only inside Hotel, no formal parking outside</p> <p>Lifeguard- Only during busy holidays but not permanent</p> <p>Node proximity- +/- 40km from Dutywa</p>
2. Jujura	Access-Clear general public access to the beach

	<p>Ablutions- No ablutions around the beach</p> <p>Parking-No developed parking area</p> <p>Lifeguard- seasonally</p> <p>Node proximity- +/- 45 km from Dutywa</p>
3. Beechamwood	<p>Access- Clear general public access to the beach</p> <p>Ablutions- no ablution facilities along the beach</p> <p>Parking- no developed parking area</p> <p>Lifeguard-seasonally</p> <p>Node proximity- +/- 40km from Dutywa</p>
4. Nqabarha	<p>Access-Clear general public access to the beach</p> <p>Ablutions-no ablution only from nearest lodge</p> <p>Parking- no parking</p> <p>Lifeguard-seasonally</p> <p>Node proximity- +/- 35km from Dutywa</p>
5. Dwesa- Cwebe	<p>Access- Only accessible through the nature reserve.</p> <p>ablutions- well developed ablutions within the reserve</p> <p>parking- Parking is inside the reserve</p> <p>Lifeguard-seasonally</p> <p>Node proximity +/-40km from Dutywa</p>
6. Haven	<p>Access- Clear public access to the beach</p> <p>Ablutions- ablutions only from Hotel</p> <p>Parking- well developed parking area</p> <p>Lifeguard-seasonally</p> <p>Node proximity</p>
7. Nkanya	<p>Access-Clear public access to the beach</p> <p>Ablutions- No ablutions at the beach</p> <p>Parking- no parking area</p> <p>Lifeguard-seasonally</p>

	Node proximity +/- 35km from Dutywa
8. Qatywa	<p>Access- Clear public access to the beach</p> <p>Ablutions- no public ablutions on the beach</p> <p>Parking- no parking</p> <p>Lifeguard- seasonally</p> <p>Node proximity</p>
9. Bulungula	<p>Access- clear public access</p> <p>Ablutions- no public ablutions only from back packer lodge</p> <p>Parking- no parking</p> <p>Lifeguard- seasonally</p> <p>Node proximity +/- 35 km from Elliotdale</p>
10. Mpame	<p>Access- clear public access</p> <p>Ablutions- no ablutions</p> <p>Parking- no parking</p> <p>Lifeguard- seasonally</p> <p>Node proximity +/- 40km from Elliotdale</p>
11. Kufolokwe/Jotela	<p>Access-Clear public access to the beach</p> <p>Ablutions- no ablutions</p> <p>Parking- Enough space for parking but not well developed</p> <p>Lifeguard- only seasonally during busy holidays</p> <p>Node proximity-</p>

The following could be deduced from the beach assessment:

1. Need for new or improved public beach facilities to be constructed at all sites, such as ablutions, parking, access ways, etc. Construction of such facilities must adhere to EIA Regulations;
2. Access to the beach is freely available, except for Kob Inn and Dwesa-Cwebe Nature Reserve, where access is available through the hotel premises and through reserve security personnel, respectively;

3. Apart from Kob Inn and The Haven – where parking is available on hotel premises – there needs to be fully developed parking infrastructure, instead of the informal spaces designated for parking at best, or parking being non-existing as in many sites;
4. Lifeguards are available during holiday seasons only; and
5. Elliotdale and Willowvale are the nearest nodal areas for most sites assessed.

7.11.1.5.4. Recommendations

The Mbhashe LM must position itself to participate in the Blue Flag programme by:

- 1) Securing an accredited laboratory, within a six-hour radius, for water quality testing.
- 2) Providing public ablution facilities at all sites.
- 3) Providing public parking facilities at all sites.
- 4) After all the above have been resolved, selecting two beaches to be submitted for candidacy for the Blue Flag.

7.11.2. Issues relating to Priority 9

With respect to natural resource management, the following issues were identified during engagement with stakeholders:

Issues	Impact	Existing response	Proposed intervention	Responsibility	Support
No capacity to respond to oil spills	Unable to respond urgently to oil spill events	Rely on DEA for operational response	Initiate efforts to be able to respond to oil spills as per Oil Spill Contingency	Mbhashe LM	DEA
Need to deal effectively with illegal sand mining.	Degraded ecosystems	The DMR is responsible for enforcement with respect to illegal sand mining.	Allow for mining to continue at agreed-to site, while closing others	Mbhashe LM, DMR	ADM

Need to establish community based natural resource management	Lack in community buy-in wrt natural resources.	None	Embark on awareness campaigns to educate communities to take custodianship of natural environment.	DEDEAT, Mbhashe LM	
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7.11.3. Ranking of Priority 9 issues

Issues presented in the previous paragraph were ranked in order to obtain their respective levels of priority:

Priority Rating Criteria ->	1.MAGNITUDE	2.SEVERITY	3.RISK	4.IMAGE	5.TEMPORAL	6. OPPORTUNITY LOSSES	TOTAL SCORE	PRIORITY
Issues and Pressures								
No capacity to respond to oil spills	1	1	1	0	1	1	5	LOW
Need to deal effectively with illegal sand mining	2	2	2	2	3	2	13	HIGH
Need to establish community-based natural resource management.	2	1	1	1	3	1	9	MEDIUM

8. Coastal management proposed Actions for the Mbashe LM, 2016-2021

The Mbashe LM CMP has a five-year horizon, that is, 2016 - 2021. The planning and time frames takes into account financial year of municipalities, which starts on 1 July, ending 30 June.

Specific actions are proposed for the five-year period 2016-2021. These actions are grouped in accordance with the nine Priorities already discussed, namely,

- I. Cooperative governance;
- II. Coastal planning and development;
- III. Climate change and dynamic coastal processes;
- IV. Land and marine-based sources of pollution;
- V. Estuaries;
- VI. Facilitation of coastal access;
- VII. Awareness, education, training, capacity building and information;
- VIII. Compliance, monitoring and enforcement; and
- IX. Natural resource management

Furthermore, responsible line functions are indicated under "Lead Agency."

Priority 1: Cooperative Governance					
Action	Indicators	Completion Date	Lead Agency	Supporting Agency	Estimated Cost
Formalise Stakeholder List and circulate it to identified stakeholders for commenting.	Coastal stakeholders list posted on website	Jan-17	Mbashe LM	ADM	Operational budget
Formation of a Mbashe LM Coastal Committee, to include relevant government agencies, traditional authority representatives, environmental interest groups, boat launch site operators, and business sector representatives	Terms of Reference for the Formation of the Mbashe LM Coastal Committee	Dec-16	Mbashe LM	ADM	None
	Recorded minutes of committee meetings	Ongoing	Mbashe LM	ADM	Operational budget
Include Dwesa-Cwebe, Qatywa Development Trusts, traditional leadership in the Mbashe Coastal Committee	Recorded participation of Dwesa-Cwebe, Qatywa Development Trusts, traditional leadership in Mbashe Coastal Committee	Immediately upon establishment of Mbashe Coastal Committee	Mbashe LM	ECPTA	Operational budget

	Give coastal management reports to traditional councils	Immediately	Mbhashe LM		Operational budget
Compile report on beach driving and boat launch sites for ADM Coastal Committee	Vehicles on the Beach and Boat Launch Sites Monitoring Report	Ongoing	Mbhashe LM	DEDEAT	Operational budget
Priority 2: Coastal Planning and Development					
Action	Indicators	Completion Date	Lead Agency	Supporting Agency	Estimated Cost
Incorporate coastal management focus into LED strategy.	Strategy to Support Coastal Livelihoods completed	Mar-17	Mbhashe LM	ADM, DEDEAT, DAFF, DEA	R70000
Develop Coastal Planning Scheme	Gazetted Coastal Planning Scheme	Nov-17	Mbhashe LM	ADM, DEDEAT, DEA	R150000
Conduct assessment of condition of current coastal infrastructure and amenities	Report on State of Coastal Amenities and Infrastructure	Nov-18	Mbhashe LM	ADM	R70000
Identify key nodal points for development of coastal recreational facilities	Spatial Plan for Coastal Recreation Nodes	Jun-19	Mbhashe LM	ADM	R50000
Design coastal recreational nodes	Landscape Designs for Coastal Recreational Areas	Dec-19	Mbhashe LM	ADM	R150000
Assess and map hazard and safety zones with respect to bathing conditions and the use of nonmotorised craft on coastal public property	Hazard and Safety Zones for Recreational Use of Coastal Public Property	Jun-18	Mbhashe LM	ADM	R200000
Meet with DEDEAT, ADM, to discuss collaboration wrt establishment of coastal management lines.	Recorded understanding of plans to develop coastal management lines for Mbhashe LM, including the LM's role in such as process..	Jan-17	Mbhashe LM	ADM, DEDEAT, DEA	Operational budget
Develop environmental guidelines and procedures for all municipal work impacting on the environment	MBHASHE Environmental Guidelines and Procedures for Capital Projects	Jun-17	Mbhashe LM	LMs, DEDEAT	R50000
Priority 3: Climate change and dynamic coastal processes					
Action	Indicators	Completion Date	Lead Agency	Supporting Agency	Estimated Cost

Assess areas of vulnerability wrt sea-level rise	Coastal Vulnerability Report completed.	Jun-20	Mbhashe LM	ADM, DEDEAT, DEA	R50000
Develop a municipal climate change strategy, to include focus on coastal resources.	Climate Change Strategy for Mbhashe completed.	Jun-17	Mbhashe LM	ADM, DEDEAT	R200000
Conduct a survey of sea defense infrastructure, such as seawalls, gabions, dune systems, and propose areas where such must be installed or removed.	Survey of Sea Defense Infrastructure report completed.	Jun-21	Mbhashe LM	ADM	R30000
Rehabilitate coastal dunes in high risk areas wrt sea-level rise	Visible dune rehabilitation work at coastal sites.	When and where necessary	Mbhashe LM	DEDEAT, DEA	WftC
Priority 4: Land and marine-based sources of pollution					
Action	Indicators	Completion Date	Lead Agency	Supporting Agency	Estimated Cost
Analyse Mbhashe LM's role in the Oil Spill Contingency Plan, and resource requirements to fulfil requirements of such a role.	Report on Readiness for Oil Spills within Mbhashe LM	Dec-17	Mbhashe LM	ADM, DEA	Operational budget
Assess level of availability of waste bins on public beaches.	Sufficient waste bins on public beaches	Ongoing	Mbhashe LM		Operational budget and capital budgets
Initiate waste removal from estuaries	Ongoing waste removal programme in place.	Ongoing	Mbhashe LM	DEA	WftC
Pilot recycling at key coastal recreation sites. Includes purchasing of appropriate containers and appointment of recycling supervisors	Recycling containers at recreational coastal sites and presence of recycling supervisors	Aug-18	Mbhashe LM		R50000
Develop Waste Management by-law	By-law Relating to Waste Disposal gazetted.	Jun-17	Mbhashe LM	ADM	
Ongoing inspection of septic tanks.	Inspection record of septic tanks	Ongoing	Mbhashe LM		Internal operations
Regulate septic tanks by means of a by-law	By-law Relating to Septic Tanks gazetted.	Dec-19	Mbhashe LM		R30000

Liase with DEA wrt data on location of discharge points into the coastal (estuarine) and marine environments. Incorporate the discharge points into Mbashe LM SDF.	Map of discharge points into marine environment.	Mar-17	Mbashe LM	ADM, DEDEAT, DEA	None
Initiate water quality monitoring at public beaches	Database of water quality with respect to public beaches	Ongoing	Mbashe LM		R50000
Priority 5: Estuaries					
Action	Indicators	Completion Date	Lead Agency	Supporting Agency	Estimated Cost
In partnership with DEDEAT and ADM, select priority estuaries for development of EMPs during the term of this CMP.	Completed EMPs for selected estuaries.	Jun-18	Mbashe LM	ADM, DEDEAT, DEA	R500000
Develop long term estuarine research and monitoring programme, in partnership with WSU.	Publication of peer-reviewed research.	Jun-21	Mbashe LM	WSU, DEDEAT, DEA	R250000
Priority 6: Facilitation of coastal access					
Action	Indicators	Completion Date	Lead Agency	Supporting Agency	Estimated Cost
Undertake an inventory and assessment of existing and potential coastal access points.	Inventory and assessment of coastal access points completed.	Dec-17	Mbashe LM	ADM, DEDEAT, DEA	R20000
Develop a Municipal Coastal Access Management Plan as per National Strategy for the Facilitation of Coastal Access.	Municipal Coastal Access Management Plan gazetted	Dec-18			R50000
Develop coastal access by-law to regulate the management of coastal access	By-law Relating to the Management of Coastal Access Points gazetted	Jun-19			R100000
Support LED by identifying coastal access roads needing upgrading and repairs, to allow for easy access to coastal tourism locations.	Plan of coastal access road upgrades and maintenance, using the projects for job creation and social upliftment.	Jun-21	Mbashe LM	ADM	Internal operations
Develop management plans for all licenced/listed public launch sites. Support clubs operating launch sites with development of management plans.	Boat Launch Site Management Plans completed.	Jun-17	DEDEAT	LMs, DEA	DEDEAT

Priority 7: Awareness, education, training, capacity building and information					
Action	Indicators	Completion Date	Lead Agency	Supporting Agency	Estimated Cost
Develop education programme for coastal communities wrt estuaries, coastal development and livelihoods.	Annual Education and Awareness Programme document	Annual	Mbhashe LM	ADM, DEDEAT, ECPTA, DEA	R20000
Explore opportunities from external government and nongovernmental agencies who conduct awareness/education,	Partnership Agreements for education and awareness campaigns.	Mar-17	Mbhashe LM	ADM, DEDEAT, ECPTA, DEA, NGOs	Internal operations
Celebrate calendar days such as Marine Week, International Coastal Cleanup. Create opportunities for schools, youth groups to attend.	Participate annually in National Marine Week and International Coastal Cleanup, as well other identified campaigns.	Annual	Mbhashe LM	ADM, DEDEAT, ECPTA, DEA, NGOs	R50000
Ensure accredited training and capacitation of officials, high-level management, and councillors associated with the coastal zone.	Attendance certificates for officials	Mar-20	Mbhashe LM		R50000
Priority 8: Compliance, monitoring and enforcement					
Action	Indicators	Completion Date	Lead Agency	Supporting Agency	Estimated Cost
Develop by-law to regulate coastal access.	By-law Relating to Coastal Access gazetted.	Dec-18			
Mbhashe to facilitate the appointment of identified staff as EMIs, to as to be able to enforce coastal and environmental transgressions. Budget necessary for training towards EMI designation.	Two EMIs appointed.	Jun-17	Mbhashe LM	DEA, DEDEAT	R100000
Review adequacy of signage located in coastal public property, quality of its content, its state of repair, appropriateness of its location; and develop guidelines for coastal signage in the municipality.	Assessment of Coastal Signage and Guidelines for Use of Coastal Signage completed.	Apr-17	Mbhashe LM	ADM	R20000
Priority 9: Natural resource management					
Action	Indicators	Completion Date	Lead Agency	Supporting Agency	Estimated Cost

Establish and resource an Invasive Alien Plant removal programme.	A strategy for Invasive Alien Plant removal completed, and under implementaiton	June 2020	Mbhashe LM	ADM, DEDEAT	
In partnership with DMR, develop strategy towards regularising of some illegal sand mining sites, in collaboration with affected communities, with the view to promote the sustainability of coastal ecosystems	Strategy for the Facilitation of Small Scale Sand Mining in the MBHASHE.	Dec-19	Mbhashe LM	ADM, DEDEAT, DEA	R50000
Establish Community-based forums for effective inclusive coastal management	Terms of Reference for Community-based forums.	Jun-21	Mbhashe LM	ADM	Internal operations

9. Integration and implementation

Having generated a list of proposed actions for coastal management within the Mbhashe LM, it is important to ensure the systematic integration of these actions into the Mbhashe LM planning and implementation mechanisms. To this end, the proposed actions are considered in line with the district municipality's key performance areas.

9.1. Key Performance Areas for Mbhashe LM

The Mbhashe LM is guided by the Key Performance Areas (KPA) identified by the Five-Year Local Government Strategic Agenda, (5YLGSA), 2006 for local government. The KPAs for local government, and subsequently adopted by the Mbhashe LM (Mbhashe LM IDP 2012-2017) are:

- **Basic Service Delivery and Infrastructure Development**
- **Municipal Transformation and Organisational Development**
- **Local Economic Development**
- **Financial Viability and Management**
- **Good Governance and Public Participation**
- In order to ensure alignment of the coastal priorities and proposed actions with the Mbhashe LM's IDP, the actions are considered in relation to the KPAs mentioned above (Table 12)

Table 12: The proposed coastal interventions and actions are linked to the Mbhashe KPAs, and responsible Mbhashe line functions are indicated for the proposed actions.

KPA	Proposed action
Basic Service Delivery and Infrastructure Development	Assess state of coastal recreational facilities and perform necessary maintenance
	Develop a coastal planning scheme
	Conduct assessment of coastal vulnerability
	Demarcate coastal management lines

	Develop coastal by-laws to regulate prohibited and restricted activities on coastal public property, including conditions of use.
	Assess and map hazard and safety zones with respect to bathing conditions and the use of nonmotorised craft on coastal public property
	Assess the state of coastal defense infrastructure.
	Rehabilitate coastal dunes in high risk areas wrt sea-level rise
	Develop Waste Management Strategies, to align with CMP and coastal management objectives wrt land-based sources of pollution.
	Ongoing inspection of septic tanks.
	Regulate septic tanks and by means of a by-law
	Liase with DEA wrt data on location of discharge points into the marine environment. Incorporate the discharge points into LM SDF.

	Ensure WftC programme works effectively in waste removal in coastal public property
	Pilot recycling at key coastal recreation sites. Includes purchasing of appropriate containers and appointment of recycling supervisors
	Initiate water quality monitoring at public beaches
	In partnership with DEDEAT, select priority estuaries for development of EMPs during the term of this CMP.
	Undertake an inventory and assessment of existing and potential coastal access points.
Local economic development	Develop LED strategy to support coastal Livelihoods activities
	Develop coastal and marine tourism strategy
	In partnership with DMR, develop strategy towards regularising of some illegal sand mining sites, in collaboration with affected communities, with the view to promote the sustainability of coastal ecosystems
	Investigate deserving sites for heritage status

	Based on the Report mentioned above, commence with application process for heritage status for identified sites.
Financial viability and management	Explore opportunities from external government and nongovernmental agencies who conduct awareness/education,
Good governance and public participation	Formalise Stakeholder List and circulate it to identified stakeholders for commenting.
	Develop mechanisms for stakeholder engagement
	Formation of an Mbhashe LM Coastal Committee, to include relevant government agencies, traditional authority representatives, environmental interest groups, boat launch site operators, and business sector representatives
	Ensure estuary management is focus area in Mbhashe LM Coastal Committee meetings
	Establishment of coastal management function within Mbhashe LM, whose duties must include estuaries.
	Ensure incorporation of CMP plans into IDP, SDF, SDBIP

	Develop environmental guidelines and procedures for all municipal work impacting on the environment
	Develop a Municipal Coastal Access Management Plan as per National Strategy for the Facilitation of Coastal Access.
	develop coastal access by-laws to regulate the management of coastal access
	Develop education programme for coastal communities wrt estuaries, coastal development and livelihoods.
	Celebrate calendar days such as Marine Week, International Coastal Cleanup. Create opportunities for schools, youth groups to attend.
	Ensure accredited training and capacitation of officials involved in the coastal zone
	Facilitate the appointment of identified staff as EMIs, to as to be able to enforce coastal and environmental transgressions. Budget necessary for training towards EMI designation.

	Review adequacy of signage located in coastal public property, quality of its content, its state of repair, appropriateness of its location; and develop guidelines for coastal signage in the municipality.
Municipal transformation and development	Initiate efforts to be able to respond to oil spills as per Oil Spill Contingency
	Develop long term estuarine research and monitoring programme, in partnership with recognised tertiary education institution.

10. Maintenance standards for public beaches

Coastal management at the municipal level applies not only at the strategic and policy level, but also to the operational management of public amenities within the coastal zone, especially recreational beaches. The management of public recreational beaches must be done in line with existing environmental and coastal management objectives, principles and laws. Table 13 provides maintenance standards to guide beach management personnel with day-to-day maintenance of beach amenities. The Mbashe LM endeavours to implement and adhere to these maintenance standards.

Table 13: Beach maintenance standards for Mbashe LM.

Area	Indicator	Frequency	Visual Evidence
Management & Staffing	Beach Manager in place	Permanently	Official present
	Beach management infrastructure & facilities	Permanently	Availability of e.g. office, fax, telephone, etc.
	Coastal Committee meetings	Quarterly	Recorded minutes
Infrastructure Management	Buildings maintained	Regularly	Well-maintained buildings, meeting Health and Safety Standards
	Parking areas clean & maintained	Daily	Well-maintained parking areas
	Grassed area clean & maintained	Daily	Well-maintained grassed areas
Public Toilets	Adherence to Public Ablutions Minimum Standards		
Sand Management	Remove wind-blown sand on paved areas		When necessary
	Remove wind-blown sand on building structures		Sand-free surfaces
Boardwalks	Repair damaged boardwalks	When necessary	Well-maintained boardwalks
	Re-expose sand-covered boardwalks	Monthly	Clearly visible walkways
	Ensure railings are fixed and stable	Daily	Well-maintained and safe railings
Fence	Repair damages to fences, and conduct routine maintenance	Monthly	Well-maintained fencing
Dune management	Close-off non-designated pathways	When necessary	Well-managed dunes

	Monitor and maintain dune rehabilitation material (e.g. sand bags, brush wood) where applicable.	Monthly	Well-managed dunes
	Remove waste material on dunes	Weekly	Well-managed dunes
	Ensure restriction of access to stable and sensitive dune systems	Continually	Well-managed dunes
Signage	Replace damaged signs	When necessary	Well-maintained signage
	Signs appropriately positioned (views not obstructed)	When necessary	Well-positioned signage
	Remove graffiti	When necessary	Graffiti-free signs
	Ensure that signs display up-to-date information	When necessary	Good-quality signage
	Install environmentally informative signage	When necessary	Educational signs
Vegetation	Watering of landscaped vegetation	As required	Well-maintained gardens
	Trim vegetation encroaching on walkways – branches only	Two months	Well-maintained gardens
	Ensure removal of alien vegetation (consult with Environmental Management)	When necessary	
Marine birds and mammals	Ensure removal of carcasses in consultation with Solid Waste	When necessary	
	Report live stranded marine animals (e.g. whales, dolphins, etc)	When necessary	
Water quality	Ensure regular testing of seawater	As per predetermined schedule	
	Ensure the implementation of water quality and pollution measures	When necessary	
Boat Launching Sites	Ensure Boat Launch Site Management Plans are in place.		

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