

WEST COAST DISTRICT MUNICIPALITY



SECOND GENERATION COASTAL MANAGEMENT PROGRAMME 2019 - 2024



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LIST OF ABBREVIATIONS

CML	Coastal Management Line
CMP	Coastal Management Programme
CSIR	Council for Scientific and Industrial Research
DAFF	Department of Agriculture, Forestry and Fisheries
DEFF	Department of Environment, Forestry and Fisheries
DEA	Department of Environmental Affairs
DEFF: O+C	Department of Environmental Affairs: Oceans and Coasts
DEADP	Department of Environmental Affairs and Development Planning
DHSWS	Department of Human Settlements, Water and Sanitation
EAF	Estuary Advisory Forum
EFZ	Estuarine Functional Zone
EIA	Environmental Impact Assessment
EMP	Estuarine Management Plan
HWM	High-Water Mark
ICMA	Integrated Coastal Management Act (Act No. 24 of 2008)
IDP	Integrated Development Plan
MCC	Municipal Coastal Committee
MEC	Member of the Executive Council
Min Tech	Ministerial Technical Committee
MLRA	Marine Living Resources Act (Act No. 18 of 1998)
MMP	Mouth Management Plan
MPA	Marine Protected Area
MSA	Municipal Systems Act (Act No. 32 of 2000)
NBA	National Biodiversity Assessment 2012
NCC	National Coastal Committee
NCMP	National Coastal Management Plan (2015)
NEM: BA	National Environmental Management: Biodiversity Act (Act No. 10 of 2004)
NEM: PAA	National Environmental Management: Protected Areas Act (Act No. 57 of 2003)
NEMA	National Environmental Management Act (Act No. 107 of 1998)
NEMP	National Estuary Management Protocol (2013)
NHRA	National Heritage Resources Agency
PCC	Provincial Coastal Committee
PLS	Public Launch Sites
PPP	Public Participation Process
RMA	Relevant Management Authority
SANBI	South African National Biodiversity Institute
SDF	Spatial Development Framework
SEA	Strategic Environmental Assessment
SPLUMA	Spatial Planning and Land Use Management Act (Act No. 16 of 2013)
TNPA	Transnet National Ports Authority
WCDM	West Coast District Municipality
WG8	Working Group 8 (Oceans and Coasts) of Min Tech
CWDP	Coastal Waters Discharge Permit

GLOSSARY OF TERMS

“admiralty reserve” means any strip of land adjoining the inland side of the High-Water Mark which, when the ICM Act took effect, was state land reserved or designated on an official plan, deed of grant, title deed or other document evidencing title or land-use rights as “admiralty reserve”, “government reserve”, “beach reserve, “coastal forest reserve” or other similar reserve;

“biodiversity” or **“biological diversity”** has the same meaning ascribed to it as in the Biodiversity Act;

“blue economy” means marine-based economic development that leads to improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities;

“coastal access land” means land designated as coastal access land in terms of section 18(1), read with section 26, of the ICM Act;

“coastal activities” means activities listed or specified in terms of Chapter 5 of the NEMA which take place –

- a) in the coastal zone; or
- b) outside the coastal zone but have, or are likely to have, a direct impact on the coastal zone;

“coastal environment” means the environment within the coastal zone;

“coastal management” includes-

- a) the regulation, management, protection, conservation and rehabilitation of the coastal environment;
- b) the regulation and management of the use and development of the coastal zone and coastal resources;
- c) monitoring and enforcing compliance with laws and policies that regulate human activities within the coastal zone; and
- d) planning in connection with the activities referred to in paragraphs (a), (b) and (c);

“coastal management line” means a line determined by a MEC in accordance with section 25 of the ICM Act in order to demarcate an area within which development will be prohibited or controlled in order to achieve the objectives of the ICM Act.

“coastal management objective” means a clearly defined objective established by a coastal management programme for a specific area within the coastal zone which coastal management must be directed at achieving;

“coastal protected area” means a protected area that is situated wholly or partially within the coastal zone and that is managed by, or on behalf of, an organ of state, but excludes any part of such a protected area that has been excised from the coastal zone in terms of section 22 of the ICM Act;

“coastal protection zone” means the coastal protection zone contemplated in section 16 of the ICM Act;

“coastal public property” means coastal public property referred to in section 7 of the ICM Act;

“coastal resources” means any part of-

- a) the cultural heritage of the Republic within the coastal zone, including shell middens and traditional fish traps; or
- b) the coastal environment that is of actual or potential benefit to humans;

“coastal waters” means-

- a) internal waters, territorial waters, exclusive economic zone and continental shelf of the Republic referred to in sections 3, 4, 7 and 8 of the Maritime Zones Act, 1994 (Act No. 15 of 1994), respectively; and
- b) an estuary;

“coastal zone” means the area comprising coastal public property, the coastal protection zone, coastal access land, coastal protected areas, the seashore and coastal waters, and includes any aspect of the environment on, in, under and above such area;

“competent authority” means a competent authority identified in terms of section 24C of the NEMA;

“cultural heritage” means any place or object of aesthetic, architectural, historical, scientific, social or spiritual value or significance;

“development”, in relation to a place, means any process initiated by a person to change

the use, physical nature or appearance of that place, and includes-

- a) the construction, erection, alteration, demolition or removal of a structure or building;
- b) a process to rezone, subdivide or consolidate land;
- c) changes to the existing or natural topography of the coastal zone; and
- d) the destruction or removal of indigenous or protected vegetation;

“dynamic coastal processes” means all natural processes continually reshaping the shoreline and near shore seabed and includes -

- a) wind action;
- b) wave action;
- c) currents;
- d) tidal action; and
- e) river flows;

“effluent” means -

- a) any liquid discharged into the coastal environment as waste, and includes any substance dissolved or suspended in the liquid; or
- b) liquid which is a different temperature from the body of water into which it is being discharged;

“environment” means “environment” as defined in the NEMA;

“environmental authorisation” means an authorisation granted in respect of coastal activities by a competent authority in terms of Chapter 5 of the NEMA;

“estuary” means a body of surface water-

- a) that is permanently or periodically open to the sea;
- b) in which a rise and fall of the water level as a result of the tides is measurable at spring tides when the body of surface water is open to the sea; or
- c) in respect of which the salinity is higher than fresh water as a result of the influence of the sea, and where there is a salinity gradient between the tidal reach and the mouth of the body of surface water;

“Exclusive Economic Zone” means the Exclusive Economic Zone of the Republic referred to in section 7 of the Maritime Zones Act, 1994 (Act No. 15 of 1994);

“harbour” means a harbour proclaimed in

terms of any law and managed by an organ of state;

“high-water mark” means the highest line reached by coastal waters, but excluding any line reached as a result of -

- a) exceptional or abnormal weather or sea conditions; or
- b) an estuary being closed to the sea;

“littoral active zone” means any land forming part of, or adjacent to, the seashore that is -

- a) unstable and dynamic as a result of natural processes; and
- b) characterised by dunes, beaches, sand bars and other landforms composed of unconsolidated sand, pebbles or other such material which is either unvegetated or only partially vegetated;

“low-water mark” means the lowest line to which coastal waters recede during spring tides;

“MEC” means the member of the Executive Council of a coastal province who is responsible for the designated provincial lead agency in terms of the ICM Act;

“municipality” -

- a) means a metropolitan, district or local municipality established in terms of the Local Government: Municipal Structures Act, 1998 (Act No. 117 of 1998); or
- b) in relation to the implementation of a provision of this Act in an area which falls within both a local municipality and a district municipality, means –
 - i. the district municipality; or
 - ii. the local municipality, if the district municipality, by agreement with the local municipality, has assigned the implementation of that provision in that area of the local municipality;

“National Estuarine Management Protocol”

means the national protocol concerning the management of estuaries contemplated in Section 33 of the ICM Act;

“organ of state” has the meaning assigned to it in section 239 of the Constitution;

“pollution” has the meaning assigned to it in section 1 of the NEMA;

“port” means a port as defined in the National Ports Act, 2005 (Act No. 12 of 2005);

“protected area” means a protected area referred to in section 9 of the Protected Areas Act, 2003 (Act No. 57 of 2003);

“Protected Areas Act” means the National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003);

“provincial lead agency” means a provincial organ of state designated by the Premier of the province in terms of section 38 of the ICM Act as the lead agency for coastal management in the province;

“public launch site” means a site listed by notice in the Gazette in terms of the Management of Public Launch Sites in the Coastal Zone Regulations, 2014, (GN. No R 497 of 27 June 2014) as a site where a vessel may be launched by members of the public in the coastal zone, but excludes a privately used launch site;

“sea” means -

- a) the high seas;
- b) all coastal waters; and
- c) land regularly or permanently submerged by seawater, including-
 - i. the bed, subsoil and substrata beneath those waters; and
 - ii. land flooded by seawater which subsequently becomes part of the bed of coastal waters, including the substrata beneath such land;

“seashore” subject to section 26 of the ICM Act, means the area between the Low-Water Mark and the High-Water Mark;

“small scale fishers” means persons that fish to meet food and basic livelihood needs, or are directly involved in harvesting/processing or marketing of fish, traditionally operate on or near shore fishing grounds, predominantly employ traditional low technology or passive fishing gear, usually undertake single day fishing trips, and are engaged in the sale or barter or are involved in commercial activity.

“small scale fishing community” means an established socio-cultural group of persons who are, or historically have been, fishermen and - women, including ancillary workers and their families; have shared aspirations and historical interests or rights in the harvesting, catching or processing of marine living resources; have a history of shared Small Scale fishing activity but, because of forced removals, are not necessarily tied to particular

waters or geographic area; and were or still are operating near or in the seashore or coastal waters where they previously enjoyed access to marine living resources, or continue to exercise their rights in a communal manner in terms of an agreement, custom or law; and who regard themselves as a community;

“special management area” means an area declared as such in terms of section 23 of the ICM Act;

“the Act” refers to the National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008 and includes any regulation made in terms of this Act);

“universal access” a system of access that accommodates the many different needs of people;

“vessel” means a waterborne craft of any kind, whether self-propelled or not, but does not include any moored floating structure that is not used as a means of transport by water;

“waste” means any substance, whether or not that substance can be re-used, recycled or recovered-

- (a) that is surplus, unwanted, rejected, discarded, abandoned or disposed of;
- (b) that the generator has no further use of, for the purposes of production, reprocessing or consumption; and
- (c) that is discharged or deposited in a manner that may detrimentally impact on the environment;

“wetland” means land which is transitional between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is periodically covered with shallow water, and which land in normal circumstances supports or would support vegetation typically adapted to life in saturated soil.

EXECUTIVE SUMMARY

INTRODUCTION

The National Environmental Management: Integrated Coastal Management Act (No. 24 of 2008) (ICMA) provides for the integrated management of South Africa's coastline to ensure the sustainable development of the coast. It was developed to promote ecologically-, socially-, and economically sustainable coastal development, as well as to prevent inappropriate development along the coastline. It is also intended to promote public awareness regarding the complexities and sensitivity of the coastal environment, which then promotes active participation in coastal management.

The ICMA highlights the benefits of cooperation and shared management responsibilities and mandates all three spheres of Government to develop Coastal Management Programmes (CMPs). These are policy and/or strategy documents that contain a system of principles and objectives to guide decisions and achieve outcomes relating to the coastal environment. These policy tools consist of three core components: a situational analysis or status quo assessment; a vision, priority and objectives setting component; and, a five-year implementation programme, which includes specific coastal management objectives and implementation strategies for each identified priority area.

The West Coast District Municipality (WCDM) has reviewed and updated its 2013 CMP in line with the requirements of the ICMA and in support of the implementation of the National CMP (2015) and the Western Cape CMP (2016). This updated WCDM CMP builds on its previous strengths and successes; is informed by stakeholder engagement; and, responds to the requirements of current legal mandates as well as national-, provincial- and municipal policies, strategies and programmes.

SITUATION ASSESSMENT

The Situation Assessment was structured according to ten themes that were identified during the review of the first-generation CMP as well as the outcomes of stakeholder workshops.

Theme 1: Cooperative Governance

Cooperative governance is important in the implementation of coastal management objectives and strategies within the WCDM and the LMs. Effective cooperative governance requires:

- the participation of all stakeholders in the development of the CMP as well as in relevant committees and forums ,
- coastal governance and co-responsibility,
- integrated, coordinated decision making,
- planning and development,
- the continued learning and practical implementation of programmes and processes, and
- ensuring compliance with international conventions, protocols and agreements.

It is important that the WCDM and the LMs work closely with the National and Provincial spheres of government to ensure that the municipalities are sufficiently capacitated and financially resourced to implement coastal management strategies.

Theme 2: Facilitation of Coastal Access

The provision of public access to the coast is clearly addressed in the ICMA. Within the WCDM, public access to the coast is not fully compliant with the relevant provisions in the ICMA, due to either a lack of public access or amenities, a lack of awareness regarding the impact of illegal activities on the coastal zone, the poor condition of existing access roads to coastal areas, and the lack of open communication between local communities and authorities with regards to the provision of public access within the coastal zone. Another factor that impacts on the facilitation of coastal access is the alienation of land as a result of aquaculture, mining and residential estates, and in some instances the perceived restriction of access.

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

Theme 3: Coastal Planning and Development

This can be achieved by incorporating appropriate spatial principles into the WCDM SDF, defining and establishing urban edges for all urban nodes in the coastal zone and ensuring that climate change adaptation and mitigation measures are included in the planning processes.

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

There will inevitably be impacts due to increasing development along the WCDM coastline. However, in order to preserve the coastline and prevent degradation, it is necessary to incorporate all existing guidelines and frameworks that have an impact on coastal management into town and regional planning schemes, and broader spatial planning tools such as SDFs, for all development along the coastal zone.

Theme 4: Compliance, monitoring and enforcement

The coastal and marine environments are sensitive and are prone to exploitation and degradation as a result of anthropogenic activities. Various legislation has been developed to protect these coastal and marine resources and need to be effectively implemented and enforced in order to preserve the integrity of these systems.

Illegal activities within the WCDM need to be monitored and the relevant coastal and marine legislation needs to be enforced. There are a number of structures that make provision for enabling organs of state to respond to these illegal activities, and the officials who have been mandated to enforce certain legislation need to be more visible in areas that are known to be hotspots for illegal activities. The municipalities also need to build their own capacity in terms of being able to ensure compliance with coastal management objectives.

Theme 5: Estuary Management

Estuaries are sensitive unique environments and are susceptible to pollution and

degradation from sources upstream and the surrounding areas as well as the impacts of climate change. The WCDM does not have a large number of estuaries along its coastline but the majority of the estuaries have estuarine management plans (EMPs) that are in various stages of development. It is important that the implementation strategies outlined in these EMPs are actioned in order to preserve their ability to provide ecosystem services and ecological infrastructure. It is also important to promote the importance of these estuaries in terms of their contribution to the fisheries and tourism sectors in the Western Cape.

Theme 6: Natural Resource Management

The marine environment includes inshore and offshore reefs, sandy beaches and rocky shores. This area is an extremely valuable asset and resource due to its aesthetic value, ecological and biological diversity and economic potential. However, the integrity of marine resources is vulnerable to a variety of impacts largely resulting from varying levels of human induced pressure. Numerous plant and animal populations (such as abalone, limpets, mussels and lobster and other shellfish, seaweed, bait species, etc.) along the WCDM coastline are subject to varying degrees of exploitation for subsistence and non-subsistence purposes, both permitted and un-permitted. Climate change impacts may also affect the long term sustainability of natural resources if not managed appropriately.

Certain coastal communities along the WCDM coastline are dependent on harvesting various marine organisms, either for food or to generate an income, as well as numerous types of mining. Sand mining and heavy mineral mining takes place in certain areas along the WCDM coastline. However, in some circumstances it seems that both mining and the harvesting of marine living resources continue unchecked. The Department of Mineral Resources and Energy (DMRE) is responsible for checking environmental compliance in the mining sector, and Department of Environment, Forestry and Fisheries is responsible for monitoring marine living resource use. The unsustainable use of these resources results in over exploitation and degradation of the marine and coastal zones. Both the WCDM and LMs need to engage with national departments to improve natural resource management along the West Coast.

Theme 7: Heritage resource management

The WCDM is home to some of the oldest population groups in southern Africa and as a result, some of the most valuable heritage and cultural assets. These assets highlight the history of the development of the South African people. It is important that these cultural groups, and the heritage and cultural assets that are associated with these groups, are acknowledged and that important cultural and heritage assets are formally protected to ensure that future generations can better understand and appreciate the rich and diverse heritage of South Africa.

Theme 8: Pollution control and management

The community needs to become custodians of their environment by supporting the authority's objectives regarding waste management. This can be achieved by various actions such as reporting pollution events as well as reducing household pollution through adopting a culture of reduce-reuse-recycle.

Existing waste management policies and plans need to be updated and better implemented to ensure that the municipalities fulfil their required mandates in terms of waste management; and the municipalities need to continue to support organisations that undertake continual monitoring of environmental conditions within the WCDM.

The WCDM has a large number of industrial and processing facilities along the Saldanha Bay coastline that discharge into the coastal environment. The WCDM also supports a number of aquaculture activities that may also contribute to coastal and marine degradation if their management practices become unsustainable. Currently, there are two organisations that are very active in monitoring environmental conditions, particularly within Saldanha Bay LM, and these organisations need to be supported by the municipalities as well as other relevant spheres of government. It is important that all discharge and other pollution generating activities within the WCDM are properly authorised and that they remain compliant with their authorisation conditions.

There are programmes that are being implemented by National government that afford an opportunity for the municipalities to capacitate themselves on waste management, thereby improving waste management along the coastline. These programmes are currently being underutilised by the LMs, it is their responsibility to ensure that these programmes are being effectively utilised, particularly the Working for the Coast programme.

Theme 9: Socio-economic development

The WCDM coastal economy focusses on ports and harbours, fisheries and processing as well as aquaculture, and it is important that any further development of these industries is achieved in an environmentally sustainable manner. However, it is even more important to ensure that the coastal communities benefit from these activities, and the municipalities need to encourage private operators to support community benefaction objectives. To assist with this, the WCDM should develop a list of community benefaction objectives and targets that the private sector could contribute to.

Many coastal communities rely on the fisheries industry. Although the municipalities cannot directly control the issuing of rights and permits, they have a responsibility to support community development. Close partnership with DEFF is essential in ensuring the sustainability of the livelihood of coastal communities that rely on marine resources, and DEFF need to be able to support the more isolated communities who cannot travel long distances to secure their permits.

Renewable energy is a rapidly growing sector in South Africa, and a number of renewable energy projects are being proposed in the WCDM. It is important that the WCDM and the LMs participate in the development of the sector, but they must ensure that the renewable energy projects do not conflict with the Municipality's environmental and biodiversity conservation programmes. Active involvement in the EIA process by both the WCDM and LMs is required to ensure this.

Theme 10: Awareness, education, training, capacity building and information

The WCDM coastline has unique biodiversity and has many beaches and rocky shore environments that are in good condition. It is important to conserve and effectively manage this natural heritage through awareness and education of the coastline through outreach and educational programmes. This requires the coordination and cooperation of the communities, authorities and private sector.

Municipal officials also need to be able to make informed and environmentally sound decisions with regards to spatial and town planning activities. A wide variety of data is publicly available and there is easy access to up-to-date environmental planning tools that can assist decision-makers. It is important that management officials are adequately

capacitated to understand the environmental management aspects and legislative tools that need to be utilised to effectively fulfil their mandates. National and Provincial government understand the need to provide training to municipal officials regarding environmental management, and offer training programmes on an annual basis. The municipalities need to ensure that they are aware of these programmes and attend where possible.

In order to secure capacity in the future, it is strongly recommended that Municipalities utilise internship programmes where graduates are afforded the opportunity to gain valuable work experience within the environmental management context. Engagement with universities and funding organisations (NRF, DOPW, SETA) needs to be undertaken to facilitate this initiative. Municipalities must also assist research institutions in their research objectives by facilitating access to data and potential resources.

VISION, PRIORITIES AND COASTAL MANAGEMENT OBJECTIVES

The vision for the first generation CMP for the WCDM has been carried through to the second generation CMP. The vision that was created still holds true and still bears relevance to the WCDM coastline.

We, the people of the West Coast District, celebrate the diversity, richness and uniqueness of our coast and its communities. The coastal environment will be effectively managed to ensure a balance between ecological integrity, sustainable livelihoods and cultural values.

The coast will be a safe, clean and healthy asset with equitable access and opportunities for all communities, now and in the future.

The Situational Analysis (Chapter 3) describes the state of the WCDMs coastal ecosystems. The Situational Analysis along with contributions from the stakeholder engagement workshops held in each coastal LM contributed significantly to the assessment of the status of coastal management within the WCDM.

The WCDM does not have the resources nor the capacity to address every coastal issue or challenge with which it is faced. It is good practice to focus available resources on those issues that are deemed to be significant and require urgent response and then to embark on a "cycle of improvement".

Ten priorities/objectives for coastal management in the WCDM have been identified and, together with the coastal management strategies, have been summarised below.

Coastal Management Priority/Objective	Coastal Management Strategy
1. Improve Cooperative Governance and Clarify Institutional Arrangements	<ul style="list-style-type: none"> - Clarification of institutional arrangements for coastal management and the facilitation of the generation of capacity - The continued implementation and update the Coastal Management Programme - The promotion of cooperative governance through engagement with all relevant coastal stakeholders
2. The Facilitation of Coastal Access	<ul style="list-style-type: none"> - The implementation of the West Coast District Municipality Coastal Access Audit

Coastal Management Priority/Objective	Coastal Management Strategy
	<ul style="list-style-type: none"> - Engagement with the Working for the Coast Infrastructure Programmes - Addressing Public Coastal Access Issues through Town Planning and Resource Use Permits - The facilitation of the effective management of Public Launch Sites - Managing recreational and commercial events on beaches - Ensuring Public safety and security
<p>3. To Ensure that Coastal Planning and Development is Conducted in a Manner that ensures the Protection and Rehabilitation of the Coastal Zone</p>	<ul style="list-style-type: none"> - Incorporation of biodiversity, environmental and climate change policies into town planning processes - Addressing Coastal Erosion within the coastal zone - To address the high percentage of vacant plots and the low occupancy levels of residential dwellings
<p>4. To Enhance Compliance Monitoring and Enforcement Efforts in the District</p>	<ul style="list-style-type: none"> - Developing Local Authority Environmental Management Inspectorate and Honorary Marine Conservation Capacity - Facilitating and encouraging public reporting of illegal activities - Facilitating the development and enforcement of Municipal by-laws - Addressing the increase in illegal Off-Road Vehicle activity
<p>5. To Ensure Effective Management of Estuarine Resources in the WCDM</p>	<ul style="list-style-type: none"> - Facilitating the designation of Responsible Managing Authorities (RMA) - Supporting the development of Estuarine Management Plans for smaller estuaries in the WCDM - Facilitating the implementation of Estuarine Management Plans in the District
<p>6. The Protection, Management and Sustainable Use of Natural Resources</p>	<ul style="list-style-type: none"> - The effective control of invasive alien plants - Cooperative management of Protected Areas - Monitoring mining activities in the coastal zone - Facilitating the coordinated management of Marine Living Resources
<p>7. To appreciate and conserve the rich heritage and cultural resources that are found within the WCDM.</p>	<ul style="list-style-type: none"> - Acknowledging Khoisan Communities and their Needs - Facilitating the conservation of Heritage Resources
<p>8. The Effective Management and Control of Pollution in the Coastal Zone</p>	<ul style="list-style-type: none"> - Managing the discharge of effluent, stormwater and other industrial-based pollutants into coastal waters - Continue to plan, install, alter, operate, maintain, repair, replace, protect and monitor municipal WWTWs in coastal towns - To promote the effective management of Air Quality - To ensure the effective management of solid waste in the coastal zone - Encouraging the Reinstatement of the Blue Flag Beach Programme
<p>9. Ensuring the Socio-Economic Development of Coastal Communities</p>	<ul style="list-style-type: none"> - Promotion of the Small Harbours: Spatial and Economic Development Framework - Development of marine aquaculture within the District - Supporting the Small-Scale Fisheries Industry

Coastal Management Priority/Objective	Coastal Management Strategy
	<ul style="list-style-type: none"> - The facilitation of coastal tourism development - Preparing for the growth of the renewable energy sector
10. Developing and Facilitating Awareness, Education, Training, Capacity Building and Information Gathering in the District	<ul style="list-style-type: none"> - Facilitate the training of municipal officials on coastal management and informed decision making - Facilitating public awareness and access to information - Supporting existing education and awareness projects - Supporting research and development and graduate skills development

IMPLEMENTATION AND REVIEW

Implementation of this WCDM is driven by the DM's commitment to the requirements of the various relevant national and provincial drivers (The National Development Plan, NCMP, Operation Phakisa, Western Cape Coastal Management Programme), as well as the WCDMs strategic objective of 'ensuring environmental integrity for the West Coast'. These, together with the outcomes of the stakeholder engagement process, form the basis for the WCDM CMP priority areas which will enable quantifiable and measurable outcomes.

Monitoring the success of the implementation of this WCDM CMP is important and the five-year programme is proposed to be continually reviewed by the WCDM Municipal Coastal Committee (MCC). Indicators identified will be used to measure the success of the proposed strategies. Indicators, and the means of collecting information about them, are anticipated to be refined over time. The recently completed Western Cape State of Coast report will be a useful guide for developing district and local level indicators. The implementation and monitoring of the estuarine management plans will also play an important role in the monitoring of the success of the WCDM CMP as many of the priority actions are linked.

Following the adoption of the updated WCDM CMP by the WCDM, the next review/amendment is required to occur five years after the adoption of this updated WCDM CMP, as per the requirements of the ICMA. Review of the progress of implementation will be on-going and interim amendments to the programme may be required and undertaken in consultation with the WCDM MCC.

CONCLUSION

Managing the complex and sensitive environments that make up the coastal zone is a challenge that requires strategic and practical coastal management objective setting; followed by the development of definitive and implementable goals, with on-going monitoring of indicators to ensure effective implementation.

This WCDM CMP is intended to function as an integrated coastal planning tool to manage the diverse range of activities that occur in the coastal zone, without compromising environmental integrity or economic development. Effective implementation of the priority strategies contained in this WCDM CMP should make a significant contribution towards the achievement of ICM in the West Coast as well as the Western Cape as a whole.

1 INTRODUCTION

1.1 Background

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

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

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

The ICMA was developed to provide tools to ensure that development within the coastal zone and the use of coastal resources is both socially and economically viable. The ICMA also aims to ensure that development in the coastal zone and the use of coastal resources is ecologically sustainable; and that illegal activities that take place within the coastal zone are dealt with using appropriate measures.

1.2 Defining the Coastal Zone

The ICMA provides a uniform national definition of the coastal zone that clearly outlines the boundaries and spatial aspects of the coastal zone. In order to effectively manage coastal resources, the boundaries of the coastal zone have to be well defined and understood. In terms of the ICMA, the coastal zone is made up of the following:

- coastal waters;
- coastal public property;
- the coastal protection zone;
- coastal access land;
- coastal protected areas; and
- special management areas.

The various features of the coastal zone, their constituents and the responsible authority is detailed in Figure 1 and Table 1.

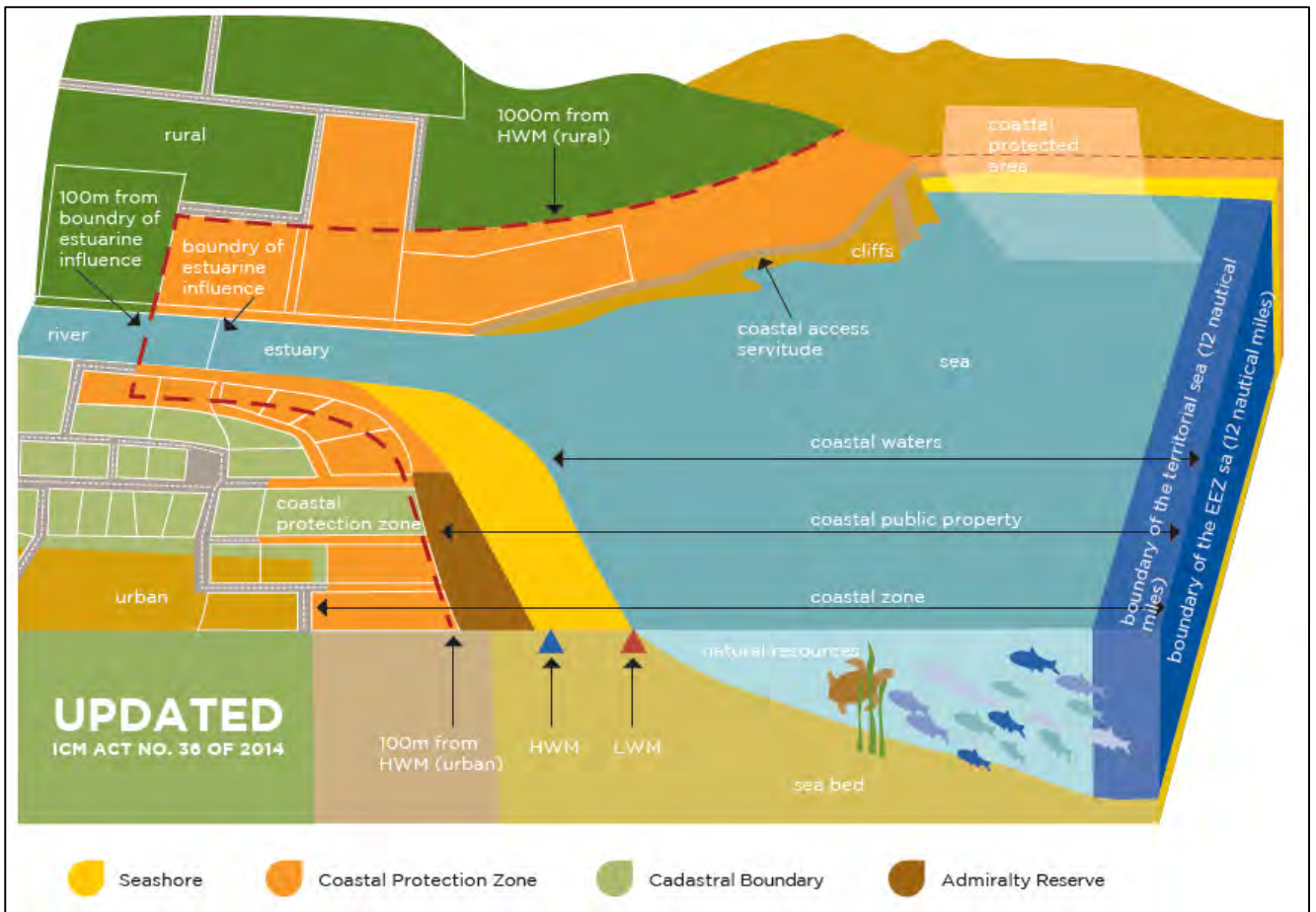


Figure 1: The coastal zone as defined by the ICMA (Western Cape CMP, 2016)

Table 1: Definition of the coastal zone in terms of the ICMA

FEATURE	CONSITUENTS	CHARACTERISTICS	RESPONSIBLE AUTHORITY
Coastal Public Property	<ul style="list-style-type: none"> Coastal waters; Land submerged by coastal waters, including: <ul style="list-style-type: none"> - Land flooded by coastal waters that subsequently becomes part of the bed of coastal waters; and - The substrate beneath such land; Any Natural island within coastal waters; The seashore, including: <ul style="list-style-type: none"> - The seashore of a natural or reclaimed island; and - The seashore of reclaimed land; Subject to Section 66A, any admiralty reserve owned by the State; Any land owned by the State declared under Section 8 to be coastal public property; Land reclaimed in terms of Section 7C; or 	<ul style="list-style-type: none"> Marks the shift away from resource centered management to a people centered approach; and Aims to improve access to coastal resources, protect sensitive coastal ecosystems and to promote the functioning of natural coastal processes. 	The State, which includes all three spheres of government.

FEATURE	CONSITUENTS	CHARACTERISTICS	RESPONSIBLE AUTHORITY
	<ul style="list-style-type: none"> Any natural resources on or in any coastal public property of a category mentioned above. 		
Coastal Protection Zone	<ul style="list-style-type: none"> Sensitive coastal areas, as defined in the Environment Conservation Act (no. 73 of 1989); Any part of the littoral active zone that is not coastal public property; Any coastal protected area, or part of such an area, that is not coastal public property; A rural land unit that is situated within 1000m of the high water mark (HWM) that is zoned as agricultural or undetermined; Any urban land unit that is completely or partly within 100m of the HWM; Any coastal wetland, lake, lagoon or dam that is situated completely or partially within a land unit situated within 1000m of the HWM that was zoned for agricultural or undetermined use, or is within 100m of the HWM in urban areas; Any part of the seashore that is not coastal public property (including all privately owned land below the HWM); Any Admiralty Reserve that is not coastal public property; and Any land that would be inundated (submerged or covered) by a 1:50 year flood or storm event (this includes flooding caused by both rain storms and rough seas). 	<ul style="list-style-type: none"> To protect the ecological integrity, natural character and the economic, social and aesthetic value of the neighbouring coastal public property; To avoid increasing the effect or severity of natural hazards; To protect people, property and economic activities from the risks and threats that may arise from dynamic coastal processes such as wave and wind erosion, coastal storm surges, flooding and sea-level rise; To maintain natural functioning of the littoral active zone; To maintain the productivity of the coastal zone; and To allow authorities to perform rescue and clean-up operations 	The State, which includes all three spheres of government.
Coastal Access Land	<ul style="list-style-type: none"> Land designated as such in terms of Section 18(1) of the ICMA. 	<ul style="list-style-type: none"> Intention of coastal access land is to ensure that the public can gain access to coastal public property via public access servitudes. 	Municipality, in accordance with Section 29 of the ICMA by notice in the Gazette.
Coastal Waters	<ul style="list-style-type: none"> The internal waters, territorial waters, exclusive economic zone and continental shelf of the Republic referred to in Sections 3, 4, 7 and 8 of the Maritime Zones ACT (No 15 of 1994), respectively, and, an estuary. 	<ul style="list-style-type: none"> Intention is for the State to control activities in coastal waters in the interests of all South African citizens. 	National Government.

FEATURE	CONSITUENTS	CHARACTERISTICS	RESPONSIBLE AUTHORITY
Coastal Protected Areas	<ul style="list-style-type: none"> • A protected area that is situated wholly or partially within the coastal zone and that is managed by, or on behalf of, an organ of state, but excludes any part of such a protected area that has been excised from the coastal zone in terms of Section 22 of the ICMA. 	<ul style="list-style-type: none"> • Coastal protected areas are managed through the Protected Areas Act; and • Intended to augment the coastal protection zone. 	National or Provincial conservation agencies.
Special Management Areas	<ul style="list-style-type: none"> • An area declared as such in terms of Section 23 of the ICMA. 	<ul style="list-style-type: none"> • May prohibit certain activities from taking place within such a management area in order to: <ul style="list-style-type: none"> - Achieve the objectives of a coastal management programme; - Facilitate the management of coastal resources by local communities; - Promote sustainable livelihoods; or - Conserve, protect or enhance coastal ecosystems and biodiversity. 	National Government (may adopt a manager).
Estuaries	<ul style="list-style-type: none"> • Estuarine Functional Zone (EFZ) as defined in the National Estuaries Layer, available from the South African National Biodiversity Institute's (SANBI) BGIS website (http://bgis.sanbi.org)(Government Gazette Notice No. R546, 10 June 2010); and • The EFZ is by default approximated as the 5m topographical contour (i.e. 5m above mean sea level) but should be confirmed by on-site verification, especially in smaller estuaries. The EFZ includes open water area, estuarine habitat (sand and mudflats, rock and plant communities) and floodplain area. 	<ul style="list-style-type: none"> • Estuaries are rich in resources, biodiversity and habitat provision; • They provide the link to the hinterland and the catchment; • Their state is often referred to as the report card for the catchment as a whole; • They require integrated and dedicated management tools; and • Local input in an advisory capacity. 	National, Provincial, Local Government or conservation agencies.

1.3 Value of the coast

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

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

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

The contribution of coastal resources to the South African economy is estimated to be approximately R 57 billion per annum (UNOPS, 2011) where the direct economic benefits of coastal resources in South Africa are approximately 35% of the country's GDP. Within the WCDM, the primary direct economic benefits of coastal resources include port activities within the Saldanha Bay port, small scale fisheries, recreational fishing and coastal tourism. The WCDM coastline also provides a valuable source of educational and scientific opportunities that cannot be quantified in monetary value.

1.4 Context of Coastal Management Programmes in South Africa

In terms of the ICMA, CMPs are considered to be an important tool for effective integrated coastal management in South Africa. Section 48 of the ICMA requires that coastal district and local municipalities develop CMPs that are in alignment with both the NCMP and the provincial CMP (Western Cape CMP - 2016). While the NCMP and the provincial CMPs are required to address strategic planning and implementation issues in the coastal zone, whereas municipal CMPs are required to address more operational and more focused planning and implementation issues in the coastal zone.

1.5 The Purpose of the Updated West Coast District Coastal Management Programme

The first generation WCDM CMP was finalised and adopted in 2013. However, the priorities identified in the first generation WCDM CMP, like the coastal zone, are dynamic and must be periodically re-examined to revise strategies. For this reason, Section 48 of the ICMA requires that the WCDM review the CMP at least once every five years, and if necessary, amend the CMP.

This CMP serves as the second generation CMP for the WCDM. In order to ensure that all the requirements of a CMP as per Section 49 of the ICMA are met, the CMP must –

- a) Be a coherent municipal policy directive for the management of the coastal zone

- within the jurisdiction of the municipality;
- b) Be consistent with –
- (i) The national and provincial coastal management programmes; and
 - (ii) The national estuarine management protocol.

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

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

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

1.6 The West Coast District Municipality Coastal Management Programme Development Process

An integrated approach was adopted for the development of this WCDM CMP whereby the coastal LMs were engaged separately. The coastal LMs within the WCDM (see Figure 2) are:

- Swartland;
- Saldanha Bay;
- Bergrivier;
- Cederberg; and
- Matzikama.

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

- Firstly, an initial framework for coastal management in the WCDM was developed, which outlined the key components of an integrated CMP. This formed the structure of the CMP.
- A draft situation analysis of the coastal zone and coastal management along the WCDM coastline was prepared.
- Through a series of stakeholder workshops, coastal issues and potential future needs were identified.
- A preliminary list of indicators for coastal management was derived from the issues identified as well as consultation with the existing WCDM CMP (2013) and the Western Cape Provincial CMP (2016). This was done in order to monitor the progress of the implementation of the CMP to achieve management objectives.

- Finally, specific coastal management actions for the WCDM CMP were identified, from which implementation plans were developed.

1.7 Framework of the Second Generation WCDM CMP

The framework for the second generation WCDM CMP is based on the first-generation CMP, the Western Cape CMP as well as the NCMP. It is important that the second generation WCDM CMP aligns closely with the Provincial and National CMP.

The framework aims to provide a holistic and structured guideline as to how to undertake the situation analysis, and to identify coastal issues and future needs:

- The **vision** of the WCDM CMP was developed to not only reflect the ecological aspects of the coastal zone but to also reflect its social, economic and cultural aspects.
- The **objectives** of the WCDM CMP were formulated in order to achieve the WCDM's vision for coastal management.
- The **strategies** and **associated actions** in the first generation WCDM CMP were grouped into the following themes:
 1. Institutional arrangements;
 2. Natural resource management;
 3. Heritage resource management;
 4. Pollution control and management;
 5. Facilitation of coastal access;
 6. Safety and security;
 7. Socio-economic development; and
 8. Institutional, human and financial resource capacity.

However, after reviewing the first generation CMP, the Provincial CMP and the outcomes of the stakeholder engagement process for the second generation WCDM CMP, the need to reorganise the themes became evident. They have been reorganised as follows, and these 10 themes (listed in order of importance) will be carried through into the development of implementation strategies for coastal management in the WCDM:

1. **Cooperative governance and institutional arrangements:** This theme has overarching importance for the effective implementation of coastal management objectives and strategies. Effective cooperative governance requires the participation of all public sector agencies and departments with responsibility for coastal management, from national through to local government levels. There is a need for co-responsibility, and integrated and coordinated decision making and planning. In addition, ongoing skills transfer and capacity building, especially related to practical implementation of programmes and processes is required. This will assist in ensuring compliance with international conventions, protocols and agreements.
2. **Facilitation of coastal access:** The ICMA (Section 49) identifies the facilitation of coastal access as a key issue, and this is particularly applicable to the WCDM CMP. Emphasis needs to be placed on the promotion and management of access to coastal public property, the promotion and facilitation of equitable access to coastal resources and coastal public property, and the need to meet the objective of ensuring access whilst promoting custodianship and stewardship of the coastal zone.

3. **Coastal planning and development:** Due to the ever-increasing demand for ocean and coastal space as well as the manifestation of climate change impacts, appropriate coastal planning is required to ensure that all forms of development align with ICMA principles and resilient to climate change. This requires that measures which emphasise local economic development opportunities are put in place. But planning and spatial development must focus on sustainable and equitable development, and the approval process must take this into consideration.
4. **Compliance, monitoring and enforcement:** In order to ensure that coastal management objectives are being implemented and that coastal legislation is being complied with, compliance, monitoring and enforcement strategies need to be developed. Ensuring compliance with applicable coastal legislation requires the promotion of the Environmental Management Inspectorate, including facilitation, training and designation of Environmental Management Inspectors by the WCDM. This will contribute to ensuring that the coastal zone is managed effectively. The selection of indicators and the implementation of monitoring programmes are required in order to assess progress towards achieving the CMP vision and objectives. In order to evaluate the findings of these monitoring programmes, Section 93 of the ICMA requires that State of the Coast Reporting be carried out. State of the Coast Reporting will inform the subsequent reviews of the WCDM CMP and future coastal planning processes.
5. **Estuary management:** Although the WCDM does not have a high number of estuaries, the estuaries are heavily impacted and of high value. These estuaries require the establishment and implementation of strategies to improve the management and protection of estuarine resources, increase their resilience to climate change impacts as well as the need to secure sufficient financial resources to fund and implement the identified actions, research projects, other initiatives and the advisory forums.
6. **Natural resource management:** The effective management of natural resources needs to include the maintenance of ecosystem integrity and health, adaptation and mitigation to climate change impacts, the assessment and effective management of coastal protected areas, including marine protected areas, as well as the identification and rehabilitation of damaged and degraded coastal ecosystems and habitats.
7. **Heritage resource management:** The WCDM coastline has a wealth of heritage resources that require protection and management in order to preserve them for the benefit of future generations. Heritage resource management in the coastal zone is an important aspect of coastal management in the WCDM.
8. **Pollution control and management:** This requires both effective management and effective prevention strategies, with an emphasis on reducing and responding to both land based and marine based sources of pollution in the coastal zone. Ensuring adherence to the waste management hierarchy of "reduce, reuse, recycle", will help reduce solid waste in particular. The effective management of waste within the coastal zone requires cooperation between various departments within the local and district municipalities, provincial and national government departments, as well as coastal communities.
9. **Socio-economic development:** The coastal zone is important to society, and to the economic development of all coastal communities. It is important that the socio-economic environment along the coastline is well managed and supported to

ensure that all coastal communities receive the full benefit of the resources that the coastal zone provides and also start to become resilient to the impacts of climate change. The identification and exploitation of sustainable livelihood opportunities is equally important to capitalise on the benefits offered by the coastline.

10. **Awareness, education, training, capacity building and information:** These are important actions to implement, as this will help to facilitate the cooperative management of the coastal zone, which is required to successfully implement an *integrated* coastal management strategy. The generation of internal capacity within the West Coast DM, to effectively manage the coast is also vital in ensuring that the objectives and strategies set out in the CMP are implemented. Through the facilitation of knowledge production and exchange, the promotion of knowledge sharing of coastal issues, and instilling a sense of ownership of the coastal zone amongst all stakeholders, the municipalities can create an increased awareness among various key coastal stakeholders. .

2 LEGISLATIVE OVERVIEW

Coastal management is an integrated process and as a result the coastline is governed by a number of laws and policies. Due to the complexities of the legislative framework that is applicable to coastal management in South Africa, many legal requirements pertaining to coastal management are either implemented ineffectively or not at all. This section provides a brief description of the relevant legislation, policies and plans that are important to integrate into coastal management activities.

2.1 Legislation

The South African Constitution

Schedule 4b and 5b of the Constitution indicates that the management of the following matters are assigned to local government:

- Beaches and amusement facilities;
- Cleansing;
- Control of public nuisances;
- Local amenities;
- Local sport facilities;
- Local tourism;
- Municipal parks and recreation;
- Municipal planning;
- Municipal roads;
- Noise pollution;
- Pontoons, ferries, jetties, piers and harbours, excluding the regulation of international and national shipping activities and related matters;
- Public places;
- Refuse removal, refuse dumps and solid waste disposal;
- Stormwater management systems in built up areas;
- Traffic and parking; and
- Water and sanitation services limited to potable water supply systems and domestic waste-water and sewage disposal systems.

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

The following aspects of this Act relate to coastal management and need to be incorporated into the WCDM CMP:

- The demarcation of municipal boundaries as well as the coastline;
- The creation and adoption of by-laws;
- Chapter 5 provides for Integrated Development Planning (IDP) wherein a municipal CMP can be incorporated. Section 26 states that each Local, Metropolitan and District Municipality is required to develop an IDP, which must reflect a municipality's vision and objectives. The IDP is seen as the primary planning instrument that informs and guides all planning and development in a municipality;
- Section 11(3) highlights the need for municipalities to exercise their legislative authority. The Act states that municipalities must exercise their executive and legislative authority within the constitutional systems of co-operative government envisaged in terms of Section 41 of the Constitution; and
- Section 25 states that: "each municipal council must, within a prescribed period after

the start of its election term, adopt a single, inclusive and strategic plan for the development of the municipality".

Local Government: Municipal Structures Act (Act No. 117 of 1998, as amended by Act No. 1 of 2003)

The functions of a District and Local Municipality that relate to coastal management are identified in this Act as:

- (a) Integrated development planning for the Municipality, including a framework for IDPs of all municipalities in the area of the DM;
- (b) Potable water supply systems;
- (c) Domestic waste-water and sewage disposal systems;
- (d) Solid waste disposal sites, as it relates to:
 - (i) The determination of a waste disposal strategy;
 - (ii) The regulation of waste disposal; and
 - (iii) The establishment, operation and control of waste disposal sites, bulk waste transfer facilities and waste disposal facilities for more than one LM in the district;
- (e) Municipal roads, which form an integral part of a road transport system for the area of a DM as a whole;
- (f) Promotion of tourism for the area of the DM;
- (g) Municipal public works relating to any of the above functions or any other function assigned to the DM;
- (h) The receipt, allocation and, if applicable, the distribution of grants made to the DM; and
- (i) The imposition and collection of taxes, levies and duties related to the above functions or as may be assigned to the DM in terms of national legislation.

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

The objective of the Municipal Finance Management Act (2003) (MFMA) is to modernise municipal financial management in South Africa so as to lay a sound financial base for the sustainable delivery of services.

Municipal financial management involves managing a range of interrelated components: planning and budgeting, revenue, cash and expenditure management, procurement, asset management, reporting and oversight. Each component contributes to ensuring that expenditure is developmental, effective and efficient and that municipalities can be held accountable.

The MFMA, together with the Municipal Structures Act (1998), the Municipal Systems Act (2000), the Municipal Property Rates Act (2004) and the Municipal Fiscal Powers and Functions Act (2007), sets out frameworks and key requirements for municipal operations, planning, budgeting, governance and accountability.

National Environmental Management Act (No. 107 of 1998) (NEMA)

NEMA serves as a framework legislation for South Africa because it provides for overarching and generic principles that should inform South Africa's environmental management and governance. NEMA is mainly regarded as a requirement from State in order to fulfil obligations imposed upon it by the constitutional environmental right to protect the environment through reasonable legislative measures and other measures. Furthermore, NEMA is intended to give effect to the cooperative governance imperative contained in the Constitution.

It is important that the Municipalities incorporate the sustainable development principles outlined in NEMA into their municipal planning procedures.

National Environmental Management: Integrated Coastal Management Act (Act No. 28 of 2008) Amended in 2014 (ICMA)

The ICMA (Amended in 2014) is the key legislative framework that regulates the use of coastal resources. The Objectives of the ICMA include the following:

- Sets out a new and integrated approach to managing the nation's coastal resources in order to promote social equity and to make best economic use of coastal resources, whilst protecting the natural environment. Specifically, the Act seeks to:
 - Provide a legal and administrative framework that will promote cooperative, coordinated and integrated coastal management;
 - Preserve, protect and enhance the status of the coastal environment as the heritage of all;
 - Ensure that coastal resources are managed in the interest of the whole community;
 - Ensure that there is equitable access to the opportunities and benefits derived from the coast; and
 - Give effect to South Africa's international law obligations.

It is important that the WCDM CMP fully aligns with the requirements of the ICMA.

NEM ICMA: Dumping at Sea Regulations (2016)

The Dumping at Sea Regulations have been developed to enable the Department of Environmental Affairs (DEA) to implement Sections 70 and 71 of the ICMA. The Regulations outline the specific requirements that must be met when applying for a dumping permit as well as an emergency dumping permit.

All Dumping at Sea permits are issued by DEFF, but the Municipalities have a responsibility to report any illegal activities to DEFF to ensure that all dumping at sea activities are properly authorised and monitored.

NEM ICMA: Coastal Waters Discharge Permit Regulations (2018)(CWDP)

The CWDP Regulations aim to provide an administrative framework for the implementation of Section 69 of the ICMA. The ICMA empowers the DEFF to manage the discharge of effluent into coastal waters in a manner that ensures that users of coastal waters are not adversely affected, and that the environmental integrity of the coast is not compromised. Again, the municipalities have a responsibility to report and incidences or non-compliances observed to DEFF.

National Estuarine Management Protocol (NEMP)

The ICMA requires that estuaries in South Africa be managed in a co-ordinated manner. As a result, the NEMP was developed to guide the management of estuaries through the development and implementation of individual Estuarine Management Plans (EMPs). The EMPs aim to achieve harmony between ecological processes and human activities while accommodating sustainable estuarine resource utilisation.

However, the role of a municipal RMA was questioned in a recent case where the Supreme Court of Appeal (SCA) handed down judgment in *Abbott Vs Overstrand Municipality*

(99/2015) [2016] ZASCA 68 (20 May 2016). This case resulted in a review of the role of municipalities with regards to the implementation of certain estuarine management actions. The case specifically dealt with whether or not a municipality was under any legal obligation to take measures to prevent the flooding of a residential property that was situated on a floodplain, prompting the question as to whether or not municipalities can exercise an environmental management function in terms of the Constitution (WCSocr, 2019).

In a circular that was circulated to all coastal municipalities on the 30th May 2017, the role of local government in estuary management in terms of the NEMP was clarified. Legal advice was sought and consultation with DEFF was undertaken which resulted in the DEA&DP noting that the findings in the Abbot Vs Overberg case were that the identification of municipalities as RMAs for implementing the NEMP is inconsistent with Section 156(1)(b) of the Constitution and does not comply with section 156(4) of the Constitution. With regards to artificial breaching of estuary mouths, DEA&DP maintain that this remains a local government function on terms of the Constitution and the Disaster Management Act (No. 57 of 2002).

In an effort to address the shortfalls identified in terms of the Constitution and the NEMP, DEFF is in the process of revising the NEMP. However, in the interim, DEA&DP and CapeNature will continue to maintain the lead role in ensuring the coordinated planning, implementation and management of estuaries in the Western Cape. Section 154(1) of the Constitution places an obligation on the National and Provincial authorities to support and strengthen the capacity of local government to perform their functions. DEA&DP has committed to enter into Implementation Protocols with Municipalities for the implementation of these functions in terms of the Intergovernmental Relations Framework Act (No. 13 of 2005) (WCSocr, 2019).

NEM: Environmental Impact Assessment (EIA) Regulation, as amended in 2017

The EIA Regulations, as amended in 2017, make provision for the protection of the coastal zone by incorporating a number of listed activities that are specifically aimed at protecting the coastline. Any proposed activities listed in the EIA Regulations that relate to the coastal zone may not proceed without undergoing an EIA process and having been issued an Environmental Authorisation.

The National Department of Environmental Affairs (DEA) and Provincial Department of Environmental Affairs and Development Planning (DEA&DP) are the relevant Authorities that are mandated to issue Environmental Authorisations (EAs) as well as to monitor compliance with the conditions of the EAs. However, it is the Municipality's responsibility to ensure that they participate in and undertake their own EIA processes to ensure that municipal planning schemes are taken into consideration. This will prevent conflicts with the Municipality's development goals and objectives.

NEM: Control of Use of Vehicles in Coastal Areas Regulations (2014)

The NEM: Control of Use of vehicles in Coastal Areas Regulations aim to minimise the impact of vehicles driving in the sensitive coastal environment. The Regulations stipulate prohibitions as well as defines permissible uses of vehicles within the coastal area. The Regulations allow for permits to be issued for the use of vehicles in coastal areas.

The DEA are mandated to issue permits for vehicles in the coastal zone as well as enforcing the Regulations. However, the Municipalities are responsible for reporting any illegal driving activities in the coastal zone to DEA.

NEM: Management of Public Launch Sites in the Coastal Zone Regulations (2014)

The NEM: Management of Public Launch Sites in the Coastal Zone Regulations provides a formal process when registering new or existing public launch sites. The Regulations provide a framework from which the provincial Department of Environmental Affairs is able to assess and authorise public launch sites.

Currently there are 12 registered launch sites within the WCDM and the relevant Local Municipalities (LMs) have been identified as the management authorities responsible for the operation and maintenance of the launch sites. The Municipalities, in their role as the Management Body, is required to draft an Operation Plan for each of the PLS in their jurisdiction. The 12 listed PLS and the management bodies are listed below:

Launch site	Management Body
Papendorp	Matzikama Municipality
Strandfontein by the café	Matzikama Municipality
Doring Bay Harbour (unproclaimed)	Matzikama Municipality
Eland's Bay (Old Crayfish Factory)	Cederberg Municipality
Northern Dwarskersbos	Bergrivier Municipality
Rooibacai	Bergrivier Municipality
Brittania Bay	Saldanha Municipality
Cubb, Paternoster	Saldanha Municipality
Paternoster	Saldanha Municipality
Klein, North West Bay	Saldanha Municipality
Jacobsbaai	Saldanha Municipality
Yzerfontein	Swartland Municipality

However, the Management Bodies can request that registered PLS can be delisted or a new PLS can be added to the list. As this list of registered PLS gets updated, the WCDM CMP will also need to be updated accordingly.

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

The purpose of the MRLA is to provide for the conservation of the marine ecosystems, the long-term sustainable utilisation of marine living resources and the orderly access to the 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.

The WCDM has a strong small-scale fishing presence and the small-scale fisheries in the district needs to be managed through the MLRA by DEFF and CapeNature. However, the MLRA does not make provision for local authorities to implement and enforce the Act unless representatives of the local authority are designated as Fisheries Control Officers in terms of Section 9 of the MLRA.

National Ports Act (No. 12 of 2005) (NPA)

The NPA seeks primarily to give effect to the Government's Policy on commercial ports that outlines the role of ports in the South African economy. The largest port in the WCDM is the Saldanha Bay port. There are also a number of smaller harbours along the length of the coastline that function as small commercial and recreational harbours.

National Environmental Management: Protected Areas Act (No. 57 of 2003) (NEM:PAA)

NEM:PAA mainly provides for the following:

- Declaration of nature reserves and determination of the type of reserve declared;
- Cooperative governance in the declaration and management of nature reserves;
- A system of protected areas in order to manage and conserve biodiversity; and
- Utilization and participation of local communities in the management of protected areas.

A number of protected areas exist within the coastal areas of the WCDM. Some of the protected areas that have been proclaimed under the NEM: PAA include:

- Penguin (Bird) Island Nature Reserve Complex (CapeNature);
- West Coast National Park (SANParks);
- Rocherpan NR (CapeNature);
- Elands bay Dune Reserve (CapeNature); and
- Dassen Coastal Complex Protected Area (Cape Nature).

National Environmental Management: Biodiversity Act (No. 10 of 2004) (NEM:BA)

The objectives of the Biodiversity Act include the following:

- Management and conservation of biological diversity;
- Use of biological resources in a sustainable manner;
- Equitable sharing of benefits arising from bio-prospecting; and
- Cooperative governance in biodiversity management and conservation.

The Biodiversity Act requires that the state must manage, conserve and sustain South Africa's biodiversity and its components and genetic resources; and must implement this Act to achieve the progressive realization of those rights.

National Environmental Management: Air Quality Act (No. 39 of 2004) (NEM:AQA)

The purpose of the NEM:AQA is to provide a legislative platform for regulating air quality. This is done by providing reasonable measures for the prevention of pollution and ecological degradation, as well as securing ecologically sustainable development while promoting justifiable economic and social development. The AQA also aims to provide for national norms and standards regulating air quality monitoring, management and control by all spheres of government.

The WCDM has an Air Quality Management Plan that is currently being updated and the WCDM, together with the LMs are responsible for implementing the strategies outlined in the Air Quality Management Plan. The WCDM is also responsible for issuing Air Emissions Licenses and monitoring the conditions stipulated in the licenses.

National Environmental Management: Waste Management Act (No. 59 of 2008) – (NEM:WMA)

The NEM:WMA outlines roles and responsibilities of the three spheres of government with respect to waste management within a waste avoidance and minimisation framework. It establishes a national framework for waste management and provides for identification of waste management activities that require licensing. The NEM:WMA sets out measures for the storage, collection, transportation, recovery, re-use, recycling, treatment and disposal of waste and outlines requirements for the licensing of waste management activities.

Second generation IIWP was approved by council in 2012. The third generation Integrated Waste Management Plan is to be drafted as soon as the IWMP of all the local municipalities have been drafted, as the District IWMP flows from there (WCDM IDP, 20117-2022).

National Water Act (No. 36 of 1998) (NWA)

The NWA is the legislative framework that guides the development of a number of programmes that aim to understand the state of and effectively manage water resources in South Africa. Examples of programmes and projects include the classification of water resources and setting the Reserve and Resource Quality Objectives (RQOs), the prevention of the pollution of water resources due to land based activities, the authorisation and management of various water use activities as well as the establishment and management of catchment management agencies which manage water resources within their water management area.

The water management area within the WCDM is the Breede Gouritz Water Management Area (WMA) and the Olifants Berg WMA. The Breede Gouritz Catchment Management Agency has been set up to manage activities within the water management area. A Catchment Management Agency has not yet been established for the Olifants Berg CMA.

Conservation of Agricultural Resources Act (No. 43 of 1983) (CARA)

CARA is the chief statute that deals with agricultural resources. The objective of CARA is to provide for the conservation of the natural agricultural resources of South Africa by the maintenance of the production potential of land. In order to maintain production potential of land, CARA provides for the following mechanisms:

- Combating and preventing erosion and the weakening and destruction of water sources;
- Protection of vegetation; and
- Combating and control of weeds and invader plants.

It is important that the WCDM CMP captures the objectives of CARA through the management of coastal erosion as well as the management of alien invasive vegetation on their properties within the coastal zone.

National Heritage Resources Act (No. 25 of 1999) (NHRA)

The NHRA governs natural heritage resources and the management thereof. It creates Heritage Authorities, namely the South African Heritage Resource Agency (SAHRA), with the responsibility to protect and manage certain categories of heritage resources. The WCDM has a number of heritage resources that are formally protected through the NHRA. In terms of the Act, the local authorities are responsible for managing all Grade III registered heritage resources if they are capable. A detailed discussion regarding the heritage resources within the WCDM has been provided in the Situational Analysis.

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

SPLUMA aims to provide a framework for spatial planning and land use management in South Africa and informs the development of Spatial Development Frameworks (SDFs) at Provincial and local government levels. All the Local Municipalities, District Municipalities and Provinces require the development of Spatial Development Frameworks (SDFs) to inform the Integrated Development Plans (IDPs). These SDFs must incorporate all coastal

management aspects so ensure that the integrity of the coastline is maintained when development in the coastal zone is proposed.

Western Cape Land Use Planning Act (Act No. 3 of 2014) (WCLUPA)

The WCLUPA provides a legislative framework for effective provincial planning, regional planning and development pertaining to urban and rural development, regulation, support and monitoring of municipal planning and regulation of public places and municipal roads arising from subdivisions. WCLUPA also makes provision for provincial spatial development frameworks as well as provides for minimum standards for, and the efficient coordination of, spatial development frameworks. The WCLUPA aims to provide for the minimum norms and standards of effective municipal development management and regulates provincial development management, as well as the effect of land development on agriculture and also aims to provide for land use planning principles.

The Promulgation of this Act is important for future planning for development in the coastal zone.

Criminal Procedures Act (No. 51 of 1977)

The Criminal Procedures Act provides the basis for the procedure for the arrest and prosecution of people found to be in contempt of the law. The Criminal Procedures Act needs to be applied when conducting any enforcement activities relating to any of the environmental and coastal legislation.

2.2 National and Provincial policies and programmes

This section lists the various National and Provincial policies and programmes that have informed the development of the WCDM CMP:

- National Coastal Management Programme (2015)(NCMP);
- National Estuarine Management Protocol (2013)(NEMP);
- State of Oceans and Coasts around South Africa Report (2014);
- 2nd South Africa Environment Outlook (2016);
- Africa Environmental Education and Training Strategy Action Plan (2015);
- White Paper for Sustainable Coastal Development (2000);
- Blue Flag South Africa;
- National Biodiversity Strategy and Action Plan (NBSAP);
- National Climate Change Response Strategy (NCCRS);
- South African Water Quality Guidelines for Coastal Marine Waters (2012, currently being updated);
- National Guideline for the Discharge of Effluent from Land-based Sources into the Marine Environment (2014);
- Policy for the Small-Scale Fisheries Sector in South Africa (2012);
- Western Cape Coastal Management Programme (2016) (WCCMP);
- Western Cape Biodiversity Spatial Plan (2017) (WCBSP);
- Western Cape State of the Coast Report (2019) (WCSocr);
- Western Cape Estuarine Management Framework and Implementation Strategy: Institutional Framework for Estuarine Advisory Forums;
- Western Cape Green Economy Strategic Framework (2017) (WCGESF);
- Western Cape Climate Change Response Strategy (2014) (WCCCRS); and
- Breede-Gouritz Catchment Management Strategy (2017).

2.3 West Coast District Municipality policies and programmes

This section lists the various WCDM policies and programmes that have informed the development of the WCDM CMP:

- West Coast District Municipality Integrated Development Framework (2017-2022) (IDP);
- West Coast District Spatial Development Framework (2014) (SDF);
- West Coast District Air Quality Management Plan (currently being reviewed and updated);
- West Coast District Disaster Manager Plan (2015);
- West Coast District Municipality Sea Level Rise & Flood Hazard Risk Assessment;
- Coastal Management/Set Back lines for the West Coast District Municipality;
- West Coast District Climate Change Response Framework (2014);
- Treated Effluent By-law and Amended By-law (2015); and
- Stormwater Management By-law (2005).

2.4 Local Municipality policies and programmes

The following policies, programmes and by-laws for each of the Local Municipalities (LMs) were assessed as part of the WCDM CMP development process:

- Bergrivier LM IDP;
- Bergrivier LM SDF;
- Bergrivier Air Pollution Control By-law;
- Bergrivier Solid Waste Disposal By-law;
- Bergrivier Stormwater Management By-law;
- Bergrivier LM By-law Relating to the Management and Use of the Berg River Estuary (Friday, 5 July 2019. No. 8124);
- Cederberg LM IDP;
- Cederberg LM SDF;
- Cederberg LM By-law for the Control of the Seashore and the Sea situated within or adjoining the Area of Jurisdiction of the Municipality of Cederberg;
- Cederberg LM By-law relating to Camping Areas;
- Cederberg LM By-law relating to Nature Reserves;
- Matzikama LM IDP;
- Matzikama LM SDF;
- Matzikama LM Disaster Management Plan;
- Matzikama LM Air Quality Management Plan;
- Matzikama LM Solid Waste Disposal By-law;
- Matzikama LM Stormwater Management By-law;
- Saldana Bay LM IDP;
- Saldana Bay LM SDF;
- Saldanha Bay LM Air Pollution Control By-law;
- Saldanha Bay LM Solid Waste Disposal By-law;
- Saldanha Bay LM Stormwater Management By-law;
- Swartland LM IDP;
- Swartland LM SDF;
- Swartland LM Waste Management By-law;
- Swartland LM Municipal Land Use Planning By-law;
- Swartland LM Air Quality By-law;
- Swartland LM Public Amenities By-law;
- Swartland LM Stormwater Management By-law;
- Swartland LM By-law pertaining to the Control of the Yzerfontein Fish Market; and

- Swartland LM By-law relating to Water Supply, Sanitation Services and Industrial Effluent.

2.5 Other policies and programmes

Coastal zone management requires an integrated approach. Therefore, the following policies, programmes and plans that have been developed outside of local government and provincial government levels have also been reviewed as part of the WCDM CMP development process:

- West Coast National Park Management Plan (2013-2023);
- Draft Dassen Coastal Complex Protected Area Management Plan (2019–2029);
- Transnet Long Term Port Expansion Plan;
- Saldanha Bay Aquaculture Development Zone; and
- Saldanha Bay Special Economic Zone.

3 SITUATION ASSESSMENT

This chapter provides an updated Situation Assessment of the WCDM that was developed for the first generation WCDM CMP in 2013. A brief outline of the coastal environment and the status of coastal ecosystems along the WCDM coastline is provided. The status of coastal management along the WCDM coastline has been assessed using the framework for coastal management as set out in Section 1.7. Section 1.7 identifies ten themes for inclusion in this updated CMP and the current status of the WCDM coastline has been described according to these ten themes. Current coastal issues and existing responses to address these issues have also been described.

3.1 Locality and extent of the coastline

The WCDM is situated north of Cape Town in the Western Cape Province and extends from the border of the City of Cape Town at Bokbaai/Bokpunt approximately 30km south of Yzerfontein, to the border of the Northern Cape Province, approximately 80km north of Strandfontein (Figure 2). The Atlantic Ocean forms the western boundary, while the WCDM borders with Cape Winelands DM on the east and the Western Cape share the provincial boundary to the east. The WCDM covers an area of approximately 3,111km² and consists of five local municipalities, namely:

- Swartland;
- Saldanha Bay;
- Bergrivier;
- Cederberg; and
- Matzikama.

Maps of each of the LMs that indicate the extent of the coastline as per the Municipal Demarcation Board are provided in Appendix A.

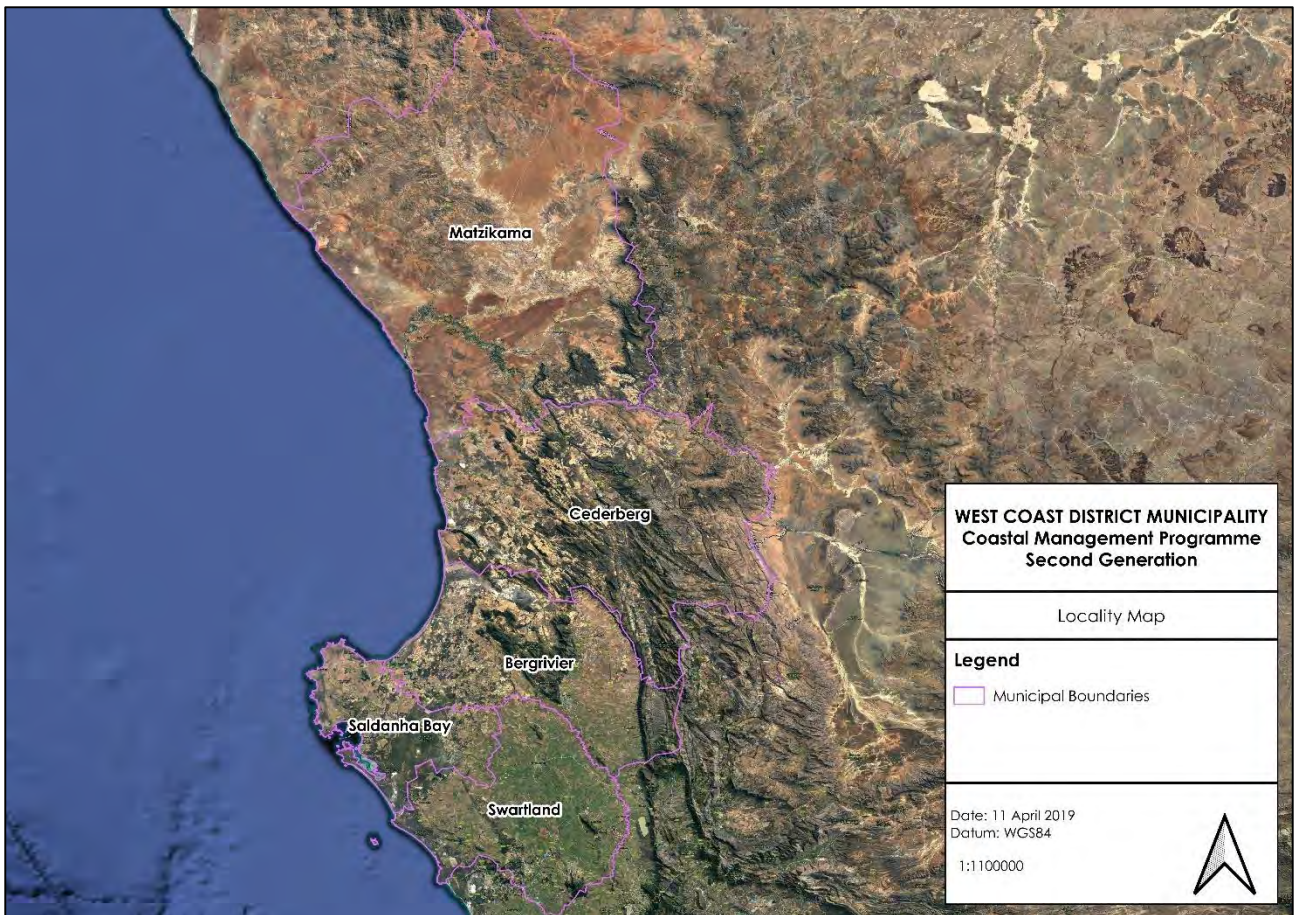


Figure 2: Boundaries of the WCDM

An important aspect of coastal management is understanding of the extent of the coastline. According to the Demarcation Board of South Africa, the extent of the WCDM coastline is 498.5km. The WCDM coastline is broken down into the five LM extents as follows:

- Swartland – 46km;
- Saldanha Bay – 233.5km (including the extent of the SANParks managed West Coast National Park, which extends for 92.5km along the coast);
- Bergrivier – 46km;
- Cederberg – 62km; and
- Matzikama – 111km.

3.2 Theme 1: Institutional Arrangements and Cooperative Governance

This theme has overarching importance for the effective implementation of coastal management objectives and strategies. Effective cooperative governance requires the participation of all public sector agencies and departments with responsibility for coastal management, from national through to local government levels. There is a need for co-responsibility, and integrated and coordinated decision making and planning. In addition, ongoing skills transfer and capacity building, especially related to practical implementation of programmes and processes is required. This will assist in ensuring compliance with international conventions, protocols and agreements.

3.2.1. Coastal management functions at Provincial, District and Local Level

At a provincial level, the DEA&DP Coastal Management Unit have several coastal management functions within the WCDM. These functions include the following:

- Assisting municipalities with the registering and/or deregistering of PLS;
- Supporting the Municipal Coastal Committee (MCC);
- Facilitating the Provincial Coastal Committee (PCC);
- Supporting estuary management;
- Advisory and support services with regards to the provision of access to the coast;
- Commenting on and undertaking their own Environmental Impact Assessments (EIAs) applications as well as providing advisory and support services;
- Assistance with the delineation of coastal management lines; and
- Coastal education and awareness.

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

- Department of Mineral Resources and Energy (DMRE);
- Department of Agriculture, Land Reform and Rural Development (DALRRD);
- Department of Cooperative Governance and Traditional Affairs (CoGTA);
- South African Local Government Association (SALGA); and
- Department of Environment, Forestry and Fisheries (DEFF).

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

Most environmental and coastal aspects within the WCDM still falls to the District to manage. The reason for this appears to be that there is still a lack of resources and capacity at LM level to administer environmental and coastal management tasks. This situation does not seem to have changed much since the first-generation CMP was developed.

At WCDM level, there is also limited capacity and resources to fulfil their coastal management role. The WCDM has an Environmental Management Unit, which falls within the Administration and Community Services Department. The WCDM only has one designated environmental management officer who is responsible for environmental management in the District. Saldanha Bay LM and Bergivier LM both have fulltime and dedicated environmental officers, while Swartland LM, Cederberg LM and Matzikama LM do not have any environmental officers. The details of the environmental officer for the WCDM are as follows:

Mr Charles Malherbe

Tel: 022 433 8400

Email: cjmalherbe@wcdm.co.za

Physical Address: 58 Long Street
Moorreesburg
7310

Postal Address: PO BOX 242
Moorreesburg
7310

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

- Tourism;
- Disaster management; and
- Technical services (roads, planning and development and water supply),

At an LM level, the situation still exists where there is often no department specifically assigned with an environmental or coastal management mandate. As a result, there exists a lack of capacity, resources and expertise to effectively manage coastal and environmental matters within the municipal areas. In some municipalities, environmental and coastal management functions have been assigned to individuals in town planning departments. Saldanha Bay LM, Bergrivier LM and Cederberg LM have fulltime and dedicated environmental officers, while Swartland LM and Matzikama LM do not have any environmental officers. Within each LM, the following positions exist within the organisational structure to support coastal zone management (as at May 2019):

- Swartland – Environment and Occupational Health Manager within the Development Services Department:
Mr Kobus Marais
Email: kobusmarais@swartland.org.za
Tel: 022 487 9440
- Saldanha Bay – Environmental officer within the Economic Development and Strategic Services Directorate:
Ms Nazeema Duarte
Email: Nazeema.Duarte@sbm.gov.za
Tel: 022 701 7116
- Bergrivier – Environmental officer within the Planning and Environmental Management Department
Ms Angila Joubert
Email: joubertA@bergmun.org.za
Tel: 022 783 1112
- Cederberg - Environmental Officer within the Community Services Department:
Ms Danné Joubert
Email: dannej@cederbergmun.gov.za
Tel: 027 482 8600
- Matzikama - There is no formal Environmental Officer. However, environmental management duties have been assigned to the Community Services Department:
Ms Thesme van Zyl
Email: thesme@matzikamamun.co.za
Tel: 027 201 3351/3302

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

The South African Local Government Association (SALGA) also plays and a supportive role to the Municipalities. SALGA, together with DEFF, have developed an Environmental Legal Protocol that aims to define the role of Local Government in Environmental Management and establishing the costs of performing environmental management functions.

3.2.2. Co-operative governance

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

- 'Vertical' co-operative governance relies on integration between the coastal management bodies of the Local Municipalities, WCDM and with the Provincial and National authorities. Currently there appears to be some level of co-ordination between the various levels of government with respect to decision-making around issues impacting on the stakeholders and the coastal assets of the WCDM. Key to this has been the establishment of the Municipal Coastal Management Committee;
- 'Lateral' cooperative governance relies on inter-departmental integration, coordination and communication between the WCDM and other governmental departments/parastatals, for example, DEA&DP, DEFF, Cape Nature, DRDLR, DMRE, SAPS. To a large extent this seems to be lacking in the province, although there is good lateral cooperation in estuary management. Other platforms that facilitate "lateral" cooperative governance include the PCC as well as the National Committee (Working Group 8) that specifically deals with coastal management issues in South Africa.

3.2.3. Protected Areas

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

3.2.4. WCDM Coastal Committee

The WCDM has established a Coastal Committee that meets on a quarterly basis. The WCDM Coastal Committee is currently chaired by Cllr Andre Kruger from Saldanha Bay LM, who was previously the Speaker of the WCDM. A variety of stakeholders are invited and encouraged to attend these meetings. These stakeholders include, but are not limited to:

- Representatives from the DEFF;
- Representatives from the CapeNature;
- Representatives from the DEA&DP;
- Transnet;
- Local municipal officials;
- Residents and rate payers' associations;
- Chairpersons of various Estuary Advisory Forums;
- Local conservancies; and
- Various NGO's.

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

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

- The Local Municipalities need to show commitment to the CMP by providing input, resulting in buy-in to the WCDM CMP objectives and implementation strategies.
- An improvement in lateral cooperation through closer collaboration between all relevant spheres of government as well as public-private partnerships for effective coastal management.

- Clear mandates for all spheres of government with regards to coastal management needs to be defined. These mandates require funding to enable them to be effectively fulfilled.

3.3 Theme 2: Coastal access

Section 49 of the ICMA specifically identifies the facilitation of coastal access as a key component of the WCDM CMP. Emphasis needs to be placed on the promotion and management of access to coastal public property, the promotion and facilitation of equitable access to coastal resources and coastal public property, and the need to meet the objective of ensuring access whilst promoting custodianship and stewardship of the coastal zone.

3.3.1. Existing access to the coastline

The processes required to identify and formalise access points in areas that may not be considered priority areas, as required by the ICMA, is a laborious one. To determine whether coastal access has been appropriately designated in an area or not, the need for coastal access based on the number of people living in the area, the total length of coastline and the number of existing coastal towns and access points located along that length of coastline must be determined.

The WCDM has a population of 436 403 people living within its borders (WCSocr, 2018) and this comprises 9% of the total population of the Western Cape (StatsSA, 2016). This means that the WCDM as a whole is not a highly populated municipality, and has small to medium sized settlements scattered throughout the region. Along the WCDM coastline, there are 16 towns, with the majority of these towns located within the Saldanha Bay LM. Table 2 below provides an indication of the population density and number of coastal towns located within each coastal LM.

Table 2: A description of the number of coastal towns and population densities within the WCDM

Local Municipality	Length of coastline	Population (StatsSA, 2016)	Coastal towns
Matzikama	111km	71 045	Papendorp Strandfontein Doringbaai
Cederberg	62km	52 949	Lamberts Bay Elands Bay
Bergrivier	46km	67 474	Dwarskersbos Velddrif Laaipek
Saldanha Bay	233.5km (Incl. West Coast National Park)	111 173	Laignville St Helena Bay Stompneus Bay Britannia Bay Paternoster Jacobs Bay Saldanha Langebaan
Swartland	46km	133 762	Yzerfontein

Physical access to many sections of the WCDM coastline is restricted by large tracks of private land, mining, aquaculture facilities and conservation areas, especially further north. There is also limited formalised public road infrastructure that facilitates access to the

coastline, with the majority of the road network being informal sand tracks through private land as well as the Transnet service road that run parallel to the Sishen-Saldanha rail way line. The Transnet service road is not a public road, and users require a permit, which is issued by Transnet.

There is controversy surrounding the facilitation of access to marine resources, with a concern that the benefits of those resources could be distributed in a more equitable manner. There has also been conflict between industrial development, nature conservation and tourism activities, especially in the Saldanha-Langebaan area. Along some sections of the WCDM coastline, ribbon development is taking place, where low occupancy levels occur. This is prominent in relatively new housing developments around Dwarskersbos and St Helena Bay, where fewer than 20% of available stands have houses constructed on them. This further restricts the facilitation of coastal access. However, many of the existing coastal access points are located at the settlements that occur along the coastline. Figure 3 below provides an indication of the location of the existing main settlements along the WCDM.

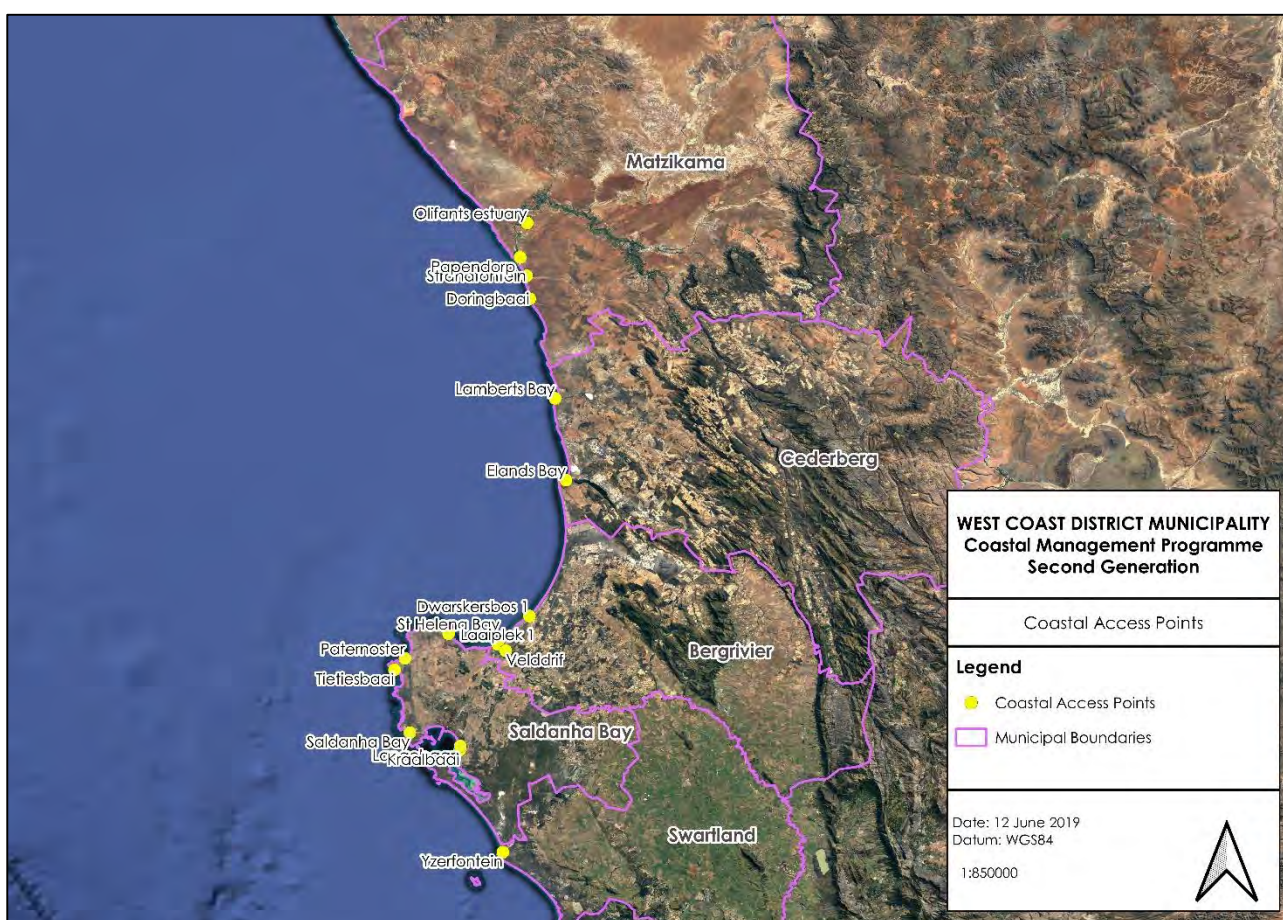


Figure 3: Coastal access points along the WCDM coastline.

3.3.2. Western Cape Coastal Management Programme (2016)

The 2016 Western Cape Coastal Management Programme (WC CMP) identified nine priority areas with accompanying goals and coastal management objectives. The Facilitation of Coastal Access is Priority Area 3 with specific goals and objectives. The Western Cape Government is a key role-player in building commitment and providing guidance and support to municipalities to allow them to effectively implement, maintain and monitor coastal access. This priority area includes ensuring that the public has an equitable and

reasonable right of access to the coast and its resources, as well as the appropriate management of such access. Two implementation strategies were highlighted:

1. Develop a Western Cape Coastal Access Strategy and Plan (This strategy proposes to ensure provincial consistency, entrenches the municipal responsibility and supports municipal implementation); and
2. Assist Local Government in implementing the Western Cape Coastal Access Strategy.

To date, the Western Cape Province has developed a draft Coastal Access Strategy and has appointed a service provider to undertake a coastal access audit of existing coastal access points along the WCDM coastline. However, the results of the coastal access audit are not yet available. Once the results do become available, the WCDM CMP will need to be updated.

In order to assist the WCDM and the LMs with the implementation of the Provincial Coastal Access Strategy, the WC CMP proposes the following actions:

1. Assist with the inclusion of coastal access land designated by Local Governments in reviewed SDFs;
2. Produce a consolidated report on status of coastal access land designation and management;
3. Develop a framework operational plan for each listed Public Launch Site (PLS); and
4. Monitor the implementation of operational plans for PLS.

To date, the SDFs for the WCDM and LMs have not included coastal access land. This needs to be prioritised once the Coast Access Audit for the WCDM has been completed.

3.3.3. National and Provincial Coastal Access Strategies

The National Strategy for the Facilitation of Coastal Access in South Africa was developed in 2014 and it states that the goal of coastal access is "to ensure, protect and manage, in perpetuity, public right of physical access to and along the coastal zone".

Section 18 of the ICMA requires each metro and district municipality, (unless assigned to local municipalities by agreement) whose area includes coastal public property to, within four years of the commencement of the Act, promulgate a by-law that designates coastal access land in order to secure public access to coastal public property. To date, the WCDM has not achieved this. However, the ICMA does not provide any guidance on how many of what type of access should be provided. The National Strategy, together with the Provincial Coastal Access Strategy, needs to be used as a benchmark, and states the following two objectives:

- Objective 1: Opportunities for public access must be provided at appropriate coastal locations in context of the environmental, financial and social opportunities and constraints.
- Objective 2: Public access must be maintained, managed and monitored to minimize adverse impacts on the environment and public safety, and to resolve incompatible uses.

The National Strategy for the Facilitation of Coastal Access describes the various types of access as follows:

- Existing access to the coast;
 - with facilities provided by the local municipality;

- informal access provided over private land;
- may be indicated in zoning schemes of municipality as “public open space” or similar; or
- Public launch sites (Western Cape public launch sites listed in the provincial gazette (P.N. 193/2015) dated 26 June 2015);
- Seasonal coastal access; i.e. popular camping spots along the coast over festive periods;
- Coastal access land designated under section 18 of the ICMA by a municipality;
- Coastal public property declared under sections 8 and 9 of the ICMA by the national Minister; and
- Private land may be acquired for the purpose of declaring as coastal public property to improve public access by:
 - purchasing the land;
 - exchanging that land; or
 - if no agreement, by expropriation.

The minimum requirements for coastal access so designated is described in section 20 of the ICMA:

- a) signpost entry points to coastal access land;
- b) control the use of, and activities on, that land;
- c) protect and enforce the rights of the public to use that land to gain access to coastal public property;
- d) maintain that land to ensure that the public has access to the relevant coastal public property;
- e) where appropriate and within its available resources, provide facilities that promote access to coastal public property, including parking areas, toilets, boardwalks and other amenities, considering the needs of physically disabled persons;
- f) ensure that the provision and use of coastal access land and associated infrastructure do not cause adverse effects to the environment;
- g) remove any public access servitude that is causing or contributing to adverse effects that the municipality is unable to prevent or to mitigate adequately; and
- h) describe or otherwise indicate all coastal access land in any municipal coastal management programme and in any municipal spatial development framework prepared in terms of the Municipal Systems Act.

3.3.4. Coastal Access Audit for the WCDM

Section 18 of the ICMA states that each metro and district municipality, (unless assigned to local municipalities by agreement) whose area includes coastal public property, are to promulgate a by-law that designates coastal access land in order to secure public access to coastal public property within four years of the commencement of the ICMA. However, in the Western Cape, none of the Municipalities have undertaken this, including the WCDM.

The 2014 amendments to the ICMA allow the Provincial Member of the Executive Council (MEC), followed by the National Minister, to intervene and provide support to the municipalities in the designation of coastal access land, should a municipality fail to do so. However, in order to assist the WCDM, the DEA&DP have appointed a Service Provider to undertake a Coastal Access Audit for the WCDM that will assess existing and historic coastal access land and admiralty reserve, and will include recommendations in respect of land that could be designated as coastal access land.

To date (May, 2019), a desktop assessment and a ground-truthing exercise has been undertaken where these coastal access points were verified. The list of coastal access points

for the WCDM are currently being reviewed by DEA&DP and the WCDM and have not yet been made available for public comment. Once the results of the audit have been reviewed by DEA&DP and WCDM, the draft audit will be circulated for public comment. Once the draft audit report has been circulated, a series of stakeholder workshops will be conducted where the findings of the report will be discussed and verified. It is anticipated that the final Coastal Access Audit Report will be available by the end of October 2019. It is important that the outcomes and recommendations of the Coastal Access Audit for the WCDM be incorporated in the WCDM CMP and well as the relevant Municipal IDPs and SDFs.

3.3.5. Coastal public amenities

Many of the beaches and coastal access points along the WCDM have public amenities such as parking areas, toilets, braai areas, walkways and rubbish bins and educational signage. The provision and maintenance of these amenities falls to the LMs in terms of their constitutional mandate to manage beaches within their area of jurisdiction.

No detailed assessment of the state of these public amenities within the DM has been undertaken to date. However, the Coastal Access Audit that is being undertaken for the WCDM will identify priority areas for access that require attention by the municipality.

3.3.6. Working for the Coast projects

Since the 1999/2000 financial year, the DEFF has been implementing programmes aimed at conserving natural assets and protecting the environment. These programmes are called the Environmental Protection and Infrastructure Programmes (EPIP).

The purpose of EPIP is to manage the identification, planning and implementation of programmes that mirror and support the mandate of the DEFF, while creating job opportunities under the banner of the Expanded Public Works Programme (EPWP) using labour intensive methods targeting the unemployed, youth, women, people with disabilities and Small, Medium and Micro-sized Enterprises (SMMEs).

The main goal of the EPIP is to alleviate poverty through a number of interventions that are implemented in communities, to uplift households, especially those headed by women, while empowering beneficiaries to participate in the mainstream economy in a manner that addresses the environmental management challenges facing the country.

The EPIP implements its projects through a number of focus areas that include the following:

- Greening and Open Space Management;
- People & Parks;
- Working for Land;
- Working for the Coast;
- Working on Waste;
- Wildlife Economy; and
- Youth Environmental Service.

The Working for the Coast (WftC) focus area is the area where the WCDM and its LMs can benefit the most in terms of facilitating coastal management in the district. The WftC focus area is responsible for the implementation of the following in coastal areas:

- Rehabilitation of coastal environment, including but not limited to, dunes, estuaries, etc.;

- Cleaning up of coastlines in general and the beaches in particular;
- Upgrading and maintaining of facilities and infrastructure along the coast; and
- Facilitation of access to the coastline without compromising the environment.

The EPIP funding cycles run over two years and before the next funding cycle, the EPIP conducts information sharing sessions with provincial departments, municipalities and public entities to identify projects for upcoming funding cycles. For the 2018/2019 to 2020/2022 funding cycle, the following projects within the WCDM have been approved and budget has been allocated:

Municipality	Project Name	Project Description	Project Budget
Matzikama	WftC Olifants River to Berg River Mouth	Control of invasive alien vegetation, cleaning of the coast and coastal catchment areas, monitoring and compliance and Environmental education and awareness	R13 million
	WftC Infrastructure Project Working for the Coast	Strandfontein beach: Improvement of access to and along the coast, fencing, movable ramp for disabled and CSIR emergencies, signage, upgrading of ablution blocks, braai spots, benched, coastal engineering, lifeguard station. Papendorp: formalisation of slipway, lights at slipways and jetties, dune rehabilitation and stabilisation.	R 10 million
Saldanha Bay	WftC Berg River Mouth to Silwerstroom River	Control of invasive alien vegetation, cleaning of the coast and coastal catchment areas, monitoring and compliance and environmental education and awareness	R12,8 million
	WftC Infrastructure Project Paternoster Upgrade	Paternoster: entrance beautification, lifesaver station, dune stabilisation at Tietiesbaai, stabilisation of dunes and road closures at Columbine/Tietiesbaai, beachfront; retaining wall and boardwalks at Mosselbank.	R10 million
	WftC Infrastructure Project Saldanha Upgrade	Development of 7 recycled wood boardwalks/stairs with balustrades and landings, 4 recycled wood and concrete benched areas outside Tabakbaai report, 4 recycled plastic table and chair sets (8 seater), and repair fence around Hoedjieskop open space/reserve.	R10 million
SANParks West Coast National Park	WftC West Coast National Park	Control of invasive alien vegetation, cleaning of the coast and coastal catchment areas, monitoring and compliance and environmental education and awareness	R6,8 million

Figure 4 below provides an indication of the WftC budget that was spent by each DM in the Western Cape during the 2015-2018 cycle (WCSocr, 2019). The WCDM had the second largest budget allocated in the Province with Eden DM having the largest budget.

While the WCDM endeavours to engage directly with the WftC programme, it is important that the LMs engage with the EPIP at the information sharing sessions so that priority projects can be highlighted and identified for the allocation of funding.

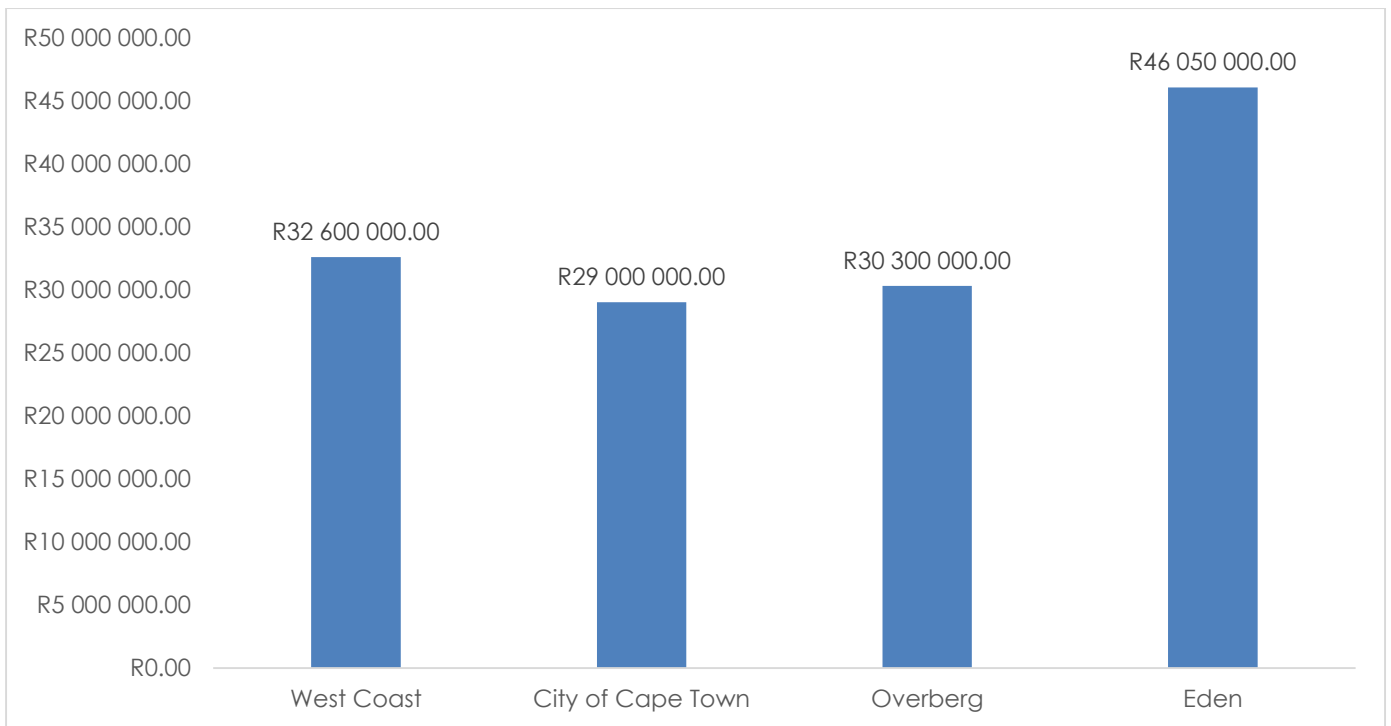


Figure 4: The WfC budget that was sent by each DM in the Western Cape during the 2015.2018 funding cycle (WCSOCR, 2019).

3.3.7. Public launch sites

A public launch site (PLS) is a site that has been listed by notice in the Gazette in terms of the Management of Public Launch Sites in the Coastal Zone Regulations 2014 (GN. No R 497 of 27 June 2014). The intention of these regulations is to manage public launch sites in the Coastal Zone as indicated in Section 83(1)(d)(i) and (o) of the ICMA, as amended. Members of the public may only launch a vessel from an official site. A vessel excludes non-motorised waterborne craft which do not require a vehicle or any other equipment to launch into the water.

Previously, the ORV Regulations used an application based system where applicants could submit an application for boat launch site license or exemption to DEA&DP. The new PLS regulations state that members of the public may only launch vessels from a public launch site. However, if managed PLS are not available, it is likely that many members of the public will continue to use un-listed launch sites, which will have negative ecological impacts in environmentally sensitive areas (Tunley et al., 2010).

Public launch sites are those listed in the Western Cape Provincial Gazette 7410, 26 June 2015. It is illegal to launch vessels from any other launch site, including those that were previously licensed or identified in any launch site audits.

The WCDM has 12 launch sites that have been listed in the Provincial Gazette (2015) and a further 24 launch sites that are unlisted. The registered launch sites within the WCDM are listed in Figure 5 below. The relevant Local Municipalities (LMs) have been identified as the management authorities responsible for the operation and maintenance of the launch sites. It is recommended that illegal use of unregistered launch sites be monitored and the Municipalities must determine whether there is a need to list additional launch sites as a result.

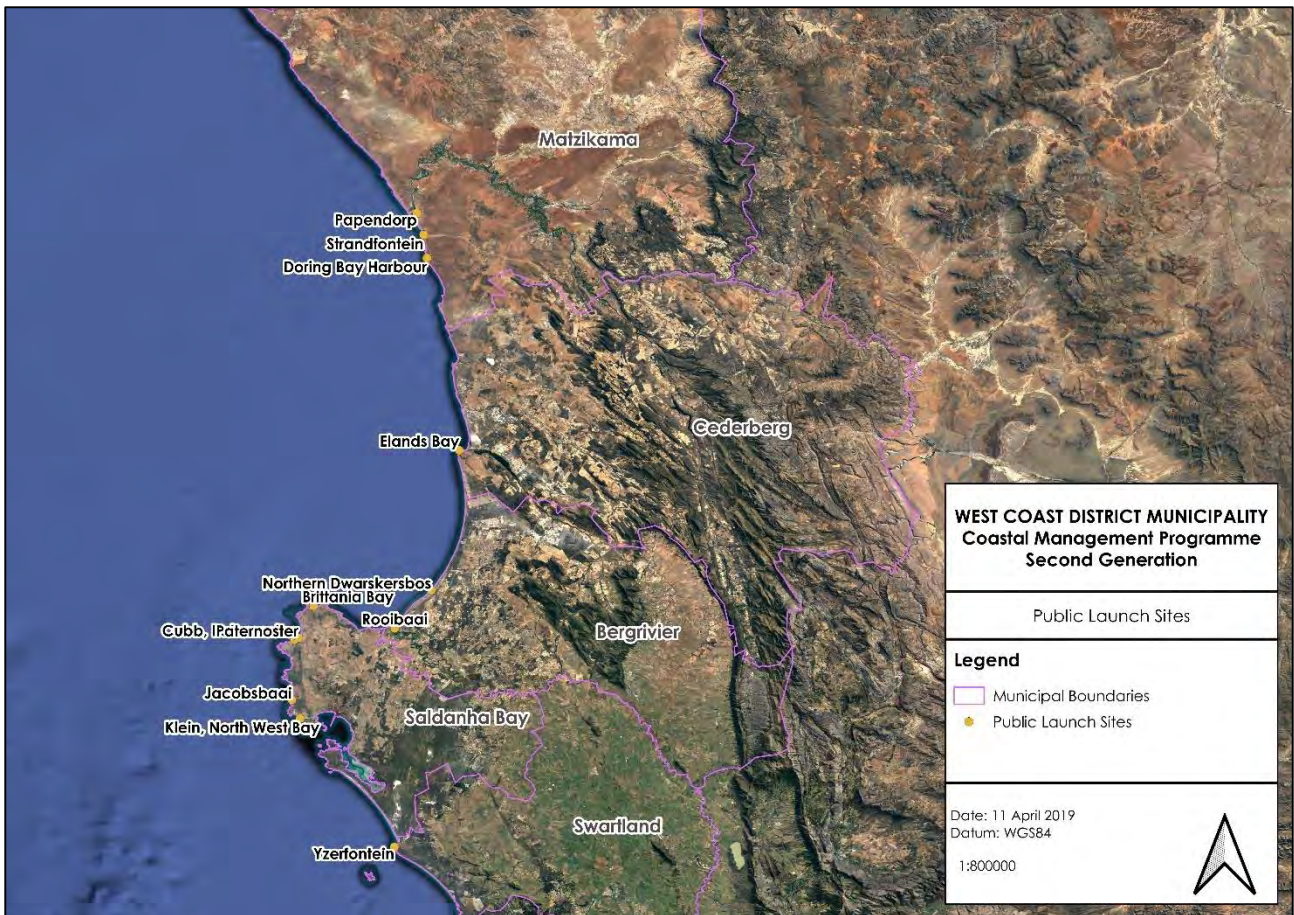


Figure 5: The locality of the listed launch sites located within each of the LMs in the WCDM.

The Bergriver LM are in the process of adding an additional two launch sites. These additional launch sites are as follows:

- Southern Dwaarskroep Public Launch site - was requested to be listed by DEADP on 28 November 2018 after approval by Council.
- Port Owen Public Launch site - request to be listed was sent to Province (DEADP) on 15/04/2019. Lease agreement will take place between POMA/ Bergrivier Municipality and CapeNature.

3.3.8. Use of vehicles in the coastal zone

Inadequate control of vehicle use in the coastal zone has led to the degradation of dunes, loss of habitat and natural coastal defences and overall damage of coastal ecosystems. It also poses a threat to the safety of people enjoying coastal recreation.

The regulation of the use of vehicles in the coastal zone is conducted through the Control of Use of Vehicles in the Coastal Zone Regulations (ORV Regulations) that came into effect on the 11th of May 2015.

The ORV regulations prescribe permissible uses that are described as activities in the coastal area that do not require a permit. These permissible uses include the following:

- The use of a vehicle:
 - on a public road;
 - on private land by the owner or with the written permission of the owner or lawful occupier of that land;

- on a road within a coastal protected area where written permission has been granted by the management authority of that coastal protected area, or provided that such use is authorised in the protected area management plan or integrated management plan compiled by the management authority;
- within a mining area as defined in section 1 of the Minerals and Petroleum Resources Development Act (No. 28 of 2002)
- in coastal public property within an operational harbour area that has already been physically modified from its original natural state; or
- in an emergency in order to safeguard human life or health, property or any aspect of the environment;
- the use of a vehicle within a public launch site or privately used launch site;
- the use by a physically disabled person of an electrically propelled wheelchair that is specifically designed and manufactured for this particular function;
- the use of a vehicle by an employee or agent of an organ of state acting in the course and scope of their employment or mandate, or by any person contracted by an organ of state, for the purposes of performing the public duties of that organ of state mandated by law; or
- the use of a vehicle by members of the National Sea Rescue Institute (NSRI) for the purpose of performing the public duties of that organisation including authorised training exercises.

According to the ORV regulations, the following activities where a vehicle may be required to be operated within the coastal zone will require a permit:

- Carrying out a non-recreational activity in terms of a right, permit or exemption granted under the ICMA, the Marine Living Resources Act (No. 18 of 1998) (MLRA) or the Sea Fishery Act (No. 12 of 1988);
- Conducting scientific research;
- Operating a tourism business;
- Accessing private property provided there is no reasonable alternative access to the property;
- Producing an advertisement, film, still photograph or a television programme;
- Access by a physically disabled person;
- Hosting a fishing competition; or
- The construction or maintenance of infrastructure within the coastal zone as authorised by a law.

The WCDM and the LMs are not mandated to receive and process ORV permits. This responsibility resides with DEFF: O+C, and is seen as a major drawback to achieving effective *integrated* Coastal Zone Management (CZM). However, it is important that the DM and LMs are aware of permitted ORV activities taking place in the coastal zone within their relevant areas, in order to fulfil their mandates with regards to maintenance of beaches. It is assumed that DEFF:O+C do engage with the LMs with regards to permitting ORV activities.

In the WCDM, there is an increase in illegal driving of vehicles within the coastal zone and while the WCDM and the LMs do not have a mandate to enforce the ORV regulations, they have a responsibility to report illegal activities to DEFF. Contacts where the public can report illegal activities along the coastal zone need to be made easily available so that members of the public, as well as the municipalities know where to report illegal activities that have been observed.

Since the LMs have a mandate to manage beaches, they also have the ability to physically block off illegal access points. The outcomes of the WCDM coastal access audit will inform

the identification of priority areas for coastal access and problem areas can potentially be addressed through the installation of physical barriers.

3.3.9. The use of the coastal zone for recreational activities

The WCDM and the LMs often received requests from the public to undertake various recreational and small-scale commercial activities in the coastal zone, in particular on beaches. Some of these requests include the following:

- Wedding ceremonies;
- Sporting tournaments;
- Corporate functions on beaches;
- Filming on beaches for commercial and advertisement purposes; and
- Photo shoots (non-commercial. I.e. family photo shoots).

The LMs have a mandate to maintain beaches within their respective areas. However, apart from the ORV Regulations, there are no regulations that have been developed that regulate these types of activities in the coastal zone.

Swartland Municipality has developed their own "Policy Guidelines on Filming in the Jurisdictional Area of Swartland Municipality". This policy describes the process to be undertaken to apply for a permit for filming in the coastal zone, and prescribes permitting fees. This policy also clearly outlines the code of conduct and obligations of the applicant in terms of carrying out filming activities in the coastal zone. This policy is very clear in terms of what is expected from the applicant before, during and after filming activities, and serves as a good example of a policy that could be developed for all the LMs within the WCDM.

It is suggested that a similar policy be drafted for all the LMs within the WCDM. This policy will function as a management tool for the LMs by providing clarity on the process to be followed to address and manage requests for these types of activities within the coastal zone. However, in order to simplify the management of activities in the coastal zone, an "umbrella policy" should be developed that incorporates all the activities that are frequently requested, e.g.: Wedding and other religious and cultural ceremonies, sporting tournaments, corporate functions (team building exercises, functions such as dinners or lunches, etc.), filming and photoshoots. The policy will also prescribe fees that will be required to be paid by the applicant. These fees must then be used to perform the LM function of maintaining the coastal areas within their own respective areas.

However, should a policy of this nature be developed, other gazetted regulations must be taken into consideration when an application is submitted. These include, but are not limited to, the following:

- The ORV Regulations – vehicles entering the coastal zone for setting up, operating and breaking down of events; and
- The EIA Regulations – the temporary installation of dune stabilisation infrastructure, the removal of 5m³ or more of beach sand, the clearing of 5m² of vegetation etc.

If any of the activities listed in the above-mentioned regulations are triggered, the applicant must be referred to the relevant Managing Authority.

In terms of determining the fee structure for this permit, the Municipality will need to follow the process for determining the fee structure prescribed by National Treasury.

3.3.10. Facilitation of coastal access through land use planning processes

During the stakeholder workshops, an important issue was raised regarding the municipal approval of plans for new developments along the coast, such as aquaculture facilities, housing developments and mines, which result in access to coastal areas being restricted. While these types of developments may be subject to Environmental Impact Assessments, it is important that the LMs take into consideration and provide comment on all potential impacts of new development proposals, particularly with regards to the impact on public access to the coast. It would be possible for the LM to include a set of conditions in the land use planning approvals to address restricted coastal access should it be deemed as serious impact. It is suggested that LMs engage more closely with applicants during the land use planning approval process in order to address issues such as coastal access in an amenable and practical manner.

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

- The outcomes and recommendations of the WCDM Coastal Access Audit need to be implemented once the process has been completed.
- The LMs are responsible for maintaining coastal access points and infrastructure, and signage needs to be either developed or upgraded at most of the coastal access points.
- The LMs can use their town planning processes to address coastal access issues related to applications for new developments along the coastline.
- The WfC Programme is an important resource for providing coastal access and funding of infrastructure and must be better utilised by the LMs.
- A coastal access by-law needs to be developed at local level in order to effectively manage coastal access.
- The LMs and DEFF need to engage more closely with each other with regards to the issuing of permits in terms of the MLRA. Permits are currently issued in areas where there is no public launch sites and no formal access.
- The LMs are responsible for the management and maintenance of Public Launch Sites and if they do not have capacity to fulfil their mandate, a service provider must be appointed.
- The Doringbaai Launch site needs to be assessed as it is dangerous for its users.
- Illegal ORVs are an issue along the WCDM coastline. The LMs can potentially construct physical barriers at these sites that will prevent vehicle access. However, it is important that any illegal ORV activities are reported to the DEA.
- A standardised policy is required for the management of recreational and commercial events taking place on beaches where the roles and responsibilities of the DM and LMs are clearly defined.
- Ensuring the safety and security of the public at beaches is important in terms of promoting beaches as a safe recreational space, as well as tourism destinations. Public safety needs to be improved along all sections along the coastline, particularly around popular coastal resorts and villages.

3.4 Theme 3: Coastal Planning and Development

Due to the ever-increasing demand for ocean and coastal space, appropriate coastal planning is required to ensure that all forms of development are aligned with ICMA and NEMA principles. This requires that measures which emphasise local economic development opportunities and approval procedures are put in place. But planning and spatial development must focus on sustainable and equitable development that also increases resilience to the impacts of climate change.

A number of spatial planning tools have been developed that assist decision makers in making informed and sustainable decisions. These spatial planning tools are aligned with

the NEMA Principles and ensure that development is conducted in an environmentally responsible manner. This section provides a summary of the existing spatial planning tools that are currently being incorporated into the WCDM and the LM planning processes. These tools aim to conserve the unique biodiversity of the district as well as to aid in the planning, adaptation and mitigation of climate change related impacts, particularly within the coastal zone.

3.4.1. Western Cape Biodiversity Spatial Plan (2017)

The Western Cape Biodiversity Spatial Plan (WCBSP) is the product of a systematic biodiversity planning assessment that delineates, on a map (via a Geographic Information System (GIS)), Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs) which require safeguarding to ensure the continued existence and functioning of species and ecosystems, including the delivery of ecosystem services, across terrestrial and freshwater realms. These spatial priorities are used to inform sustainable development in the Western Cape Province, including the WCDM and the LMs.

The WCDM IDP (2017-2022) has identified the importance of including CBAs and ESAs into their SDF in order to increase the areas resilience to climate change. Unfortunately, the WCDM SDF has not yet been updated to include the WCBSP. However, the WCDM IDP has identified one of the DMs objectives as being:

“To ensure the environmental integrity of the district is improved”

In order to do this, the WCDM IDP has actioned the review and implementation of the SDF to incorporate the WCBSP and to implement the recommendations and measures associated with the WCBSP within the next 5 years.

Figures 6 to 10 below provide maps for each of the LM's indicating the spatial extent of the CBAs and ESAs within the municipal areas. It is evident from this data that the incorporation of the WCBSP into all planning along the entire coastline is critical, as almost half the area is defined as a CBA¹, and large stretches fall into CBA² and ESA² categories.

¹Critical Biodiversity Areas (CBA) are areas that are required to meet biodiversity targets for species, ecosystems or ecological processes and infrastructure. CBAs are areas of high biodiversity and ecological value and need to be kept in a natural or near-natural state, with no further loss of habitat or species.

² Ecological Support Areas (ESA) are Areas that are not essential for meeting biodiversity targets, but that play an important role in supporting the functioning of PAs or CBAs, and are often vital for delivering ecosystem services. ESAs need to be maintained in at least a functional and often natural state, in order to support the purpose for which they were identified, but some limited habitat loss may be acceptable

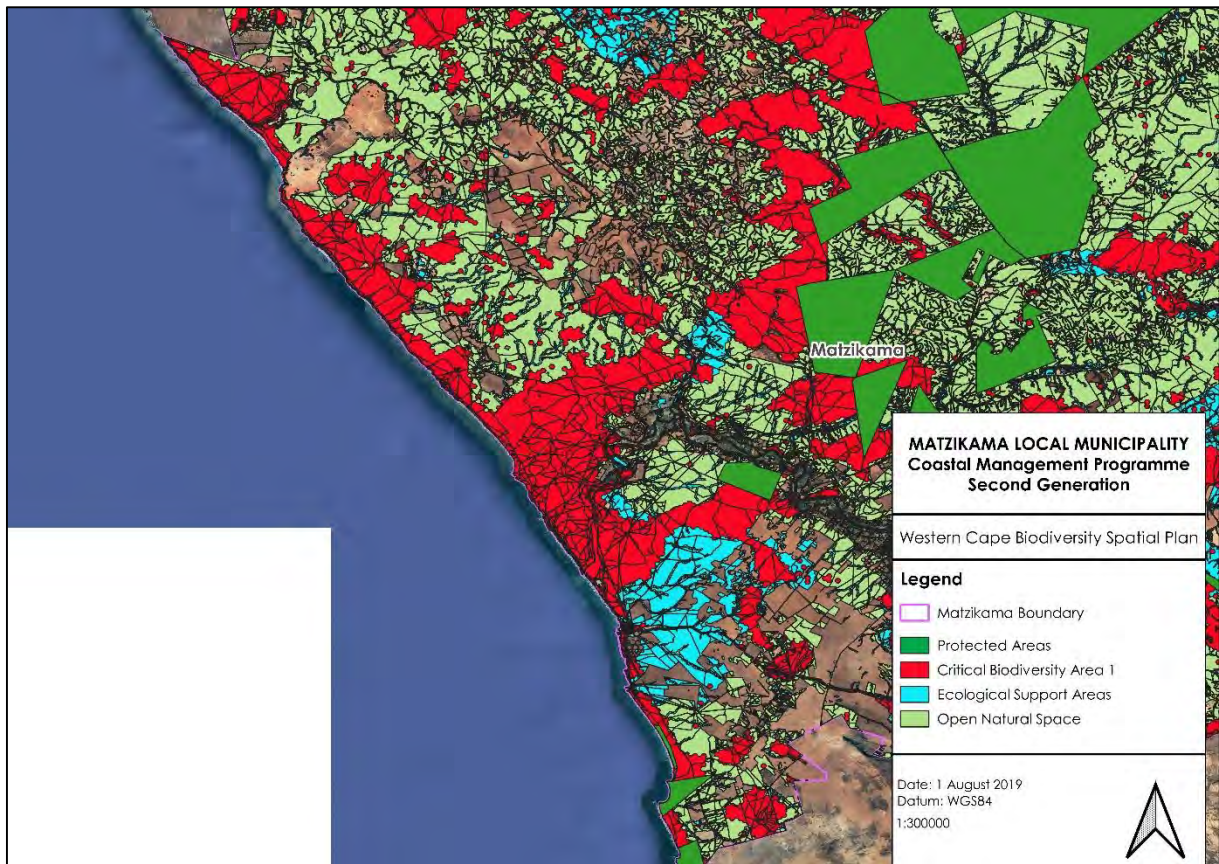


Figure 6: Critical Biodiversity Areas within the Matzikama LM (WCBS, 2017)

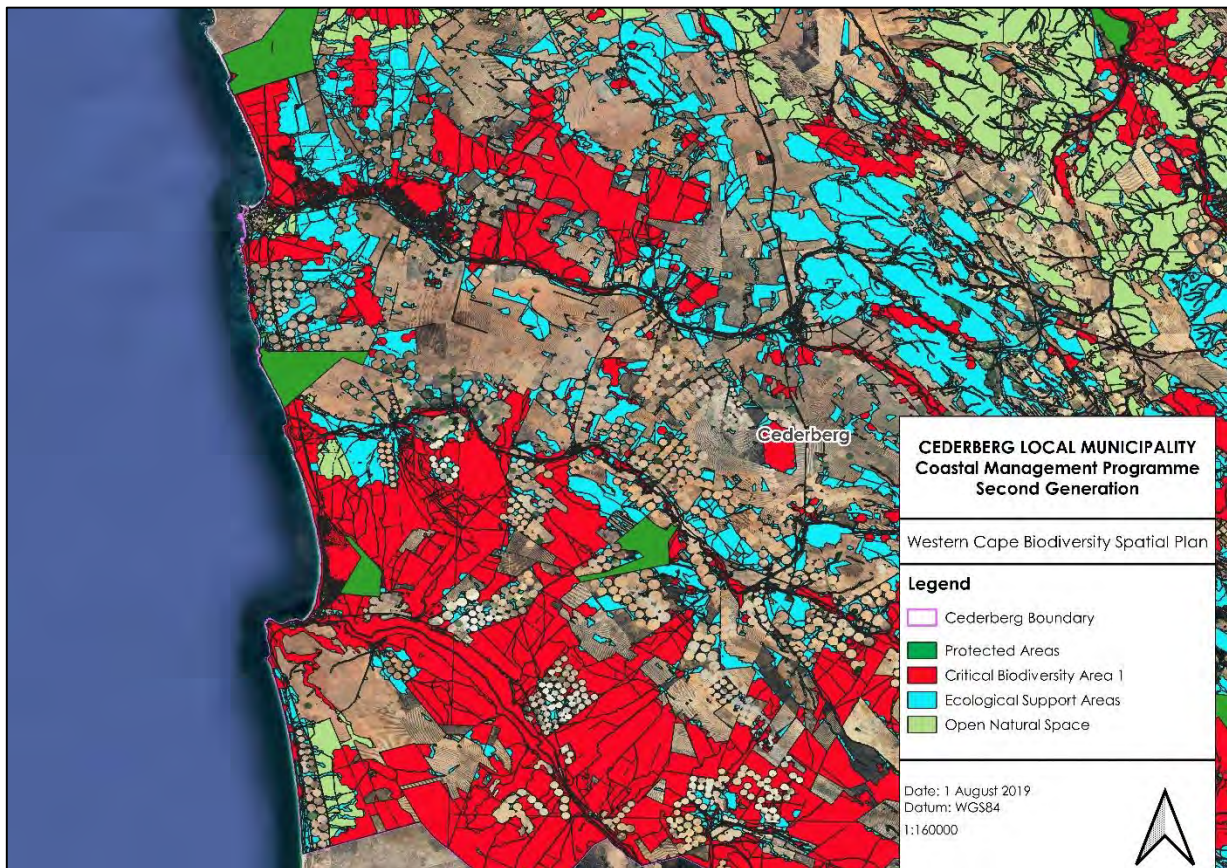


Figure 7: Critical Biodiversity Areas within the Cederberg LM (WCBS, 2017)

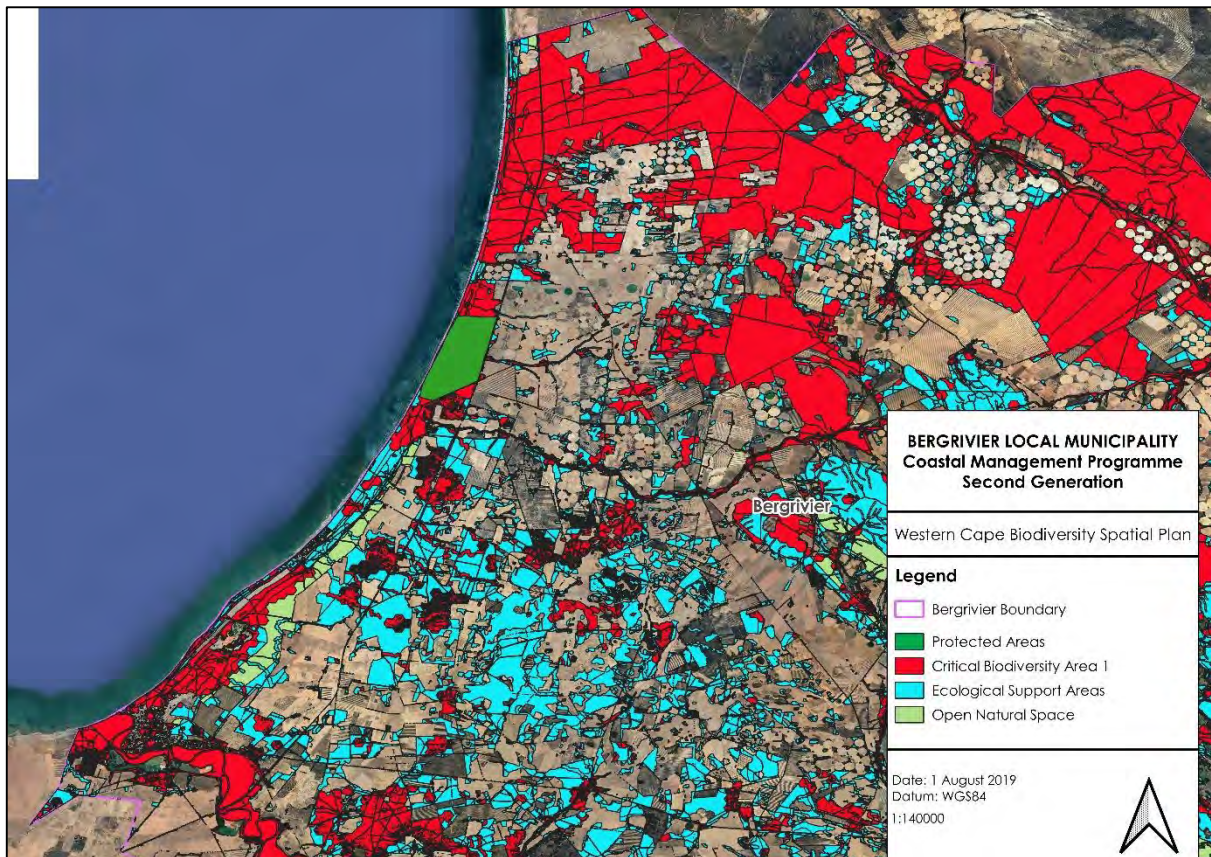


Figure 8: Critical Biodiversity Areas within the Bergrivier LM (WCBSP, 2017)

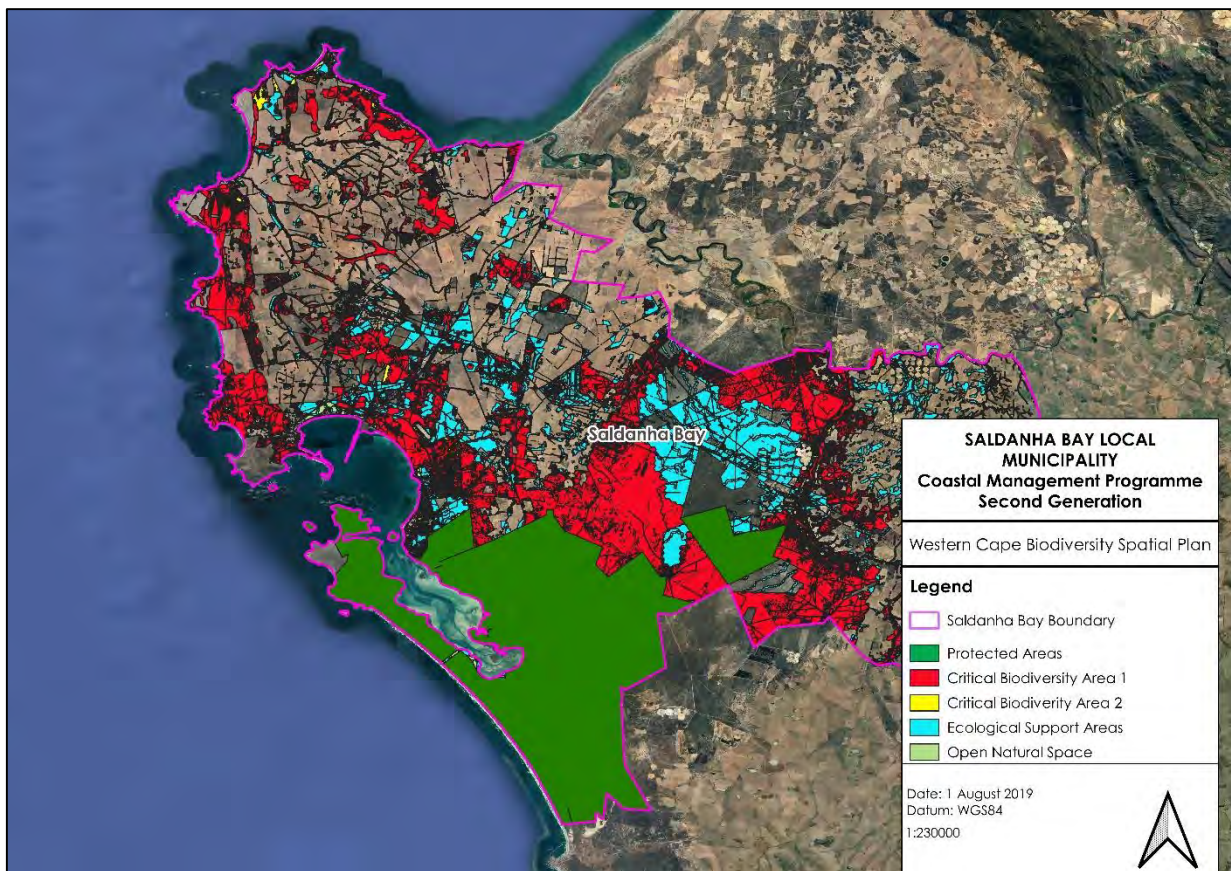


Figure 9: Critical Biodiversity Areas within the Saldanha Bay LM (WCBSP, 2017)

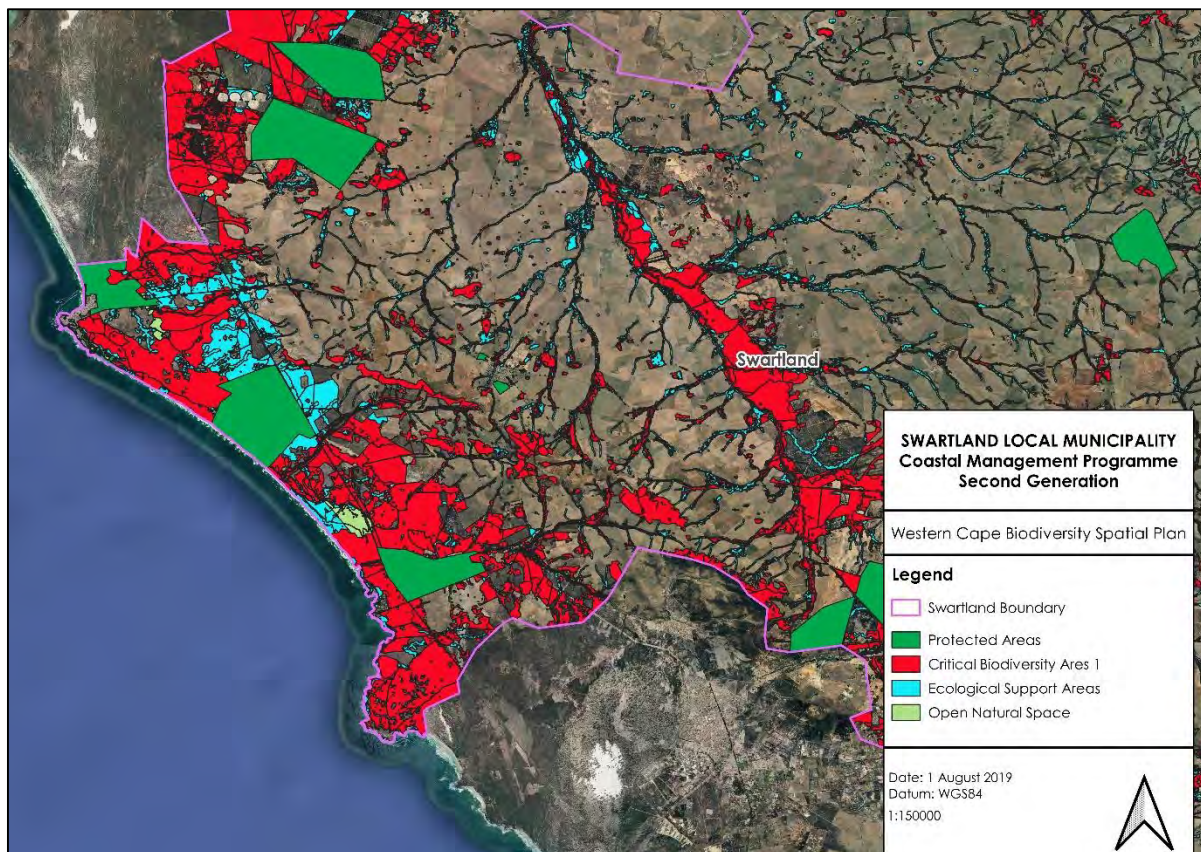


Figure 10: Critical Biodiversity Areas within the Swartland LM (WCBSP, 2017)

3.4.2. Cape West Coast Biosphere Reserve (CWCBR)

The CWCBR is an entity involving a members of the public, local businesses and a number of levels of government that range from international to the local level. The CWCBR is a collection of properties that are either privately or publicly held. A significant number of plans and policy statements at each level of government have been reviewed by the CWCBR in an attempt to understand their influence on the reserve.

Conservation of natural areas is centred around what remains of any particular natural area or specific vegetation type, and what state the remaining natural areas and vegetation are in at any given point in time. The fragmentation of natural vegetation into remnants increases the problem. For the CWCBR the situation is severe with all vegetation types, except Swartland Alluvium Renosterveld, Swartland Silcrete Renosterveld, and Saldanha Limestone Dune Thicket. All other vegetation types are undergoing major transformation and fragmentation.

A number of planning approaches for the CWCBR are to be used at provincial and local level planning. These include bio-regional planning that aims to create greater balance between conservation planning and development planning, by classifying "bio regions" on the basis of objective criteria to allow definition of different management systems. In addition, agro-ecological zoning and conventional regional planning approaches may also be applied.

The zones divide the biosphere reserve into workable management areas according to degrees of conservation, development and degradation. These zones are to be incorporated into all municipal planning documentation, in particular the IDP's and SDF's.



Figure 11: Cape West Coast Biosphere Reserve spatial map (www.capebiosphere.co.za)

The Biosphere Reserve is zoned according to the UNESCO method as core zones (statutory conserved areas), transition zones (developed areas), buffer zones (primarily natural veld privately owned) and urban areas. The boundaries of these zones were based on the cadastral information, reserves (private, provincial, marine and local authority) and other infrastructure (e.g. roads). Figure 11 indicates the spatial extent of these zones within the CWCBR.

3.4.3. Coastal Management Lines

Climate change has been highlighted as a current and future threat to coastal environments and infrastructure. The dynamic nature of coastal zones makes the prediction of sea level changes and calculation of the related risk to coastal communities challenging but essential in the face of the potentially extensive impacts from sea level rise related storms and storm surges on the coastal zone.

The establishment of Coastal Management Lines (CMLs) are a provincial responsibility, as legislated by the ICMA. CMLs are prescribed boundaries that may limit development in ecologically sensitive or vulnerable areas, or areas where dynamic natural processes pose a hazard or risk to humans. The ICMA allows CMLs to demarcate areas where authorities can prohibit or restrict the building, alteration or extension of structures that are either entirely or partly seaward of the CML. It is noted that the location of immovable property and the ownership and zonation of vacant land must be taken into consideration when delineating coastal management lines. The ultimate intentions of the CMLs are to:

- protect coastal public property, private property and public safety;
- determine features that should be protected under the coastal protection zone; and
- preserve the aesthetic values of the coastal zone.

To determine the CML, coastal features are considered alongside coastal risk zones, based on observed and available information. In developing a CML the following are considered:

- Environmental buffers required inland from the HWM to maintain a functional coastal ecosystem under future sea level rise scenarios;
- Social buffers required along the coast, for example, allowance for public beach access through and along the coastal frontage, areas which have cultural significance and will need to be preserved from development, or heritage resources and historically sensitive locations that require specific management; and
- Economic requirements for the coast, for example, allowance for new beach facilities that will need to be placed closer than would normally be the case. Economic demands often require a trade-off against environmental aspects at a particular site.

Demarcation of the actual CML is different for developed and undeveloped areas and is a combination of the two around estuaries.

In rural areas, the CML follows the landward boundary of the long-term risk projections. Where necessary, a separate line can be drawn around existing development and development rights within the risk zone in order to recognise the development rights within a 'development island'.

In urban areas, the CML is drawn seaward of properties adjacent to the shoreline with existing development or development rights, as the intention is not to use the coastal management/set-back line to impact on existing development rights.

The CML also extends along estuaries, and in developed areas it is aligned with the lower (water side) boundary of properties with existing development or development rights. In

rural areas, the CML runs along the 5m amsl (above mean sea level) contour or along the 1:100 year floodline around estuaries.

Overlay Zones are a universal mechanism for administration of CMLs within the extent of town planning regulations and management in the Western Cape. The overlay zones refer to areas designated as subject to short term (1:20 year), medium term (1:50 year) or long term (1:100 year) risk emanating from coastal processes such as coastal erosion, storm surges, sea level rise and storm wave run-up, based on risk modelling. In rural areas, the risk grading from low to high is not necessary, and hence only a default 'risk' zone is indicated as the entire area between the 0m amsl and landward boundary of the low risk (long term risk) zone (Figure 10).

When the CML and coastal management overlay zones are combined, a management scheme along the shore that guides where development should and shouldn't take place (coastal management/set-back line) and how it needs to be undertaken in order to protect property, lives and the integrity of the coast (overlay zones) is produced. Figure 12 below provides an example of what the final combined management scheme looks like in a developed or urban area in the West Coast District Municipality (WCG 2014). With the CML in place, development can be prevented from encroaching onto coastal public property, whilst the risk-based overlay zones will determine the nature of development in close proximity to the shoreline.



Figure 12: An example of the combined coastal management line and overlay zones (urban or developed area) in the West Coast District Municipality (WCG, 2014).

Draft CMLs have been determined for the entire WCDM coastline. However, the Draft CMLs are in the process of being formalised and adopted by the MEC. IN the meantime, it is important that the CMLs are incorporated into all municipal zoning schemes and considered in all planning decisions. Two of the LMs have already begun to consider the CMLs in terms of their planning processes through their SDFs. These LMs include the Cederberg LM and the Swartland LM.

3.4.4. West Coast District Municipality's Climate Change Response Framework (2014)

Climate change has become a reality in South Africa and is considered to be one of our largest economic and environmental challenges. A lack of resilience to climate change manifestations, and an inability to adapt will increase the susceptibility of human and natural systems to the impacts of climate change. It is anticipated that local government will play an important role in improving climate change resilience through the effective execution of its mandated duties. Local government will be required to plan and respond appropriately if it is to fulfil its objectives of sustainable and equitable service provision, enabling socio-economic development and providing a safe and healthy environment for all.

This WCDM's Climate Change Response Framework was developed in 2014 and is aimed at decision makers and technical personnel from local through to national government, development agencies, NGO's and civil society organisations in order to serve as a guide to improve adaptive capacity within the WCDM. The framework recognises that responding to, adapting to and mitigating climate change impacts needs to be a coordinated effort between the WCDM and the LMs.

The WCDM Climate Change Response framework identified the following climate change-related risks to the coastal zone:

- Increased coastal erosion and inundation;
- Increased or permanent inundation of infrastructure and utilities;
- Impacts on private and public harbours and boat ramps;
- Increased erosion or deterioration of coastal defences;
- Loss of private property and community assets;
- Loss of beach width; and
- Changes to wetland and estuary ecosystems due to sea level rise, erosion and saline intrusion.

The WCDM has a significant amount of infrastructure and settlements located within the coastal zone. Based on sea-level rise scenarios combined with the risk posed by coastal erosion, the majority of the WCDM's coastal infrastructure is at risk. This includes the following:

- Recreational facilities;
- Water management infrastructure; and
- Transportation infrastructure such as ports and road networks.

The WCDM Climate Change Response Framework reports that most of the LMs in the WCDM have implemented a reactive approach towards infrastructure management. In order to provide reliable levels of service, municipalities will have to review how they plan, design and manage their infrastructure to incorporate climate change considerations.

Based on the above as well as feed-back from stakeholders, the future needs in terms of coastal planning and development are as follows:

- The WCDM and the LMs must ensure that all biodiversity planning tools are incorporated into the Municipal SDFs as well as in town planning approvals.
- Impacts of climate change, such as sea level rise and coastal erosion due to storm surges and inundation, need to be considered prior to approving applications for new development within the coastal zone. Further studies need to be conducted with regards to developing clear guidelines to address the impacts of climate change on existing infrastructure and developed areas,

- There are sections along the WCDM that have been approved for development of upper income housing estates but with low occupancy levels. To address the high percentage of vacant plots and the low occupancy levels of residential dwellings, and to equitably designate zones for the purposes of mixed cost housing and taking into account the needs of previously disadvantaged individuals a key priority would be to rezone certain portions of these areas.
- Coastal Management Lines must be incorporated into the SDFs once they have been approved by the MEC, but must in any event be considered in all coastal plans and proposed coastal developments.
- Erosion control measures must be implemented along sections of the beaches in the WCDM, particularly at Strandkombuis.
- R10 million was allocated to addressing coastal erosion at Strandfontein and an engineering service provider was appointed, but to date nothing has happened. This R10 million has been allocated for the improvement of coastal infrastructure and this specific Environmental Infrastructure Project will be implemented as soon as DEA appoints a Implementer to work with the Municipality. DEA is currently in the process of approving business plans for these projects to be implemented within the next 2 year EPIP funding cycle.

3.5 Theme 4: Compliance, monitoring and enforcement

3.5.1. Environmental Management Inspectorate (EMI)

EMIs represent the environmental compliance and enforcement capacity in respect of NEMA and Specific Environmental Management Acts (SEMAs) as defined in NEMA. There are also officials appointed in terms of provincial legislation and local authority by-laws who also carry out environmental compliance and enforcement functions in terms of that legislation. In many instances, officials may carry both the EMI designation in terms of national environmental legislation, as well as a separate provincial or municipal designation in respect of ordinances or by-laws.

The following relevant government organisations in the Western Cape have appointed EMIs to carry out environmental compliance and enforcements functions:

- DEFF;
- SANParks;
- Department of Human Settlements, Water and Sanitation (DHSWS);
- SANBI;
- DEA&DP; and
- CapeNature.

DEFF initiated an EMI Local Authority Project in 2011 that aimed to capacitate local authorities by providing them with the relevant mandate to enforce certain environmental legislation in terms of Schedules 4 and 5 of the Constitution, by providing the legislative tools to do so. In the 2017-2018 financial year, DEFF reported that 61 local authority EMIs had been designated in the Western Cape, of which two were within the WCDM. The two EMIs within the WCDM.

In terms of Section 31B and C of NEMA, the Minister of the DEFF and MECs are empowered to designate EMIs at their discretion. The Minister and MECs can further delegate this power to designate EMIs to other organs of state. Examples of this include SANParks and the Head of DEA&DP.

Various grades of EMIs exist that are capacitated to enforce a variety of functions in terms of NEMA, with Grade 1 EMIs holding the greatest amount of power in terms of enforcement. Table 3 below provides a description of the powers that are granted to the different grades of EMIs in terms of enforcing NEMA.

Table 3: Powers granted to the various grades of EMIs in terms of NEMA

Grade	Powers that may be conferred in terms of Section 31D(3) of the NEMA
5	Powers in terms of section 31H, section 31I (3) and section 31J of the Act.
4	All the powers given to environmental management inspectors under the Act, except for the power under sections 31H(1)(b), 31H(5), 31I(3) 31J, 31L and 34G(2) of the Act.
3	All the powers given to environmental management inspectors under the Act, except for the power under sections 31H (5) and 31L of the Act.
2	All the powers given to environmental management inspectors under the Act, except for the power under section 31L of the Act.
1	All the powers given to environmental management inspectors under the Act.

To be eligible for EMI designation, an official must complete a relevant training course approved by the Director-General. Currently, DEFF offer an EMI Basic Training Course. DEFF normally host two EMI training courses per year. Officials who wish to undergo the EMI training are required to submit an application form to DEFF, which will be evaluated to ensure that the applicant meets the minimum requirements to attend the course. The organisation who has designated the applicant is responsible for financing the training of the applicant.

However, it important to note that being a government worker and having promulgated by-laws also give the municipality powers to enforce constitutionally mandated powers. EMI status is not required to fulfil this function.

3.5.2. Fisheries Control Officers

Fisheries Control Officers (FCOs) are appointed by DEFF in terms of Chapter 6 of the Marine Living Resources Act (No. 18 of 1998) and are responsible for ensuring that the provisions of the MRLA are being complied with. The WCMD have a total of eight fisheries offices along the coastline. These fisheries offices are located as follows:

Doringbaai	027 215 1211
Elands Bay	022 972 1706
Jacobs Bay	022 715 3443
Laaiplek	022 783 1035
Lamberts Bay	027 432 1631
Saldanha	022 714 1710
St Helena Bay	022 736 1118
Yzerfontein	022 451 2267

Another mechanism that can be used to enact the MLRA is through the appointment of Honorary Marine Conservation Officers. These Officers are appointed in terms of Section 9 of the MLRA and the position is entirely voluntary. These officers work closely with the FCO and act as they "on-the-ground" eyes and ears of the DEFF compliance directorate. The Officers can be members of the community or employees of the municipality, and do not have to be employed by DEFF.

It is important that the WCMD, LMs and communities engage closely with the local FCOs with regards to reporting illegal activities in terms of the MLRA and that Honorary Marine

Conservation Officers be appointed to assist in this role. These illegal activities include, but are not limited to, abalone poaching, suspicious vessels at sea and illegal fishing activities.

3.5.3. Air Quality Compliance and Enforcement in the WCDM

A dedicated air quality management section has been established in the WCDM and has been properly capacitated through the appointment of trained staff, mandated to do compliance monitoring and enforcement. Currently, two WCDM staff members have been trained as EMIs and await final designation. The process of designation of these officials must, however, first be clarified at national and provincial level since municipalities do not have the authority in terms of NEMA to do such designations. It is hoped that an implementation protocol will soon be entered into between the MEC and Council. Until such time as the legal issues regulating the designation of EMIs have been resolved, it is recommended that municipal staff be appointed by the MEC and report to provincial officials. This will create an opportunity for municipal EMIs to gain valuable experience from provincial staff until such time as the legal issues relating to designation by municipalities have been concluded.

Council's Manager: Air Quality and Senior Air Quality Officer have been designated as EMI's by the MEC on 31 July 2014. Compliance and enforcement actions have been implemented at various industries with assistance from DEA&DP as well as DEA.

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

- There is a need for EMIs at a local level. One Grade 5 EMI needs to be appointed in each LM.
- The WCDM EMIs must be continually supported through training and provision of resources.
- Contact details of the relevant EMIs and FCOs in the WCDM must be publicly displayed at known infringement sites so that members of the public know who to report illegal activities to.
- The implementation of the CMP must be monitored through the WCDM Coastal Committee.
- SAPS, EMIs and FCOs need to be more visible in coastal areas to deter illegal activities from taking place.
- Municipal by-laws need to be better enforced.

3.6 Theme 5: Estuary management

Although the WCDM does not have a high number of estuaries, almost all the estuaries in the District are heavily impacted. These estuaries require the establishment and implementation of strategies to improve the management and protection of estuarine resources, as well as the need to secure sufficient financial resources to fund and implement identified actions, research projects, initiatives and advisory forums. This is done through the development of Estuarine Management Plans as per the NEMP.

The updated National Biodiversity Assessment (2019) identifies 29 estuaries within the WCDM. The locality of these estuaries are indicated in Figure 13 below and a brief description of each has been provided in Table 4.

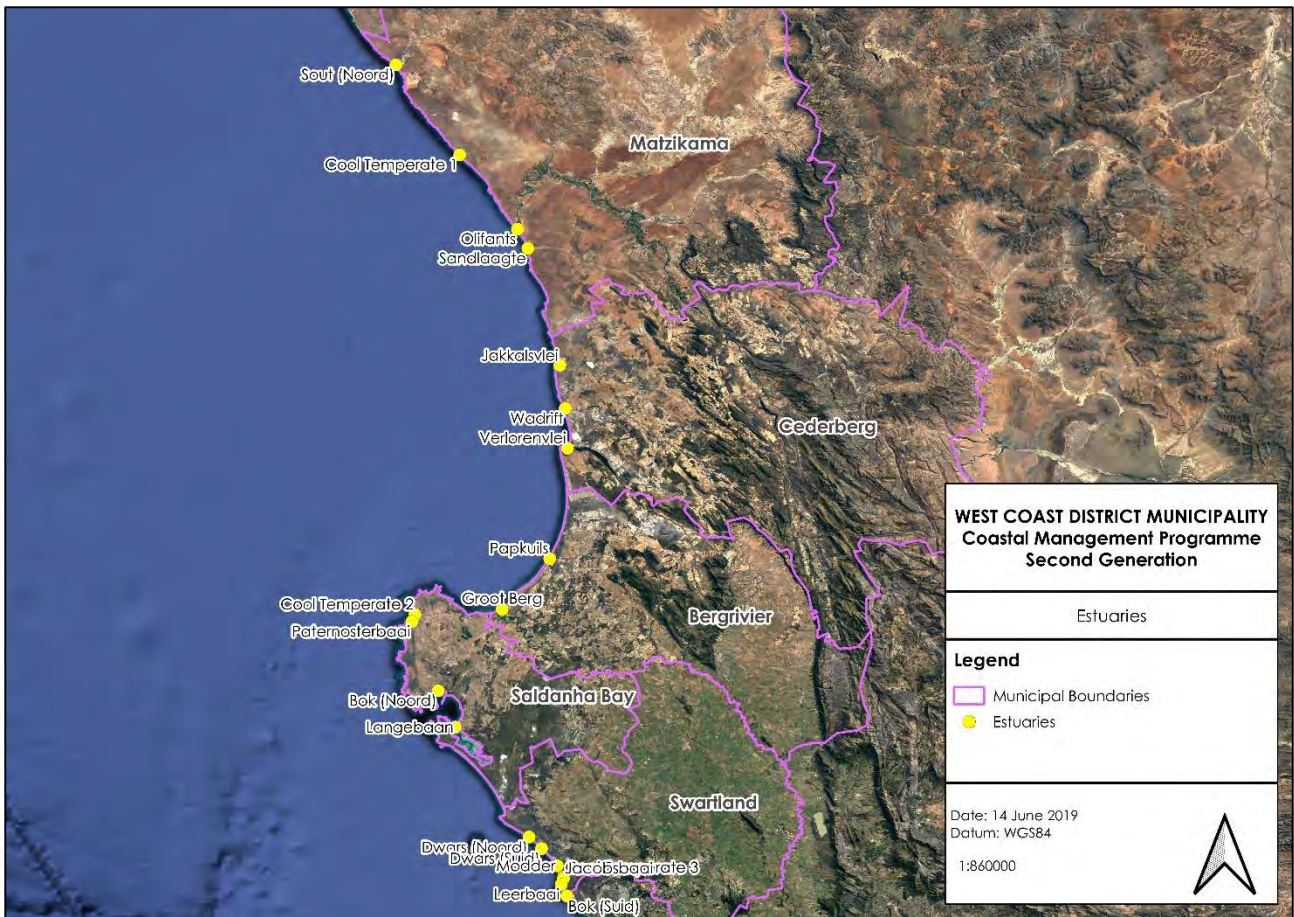


Figure 13: Estuaries in the WCDM including the Langebaan lagoon (National Biodiversity Assessment, 2019).

Estuaries are recognised as particularly sensitive and dynamic ecosystems, and as such require a more integrated and holistic approach in the planning and control of activities related to their use and management. As a result, the ICMA, via the prescriptions of the National Estuarine Management Protocol (the Protocol), require Estuary Management Plans to be prepared for estuaries in order to create informed platforms for efficient and coordinated estuarine management. Table 4 below provides a brief summary of the characteristics of each estuary within the WCDM as well as whether an Estuarine Management Plan is being developed or not.

The RMAs for the estuaries in the WCDM are currently being identified. The pending amendment to the NEMP has delayed this process due to the roles and responsibilities of the municipalities with regards to estuary management needing further clarification. This is as a result of the Overberg vs. Abbott judgment that was described in more detail in Section 2.1 of this report.

The Estuary Management Framework and Implementation Strategy project that is being developed by DEA&DP, is in the final stages of completion. The strategy will provide some guidance on how and what kind of management will be implemented in the smaller estuary systems as well as will assist to clarify the roles and responsibilities of the municipalities with regards to the management of the estuaries in the WCDM. Discussions and the way forward for EMPs for some of the smaller estuaries that have recently been included in the 2019 NBA will still be discussed with the relevant stakeholders (*Personal communication Melissa Naiker, DEA&DP*).

Although the WCDM will not be the designated RMA for any of the estuaries within its boundaries, the WCDM has been assigned certain actions in the Implementation Strategies in each of the EMPs. The management objectives and action plans that require action from the WCDM are provided in Appendix B, and have been included as part of the Implementation Strategy in this CMP.

Table 4: A summary of the characteristics of each of the estuaries located within the WCDM

Estuary name	Municipal Area	Estuary Type	Present Ecological State (NBA, 2018)	Biodiversity Importance	EMP developed?	Unique Characteristics and Pressures
Sout (Noord)	Matzikama LM	Arid Predominantly Closed Estuary	E – Seriously modified. The loss of natural habitat, biota and basic ecosystem functions and processes are extensive	Low to average importance.	Yes, EMP currently in draft state and being updated by Royal Haskoning DHV.	<p>The size of the Estuarine Functional Zone (EFZ) is approximately 433.4 ha, extending over a length of 7.8 km along the eastern arm.</p> <p>The estuary experiences very high pressures regarding flow modification and habitat loss (NBA, 2018).</p> <p>Salt works/mining takes place the middle reaches of the estuary and heavy mineral mining occurs 5 km south of the estuary at Brand-se-Baai, at the Tronox Namakwa Sands Mineral Separation Plant.</p> <p>A minor portion of the Sout River catchment is characterised as part of the Knersvlakte, and the estuary would benefit from conservation principles applicable to the broader Knersvlakte Bioregion.</p>
Cool Temperate 1	Matzikama LM	Micro-outlet	Not determined	Not determined	Yes – EMP was updated in 2017 by Royal Haskoning DHV.	This information will need to be updated once the updated National Biodiversity Assessment has been made available.
Olifants	Matzikama LM	Predominantly Open Estuary	C - Moderately modified. A loss and change of natural habitat and biota have occurred but the basic ecosystem functions and processes are still predominantly unchanged.	High importance.	Yes – EMP was updated in 2017 by Royal Haskoning DHV.	<p>The Olifants is one of the largest estuaries in South Africa and is one of the most important estuaries in terms of its conservation value and from an ecological, social and cultural heritage perspective.</p> <p>The estuary experiences high pressures with regards to pollution, habitat loss due to mining activities, invasive alien plants and fishing effort.</p> <p>It is the least developed of the permanently open estuaries in South Africa.</p> <p>The people of Ebenhaeser and Papendorp have a long history of fishing in the Olifants</p>

						<p>River estuary and as a result the estuary experiences high pressure as a result of fishing effort.</p> <p>Birds are probably one of the most important components of the estuary's biodiversity. The diversity and numbers of birds are very high, due to the size and diversity of habitats on the estuary, and its lack of disturbance.</p> <p>This estuary has been declared and Important Bird Area</p> <p>Upper reaches of the Olifants estuary are located within the Knersvlakte Bioregion Expansion Corridor.</p>
Sandlaagte	Matzikama LM	Micro-outlet	Not determined.	Not determined.	No	This information will need to be updated once the updated National Biodiversity Assessment has been made available.
Jakkalsvlei	Cederberg LM	Large Temporarily Closed Estuary	D - Largely modified. A large loss of natural habitat, biota and basic ecosystem functions and processes have occurred.	Low to average importance.	Yes, EMP currently in draft state and being updated by Royal Haskoning DHV.	<p>Jakkalsvlei estuary and its catchment falls within the very rural, and largely undeveloped areas.</p> <p>It is a relatively small estuary and has an average importance with regards to its biodiversity value.</p> <p>The main form of social dependency associated with the Jakkalsvlei estuary relates to recreational/ aesthetic value from a tourism and landownership perspective. Above the estuary, the Jakkals River is vitally important in terms of regional water supply, particularly for irrigation.</p> <p>While the estuary falls just outside of the Greater Cederberg Biodiversity Corridor, the catchment area of the Jakkals River would benefit from the implementation of the agriculture best practise guidelines produced under the initiative.</p>

Wadrift	Cederberg LM	Arid Predominantly Closed Estuary	E – Seriously modified. The loss of natural habitat, biota and basic ecosystem functions and processes are extensive	Low to average importance.	Yes, EMP currently in draft state and being updated by Royal Haskoning DHV.	The Wadrift estuary is known as an important site for its rich bird diversity. The Wadrift estuary has not been identified as a national priority estuary in need of formal protection, however, it does fall within the Greater Cederberg Biodiversity Corridor and as a result, some level of sustainable management is required.
Verlorenvlei	Cederberg LM	Estuarine Lake	D – Largely modified. A large loss of natural habitat, biota and basic ecosystem functions and processes have occurred.	Important.	Yes – EMP was updated in 2018 by Royal Haskoning DHV.	Verlorenvlei is one of the largest estuarine lakes in South Africa but is also one of the country's few coastal freshwater lakes. It predominantly functions as a freshwater system where the mouth is perched and only allows occasional seawater inflow during high spring tides and stormy conditions at sea. Designated as a Ramsar site in 1991, and also identified as an Important Bird Area, Verlorenvlei is regarded as one of the ten most important wetlands for wading birds in the South-Western Cape. It has been listed as one of the estuaries with minimal development and in a good state to be conserved so as to control further developments. Despite the importance of this estuary in South Africa, it has no official conservation status.
Papkuijs	Bergrivier LM	Micro-outlet	Not determined	Not determined.	No	This information will need to be updated once the updated National Biodiversity Assessment has been made available.
Groot Berg	Bergrivier LM	Predominantly Open Estuary	C – Moderately modified. A loss and change of natural habitat and biota have occurred but the basic ecosystem functions and	High importance.	Yes – EMP was updated in 2017 by Royal Haskoning DHV.	The Berg estuary is rated as the third most important estuary in South Africa from a conservation perspective. Birds are one of the most important components of the Berg estuary's biodiversity. The Berg supports the highest recorded density of shorebirds on the West

			processes are still predominantly unchanged.			Coast of Africa, and supports nationally important populations of several species. The estuary provides a nursery area for numerous fish species that are caught in the commercial and recreational inshore fisheries along the west coast. The estuary is a popular tourist destination for South Africans and overseas tourists. The north bank of the lower estuary is almost completely urbanized, while the middle and upper reaches have a strong natural or rural feel.
Cool Temperate 2	Saldanha Bay LM	Micro-outlet	Not determined	Not determined.	No	This information will need to be updated once the updated National Biodiversity Assessment has been made available.
Paternosterbaai	Saldanha Bay LM	Micro-outlet	Not determined	Not determined.	No	This information will need to be updated once the updated National Biodiversity Assessment has been made available.
Bok (Noord)	Saldanha Bay LM	Micro-outlet	Not determined	Not determined.	No	This information will need to be updated once the updated National Biodiversity Assessment has been made available.
Langebaan	Saldanha Bay LM	Estuarine Lagoon	B - B Largely natural with few modifications. A small change in natural habitats and biota may have taken place but the ecosystem functions and processes are essentially unchanged.	High importance.	Yes, the management strategies and actions for this estuary are nested in the Management Plan for the West Coast National Park, which is managed by SANParks	Langebaan Lagoon falls within the West Coast National Park (WCNP), which is managed by SANParks. The Lagoon is also a proclaimed Marine Protected Area within the WCNP. Langebaan Lagoon is the only non-estuarine tidal lagoon in South Africa uniquely sheltered with a strong and distinct tidal flow. It is characterised by high levels of productivity, with uniquely diverse biotic communities. It has a small freshwater input from the aquifer on the southernmost part of the lagoon as salinities remain equivalent to those inside and outside of the bay.

						<p>Langebaan Lagoon has a rich marine invertebrate fauna of more than 400 species.</p> <p>In terms of birds, Langebaan Lagoon provides an important feeding area for migrant waders and the lagoon supports approximately 26 % of all waders noted in the wetlands of the south-western Cape Province.</p> <p>The Langebaan Lagoon is an Important Bird Area as well as a Ramsar wetland of importance.</p>
Dwars (Noord)	Swartland LM	Micro-outlet	Not determined	Not determined.	No	This information will need to be updated once the updated National Biodiversity Assessment has been made available.
Dwars (Suid)	Swartland LM	Micro-outlet	Not determined	Not determined.	No	This information will need to be updated once the updated National Biodiversity Assessment has been made available.
Modder	Swartland LM	Micro-estuary	Not determined	Not determined.	No	This information will need to be updated once the updated National Biodiversity Assessment has been made available.
Cool Temperate 3	Swartland LM	Micro-outlet	Not determined	Not determined.	No	This information will need to be updated once the updated National Biodiversity Assessment has been made available.
Jacobsbaai	Swartland LM	Micro-outlet	Not determined	Not determined.	No	This information will need to be updated once the updated National Biodiversity Assessment has been made available.
Leerbaai	Swartland LM	Micro-outlet	Not determined	Not determined.	No	This information will need to be updated once the updated National Biodiversity Assessment has been made available.
Bok (Suid)	Swartland LM	Micro-outlet	Not determined	Not determined.	No	This information will need to be updated once the updated National Biodiversity Assessment has been made available.

An Estuary Advisory Forum (EAF) is a platform that can be established to provide an advisory service to the RMA on issues specific to the management and implementation of the EMP, as well as being the entity that links all stakeholders, which serves to foster stakeholder engagement and to facilitate the implementation of the project plans identified in the EMP. It is envisioned that the broader community is also able to voice concerns and raise issues via the EAF. This includes Ratepayers' Associations, NGO's, community groups, conservancies, etc., as well as representatives from surrounding industry and agriculture.

While the establishment of an EAF for each estuary is no longer a requirement in the 2013 NEMP, the Western Cape Government still supports their establishment and recommends that private entities and non-government organisations continue to play a supporting role in the implementation of the EMPs. DEA&DP are drafting an Institutional Framework for EAFs as part of their EMFIS project. This document will provide a resource to assist in the structure and management of the EAFs to ensure that the estuaries within the WCDM are effectively managed.

While an individual EAF is not necessarily always recommended, the establishment of a regional EAF can be proposed. The EAF should be chaired by the RMA and should aim to meet on a quarterly basis (Jakkalsvlei EMP; DEA&DP, 2018). The EMPs that have been developed for the estuaries within the WCDM are attached in Appendix C.

The following Estuary Advisory Fora (EAFs) have been established, on which the WCDM are represented:

- Olifants EAF;
- Verlorenvlei EAF; and
- Berg River EAF.

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

- The RMAs for each of the estuaries need to be officially designated.
- The EMPs need to be approved, adopted, implemented and implementation must be monitored through the EAFs and the WCDM Coastal Committee.

3.7 Theme 6: Natural resource management

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

3.7.1. Vegetation

The WCDM is located within the Cape Floristic Kingdom consisting of the Fynbos Biome, which is predominant towards the south of the region, and the Succulent Karoo Biome, which extends along the north-westerly margin of the region. Both of these biomes have been identified as global biodiversity hotspots with high levels of diversity and endemism for plants and animals. The Succulent Karoo is one of only two semi-arid biodiversity hotspots in the world, and exhibits the highest plant diversity for a semi-arid ecosystem globally. The region contains about 9000 plant species, of which over 6000 are endemic. The diverse soil types and variation in rainfall distribution are key to this diversity. The region also has high animal diversity, including both vertebrates and invertebrates and is especially rich in lizard, amphibian and insect species (WCDM SDF, 2013).

A significant portion of the low-lying vegetation has already been lost due to agricultural activities, and resort and urban settlements have also had a large impact on the biodiversity of coastal regions. Other significant threats to biodiversity within the coastal zone include port land management and invasive alien plant infestation, soil erosion, overgrazing and inappropriate fire regimes. When practices are unsustainable, land uses such as mining, potato farming and 4x4 trails pose threats to the West Coast's biodiversity (WCDM SDF, 2013)).

3.7.2. Formal protected Areas

There are a number of both terrestrial and marine protected areas within the WCDM. This protected area network comprises of South African National Parks (SANParks), CapeNature, Local authority and privately managed protected areas. Figure 14 below indicates the location of the protected areas located along the coast of the WCDM.

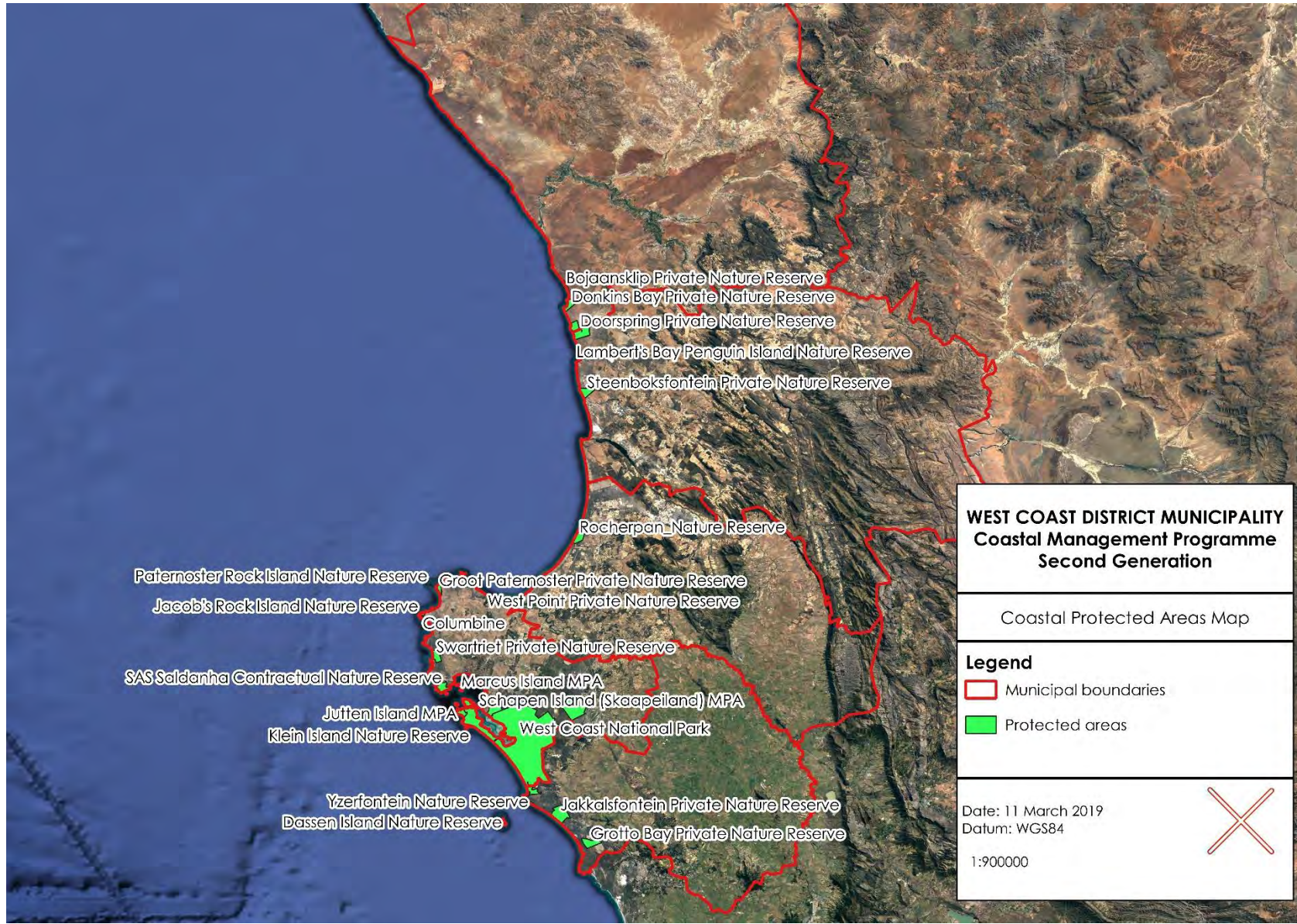


Figure 14: Formal protected areas within the coastal zone of the WCDM (WCBSP, 2017)

Cape West Coast Biosphere Reserve

The West Coast Biosphere Reserve covers a large area extending from the Diep River north of Cape Town to the Berg River and includes the whole of the municipal area. There are several reserves in SBM, namely:

- The West Coast National Park (WCNP);
- Langebaan Lagoon Marine Protected Areas (which is included in the WCNP);
- the Postberg Nature Reserve;
- the SAS Saldanha Nature Reserve;
- Jacob' Rock Nature Reserve;
- Swartriet Private Nature Reserve;
- the Cape Columbine Nature Reserve;
- the Groot Paternoster Private Nature Reserve;
- Paternoster Rocks Provincial Nature Reserve; and
- Hopefield Private Nature Reserve.

The aim of the Cape West Coast Biosphere is to:

- Foster human development that is ecologically sustainable.
- Conserve the landscapes, vegetation and species of the West Coast
- Lend support for research, monitoring, education and information exchange related to local, national and global issues of conservation and development.
- A strategic and associated business plan has been prepared to ensure that the goals of the biosphere are achieved.

The CWCBR Spatial Development Plan has been discussed in Section 3.4.2 of this report.

West Coast National Park

The West Coast National Park (WCNP) is situated approximately 100km northwest of Cape Town and stretches from Yzerfontein in the south to Langebaan in the north, and from the Atlantic Ocean in the west (with approximately 30 km of coastline) across the West Coast road (R27) towards Hopefield in the east (Figure 15). The WCNP includes Jutten Island, Malgas Island, Needle Rock, Schapen Island, Postberg Nature Reserve and Klein Island.

The park falls within the WCDM and in the Saldanha Bay LM, with the Swartland LM located adjacent to the park in the south. The park forms the northern core of the Cape West Coast Biosphere Reserve, (CWCBR) and is fully integrated in the various integrated development plans (IDPs) and spatial development frameworks (SDFs) of the municipalities.

The key conservation areas of West Coast National Park are the Langebaan Lagoon and the offshore islands in Saldanha Bay, which together form the Langebaan Ramsar site, and they are proclaimed Marine Protected Areas. The lagoon has a rich diversity of marine invertebrates and seaweeds and supports approximately 10% of the coastal water population in South Africa. The offshore islands provide important nesting areas for several red-listed seabird species. The substantial terrestrial section of the park protects habitat types which are threatened by agricultural activities and housing developments (SANParks, 2013).

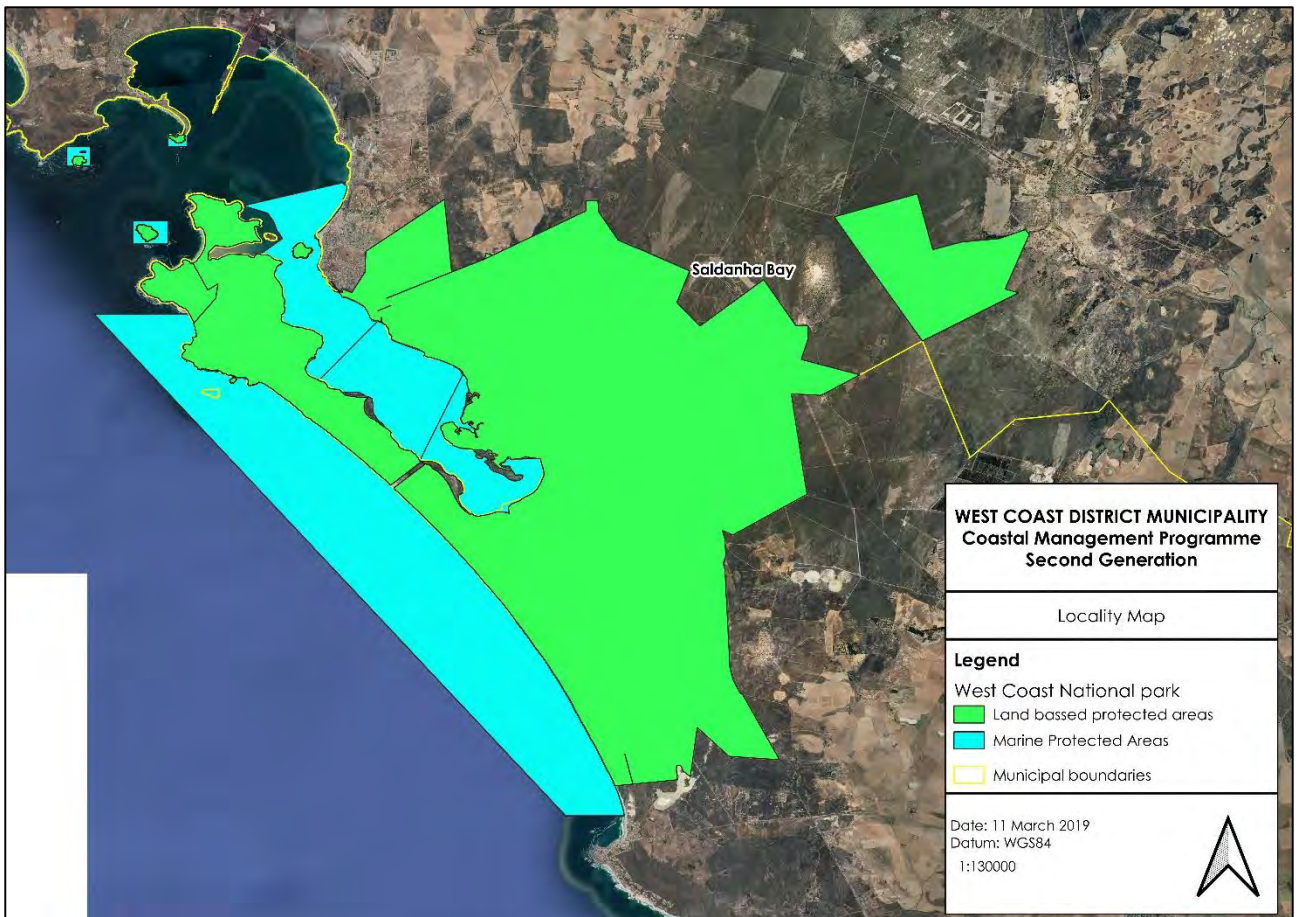


Figure 15: The boundaries of the WCNP, including the MPA sections.

Offshore Marine Protected Areas

Operation Phakisa identified the need to protect off shore ocean habitats within South Africa's Exclusive Economic Zone (EEZ). Through Operation Phakisa, a number of offshore sites were identified and 20 of these have been gazetted as Marine Protected Areas (MPAs) (Gazette No. 42478, 23 May 2019). MPAs are increasingly being used as a tool for the achievement of biodiversity, fisheries management, tourism and research objectives. This MPA network represents the full spectrum of biodiversity, secures ocean benefits and provides important reference areas to understand and manage change in our oceans (DEA, 2016). Figure 16 shows the location of these 20 new MPAs, with the Benguela Muds and the Cape Canyon MPAs being located offshore of the WCDM coastline.

While the WCDM and the LMs do not have any direct responsibility in terms of management of these offshore MPAs, it does provide an opportunity for the WCDM and the LMs to use these MPAs as an opportunity to educate and inform communities of the importance of the offshore marine environment to the coastal and marine economy.

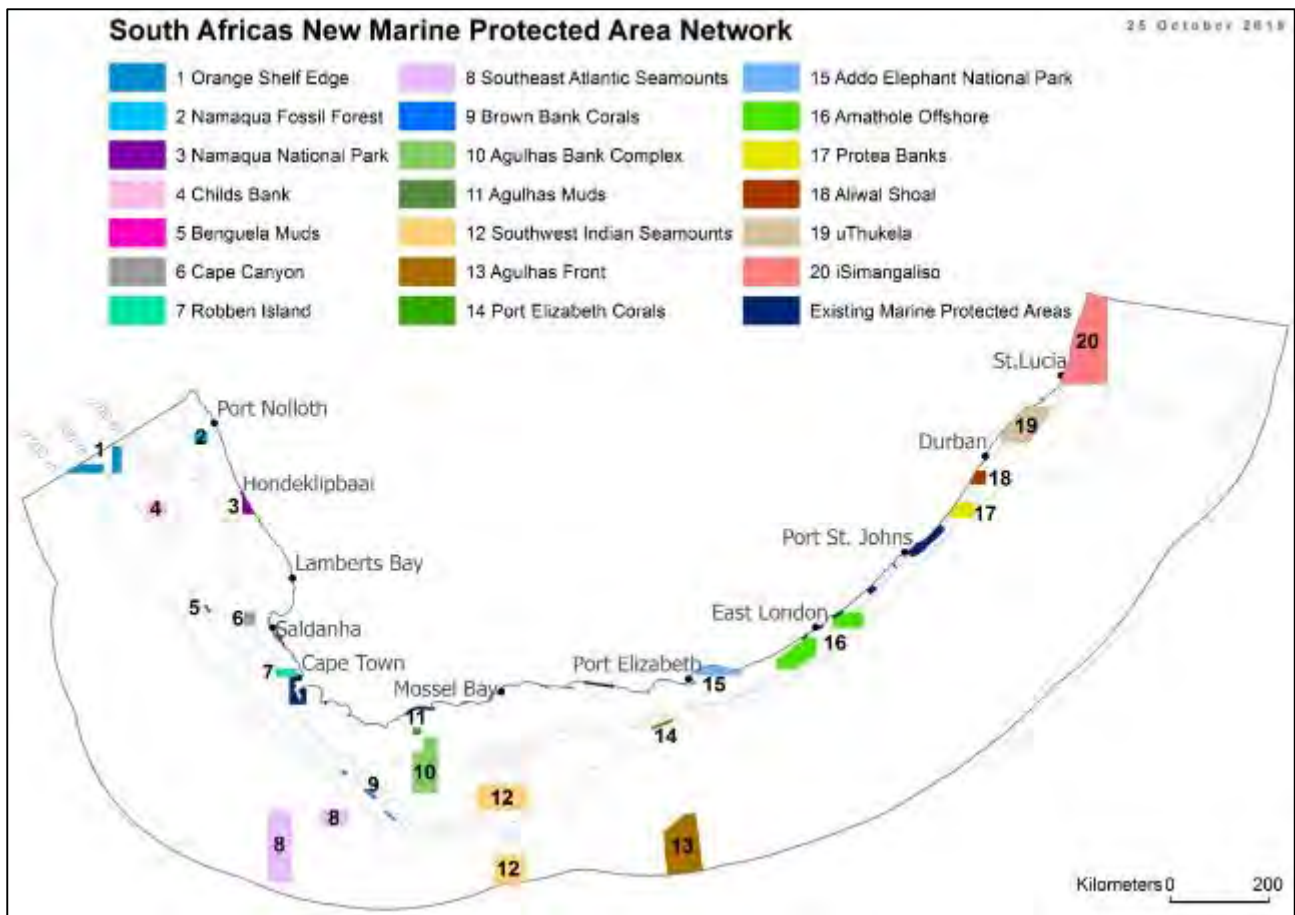


Figure 16: the location of the 20 new MPAs (www.saambr.org.za/marine-protected-areas-mpas/)

RAMSAR Convention

The Convention on Wetlands, signed in Ramsar, Iran, in 1971, is an intergovernmental treaty which provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources. There are two official Ramsar sites located within the WCDM, namely Langebaan and Verlorenvlei.

Langebaan Ramsar site

The Langebaan Ramsar site was designated in 1988 and includes the following islands

- Schaapen (29 ha);
- Marcus (17 ha);
- Malgas (18 ha); and
- Jutten (43 ha).

It also includes the Langebaan Lagoon (15 km long and 12.5 km wide) and a section of the Atlantic coastline. The lagoon is entirely marine with a relatively stable salinity and supports dense populations of molluscs and crustaceans as well as 71 species of different marine algae. The lagoon also serves as a nursery for the development of juvenile fish, including gobies (Gobiidae), klipfish (Clinidae), pipefish (Syngnathidae), skates, rays and small shark.

The extensive intertidal area of the lagoon supports up to 55 000 waterbirds in summer, most of which are waders (23 species), including 15 regular Palaearctic migrants. The most abundant Palaearctic waders are the curlew sandpiper, grey plover, turnstone, knot and sanderling. The most important resident waders are the whitefronted plover, Kittlitz's plover

and chestnut banded plover. About 400 African oystercatchers, which comprises 12% of the global population, are found in the Langebaan area.

The five islands of Saldanha Bay to the north of the lagoon provide a home for nearly a quarter of a million sea birds, many of which are endemic to the nearshore regions of South Africa and Namibia. Cape gannets and Cape cormorants are abundant and the largest known colony of kelp gulls in southern Africa is found on Schaapen Island.

Verlorenvlei Ramsar site

The Verlorenvlei Ramsar site was designated in 1988 and is situated approximately 100 km northwest of Cape Town. The Verlorenvlei is one of the largest lakes (and one of the country's few coastal freshwater lakes), with associated scrub, shrubland, dune systems, marshland and reed beds representing a transition zone between two plant communities. The site is an important feeding area for rare pelicans and fish, for molting and breeding birds, as well as for staging wading birds. During dry periods, large numbers of flamingos gather. The site also supports notable plant species. Water is pumped for irrigation purposes, and the marshland is used for cattle grazing.

West Coast Biodiversity Corridor

The West Coast Biodiversity Corridor (located within one of only 35 areas which qualify as Biodiversity hotspots around the world), stretches from Blaauwberg to Saldanha and back to Darling (Figure 17), and is by far one of the most richly and uniquely abundant natural areas in South Africa – home to two critically endangered vegetation types and the last intact lowland fynbos region within the Western Cape, including the Saldanha strandveld (Classified as Endangered; WCBSP, 2017). The Corridor is also home to a rich diversity of marine and wildlife and hosts two internationally accredited Important Bird Areas, namely the Langebaan Lagoon and Dassen Island. It also hosts world famous cultural heritage sites such as Mamre, !Kwa ttu and the West Coast Fossil Park, a National Heritage Site (www.westcoastway.co.za).

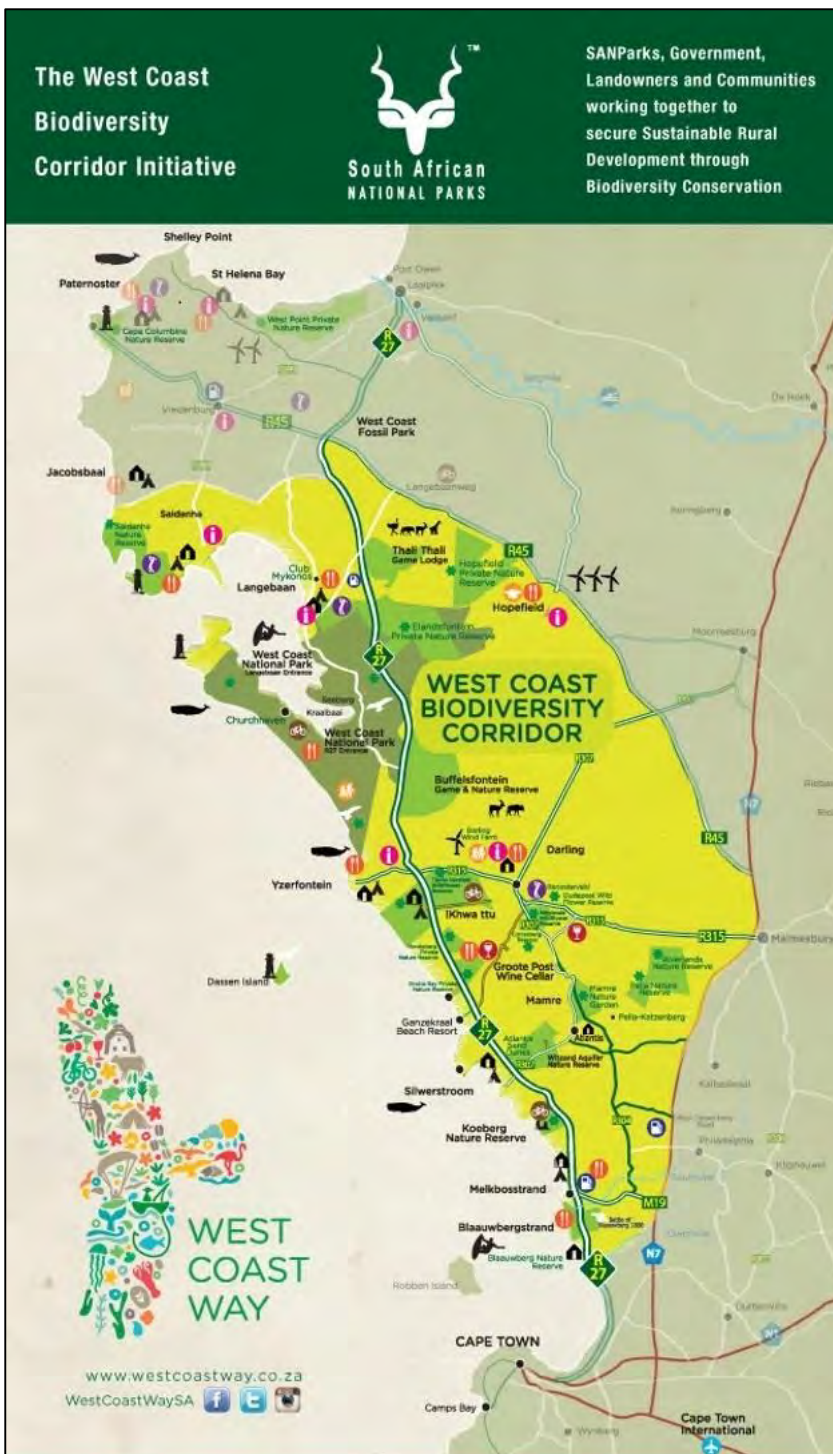


Figure 17: The West Coast Biodiversity Corridor

Provincial Nature Reserves

A number of provincial nature reserves can be found within the WCDM that are managed by CapeNature (Figure 14). The Provincial nature reserves are described below.

➤ **Dassen Coastal Complex**

The Dassen Coastal Complex is situated within the Cape Floristic Region and is home to South Africa's largest new protected area in highly-threatened and poorly conserved lowland and coastal habitats, namely the Ganzekraal Conservation Area (this area's declaration as Nature Reserve as 'Ganze Craal' is in progress). In addition to the Ganzekraal Conservation Area, the Complex includes Bokbaai, a privately-owned conservation area

and National Heritage Site, nested within Ganzekraal, the Seal Ledges island situated offshore between Melkbosstrand and Bokbaai, the offshore Dassen Island Nature Reserve to the northwest, approximately 10 km offshore from the coastal town of Yzerfontein, and the Riverlands Nature Reserve and Pella property situated approximately 20 km to the east towards the town of Malmesbury.

The Complex supports the largest remaining intact and ecologically viable examples of several threatened lowland ecosystems, making a substantial contribution to National and International biodiversity targets, and provides protection for several threatened plants and animals, including seabirds and marine ecosystems.

The Complex represents a new protected area providing opportunities to strategically and adaptively manage biodiversity towards ensuring the persistence of an intact natural climate change corridor, marine and freshwater ecosystems, and unique cultural and biological diversity of the region (CapeNature, 2019).

➤ **Rocher Pan**

Rocherpan is a coastal nature reserve located approximately 25km north of Velddrif in the Bergrivier LM. The reserve is rich in bird life and colourful wildflowers. It consists largely of a seasonal vlei that is predominantly dry between March and June. Rocherpan was established as a nature reserve (930 hectares in size) in 1966, and the adjacent section of the Atlantic Ocean was declared a marine reserve in 1988 (150 hectares in size).

➤ **Lamberts Bay Bird Island Nature Reserve**

Bird Island lies approximately 100 m off the shore of Lambert's Bay in the Cederberg LM. The reserve allows visitors an opportunity to observe the blue-eyed Cape gannet up close. Bird Island is one of only six sites world-wide where Cape gannets breed, and it is the only breeding site easily accessible to the public.

The island, which is almost three hectares in size, is connected to the mainland via a breakwater. It is an important breeding and roosting site for seabirds, particularly Cape gannets and cormorants. Cape fur seals can also be observed on the island.

➤ **Paternoster Rock Island Nature Reserve**

Paternoster Rock Island reserve is a Local Authority Reserve that encompasses a small rocky outcrop directly off the point at Paternoster in the Saldanha Bay LM. The island reserve is an important nesting site for seabirds such as Cape gannets and Cape cormorants.

➤ **Jacobs Rock Island Reserve**

Jacobs Rock Island Reserve is a Local Authority Reserve that encompasses a small rocky outcrop located just off the coast at Jacobs Bay in the Saldanha Bay LM. The JR Island Reserve is also an important nesting site for seabirds such as Cape gannets and Cape cormorants.

➤ **SAS Saldanha Nature Reserve**

The SAS Saldanha Provincial Nature Reserve is 876ha in size that is situated in a military area within the Saldanha Bay LM and has a rich agricultural history. The area forms a microcosm of that consists of indigenous fynbos and animal life that is representative of the West Coast. There are a number of trails within the Nature Reserve and the reserve contains a number of historically important buildings and artefacts that date back to WWII.

Local Authority Nature Reserves

➤ Columbine Local Nature Reserve

The Cape Columbine Nature Reserve, which includes Tietiesbaai, is located in the Saldanha Bay LM and covers an area of 263ha along a rocky stretch of coastline with numerous inlets and coves. It was declared a nature reserve in December 1973. The entrance is about 5km from the fishing town of Paternoster and the vegetation is typical of West Coast strand and duneveld, ranging from the well-known West Coast fynbos to Karoo succulents. During spring, from August to September, the area is covered in wild flowers.

➤ Yzerfontein Nature Reserve

The Yzerfontein Nature Reserve is a local authority nature reserve that is managed by the Yzerfontein Urban Conservancy through the Swartland LM. It is located within the town of Yzerfontein and aims to conserve the public open spaces within the coastal town.

Private Nature Reserves

A number of private nature reserves are also located within the WCDM's coastline and include the following:

- Bojaansklip Private Nature Reserve (Matzikama LM);
- Donkins Bay Private Nature Reserve (Matzikama LM);
- Doorspring (Matzikama and Cederberg LMs);
- Steenbokfontein (Cederberg LM);
- West Point (Saldanha Bay LM);
- Groot Paternoster (Saldanha Bay LM);
- Swarriet Private Nature Reserve (Saldanha Bay LM);
- Tygerfontein Private Nature Reserve (Swartland LM);
- Khwa tuu Guest Farm (Swartland LM);
- Jakkalsfontein Private Nature Reserve (Swartland LM); and
- Grotto Bay Private Nature Reserve (Swartland LM).

It is important that the WCDM engage with the private nature reserves to ensure that their spatial planning processes do not conflict with the objectives and management practices of the private nature reserves.

Conservancies

A conservancy is a vehicle and platform for community-based conservation. It is a voluntary association of environmentally conscious land-owners and land-users who choose to cooperatively manage their natural resources in an environmentally sustainable manner without necessarily changing the land-use of their properties. There are a number of conservancies within the WCDM and it is important that all spheres of government engage with these conservancies in order to manage these areas affectively. The conservancies within the WCDM include the following:

- Yzerfontein Urban conservancy;
- Jacobsbaai conservancy;
- Columbine conservancy; and
- Velddrif Bergrivier Conservation Association.

3.7.3. Important Bird Areas

Important Bird and Biodiversity Areas (IBAs) are sites of international significance for the conservation of the world's birds and other biodiversity. By conserving IBAs, the ecosystem goods and services they provide are protected and, in turn, support a component of the South African economy (such as water management and agriculture).

The WCDM has five IBAs located within its boundaries. These IBAs have been indicated in Figure 18 below and include the following areas:

- Olifants River estuary;
- Verlorenvlei estuary;
- Cedarberg - Koue Bokkeveld Complex;
- Berg River estuary; and
- West Coast National Park and Saldanha Bay islands.

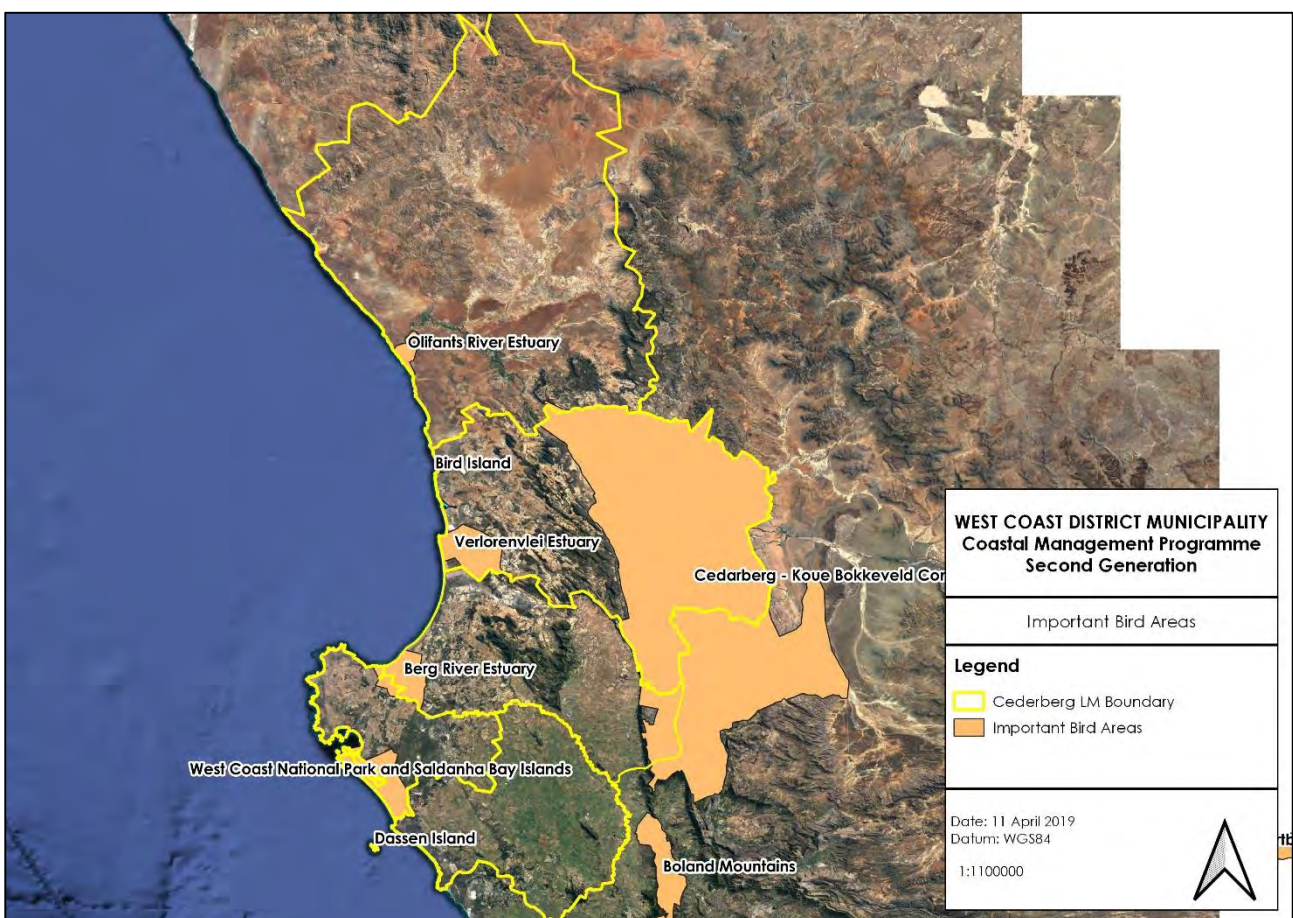


Figure 18: The location of the IBAs in the WCDM

3.7.4. Marine resources

The West Coast is characterised by its cold water upwellings that are nutrient rich waters, which result in the presence of a substantial fishing industry, with approximately 90% of South Africa's fish being caught off the West Coast. This makes the offshore regions of the West Coast one of the world's richest fishing grounds. The West Coast falls within two marine biogeographic regions, namely:

- The South-western Cape Marine Bioregion, situated off Cape Columbine southwards; and

- The Namaqua Marine Bioregion situated from Cape Columbine northwards.

The Namaqua bioregion is dominated by the cold Benguela Current and is characterized by large-scale intensive upwelling and nutrient rich water. Low oxygen events are a feature of this region. Extensive mud banks are an important characteristic of the Namaqua bioregion. This productive bioregion supports major commercial fisheries including hake trawl and longline fisheries. A significant proportion of the commercial linefish effort occurs within this bioregion (Sink, et al., 2004).

The South-western Cape Marine Bioregion is less prone to oxygen deficient bottom water that extends close inshore at times causing hypoxic conditions and lobster walkouts. Important commercial fisheries in the Southwestern Cape bioregion include trawl and longline fisheries for deep water and inshore (Sink, et al., 2004).

Despite commercial fishing being an important economic along the WCDM coastline, there are various factors threatening existing stocks. These factors are derived from anthropogenic activities and include the following:

- Pollution of coastal waters;
- Increased coastal development in sensitive coastal habitats; and
- Over fishing.

While the WCDM does not hold responsibility in terms of activities that occur in the inshore and offshore environment, the WCDM has an obligation to alert the responsible authorities should any suspicious or illegal activities be observed.

Marine mammal strandings

A number of marine mammals are commonly found along the WCDM. These species include southern right whales, humpback whales, Bryde's whales, Heaviside dolphins, dusky dolphins and common dolphins.

Although a relatively rare occurrence, the WCDM does occasionally experience strandings of large marine animals. These stranding events require a collective, coordinated and organised response by various authorities and agencies for the effective management of the following scenarios:

- Rescue attempts for live animals;
- Public control and management;
- Volunteer control and management;
- Environmental protection; and
- Carcass removal and disposal.

Currently there is confusion within the local government structures in the WCDM as to whose responsibility it is to respond to these events and the protocol to be followed should stranded marine mammals be reported. The City of Cape Town have developed a "Large Marine Animal Stranding Policy and Protocol" that clearly outlines the roles and responsibilities of the various stakeholders that are required to respond to these stranding events This policy has been attached in Appendix D. The protocol that has been developed clearly outlines what actions to be taken should a stranded mammal be reported. It is suggested that a stranding policy and protocol be developed for the WCDM that models the policy and protocol that has been developed by the City of Cape Town.

Oil and Gas

Currently, South Africa does not have significant proven oil and gas reserves and produces oil and gas from coal and imported crude oil. Due to abundant coal resources that have been available in South Africa that has allowed the country to produce petroleum and by-products, as well as electricity cheaply from coal, gas is an underutilised resource. However, as coal resources in South Africa are declining and the relative cost of coal-produced electricity and petroleum increases, gas will become a more exploited resource.

Offshore and onshore gas exploration has begun in South Africa with 20 exploration licences having been issued to date (SAOGA, 2017). Figure 19 indicates the exploration rights that have been granted offshore of the WCDM coastline. It is important that the WCDM and the LMs are aware of offshore oil and gas exploration activities that are taking place offshore of the West Coast coastline, due to the potential for oil spills and contamination of coastal waters and beaches. Both the WCDM and the LMs have a role to play in managing oil spills along the coastline and these roles and responsibilities are discussed further in Section 3.9.

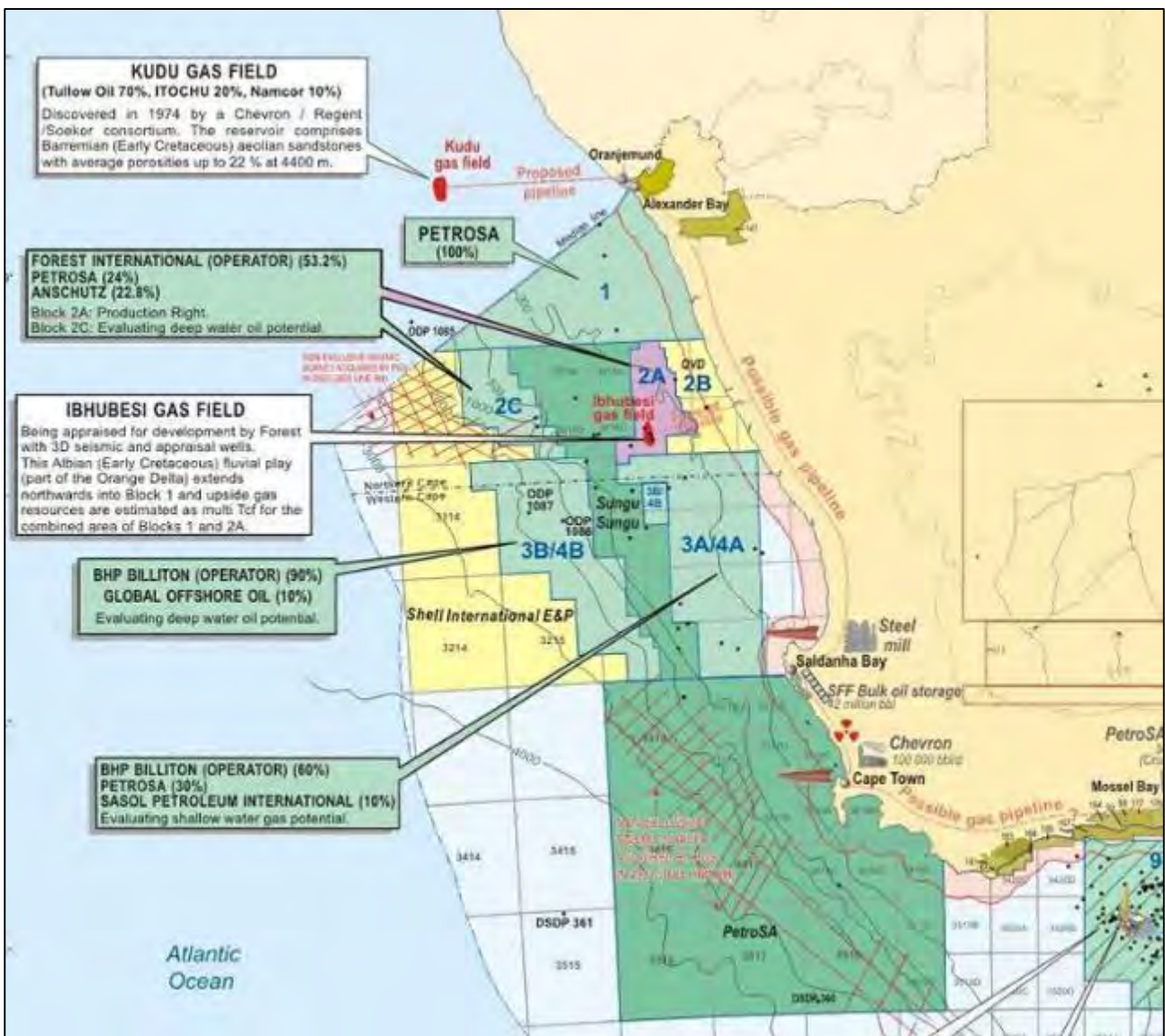


Figure 19: Offshore gas and oil exploration rights that have been granted along the West Coast of South Africa (www.energy-pedia.com/news/south-africa/bhp-set-to-drill-offshore-south-africa)

Strategic Environmental Assessment (SEA) for a phased gas pipeline network and expansion of the electricity grid infrastructure in South Africa

The Operation Phakisa Offshore Oil and Gas Lab (August 2014) has set a target of achieving 30 exploration wells in the next 10 years in order to exploit the potential of gas reserves in South Africa and contribute to the transition to a low carbon economy. In addition, the need to accelerate the planning for gas to power as part of the Government's Integrated Resource Plan (IRP) and for State Owned Entities to pre-plan for the logical development of gas transmission servitudes within South Africa has been identified. The phased development of an onshore gas pipeline network forms part of the infrastructure that is proposed as an enabler for the offshore oil and gas exploration and has the potential to unlock further possibilities for the growth of the gas industry in South Africa (CSIR, 2018).

To support the objectives of the Operation Phakisa Oceans Economy Oil and Gas Lab and to ensure that when required, environmental authorisations are not a cause for delay, a Strategic Environmental Assessment has been undertaken.

In April 2017, the Council for Scientific and Industrial Research (CSIR) was appointed to undertake a SEA for a Phased Gas Pipeline Network and for the expansion of the electricity grid infrastructure (EGI) corridors that were assessed as part of a separate SEA Process (in response to the Government's Strategic Infrastructure Build Program, Strategic Integrated Project SIP 10: Electricity transmission and distribution for all) which concluded in 2016 (CSIR, 2018).

The SEA will be focussed on nine corridors identified as part of Operation Phakisa as key areas where gas transmission pipelines are required in order to meet future energy requirements. SEA will assess the environmental, social and economic constraints and opportunities for gas pipeline and EGI development within these corridors. The results of the assessment will serve to inform suitable routing options for gas pipelines and EGI expansion.

The proposed gas pipeline corridors that will directly affect the WCDM are as follows (refer to Figure 20):

1. From Saldanha Bay to Atlantis and from Atlantis to Mossel Bay on the south coast.
2. An inland corridor from Saldanha to Mossel Bay and Coega.
3. From Saldanha Bay to Abraham Villiers Bay (landing point for the Ibhubesi field).

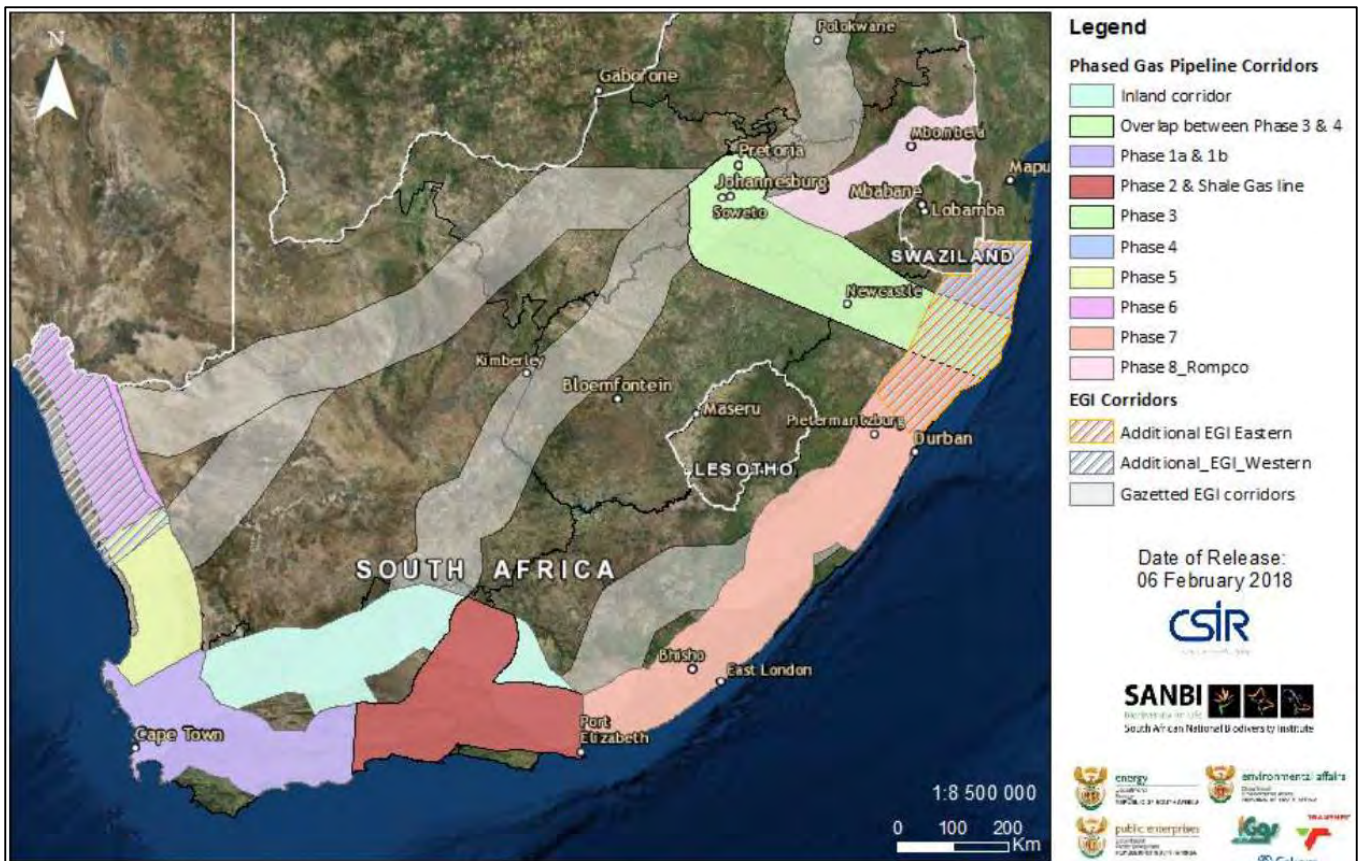


Figure 20: The gas pipeline corridors that were assessed as part of the SEA (CSIR, 2018; https://gasnetwork.csir.co.za/wp-content/uploads/2019/04/PART-1_Background_Gas-Pipeline_FINAL_110419.pdf)

Algal blooms

Harmful algal blooms (HABs) are a fairly common occurrence along the WCDM coastline and can have a significant impact of natural coastal resources such lobster, commercial fisheries and aquaculture operations. These algal blooms are caused by south-easterly winds bringing nutrients from the sea bottom to the surface. This event is known as an upwelling and results in a rapid increase in plankton populations. The density of the algal bloom turns the ocean's surface red to brown.

Over time algal blooms naturally die off and get dispersed. When calm and relatively warm oceanic conditions occur, this could further result in a proliferation and congregation of decomposing bacteria that have, through the breakdown of dead algae, depleted the available oxygen in the water.

The National Oceans and Coastal Information Management System (OCIMS) has developed a HAB Decision Support Tool (DeST) and provides capability for monitoring and assessing risk of HAB events for the South African coastal area to approximately 50km offshore. Maps of sea surface temperature, ocean winds and ocean colour-derived phytoplankton biomass proxies are used to provide information on the presence and movement of blooms, and the HAB viewer provides real time information on the spatial extent of the HAB risk along the coast.

The WCDM does have a HAB Contingency Plan as part of the Disaster Management Plan to monitor and manage HAB event. With regards to removing and disposing of mortalities that wash up on beaches as a result of HAB events, the WCDM has a mandate to manage

municipal health services, which is defined in the MinMEC Resolution in July 2002, as environmental health services. The responsibility thus falls to the WCDM to remove and dispose of mortalities. However, LMs have been designated the responsibility of managing beaches, which also includes an environmental health component, and it is suggested that the removal and disposal of mortalities becomes a joint effort between the WCDM and the LMs. The WCDM HAB Contingency Plan needs to be updated to incorporate a joint function between the WCDM and LMs with regards to removal and disposal of mortalities.

3.7.5. Mineral resources

The South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves (SAMREC) defines mineral resources as any solid mineral of potential economic interest in any concentration found in bedrock or as afloat, especially a valuable or potentially valuable mineral in sufficient concentration to suggest further exploration. In the WCDM region, these mineral resources include the following:

- Diamonds;
- Limestone;
- Dolomite;
- Dimension stone;
- Gypsum;
- Salt;
- Silica sand;
- Brentonite;
- Phosphate;
- Kaolin;
- Heavy minerals;
- Sepiolite;
- Brick clay; and
- Building sand

Mining in the West Coast area does not significantly contribute to the economy of the WCDM. However, mining activities are very prominent along the coastal zone of the Matzikama LM (WCDM CMP, 2013). The mining sector in the WCDM is dominated by a few large and well-established mining companies. The major mining activities occurring within the district are as follows:

- Sand and rock mining by PPC in the south of the DM;
- Offshore and onshore diamond mining in coastal areas from Lamberts bay to the north; and
- Heavy mineral sand mining by Tronox Namakwa Sands in the Matzikama LM.

The oil and gas industry and mining have the potential to enhance the economic status of the WCDM and its LMs and to create significant jobs. However, it also has the potential to significantly impact on the biodiversity of the area as well as the tourism industry that depends on the sensitive terrestrial and marine biodiversity that characterises that WCDM.

A summary of the existing mining activities within each LM is provided below.

Matzikama

A large number of mineral deposits are found throughout the municipality. However, diamond mining is the most prominent form of mining that occurs along coastline (Figure 21). The vast majority of these diamond mines are no longer operational with only five mines still working (Figure 22).

A large number of applications have been submitted for mining rights in the LM. If all these mines become operational this could have a detrimental effect on the landscape. A strategy for managing this is required. Currently, the largest mining operation in the municipality is the Tronox Namakwa Sands Mineral Separation Plant, north of Koekenaap (Matzikama IDP, 2017).

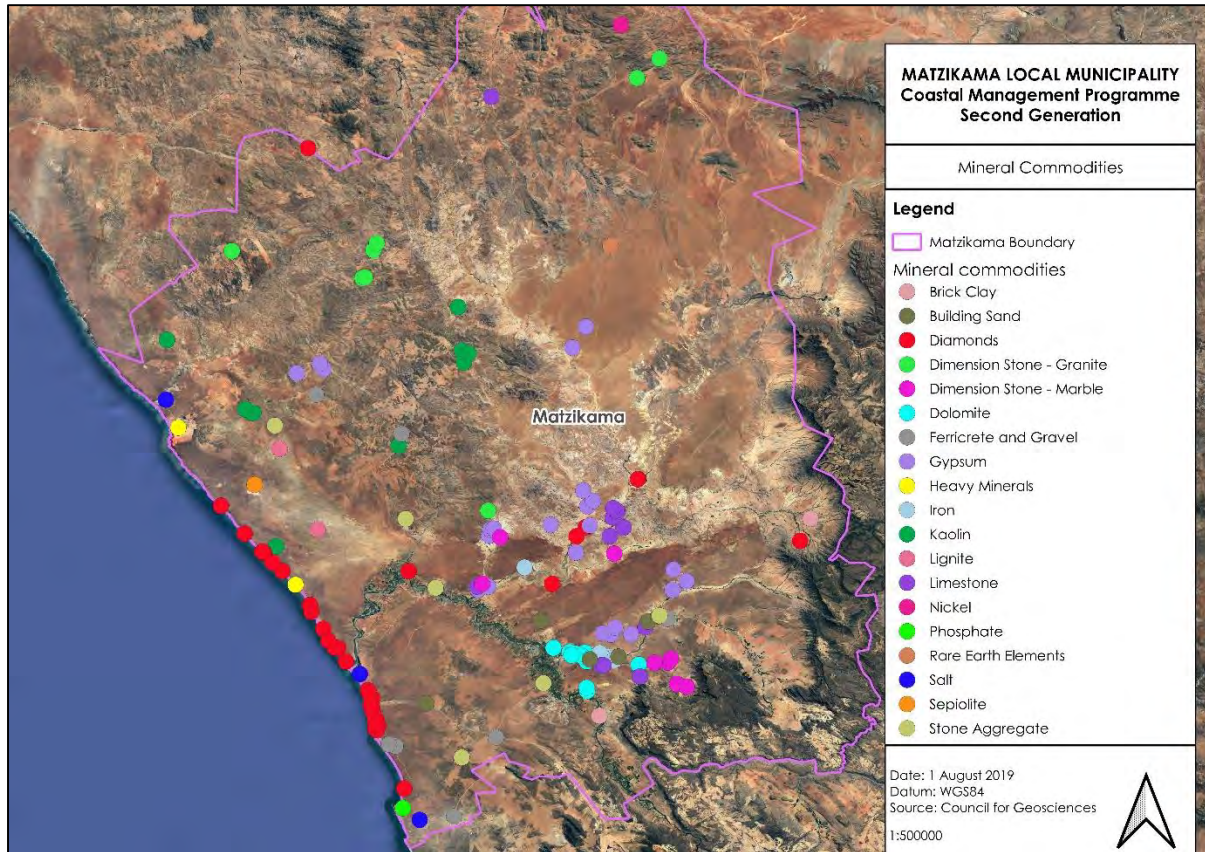


Figure 21: Mineral commodities within the Matzikama LM (Council of Geosciences, 2014)

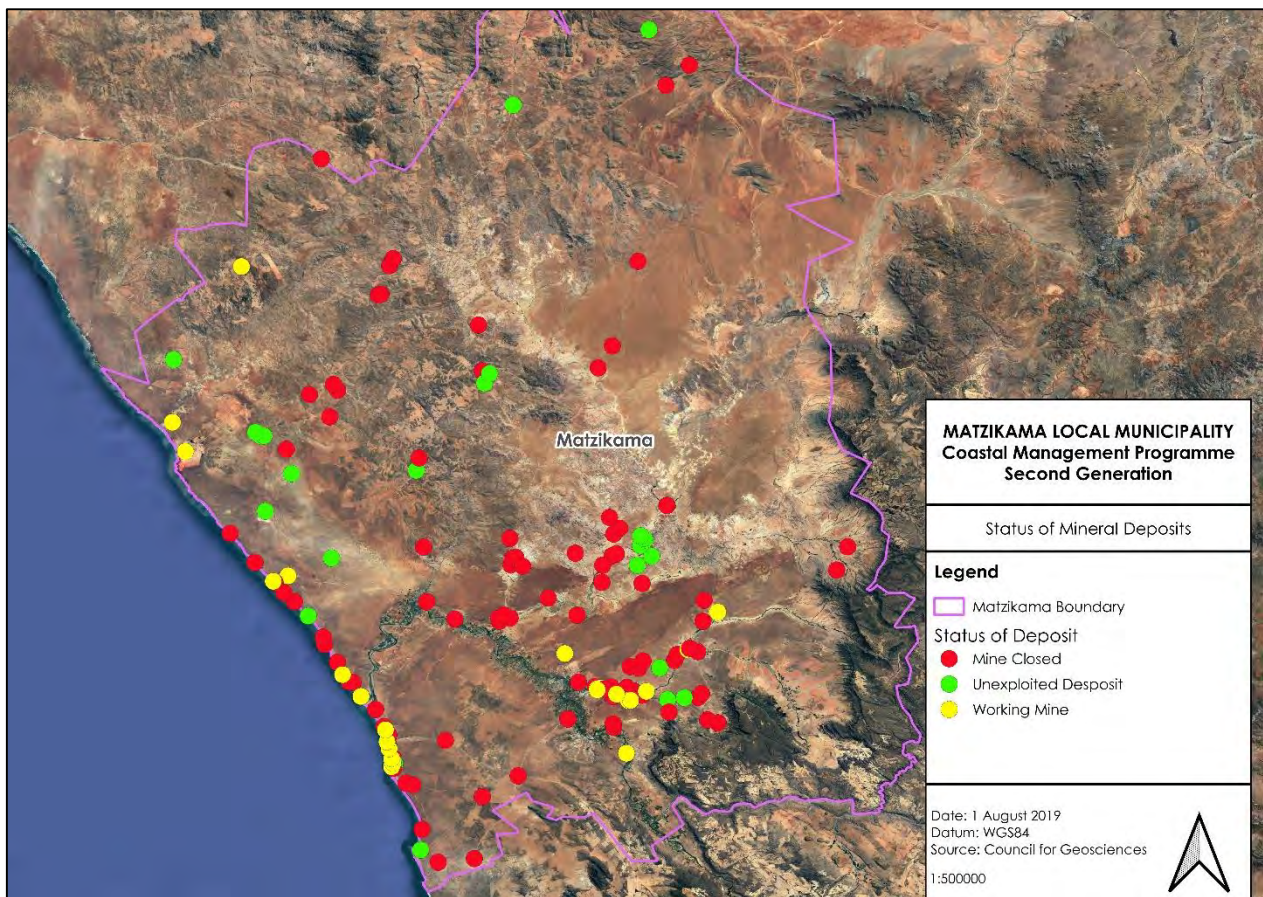


Figure 22: Status of mineral deposits in the Matzikama LM (Council of Geosciences, 2014)

Cederberg

Mining activities that occur in the Cederberg LM are minimal with the main commodity that is mined in the Cederberg region being sandstone (Figure 23). Many of the mines that used to operate in the region and now closed (Figure 24). However, diamond mining activities are taking place off shore from Lamberts Bay to the north of the LM (Cederberg SDF, 2017-2022).

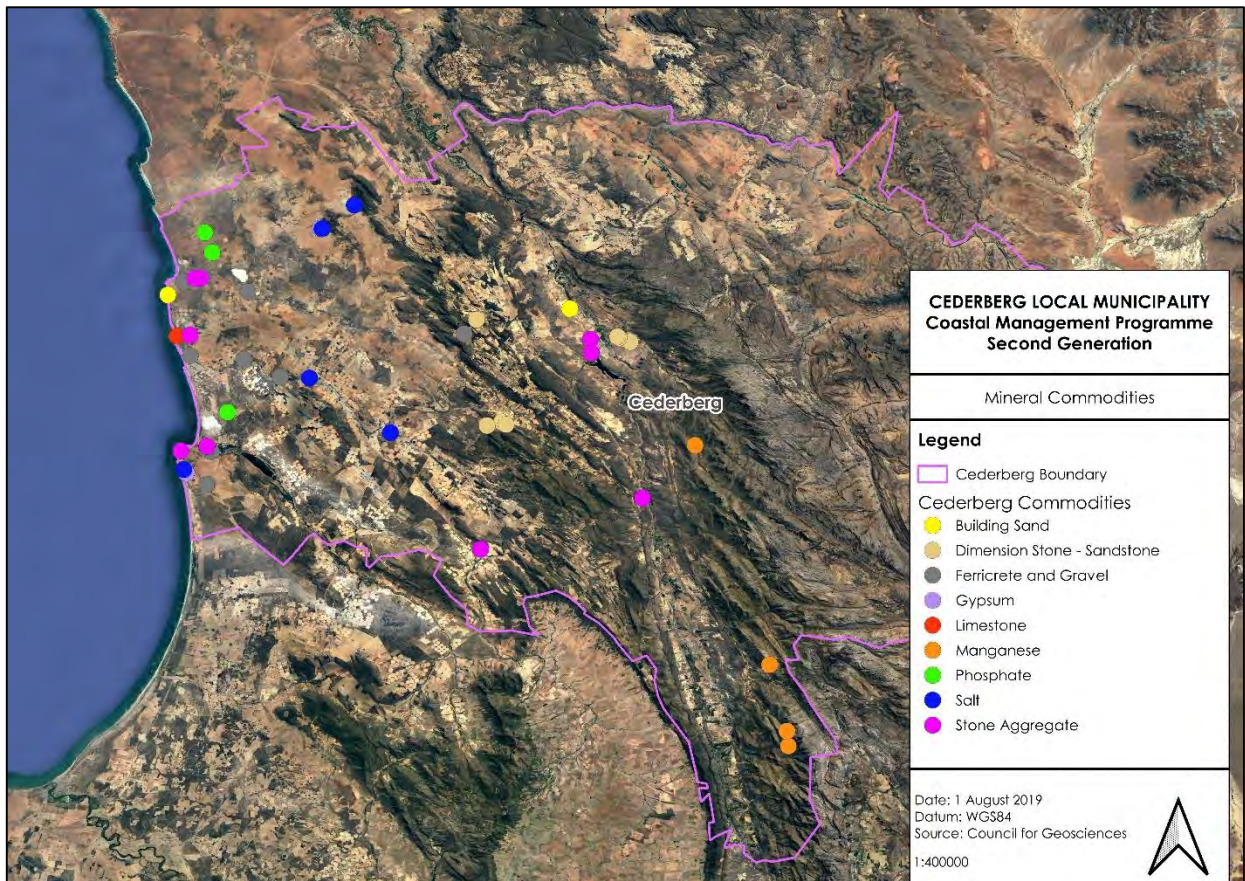


Figure 23: Mineral commodities within the Cederberg LM (Council of Geosciences, 2014)

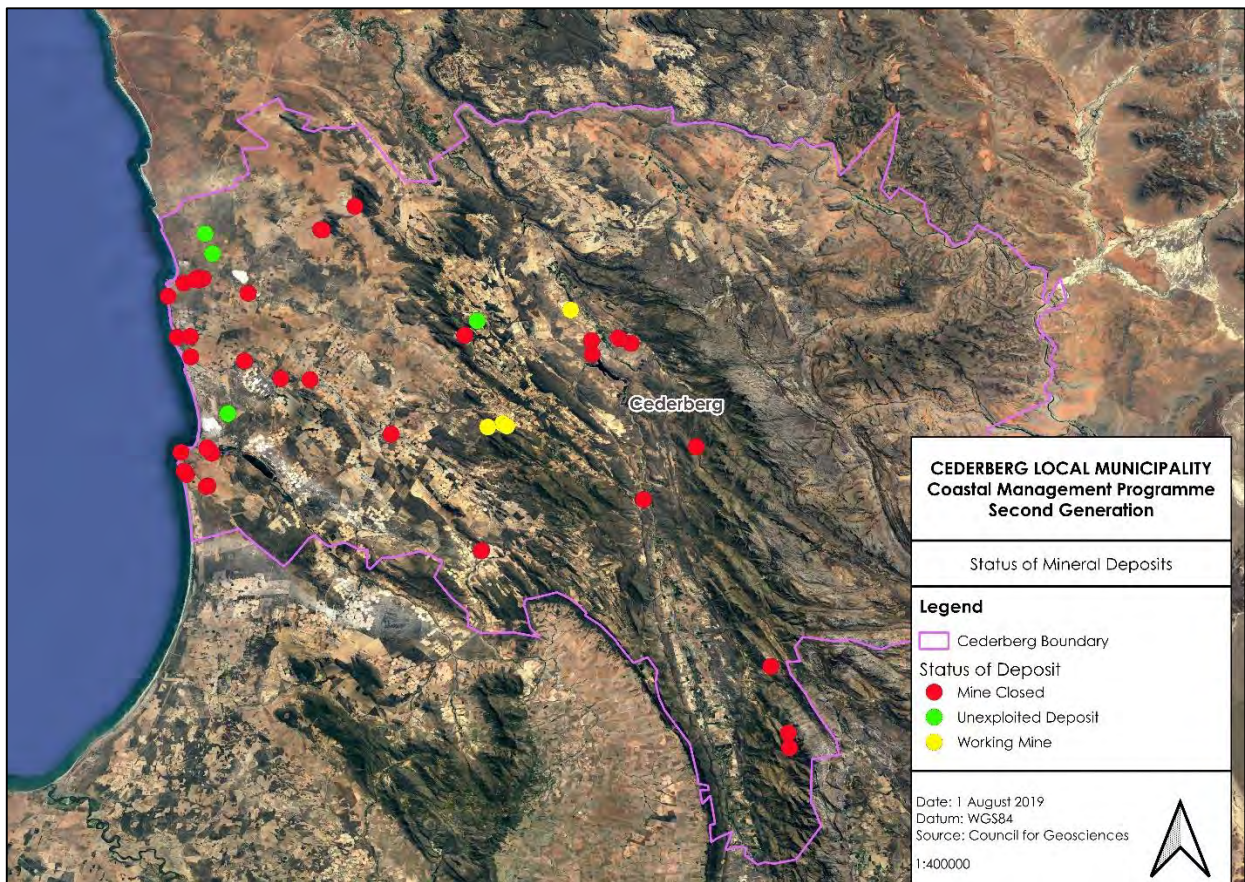


Figure 24: Status of mineral deposits in the Cederberg LM (Council of Geosciences, 2014)

Bergrivier

Figure 25 indicates that salt, limestone for cement and sand for building purposes are the three commodities that are currently mined in the Bergrivier LM (Bergrivier SDF, 2012-2017, Council for Geoscience, 2014). Many of the mines in the Bergrivier are not operational (Figure 26). However, the following registered mining activities are located within the coastal zone and estuaries in the Bergrivier LM:

- a) Kliphoek Salt works on Farm Kliphoek No 59, an opencast mine, mining salt on the southern bank of the Berg River;
- b) Velddrif Salt Company (Pty) Ltd on Portion 69 of Farm 110, an opencast mine, mining salt, on the southern bank of the Berg river at the southern entrance to Velddrif; and
- c) Berg River Salt Works (Cerebos Pty Ltd) on Farms Kliphoek, Uitkomst and Vlaminke Vlei, an opencast mine, mining salt located on the southern bank of the Berg River.

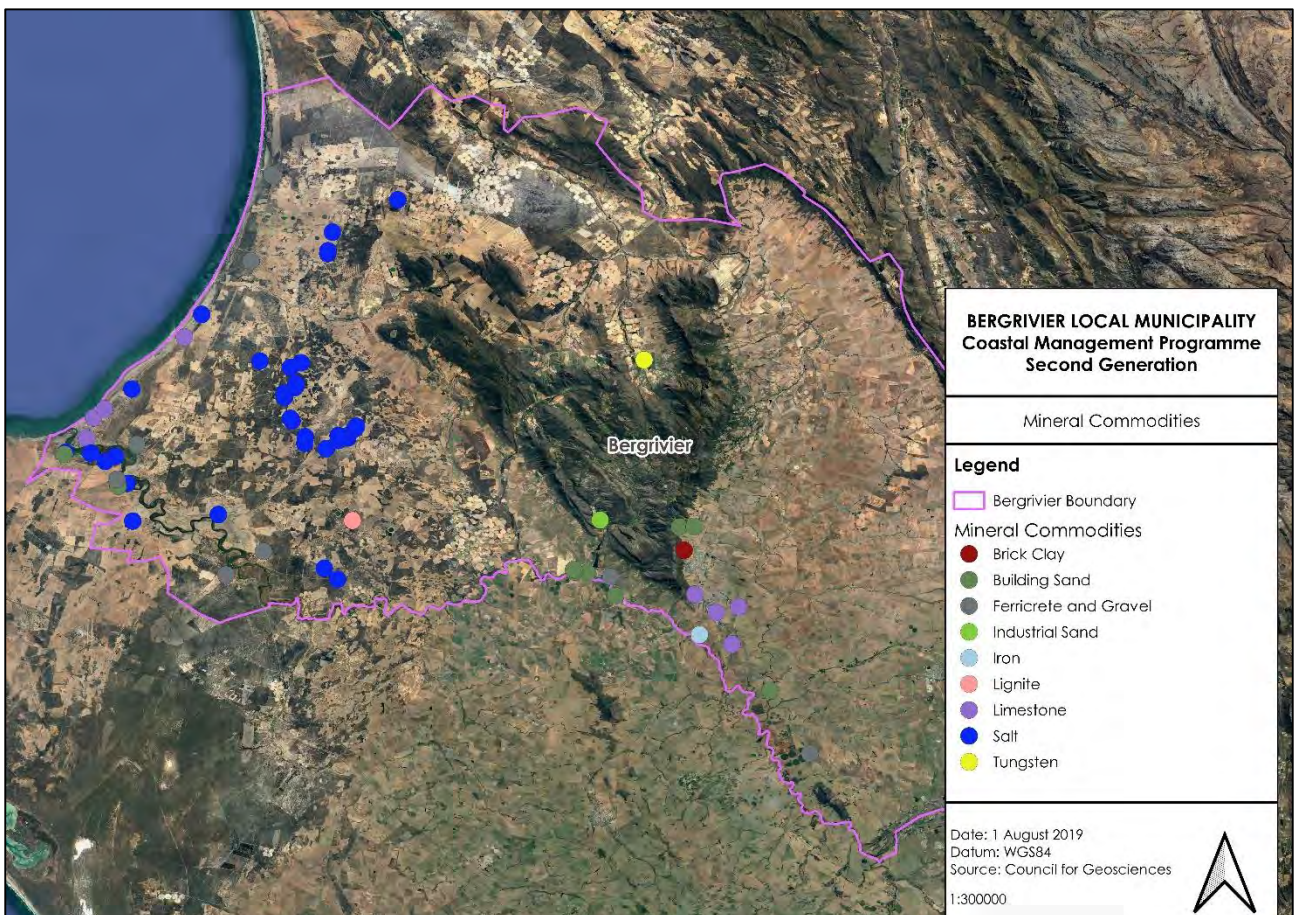


Figure 25: Mineral commodities located within the Bergrivier LM (Council of Geoscience, 2014)

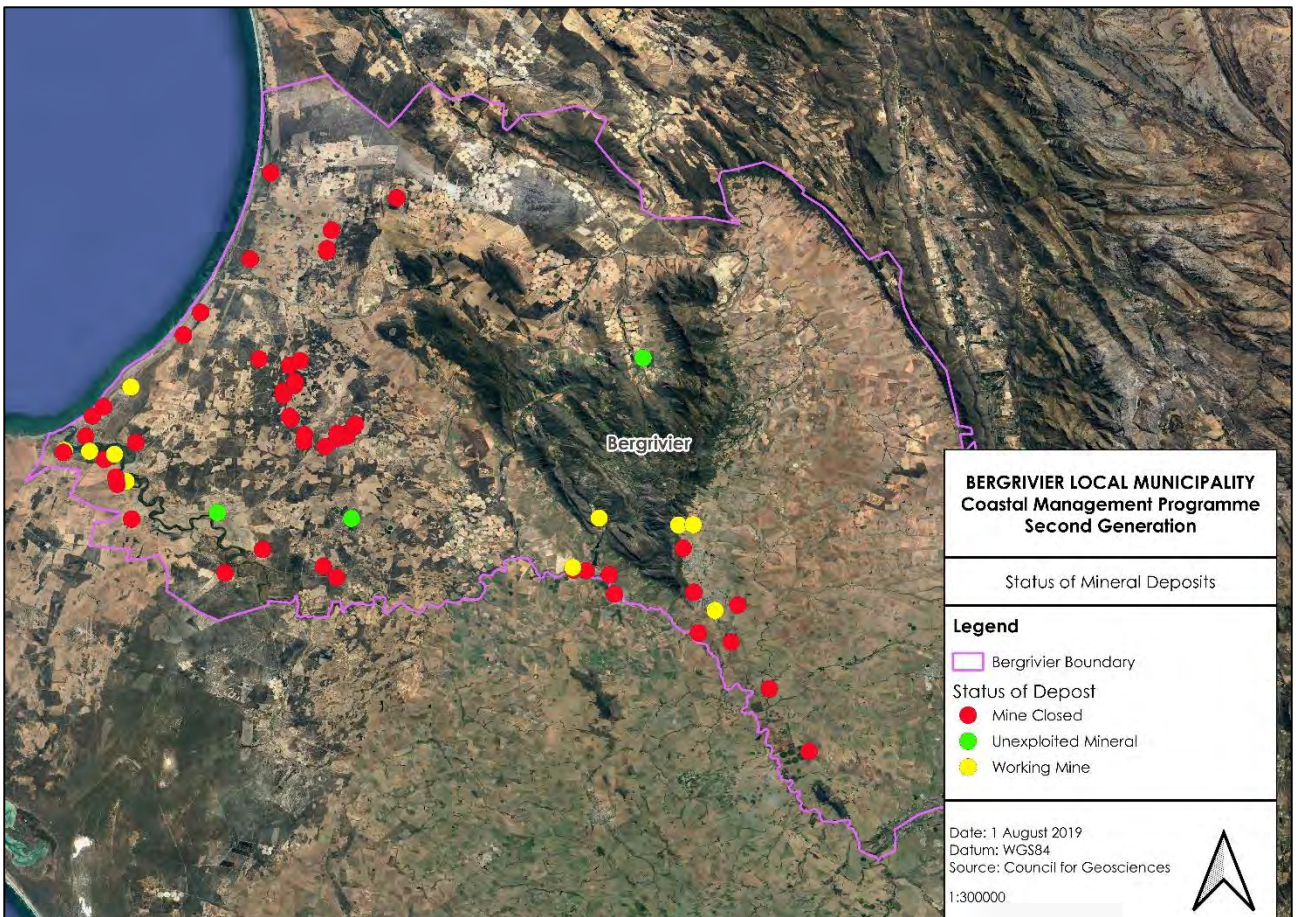


Figure 26: Status of mineral deposits in the Bergrivier LM (Council of Geoscience, 2014)

Saldanha Bay

Within the Saldanha Bay LM, phosphate is the primary commodity that is mined along the coastline (Saldanha Bay SDF, 2017). Other mineral resources include gypsum, sodium, limestone and kayolin (Figure 27).

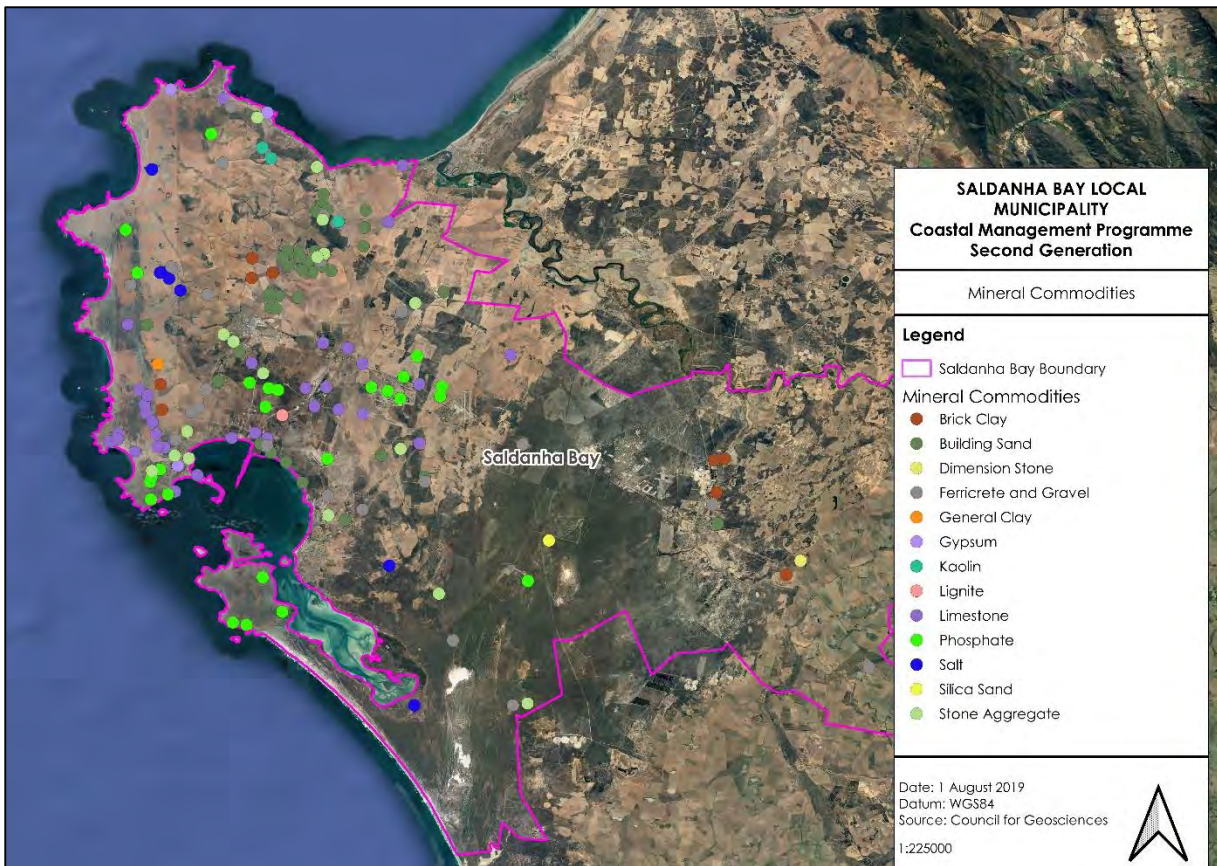


Figure 27: Mineral commodities within the Saldanha Bay LM (Council of Geoscience, 2014)

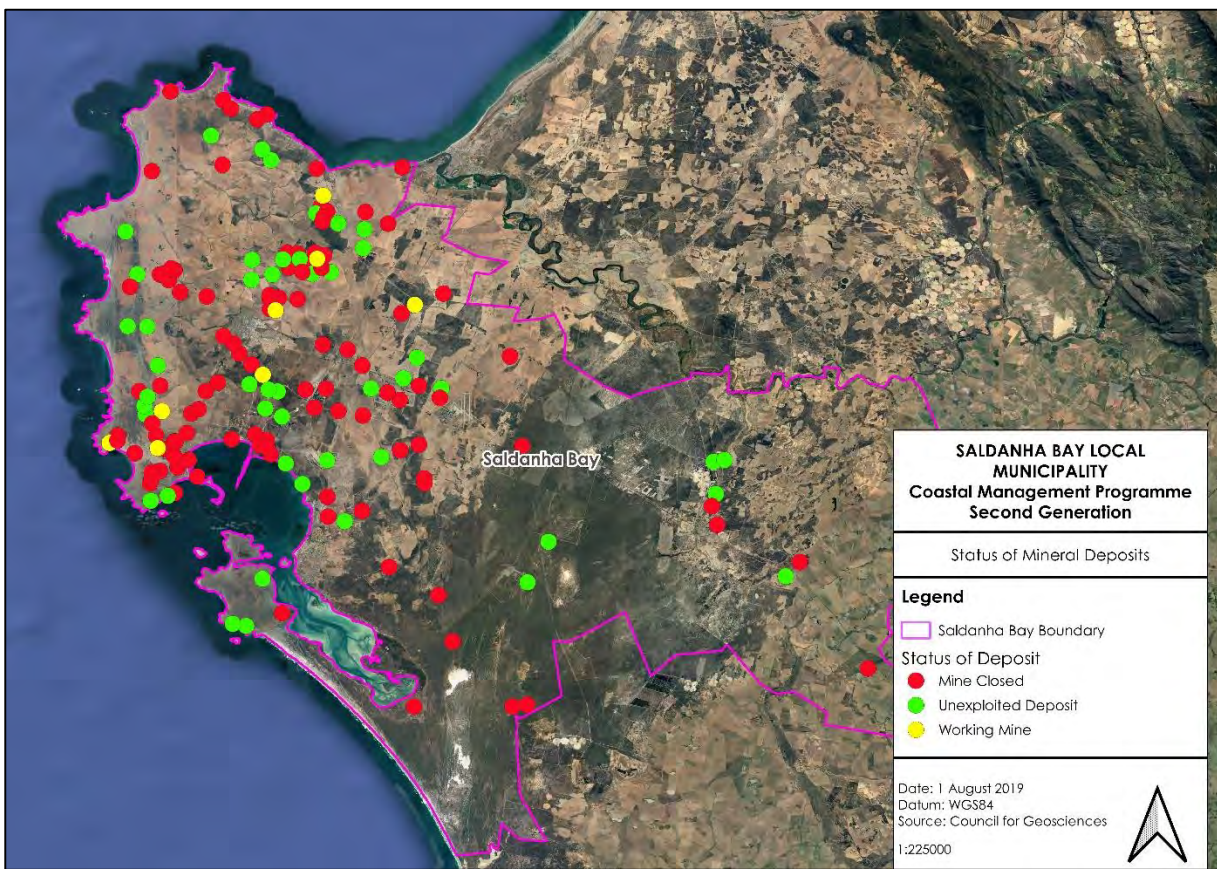


Figure 28: Status of mineral deposits in the Saldanha Bay LM (Council of Geoscience, 2014)

Swartland

The geological structure of the Swartland region does not contain any minerals or metals of high value that can be mined economically. The main commodities that are mined in the Swartland region are granite, limestone, sand, gypsum and salt. The economic potential of mines within the Swartland is mainly for the mining of building sand and clay, with mining being sensitive to the environment and agricultural production (Figure 29).

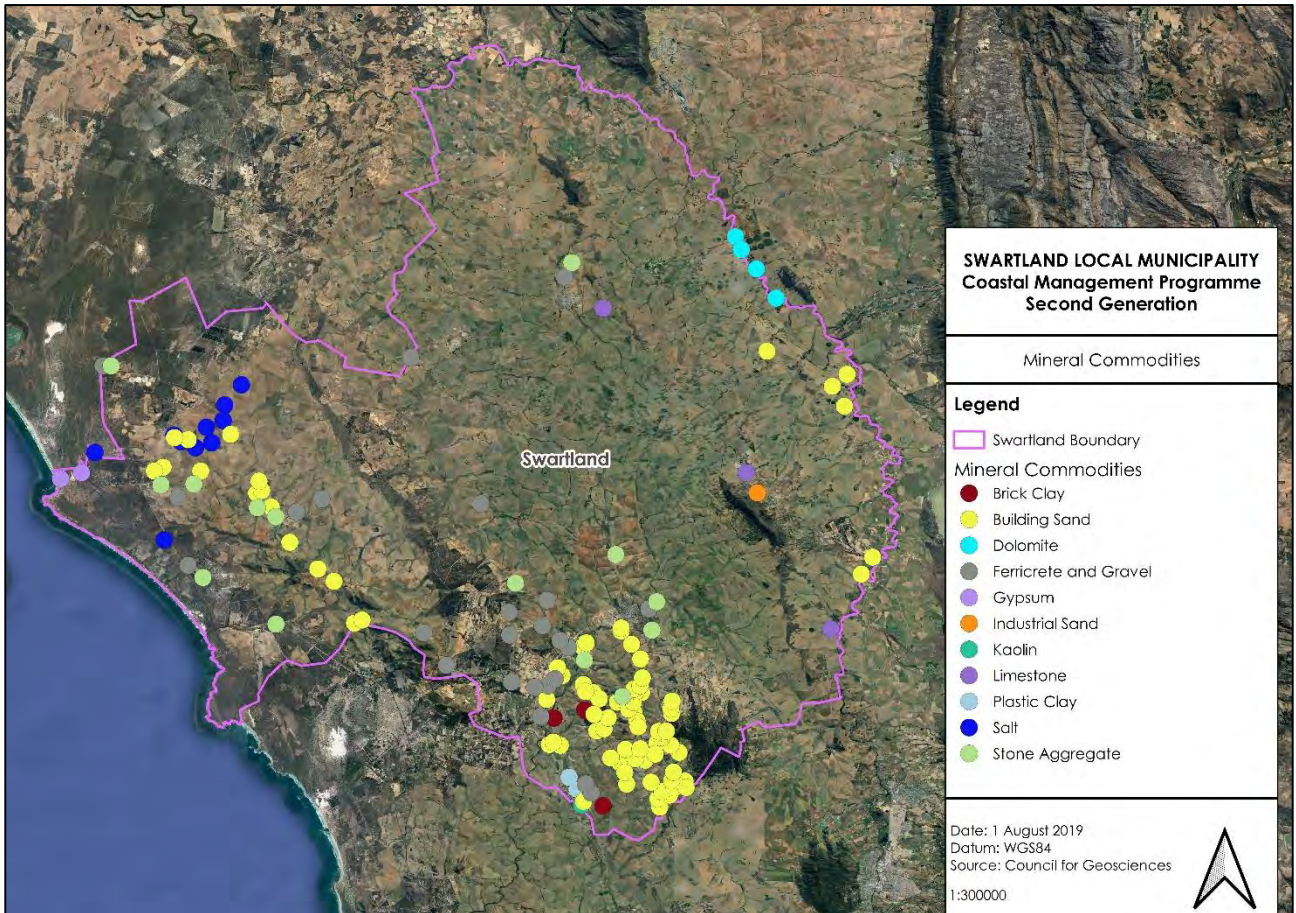


Figure 29: Locality of existing mines in Swartland (Swartland IDP, 2017 – 2023)

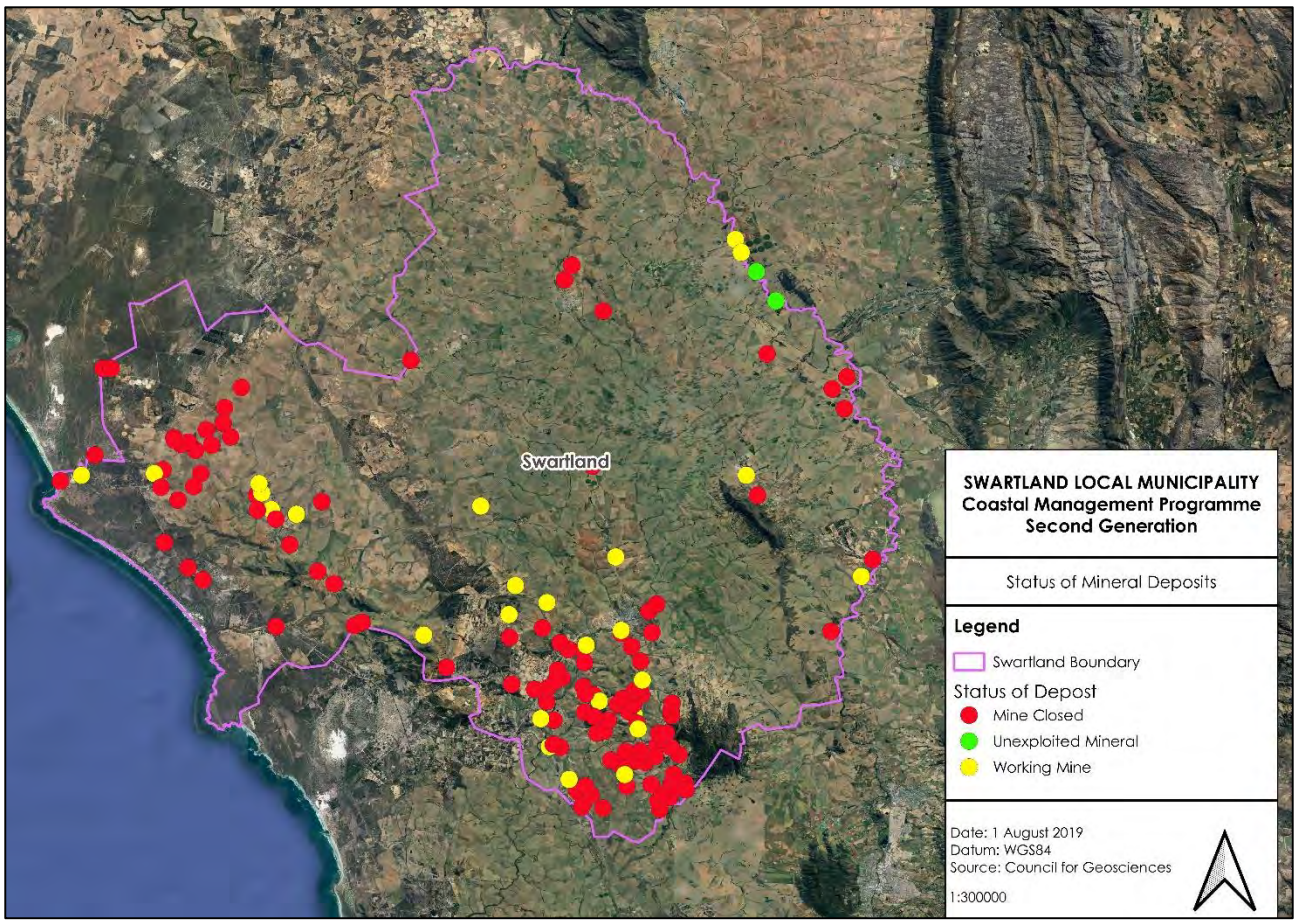


Figure 30: Status of the mineral deposits in the Swartland LM (Council of Geoscience, 2014)

SANBI Mining Guidelines

Most mining operations, past, in operation, proposed and possibly in future, comprise of either quarrying or open cast mining. This results in total surface destruction. This is further worsened if there is no proper rehabilitation, as happened with Foskor near the West Coast Fossil Park. SANBI has prepared mapping that indicates where such habitat destruction should not be contemplated, and areas where it could. An example of the map is provided in Figure 31. Mining is already prohibited in legally protected areas and should also be prohibited in 'highest risk' areas. It should be permitted in medium risk and no risk areas only, but with the most stringent rehabilitation plans implementation and success monitored regularly, with reporting to the Municipality which is responsible for land use management (Saldanha Bay SDF, 2017) as well as DEA, DEA&DP and DMR.

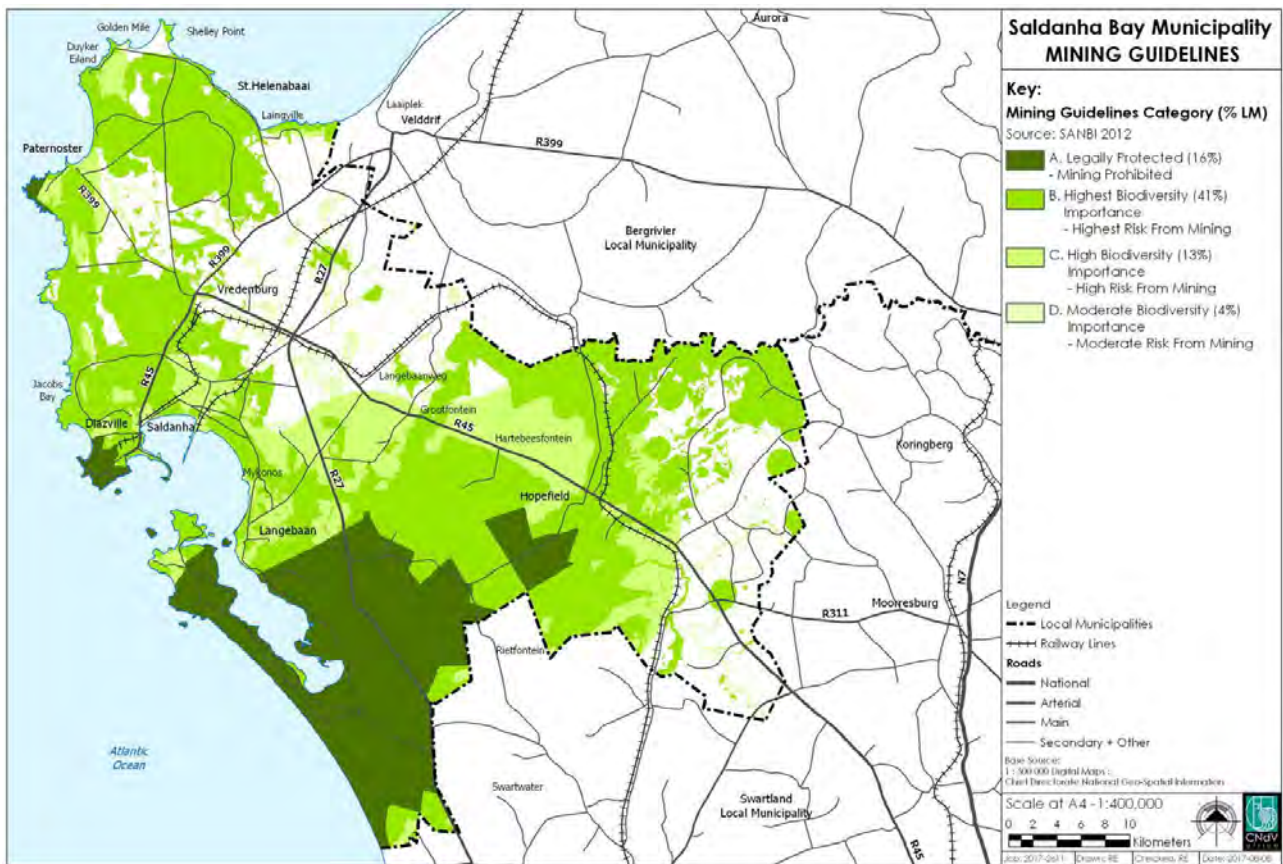


Figure 31: Mining Guidelines in the Saldanha Bay LM as proposed by SANBI (2012).

It is important that these mining guidelines are incorporated into all municipal planning processes.

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

- Alien vegetation need to be better managed in the District, particularly within open areas of coastal towns.
- The WCDM and LMs need to continue to work closely with the SANParks, CapeNature and Private nature reserves to ensure that the unique biodiversity of the WCDM is conserved.
- The WCDM and LMs must engage with and support Conservancies within the DM in terms of incorporating their objectives into town planning processes.
- The WCDM and LMs must be in the position to assist members of the public to alert the relevant authorities of suspicious or illegal activities that are taking place in terms of NEMA and MLRA.
- A Marine Mammal Stranding Policy must be developed for the WCDM where the roles and responsibilities of each organ of state, as well as a protocol to be followed in terms of responding to a stranding report, are clearly defined. The CoCT Policy should be used as an example.
- The WCDM and the LMs must ensure that they are aware of offshore oil and gas and mining activities taking place as oil spills and other contaminant leaks could potentially impact the coastline. The relevant authorities will then need to respond appropriately.
- The proposed gas pipeline corridors must be included into the SDF and engagement must be encouraged between the WCDM, LMs and the relevant national departments.
- The WCDM needs to revise the HAB Contingency Plan to incorporate the cleaning up of mortalities that result from a HAB event. The cleaning up of mortalities along beaches is a LM responsibility and this needs to be carried through into the Contingency Plan.

- The WCDM and LM must take into consideration the cumulative impact of existing and proposed mining activities along the coastline in order to ensure that the integrity and sustainability of the ecological functioning of the coastline is not severely impacted. The SANBI Mining Guidelines must inform the development of the mining industry along the West Coast.

3.8 Theme 7: Heritage resource management

The West Coast has a wealth of heritage resources as well a cultural history. The coastal regions of the south-western Cape were densely occupied by pastoralists, or herders, known as the Khoikhoi or Khoi-San. The West Coast region was the land of the CochoQua, which included Saldanha Bay to Vredenburg. The ChariGuriQua or GuriQua occupied the lower Berg River area, St Helena Bay and points around Piketberg (SAWestcoast.com).

3.8.1. Khoisan communities within the WCDM

Archaeological sites on the West Coast, like Kasteelberg, show occupation by herders between 1800 and 1600 years ago. It is well recorded that whale meat was used by the Khoikhoi. Places where whales often strand themselves along the shore are known as 'cetacean traps', which are areas where minima in the earth's magnetic field cross the shoreline, and where there are offshore reefs. St Helena Bay, or more specifically, Slipper Bay appears to be one of these 'cetacean traps', approximately 12km from Kasteelberg.

The GuriQua and the SonQua (Bushmen) are forgotten in the history of the West Coast. They were here to witness the arrival and departure of Vasco da Gama. The history of the Khoikhoi and the SonQua after 1652 is well documented, but it is important to mention that the 1713 small-pox epidemic was one of the main causes for the virtual disappearance of the Khoikhoi from the south-western Cape.

The remnants of the ChariGuriQua of the West Coast followed Adam Kok, the founder of the Bastaard (later Griqua) group. The Bastards or Baster group were descendants of mixed unions between European settler farmers and Khoikhoi women. After the 1950's many descendants of the Khoikhoi were classified as "Coloured". There are no written records by the indigenous peoples for the pre-colonial period. Anthropological and archaeological research are the only tools we can use to give us a picture of a people and culture lost in time. The only other sources of information we have are ships journals and the diaries of visitors written from 1488 to 1652 (www.sawestcoast.com).

Today the ancestors of the Khoisan people along the West Coast are active members of the broader community. However, the local Khoisan people still feel the effects of being severely marginalised during the Apartheid Era. A Draft Khoisan Bill is being reviewed, which aims to support the Khoisan people in providing opportunities for cultural, social and economic upliftment.

3.8.2. Heritage resources

South Africa has a wealth of important heritage sites located along the coastline. Coastal heritage sites provide proof of human presence in, and associations with, the coastal zone. Therefore, the safe-guarding of these heritage resources is important for the understanding of the history of humankind and the definition of our cultural identity. The management of heritage resources in South Africa takes place within a legal and administrative framework in terms of the National Heritage Resources Act (Act No. 25 of 1999, NHRA). The parastatal

responsible for the implementation of this legislation is the South African Heritage Resources Agency (SAHRA). SAHRA has developed policies, guidelines and regulations for the management of heritage sites. In terms of the NHRA, archaeological heritage material of relevance for the West Coast coastal zone includes the following:

- Material remains resulting from human activities that are in a state of disuse older than 100 years, including human and hominid remains as well as artificial features and structures;
- Wrecks of vessels or aircraft wrecks, whether on land or within our maritime zones or water, and any other associated artefacts or cargo; and
- Features, structures and artefacts associated with military history that is older than 75 years, as well as the sites in which they are found.

In terms of Section 8 of the NHRA, the management of heritage resources is prescribed as follows:

- Tier 1: SAHRA is responsible for the identification and management of Grade I heritage resources and heritage resources in accordance with the applicable provisions of the NHRA and co-ordinates and monitors the management of the national estate in the Republic;
- Tier 2: A provincial heritage resources authority is responsible for the identification and management of Grade II heritage resources, and heritage resources which are deemed to be a provincial competence in terms of the NHRA; and
- Tier 3: A local authority is responsible for the identification and management of Grade III heritage resources, and heritage resources which are deemed to be a provincial competence in terms of the NHRA.

Shorelines were an attractive landscape for early people to exploit, and the West Coast coastline has thousands of shell middens scattered along its coastline. Shell middens result from people visiting the shore, collecting shellfish and consuming the flesh in sheltered areas such as dunes, hollows or caves. Some of these middens date back to the Middle Stone Age (MSA), and are often associated with stone tools, hearths (fireplaces), animal bones, ostrich eggshell water containers and beads. Occasionally human burials have been found in these middens. The most significant of these networks of shell middens are found between Britannia Bay to Stompneusbaai. Other areas where significant shell middens have been observed include Elands Bay, Paternoster, Namakwa Mining area and areas around Saldanha Bay.

More recent agricultural colonisation of the West Coast and the development of the fishing industry are reflected in the cultural landscapes of the District. The West Coast contains a variety of modified landscapes (cultural landscapes) which contribute significantly to the character of the region. Fishing villages, harbours, lighthouses, farms and farmsteads all contribute to the cultural landscape of the Districts coastal zone and its rich heritage resources. Some examples of these culturally significant resources include the following:

- World War II structures that have been converted to labourer camps at Elands Bay;
- The Oorlogsvlei house in Saldanha Bay;
- The Kliprug area in Paternoster where several authentic historic buildings remain as the community over time has sought to restore and renovate to make them habitable;
- The Bartholomew Diaz monument at St Helena Bay;
- Several historical buildings that remain within the Saldanha CBD;
- Historical buildings on the beachfront at Bokbaai;
- A middle Stone Age (MSA) site with archaeological and palaeontological resources west of the Langebaan harbour; and

- the Vredenburg peninsula, as it is well known for its archaeological and palaeontological resources including Khoisan artefacts dating to the Early and MSA and hundreds of rock paintings in the Late Stone Age (LSA).

The local authorities are required to develop a heritage register that lists all graded heritage assets as well as heritage and cultural assets that require formal protection through the NHRA. To date, the following municipalities have not compiled heritage registers:

- Cederberg Municipality;
- Bergvriër municipality; and
- Saldanha Bay Municipality.

In order for heritage assets along the coastline to be managed effectively, these heritage registers need to be compiled.

In terms of Provincial Heritage assets, a list of the declared Provincial Heritage Sites along the WCDM coastline is provided in Appendix E.

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

- The WCDM and LMs must identify the Khoisan communities that occur within their municipal areas and highlight their needs in the IDP in order to aim in addressing past racial inequalities. Many coastal Khoisan communities do not benefit from coastal resources as they did historically, and these benefits need to be identified and supported.
- The WCDM and LMs must engage with the Provincial Heritage Resources Agency to develop a comprehensive heritage register and new heritage resources must be identified for formal protection.
- Authentic heritage in Papendorp, Doringbaai and Ebenhaezor needs to be promoted and used as a tourism opportunity.
- More comprehensive engagement with communities by the Provincial Heritage Resources Agency with regards to the proclamation of heritage resources and the renaming of heritage sites is required.

3.9 Theme 8: Pollution control and management

Pollution requires effective management and prevention strategies, with emphasis on reducing and responding to land based and marine based sources of pollution in the coastal zone. Ensuring adherence to the waste management hierarchy of “reduce, reuse, recycle”, will help reduce solid waste in particular. The effective management of waste within the coastal zone requires cooperation between various departments within the local and district municipalities, government departments as well as coastal communities.

3.9.1. Existing sources of pollution in the coastal zone

A number of point and non-point sources of pollution within the WCDM have an impact on the coastal zone. These sources of pollution can result from activities taking place directly within the coastal zone as well as further up in the catchment areas. Pollution sources can be derived from industrial, domestic and agricultural activities. This section aims to identify as far as possible the known sources of pollution that impact the coastal zone within the WCDM.

Effluent discharges into the coastal zone

A number of direct discharges into the coastal zone can be found along the WCDM coast.

These outfalls discharge effluents that are derived from a number of activities, including aquaculture, desalination, fish processing and Waste Water Treatment Works (WWTW). Discharges into the coastal zone require authorisation in terms of the ICMA, which makes provision for the allocation of Coastal Waters Discharge Permits (CWDP). A CWDP must specify the volume and type of effluent that is authorised to be discharged, as well as water quality conditions that are required to be met. These water quality conditions are specified by the "South African Water Quality guidelines for Coastal Marine Waters".

The table below provides information on the coastal discharges along the WCDM where authorisation in terms of the ICMA is currently being applied for (WCSocr, 2018).

Table 6: Coastal discharges along the WCDM

Outfall name	Location	Local Municipality	Effluent Type	Quantity Authorised per Annum (m ³ /annum)
Amawandle Pelagic	Laaiplek	Bergrivier LM	Fish Processing Effluent	500 000
Lamberts Bay Foods Limited	Lamberts Bay	Cederberg LM	Food Processing Effluent	2 900 000
Ocean Lobster Elands Bay	Elands Bay	Cederberg LM	Aquaculture	2 847 000
Doring Bay Abalone (TPY) LTD	Doring Bay	Matzikama LM	Aquaculture	525 600
Lucky Star Limited	St Helena Bay	Saldanha LM	Fish Processing Effluent	615 000
Jaloersbaai Pty Ltd.	St Helena Bay	Saldanha Bay LM	Fish Processing Effluent	(no data)
West Point Processors	St Helena Bay	Saldanha Bay LM	Fish Processing Effluent	(no data)
Oranjevis	St Helena Bay	Saldanha Bay LM	Fish Processing Effluent	(no data)
Hannasbaai Fishing Company	St Helena Bay	Saldanha Bay LM	Fish Processing Effluent	(no data)
Sandy Point Fishing	St Helena Bay	Saldanha Bay LM	Fish Processing Effluent	(no data)
Sea Harvest Corporation Pty Ltd.	Saldanha Bay	Saldanha Bay LM	Fish Processing Effluent	(no data)
Southern Sea fishing	Saldanha Bay	Saldanha Bay LM	Fish Processing Effluent	(no data)
Suid Oranje Vissery	St Helena Bay	Saldanha Bay LM	Fish Processing Effluent	(no data)
St Helena Bay Fishing	St Helena Bay	Saldanha Bay LM	Fish Processing Effluent	(no data)
Premier Fishing	Saldanha Bay	Saldanha Bay LM	Fish Processing Effluent	4 380 000
Transnet Port Terminals Reverse Osmosis	Saldanha Bay	Saldanha Bay LM	Brine	1 606 000
Sunrise Energy (PTY) LTD	Saldanha Bay	Saldanha Bay LM	Unconfirmed	146 000
Oceana Lobster(Pty) Ltd in St Helena Bay	St Helena Bay	Saldanha Bay LM	Aquaculture	8 516 545
Saldanha Bay Oyster	Saldanha Bay	Saldanha Bay LM	Unconfirmed	4 320
Pioneer Food Groceries	Saldanha Bay	Saldanha Bay LM	Food Processing Effluent	7 847
Bluecap General Trading	Paternoster	Saldanha Bay LM	Aquaculture	(no data)
Benguela Abalone Hatchery	St Helena Bay	Saldanha Bay LM	Aquaculture	(no data)
West Coast Oyster Growers PTY Ltd	Saldanha Bay	Saldanha Bay LM	Aquaculture	131 400

Outfall name	Location	Local Municipality	Effluent Type	Quantity Authorised per Annum (m ³ /annum)
Saldanha Lobster Saldanha	Saldanha Bay	Saldanha Bay LM	Aquaculture	7 905 600
Atlantic Sea Farm	Saldanha Bay	Saldanha Bay LM	Aquaculture	(no data)
Frontier -Proposed Desalination	Saldanha Bay	Saldanha Bay LM	Brine	(no data)

Treated effluent from the Saldanha WWTW is not being discharged to sea anymore because the treated effluent is being reused by Arcellor Mittal and Blue Bay Lodge.

The responsibility to monitor the quality of effluent and the impacts on the receiving environment is that of the CWDP holder. Monitoring reports are required to be submitted to DEA on an annual basis and any non-compliances will be acted on by the Department. However, as custodians of the coastline, it also becomes the responsibility of the communities and municipalities to report any non-compliances (e.g. sewage spills) that may be observed.

Food and fish processing facilities

There are a number of food and fish processing facilities located within the WCDM coastal zone that produce various waste streams that require careful management. Effluent discharges, as well as solid waste such as offcuts are produced by these facilities. The inappropriate management of these waste streams can have knock on effects that directly impact the surrounding environment as well as the behaviour of animals.

An example of this is the situation taking place at Lamberts Bay. Lamberts Bay Foods Limited is a food processing facility that is located at the Lamberts Bay harbour. One of the waste streams that are generated by this facility are off-cut potato chips. The offcuts are loaded into transport vehicles and disposed of. However, the transport vehicles are not covered, and this provides an opportunity for birds to scavenge on these off-cuts. The local environmental manager for the nearby Bird Island Protected Area has indicated that the seagulls have started feeding exclusively on these off-cuts and have started breeding on the roof of the factory. The Crowned cormorant (endangered species), which is found on Bird Island, is not nesting on the island anymore but on the factory roof and in the trees around town. The guano from the birds nesting on the potato factory roof also poses a health risk. There is insufficient monitoring of the activities taking place at this facility and the WCDM need address this as a matter of urgency.

Waste Water Treatment Works (WWTW) within the coastal zone

There are nine Waste Water Treatment Works (WWTW) located within close proximity to the coastal zone that may impact the health and safety of the nearby beaches and coastal waters. None of these WWTW are managed by the WCDM but rather the respective LMs. Figure 32 indicates the location of these WWTW within the LMs.

It is the LMs responsibility to maintain the infrastructure associated with the WWTW to minimise the risk of contamination from untreated sewage. The LMs are also responsible for monitoring the quality of the treated effluent generated by the WWTW and are required to report to the DWS.

One of the regulatory approaches that was introduced in South Africa in 2008 was the Green Drop Certification Programme for Wastewater Quality Management Regulation. The

Green Drop process measures and compares the results of the performance of water service authorities and their service providers via a standardised scorecard, and subsequently rewards (or penalises) the municipality upon evidence of their excellence (or failures) according to the defined minimum standards or requirements.

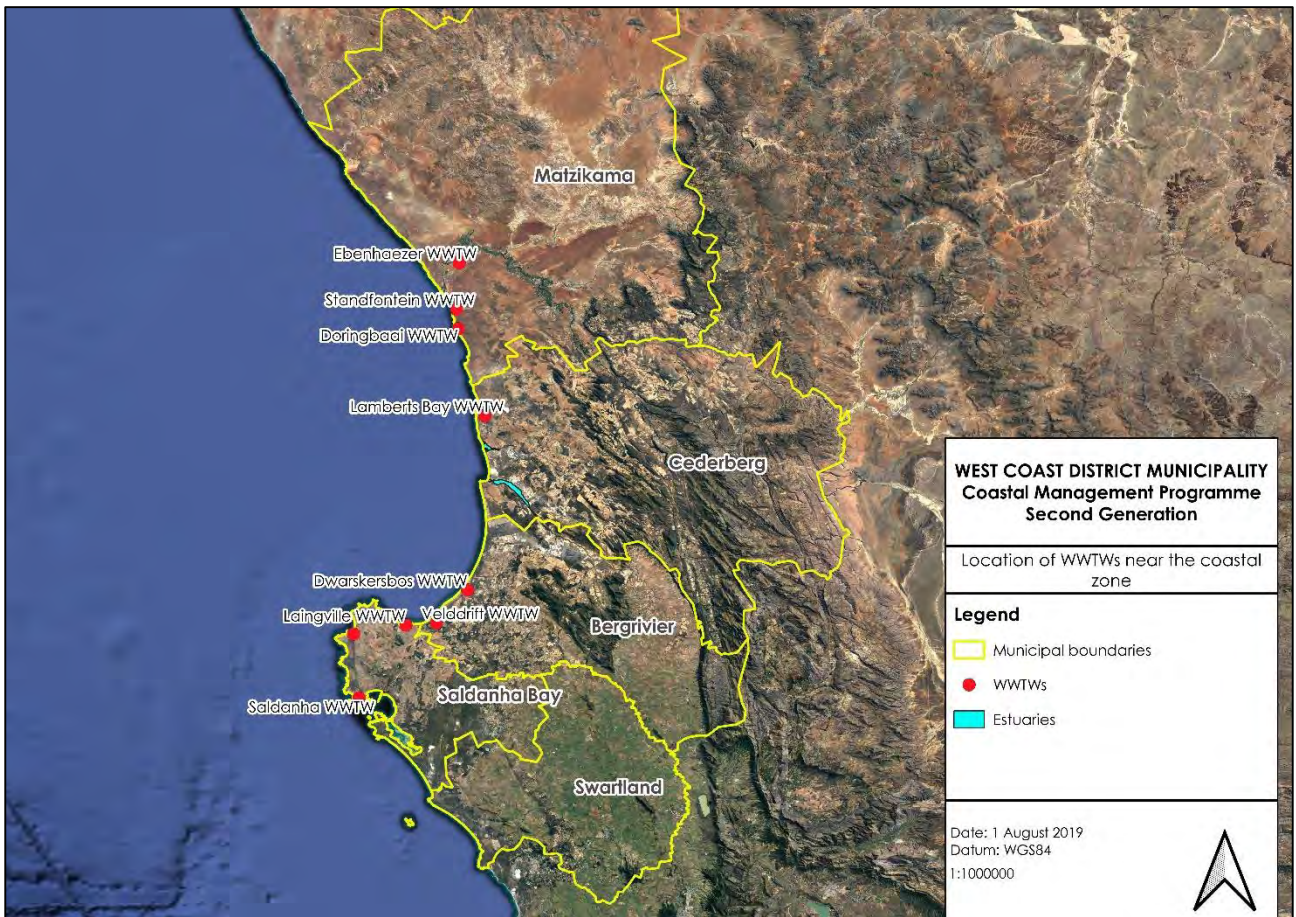


Figure 32: The location of WWTWs near coastal zones along the WCDM

However, Figure 33 below presents the 2013 – 2017 results of compliance with the Green Drop Certificate for the WWTWs located in the WCDM coastal municipalities, with Saldanha Bay showing the highest percentage of compliance with the Green Drop standards (WCSocr, 2019).

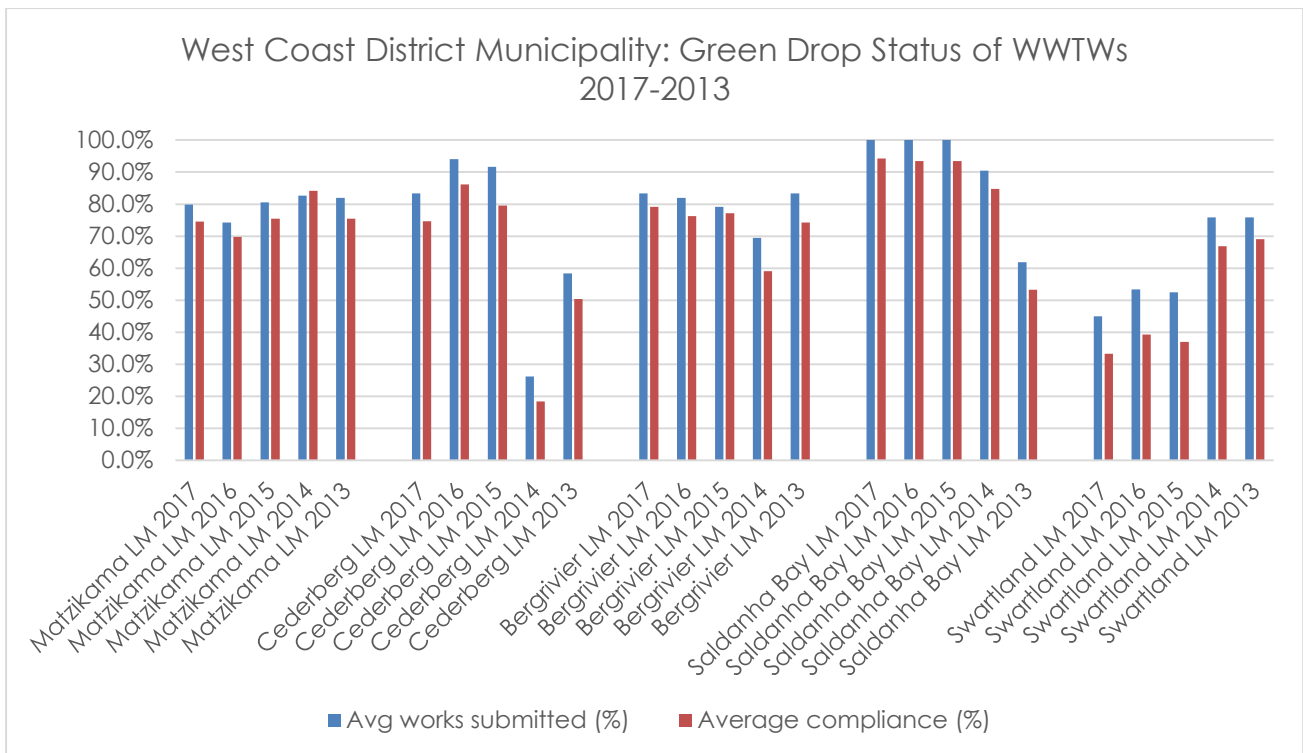


Figure 33: The results of compliance with the Green Drop Certificate for the WWTWs located in the WCDM coastal municipalities (WCSO CR, 2019)

It is important that the LMs continue to maintain WWTW infrastructure and to ensure that the quality of the treated effluent meets the required norms and standards.

Air emissions within the coastal zone

A number of air emissions that are generated through the greater WCDM area can impact on coastal areas. The primary sources of air emission are derived from the following activities within the WCDM (WCDM IDP, 2017-2022):

- Domestic fuel burning
- Transportation emissions;
- Mining activities;
- Agricultural activities;
- Industrial activities;
- Waste treatment disposal; and
- Biomass burning.

DEA published legislation and established an online national atmospheric emissions inventory system that requires that industry and local government report to the system on an annual basis. The WCDM is required to develop a detailed Emissions inventory that needs to be updated on an annual basis. This air emissions inventory is based on licensed activities within the WCDM. Table 7 below provides an indication of the sources of air emissions within the WCDM that currently have air emissions licenses (AELs), or provisional AELs.

Table 7: AELs that have been issued within the WCDM (WCDM IDP, 2017-2022)

AEL holder	Type of industry	Status	Local Municipality
Saldanha Steel	Steel manufacturing	AEL	Saldanha Bay
Transnet Port terminal	Iron ore storage and handling	AEL	Saldanha Bay
SFF	Crude oil storage	AEL	Saldanha Bay
Tronox – smelter	Minerals smelter	AEL	Saldanha Bay

AEL holder	Type of industry	Status	Local Municipality
Duferco	Galvanising	AEL	Saldanha Bay
PPC Saldanha	Drying plant	AEL	Saldanha Bay
Oceana	Fishmeal production	Provisional AEL	Saldanha Bay
Oranjevis	Fishmeal production	Provisional AEL	Saldanha Bay
WPP	Fishmeal production	Provisional AEL	Saldanha Bay
Premier Fishing	Fishmeal production	Provisional AEL	Saldanha Bay
Afrisam	Cement manufacturing	Provisional AEL	Saldanha Bay
Sea Harvest	Fishmeal Production	Provisional AEL	Saldanha Bay
Oiltanking Mogs Saldanha	Crude oil storage	Provisional AEL	Saldanha Bay
Chevron (Sea Harvest Site)	Petroleum Product storage	AEL	Saldanha Bay
Salcarb	Drying of mineral solids	Provisional AEL	Saldanha Bay
Rare Metals Industry	Metallurgical industry	Pending	Saldanha Bay
Frontier Separation (Pty) Ltd	Mineral separation/drying	Provisional AEL	Saldanha Bay
Chlor-Alkali Holdings	Chemicals industry	Pending	Saldanha Bay
Terra Nominees (Pty) Ltd	Storage and handling of ore and coal	Pending	Saldanha Bay
PPC Riebeeck	Cement manufacturing	AEL	Swartland
Swartland Boudienste	Wood drying	AEL	Swartland
Cape Dairy Biogas	Animal matter processing	Provisional AEL	Swartland
PPC De Hoek	Cement manufacturing	AEL	Bergrivier
Foodcorp transferred to Amawandle Pelagic	Fishmeal production	AEL	Bergrivier
Cape Lime	Lime processing	AEL	Matzikama
Namakwe Klei Stene	Clay brick manufacturing	AEL	Matzikama
Tronox Mineral Sands	Drying plant	Provisional AEL	Matzikama

The majority of these AELs have been issued to facilities located within coastal areas.

Solid waste within the coastal zone

Solid waste, in particular plastic waste is becoming more evident on beaches and in coastal waters. The Ocean Conservancy's International Coastal Clean-up initiative, which has become an annual feature on the South African environmental calendar, reports that over 8 million kg of waste was cleaned up off approximately 24 000km of coastline around the world in 2016 (WCSocr, 2018). In South Africa, the most common items picked up off beaches include the following (International Coastal Clean-up, 2017):

1. Cigarette butts – 9 192 units;
2. Plastic beverage bottles – 5 526 units;
3. Plastic bottle caps – 7 812 units;
4. Food wrappers – 8 285 units;
5. Plastic grocery bags – 1 877 units;
6. Plastic lids – 1 091 units;
7. Straws / stirrers – 3 305 units;
8. Glass beverage bottles – 2 594 units;
9. Other plastic bags 3 269 units; and
10. Foam take-away containers – 1 169 units.

The LMs have a mandate to ensure that beaches are maintained and kept clean but communities along the coastline also need to take responsibility of their coastal

environments and dispose of solid waste in a more responsible manner. It is only through education and awareness that a sense of custodianship of the coastal environment can be developed amongst the communities.

Oil spills off the WCDM coastline

The WCDM has a number of small harbours as well as the larger Saldanha Bay port. The presence of these ports and harbours within the WCDM increase the risk of the occurrence of oil spills due to increased shipping traffic (Anchor Environmental, 2018). In South Africa there have been a total of five major oil spills:

- two off Cape Town (1983 and 2000);
- one in the vicinity of Dassen Island (1994);
- one close to the St. Lucia estuary in KwaZulu-Natal (2002);
- one in the Goukamma Nature Reserve (2013); and
- Treasure oil spill occurred on 23 June 2000 when the ship sank six miles off the West Coast.

No comparable oil spills have occurred in the WCDM to date, but minor spills do occur, which have the potential to severely impact the surrounding environment (Anchor Environmental, 2018).

Stormwater

Storm water runoff occurs when rain flows over impermeable surfaces into waterways and can become a major source of non-point sources pollution into the coastal zone. Surfaces such as paved driveways, tarred roads and pavement are impermeable and do not allow rainwater to soak into the ground. Stormwater runoff accumulates contaminants that may be found on these surfaces and stormwater runoff does not get pre-treated before entering coastal waters (Anchor Environmental, 2018a). It is an important emerging issue in coastal zone management, and a particularly difficult one to manage.

Stormwater runoff is difficult to characterise and treat prior to it entering the coastal zone due to the variation of the composition of the discharge as well as the large number of discharge points. However, in order to address the issue of contaminated stormwater, the source of the contaminants needs to be identified and managed. This will aid in preventing these contaminants from entering into the stormwater systems. In order to do this, a coordinated effort needs to be made between various public and private sector groups within the coastal communities.

Other sources of pollution

A number of other sources of pollution in the coastal zone of the WCDM can be identified and managed. These additional sources of pollution include dredging and ballast water.

Dredging and port expansion

Dredging of the seabed is carried out throughout the world in order to expand and deepen existing harbours/ports or to maintain navigation channels and harbour entrances. Dredging has numerous environmental impacts with the most notable being the destruction of the benthos. Water quality is also negatively affected by an increase in suspended solids and release of nutrients and contaminants.

Dredging activities occur in the Saldanha Bay harbour as well as Port Owen in the Berg Estuary within the WCDM. Saldanha Bay is the largest and deepest natural port in South Africa and as a result has undergone extensive harbour development. As a result, it has been subjected to numerous dredging and marine blasting events. The most recent construction-related dredging occurred between July 2015 and October 2016, where a total of 25 000 m³ of sediment was dredged for the expansion of the General Maintenance Quay (Anchor Environmental, 2018a).

Port Owen is a marina that is located in Velddrif on the Berg estuary and was constructed by dredging approximately 1 million cubic metres of sand and rock over 15 years and constructing 7 km of embankment, as well as many jetties and other infrastructure. The dredging activities in Port Owen continue in order to maintain the depth of the marina. Impacts of the dredging programme at Port Owen are low but necessary precautions need to be taken when dredging, as well as necessary approvals be obtained from the competent authorities and complied with (Anchor Environmental, 2018b).

Ballast Water

Ballast water is either freshwater or seawater taken up at ports of departure and discharged on arrival where new water can be pumped aboard. The release and uptake of ballast water has increased the risk of marine invasions, as species with a larval or planktonic phase in their life cycle were now able to be transported long distances between ports on board ships.

The number of alien and invasive species that are listed in terms of the National Environmental Management: Biodiversity Act (NEMBA) is 89, of which 53 are considered invasive i.e. population are expanding and are consequently displacing indigenous species. At least 28 alien and 42 invasive species occur along the West Coast of South Africa, and 25 of these species have been confirmed from Saldanha Bay and/or Langebaan Lagoon, of which all but one is considered invasive (Anchor Environmental, 2018a). Examples of these species that are commonly observed in the Saldanha Bay/Langebaan Lagoon areas include the following:

- Mediterranean mussel (*Mytilus galloprovincialis*);
- European green crab (*Carcinus maenas*);
- barnacle (*Balanus glandula* and *Perforatus perforatus*);
- Pacific South American mussel (*Semimytilus algosus*);
- Japanese skeleton shrimp (*Caprella mutica*); and
- European porcelain crab (*Porcellana platycheles*).

Other potentially negative effects of ballast water discharges are contaminants that may be transported with the water. Carter (1996) reported on concentrations of trace metals such as cadmium, copper, zinc and lead amongst others that have been detected in ballast water and ballast tank sediments from ships de-ballasting in Saldanha Bay (Anchor Environmental, 2018a)

3.9.2. Existing pollution monitoring and management activities

A number of existing pollution monitoring and management programmes are being implemented within the WCDM. This section briefly identifies these programmes and highlights the WCDMs role in terms of the implementation of these programmes.

Department of Water and Sanitation

The Department of Water and Sanitation established the National Estuarine Monitoring Programme, NEsMP, in 2008. The purpose of NEsMP is the monitoring of water quality, physico-chemical and biological aspects for determining long-term trends and changes in the condition of South African estuaries. The NEsMP coordinates national monitoring efforts and provides support in the form of sampling equipment, training, data management and information dissemination, while collaborating institutions collect physico-chemical data and water samples.

Through the NEsMP, basic water quality monitoring is currently undertaken on a monthly basis by the WCDM. However, monitoring is limited to the EFZ. The data that is obtained from this monitoring are important as they contribute to a long-term data repository for the system to detect long term trends and to assist in decision making. The existing estuary fora also play a valuable role in monitoring activities in and around the estuaries and the facilitating the appointment of designated monitoring officer.

Department of Environmental Affairs: Oceans and Coasts

The Department of Environmental Affairs: Oceans and Coasts branch (DEA: O+C) is in the process of revising the Water Quality Guidelines for Coastal Marine Waters. The Water Quality Guidelines for Coastal Marine Waters is an important source of information with regards to norms and standards required for discharges into coastal waters. DEA required that all authorised discharges are compliant with the limits outlined in these guidelines, and holders of discharge authorisations are required to submit annual monitoring reports to DEA in order for DEA to track compliance with these guidelines.

DEA: O+C have also begun to appoint regional representatives that form part of their newly established coastal monitoring unit. This unit will be monitoring a variety of coastal and oceanographic parameters, particularly focused on climate change. These parameters will include wave data, sea surface temperature as well as pollution monitoring. The regional representative for the West Coast is Mr Trevor Coetzee (tcoetzee@environment.gov.za). The regional representative will be the primary link between the local authorities and the national DEFF and it is important that the WCDM and LMs work closely with the regional representative, particularly with regards to coastal pollution monitoring.

Air Quality monitoring and management

Within the WCDM area of jurisdiction, ambient air quality monitoring is done by Saldanha Bay Municipality, comprising of an accredited ambient monitoring stations, with one located in Saldanha and one in Vredenburg. A total of seven dustfall buckets have also been placed in strategic positions within the Saldanha/Vredenburg area. Ambient air quality monitoring stations are also operational at an industrial level, particularly in the more densely developed industrial area of Saldanha Bay. The following industrial plants currently undertake ambient air quality monitoring:

- Transnet Port Terminals (TPT): Two stations measuring PM10 and PM2.5;
- ArcelorMittal steel plant: One station measuring PM10 , SO2 and H2S. This station has been vandalised and is not operational;
- TRONOX Namakwa Sands: One station measuring PM10. Not operational due to vandalism.

Monitoring results from these industrial stations (TPT) are reported on a quarterly basis to the WCDM as well as to the West Coast Air Quality Working Group established to coordinate air quality matters in the WCDM area of jurisdiction. This working group is chaired by the WCDM.

The West Coast District Municipality has funded and installed an ambient air quality monitoring station located at Velddrif within the Bergrivier Municipality. Data collection takes place daily for the Hydrogen Sulphide (H₂S) levels monitored for the region by Argos Scientific. Levels of this pollutant is captured in the monthly reports submitted to the WCDM and distributed from there to the Bergrivier municipality.

The National Environmental Management: Air Quality Act 39 of 2004 (AQA) requires Municipalities to develop Air Quality Management Plans (AQMP) that set out implementation strategies to achieve the prescribed air quality standards. The WCDM has an Air Quality Management Plan that is currently being reviewed and updated.

AQMP Steering Committee and Working Groups

Communication with LMs and the appointment of Air Quality Officers (AQOs) at this level have been identified as shortcomings for the effective management of the air quality function in the WCDM. It has been suggested that a Memorandum of Understanding be entered into with the LMs in order to coordinate this function properly. Air Quality Officers have now been designated at all five LMs.

A West Coast Air Quality Working Group (WCAQWG) has been established by the WCDM. The relevant working groups for air quality management meet on a quarterly basis prior to meetings by the WCAQWR. Issues such as air quality management, education and raising awareness and compliance monitoring and enforcement can receive the required attention at these meetings and be reported to the provincial structure. Within the WCDM area of jurisdiction, a Joint Municipal Air Quality Working Group was established in February 2015 between the WCDM and five LMS. The working group meet quarterly and items of mutual interest are discussed.

Oil Spill Contingency Plans

A number of Oil Spill Contingency Plans have been developed by various organs of state within the WCDM. Oil Spill Contingency Plans for the West Coast Zone and the Swartland Zone were developed by DEA in 2012 and 2013 respectively and the Port of Saldanha Oil Spill Contingency Plan has been developed by Transnet National Ports Authority.

The oils spill contingency plans outline the roles and responsibilities of each sphere of government with regards to managing an oil spill incident. The primary responsibility for managing oil spills lies with the South African Maritime Safety Authority (SAMSA) with support from DEA, DEA&DP and local government. According to the West Coast Zone and Swartland Zone Oil Spill Contingency Plans, local government, and in this case the LM, is responsible for:

- taking specified measures to prevent or remedy adverse effects of the spill on the coastal environment;
- providing assistance in the form of supervision, labour, transport and equipment for the protection and clean-up of their beaches, estuaries and other areas under their jurisdiction; and
- making arrangements with local Traffic and Police Officers to ensure traffic and crowd control in the vicinity of the impacted area.

It is the responsibility of the WCDM to provide support and resources to the LM where required. Oil Spill Contingency Plans must be developed for the remaining five LMs.

Water quality trusts

Two water Quality trusts exist within the WCDM, both located within the Saldanha bay LM. These trusts are the Saldanha Bay Water Quality Forum Trust (SBWQFT) and the St Helena Bay Water Quality Forum Trust (SWT). Both of these trusts are very active in terms of environmental monitoring, particularly with regards to water quality testing.

SBWQFT

The Saldanha Bay Water Quality Forum Trust (SBWQFT) is a registered non-government organisation (NGO) that is voluntarily funded by large, medium and small industries operating within the area. This NGO creates a platform for discussions and mutual consent on the limitation and remediation of impacts on water quality and the marine ecosystem.

The SBWQFT acquires, receives and evaluates monitoring information on effluents, marine water quality and ecosystem health. For over a decade the trust has collated scientific data, from the Saldanha Bay and Langebaan Lagoon ecosystems. The monitoring includes avifauna, many forms of marine life and sediment sampling at various points within this unique ecosystem.

A "State of the Bay" report is produced on an annual basis by Anchor Environmental Consulting and presents data on parameters monitored directly by the SBWQFT as well as those monitored by others (government, private industry, academic establishments and NGOs). This "State of the Bay" report is an invaluable tool for understanding the long term impacts of the various activities taking place in Saldanha Bay on the marine and coastal environment.

Currently, there are three representatives of the SBLM, of which one sits on the board of trustees and this member also sits on the WCDM Municipal Coastal Committee (MCC).

SWT

The SWT monitors the quality of the water in the bay from Stompneus Bay in the south to Laaipek in the north. 19 points are sampled every two weeks, followed by bacteriological analysis. A "State of the Bay" report is also produced on an annual basis by Anchor Environmental. Currently, a representative from Bergrivier LM as well as Saldanha Bay LM sit on the board of trustees.

Both the SBWQFT and SWT are important platforms where industry, the private sector and organs of state can interact with regards to ensuring that the environmental integrity of the west coast as a whole is effectively managed.

It is important that the WCDM and SBLM continue to engage with the SBWQFT and SWT with regards to the results of the monitoring activities being undertaken so that issues that need to be escalated through channels such as the MCC and PCC can be done.

Estuary Management Plans

As part of the existing draft EMPs that have been developed for six of the estuaries within the WCDM, resource monitoring protocols have been developed to monitor both abiotic and biotic components of the estuaries. The water quality monitoring activities associated

with the EMPs are supported by the WCDM as well as DWS.

Blue Flag for beaches

Blue Flag for beaches is an international annual award which focuses on the environmental management of our coastline and coastal waters to help tourism growth and development. Although it is a voluntary eco-label, it has become an international symbol of quality for beaches and marinas that achieve a standard of excellence in the areas of safety, amenities, cleanliness, environmental information and environmental management. South Africa was the first country outside Europe to be granted Blue Flag accreditation for its beaches, and the programme has been locally managed by WESSA since 2001 in partnership with participating coastal local municipalities. The strict criteria of the programme are set by the international coordinators of the Blue Flag campaign in Europe, the FEE (the Foundation for Environmental Education) (WESSA, 2018).

The Blue Flag Programme requires that beaches achieve excellent bathing water quality. The bathing water quality standards have been based on the most appropriate international and national standards and legislation.

Blue Flag has one minimum global standard for water quality, and these standards must be adopted unless stricter national standards are already in existence, e.g. testing for total coliform bacteria. In that case, the beach must comply with the more demanding national standards for bathing water quality.

Previously in the WCDM, two beaches had been awarded Blue Flag status, namely Yzerfontein (2009-2011) and Strandfontein (2012-2015). Currently there are no Blue Flag beaches in the WCDM.

Working for the Coast

Waste, in this case litter/rubbish, along the WCDM coastline can be managed through the Working for the Coast (WftC) initiative, which is a national programme. However, this activity is dependent on the programmes and implementers that have been appointed for the relevant funding cycle. It is important that the Municipalities engage with the programme in order to receive the full benefits of the projects that can be facilitated. It is important that the LMs use the WftC as a tool to aid them in ensuring that beaches are kept clean as well as to uplift coastal communities through the employment opportunities that the WftC programme provides.

Operation Phakisa

Operation Phakisa was launched in 2014 as a programme aimed at accelerating government's development targets. The Oceans Economy programme anticipates that the oceans have the potential to contribute up to 177 billion rand to the gross domestic product (GDP) of South Africa and create just over one million jobs by 2033 (Operation Phakisa, 2018). These projects, aimed at maximising economic benefits from the coastal and marine environments, plans on establishing Marine Water Quality Laboratories to analyse samples and create an environmental monitoring network along the 3 900 km of South African coastline (DEA&DP, 2018).

As one of the enablers, the Minister launched the South African Marine Research and Exploration Forum (SAMREF) to facilitate new collaborative offshore studies to increase knowledge of the offshore marine environment related to renewable energy potential, marine biodiversity and ecology, climate change and ecosystem functioning (DEA, 2018).

The National Pollution Laboratory (NPL) located at Walter Sisulu University (WSU) has been established and work will soon be commencing. The laboratory will monitor water quality along the South African coast (DEA, 2018).

Based on the above as well as feed-back from stakeholders, the future needs in terms of coastal pollution monitoring and management are as follows:

- The LMs need to monitor the quality of the effluent from WWTW more carefully and ensure that the infrastructure is appropriately maintained to prevent contamination of the coastal environment by inadequately treated sewage.
- The WWTW effluent water quality data must be made publicly available in order to ensure transparency.
- DEA need to complete their Coastal Waters Discharge audit and make decisions on the CWDPs that have been applied for. DEA then need to ensure that they monitor the permit holders on an annual basis to ensure compliance with the permit conditions.
- DEA need to address the potato offcut issue at Lamberts Bay. Engagement with CapeNature is needed to ensure that the birds return to their natural behaviours.
- The WCDM must finalise their updated Air Quality Management Plan and implement the plan.
- WCDM and the LMs must, where possible, engage with the communities in the District to assist with monitoring non-compliances to permits and authorisations. Essentially, engage the community as "environmental watch dogs".
- WCDM must continue to monitor AEL holders to ensure compliance with the license conditions and must consider the cumulative impact of air emissions when approving an AEL application.
- The WCDM and LMs must include the tribal authorities in their various environmental and coastal monitoring forums, particularly the Air Quality Forum in Saldanha Bay.
- The LMs must implement recycling programmes in all coastal towns and must ensure that separated waste is collected regularly.
- WCDM must continue to implement the Oil Spill Contingency Plan when required, and must have these plans developed for all four LMs.
- WCDM must improve stormwater management by developing a stormwater bylaw that restricts the discharge of certain substances into the general stormwater system. The Buffalo City Metropolitan Municipality in the Eastern Cape have developed a Trade Effluent By-law that could be used as an example.
- All dredging activities must receive the appropriate authorisations prior to dredging activities commencing.
- The WCDM must provide support to the SBWQFT and SWT where possible, in terms of resources as well as through the WCDM Coastal Committee. The Saldanha Bay LM must continue to work with these Trusts.
- Reinstate the Blue Flag beach programme by obtaining Blue Flag Beach status at least at one of the beaches in the WCDM (e.g. Strandfontein).
- LMs must ensure that they utilise the WftC programme in order to obtain support and capacity to clean up beaches. A LM official must be able to monitor the effectiveness of the beach clean-up activities by engaging the WftC team.
- LMs need to move away from allowing the use of septic tank systems and move towards the installation of conservancy tanks instead.
- The LMs are responsible for cleaning organic matter as well as litter off of beaches and must respond to washed up kelp/seaweed and animals before it becomes a health hazard.

3.10 Theme 9: Socio-economic development

The coastal zone is important to society, and the economic development of all coastal communities. It is important that the socio-economic environment along the coastline is well managed and supported to ensure that all coastal communities receive the full benefit of the resources that the coastal zone provides. The identification and exploitation of

sustainable livelihood opportunities is equally important to capitalise on the benefits offered by the coastline.

The WCDM stretches almost 500km up the Atlantic coastline of the Western Cape, and borders the Northern Cape in the north and the City of Cape Town in the south. The West Coast road (R27) is an important regional economic driver and links Cape Town to the coastal towns along the WCDM coastline. The N7 is also a key economic driver in the WCDM and links Cape Town to the inland towns of the WCDM.

3.10.1. Contribution to Provincial GDP and demographic profile

In 2018, the coastal municipalities of the WCDM contributed 4,96% to the Provincial Gross Domestic Product (GDP), with Saldanha Bay LM being the highest contributor. The coastal municipalities of the WCDM have a total combined population of 436 403 people (WCSocr, 2019) and there is a total of 19 coastal settlements that vary in size and population density. Each coastal settlement has its own key socio-economic drivers that contribute towards the WCDMs overall Gross Domestic Product (GDP) (WCSocr, 2019). Each coastal LM has a number of socio-economic characteristics that contribute to the WCDM and Provincial GDP that are discussed in Table 8 below.

Table 8: The socio-economic characteristics of each of the coastal LMs within the WCDM

Local Municipality	Population (StatsSA, 2016)	Unemployment rate (IDP, 2017-2022)	Average household income (IDP, 2017-2022)	Coastal settlements	% Contribution to Provincial GDP for 2018 (WCSocr, 2018)	Key socio-economic drivers along the coastline
Matzikama	71 045	Economically active people: 15% Working population (approximately): 29%	85.3% of the households with an average annual income of R52 802.	Doringbaai (small isolated coastal town) Strandfontein (holiday and retirement village) Papendorp (small isolated village)	0,93%	Doringbaai is a fishing village 8 km south of Strandfontein. In 1925 the North Bay Canning Company built a crayfish packing factory in the town. The factory closed in the 1970s and has since been converted into a business hub that includes a restaurant, a winery with wine tasting venue. The local community, in cooperation with the Doringbaai Trust, recently initiated a community run abalone farm. Strandfontein lies on the R362 and is located between Papendorp in the north and Doringbaai in the south. During late winter and early spring, Strandfontein's sandy cliffs provide excellent lookout points for whale watchers. The Wandering whale labyrinth, just south of the town, is a labyrinth with paths made from blue mussel shells with a pink rose quartz center. Strandfontein has a population of less than 200 permanent residents but bursts at the seams during the holiday periods. Most of the houses are holiday homes, B&Bs and guesthouses.
Cederberg	52 949	10.5% (StatsSA, 2011)	51.4 per cent of households within the low-income bracket of up to R50 613 per annum.	Elands Bay (coastal village) Lamberts Bay (coastal town)	0,68%	Elands Bay functions as a low order service town and holiday town. The fishing industry forms the main economic activity in the LM. The Saldanha-Sishen railway divides Elands Bay, restricting access between

Local Municipality	Population (StatsSA, 2016)	Unemployment rate (IDP, 2017-2022)	Average household income (IDP, 2017-2022)	Coastal settlements	% Contribution to Provincial GDP for 2018 (WCSocr, 2018)	Key socio-economic drivers along the coastline
						the northern and southern sections of the town. The harbour at Lamberts bay plays an important role in the fishing industry in the LM.
Bergrivier	67 474	6.8% (StatsSA, 2011)	An estimated 48,9 % of households in Bergrivier fall within the low-income bracket of which 9,4 % have no income.	Velddrif (focal point for fishing activities) Dwarskersbos (coastal village) Laaipek (Fishing town)	0,82%	Velddrif is a focal point for the fishing industry. There is potential for further development as a residential area, particularly around the Port Owen area. A saltworks is located within the Berg estuary. A number of residential estates are being developed along the coastline, particularly around Dwarskersbos. However, there remain large areas of unoccupied land earmarked for development of these estates.
Saldanha Bay	111 173	23.4% (StatsSA, 2011)	Approximately 48.6 per cent of households in Saldanha Bay fall within the low-income bracket, of which 14.1 per cent have no income.	Saldanha (service town and industrial center) Langebaan (tourist center) Jacobs Bay (holiday village) Paternoster (holiday village) St Helena Bay (Including Britannia Bay, Stompneusbaai, Steenbergbaai and Shelley Point)	1,57%	Port of Saldanha links with mines in the Northern Cape via the Saldanha-Sishen railway. Port of Saldanha is a major naval, commercial and fishing port and a major portal for the export of commodities. Saldanha Bay has been transformed from a small fishing harbour to a major heavy industry center. Significant aquaculture operations are located within Saldanha Bay, including the new Aquaculture Development Zone (ADZ). Saldanha Bay has prominent biodiversity assets in the form of the WCNP, RAMSAR site and MPAs which contribute to the growing tourism sector in the area.

Local Municipality	Population (StatsSA, 2016)	Unemployment rate (IDP, 2017-2022)	Average household income (IDP, 2017-2022)	Coastal settlements	% Contribution to Provincial GDP for 2018 (WCSocr, 2018)	Key socio-economic drivers along the coastline
				Laingville		Langebaan is a growing tourism destination with numerous holiday accommodation and recreation activities being promoted (e.g. water sports, recreational angling). Jacobsbaai and Paternoster are being promoted as "typical west coast villages" and are popular tourist destinations. St Helena Bay has a number of large fish processing facilities and a harbour that services the small-scale fishing industry.
Swartland	133 762	12.7%	Households with no income: 10.4% Households with low income (R1 - R4200 pm): 39.5%	Yzerfontein Grotto Bay (Private estate and private nature reserve) Ganzekraal (Public resort managed by WCDM) Jakkalsfontein (Private estate and private nature reserve) Rondeberg Tygerfontein (private estate and conservation area)	0,97%	Yzerfontein harbour is a significant launching site for fishing vessels. However, the town is becoming a residential and retirement hub. A number of private nature reserves are located within Swartland LM, which serve as key tourist attractions. Many areas of the Swartland LM coastline are being developed as private residential estates.

3.10.2. Existing ports and harbours

There are five main harbours within the WCDM. This section provides a brief overview of the main activities that are being supported by these harbours and how they contribute to the socio-economic context of the WCDM.

Port of Saldanha Bay

Saldanha Bay LM is home to the Port of Saldanha, which is one of the largest ports in South Africa receiving close to 500 ships per annum. The Port is comprised of an iron ore terminal for export of iron ore, an oil terminal for import of crude oil, a multi-purpose terminal dedicated mostly for export of lead, copper and zinc concentrates, and the Sea Harvest/Cold Store terminal that is dedicated to frozen fish products. There are also facilities for small vessel within the Port of Saldanha including the Government jetty used mostly by fishing vessels, the Transnet-NPA small boat harbour used mainly for the berthing and maintenance of Transnet-NPA workboats and tugs, and the Moss gas quay (Saldanha Bay SDF, 2017).

Pepper bay Harbour

Pepper Bay fishing harbour is situated within the proclaimed commercial port area next to the town of Saldanha in the Saldanha Bay LM. The fishing harbour services the needs of both commercial and subsistence fishing, with a total of four quays and two boat ramps. Typical fishing activities include crayfish, sardines and anchovy, and mussel farming (PRDW, 2017).

St Helena Bay Harbour

St Helena is principally an industrial and commercial fishing harbour located in the Saldanha Bay LM. St Helena harbour carries fishing activity at all scales of operation and forms the primary centre for fishing on the West Coast. It provides the largest share of the fishing catch of all fishing harbours. The pelagic fishery is the dominant fishery active on the harbour. The various fish species caught and landed include pilchards, anchovy, round herring, lantern fish, hake, horse mackerel, snoek and sole. South Coast Rock Lobster is being caught by means of deep-sea catching operations. An abalone aquaculture farm has been established on the industrial land next to the harbour property, next to the fish processing factories. Whereas rock lobster and similar high value products are primarily exported, a large amount of fresh fish is processed at, or close to, the harbour, with only small quantities of fish, particularly Snoek, being sold straight off the boat by small scale fishermen (Aurecon, 2017a).

Laaiplek Harbour

The Laaiplek Harbour, located within the Bergrivier LM, was central to the origin of the town, with fishing the main industrial sector in the area. Fresh fish is sold to individuals at the harbour, local fish shops or out-of-town markets. Fish is also canned and processed for fishmeal in local factories at the harbour. Despite challenges, the fishing industry and the Cerebos salt refinery operations are two of the main employment creation drivers in the area.

Whilst a declining mullet population was once a concern, the strong recovery of the stock has been observed ever since gill net fishing in the estuary was banned in 2003. Other abundant fish species include pilchards, round herring and a variety of linefish. Fishing

activities at the harbour are mostly centred on small pelagics such as anchovies, pilchards and round herring. The family-owned Eigevis moors two pelagic fishing vessels on the main quay.

West Coast Rock Lobster is also landed at the harbour but not to the same extent as other harbours along the west coast. Snoek is also popular during the snoek-run. Bokkom Laan, situated close to Laaipek Harbour in Velddrif, is the base for the traditional small-scale net-fishing operations in the area. Fishermen set their nets in the open sea just off Laaipek, since the banning of gillnetting in the estuary in 2003. The main species caught is Mullet/Harders, which is dried out to make the Bokkoms the area it is renowned for (Aurecon, 2017b).

Marine Products is the largest fishing processing factory in Laaipek, dating back to the 1950s. The factory is the biggest employer in the Laaipek and Velddrif area, employing approximately 490 seasonal workers and 80 permanent employees. The old Eigelaar fish processing facilities have closed down and is an example of the declining profit margins of other fish processing facilities in the area (Aurecon, 2017b).

Lamberts Bay Harbour

Within the Cederberg LM, Lamberts Bay Harbour is now home to only a limited number of small fishing vessels. Fishing activities are mostly centred on line fish, West Coast Rock Lobster and small volumes of pelagic species and hake. Subsistence fishing remains important due to the socio-economic profile of the region. Both recreational and commercial West Coast Rock Lobster fisheries are still very active at the harbour, albeit not to the same extent as it was in the past due to the heavily depleted status of West Coast Rock Lobster (Aurecon, 2017c).

Doringbaai Harbour

Doringbaai was established in 1925 when the North Bay Canning Company built a crayfish-packing factory and developed the harbour. The bay was used long before as an anchorage on the sea-trading route and provisions were transported by camels inland to Vanrhynsdorp (<http://southafrica.co.za/history-doringbaai.html>).

The crayfish factory closed down in the 1970s and is now used for abalone farming and also houses a wine cellar and tasting room for the Fryer's Cove wines. It is also the site of a community-run restaurant (<http://southafrica.co.za/history-doringbaai.html>).

3.10.3. Western Cape Small Harbours: Spatial and Economic Development Frameworks

There are five fishing harbours in the WCDM that are owned by the Department of Public Works (DPW) and administered by DAFF. The following harbours in the WCDM have been earmarked to benefit from this project:

- Saldanha Bay;
- Pepper Bay;
- St Helena Bay;
- Laaipek; and
- Lamberts Bay.

This study identified that these harbours have four main functions which are:

1. Marine Access Points (inter-modal exchange points);
2. Key point in Fish Produce Value Chain (farms and fresh produce markets);

3. Public Space and Amenities (parks, beaches, community recreational facilities, etc.); and
4. Business/Commercial Nodes (shopping centres and industrial business parks).

To date, Spatial and Economic Development Frameworks (SEDF's) for the five Fishing Harbours within the WCDM have been completed and the report was finalised in 2014. To date, all bathymetry surveys of the identified harbours have been completed as well as a condition assessment for each harbour.

3.10.4. Tourism assets in the WCDM

The promotion of tourism development in the WCDM is one of the key priority areas identified in the WCDM's IDP (2017-2022). The WCDM has a number of unique features that attract both local and international tourists. Coastal destinations within the WCDM attract 26,3% to 31,3% of foreign tourists visiting the West Coast area, and 68,7% to 71,7% of domestic tourists. However, most of the DM is outside of the "100km magic circle", meaning it is far from the major metropolitan area of Cape Town, which can potentially inhibit tourism activities (Saldanha Bay, IDP, 2017-2022).

Each coastal LM has tourism assets that need to be managed effectively in order to increase the number of people visiting these areas. The IDPs for each of the LMs also identify projects to be implemented to attract more visitors. These IDP projects within coastal areas must be pulled through into this CMP.

Matzikama

Tourism in and around Matzikama is mainly driven by the natural beauty of the region and its historical and cultural heritage. Matzikama Municipality is also located in an area famous for flowers blooming during spring time. Within the coastal zone, heritage resources located in Doringbaai as well as bird watching activities at Papendorp provide opportunities for the LM to promote tourism in these areas. (Matzikama SDF, 2013). Matzikama tourism efforts also focus on promoting the area as:

- A destination for family breaks (short holiday visits for relaxation and enjoyment), regional touring visits (visiting as part of a touring itinerary); and
- Outdoor adventure enthusiasts (adventure sport participants or spectators), ecotourists (environment and culture enthusiasts, students, researchers with interest in the unique flora, fauna, geomorphology and cultural heritage and traditions of the area).

A major limitation to tourism in the area is road access, both in terms of road quality and the distances travelled.

Cederberg

Tourism in Cederberg is the fastest growing industry in the Cederberg. The natural environment and assets place Cederberg in a favourable position to become one of the leading destinations for adventure tourism. In recent years the Pakhuys region has distinguished itself as one of the best bouldering destinations in the world, drawing predominantly overseas visitors who stay in the area for longer periods.

The Cederberg LM aims to mainstream community-based tourism initiatives by implementing a portfolio of marketable tourism products and services in marginalized, rural communities of the Cederberg (e.g. Elands Bay).

Bergrivier

The tourism sector in the Bergrivier LM has attributes unique to this municipal area with its diverse landscape and environment and has been identified as an economic sector with growth potential. Subsequently the area has been earmarked as a priority for tourism development. Tourism activities in the LM would stimulate local investment, employment and economic growth. However, with this region attracting tourists on a seasonal basis, the seasonal, temporary or part-time nature of jobs and activities negatively impacts on the overall positivity of a tourism boom in the area. The same issue applies to seasonal employment in agriculture and fishing.

The following tourism attractions within the region were identified: unique flora locations (Sandvlakte fynbos, West Coast Renosterveld and Berg-fynbos), Fauna locations, particularly wetland birdlife in the two RAMSAR territories located in and around Velddrif, Archaeological and Paleontological sites, culturally-rich historic sites and pristine conservation areas (Bergrivier SDF, 2012-2017). Several tourism routes exist that characterize the Bergrivier towns:

- The flower route between Velddrif and Piketberg and along the N7. The same route serves as the culture route;
- The adventure route which includes all minor and dirt roads and having Aurora, Redelinghuys, Dwarskersbos (R27), Eendekuil and Porterville as destinations; and
- The bird route along the coast (R27).

The bulk of future tourism growth in the Bergrivier LM area is likely to centre around Velddrif, Laaipek and Dwarskersbos (Bergrivier SDF, 2012-2017).

Saldanha Bay

The Spring flower season is clearly the region's biggest tourist attraction with smaller peaks at Christmas / New Year and Easter. The international tourism exhibits the typical pattern of peaking in the flower season, this is a world-renowned attraction, and in the latter part of the northern hemisphere after Christmas. Most northern hemisphere tourists prefer spending Christmas and New Year at home. The West Coast National Park is one of the region's most prominent eco-attractions, drawing over 127,859 visitors from January to July 2016 (Saldanha Bay SDF, 2017).

Another prominent attraction in the Saldanha Bay municipal area is the West Coast Fossil Park, which houses the fossil site of Langebaanweg. However, visitor numbers to the Fossil Park decreased by 2,44% from 2014 (14 830) to 14 477 in 2016. Of the total number of tourists visiting the Fossil Park, 90,50% and 89,22% were domestic tourists in 2014 and 2016 respectively.

Swartland

Swartland is considered by the West Coast Tourism office as being the gateway to the West Coast and the most southerly of the sub-regions, with Malmesbury being a mere 64km from Cape Town. It is best known for its wheat fields, interspersed by green vineyards.

Wild flowers are prolific in the areas closer to the coast during spring, while Southern Right and Humpback whales often visit the sheltered bay of Yzerfontein from June to November.

WESSA Green Coast

The National Development Plan (NDP) outlines South Africa's strategy to tackle socio-economic development in the country. It provides a framework for Government, private sector and citizens to work together to stimulate and accelerate economic growth and provide solutions to the challenge of unemployment, poverty and inequality. In an attempt to fast track the objectives of the NDP, Operation Phakisa was developed in 2014 as a "fast results delivery programme to help implement the National Development Plan". The South African coastline has been identified as a crucial starting point for this strategy as Government aims to realise the potential that the coastline offers as an untapped resource. Operation Phakisa states that the oceans have the potential to contribute up to 177 billion Rand to the Gross Domestic Product (GDP) and create approximately 1 million jobs by 2030.

The Green Coast award has been developed to recognise those coastal sites which are managed according to standardised criteria and able to maintain a consistent improvement of conditions at the site. Green Coast sites aim to protect one of three main coastal themes namely; sensitive habitats, species and cultural heritage. The Green Coast award allows local municipalities to sustainably manage those coastal sites outside of traditionally developed swimming beaches. The award has been developed in a way that will allow for adequate monitoring and protection of the site, whilst also allowing for the development of low impact coastal tourism, should there be potential for this. A Green Coast site is not just another stretch of protected coastline but rather a platform for collaboration, innovation and local public participation.

The Green Coast criteria include aspects of basic ecological monitoring which allow for the setup of exciting new citizen science initiatives. The Green Coast sites with their unique habitat, species and cultural heritage also provide ideal locations for outdoor learning and exemplary environmental education activities. The objectives of Green Coast are two-fold. Firstly, it aims to provide a system for sustainable management of sensitive coastal spaces and secondly, to engage local citizens to become involved in management of these unique sites.

In an attempt to now extend this positive influence along the coastline to non-swimming beaches, WESSA will work closely with existing municipal partners to identify new coastal sites to manage under the Green Coast guidelines. The main themes covered by the Green Coast award include: Environmental management; ecological monitoring; tourism management and environmental education. A local Green Coast site committee will oversee the management of each site and this committee should ideally have representatives of all stakeholders involved in the management of the site.

Other WESSA Green initiatives include the following:

Eco-Schools programme: This programme is aimed at creating awareness and action projects around environmental sustainability at schools and in their surrounding communities. The programme improves education through curriculum-aligned environmental learning which helps learners develop practical, useful classroom and outdoor everyday skills, equipping them to live sustainably in the future.

The Green Key award: This initiative is a leading standard of excellence in the field of environmental responsibility and sustainable operations within the tourism industry. This prestigious eco-label requires that sites adhere to the strict criteria stipulated by the international Foundation for Environmental Education (FEE), with regard to water, waste, energy, food and beverage, and other areas of operation. A Green Key is an establishment's promise to its guests that by opting to support such an establishment, they

are helping to make a difference on an environmental and sustainability level.

It is strongly suggested that the WCDM, together with CapeNature and the coastal LMs, support this initiative by identifying areas that meet the criteria stipulated in order for a section of coast to receive the Green Coast eco-label. Suitable sites include unspoilt beaches and non-urban, wild spaces with minimal infrastructure. To achieve Green Coast status, locations will have to comply with a set of site-specific requirements and inspection criteria. LMs will be responsible for upholding the criteria, assisted by WESSA members who will provide specific support with the collection and monitoring of baseline ecological info.

3.10.5. Aquaculture activities

Marine aquaculture is a coastal dependent activity with direct impacts on the coastline in terms of water quality and land use change. It is estimated that over 67% of South African marine aquaculture producers are situated in the Western Cape, which in 2013 collectively accounted for 87% of the total annual South African production of about 3,000 tonnes and contribute about R600 million or 0.1% to the Western Cape economy annually (WCSocr, 2018).

In the WCDM, there are 12 companies with marine aquaculture rights that are currently operational. There are three oyster farms in Saldanha Bay, one oyster farm in Paternoster, four mussel farms in Saldanha Bay, four abalone farms in Saldanha Bay LM (Saldanha, Jacobsbaai, Paternoster and St Helena Bay) and one abalone farm in Doringbaai.

DEFF is also in the process of implementing the development of an Aquaculture Development Zone (ADZ) in Saldanha Bay. The ADZ received its Environmental Authorisation in June 2018 after a lengthy and comprehensive Environmental Impact Assessment.

The ADZ aims to enhance sustainable aquaculture expansion in Saldanha Bay and will contribute towards the fulfilment of the aquaculture development objectives of Operation Phakisa: Oceans Economy in terms of job creation, increased primary production, increased gross domestic product contribution and inclusive growth of the sector.

In order to monitor the construction and operational phases of the ADZ, an Aquaculture Management Committee (AMC), comprised of relevant government departments, has been established. The AMC will oversee the management, monitoring and compliance of the environmental authorisation. In order to ensure transparency and accountability, a consultative forum has been established to create a platform for interested and affected parties to engage with government departments and discuss environmental monitoring results and issues.

Initially, about 1 800 ha of sea-space had been earmarked for the ADZ in the bay. However, this has been reduced by about 50% to about 884 ha, or about 10% of the bay, as a result of stakeholder inputs and other user needs.

3.10.6. Saldanha Bay Special Economic Zone (SEZ)

One of the critical tools for accelerating the country's industrial development agenda is the new Special Economic Zone (SEZ) Programme, which was mandated by the SEZ Act, proclaimed on the 9th of February 2016. SEZs are a tool to help:

- promote industrial agglomeration;
- build the required industrial infrastructure;

- promote coordinated planning among key government agencies and the private sector; and
- guide the deployment of other necessary development tools.

President Jacob Zuma launched the Saldanha Bay IDZ (SBIDZ) in the Western Cape on 31 October 2013 and handed over the operator permit. It is envisioned that this IDZ will serve as the primary oil, gas and marine repair engineering and logistics services complex in Africa, servicing the needs of the upstream oil exploration industry and production service companies operating in the oil and gas fields off Sub-Saharan Africa. Situated approximately two hours north of Cape Town, the SBIDZ will include logistics, repairs and maintenance, and fabrication activities (DTI, 2018).

3.10.7. Small Scale Fisheries Policy

Many communities along the Western Cape coast rely on the coastline for subsistence purposes. The recommended definition of subsistence fishers according to the Policy for the Small-Scale Fisheries Sector in South Africa are poor people who:

- personally harvest marine resources as a source of food or to sell it to meet the basic needs of food security;
- operate on or near to the shore or in estuaries,
- live in close proximity to the resource,
- consume or sell the resources locally,
- use low technology gear (often as part of a long-standing community-based or cultural practice), and
- the types of resources they harvest generate only sufficient returns to meet the basic needs of food security (Branch, et. al. 2002).

The first democratic election in South Africa in 1994 was followed by a revision of many policies and laws, with the aim of correcting past political and social inequalities. One change that was made was the promulgation of the Marine Living Resources Act (MLRA), which recognised the previously marginalized subsistence fisheries as a formal fishing sector for the first time (Harris, et. al. 2002).

Interim Relief Measures (IRM) have been in place since an equality court order was issued to the DAFF in 2007. The IRM permit system was originally intended to provide temporary relief to small-scale fishers who did not benefit from Long Term Rights according to policies developed by DAFF in 2005, while the new Small-Scale Fisheries Policy was being drafted. However, the Small-Scale Fisheries Policy is in the process of being implemented and the IRM permit system continues to be utilised by DAFF to allow for the provision of legal access to limited marine resources for community fishers in the Northern and Western Cape (WWF-SA, 2015).

The main species that communities involved in the IRM are allowed to harvest are limpets, West Coast rock lobster, linefish (snoek, yellowtail, and cape bream), white mussels and oysters, subject to various respective limits. West coast rock lobster is the most valuable resource to the communities along the West Coast of South Africa. For the last two seasons, the Department allocated 235 tonnes of lobster to these communities, of which most was officially reported as caught. However, the actual catch data is likely to be far higher than what is reported due to high levels of under-reporting (DAFF, 2017).

In terms of the number of permits issued for small scale fisheries operations and what percentage of these have been issued to communities that were previously deprived of these rights, the WCSocr indicates that forty-five communities are currently involved in IRM, which includes two communities in the Northern Cape. The total number of people

supported through the dispensation is 1998 but is not consistent due to fishers passing away or finding other forms of work, while communities also regularly include new fishers on the IRM list (DAFF, 2017).

3.10.8. Renewable Energy opportunities

Renewable energy resources within the WCDM include wind resources, wave energy, biomass waste, solar- and hydro energy. Although these energy resources have potential to be utilized, it is acknowledged that within the WCDM, renewable energy production is still in its infancy. The most viable resources within the West Coast District include:

Wind

Wind resources in the West Coast District are substantial and comparably high in relation to the rest of the country. The region also leads the country in terms of implementation experience with regards to the establishment of several wind farms throughout the WCDM, from Darling and Hopefield in the south to the ESKOM Sere wind farm north of Vredendal. The Saldanha harbour has sufficient infrastructure and capacity to facilitate imported wind turbines into the WCDM.

Wave energy

Wave energy development is still in its early stages but holds much promise as a source of renewable energy. The WCDM has a long coastline and preliminary results show that wave energy resources are substantial. Currently there are no large-scale commercial projects in place. However, potential environmental impacts that this technology may have on marine ecosystems must be taken into consideration.

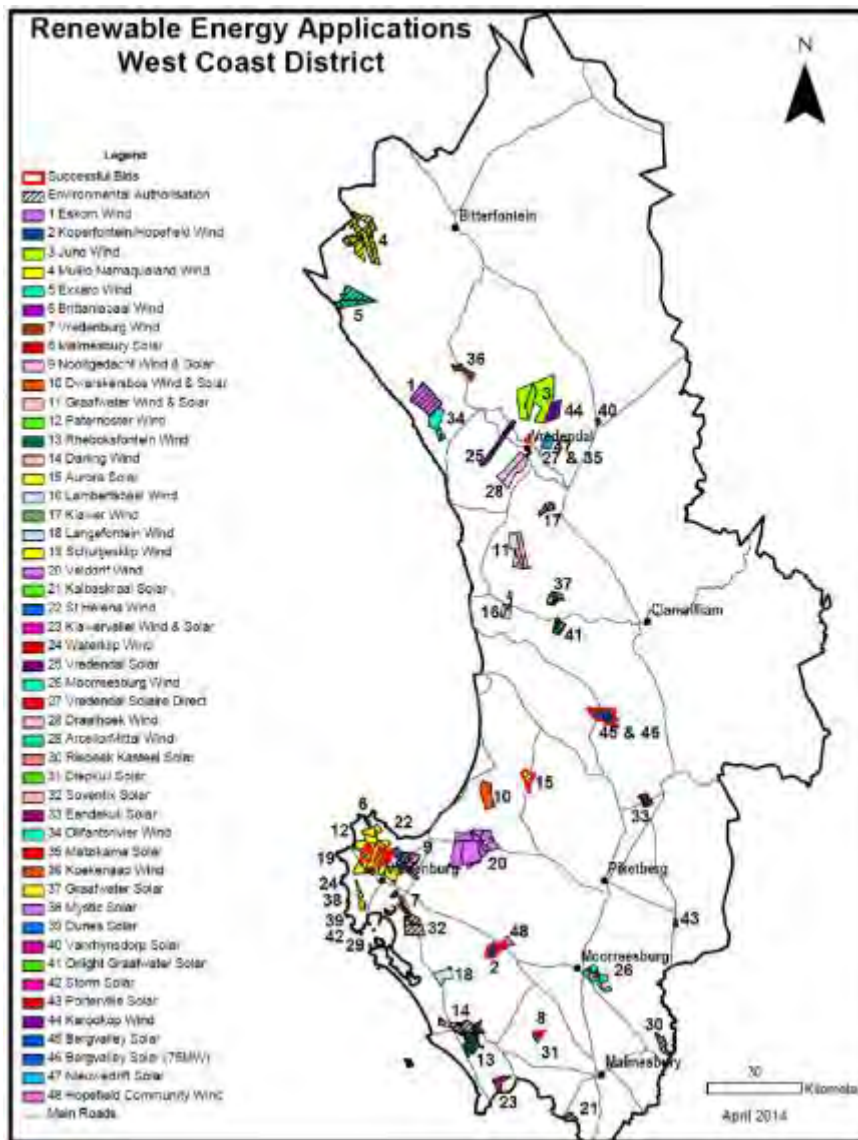


Figure 34: Existing and Pending Renewable Energy Environmental Applications (WCDM SDF, 2014)

Renewable Energy Development Zones (REDZ) and Strategic Transmission Corridors

A Strategic Environmental Assessment was undertaken in 2015 by DEA that aimed to identify Renewable Energy Development Zones that were of strategic importance for large scale wind and solar photovoltaic development in South Africa. IN 2017, Cabinet approved the REDZ based on the recommendations of the SEA. As a result, applications for Environmental Authorisation for large scale wind and solar energy facilities need only follow a Basic Assessment procedure in terms of Section 19 and 20 of the EIA Regulations (2014, as amended).

While none of the REDZ fall within the WCDM, the WCDM falls within the Western Strategic Transmission Corridor.

Based on the above as well as feed-back from stakeholders, the future needs in terms of coastal socio-economic development are as follows:

- WCDM and LMS must ensure that they engage with the Western Cape Small Harbours: Spatial and Economic Development Framework and incorporate the programme into their IDPs and SDFs.

- WCDM and LMs must implement the projects outlined in the IDP and SDFs that relate to coastal development and conservation.
- WCDM and LMs must ensure that they incorporate the promotion of aquaculture into their Local Economic Development (LED) plans. A feasibility study should also be conducted to determine the potential for a formal partnership between the Municipalities and the Aquaculture Operators to directly involve communities so that they can benefit through skills development and employment opportunities.
- The WCDM must engage with the LMs to assist them in participating in the WESSAs Tourism Green Coast project.
- The DAFF must ensure that community development is catered for in the ADZ business model. Community opportunities must include skills transfer and employment.
- DAFF need to finalise the Small-Scale Fisheries Policy and implement the allocation of rights in an appropriate and transparent manner.
- DAFF Regional Offices need to consider supporting communities with regards to assisting them with the application process for fisheries permits. Many communities are far from Cape Town and do not have the money for transport. The Regional officers must consider receiving and processing applications for fishing rights in the WCDM.
- The WCDM and LMs must incorporate the development of the renewable energy sector into their IDPs, SDFs and LEDs in accordance with the Renewable Energy Development Zones (REDZ), provided that Environmental Authorisations have been issued for new renewable energy projects, or are stipulated as a clear requirement in the IDPs and SDFs.
- The R27 along the coastal stretch of the WCDM is tarred up to Lamberts Bay. There is however a great need from a tourism as well as an agricultural "Abalone Farming" perspective to have the road tarred up to Doringbaai. Tarring of this stretch of road would unlock great socio-economic development opportunities for the Matzikama Region.

3.11 Theme 10: Awareness, education, training, capacity building and information

Creating awareness of the importance of the coastline and the impact of climate change through education, training and capacity building will help to facilitate the cooperative management of the coastal zone, which is required to successfully implement an integrated coastal management strategy. The generation of internal capacity within the WCDM to effectively manage the coast is also vital in ensuring that the objectives and strategies set out in the CMP are implemented. Awareness of the coastal zone and well a climate change impacts within the coastal zone among various key stakeholder can be achieved through the improvement of available of capacity and resources, the promotion of knowledge sharing of coastal issues, and instilling a sense of ownership of the coastal zone amongst all stakeholders.

3.11.1. National Oceans and Coastal Information Management System

DEFF and the Department of Higher Education, Science and Technology (DHES) have initiated the National Oceans and Coastal Information Management System (OCIMS) for South Africa. The OCIMS project forms part of the Operation Phakisa Marine Protection Services and Oceans Governance workstream Initiative 6 and is endorsed by Cabinet.

OCIMS will support a variety of oceans and coastal initiatives by providing information and decision support to key stakeholders involved in the day-to-day management of South Africa's oceans and coasts, including Municipalities (coastal planning, response to climate change and disaster management).

The project outcomes will be achieved through the development of an Information Management System (IMS) that will integrate current and future oceans and coastal systems, information and expertise into a user-friendly and cost-effective IMS for the benefit

of relevant stakeholders. In June 2015, the CSIR was nominated by DEFF as a service provider to facilitate the implementation of the project and to co-develop OCIMS.

The OCIMS website provides a wide range of resources that will enable decision makers to access existing data, policies and programmes related to the coastal and marine environment. Training guidelines and manuals that have been developed by various organisations for different coastal activities are available for download as well as all relevant coastal and marine legislation, policies and guidelines (www.ocims.gov.za).

The following Decision Support Tools are available on the OCIMS webpage that can be used to assist with informed decision making as well as provide information to the public:

1. Harmful Algal Bloom Decision Support Tool:

The HAB Decision Support Tool (DeST) provides a capability for monitoring and assessing risk of HAB events for the South African coastal area to approximately 50 km offshore. Figure 35 is a screenshot of the HAB DeST. This is an important tool that the WCDM can use in terms of implementing the Districts HAB Contingency Plan.



Figure 35: A screenshot of the HAB DeST from the OCIMS website.

2. Coastal Operations at Sea Decision Support Tool

The Coastal Operations at Sea (CoastOps) DeST provides a capability for monitoring and predicting ocean and sea state variables in the coastal ocean using state-of-the-art forecasts of winds, currents and waves, which are provided by numerical models that simulate and predict ocean and atmospheric conditions. This will assist the WCDM in preparing for potential disasters such as storm surges and high winds.

3. Marine Spatial Planning Support Viewer

Marine Spatial Planning (MSP) Support Viewer DeST provides a consolidated view of data sources that can inform MSP and the development of Marine Area Plans (MAPs). The MSP Support Viewer DeST contains relevant and accessible spatial data from authoritative sources and use a federated data source approach for data ingestion.

4. *Integrated Vessel Tracking Decision Support Tool*

The Integrated Vessel Tracking (IVT) DeST provides the capability of monitoring vessels movements based on both transponder information (such as Automatic Identification Systems) as well as vessels detected using Search and Rescue data, and provides notifications when vessels are within Marine Protected Areas (MPAs).

5. *Water Quality Decision Support Tool*

The purpose of the Water Quality DeST is to provide support to coastal managers' decision-making processes by providing a consolidated view of various remote-sensed and in-situ sources of water quality data. This will assist the municipalities in managing public safety with regards to water quality at popular beaches.

6. *Coastal Flood Hazard Decision Support Tool*

The Coastal Flood Hazard DeST identifies coastal areas at risk of flooding and aids in facilitating climate change adaptation. Based on the data available for South Africa, as one example the DeST can provide disaster managers, spatial planners and the general public a way of identifying coastal areas that are potentially at risk of flooding.

7. *Department of Environmental Affairs Coastal Viewer*

Information regarding the Coastal Public Property (CPP) and Coastal Protection Zone (CPZ) can be found in this viewer. This can support decision making processes by focussing on access to the coast, protecting sensitive coastal ecosystems and protecting people, property and economic activities that may be affected by dynamic coastal processes.

3.11.2. *South African National Biodiversity Institute (SANBI)*

SANBI has developed an online portal where decision makers and other public and private entities can freely access spatial data that relates to biodiversity in South Africa. The Biodiversity Geographical Information System (BGIS) website houses all biodiversity related spatial data and their associated technical reports.

The following information and services are made available by the SANBI BGIS website and team:

- Freely downloadable biodiversity-related spatial datasets;
- Each spatial dataset is accompanied by metadata. Metadata describes the spatial datasets and provides the user an idea of its validity;
- An easy to use mapping platform that allows users to visualise important biodiversity features. The mapping platform allows users to add their own data, switch layers on and off, add annotations, and print maps;
- A pdf report listing all the biodiversity features in an area of interest; and
- The BGIS team offers free, quarterly BGIS training. The training focuses on how to efficiently use the website to make informed land-use decisions.

3.11.3. *Formalised coastal education and awareness campaigns*

The objective of awareness and education campaigns is to reduce the impacts on the coastal environment relating to prevalent coastal pressures such as land use, pollution (such

as solid waste) and resource exploitation.

A number of environmental education (EE) programmes are active in the Western Cape, with the WCDM actively participating in these programmes. Examples of coastal programmes that are implemented in partnership with government and non-profit organisations (NGOs) include:

- Working for the Coast programme, implemented by the DEA and is aimed at ensuring access to pristine beaches and a well conserved coastline.
- International Coastal Clean-up, which is an initiative in partnership with volunteer organisations and individuals around the globe. It provides an opportunity to encourage people to remove waste and litter from beaches, estuaries and rivers, identify the sources of debris and change human behaviours regarding marine litter. In South Africa this initiative is managed by PlasticsSA and KZN Wildlife, and on one occasion over 3000 people collected over 7 tonnes of litter off 121km of the South African coastline.
- Youth Environmental Services Programme, the Government initiated the Youth Service Programme (YES) as a Presidential programme in 2003. Its aim was to respond to the multiple needs of young people which enable them to access new opportunities for employment, income generation, skills development and personal development while contributing to the reconstruction of South Africa. The Youth Environmental Service entails the involvement of unemployed young people in activities which provide environmental service that benefits the community whilst they are also provided with opportunities for personal development, accredited training and exit opportunities.

The DEA&DP, as the designated lead agent for coastal management in the Western Cape, promote and support environmental awareness and education amongst the people of the Western Cape through Environmental Calendar events and programmes, particularly the International Coastal Clean-up and National Marine Month activities. These initiatives are annual events and are aimed at raising environmental awareness in a broader sense and the WCDM work together with the DEA&DP to roll out these programmes within the region (WCSOCR, 2018).

The WCDM, with support from DEA&DP, promotes and implements the annual National Marine Week programme, which highlights the importance of oceans and the role they play in the life of all South Africans, as well as the Coastal Clean-up week. Typically the Environmental Calendar includes the following events, and the WCDM and the LMs are encouraged to promote and become involved in these:

- World Recycling Day
- Earth Hour
- Earth Day
- World Biodiversity Day
- World Environment Day
- World Ocean Day
- International Coastal Clean-up Day
- Marine week
- International Day of Climate Action
- World Fisheries Day

3.11.4. National and Provincial training initiatives

A comprehensive understanding of the Integrated Coastal Management Act (ICMA) forms an integral aspect of coastal management for implementing agents and coastal officials. The DEA&DP have provided training on different aspects of the ICMA, including how ICMA

integrates with other legislation (WCSoCR, 2019). The training that the DEA&DP have facilitated since 2013 include the following:

Year	Date	Type of training
2013	20 November	DEA&DP Estuaries Workshop
2014	18 February	Estuarine Management Chairpersons Forum
2015	19 March	ICMA/SPLUMA
2015	26 May	ICMA- support workshop
2016	1-2 March	Western Cape Integrated Management Act Training
2016	14-15 March	Environmental Management Framework Workshop
2016	17 November	ICMA with focus on Environmental Governance
2017	1-2 March	ICMA with focus on Estuaries
2017	03 March	ICMA with focus on CML
2017	6-8 March	Estuary Management Course
2017	15 June	Marine Mammal Stranding Workshop
2018	8 March	Capacity Building Workshop on Provincial Coastal Access Strategy and Plan (CASP) and Coastal Access Bylaw

Nelson Mandela University facilitates a three day "Management in Estuaries in South Africa" short course, with support from DEFF, on an annual basis. This course aims to capacitate government officials and private entities on estuarine management and the requirements of the national Estuarine Management Protocol. In order to enrol for this course, the following people can be contacted:

Dr Janine Adams
 Director of the Institute for Coastal and Marine Research
 Tel: 041 504 2429
 Email: Janine.Adams@mandela.ac.za

3.11.5. Signage at beaches

One of the most simple and effective ways to provide information to the public is through the erection of education-based signage at public access points along the coastline. The LMs are proactive in erecting a variety of signage at key areas that prohibit illegal dumping as well as illegal ORV activities. It is also important that signage be erected at high risk public areas, such as dangerous swimming beaches and public launch sites, which warns the public of dangerous conditions.

Through the WfC programmes, educational signage at beaches can be erected. The OCIMS Programme also has links to educational posters that follow coastal themes that are free and easy to access. These posters are available in English, isiXhosa and Afrikaans (<https://www.ocims.gov.za/documents/gen-info/>).

One of the issues that was raised during the initial stakeholder consultation was that members of the public do not know who to contact to report illegal or suspicious activities. It is suggested that signage be erected at key coastal access points that provide the contact details of the relevant officials (e.g. the Local FCO for fisheries transgressions, EMIs for ORV infringements, etc.).

3.11.6. Coastal related forums and committees

A number of environmental and coastal-related forums and committees exist within the WCDM that aim to keep up to date with environmental and coastal issues within the district. These forums and committees have a wide range of stakeholder that include government, industrial organisations, conservation authorities, rate payers associations and other public groups and organisations. The following forums currently exist within the WCDM:

- In Saldanha Bay, an Air Quality forum has been developed that allows for members of the public to participate.
- The new ADZ that will be developed in Saldanha Bay has established a Community Forum that facilitates the transparent reporting of monitoring results from the ADZ.
- The Estuary Advisory Forums allow for representatives of local community leaders and Rate Payers Associations to engage with the officials that are responsible for the management of these estuaries and the execution of the Implementation Plans.
- The MCC meets on a quarterly basis where coastal issues are raised and discussed.

3.11.7. Fisheries Community Development Workers

DEFF have community development workers to ensure that there is constant interaction and easily accessible relationships with local coastal communities. This function also aids in making sure that information about the operations and service deliver programmes of the department are easily cascaded to the coastal communities.

The roles and responsibilities of the community development workers include the following:

- Conducting community outreach programmes and events;
- Conduct situational analysis for each respective area;
- Establish community fishing forums;
- Establish database of all stakeholder and forums in their respective coastal areas;
- Act as a departmental representative/ link between the local coastal communities and the department, and
- Provide constant feedback on service delivery enquiries.

The details for the Fisheries Community Development Workers for the WCDM are listed in Table 8 below.

Table 8: the details for the Fisheries Community Development Workers in the WCDM

Fisheries Community Development Worker	Areas of responsibility	Contact Number
Fransiena Magdalena Joseph	Doringbaai, Lambertsbaai and Elandsbaai	078 2380 109
Riaan Brandon Hendricks	Laaiplek, St Helena Bay , Paternoster and Saldanha Bay	071 754 6754

3.11.8. Public libraries

Public libraries are an underutilised resource when it comes to education and awareness. Each coastal town within the WCDM has a public library that can be used to allow members of the public access to environmental and coastal literature. Public libraries can also be used as a resource for the municipalities to directly engage with communities to discuss and educate people on coastal issues.

One of the prominent issues that came out of the stakeholder engagement sessions was that the communities were not aware of coastal policies, programmes or legislation, and

they do not all have access to online resources. A database of coastal and environmental literature can be made available at public libraries with a summary of the key resources being made available in more than one language.

3.11.9. Other environmental education initiatives

Cape West Coast Biosphere Reserve

The Cape West Coast Biosphere Reserve is committed to the environmental education of the public and wants to place a strong focus on schools, especially in the surrounding areas. The CWCBR is currently working on developing an Environmental Education and Training strategy, which will provide a framework for planning and the implementation of awareness, education and training intervention strategies.

West Coast National Park

The WCNP have a number of environmental education initiatives that aim to increase awareness of the unique biodiversity of the area. The WCNP offer the following programmes (www.sanparks.org):

Orientation programme: this provides way of welcoming guests to the park where a welcome presentation is done by the People and Conservation Department. The aim of the presentation is to introduce SANParks but more specifically the West Coast National Park to the visitors.

Dune Hike: This excursion entails a dune walk of 700m on the Dawid Bester Hiking Trail. On route the different medicinal plants and its uses are explained as well as the dune ecology on arrival at the dunes.

Birds, lagoon and salt marsh ecology: This entails an excursion to either 1 of the 4 bird hides in the park to spot and identify the birds in the park. This talk can be supplemented with a talk regarding the Langebaan Lagoon system as well as the salt marsh ecology.

Game drives: A game drive into Postberg Nature Reserve includes game identification and viewing and discussion on the importance if eco- system balance as well as animal adaptations and eating habits etc. Environmental issues that are discussed include the over population of game in Postberg Nature Reserve and how SANParks manage game.

Rocky and sandy shore ecology: This is a hands-on activity where the various forms of life and rocks are explored. An explanation on what causes the tides is also done coupled with interesting facts about red tides as well as the search and identification of sea organisms under rocks, seaweed and kelp. This activity is usually done at Tsaarsbank and on 16 Mile Beach.

Adopt-a-beach project: This involves a beach clean-up, analysing of garbage and a discussion on marine pollution.

Educational hike: The Geelbek Environmental Education Office offer 2 hikes, the Strandveld Hiking trail and the circular Dune hike, both of which are 14km long.

!Khwa ttu Project

In 1998, the Working Group for Indigenous Minorities in Southern Africa (WIMSA) agreed that the Khoisan communities along the West Coast needed assistance in training their own

people to deal with tourism and how to showcase Khoisan culture to the world.

Swiss anthropologist Irene Staehelin agreed to help the San. In 1999, guided by her vision and inspired by heritage centres in America and Canada, she bought a farm on the West Coast of South Africa for the !Kwa ttu project, namely a San Culture and Education Centre.

Today the project is run by the !Kwa ttu Non-Profit Company, jointly directed by the Ubuntu Foundation Switzerland and the San, represented by WIMSA. The farm is held in perpetuity by the Meerkat Non-Profit Company for the sole use of the !Kwa ttu project and can only be used as a San Culture and Education Centre.

Through the !Kwa ttu mentorship and training programmes, !Kwa ttu educates and develops skills for up to 30 Khoisan annually. This benefit positively affects approximately 150 dependents from remote communities in Botswana, Namibia and South Africa.

The entry level course focuses on improving students' cultural, heritage, nature and environmental education, builds life skills and provides work exposure. The course prepares Khoisan youth to make decisions about their future and walk the path of their choice – be it further study, entering the workplace or starting their own business.

3.11.10. Research opportunities in the WCDM

DEFF used to implement the mussel watch programme to monitor contaminants in Saldanha Bay and St Helena Bay. However, it is not in effect anymore. There is opportunity for this programme to be reinstated.

Based on the above as well as feed-back from stakeholders, the future needs in terms of awareness, education, training, capacity building and information are as follows:

- The WCDM and LMS need to ensure that they are familiar with the OCIMS and what data can be obtained in terms of environmental monitoring and decision-making tools.
- The WCDM and LMs must provide links on the webpages to key coastal legislation, policies and programmes as well as sources of scientific data (e.g. OCIMS and BGIS).
- WCDM and the LMs must continue to engage with DEA and DEA&DP with regards to upcoming training opportunities for officials. This must be done at the beginning of each year so provision can be made for training.
- All LM Environmental Officers must attend the Estuary Management Training course that is implemented by NMU.
- Educational signage must be erected at all formalised coastal access points. The WfC programme must be used to support this.
- Signage must be erected at all coastal access points that provide the contact details of the relevant authorities that the public can report suspicious or illegal activities to.
- The WCDM and LMs must ensure that they continue to participate in the relevant committees and forums.
- The WCDM and LMs must engage with the FCDW in an attempt to assist the local communities with issues relating to the MLRA.
- The LMs must ensure that the public libraries have access to all the latest relevant environmental and coastal policies, plans and programmes.
- A formalised Coastal Education Strategy must be developed that utilises municipal resources such as public libraries, schools and own halls. Open days and information sharing sessions by representatives from relevant coastal authorities and organisations must be included. The Two Oceans Aquarium and CapeNature can assist with the implementation of some coastal education activities that may form part of this strategy.
- The DM and LMs need to support cultural education facilities such as the !Kwa ttu Project. Support can be in the form of creating awareness of these initiatives by creating a link on the municipality's website or including them as part of their tourism plans.
- The Musselwatch programme should be reinstated.

- The WCDM, together with the LMs, should consider hosting an aquaculture summit that highlights the aquaculture industry in the region as well as the opportunities for community benefaction.
- The Municipalities must be available to support research institutions by providing data, if it is present, in a timeous manner. Other ways that the municipalities can support research is by engaging with communities so that field visits can be facilitated without suspicion.
- The Municipalities should start to formalise an internship programme that allows undergraduate students the opportunity to obtain valuable work experience. Institutions such as the DPW, SETA and NRF can be approach to source funding.

4 ROLES AND RESPONSIBILITIES FOR COASTAL MANAGEMENT

4.1 Mandatory Roles and Responsibilities in terms of the ICMA

The ICMA is the central piece of legislation that defines the roles and responsibilities of various spheres of government, and other role players with regards to coastal management. While the roles and responsibilities of the National and Provincial government are important to consider at local government level, this chapter will only highlight roles and responsibilities pertaining to the WCDM.

The ICM Act definition of a municipality is as follows:

- a metropolitan, district or local municipality established in terms of the Local Government: Municipal Structures Act (Act No. 117 of 1998); or
- in relation to the implementation of a provision of this Act in an area which falls within both a local municipality and a district municipality, means -
- the district municipality; or
- the local municipality, if the district municipality, by agreement with the local municipality, has assigned the implementation of that provision in that area to the local municipality.

Responsibilities assigned to Municipalities are automatically assigned to metropolitan and district municipalities (WCDM). If capacity exists at a local government level, district municipalities can assign certain provisions.

However, the functions and powers of municipalities are assigned in terms of sections 156 and 229 of the Constitution of the Republic of South Africa Act (No. 108 of 1996). When two municipalities have the same fiscal powers and functions with regard to the same area, an appropriate division of those powers and functions must be made in terms of national legislation, namely, the Municipal Structures Act (No. 117 of 1998). This Act assigns responsibility for the adjustment of the division of functions and powers, as well as the resolution of disputes arising between district and local municipalities to the MEC for local government. Any action initiated should be undertaken after consultation and via a notice in the Government Gazette. The Municipal Systems Act, (No. 32 of 2000) also provides a directive for the cooperation, support and assistance between district and local municipalities wherever possible.

Table 9 below summarises the key roles and responsibilities of the WCDM in coastal management in terms of the ICMA.

Table 9: The roles and responsibilities of the WCDM in coastal management in terms of the ICMA

ASPECT	RELATED SECTION/S IN THE ICMA	BRIEF DESCRIPTION OF ROLE AND RESPONSIBILITY	ASSISTANCE FROM OTHER ORGANS OF STATE
Access to coastal public property	18, 19, 20	Ensuring that the public has equitable access to coastal public property by designating coastal access land, designate in by-laws strips of coastal access land to promote access to CPP along the coast, withdraw inappropriate coastal access land and follow an environmentally sensitive and socially	DEA, DEA&DP, WCDM

		responsible process in designating coastal access land. This is the responsibility of the LM.	
Coastal management line demarcation on zoning maps	25	The WCDM and the LMs must delineate coastal management lines in municipal zoning schemes maps and should participate in any provincial coastal management line determinations, but this is discretionary; alternatively can work with province to determine coastal management lines. Province will have to Gazette.	DEA&DP
Determining and adjusting coastal boundaries of coastal access land	29	The WCDM must ensure specified considerations are taken into account when determining or adjusting a coastal boundary of coastal access land.	DEA, DEA&DP
Marking coastal boundaries zoning maps	31	The WCDM and LMs must delineate coastal boundaries determined or adjusted in terms of S26 on zoning scheme maps	
Municipal Coastal Management Programmes	48, 49, 55	The WCDM must prepare and adopt a municipal coastal management programme for managing the coastal zone or specific parts of the coastal zone in the municipality.	DEA, DEA&DP
Consistency and alignment between Municipal Coastal Management Programmes and other statutory plans	51, 52	The WCDM and LMs must ensure that any plan, policy or programme adopted by an organ of state that may affect coastal management is consistent and aligned with municipal coastal management programmes, which in turn is aligned with provincial coastal management programmes and the national coastal management programme. Ensure that IDPs (including its spatial development framework) is consistent with other statutory plans [See S52 (1) (a-f)] adopted by either a national or a provincial organ of state.	
Consultation and public participation	53	The WCDM must ensure that adequate consultation and public participation precedes the exercising of a power by a municipality, which the ICMA requires to be exercised in accordance with section 53 of the ICMA.	DEA&DP
Implementation of land use legislation in the coastal protection zone	62	In implementing any legislation that regulates the planning or development of land, in a manner that conforms to the principles of co-operative governance contained in Chapter 3 of the Constitution, apply that legislation in relation to land in the coastal protection zone in a way that gives effect to the purposes for which the protection zone is established, as set out in section 17.	DEA, DEA&DP, Cape Nature

4.2 Collaborative Partnerships for Coastal Management

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

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

4.3 Development of bylaws

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

(2) A municipality may exercise executive and legislative authority within its boundaries only, but may, by written agreement with another municipality and subject to Chapter 5 of the Municipal Structures Act and other applicable national legislation, exercise executive authority in the area of that other municipality.

(3) A municipality exercises its legislative or executive authority by—

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

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

A by-law for coastal management within the WCDM will be developed as part of the CMP process. This will provide the District Municipality the legislative support to implement coastal management along the west coast.

5 VISION AND PRIORITIES

5.1 The West Coast District Municipality Vision for the Coastline

South Africa's Constitution specifies the following objectives for local government:

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

The vision of the WCDM as expressed in its 2017 - 2021 IDP captures these objectives:

"A quality destination of choice through an open opportunity society".

The vision for the first generation CMP for the WCDM has been carried through to the second generation CMP. The vision that was created for the first generation CMP still holds true and still bears relevance to the WCDM coastline.

We, the people of the West Coast District, celebrate the diversity, richness and uniqueness of our coast and its communities. The coastal environment will be effectively managed to ensure a balance between ecological integrity, sustainable livelihoods and cultural values.

The coast will be a safe, clean and healthy asset with equitable access and opportunities for all communities, now and in the future.

The guiding principles for coastal management within the WCDM, presented in Figure 28 below (NCMP, 2015), are closely aligned with the principals set out in this Western Cape CMP and the NCMP:

Economic development

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

Social Equity

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

Ecological integrity

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

Holism

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

Risk Aversion and Precaution

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

Accountability and Responsibility

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

Duty of Care

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

Integration and Participation

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

Co-operative governance

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

Adaptive Management Approach

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

Figure 28: The guiding principles for coastal management in South Africa (NCMP, 2015)

5.2 The West Coast District Municipality Priorities for Coastal Management

The Situational Analysis (Chapter 3) describes the state of the WCDMs coastal ecosystems. The Situational Analysis along with contributions from the stakeholder engagement workshops held in each coastal LM contributed significantly to the assessment of the status of coastal management within the WCDM.

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

Ten priorities for coastal management in the WCDM have been identified and are listed in order of importance based on the outcomes of the stakeholder engagement process thus far:

Priority 1: Cooperative governance and institutional arrangements

Goal: To promote the integrated and cooperative management of the coastline by bringing all relevant stakeholders together and creating the capacity within the municipalities to effectively monitor and manage coastal activities.

Cooperative governance is important in the implementation of coastal management objectives and strategies within the WCDM and the LMs. Effective cooperative governance requires:

- the participation of all stakeholders,
- coastal governance and co-responsibility,
- integrated, coordinated decision making,
- planning and development,
- the continued learning and practical implementation of programmes and processes, and
- ensuring compliance with international conventions, protocols and agreements.

It is important that the WCDM and the LMs work closely with the National and Provincial spheres of government to ensure that the municipalities are sufficiently capacitated and financially resourced to implement coastal management strategies.

Priority 2: Facilitation of coastal access

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

To gain Blue Flag Beach Status for at least one beach within the WCDM.

The provision of public access to the coast is clearly addressed in the ICMA. Within the WCDM, public access to the coast is not fully compliant with the relevant provisions in the ICMA, due to either a lack of public access or amenities, a lack of awareness on the impact of illegal activities on the coastal zone, the poor condition of existing access roads to coastal areas, and the lack of open communication between local communities and

authorities with regards to the provision of public access within the coastal zone. Other challenges facing the facilitation of coastal access in the WCDM includes the alienation of land for aquaculture, mining and gated residential estates.

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

Priority 3: Coastal planning and development

Goal: To promote responsible coastal planning for the sustainable development of the WCDM coastal zone consistent with ICMA and other legislation and policy requirements, namely:

- Coastal Protection Zone
- Coastal Management Lines
- Coastal Access
- Climate change risks and opportunities
- Cape West Coast Biosphere Reserve
- Western Cape Biodiversity Spatial Plan

This can be achieved by incorporating appropriate spatial principles into the WCDM SDF, defining and establishing urban edges for all urban nodes in the coastal zone and ensuring that climate change adaptation and mitigation measures are included in the planning processes by incorporating the recommendations of the WCDM's Climate Change Response Strategy into these planning processes.

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

There will inevitably be impacts due to the increasing development along the WCDM coastline. However, in order to preserve the coastline and prevent degradation, it is necessary to incorporate all existing guidelines and frameworks into town and regional planning schemes, and broader spatial planning tools such as SDFs, for all development along the coastal zone.

Priority 4: Compliance, monitoring and enforcement

Goal: To capacitate the municipalities with regards to monitoring and enforcing coastal management objectives and to encourage other organs of state who have a legal mandate to enforce coastal and marine legislation to become more visible around areas that are known to be hotspots for illegal activities in order to ensure the protection of marine and coastal resources for exploitation and degradation.

The coastal and marine environments are sensitive and are prone to exploitation and degradation as a result of anthropogenic activities. Various legislation has been developed to protect these coastal and marine resources and need to be effectively implemented and enforced in order to preserve the integrity of these systems.

Illegal activities within the WCDM need to be monitored and the relevant coastal and marine legislation needs to be enforced. There are a number of structures that make provision for enabling organs of state to respond to these illegal activities, and the officials who have been mandated to enforce certain legislation need to be more visible in areas that are known to be hotspots for illegal activities. The municipalities also need to build their own capacity in terms of being able to ensure compliance with coastal management objectives.

Priority 5: Estuary management:

Goal: The implementation of the estuarine management plans for the Sout, Olifants, Jakkalsvlei, Wadrif, Verlorenvlei and Berg estuaries in accordance with the National Estuary Management Protocol.

Goal: To engage with the Province to formally identify the RMAs for the estuaries in the WCDM and to facilitate discussions around the management of the smaller estuaries identified in the 2019 NBA.

Estuaries are sensitive unique environments and are susceptible to pollution and degradation from sources upstream and the surrounding areas. The WCDM does not have a large number of estuaries along its coastline and many of these estuaries have estuarine management plans in various stages of development. It is important that the implementation strategies outlined in these EMPs are actioned in order to preserve their ecological integrity.

Priority 6: Natural resource management:

Goal: To manage the terrestrial and marine environment in a holistic and coordinated manner where the municipalities acknowledge and support the goals and objectives of the protected areas and conservancies located within the region in order, to protect and preserve the unique biodiversity that characterises the WCDM.

The marine environment includes inshore and offshore reefs, sandy beaches and rocky shores. This area is an extremely valuable asset and resource due to its aesthetic value, ecological and biological diversity and economic potential. However, the integrity of marine resources is vulnerable to a variety of impacts largely resulting from varying levels of human induced pressure. Numerous plant and animal populations (such as abalone, limpets, mussels and lobster and other shellfish, seaweed, bait species, etc.) along the WCDM coastline are subject to varying degrees of exploitation for subsistence and non-subsistence purposes, both permitted and un-permitted. Certain coastal communities along the WCDM coastline are dependent on harvesting various marine organisms either for food or to generate an income. As described in Section 3.7.4. sand mining and heavy mineral mining takes place in certain areas. Both mining and the harvesting of resources seem to continue unchecked. The DMRE is responsible for checking environmental compliance in the mining sector, and DEFF is responsible for monitoring marine living resource use. The unsustainable use of these resources results in over exploitation and degradation of the marine and coastal zones. Both the WCDM and LMs need to engage with national departments to improve natural resource management along the West Coast.

Priority 7: Heritage resource management:

Goal: To appreciate and conserve the rich heritage and cultural resources that are found within the WCDM.

The WCDM is home to some of the oldest population groups in southern Africa and as a result, some of the most valuable heritage and cultural assets. These assets highlight the history of the development of the South African people. It is important that these cultural groups, and the heritage and cultural assets that are associated with these groups, are acknowledged and that the cultural and heritage assets are formally protected to ensure that future generations can better understand and appreciate the rich and diverse heritage of South Africa.

Priority 8: Pollution control and management

Goal: To better manage and monitor effluent generating infrastructure and facilities to prevent pollution of the coastal zone as well as ensuring transparency through the publishing of monitoring data.

To achieve this goal the community needs to become custodians of their environment by supporting the authority's objectives regarding waste management. This can be achieved by reporting pollution events as well as reducing household pollution through adopting a reduce-reuse-recycle culture.

Existing waste management policies and plans need to be updated and better implemented to ensure that the municipalities fulfil their required mandates in terms of waste management; and the municipalities need to continue to support organisations that undertake continual monitoring of environmental conditions within the WCDM.

The WCDM has a large number of industrial and processing facilities along the coastline, which are primarily focussed around Saldanha Bay, that discharge into the coastal environment. The WCDM also supports a number of aquaculture activities that may also contribute to coastal and marine degradation if their management practices become unsustainable. There are two organisations who are very proactive in monitoring environmental conditions, particularly within Saldanha Bay LM and these organisations need to be supported by the municipalities as well as other relevant spheres of government. It is important that all discharge and other pollution generating activities within the WCDM are properly authorised and that they remain compliant with their authorisation conditions.

There are programmes that are being implemented by National government that afford an opportunity for the municipalities to capacitate themselves on waste management, thereby improving waste management along the coastline. These programmes are currently being underutilised by the LMs, it is their responsibility to ensure that these programmes are being effectively utilised. The most relevant of these programmes in the Working for the Coast Programme that focusses on cleaning the coastline and maintaining and developing new coastal infrastructure.

Priority 9: Socio-economic development

Goal: To ensure direct involvement with the Western Cape Small Harbours Spatial and Economic Development Framework in order to promote community development. The Municipalities must also ensure that all projects identified in the IDP and SDF that relate to development of coastal areas are implemented within the IDP period.

Goal: To assist communities to benefit from the growing aquaculture industry by engaging with aquaculture operations with regards to community beneficiation programmes.

Goal: To assist communities to benefit from the Small-Scale Fisheries Policy through engagement with DEFF in order to facilitate the fair and transparent allocation of fishing rights. DEFF also need to support communities in applying for fisheries permits as many community members cannot travel to Cape Town.

Goal: To promote and support renewable energy projects that are being proposed in the WCDM area, provided that environmental sustainability is achieved.

The WCDM coastal economy focusses on ports and harbours, fisheries and processing as well as aquaculture, and it is important that the further development of these industries is achieved in an environmentally sustainable manner. However, it is even more important to ensure that the coastal communities benefit from these activities, and the municipalities need to encourage private operators to support community benefaction objectives. To assist with this, the WCDM should develop a list of community benefaction objectives and targets that the private sector is expected to meet.

Many coastal communities rely on the fisheries industry. Although the municipalities cannot directly control the issuing of rights and permits, they have a responsibility to support community development. Close partnership with DEFF is essential in ensuring the sustainable livelihood of coastal communities that rely on marine resources, and DEFF need to be able to support the more isolated communities who cannot travel long distances to secure their permits.

Renewable energy is a rapidly growing sector in South Africa, and a number of renewable energy projects are being proposed in the WCDM. It is important that the WCDM and the LMs participate in the development of the sector, but they must ensure that the renewable energy projects do not come into conflict with the Municipality's environmental and biodiversity conservation programmes. Active involvement in the EIA process by both the WCDM and LMs is required to ensure this.

Priority 10: Awareness, education, training, capacity building and information

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

Goal: To ensure that all municipalities are aware of and have access to the new and updated environmental monitoring and decision-making tools; and that municipal planning officials are actively using these tools to ensure that town planning process are being undertaken in an environmentally responsible and informed manner.

Goal: To ensure that all municipal officials are adequately capacitated to manage environmental and coastal aspects through ensuring that all training programmes that are offered by National and Provincial government, as well as private organisations are utilised and attended.

Goal: To encourage education and skills development amongst graduates through the implementation of internship programmes; and to support research institutions be facilitating access to municipal data and assisting with field visits.

The WCDM coastline has unique biodiversity and has many beaches and rocky shore environments that are in good condition. It is important to conserve and effectively manage this natural heritage through awareness and education of the coastline. This requires the coordination and cooperation of the communities, authorities and private sector.

Municipal officials also need to be able to make informed and environmentally sound decisions with regards to spatial and town planning activities. A wide variety of data is publicly available and there is easy access to up-to-date environmental planning tools that can assist decision-makers. It is important that environmental management officials are adequately capacitated to understand the management aspects and legislative tools that need to be utilised to effectively fulfil their mandates. National and Provincial government understand the need to provide training to municipal officials regarding environmental management, and offer training programmes on an annual basis. The municipalities need to ensure that they are aware of these programmes and need to attend where possible.

In order to secure capacity in the future, it is strongly recommended that the Municipalities utilise internship programmes where graduates are afforded the opportunity to gain valuable work experience within the environmental management context. Engagement with universities and funding organisations (NRF, DOPW, SETA) needs to be undertaken to facilitate this initiative. Municipalities must also assist research institutions in their research objectives by facilitating access to data and potential access to resources.

6 COASTAL MANAGEMENT OBJECTIVES AND ACTIONS

The vision for the WCDM coastline, along with the ten priority objectives identified in the previous chapter (Chapter 5) provides the focus for coastal management for the WCDM. In order to address the ten objectives and to promote the implementation of the WCDM CMP, specific management strategies and actions are required.

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

Specific strategies and actions have been developed for the WCDM and the LMs to achieve the WCDMs CMP objectives. These strategies and actions have been developed based on the Situational Analysis and stakeholder consultation.

6.1 Coastal Management Objective 1: Improve Cooperative Governance and Clarify Institutional Arrangements

PROPOSED IMPLEMENTATION ACTION	OUTPUT INDICATOR	TIMEFRAME	RESPONSIBLE AUTHORITIES
1.1. Coastal Management Strategy: Clarification of institutional arrangements for coastal management and the facilitation of the generation of capacity			
1.1.1. Assist the Swartland LM with the formal appointment of an environmental officer.	Formal environmental officer appointed.	2019/2020	WCDM Swartland LM
1.1.2. Assist the Matzikama LM with the formal appointment of an environmental officer.	Formal environmental officer appointed.	2019/2020	WCDM Matzikama LM
1.1.3. Appoint an assistant environmental officer for the WCDM to support the current environmental officer.	Formal assistant environmental officer appointed.	2019/2020	WCDM
1.1.4. Develop clear mandates for LM and DM environmental officers and adopt.	Mandate adopted by Council. Adopted mandate circulated to all environmental officers.	2020	WCDM & LMs
1.2. Coastal Management Strategy: The continued implementation and update the Coastal Management Programme			
1.2.1. Update the WCDM CMP every five years.	Update of WCDM CMP commenced. Update of WCDM CMP finalised.	By June 2024 By June 2025	WCDM
1.2.2. Ensure that all LMs participate in the CMP development by providing comment within the stipulated timeframes and attending stakeholder workshops.	Record of comment received on all drafts of the CMP. Record of attendance to all relevant stakeholder sessions (attendance registers).	At time of CMP update At time of CMP update	WCDM & LMs
1.2.3. Report on status of implementation of the CMP at the WCDM MCC meetings.	CMP update added as permanent item on the WCDM MCC agenda. Meeting minutes recording update report. Produce an annual report based on the quarterly inputs on the implementation of the WCDM and submit to DEA&DP.	Quarterly	WCDM & LMs
1.3. Coastal Management Strategy: The promotion of cooperative governance through engagement with all relevant coastal stakeholders			
1.3.1. Organise and facilitate WCDM Municipal Coastal Committee (MCC) meetings every three months.	WCDM Coastal Committee meetings held every three months (minutes of meetings). Attendance registers indicating participants.	Quarterly	WCDM & LMs
1.3.2. Update and maintain WCDM Municipal Coastal Committee stakeholder database to	Updated stakeholder database.	Continual	WCDM

PROPOSED IMPLEMENTATION ACTION	OUTPUT INDICATOR	TIMEFRAME	RESPONSIBLE AUTHORITIES
ensure all relevant stakeholders (government and private) and present and that contact details are up-to-date.			
1.3.3. Expand the MCC to facilitate attendance by local representatives of DEFF: O&C (in particular the new monitoring directorate), DMRE, DPW, other NGOs and civil society.	Proof of correspondence of MCC dates, venues and times.	Continual	WCDM
1.3.4. WCDM to ensure attendance at all PCC meetings to escalate key coastal issues that require assistance from the province or National.	WCDM represented at PCC meetings (attendance register). WCDM issues raised if necessary (minutes of meetings).	Quarterly	WCDM DEA&DP

6.2 Coastal Management Objective 2: The Facilitation of Coastal Access

PROPOSED IMPLEMENTATION ACTION	OUTPUT INDICATOR	TIMEFRAME	RESPONSIBLE AUTHORITIES
2.1. Coastal Management Strategy: The implementation of the West Coast District Municipality Coastal Access Audit			
2.1.1. Finalise WCDM Coastal Access Audit.	Final WCDM Coastal Access Audit.	2019/2020	DEA&DP
2.1.2. Update CMP with recommendations and outcomes of the WCDM Coastal Access Audit.	WCDM CMP updated.	2019/2020	WCDM
2.1.3. Designate the function of coastal access land provision to the LMs by way of a formal agreement	MoU signed.	2020	WCDM
2.1.4. Incorporate areas identified in the Coastal Access Audit to be addressed in municipal zoning schemes.	Coastal access priority areas from the Coastal Access Audit incorporated into municipal zoning schemes.	2024	LMs
2.1.5. Status of implementation of WCDM Coastal Access Audit recommendations reported to the WCDM MCC.	Feedback recorded in MCC meeting minutes.	Continual	DEA&DP WCDM LMs
2.1.6. Assist the LMs with the development and approval of a coastal access bylaw.	Approved coastal access by law for each LM.	2020	WCDM LMs
2.2. Coastal Management Strategy: Engagement with the Working for the Coast Infrastructure Programmes			
2.2.1. Improve access to and from the coast by providing coastal engineering inputs to stabilising the beach during high seas. Installing a movable ramp for disabled persons and NSRI emergencies, install signage, upgrade ablution blocks, braai spots, benches and fencing.	Facilitates upgraded.	2021	WfC WCDM Matzikama LM
2.2.2. Formalise Papendorp slipway, install lights at the slipway and jetties, rehabilitation and stabilisation of dunes at Papendorp.	Papendorp slipway formalised. Lights installed. Dunes rehabilitated and stabilised.	2021	WfC WCDM Matzikama LM
2.2.3. Upgrade the lifesaver facilities at Paternoster.	Lifesaver facilities upgraded.	2021	WfC WCDM Saldanha Bay LM

PROPOSED IMPLEMENTATION ACTION	OUTPUT INDICATOR	TIMEFRAME	RESPONSIBLE AUTHORITIES
2.2.4. Installation of boardwalks at Mosselbank.	Beachfront boardwalks installed.	2021	WftC WCDM Saldanha Bay LM
2.2.5. Installation of seven recycled wood boardwalks/stairs with balustrades and landings and four recycled wood and concrete benches outside Tabakbaai resort.	Seven recycled wood boardwalks/stairs with balustrades and landings and four recycled wood and concrete benches installed outside Tabakbaai resort.	2021	WftC WCDM Saldanha Bay LM
2.2.6. Installation of four recycled plastic tables and chair sets (8-seater) and repair fence around Hoedjieskop open space/reserve.	Four recycled plastic tables and chair sets (8-seater) installed and repaired fence around Hoedjieskop open space/reserve.	2021	WftC WCDM Saldanha Bay LM
2.2.7. WCDM and LMs to submit proposals for upgrading coastal access infrastructure to the WftC Programme for every funding cycle (2-years).	Proposal submitted to WftC.	2022 2024	WCDM All LMs
2.3. Coastal Management Strategy: Addressing Public Coastal Access Issues through Town Planning and Resource Use Permits			
2.3.1. The Impact of coastal access related to private township and resort developments needs to be assessed before the municipality approves any future development in the coastal zone. This can be done by identifying nearby formal coastal access points and determining whether sufficient coastal access is already available. If not, the following should take place: <ul style="list-style-type: none"> • A request for servitudes to be put in place; • Request that access be incorporated as part of the title deeds; or • Request that the developments oversee the maintenance of certain access areas. These can also be incorporated as mitigation measures in the EIA not only comment wise.	Environmental Authorisations for private developments carefully consider coastal access issues, and comments on the EA or BA is provided.	Ongoing	WCDM All LMs
2.3.2. Assist the LMs in assessing the impact of the coastal access point before approving its	Suitable coastal access included in town planning approvals.	Ongoing	WCDM LMs

PROPOSED IMPLEMENTATION ACTION	OUTPUT INDICATOR	TIMEFRAME	RESPONSIBLE AUTHORITIES
development. Determine if access infrastructure triggers an EIA or BA in terms of NEMA EIA regulations, and appoint service provider to undertake the study to obtain environmental approval.			
2.3.3. Coastal developments that were required to provide public access to the coast (in terms of an RoD) to be audited to confirm compliance.	Audit Reports	Annually	DEA&DP
2.3.4. Issue directives requiring all Basic Assessments and EIAs in the coastal zone to include an assessment of the impact and feasibility of coastal access land and proposed mitigation measures.	Amendments to Regulations and applicable guidelines	2024	DEA&DP DEFF
2.3.5. Engage with DEFF to ensure that DEFF are aware of the location of formal coastal access points to prevent permits being issued for sections of beach that do not have access points in order to limit illegal access and ecological impacts associated with this.	Coastal access maps provided to DAFF.	2020	LMS DEFF
2.4. Coastal Management Strategy: The facilitation of the effective management of Public Launch Sites			
2.4.1. The WCDM to assist the LMs to undertake a municipal capacity assessment to determine whether the LM has the capacity and resources to manage its designated Public Launch Sites.	Municipal Capacity Assessment for the Management of Public Launch Sites completed	2020	WCDM LMs
2.4.2. WCDM to assist the LMs to appoint a service provider to management the Public Launch Sites that the capacity assessment shows requires the delegation of management responsibilities.	Service Level Agreements signed. Public allocation approved.	2021	WCDM LMs DEA&DP
2.4.3. The WCDM to assist the LMs with undertaking A "State of Public Launch Sites" assessment where key infrastructure upgrade requirements must be identified and implemented.	State of Public Launch Sites completed Infrastructure upgrades implemented	2020 2024	WCDM LMs

PROPOSED IMPLEMENTATION ACTION	OUTPUT INDICATOR	TIMEFRAME	RESPONSIBLE AUTHORITIES
2.4.4. WCDM to assist LMs with the development of Operational Management Plans for their designated Public Launch Sites.	Operational Management Plans approved by DEA&DP	2020	WCDM LMs DEA&DP
2.5. Coastal Management Strategy: Managing recreational and commercial events on beaches			
2.5.1. A Standardised policy for the management of recreational and commercial events (including sporting events) needs to be developed and adopted.	"Policy for Recreational and Commercial Events of Beaches" adopted.	2020	WCDM LMs
2.6. Coastal Management Strategy: Ensuring public safety and security			
2.6.1. Establish protocols and procedures concerning public safety and behaviour on coastal public property.	Protocols and procedures finalised	2012	DEA: Oceans and Coasts
2.6.2. Periodic updating of Disaster Management Plan with the incorporation of ICMA principals, findings and new legal requirements and improve the detection and response system.	Disaster Management Plans revised	Ongoing	WCDM
2.6.3. Increase patrols of coastal parking areas and expand Sector Policing approach.	Increased patrols to coastal parking areas and decrease in reported crime at these sites. Operational procedure revised to sector approach.	Ongoing	SAPS

6.3 Coastal Management Objective 3: To Ensure that Coastal Planning and Development is Conducted in a Manner that ensures the Protection and Rehabilitation of the Coastal Zone

PROPOSED IMPLEMENTATION ACTION	OUTPUT INDICATOR	TIMEFRAME	RESPONSIBLE AUTHORITIES
3.1. Coastal Management Strategy: The incorporation of biodiversity, environmental and climate change policies into town planning processes			
3.1.1. Update IDPs and SDFs to incorporate all updated coastal and environmental spatial plans, management legislation (based on boundaries in terms of ICMA), policies and plans.	Revised IDPs and SDFs	2023	WCDM LMs
3.1.2. Consider climate change risks and the Coastal Management Lines when reviewing coastal development applications in order to prevent damage to coastal infrastructure.	WCDM CMP updated.	2019	LMs
3.1.3. Coastal Management Lines must be incorporated into the SDFs.	CMLs indicated in SDF	2019	WCDM LMs
3.2. Coastal Management Strategy: Addressing coastal erosion within the coastal zone			
3.2.1. Stabilisation of dunes at Tietiesbaai.	Dunes stabilised.	2021	WfFC WCDM Saldanha Bay LM
3.2.2. Dune stabilisation and road closures at Columbine/Tietiesbaai.	Dunes stabilised. Roads closed.	2021	WfFC WCDM Saldanha Bay LM
3.2.3. Installation of beachfront retaining wall at Mosselbank.	Beachfront retaining wall installed.	2021	WfFC WCDM Saldanha Bay LM
3.2.4. Rehabilitation and stabilisation of dunes at Papendorp.	Dunes rehabilitated and stabilised.	2021	WfFC WCDM Matzikama LM
3.2.5. Implement recommendations made by engineer to stabilise coastal erosion at Strandfontein	Dunes stabilised. Roads closed.	2021	WfFC WCDM Saldanha Bay LM

PROPOSED IMPLEMENTATION ACTION	OUTPUT INDICATOR	TIMEFRAME	RESPONSIBLE AUTHORITIES
3.2.6. Stabilise coastal dunes at Strandkombuis	Dunes stabilised.	2024	Saldanha Bay LM
3.2.7. Collaborate with the various spheres of government to motivate for and to facilitate further assessments of the erosion that is affecting the Langebaan/Saldanha Bay area. These assessments include, but are not limited to sediment studies and a feasibility study for the installation of stabilising structures.	Assessments completed.	2021	WCDM Saldanha Bay LM DEA&DP DPW DEFF
3.2.8. Identify, prioritise, estimate costs, and rehabilitate areas in estuaries that are experiencing or are prone to erosion, as per the Estuarine Management Plans.	Priority areas needing rehabilitation identified. Degradation profiles compiled. Rehabilitation programme developed. Priority degraded areas restored.	2024	Western Cape Department of Transport: Public Works (WC DoT&PW) LMs RMA
3.3. Coastal Management Strategy: To address the high percentage of vacant plots and the low occupancy levels of residential dwellings.			
3.3.1. Urban edges to be illustrated in SDFs to promote nodal development and appropriate densities beyond urban edges. SDF and other planning instruments to ensure infill development of the high percentage of vacant plots within urban areas, as well as including zones for mixed-cost housing.	Revised SDFs.	2020	LMs

6.4 Coastal Management Objective 4: To Enhance Compliance Monitoring and Enforcement Efforts in the District

PROPOSED IMPLEMENTATION ACTION	OUTPUT INDICATOR	TIMEFRAME	RESPONSIBLE AUTHORITIES
4.1. Coastal Management Strategy: Developing Local Authority Environmental Management Inspectorate and Marine Conservation Capacity			
4.1.1. WCDM to assist the LMs to appoint one Grade 5 EMI within each LM to enforce the legislative requirements in terms of NEMA.	One official identified per LM. Budget allocated within each LM to send the identified official on the training programme. Training and function included in an official performance agreement.	2023	LMs DEA&DP
4.1.2. WCDM EMIs need to ensure that they receive continual training with the aim of being promoted to the next grade of EMI.	Budget allocated to send the EMIs on the training programme. Training and function included in an official performance agreement.	2023	WCDM DEA&DP
4.1.3. At least one Honorary Marine Conservation Officer must be appointed in terms of Section 9 of the MLRA in each LM. CapeNature officials may also be appointed as Honorary Marine Conservation Officers.	One official identified per LM. Budget allocated within each LM to send the identified official on the training programme. Training and function included in an official performance agreement.	2020	DEFF CapeNature LMs
4.2. Coastal Management Strategy: Facilitating and encouraging public reporting of illegal activities			
4.2.1. The WCDM must assist the LMs with the development and erection of signs at all coastal access points that provide the contact details of the local SAPS unit, Fisheries Control Officer, the Local EMI as well and the Local Environmental Officer.	Funding received from WftC. Signage design approved. Signage printed Information signs erected at all coastal access points.	2020	LM WCDM
4.2.2. Contact details of the local SAPS unit, Fisheries Control Officer, the Local EMI as well and the Local Environmental Officer must be made available on all Municipal Websites.	Contact details of relevant compliance officials indicated on the Municipal website.	2019	WCDM LM
4.2.3. Compliance officials need to be more visible in areas that are known to be hotspots for illegal activities, including poaching and illegal ORV driving.	Increased patrols by local compliance officials at known hotspots for illegal activities. A decrease in report of illegal activities.	Ongoing	LMs WCDM DEA&DP DEFF
4.3. Coastal Management Strategy: Facilitating the development and enforcement of Municipal by-laws			

PROPOSED IMPLEMENTATION ACTION	OUTPUT INDICATOR	TIMEFRAME	RESPONSIBLE AUTHORITIES
4.3.1. Enforcement of existing municipal by-laws need to be improved, particularly with regards to water-sports. Local Authority officials need to act of reports received on transgressions.	Records of transgressions. Decrease in transgressions against municipal by-laws.	2019	LMS
4.3.2. A Coastal Management By-law must be developed to assist the WCDM in the implementation of the CMP. This by-law must be adopted by Council and enforced by the Environmental Officer, EMI, Honorary Marine Conservation Officers, Fisheries Control Officers and SAPS.	Coastal Management By-law adopted.	2020	WCDM
4.4. Coastal Management Strategy: Addressing the increase in illegal Off-Road Vehicle activity.			
4.4.1. The enforcement of illegal ORV use is a Provincial mandate and reports of illegal ORV activities need to be investigated by DEA&DP.	Investigation Reports published.	Ongoing	DEA&DP
4.4.2. Illegal ORV use is a major issue, and enforcement of the relevant ICMA provisions is limited. Develop a procedure that allows LM EMIs to efficiently report illegal ORV use to DEA&DP, so that action can be taken. Investigate legal mandates so that the SAP, EMIs and FCOs can also enforce these provisions.	A steady increase in fines issued to guilty parties.	2021	DEA&DP
4.4.3. WCDM to assist the LMs with erecting physical barriers to prevent illegal access to the coastal zone by ORVs. The Local Municipalities, who are mandated to maintain beaches, must conduct an assessment of the location of illegal ORV access points as well as the extent of damage. This high priority access points must be physically barricaded.	Illegal ORV audit finalised. Budget allocated for the installation of physical barriers. Physical barriers at illegal ORV access points installed.	2021	LMS WCDM DEA&DP
4.4.4. Signs must be erected at known illegal ORV access points with the contact details of the DEA&DP official responsible for enforcing ICMA in the WCDM area.	Funding received from WftC Signs erected at illegal ORV access points.	2020 2024	LMS

6.5 Coastal Management Objective 5: To Ensure Effective Management of Estuarine Resources in the WCDM

PROPOSED IMPLEMENTATION STRATEGY	OUTPUT INDICATOR	TIMEFRAME	RESPONSIBLE AUTHORITIES
5.1. Coastal Management Strategy: Facilitating the designation of Responsible Managing Authorities (RMA)			
5.1.1. A formal MoU/IP between DEA&DP, CapeNature, WCDM and/or the Matzikama LM needs to be signed identifying the designated RMA for the Sout and Olifants estuaries.	Signed MoU.	2019	DEA&DP WCDM Matzikama LM CapeNature Community Property Association of Ebenhaezer and Papendorp
5.1.2. A formal MoU/IP between DEA&DP, CapeNature, WCDM and/or the Cederberg LM needs to be signed identifying the designated RMA for the Jakkals and Verlorenvlei estuaries.	Signed MoU	2019	DEA&DP WCDM Cederberg LM CapeNature
5.1.3. A formal MoU/IP between DEA&DP, CapeNature, WCDM and/or the Cederberg LM needs to be signed identifying the designated RMA for the Wadrift estuary.	RMA identified Signed MoU	2019	DEA&DP CapeNature WCDM Cederberg LM
5.1.4. A formal MoU/IP between DEA&DP, CapeNature, WCDM and/or the Bergrivier LM needs to be signed identifying the designated RMA for the Berg estuary.	Signed MoU	2019	DEA&DP CapeNature WCDM Bergrivier LM
5.2. Coastal Management Strategy: Supporting the development of Estuarine Management Plans for smaller estuaries in the WCDM			
5.2.1. The WCDM will support and coordinate actions and engage with relevant authorities on the management of the smaller and micro-systems and development of the EMP, where relevant.	Proof of correspondence. Minutes of meetings.	2020	WCDM LMs DEA&DP
5.3. Coastal Management Strategy: Facilitating the implementation of Estuarine Management Plans in the District			

PROPOSED IMPLEMENTATION STRATEGY	OUTPUT INDICATOR	TIMEFRAME	RESPONSIBLE AUTHORITIES
5.3.1. The WCDM must support, where possible, the implementation of the actions in the EMP for the Sout estuary and the WCDM must form part of the EAF.	All actions in EMP implemented. WCDM attendance at EAF meetings (attendance registers).	On-going	RMA WCDM
5.3.2. The WCDM must support, where possible, the implementation of the actions in the EMP for the Olifants estuary and the WCDM must form part of the EAF.	All actions in EMP implemented. WCDM attendance at EAF meetings (attendance registers).	On-going	RMA WCDM
5.3.3. The WCDM must support, where possible, the implementation of the actions in the EMP for the Jakkalsvlei estuary and the WCDM must form part of the EAF.	All actions in EMP implemented. WCDM attendance at EAF meetings (attendance registers).	On-going	RMA WCDM
5.3.4. The WCDM must support, where possible, the implementation of the actions in the EMP for the Wadrift estuary and the WCDM must form part of the EAF.	All actions in EMP implemented. WCDM attendance at EAF meetings (attendance registers).	On-going	RMA WCDM
5.3.5. The WCDM must support, where possible, the implementation of the actions in the EMP for the Verlorenvlei estuary and the WCDM must form part of the EAF.	All actions in EMP implemented. WCDM attendance at EAF meetings (attendance registers).	On-going	RMA WCDM
5.3.6. The WCDM must support, where possible, the implementation of the actions in the EMP for the Berg estuary and the WCDM must form part of the EAF.	All actions in EMP implemented. WCDM attendance at EAF meetings (attendance registers).	On-going	RMA WCDM
5.3.7. The WCDM must support, where possible, the implementation of the actions in the Management Plan for the Langebaan Lagoon.	Proof of correspondence with SANParks indicating the WCDMs willingness to assist where possible.	On-going	WCDM SANParks
5.3.8. The status of the Implementation of the EMPs must be reported at the EAFs as well as the WCDM Coastal Committee.	Update of implementation of EMPs recorded in relevant EAFs meeting minutes. Update of status of implementation of the six EMPs is a permanent item on the WCDM Coastal Committee Agenda. Update of implementation of EMPs recorded in WCDM Coastal Committee meeting minutes.	Quarterly	RMA WCDM WCDM

6.6 Coastal Management Objective 6: The Protection, Management and Sustainable Use of Natural Resources

PROPOSED IMPLEMENTATION ACTION	OUTPUT INDICATOR	TIMEFRAME	RESPONSIBLE AUTHORITIES
6.1. Coastal Management Strategy: The effective control of invasive alien plants			
6.1.1. WCDM and LMs to develop a long-term alien clearing plan for properties under their ownership, in conjunction with Working for Water.	Budget/funding approved, and development of plans included in IDPs. Appointment of service providers. Finalisation of plans.	2020 2020 2021	WCDM LMs WfW
6.1.2. WCDM and LMs to implement long-term alien clearing plans for properties under their ownership.	Budget/funding approved, and development of plans included in IDPs. Appointment of service providers. Commencement of alien clearing programme. Number of hectares cleared.	2022 2022 2022 2024	WCDM LMs WfW
6.2. Coastal Management Strategy: Cooperative management of Protected Areas			
6.2.1. The WCDM and LMs must ensure that the objectives of the Protected Areas and Conservancies in the area are incorporated into the IDP and SDFs.	Updated IDPs and SDFs	2022	WCDM LMs
6.2.2. All local authority nature reserves must have approved Ecological Management Plans	100% of Local Authority Nature Reserves with approved Ecological Management Plans	2024	LMs
6.3. Coastal Management Strategy: Monitoring mining activities in the coastal zone			
6.3.1. Enforce rehabilitation requirements of Mining and Mine Prospecting Licenses and Permits	Written instructions to mine operators. Approved rehabilitation Plans. Completion of rehabilitation and formal closure of mines.	Ongoing	DMRE DEFF DEA&DP
6.3.2. The SANBI Mining Guidelines must form part of the decision-making process when mining applications are made.	No mining activities in legal protected and highest biodiversity important areas.	Ongoing	DMRE DEFF DEA&DP
6.3.3. The SANBI Mining Guidelines must be incorporated into the municipal IDPs and SDFs to ensure that mining plans are not considered in environmentally sensitive areas.	Updated IDPs and SDFs.	2022	WCDM LMs

PROPOSED IMPLEMENTATION ACTION	OUTPUT INDICATOR	TIMEFRAME	RESPONSIBLE AUTHORITIES
6.3.4. The WCDM and LMs must be aware of offshore mining, oil and gas prospecting activities as these activities could result in the degradation of the coastal zone due to oil spills and other contaminants affecting beaches. These offshore mining areas must be included in the municipal IDPs and SDFs.	Updated IDPs and SDFs	2022	WCDM LMs
6.4. Coastal Management Strategy: Facilitating the coordinated management of marine living resources			
6.4.1. A Marine Mammal stranding Policy and Protocol for the West Coast must be developed in order to effectively manage marine mammal stranding events. The roles and responsibilities of the various stakeholders must be clearly defined in the policy and a clear response plan must be developed. The Marine Mammal Stranding policy must also indicate that the LMs are responsible for removing mortalities off beaches and disposing of them in an appropriate manner.	Adopted Marine Mammal Stranding Policy and Protocol.	2020	DEFF: Oceans and Coasts SANParks DEA&DP CapeNature WCDM LMs Two Oceans Aquarium SPCA
6.4.2. The WCDM HAB Contingency Plan must be updated to incorporate information from the OCIMS as well as to clearly define the roles and responsibilities of the DM and LM in terms of managing mortalities that may wash up in the coastal zone.	Updated HAB Contingency Plan	2020	WCDM
6.4.3. The Local Authorities must assist members of the public with reporting illegal activities in terms of the MLRA by referring the informant to the local FCO.	Illegal activities referred to the FCOs	Ongoing	DEFF WCDM LMs
6.4.4. Additional FCOs need to be appointed in order to ensure that a greater extent of the WCDM coastline is monitored on a more regular basis.	Appointment of additional FCOs.	2023	DEFF

6.7 Coastal Management Objective 7: Managing Heritage Resources within the District

PROPOSED IMPLEMENTATION ACTION	OUTPUT INDICATOR	TIMEFRAME	RESPONSIBLE AUTHORITIES
7.1. Coastal Management Strategy: Acknowledging Khoisan communities and their needs			
7.1.1. The history of the Khoisan communities in the WCDM needs to be incorporated into the tourism and social development section of municipal IDPs with emphasis being made on providing opportunities to develop these communities.	Update of IDPs	2023	WCDM LMs
7.1.2. Each municipality is required to develop and maintain a heritage register in terms of the NHRA. Khoisan heritage and cultural sites of importance must be identified and incorporated into the Municipality's heritage register.	Updated heritage register.	2024	WCDM LMs
7.1.3. The heritage register must be made available to other organs of state and public via online GIS, coupled with an awareness campaign. It is suggested that the GIS data for coastal heritage and cultural assets be incorporated into the DEA Coastal Viewer platform.	Coastal heritage and cultural assets present on DEA Coastal Viewer.	2020	DEFF SAHRA WCHRA LMs
7.1.4. Comprehensive stakeholder engagement with communities and traditional authorities to be undertaken when name changes of heritage resources taken place.	Attendance registers. Meeting minutes	2019	WCHRA LMs
7.2. Coastal Management Strategy: Facilitating the conservation of Heritage Resources			
7.2.1. The WCDM must assist the LMs in identifying Heritage Resources that require formal protection under the NHRA.	Formal protection of one heritage resource per year	Annually	WCHRA LMs WCDM
7.2.2. Heritage Conservation Management Plans must be developed for all Provincial Heritage sites in the WCDM with assistance from the WCDM>	2 plans to be completed per annum	Every 2 years	WCHRA LMs WCDM

6.8 Coastal Management Objective 8: The Effective Management and Control of Pollution in the Coastal Zone

PROPOSED IMPLEMENTATION ACTION	OUTPUT INDICATOR	TIMEFRAME	RESPONSIBLE AUTHORITIES
8.1. Coastal Management Strategy: Managing the discharge of effluent, stormwater and other industrial-based pollutants into coastal waters			
8.1.1. A Coastal Waters Discharge Audit of coastal outfalls is underway. Thereafter DEFF O+C will decide how to move forward with authorising discharges in terms of the new Coastal Waters Discharge Regulations. The WCDM must ensure that they engage with DEFF in this process.	Proof of engagement with DEFF regarding the Coastal Waters Discharge Audit.	2020 2021	WCDM
8.1.2. Facilities that are discharging into the coastal waters need to be continuously monitored for compliance with the CWDP conditions and the Water Quality Guidelines for Discharge into Coastal Waters. The WCDM must request that it is updated on the status of each of the coastal discharges that are being monitored.	Proof of requests from the WCDM for access to reports on results of monitoring of discharges.	Annual Annual	WCDM DEFF: Oceans and Coasts
8.1.3. Stormwater management by-laws must be revised and implemented to control the release of commercial and industrial discharges into the municipal stormwater systems.	Updated by-law	2024	WCDM LMs
8.1.4. Municipalities need to limit the number of septic tanks located in the coastal zone and catchment areas by requesting that conservancy tanks be installed and maintained, if no municipal sewerage infrastructure is available, and encourage existing septic tank users to convert septic tanks systems to conservancy tanks systems.	No new developments with septic tanks to be approved. Increase in conservancy tanks installed on existing developments.	2024	LMs
8.1.5. The LM must continue to sit as trustees on the SBWQFT and the SWT and the WCDM must ensure that they engage with these trusts on a regular basis.	Municipalities sit as trustees. WCDM attendance at meetings (Attendance registers).	On-going	Saldanha Bay LM Bergrivier LM WCDM

PROPOSED IMPLEMENTATION ACTION	OUTPUT INDICATOR	TIMEFRAME	RESPONSIBLE AUTHORITIES
8.1.6. The WCDM must request proof that all dredging activities in ports and harbours have the appropriate authorisations in place in terms of NEMA prior to dredging activities taking place.	Proof of request for authorisations.	Periodically	WCDM, TNPA, DPW, DEFF
8.1.7. The West Coast Oil Spill Contingency Plan must be implemented when required and all relevant authorities must be made aware of their responsibilities. The WCDM must request that workshops be conducted to provide training for all required authorities on the implementation of the Contingency Plan in the event of an oil spill	Proof of request to attend workshops and training.	Periodically	SAMSA
	Incident reports detailing process undertaken to respond to oil spill.	Periodically	DEFF: Oceans and Coasts
	Attendance registers from workshop.	Every 2 years	
8.2. Coastal Management Strategy: Continue to plan, install, alter, operate, maintain, repair, replace, protect and monitor municipal WWTWs in coastal towns			
8.2.1. The WCDM must engage with the Saldanha Bay LM to encourage the completion of the construction of the Britannia Bay WWTW.	Britannia Bay WWTW operational.	2021	Saldanha Bay LM.
8.2.2. Municipal WWTWs to test and report on treated effluent quality (i.e. continue with Green Drop monitoring-type programme) and publish results in an annual report that is publicly accessible on the municipality's website.	Monitoring reports published on website	Annual	LMs
8.3. Coastal Management Strategy: To promote the effective management of Air Quality			
8.3.1. Finalise the updated Air Quality Management Plan and implement the management strategies outlined in the Plan.	Finalised Air Quality Management Plan. Strategies implemented.	2019 2022	WCDM
8.3.2. Tribal Authorities must form part of existing Air Quality forums where public attendance is encouraged.	Tribal Authorities present at meetings (Attendance registers)	2019	WCDM LMs
8.4. Coastal Management Strategy: To ensure the effective management of solid waste in the coastal zone			
8.4.1. The WCDM must assist the LMs to ensure that beach cleaning activities take place on a regular basis to ensure the removal of litter. This	No litter on beaches. At least one new rubbish bin at coastal access sites.	Ongoing 2020	LMs WftC

PROPOSED IMPLEMENTATION ACTION	OUTPUT INDICATOR	TIMEFRAME	RESPONSIBLE AUTHORITIES
can be done through using the WftC resources as well as installing new rubbish bins and increasing rubbish collections at coastal access points.	Rubbish bins cleaned.	Once a week	WCDM
8.4.2. The WCDM must assist the LMs with the removal of seaweed (on selected beaches), animal mortalities and other organic matter, particularly after storm surges and HAB incidents.	No organic waste on beaches one week after storm surges or HAB incidents.	On-going	LMs WCDM
8.4.3. The WCDM must assist the LMs and other relevant authorities to ensure that food processing facilities are regularly audited to ensure that solid and organic waste is properly managed and disposed of. Trucks that are transporting organic waste must be covered to prevent birds from feeding on the waste and any organic waste that has accumulated at the food processing facility must be cleaned and removed before birds can feed on it.	No waste outside of food processing factories. Reduced number of birds feeding on organic waste at food processing factories.	2019	LMs CapeNature
8.4.4. Recycling programmes must be initiated in all coastal towns in order to reduce the amount of solid waste ending up in dustbins and landfill sites.	Recycling drop-off points in each coastal town. Recycling material collected from recycling points.	2019 Once a week	LMs
8.5. Coastal Management Strategy: Encouraging the Reinstatement of the Blue Flag Beach Programme			
8.5.1. Strandfontein beach to regain Blue Flag Beach status.	Application submitted to WESSA Municipal budget approval received Monitoring programme developed (to improve water quality) Blue Flag Beach status received.	2021	Matzikama LM
8.5.2. Strandfontein beach to maintain Blue Flag Beach status.	Retained Blue Flag Beach status.	Annually	Matzikama LM
8.5.3. At least an additional two beaches to achieve Blue Flag Status	Two beaches additional beaches with Blue Flag status.	2024	LMs

6.9 Coastal Management Objective 9: Ensuring the Socio-Economic Development of Coastal Communities

PROPOSED IMPLEMENTATION ACTION	OUTPUT INDICATOR	TIMEFRAME	RESPONSIBLE AUTHORITIES
9.1. Coastal Management Strategy: Promotion of the Small Harbours: Spatial and Economic Development Framework			
9.1.1. The municipalities must engage with DEA&DP with regards to the small harbours that have been identified and incorporate the SEDF plans for these harbours into their IDPs, SDFs and LED plans.	Update of IDPs, SDFs and LED plans	2022	WCDM LMs
9.2. Coastal Management Strategy: Development of marine aquaculture within the District			
9.2.1. The DM and LMs must engage with DEFF to continue to be informed of aquaculture development plans that must be incorporated into the IDPs, SDFs and LED plans.	Updated IDPs, SDFs and LED plans.	2022	WCDM LMs
9.2.2. A feasibility study must be conducted to determine the potential for development of a community-driven aquaculture project in the WCDM, either looking at a new site or utilising a site within the new ADZ in Saldanha Bay.	Feasibility study completed.	2021	WCDM WC Department of Economic Development and Tourism (DED&T)
9.2.3. The WCDM must engage with the relevant authorities with regards to hosting an aquaculture summit that focuses on community development and opportunities for previously disadvantaged communities in aquaculture. The summit should include existing industry partners that could provide assistance to communities to develop capacity in the aquaculture industry in the WCDM region.	Proof of WCDM engagement with relevant authorities Aquaculture summit held.	2020	DEFF DTI DED&T WCDM LMs
9.3. Coastal Management Strategy: Supporting the Small-Scale Fisheries Industry			
9.3.1. The WCDM must engage with DEFF to push that the Small Scale Fisheries Policy be finalised and Gazetted with rights being issued	Proof of WCDM communication with DEFF. Rights issued to communities in the WCDM.	2020	WCDM DEFF

PROPOSED IMPLEMENTATION ACTION	OUTPUT INDICATOR	TIMEFRAME	RESPONSIBLE AUTHORITIES
to communities in the WCDM in a fair and transparent manner.			
9.3.2. The WCDM must engage with DEFF to try to encourage the DEFF Regional offices to provide more support to communities through assisting them with MLRA permits and rights. The WCDM must facilitate a discussion between DEFF and the LMs to determine a way forward in assisting coastal communities who cannot travel to Cape Town.	Proof of WCDM correspondence with DEFF Minutes from a workshop held with the WCDM, LMs and DEFF to discuss supporting communities.	2020	WCDM LMs DEFF
9.4. Coastal Management Strategy: The facilitation of coastal tourism development			
9.4.1. The WCDM needs to assist the LMs to update their Local Tourism Strategies to incorporate the development of coastal towns as tourism destinations with emphasis on community driven tourism initiatives (e.g. !Khwa ttu Project). Development must include upgrading and supporting tourism offices as well as advertising coastal town on municipal websites.	Local Tourism Strategies updated. Coastal tourism facilities advertised on websites.	2020 2020	WCDM LMs
9.4.2. The WCDM to provide support to the Saldanha BayLM with regards to the implementation of the Paternoster entrance beautification project.	Paternoster beatification project implemented.	2021	WfC Saldanha Bay LM
9.4.3. The WCDM to facilitate the LM participation in the WESSA Tourism Green Coast project by identifying one beach per LM that meets the criteria for the project.	One beach per LM that has received Tourism Green Coast status.	2020	WCDM LMs
9.5. Coastal Management Strategy: Preparing for the growth of the renewable energy sector			
9.5.1. The municipalities must update their IDPs and SDF with potential and existing renewable energy projects in the district and must include the REDZ and Strategic Transmission Corridors.	Updated IDPs and SDFs.	2022	LMs WCDM
9.5.2. Municipalities must engage with renewable energy developers to encourage the inclusion	Signed MoUs.	2024	LMs WCDM

PROPOSED IMPLEMENTATION ACTION	OUTPUT INDICATOR	TIMEFRAME	RESPONSIBLE AUTHORITIES
of previously disadvantaged communities in the development and operation of the sector through job creation and partnerships.			

6.10 Coastal Management Objective 10: Developing and Facilitating Awareness, Education, Training, Capacity Building and Information Gathering in the District

PROPOSED IMPLEMENTATION ACTION	OUTPUT INDICATOR	TIMEFRAME	RESPONSIBLE AUTHORITIES
10.1.Coastal Management Strategy: Facilitate the training of municipal officials on coastal management and informed decision making			
10.1.1. The WCDM must conduct a survey at each LM to understand what the specific needs are in terms of training required to carry out coastal management functions.	Survey conducted.	2020	WCDM
10.1.2. The WCDM must engage with DEA&DP to facilitate a short training course that identifies all the online tools available to assist municipalities to make informed decision with regards to town planning and coastal monitoring. These online resources include the OCIMS and BGIS.	Attendance at training course (Attendance register)	2020	DEA&DP
10.1.3. The WCDM and LMs must continue to engage with DEA&DP and DEFF to ensure that all upcoming training course for officials are added to the municipal calendar and that at least one municipal official attends the courses.	DEA&DP and DEFF courses indicated on Municipal calendar. At least one municipal official in attendance (attendance register).	Annual Annual	DEFF DEA&DP WCDM LMs
10.1.4. At least one LM official or representative from the relevant RMAs must attend the Estuary Management training course each year facilitated by NMU.	LM or RMA official attendance at Estuary Management course.	Annual	LMs
10.2.Coastal Management Strategy: Facilitating Public Awareness and Access to Information			
10.2.1. Educational signage highlighting the importance of the coastal environment (can be downloaded from the OCMS webpage) must be erected at all formalised public access points.	Educational signage at all formalised coastal access points	2024	WftC LMs
10.2.2. The municipalities must have links on their webpages to the major publicly accessible coastal and biodiversity information websites (e.g. OCMS and BGIS) as well as the main	Links on municipal webpages.	2020	WCDM LMs

PROPOSED IMPLEMENTATION ACTION	OUTPUT INDICATOR	TIMEFRAME	RESPONSIBLE AUTHORITIES
updated coastal and environmental management programmes (CMP, AQMP, Disaster Management Plan, etc.).			
10.2.3. All public libraries must have updated copies of the relevant coastal planning documents (e.g. updated CMPs).	Update copies of coastal planning documents in libraries.	2020	WCDM LMs
10.2.4. A formalised Coastal Education Strategy must be developed that utilised municipal resources such as public libraries, schools and town halls. Open days and information sharing sessions by representatives from relevant coastal authorities and organisations must be included. The Two Oceans Aquarium, CapeNature and other partners such as the CWCBR and !KwaThu can assist with the implementation of some coastal education activities that may form part of this strategy.	Coastal Education Strategy completed. Initiation of the implementation of the Coastal Education Strategy.	2021 2022	LMs WCDM DEA&DP
10.3. Coastal Management Strategy: Supporting Existing Education and Awareness Projects			
10.3.1. Existing education and awareness initiatives, such the !Khwa ttu Project, must be supported by the municipalities. Support can be in the form of creating awareness of these initiative by creating a link on the municipality's website or including them as part of their tourism plans.	Existing projects advertised on municipal websites. Existing projects incorporated into Tourism Development Strategies.	2020	LMs WCDM
10.3.2. The municipalities must continue to actively engage with and participate in existing environmental management-based forums and committees (Air quality, Coastal, EAFs, water quality trusts, etc.)	Attendance at meetings (attendance registers)	On-going	LMs WCDM
10.3.3. The municipalities must assist the Fisheries Community Development Workers with regards to engagement of communities and assisting with MLRA issues.	MoU signed.	2020	LMs DEFF

PROPOSED IMPLEMENTATION ACTION	OUTPUT INDICATOR	TIMEFRAME	RESPONSIBLE AUTHORITIES
10.4.Coastal Management Strategy: Supporting Research and Development and Graduate Skills Development			
10.4.1. The Municipalities must be available to support research institutions by providing data, if it is available, in a timeous manner. Other ways that the municipalities can support research is by engaging with communities so that field visits can be facilitated without suspicion.	MoUs signed.	2020	LMs WCDM Research Institutions
10.4.2. The Municipalities should formalise an internship programme that allows undergraduate students the opportunity to obtain valuable work experience. Organs of State such as the DPW, SETA and NRF can be approach to source funding.	MoUs signed.	2021	LMs WCDM Research Institutions
10.4.3. The MusselWatch programme must be reinstate in order to obtain water quality monitoring data that can be used to provide further data to research institutions.	MusselWatch Programme reinstated.	2021	DEFF Research Institutions

7 IMPLEMENTATION AND REVIEW

Implementation of this WCDM is driven by the District Municipality's commitment to the requirements of the various relevant national and provincial drivers (The National Development Plan, NCMP, Operation Phakisa, Western Cape Coastal Management Programme), as well as the WCDMs strategic objective of 'ensuring environmental integrity for the West Coast'. These, together with the outcomes of the stakeholder engagement process, form the basis for the WCDM CMP priority areas which will enable quantifiable and measurable outcomes.

Monitoring the success of the implementation of this WCDM CMP is important and the five-year programme is proposed to be continually reviewed by the West Coast District Coastal Committee. Indicators identified will be used to measure the success of the proposed strategies. Indicators, and the means of collecting information about them, are anticipated to be refined over time. The recently completed Western Cape State of Coast report will be a useful guide for developing district and local level indicators. The implementation and monitoring of the estuarine management plans will also play an important role in the monitoring of the success of the WCDM CMP as many of the priority actions are linked.

It is proposed that a short summary report on the implementation of the WCDM CMP is prepared on an annual basis at the end of each municipal year. This summary report can assist the WCDM MCC in its reviewing role as well as can be submitted to DEA&DP in its monitoring and supporting role. An assessment of output achievement and amendment can then also assist if any review is to be undertaken within the 5 year cycle.

Following the adoption of the updated WCDM CMP by the MEC and Council, the next substantive amendment is required to occur five years after publication of this updated WCDM CMP, in compliance with the requirements of the ICM Act. Review of the progress of implementation will be on-going and interim amendments to the programme may be required and undertaken in consultation with the West Coast District Coastal Committee.

8 CONCLUSION

Managing the complex and sensitive environments that make up the coastal zone is a challenge that requires strategic and practical coastal management objective setting followed by the development of definitive and implementable goals, with on-going monitoring of indicators to ensure effective implementation.

This WCDM CMP is intended to function as an integrated coastal planning tool to manage the diverse range of activities that occur in the coastal zone, without compromising environmental integrity or economic development. Effective implementation of the priority strategies contained in this WCDM CMP should make a significant contribution towards the achievement of ICM in the West Coast as well as the Western Cape as a whole.

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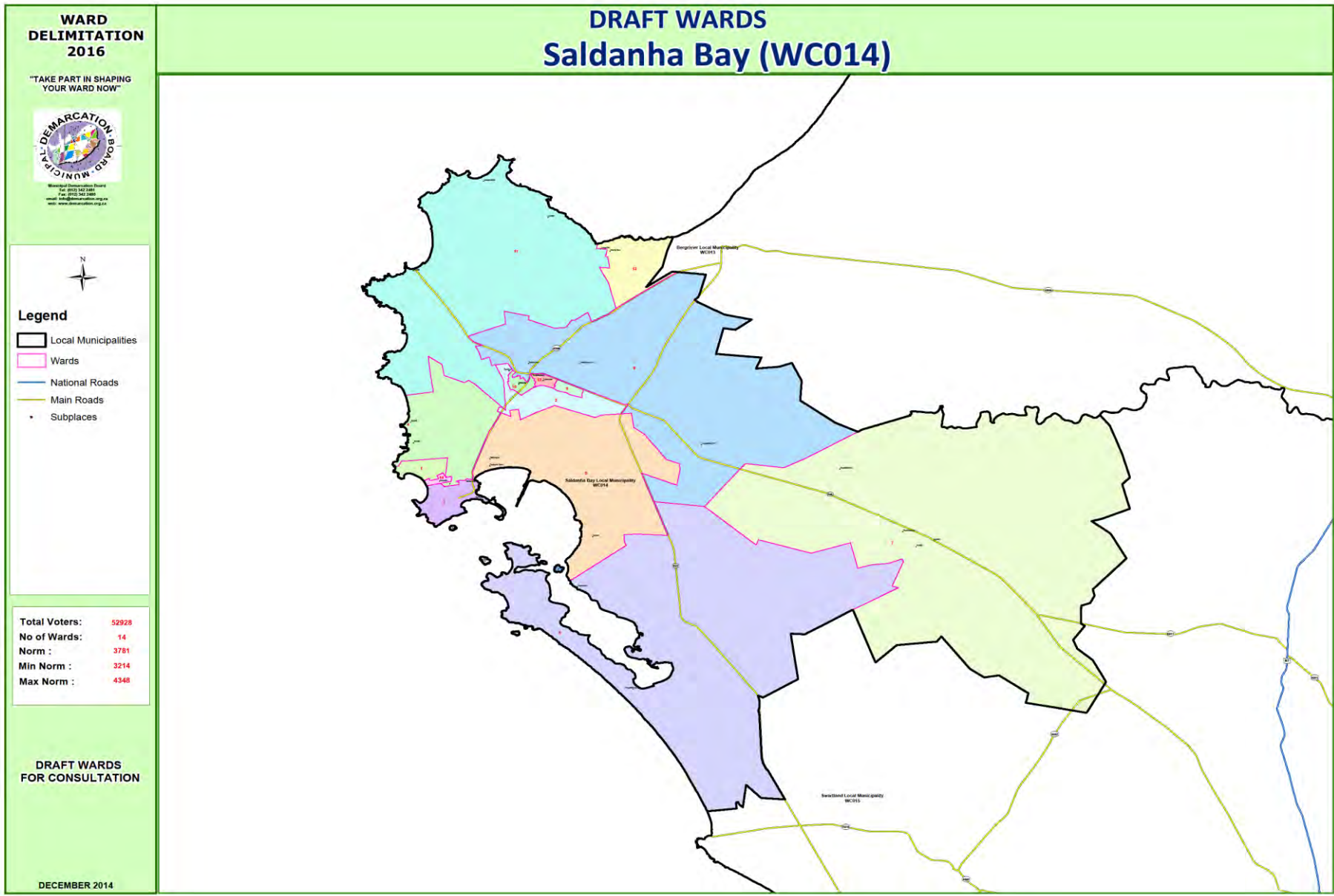
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Municipal Demarcation Board
Tel: (012) 342 2481
Fax: (012) 342 2480
email: info@demarcation.org.za
web: www.demarcation.org.za

Matzikama Local Municipality(WC011)

Legend

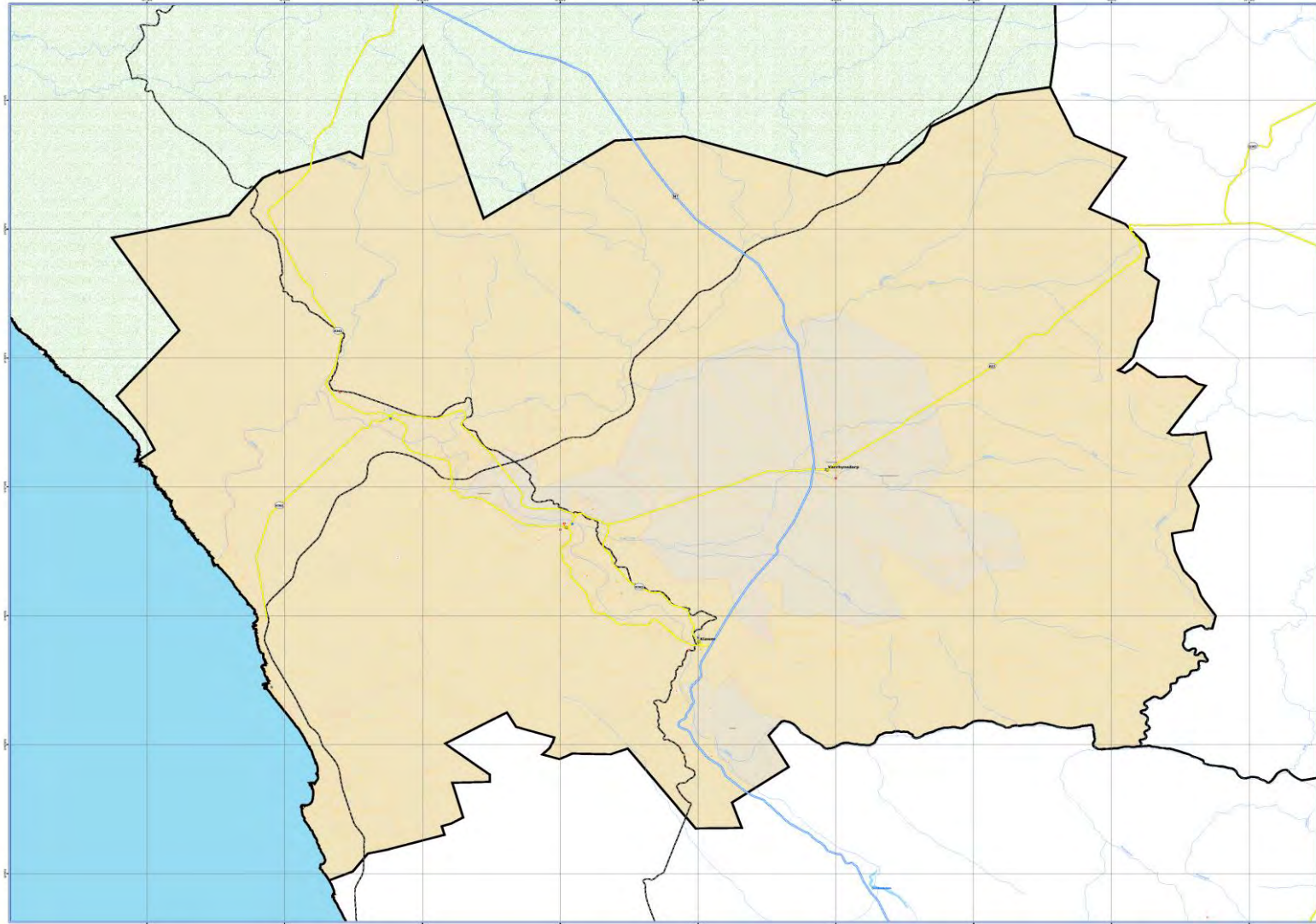
- MainTown
- Airports
- Schools
- Health Facilities
- Police Stations
- Local Municipalities
- District Management Areas
- Wards
- Traditional Councils
- Sub Place
- Parent Farms
- Dams
- National Roads
- Main Roads
- Railways
- Rivers

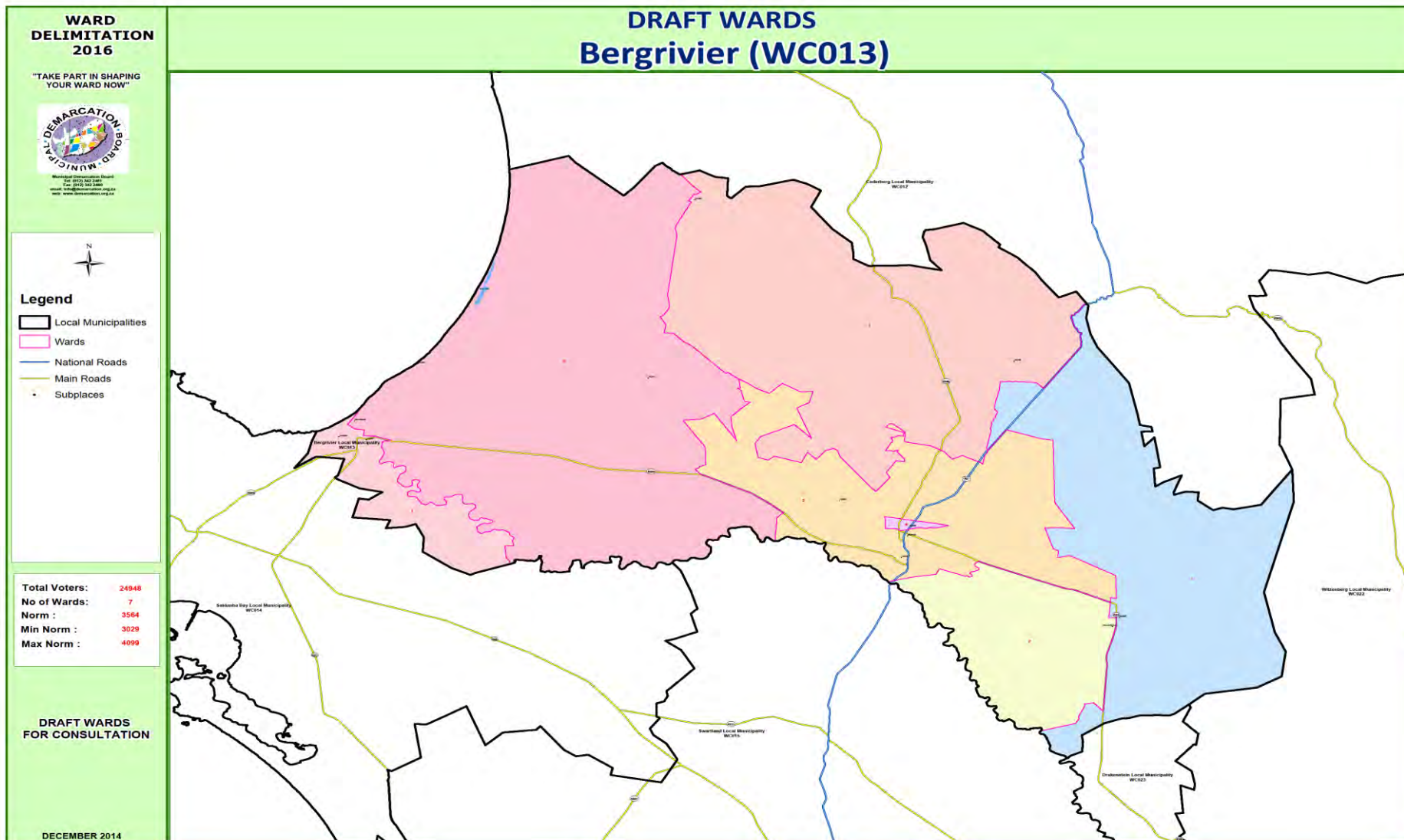
Data supplied by:

Statistics South Africa
Department: Water Affairs & Forestry
Department: Provincial & Local Government
Department: Health
Department: Safety & Security
Department: Education
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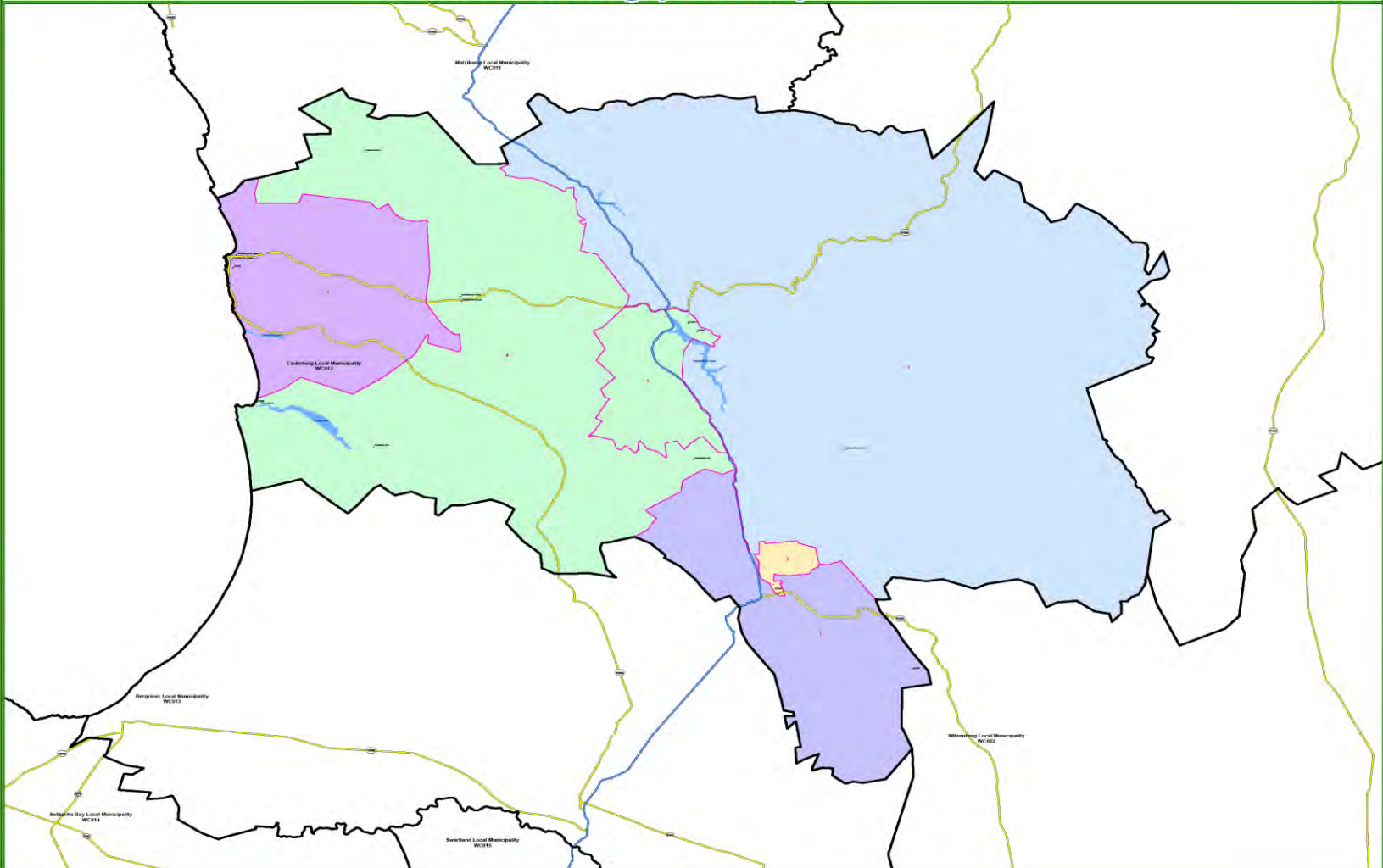
-  Local Municipalities
-  Wards
-  National Roads
-  Main Roads
-  Subplaces

Total Voters: 23268
No of Wards: 6
Norm : 3878
Min Norm : 3296
Max Norm : 4460

**DRAFT WARDS
FOR CONSULTATION**

DECEMBER 2014

**DRAFT WARDS
Cederberg (WC012)**



APPENDIX B: ESTUARY MANAGEMENT OBJECTIVES FROM THE EMPS THAT ARE RELEVANT TO THE WCDM

Management Objectives	Management Actions	Deliverables/Indicators	Responsible Agent (s)
Sout Estuary			
Objective 3.1: Ensure appropriate and sustainable land use and coastal development in and around the Sout River estuary	Implement coastal management line and associated development controls (i.e. ensure no development in the EFZ, high risk areas)	<ul style="list-style-type: none"> • No further development, infilling or land transformation in the EFZ • Transgressors prosecuted • Corrective action undertaken • Reduced habitat loss/degradation & disturbance 	Matzikama LM WCDM DEA&DP
	EFZ and 'no go area' to be incorporated into all relevant govt dept planning documents and processes (e.g. Water Use License (WUL) Applications, mining applications)	<ul style="list-style-type: none"> • EMP included in all relevant planning documents 	All authorities
Management Objective 4.1: Ensure effective co-ordination of estuarine management responsibilities	Matzikama LM incorporates the EMP and the spatial zonation plan into planning documents	<ul style="list-style-type: none"> • EMP and zonation plan adopted • EMP included in all relevant planning documents 	RMA Matzikama LM WCDM
	Ensure that EMP is maintained, enforced and budgeted for annually	<ul style="list-style-type: none"> • An action plan for securing future funding drafted and approved • Funding secured for 5 year cycle 	All authorities
	West Coast Municipal Coastal Committee (MCC) to facilitate co-operative governance in respect to the implementation of the Sout EMP.	<ul style="list-style-type: none"> • WC MCC constituted (Membership includes representatives of government and stakeholders/civil society) • WC MCC meets on a quarterly basis • Meetings are minuted 	RMA WCDM
	Identify and invite missing stakeholders/ interest groups to partake in West Coast MCC	<ul style="list-style-type: none"> • Networks established • Stakeholder database developed and regularly updated 	RMA WCDM
	Maintain, monitor, review and report on the progress of EMP actions and achievements on annual basis	<ul style="list-style-type: none"> • Feedback received from participating agencies • Biannual and annual reporting to DEA&DP and DEA undertaken by RMA 	RMA WCDM

Management Objectives	Management Actions	Deliverables/Indicators	Responsible Agent (s)
		<ul style="list-style-type: none"> Action plans updated as and when required 	
Management Objective 4.2: Define co-operative governance arrangements	Identify and implement procedures to ensure cooperative governance between all government departments with a mandate to act	<ul style="list-style-type: none"> Roles and responsibilities defined and accepted via Memorandum of Understanding (MOUs) signed between RMA and spheres of government and participating agencies West Coast MCC meets on a quarterly basis Meetings are minuted Active collaboration of various implementing agents 	All authorities
	West Coast MCC to monitor performance of RMA in relation to the implementation of the plan	<ul style="list-style-type: none"> Authorities to provide formal feedback on mandated activities West Coast MCC meets on a quarterly basis 	All authorities All stake-holders
	Individual agencies to identify and address training needs, with possible secondment to address training and capacity shortfalls	<ul style="list-style-type: none"> Motivation for training drafted and approved Staff attend relevant accredited training courses MOU to be developed for secondments 	All authorities
	Mandated authorities and participating agencies to confirm budget allocations for mandated activities/actions	<ul style="list-style-type: none"> Formal feedback from authorities on mandated activities Motivation for budget drafted and approved Funding secured for 5 year cycle 	All authorities
Olifants Estuary			
Protection of biodiversity and sense of place	Regulate boat traffic	<ul style="list-style-type: none"> Boating and other estuary uses occur only within designated areas 	Matzikama LM WCDM
Jakkalsvlei Estuary			
Objective 3.1: Ensure appropriate and sustainable land use and coastal development in and around	Implement coastal management line and associated development controls	<ul style="list-style-type: none"> No further permanent development, infilling or land transformation in the EFZ (e.g. only sacrificial infrastructure permitted) Transgressors prosecuted 	Cederberg LM WCDM DEA&DP

Management Objectives	Management Actions	Deliverables/Indicators	Responsible Agent (s)
the Jakkalsvlei River estuary, considering ecosystem services		<ul style="list-style-type: none"> • Corrective action undertaken • Reduced habitat loss/degradation and disturbance, and inappropriate behaviour 	
	EFZ and to be incorporated into all relevant govt dept planning documents and processes (e.g. Water Use License (WUL) Applications, mining applications)	<ul style="list-style-type: none"> • EMP included in all relevant planning documents 	All authorities
	Use EAF as source of I&APs for Environmental Impact assessments (EIAs)	<ul style="list-style-type: none"> • EAF partakes in development planning affecting the estuary • Impacts on the estuary are mitigated/prevented 	RMA Cederberg LM WCDM DEA&DP
Management Objective 4.1: Ensure effective co-ordination of estuarine management responsibilities	RMA adopts and incorporates the EMP and the spatial zonation plan into planning documents	<ul style="list-style-type: none"> • EMP and zonation plan adopted by RMA • EMP included in all relevant planning documents 	RMA Cederberg LM WCDM
	Ensure that EMP is maintained, enforced and budgeted for annually	<ul style="list-style-type: none"> • An action plan for securing future funding drafted and approved • Funding secured for 5 year cycle 	All authorities
Management Objective 4.2: Define co-operative governance arrangements	Identify and implement procedures to ensure cooperative governance between all gov. depts. with a mandate to act	<ul style="list-style-type: none"> • Roles and responsibilities defined and accepted via MOUs signed between RMA and spheres of government and participating agencies • Regional EAF meets on a quarterly basis • Meetings are minuted • Active collaboration of various implementing agents 	All authorities
	EAF to monitor performance of RMA in respect to implementation of plan	<ul style="list-style-type: none"> • Authorities to provide formal feedback on mandated activities • Regional EAF meets on a quarterly basis 	All authorities All stake-holders
	Individual agencies to identify and address training needs, with possible secondment to address training and capacity shortfalls	<ul style="list-style-type: none"> • Motivation for training drafted and approved • Staff attend relevant accredited training courses 	All authorities

Management Objectives	Management Actions	Deliverables/Indicators	Responsible Agent (s)
		<ul style="list-style-type: none"> • MOU to be developed for secondments 	
	Individual agencies to allocate resources, create and fill posts (including project champions), and acquire necessary infrastructure, resources and equipment to fulfil their mandates	<ul style="list-style-type: none"> • Need and Desirability investigation undertaken • Motivation for acquisition drafted and approved • Equipment purchased and maintained • Project champion(s) for allocated management actions • Staff appraisals in terms of management actions and projects (performance management system implemented) 	All authorities
	Mandated authorities and participating agencies to confirm budget allocations for mandated activities/actions	<ul style="list-style-type: none"> • Formal feedback from authorities on mandated activities • Motivation for budget drafted and approved • Funding secured for 5 year cycle 	All authorities
Wadrift Estuary			
Objective 3.1: Ensure appropriate and sustainable land use and coastal development in and around the Wadrift River estuary, considering ecosystem services	EFZ to be incorporated into all relevant govt dept planning documents and processes (e.g. Water Use License (WUL) Applications)	<ul style="list-style-type: none"> • EMP included in all relevant planning documents 	All authorities
Management Objective 4.1: Ensure effective co-ordination of estuarine management responsibilities	Ensure that EMP is maintained, enforced and budgeted for annually	<ul style="list-style-type: none"> • An action plan for securing future funding drafted and approved • Funding secured for 5 year cycle 	All authorities
Management Objective 4.2: Define co-operative governance arrangements	Identify and implement procedures to ensure cooperative governance between all gov. depts. with a mandate to act	<ul style="list-style-type: none"> • Roles and responsibilities defined and accepted via MOUs signed between RMA and spheres of government and participating agencies • Regional EAF meets on a quarterly basis • Meetings are minuted 	All authorities

Management Objectives	Management Actions	Deliverables/Indicators	Responsible Agent (s)
		<ul style="list-style-type: none"> Active collaboration of various implementing agents 	
	EAF to monitor performance of RMA in implementation of plan	<ul style="list-style-type: none"> Authorities to provide formal feedback on mandated activities Regional EAF meets on a quarterly basis 	All authorities All stake-holders
	Individual agencies to identify and address training needs, with possible secondment to address training and capacity shortfalls	<ul style="list-style-type: none"> Motivation for training drafted and approved Staff attend relevant accredited training courses MOU to be developed for secondments 	All authorities
	Individual agencies to allocate resources, create and fill posts (including project champions), and acquire necessary infrastructure, resources and equipment of fulfil their mandates	<ul style="list-style-type: none"> Need and Desirability investigation undertaken Motivation for acquisition drafted and approved Equipment purchased and maintained Project champion(s) for allocated management actions Staff appraisals in terms of management actions and projects (performance management system implemented) 	All authorities
	Mandated authorities and participating agencies to confirm budget allocations for mandated activities/actions	<ul style="list-style-type: none"> Formal feedback from authorities on mandated activities Motivation for budget drafted and approved Funding secured for 5 year cycle 	All authorities
Verlorenvlei Estuary			
3.3: Prepare and implement a mouth management plan (to improve connection with the sea)	Ecological health of ecosystem is improved Further degradation (negative trajectory) of Verlorenvlei ecosystem is halted	<ul style="list-style-type: none"> Mouth management plan developed and implemented Optimal functioning of estuary mouth maintained 	DAFF DWS CapeNature Municipalities
3.5: Appropriately manage solid waste disposal sites along Verlorenvlei	Further degradation (negative trajectory) of Verlorenvlei ecosystem is halted	<ul style="list-style-type: none"> Environmental management plans developed for each dump site, and necessary permitting obtained 	DEFF Municipalities

Management Objectives	Management Actions	Deliverables/Indicators	Responsible Agent (s)
	Ecological health of ecosystem is improved	<ul style="list-style-type: none"> • Environmental best practice and appropriate management actions implemented • Sites monitored for compliance with approved environmental management plans • Illegal sites closed 	
5.1: Remove or upgrade of road crossings through Working for Wetlands programme	Further degradation (negative trajectory) of Verlorenvlei ecosystem is halted Ecological health of ecosystem is improved	<ul style="list-style-type: none"> • Priority road crossings and type of action identified • Project plan developed and implemented • All road crossings addressed (removal or upgrade) 	WC DPW DEFF Cederberg Municipality
5.2: Ensure appropriate development in and around Verlorenvlei through IDP/SDF	Further degradation (negative trajectory) of Verlorenvlei ecosystem is halted Ecological health of ecosystem is improved	<ul style="list-style-type: none"> • Developed coastal management lines gazetted • Coastal management lines incorporated into IDP & SDF • Development excluded from sensitive areas, including EFZ • Applicable building controls applied to high risk areas 	Cederberg Municipality
6.2: Develop and deploy a human resource plan for implementation of Verlorenvlei EMP	The Estuary Advisory Forum is constituted. The community (farmers, fishers, residents, commercial concerns, NGOs, authorities, etc.) functions in an integrated, cooperative manner through a trusting and fully representative Estuary Advisory Forum.	<ul style="list-style-type: none"> • ToR for various government departments and other institutions agreed to • Project champions assigned • Departmental project plans developed and implemented 	EAF together with government departments (DEFF, DWSHS, District and local municipality) and other institutions (e.g. CapeNature) and community of the area.
6.3: Develop and deploy an education and awareness programme for Verlorenvlei	The Estuary Advisory Forum is constituted. The community (farmers, fishers, residents, commercial concerns, NGOs, authorities, etc.) functions in an integrated, cooperative	<ul style="list-style-type: none"> • Education and awareness programme developed and implemented • Strategically placed signage in and around Verlorenvlei • Dissemination of information via website, newsletters, pamphlets relating to both 	EAF together with government departments (DEFF, DWSHS, District and local municipality) and other institutions

Management Objectives	Management Actions	Deliverables/Indicators	Responsible Agent (s)
	manner through a trusting and fully representative Estuary Advisory Forum.	environmental education and compliance awareness	(e.g. CapeNature) and community of the area.
9.1: Investigate and develop job opportunities for communities in the Verlorenvlei area linked to tourism	Unemployment in the Verlorenvlei area is reduced through innovative job creation initiatives	<ul style="list-style-type: none"> Enhanced local economic development (e.g. through SMMEs) Increase in employment rate surrounding Verlorenvlei Reduction in poverty index 	Cederberg LM WCDM WC DEDT DoT
Berg Estuary			
Regulate boat traffic by implementing an Estuary Zonation Plan (EZP) to minimise impacts on biodiversity and sense of place	Berg River Local Municipality or West Coast District Municipality to publish regulations requiring permits for using motorised vessels on the Berg River estuary and restriction their use to specified zones as per the EZP in this EMP	<ul style="list-style-type: none"> Regulations/Bylaws 	WCDM and/ or Berg River LM
Define co-operative governance arrangements for management of the proposed Berg River estuary	Estuary Forum to meet the designated Responsible Management Authority, Berg River LM and to define clear roles and responsibility for the authority, the BEF and other participating agencies.	<ul style="list-style-type: none"> Proceedings 	BEF DEA / DEA&DP CapeNature Berg River LM DWSHS WCDM
	Conclude implementation protocols with respective departments and institutions.	<ul style="list-style-type: none"> Signed letters from all agencies to be involved with the management of the Berg River estuary Protected Area and the BEF clearly outlining respective roles and responsibilities 	
Adequate resources and capacity	Establish an office at the estuary, preferably at Velddrif	<ul style="list-style-type: none"> Office building 	Berg River LM DEA&DP WCDM Key partners
	Acquire necessary equipment (office equip, water quality meter, boat, vehicle)	<ul style="list-style-type: none"> Office is adequately equipped 	
	Recruit estuary manager and two field rangers as permanent staff.	<ul style="list-style-type: none"> Staff & resources deployed for management of Berg River estuary Protected Area 	

Management Objectives	Management Actions	Deliverables/Indicators	Responsible Agent (s)
	Identify and address training needs among management staff and staff (involved in estuary) of CapeNature, Berg River Municipality and DEA (e.g. for monitoring, visitor regulation and assistance)	<ul style="list-style-type: none"> • Training records 	
	Evaluate performance of staff, contractors and volunteers	<ul style="list-style-type: none"> • Performance evaluations 	
Create effective mechanisms for on-going communication with stakeholders	Develop an effective communication strategy	<ul style="list-style-type: none"> • Communication strategy 	Berg River LM BEF DEFF WCDM DEA&DP
	Maintain stakeholder database	<ul style="list-style-type: none"> • Stakeholder database 	
	Explore alternative communications mechanisms (workshops, signage, radio etc.)	<ul style="list-style-type: none"> • Record of Communications 	

APPENDIX D: CITY OF CAPE TOWN'S "LARGE MARINE ANIMAL STRANDING POLICY AND PROTOCOL"

APPENDIX E: DECLARED PROVINCIAL HERITAGE SITES ALONG THE WCDM COASTLINE (SAHRIS, 2019).

LM	Site ID	Site Reference	Full Site Name	Site Type	Archive Status	Declaration Type	Gazette No	Gazette Date
Bergrivier	27948	9/2/072/0001-001	Farmstead, Kersefontein, Piketberg District	Building	National monument	Provincial Heritage Site	6028	26/05/1978
	27949	9/2/072/0001-002	Outbuildings, Kersefontein, Piketberg District	Building	National monument	Provincial Heritage Site	12142	20/10/1989
Cederberg	3387	BPT PHS	Baboon Point Provincial Heritage Site	Rock Art, Deposit, Artefacts, Shell Midden, Cultural Landscape, Building, Palaeontological, Natural		Provincial Heritage Site	6621	09/04/2009
	3494	MPM PHS	Mussel Point Midden	Shell Midden		Provincial Heritage Site	6621	09/04/2009
	108260	The Verlorenvlei Heritage Settlement (Smit Section)	The Verlorenvlei Heritage Settlement (Smit Section)	Cultural Landscape		Provincial Heritage Site	7310	23/09/2014
Matzikama	27201	9/2/102/0010	Fryer Cemetery, Farm 270, Strandfontein, Vredendal District	Burial Grounds & Graves	Register	Heritage Register	18263	12/09/1997
Saldanha	3496	PNNA	Paternoster North Site A	Shell Midden		Provincial Heritage Site	6621	09/04/2009
	28480	9/2/042/0001/001	Farmstead, Geelbek 360, Hopefield District	Building	National monument	Provincial Heritage Site	12291	16/02/1990
	28481	9/2/042/0001/002	VOC Beacon, Geelbek 360, Hopefield District	Building	National monument	Provincial Heritage Site	7597	29/05/1981
	28476	9/2/042/0008	Dutch Reformed Church, Oostewal Street, Langebaan	Building	National monument	Provincial Heritage Site	9128	16/03/1984
	28477	9/2/042/0010	Oosterwal, Hopefield District	Building	National monument	Provincial Heritage Site	9384	17/08/1984

LM	Site ID	Site Reference	Full Site Name	Site Type	Archive Status	Declaration Type	Gazette No	Gazette Date
	28478	9/2/042/0012-001	Homestead, Langrietvlei 72, Hopefield District	Building	National monument	Provincial Heritage Site	6153	15/09/1978
	28472	9/2/042/0014	West Coast Fossil Park, Langebaanweg quarry fossil site, Hopefield District	Palaeontological	National Monument	National Heritage Site	38232	28/11/2014
	25829	9/2/042/0016	Elandsfontein Fossil Palaeolandscape (inside hopefield private nature reserve)	Palaeontological, Archaeological, Artefacts, Geological		Provincial Heritage Site	7396	29/05/2015
	27941	9/2/072/0015	St Helenafontein, Piketberg District	Building	National monument	Provincial Heritage Site	7946	04/12/1981
	27204	9/2/101/0007	Fishermen's cottages, Saldanha	Building	National monument	Provincial Heritage Site	6181	13/10/1978
28172	9/2/060/0022	Bokkerivier, Bokbaai, Malmesbury District	Building	National monument	Provincial Heritage Site	3309	19/11/1971	28172